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SURVEY REPORTS:
NUTRITION STATUS AND OTHER FACTORS

WORLD RELIEF CORPORATION

SURVEY SITES (DATES):

Chicualacualla (29-31 OCT 92)
Mapai (2-3 NOV 92)
Combomune (12-14 NOV 92)
Mabalane (11-12 NOV 92)
Barragem/Chokwe District (15-26 OCT 92)
Sites in Guija District (6-9 NOV 92)

Prepared by: Kathy Carter

(OFDA)

Project #

Grant # AOT-2060-G-00-2153-00

Born

SURVEY REPORT SUMMARY - WORLD RELIEF

Within the limits of time, tools used and translations required, these reports are a reasonable assessment of the situation in the named locations in the Gaza Province. They were carried out at the end of October, beginning of November, 1992. The following are brief notes on these reports.

BARRAGEM

- * low employment levels but a lot of small trade and exchanging of goods.
- * no major disease problem.
- * malnutrition rate (less than 80% wt/ht) = 2.9% in October, 1992.
- * potential water problem.

- * seed and agricultural implement distribution, monitoring, but no food distribution recommended unless there is a risk of seeds being eaten.

GULJA

- * many still resident in Lionde, Chokwe, Chilembene; those known to have moved back are 1000/5000 in Chivonguene, and 30 families in Nampongwan.
- * some planting, just less than half. This is a very fertile area, and expectation is high, if there is rain, for future harvests.
- * a lot of small trade. A variety of income sources includes miners.
- * increased death rate this year from cholera earlier in the year. Reduction in percentage of low birthweight babies from '91 to '92.
- * regular fruit and vegetable consumption = 29%...rarely = 31%.
- * malnutrition rate (less than 3rd centile) = 5% (hospital figures) or 14% (July SCF figures).

- * seed distribution, monitoring, food distribution to families of malnourished children, and preharvest food distribution for 2 months only.

CHICUALCUALA

- * 30.1% selling small amounts and minimum employment.
- * 40% have members employed (mostly miners & in timber), & 2 - 10% have family members in RSA.
- * death rates lower in September '92 than in '91. Overall the rates are the same.
- * SCF (USA) surveys say the malnutrition rate = 7.3 % of children less than the 3rd percentile. Observation supported this low rate of malnutrition.

*rec'd 5 Feb 93
from WR/Archive/K. Carter*

* reported intake of fruit and vegetables was low, 69% of households interviewed saying that they ate them rarely, and only 20% saying they ate them regularly.

- * 30% or more have planted (mostly millet).
- * 15% have harvested some in '92.
- * 83% have more than one type of livestock.
- * expressed need is for seed, which is not available, and water which is at present limited to 2.7 litres per person per day.

* recommendations are for seed & agricultural implement distribution, 2 months preharvest food distribution, and continued monitoring of the food security and health situation. Also recommend investigation of expected situation when people return to their places of origin.

MAPAI

- * 45% of families have a member employed; miners 13% (25% in 16th June Beirro), and timber workers 15% (25% in Muzzaman Beirro).
- * 38% of families sell in the market.
- * market prices high compared to Chokwe.
- * 30% have already planted some, & 25% already harvested some (mostly millet).
- * seeds needed.
- * nearly 50% say they eat forest fruits.
- * fruit & vegetables reportedly consumed rarely by 40%, and regularly by 18%.
- * water shortage exists, with consumption = 4 Litres / person / day.
- * administration less open in giving information than other places.
- * more variation in wealth than Chicualacuala.
- * a large variety of coping mechanisms.

* recommendations are for seed & agricultural implement distribution, 2 months preharvest food distribution, and continued monitoring of the food security and health situation. Also recommend investigation of expected situation when people return to their places of origin.

COMBOMUNE

- * 47% of families have a member employed (43% in Beirro Dindize & 33% in Combomune Rio); an average of 7% employed in RSA (14% in Combomune Rio), and 30% in timber work (50% in Beirro Dindize & 10% in Combomune Rio).

* not a critical health situation; SCF(USA) give a malnutrition rate of 6.9% of children less than the 3rd percentile, & of the children in their feeding programme, the majority are from Beirro Dindize & Combomune Rio (ie. the areas surveyed).

* only 5% say they eat fruit & vegetables rarely, & 61% eat them regularly; 20% say they eat forest plants.

* traditionally an excellent area for agriculture; some private farmers & some hand irrigated plots of land in the area.

* less than 20% have planted already; 19% have harvested in Combomune Rio; a shortage of seeds reported.

* water consumption said to be 10 litres / person / day; a small degree of water shortage in comparison with Chicualacuala & Mapai.

* more coping mechanisms functioning than in Chicualacuala & Mapai.

* said to be similar in situation to river villages between Combomune & Mabalane.

* recommendations are for seed & agricultural implement distribution (in liason with SCF), 2 months preharvest food distribution, and continued monitoring of the food security & health situation.

MABALANE

* 81% of families have a member employed; unspecified work in RSA and work in mines accounts for 34% of those in Beirros 8,9, & Cokwe; timber work accounts for 22% & trading for 11%, in Beirros 3 & 4.

* 25% of households had been selling in the market in the previous month; selling firewood & coals is a main source of income.

* market prices are higher in general than Chokwe.

* 12% consume forest fruits.

* only 9% consume fruit & vegetables rarely, & 65% consume them regularly.

* there has been a decrease in the percentage of low birth weight babies born in the local hospital between 1991 & 1992, suggesting that the nutrition status of the mothers has not declined in the last year.

* the SCF(USA) malnutrition rate is 6.3% of children less than the 3rd percentile; this was the same in both July & October.

* water is a little short but the average consumption is 7 litres per person per day.

* several people had the opinion that the situation in Mabalane town is normal; villages outside of the town were said to be suffering from a food shortage, but from observation the people in these places were coping with the situation, having sources of income eg. selling goats, firewood or coals.

* recommendations that there is seed and agricultural implement distribution to the vulnerable in the community, plus continued monitoring of the food security & health situation.

SUMMARY

The food shortages that exist have mostly come about over a long period of time, and the affected populations have developed ways of coping, especially Mapai and further south along the Limpopo. This represents a chronic, not an acute situation, which I do not believe requires acute emergency intervention.

Dependence on donations was one factor that people suggested existed; in most areas there had been too little food distribution to justify such a claim.

Migration, a normal way of coping with food and water shortage, has not been possible due to the war. With continued peace it is possible this will once more become a coping mechanism of the affected populations.

Return to places of origin is said by most of those interviewed to be their aim; this may create greater areas of need than currently exist. It is the responsibility of aid agencies to ensure that they do not provide an artificial pull by, or dependency on, the aid they offer.

KATHY CARTER. RGN. RM. CTCM&H.
WORLD RELIEF MOZAMBIQUE.
NOVEMBER 1992.

SURVEY REPORT - WORLD REIEF

LOCATION :

CHICUALACUALA

DATE : 29-10-92 to 31-10-92

AIM :

To assess the current nutrition situation of the population in and immediately surrounding the Chicualacuala town, in the light of past events and future possibilities.

SUMMARY AND RECOMMENDATIONS :

The water situation in Chicualacuala is said to be critical, more important than any shortage of food. Those with money or connections are coping but for many people lack of water limits both their present food intake and their future crop expectations.

There is a food shortage in the Chicualacuala area. The situation appears to be of a more chronic than an acute nature.

From families representing a total of 473 people the death rates are not high. From official statistics, there was no change in the

death rate when you compare the month of September in 1991 and 1992. There seems a small but still not highly significant increase in recorded deaths from "malnutrition".

The household survey suggests that fruit and vegetables are procured by most families in the market. Where staples such as maize are procured was not asked, but there seems to be neither large supply in the market, nor high prices in comparison with other places suggesting great demand. Together with the report that few locals are selling in the market, perhaps this suggests that the market is not a good indicator of the community's economy. The household survey answers DID suggest that 30.1 % of families were selling something in the market the month before our survey, but the income from this trade was not in large amounts from the information we were given.

59 % of the families reported they had no one employed permanently or casually, and an average monthly income per head of 4,985 MT. There is very little local employment in this town, which suggests future options for improving the income of the population being minimal.

CHICUALACUALA1

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There is some discrepancy in estimation of family incomes, maybe due to the difficulties in estimating irregular trade profits or due to non-monetary exchanges taking place, or due to reluctance to declare income. It can be assumed with no harvest, that for many, small trade is one of the few sources of income. With between 2% and 10% there may be reliance on income from family in RSA. With a small number there is local employment. A few families reported relying on donations, although there have not been enough official distributions so far this year to warrant such a claim. A few families also reported relying on forest fruits, which are not ideal nutrition but are edible.

Resources for these communities have dwindled over a period of several years. This is the first year there has been no harvest. The spontaneously expressed need by all levels of people we spoke to was for seed (even those who did not know that the World Relief agriculture representative had recently visited to ask about seeds), and for agricultural implements. The small amount of seed that is being planted is said to be at least 2 years old, which may affect production just as the future levels of rain will do. It is expected that what was planted that week should be ready in February at the earliest, and will not be a large amount (some say it will be just enough for seed). A large majority of families have some livestock, but not of levels significant for either income or food consumption.

The picture gained appears one of a food shortage for most people, but one of a chronic nature which MOST people have ways of coping with.

It is my recommendation ;

* that the population of Chicualacuala and surrounding area are given assistance to establish an equitable system for water distribution once World Relief have established bore holes.

* that there is distribution as soon as possible of appropriate seeds and agricultural implements to the families in the area, both to deslocados and to residents.

* that there is investigation into the likelihood of and expected effects of, a return by the population to their places of origin.

* that there is a distribution of food to each family for 2 consecutive months, early January and early February, to coincide with expected pre-harvest shortfalls in income and food availability and possible higher prices. Distribution plans should be reviewed

after this time, especially if there is no harvest forecast.

* that there is continued monitoring in Chicualacuala of the nutrition and health situation, the market, and of the functioning level of coping mechanisms.

CHICUALACUALA2

METHODS :

- 1/ Individual interviews.
- 2/ Group interviews.
- 3/ Household survey on 21 households in Beirro Communal, 16 in Beirro Chicualacuala B, & 13 in Beirro Parfuri, with an aggregate total of 473 people in these families. (These Beirros were regarded as among the most needy in the town.)
- 4/ Market survey.
- 5/ Observations.

INTRODUCTION :

Chicualacuala is a town in the north of the Gaza Province situated where the railway, from Maputo in the south, crosses into Zimbabwe. It began with the building of the railway in 1951.

Current population is approximately 10,000, with more than half of these being deslocados and some being repatriates (one recent census gives population = 12,406, including deslocados = 4972). Most deslocados have been here for 3 to 5 years.

A couple of hundred people have returned to Parfuri from the Chicualacuala area. Many also wish to return to their places of origin, but Administration has not yet given permission for this. It is felt that when there is sustained peace this will happen. Many expect large needs when this occurs, with people having lost seed, implements, and cattle in large amounts as a result of the drought and the war in recent years.

The current problems caused by war and drought, are compounded by the fact that these people usually migrate to other areas in times of shortage.

PUBLIC HEALTH :

* WATER

A severe shortage exists for the majority of the population. The average amount of water per person per day was given as 2.7 L / day (cf. Household survey). The exceptions are CFM workers, hospital, school, military & administration employees, who are rationed water that is brought by 5 CFM railway trucks every Friday (and occasionally Mondays if CFM schedules allow). (One truck = 28,000 Litres).

The main alternative source is water from private wells in Litlatla, 17 km from the town, where 20 Litres = 500 MT, and which is physically hard to transport.

CHICUALACUALA3

Others will exchange goods (firewood) or casual labour for water, empty the dregs from the CFM railway trucks, or beg from others.

<u>BEIRRO</u>	<u>SOURCE (%)</u>		
	<u>CFM</u>	<u>LITLATLA</u>	<u>EXCHANGE FOR FIREWOOD</u>
Communal	81%	14%	10%
Parfuri	54%	77%	31%
Chicualacuala B	69%	44%	38%

CFM workers = 200-300 Ltrs / week / family
 Military = 2, 25 Ltr jugs / week / family
 Hospital = 2, 25 Ltr jugs / week / family
 Deslocados = eg. a family of 7 who receives 40 Ltrs / week; a family of 8, where 2 people are needed for the task of fetching the water; some people are said to have gone without food for 1-2 days with no water to cook in.

The hospital receives CFM water, but suggests that it is always finished after 5 days.

A pumping system to get water to the town from the river was destroyed in the "Ian Smith" war, & there are estimates of US 2 million dollars to repair it.

The Household survey replies suggest that the families of people interviewed consume an average of 2.7 Litres per person per day. This was in areas thought to be worse off than others.

The water situation is seen by most to be critical, more important than any shortage of food. Those with money or connections are coping but for many people lack of water limits both their present food intake and their future crop expectation.

* DEATHS

Hospital statistics;

Sept. '91 5 adults (TB=2, Other resp. disease=3)
 S e p t . ' 9 1 3 c h i l d r e n
 (Malnutrition=1, Odema(?malnutrition)=1, Resp. disease=1).
 Sept. '92 3 adults (TB=1, Malaria=1, Pneumonia=1)
 Sept. '92 1 child (Kwashiorkor ie. malnutrition).
 Total deaths in 1991 classified as from malnutrition = 3 children. (3/25 total deaths).
 Total deaths to end October 1992 classified as from malnutrition = 3 children + 1 adult. (4/23 total deaths.)

CHICUALACUALA4

Unofficial statistics;

(Often 1 person will represent each family at local funerals, which the community says is an accurate record of deaths.)

Suggest an increase in the last 2 years, from 3-4 / month to 10-15 / month (cf. market interviews + group interview with mothers of malnourished children.) This group suggested "hunger" as the cause of the increase.

Household Survey;

From the 50 families interviewed, 11 relatives were said to have died in the last month, one "from hunger". We were not able to substantiate this information.

From families representing a total of 493 people these death rates are not high. From official statistics, there was no change in the death rate when you compare the month of September in 1991 and 1992. There seems a small but still not highly significant increase in recorded deaths from "malnutrition".

* DISEASE

Mainly venereal diseases, malaria, parasites, & anaemia (cf. Hospital opinion).

TB, vomiting & diarrhoea, & malnutrition added to this list by others interviewed.

Increase in disease because of malnutrition also suggested by one interviewee.

Household survey;

none of the 50 families interviewed had children who were, to our knowledge, malnourished.

* HEALTH FACILITIES

A small hospital/health centre serves the area. Severe cases are transferred to Chokwe, 300 km down the railway line, or across the border, 80km to Cherinze, Zimbabwe. The hospital does not provide food (not uncommon in this country), and staff say that some do not have food while in hospital.

CHICUALACUALA5

MARKET PRICES :

In the market the vendors were mostly from outside Chicualacuala eg. Chokwe, XaiXai, and Maputo.

There has been an increase in the number of people trading (according to some but not others). This would fit in with other reports of an increase in truck traffic up the corridor in recent months, although basic food items were found only in very small quantities on the day we surveyed eg. less than 25 kg flour, less than 10 kg sugar, & 10 kg salt.

According to some the high transport costs and minimal supplies in local warehouses account for the small amounts available.

Food prices varied in comparison with Chokwe:
Milho, Feijau, & Oleo were the same as Chokwe.
Farinha & Acucar were less expensive.
Amendoim & Sal were more expensive.

There were no reports of people selling household goods, except we were told that occasionally someone would do so in order to begin a trading business.

The household survey suggests that fruit and vegetables are procured by most families in the market. Where staples such as maize are procured was not asked, but there seems to be neither large supply in the market, nor high prices in comparison with other places suggesting great demand. Together with the report that few locals are selling in the market, perhaps this suggests that the market is not a good indicator of the community's economy. The household survey answers DID suggest that 30.1 % of families were selling something in the market the month before our survey, but the income from this trade was not in large amounts (from the information we were given).

AGRICULTURE :

These people are largely from villages near the river, used to living from their own farms (machambas) production, and selling the excess. Some would keep cattle. Crops included maize (near the river), beans, groundnuts, pumpkin, millet, and the more recent introductions of mandioca and Djodjo beans. Cattle numbers are greatly reduced in the last 3-4 years especially. This is due to stealing "by the enemy", and restricted migration (also because of the war) for finding feed and water in time of drought.

CHICUALACUALA6

During our visit there were 3 days of light rain. Nearly every house we visited had a small area around it cultivated and planted (said to be millet). From most houses there was also someone out planting on land elsewhere. Most said that the amounts planted were very small.

Household survey;

94% of families have their own machambas, with an average of 2 each.

No family harvested this year, while 30% harvested in the first half of 1991, and 17% harvested in the second half.

<u>TYPE OF CROP</u>	<u>% OF FAMILIES</u>		
	<u>ALREADY PLANTED</u>	<u>ALREADY HARVESTED</u>	<u>WILL HARVEST</u>
MAIZE	9.2 %	4.6 %	4.6 %
MAPIRA	13 %	9.1 %	4.1 %
MEXOEIRA	27.3 %	14.4 %	13 %
BEANS	16.4 %	14.9 %	0
GROUNDNUTS	10.2 %	10.2 %	0
VEGETABLES	13.9 %	11.8 %	2%

A large number of those interviewed (67%) were hopeful of more harvests in 1993.

Those interviewed said they had not sold any of their harvest in the last 2 years, and none had exchanged it for other products.

Only 17% of families said they had no livestock.

<u>LIVESTOCK</u>	<u>AVERAGE NUMBER PER FAMILY</u>		
	<u>B.COMMUNAL</u>	<u>B.CHICUALACUALA B</u>	<u>B.PARFURI</u>
GOATS	1	1	0
CHICKENS	2	5	4
COWS	0	1	0
SHEEP	1	1	0

Resources for these communities have dwindled over a period of several years. This is the first year there has been no harvest. The spontaneously expressed need by all levels of people we spoke to was for seed (even those who did not know that the World Relief agriculture representative had recently visited to ask about seeds), and for agricultural implements. The small amount of seed that is being planted is said to be at least 2 years old, which may affect production just as the future levels of rain will do. It is expected that what was planted that week should be ready in February at the earliest, and will not be a large amount (some say it will be just enough for seed). A large majority of families have some livestock, but not of levels significant for either income or food consumption.

EMPLOYMENT :

Although most employed people in the town are employed in the railways, the completion in 1991 of 2 to 3 years rebuilding of the railways has meant that there is less employment now than previously (170 at present). They are given food as part payment.

A small number are employed in woodcutting, and there is one known private farmer in the nearby area (numbers unknown).

The employed people in CFM, teaching & the hospital are said to receive 80,000 - 90,000 MT / month minimum.

There is a minimum of casual work available in the town (eg. fetching water, at 2,000 Mt for 200 Litres; mud-plastering houses, at 1,000 Mt for a small house & 5,000 MT for a large house).

There is said to be between 200-1000 people from families in the area who are working in South Africa (cf. estimates from Administration & from Red Cross interviews). Many of these people send food back to families via companies in Chokwe eg. Manica, or money by hand.

Household survey;

% Of Families with no one employed in permanent or casual work
= 59.7 %

The reported incomes range from 5,500 MT to 61,380 MT / month.

Of those families who had someone working, 16.7 % of them said these people did not contribute to the household income.

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<u>TYPE OF EMPLOYMENT</u>	<u>% OF FAMILIES WITH MEMBER EMPLOYED IN IT</u>
MINER	10 %
WOODCUTTER	17.5 %
WITCHDOCTOR	2.1 %
FARMWORKER	6.2 %
CATTLE WORKER	2.1 %
TYPIST	1.6 %
GUARD	1.6 %
CFM EMPLOYEE	2.1 %
SOLDIER	2.1 %
DOMESTIC WORKER	2.1 %
BUTCHER	2.1 %
CRAFTSMAN	2.1 %

Of the 50 families interviewed, 24 reported no income and 3 gave no information. Of the rest, the income per head averages at 4,985 MT per month.

59 % of the families reported they had no one employed permanently or casually, and an average monthly income per head of 4,985 MT. There is very little local employment in this town, which suggests future options for improving the income of the population being minimal.

ALTERNATIVE SOURCES OF INCOME/FOOD :

Most of the population are deslocados of 3 or more years who are used to growing crops on their own land and selling the excess.

In times of food shortage people would usually migrate to areas where food is plentiful; this has not happened in the current drought because of war and the risk of bandit attack.

Other sources of income now include selling traditional beers, selling firewood (small amounts), selling Dinda roots (about 9,000 MT / 50 kg which takes a week to dig, and for which there is a limited market), and selling building poles.

Some exchange of firewood or casual labour for maize "husks" or water takes place.

Some of those interviewed have noted an increase in stealing, especially of livestock & across the border (we were told that traditionally there would be very little, due to fear of being cursed by the witchdoctor, but that in present conditions people take risks). Some cattle are butchered illegally, and there is some increase in illegal hunting of wild game. (The hunting season was lengthened this year due to shortage of food.)

Other sources of food;

"Donations" were said by many to be relied upon by the population, but many of the people, including some of the poorer people, said that they had never received any donations, and between January and October we were told there had been only 2 distributions of about 10 kg of maize per person.

"Forest fruits" are another source of food eg. Chicutzte root (usually drunk or eaten in a porridge only occasionally or in times of food shortage), Macuacua fruits, Dinda leaves (usually used for hair-care further south).

Household survey;

Average reported income for those who sell in the market (30% of families last month) is 13,720 MT / month. Types of items sold include firewood (the main item), produce, hunting weapons, beers, soap, salt, stationary, & biscuits. Of those who have livestock, 12% have sold some of them for meat.

75 % of the interviewed families said they receive donations. One of the 3 areas where we interviewed had received donations in the last month, & here only 25 % of families said that they had received anything.

There is some discrepancy in estimation of family incomes, maybe due to the difficulties in estimating irregular trade profits or due to non-monetary exchanges taking place, or due to reluctance to declare income. It can be assumed with no harvest, that for many, small trade is one of the few sources of income. With between 2% and 10% there may be reliance on income from family in RSA. With a small number there is local employment. A few families reported relying on donations, although there have not been enough official distributions so far this year to warrant such a claim. A few families also reported relying on forest fruits, which are not ideal nutrition but are edible. The picture gained appears one of a food shortage for most people, but one of a chronic nature which MOST people have ways of coping with.

CHICUALACUALA10

NUTRITION :

A Save The Children Fund (USA) survey in Chicualacuala in July on children 6 months to 5 years showed 7.3% of children to be malnourished (for their survey, a malnourished child is less than the 3rd percentile). They have since begun a supplementary feeding programme based at the hospital, although this level of malnourishment is not thought to be critical.

Official death rates (see above) also do not reflect a critical nutrition situation.

Unofficial death rates suggest an increase, but this we could not find evidence for.

From observation among both children and adults there are some people who are thin, but most people appeared healthy.

Household survey;

The main sources of vegetables is the market (80.1 %), machambas (25.4 %), and black market (8.9 %), exchange (4.2 %), donations (8.9 %), and forest foods (23.2 %).

The main sources of fruits are the market (63 %), machambas (6.7 %), and the black market (5.7 %), exchange (2.1 %), forest foods (7.8 %).

Only 4% of those who have animals regularly eat meat (ie. 5 times a week.)

The range of food consumption varies between those interviewed. The accuracy of these reports also varies, as the reported consumption is likely to drop if there is expectation of receiving food. 3 out of 50 reported not having flour for their families the day before interview (maize flour most common), eating instead forest fruits/leaves. The measured amount of flour consumed the day before interview was an average of 12 kg per family (measured in a total of 22 families, the others not specifying amounts), which equals an average of 1.3 kg flour per person per day.

Families who said they ate fruit & vegetables at least 5 times a week = 19.7 % . Those who said they ate fruit and vegetables rarely = 68.5 % .

CONCLUSIONS :

The water situation in Chicualacuala is seen by most to be critical, more important than any shortage of food. Those with money or connections are coping but for many people, especially deslocados, lack of water limits both their present food intake and their future crop expectations.

If this situation is prolonged there could be an increase in health problems, especially from limited hygiene with lack of water. The population's food intake will also further be restricted. Future prospects will improve if there is sustained rain in the area, and will be helped by the provision of water by World Relief bore holes. This will also release cash for food instead of water. The success of the latter will depend on water provision being unrelated to the recipients having money or connections.

Future prospects for the deslocados on moving home are good if there is rain meantime, but if not, then the present plans for water provision by World Relief will have to be reviewed.

There is a shortage of food in this area. Neither harvests nor livestock, the traditional source of food for most people, provide for family consumption at present. For one or two families this may be a critical situation, but for most this is a chronic situation for which they have a number of coping mechanisms functioning.

The health of the population does not appear to be significantly affected by the shortage of food. Should the situation remain as it is for a long period of time there may be significant increases in childhood illnesses exacerbated by under nutrition. Continued monitoring of the situation is important.

Coping mechanisms found range through small trade (such as often increases in drought times), casual labour, family members working in RSA, and the eating of forest fruits/leaves/roots. Donations have occurred, but not enough to have been a significant coping mechanism. Again, continued monitoring of the situation is important.

If there is a harvest in February/March, the situation for most will improve a small amount. To maximize this improvement, World Relief could increase its involvement in seed and agricultural implement distribution. (The fact that all levels of the community voiced this as being their priority need indicates the lack of severity of the food shortage).

CHICUALACUALA12

Should the deslocados be allowed to return to their places of origin, regardless of whether or not it rains, the coping mechanisms functioning now may be totally inappropriate for isolated villages or houses. World Relief should investigate in advance what level of assistance will be needed, and to what level they can help. It is crucial that any aid given prior to this time is not used by anyone as an artificial pull for people to stay in their present location.

APPENDIX : (see attached)

SOURCES * Administrator, Chicualacuala District.
* Ten Market Traders interviewed
* Director of CFM
* Twenty three mothers of children in the SCF children's feeding programme.
* Director of Education/District Emergency Coordinator.
* Local Veterinarian.
* Director of the Hospital.
* Corridor representative for SCF.
* Leaders in Beirro Communal, Beirro Parfuri, Beirro Chicualacuala B. A total of 50 families in these Beirros.

KATHY CARTER. RGN. RM. CTCM&H.
NOVEMBER, 1992.
WORLD RELIEF MOZAMBIQUE.

CHICUALACUALA13

SURVEY REPORT - WORLD RELIEF

LOCATION : MAPAI

DATE : 2nd & 3rd November, 1992.

AIM : To assess the current nutrition situation of the population in and immediately surrounding the town of MAPAI, in the light of past events and future possibilities.

SUMMARY AND RECOMMENDATIONS :

There is a water shortage in this town, but which is in effect an improvement from what it was like prior to the town water pump being restored to working order by ICRC. The level of 4 litres/person/day is low, and if this level remains low there may be an increase in hygiene-related health problems eg. skin infection.

The death rates reported are low, with no evidence to suggest a critical malnutrition problem at the present time. The amount of disease was also reported to have decreased, although there are some malnourished children.

The prices are high in this market. This will be important to monitor in the months to come. Some conflict of reports exists, with some being positive and others negative about the economic condition of the town.

There seems to be possibility for less than half of the households interviewed to expect a harvest in the near future, although 73% were hopeful for a harvest in 1993 sometime. As in Chicualacuala the spontaneously expressed need is for seeds and agricultural implements, suggesting that this is more of a priority than any food shortage at the present time.

Although limited, there is some opportunity for employment in this town, apparently more than in Chicualacuala. Some 13 % of those interviewed had family members working as miners, presumably in RSA or in Zimbabwe. This and the timber industry seem to provide the most employment.

Small trade appears to bring in a large proportion of the household incomes. The levels declared are not high, but combined with the fact that all of those interviewed at least had machambas and some had produce from these, the households seem to mostly be coping with current food shortages.

Mapai B1

From observation there were few children and no adults we could classify as being clinically malnourished. There are obviously areas of need though, and continued monitoring of the situation and liason with SCF(USA) regarding increases in the numbers of malnourished children will be important in the months ahead.

The picture in Mapai is one of a food shortage for some of the population. For these people, who may be the majority, the situation is of a chronic nature. There appear to be many ways at the present time in which people are coping with this problem.

It is my recommendation;

* that there is distribution as soon as possible in Mapai of appropriate seeds and agricultural implements to those in need (recognising that SCF have targetted 47 families to receive seed in Mapai).

* that there is an investigation into the likelihood of and expected effects of, a return by the population to their places of origin.

* that there is a distribution of food to each family for 2 consecutive months, January and February, to coincide with expected preharvest shortfalls in income and food availability, and possible higher prices. Distribution plans should then be reviewed according to the expected harvest.

* that there is close monitoring of the market prices, and monitoring of the levels of malnutrition (via liason with SCF) and of the continued functioning of existing coping mechanisms in the months to come.

METHODS :

- 1/ Individual interviews.
- 2/ Market survey.
- 3/ Household survey on 40 households in the 16th of June Beirro and the Muzzaman Beirro, with an aggregate total of 166 people in these families. These were said to be among the most needy in the town, and were also said to have similarities in living conditions to the villages along the river near Mapai.

Mapai B2

INTRODUCTION :

Mapai is a town in the District of Chicualacuala, situated alongside the railway line, and about 22 km from the Limpopo River.

Current population in the town area is approximately 5,000, with a further in the rest of the administrative area, which includes Mpuze and the villages along the river. A large percentage of these are deslocados. Some are repatriates ie. those that have fled to other countries but who have now returned. (In this town there is also a separate administration for the people from Chigubo who reside there).

Very few people have returned to their places of origin, waiting for government permission to do so, which some say will not be until well into next year. As in Chicualacuala, there is expected to be a lot of help needed for the deslocados and repatriates when they do return home.

PUBLIC HEALTH :

* WATER

CFM, the town water tank, and the river are the main sources of supply.

Officially none of the town water is sold, but unofficially it can be bought via CFM for 250 MT/bucket or via the military at 400 MT/bucket. Private tractors will fetch river water for 300-500 MT/20litres, or 2000 MT/200 Litres.

Household Survey;

<u>BEIRRO</u>	<u>REPORTED WATER SOURCES</u>		
	<u>SOURCE (% OF FAMILIES)</u>		
	<u>VIA CFM</u>	<u>RIVER</u>	<u>ELSEWHERE</u>
16th JUNE	55%	25%	10%
MUZZAMAN	75%	50%	-
AVERAGE.	65%	38%	5%

The average recorded consumption was 4 Litres/Person/Day. In other interviews this varied from 5 litres to 10 or more litres per person per day.

Mapai B3

There is a water shortage in this town, but which is in effect an improvement from what it was like prior to the town water pump being restored to working order by ICRC. The level of 4 litres/person/day is low, and if this level remains low there may be an increase in hygiene-related health problems eg. skin infections.

*** DEATHS**

There is a small health centre in Mapai, which only has records of one death in 1991 and one in 1992, both from TB. The health worker interviewed had heard of two children dying of malnutrition in 1992, but SCF, the agency working with malnourished children in Mapai, had no information on this. Information from administration and others suggests no increase this year in death rate, and no deaths from malnutrition.

The death rates reported are low, with no evidence to suggest a critical malnutrition problem at the present time.

*** DISEASE**

The common diseases in this area are malaria and diarrhoea. Others include sexually transmitted diseases, bronchitis, conjunctivitis, & uterine infections. We were told that the amount of disease had decreased in recent times, although we have no figures on this.

*** HEALTH FACILITIES**

The health of this community is catered for by a small health centre, offering basic consultations but no surgery facilities. Serious cases are transferred to Chokwe or to Chicualacuala.

MARKET PRICES :

The prices in Mapai were significantly higher for basic food items than in Chokwe at the same time, except for beans.

Market Survey;

<u>ITEM</u>	<u>PRICE COMPARISON WITH CURRENT CHOKWE PRICES</u>	<u>PRICE/KG</u>
MAIZE	up 40%	700 MT
SUGAR	up 38%	2500 MT
FLOUR	up 12%	933 MT
OIL	up 13%	(4500 MT/L)
SALT	up 100%	737 MT
BEANS	down 33%	1667 MT

The market vendors are said to be mainly from outside Mapai, plus some families of soldiers. Most are said to procure from Chokwe.

Unlike Chicualacuala, the market in Mapai appears to be well stocked.

According to one older resident, this year economic conditions have improved because locals are going elsewhere to get things to sell eg. Maputo & Chokwe. Others disagree, saying that it has never been as bad as it is now.

Household Survey;

The main source of fruit and vegetables for those interviewed is the market (72% of households get vegetables, and 35% get fruit at the market).

The prices are high in this market. This will be important to monitor in the months to come. Some conflict of reports exists, with some being positive and others negative about the economic condition of the town.

AGRICULTURE :

Crop production and livestock are usually the main source of food and income for the present residents of Mapai. There used to be a lot of cattle in the area. Maize was grown near the river, and other crops included millet, groundnuts, beans and mandioca.

Mapai B5

For most, there has been no harvest for nearly two years (33% of those in the household survey had their last harvest in the first half of 1991.) Some maize was planted near the river with rains in June/July, and this is about due now for harvest. Some millet is also being planted which some say will only be enough for seeds. There is some fear that the seeds are old and production will be minimal. Harvesting of current planting is estimated to be in March or April.

We observed many people preparing for planting and planting their machambas. There is said by most to be a lack of seed and agricultural implements.

Household Survey;

100% of those interviewed have machambas, with an average of 4 machambas each.

REPORTED TYPE OF CROP	PLANTING AND HARVESTING		
	% OF FAMILIES REPORTING -		
	-ALREADY PLANTED	-ALREADY HARVESTED	-WILL HARVEST
MAIZE	5%	5%	0
MAPIRA	10%	10%	3%
MEXOEIRA	28%	25%	0
VEGETABLES	13%	13%	0

Only 3% had sold any of their produce in the last two years, although one or two had exchanged produce for items such as clothing or tools. 2.5% had sold some of their livestock for meat.

The animals observed appeared to be in good condition.

TYPE OF LIVESTOCK	LIVESTOCK REPORTED		
	AVERAGE	NUMBER	PER HOUSEHOLD
	16th OF JUNE	MUZZAMAN	AVERAGE
GOATS	1	1	1
HENS	4	2	3
COWS	1	0	1

There seems to be possibility for less than half of the households interviewed to expect a harvest in the near future, although 73% were hopeful for a harvest in 1993 sometime. As in Chicualacuala the spontaneously expressed need is for seeds and agricultural implements, suggesting that this is more of a priority than any food shortage at the present time.

EMPLOYMENT :

There is some employment available in Mapai, most of it casual. This is mostly with CFM, in timber-sawing or with the private farmers of the area. Wages are not always paid at the due time. There is said to be a large number of families who have at least one family member working in RSA or in Zimbabwe eg. in the mines.

SCF(USA) are supporting an income generation programme, assisting 45 tradespeople in Mapai to develop their businesses.

Household Survey;

55% of the households interviewed said they had no one employed. Of those with members employed, only 8% said these members did not contribute.

The incomes where someone was employed ranged from 3,500MT to 270,000MT/month. 18 out of 40 families have someone employed. No one refused to answer.

Mapai B7

TYPE OF EMPLOYMENT	% HOUSEHOLDS WITH MEMBER EMPLOYED		
	16TH OF JUNE	MUZZAMAN	AVERAGE
CARPENTER	-	5%	3%
COOK	-	5%	3%
TIMBER WORKER	5%	25%	15%
CRAFTSMAN	-	5%	3%
TREE FELLER	-	10%	3%
MINER	25%	-	13%
MACHINE OPERATOR	5%	-	3%
MARKET TRADER	5%	-	3%

Although limited, there is some opportunity for employment in this town, apparently more than in Chicualacuala.

ALTERNATIVE SOURCES OF INCOME/FOOD :

Income is found in different ways; cutting poles, grinding maize, making and selling baskets, selling sumo(sugar-palm drink), selling beer, selling poles for pounding maize (eg. makes 1/day, and sells them for 2000MT per pole), and other items.

A reliance on donations was suggested by one person to exist. These have been irregular in time and amount. In the past people would help each other out, but a few people commented that this does not happen so much now.

One person remarked that there has been an increase in stealing, but only by children and unemployed soldiers.

25

Household Survey;

This suggests that 38 % of families sold something in the market the month prior to the interview.

Items sold included firewood (15% of families), traditional beers (8% of families), clothes, and other diverse products.

In the month of the interview, none reported selling anything. Of those who sold, the average income per month was said to be 19,375 MT.

Of the 38% of households who had sold something in the month previous to the survey, the average income was 19,375MT in one month.

Those who reported receiving donations were 88% of families, but none of these had received in the last month.

19 of the 40 households make use of "wild plants", eg. cacana, macuacua, nate, chicutze (for which they must travel long distances), and other things.

Small trade appears to bring in a large proportion of the household incomes. The levels declared are not high, but combined with the fact that all of those interviewed at least had machambas and some had produce from these, the households seem to mostly be coping with current food shortages.

NUTRITION :

Malnutrition was mentioned, and there is an SCF children's feeding centre in Mapai, but the only available figure is that of Chicualacuála town, which has a malnutrition rate of 7.3%. In the programme there are 111 moderately malnourished children and 24 seriously malnourished children. It is possible that there is a large percentage from one particular area in the town, but this is being followed up at present by SCF.

None of the families in the household survey had children who were malnourished. Observation supported this.

Household Survey;

<u>WHERE FAMILIES PROCURE VEGETABLES AND FRUIT</u>	<u>16TH</u>	<u>OF</u>	<u>MUZZA</u>	<u>AVGE.</u>		
SOURCE	VEG.	FRUIT	VEG.	FRUIT	VEG.	FRUIT
MACHAMBA	65%	0	5%	0	35%	0
MARKET	60%	25%	85%	45%	72%	35%
SHOPS	0	0	0	0	0	0
BLACK MARKET	0	0	0	0	0	0
EXCHANGE	10%	55%	0	10%	5%	33%
GIFTS	0	0	0	5%	3%	3%
WILD PLANTS	0	0	25%	0	13%	0

Of those surveyed, only 18% reported eating fruit and vegetables regularly (ie. at least 5 times a week). 30% estimated once a week, and 40% said rarely.

Very few reported eating meat regularly (only 8%).

Only 13% reported eating forest fruits (wild plants).

From observation there were few children and no adults we could classify as being clinically malnourished. There are obviously areas of need though, and continued monitoring of the situation and liason with SCF(USA) will be important in the months ahead.

CONCLUSIONS :

The overall impression of this area is one of shortage; shortage of water, seed and food. The needs of the majority of the population appear to be also in this order of priority. These needs appear to have developed slowly, and what seems to exist is a chronic shortage of water, seeds and food.

Coping mechanisms have developed, and most people seem to be coping, but the situation may deteriorate with further lack of rain, or with population resettlement.

SOURCES :

- * Administrator of the Post of Mapai.
- * Administrator of Chigubo (Mapai).
- * Sub-chief of CFM (Mapai).
- * Farmer/businessman, Mr Malulech, and others.
- * SCF Corridor Representative.
- * Healthworker, Mapai, Mr Bolloy.
- * Beirro Leaders in Beirros 16th of June and Muzzaman,
and a total of 40 household representatives in these
Beirros.

KATHY CARTER. RGN. RM. CTCM&H.
NOVEMBER, 1992.
WORLD RELIEF MOZAMBIQUE.

Mapai B11

SURVEY REPORT - WORLD RELIEF

LOCATION : COMBOMUNE / COMBOMUNE RIO

DATE : 12-11-92 to 14-11-92

AIM :

To assess the current nutritional situation of the population in Combomune town and Combomune Rio settlements in the light of past events and future possibilities.

SUMMARY AND RECOMMENDATIONS :

The main source of water for this population is the river. All of those interviewed gave the river as their only source of water. (Holes are dug in the dry bed as temporary wells). The average water consumption per person is better than many areas along the corridor, at 10 litres per person per day. Some people buy water, at 300 - 500 MT for 20-25 litres. Water shortage here is not critical, especially as Geomoc and ICRC are at present involved in provision of two new boreholes for the town.

The health problems seen in the local health centre are mostly malaria, diarrhoea, and sexually transmitted diseases. There are no official death rates, but those reported in our survey showed 6 deaths from 35 families, including one "of cause unknown" and one "of hunger". (Other causes were suicide, headache, and malaria). Some suggest an increase in deaths (eg. one group of mothers thought 5-6 per week) in the last year, while others disagree. Observation supports a non critical health situation.

There are some marked differences between Combomune Rio and Combomune town. 12 out of 21 households at Combomune Rio were original inhabitants of the area, while those in the town all came from other places about 5 years ago. More people from the town appear to have employment, but those employed from the river area have a higher average income than those in the town, and seem to have more ability to plant.

An average of 91% of those interviewed have machambas. There is some planting, especially near the river (eg. 24% of these households have planted maize, compared to 7% in the town).

There are some small hand irrigated plots near the river planted with a variety of crops. There are one or two larger farmers who irrigate their land mechanically employ others, and who are coping well despite the lack of water.

Only 7% of those interviewed expected to harvest in 1992, and none in 1993.

COMBOMUNE1

35% had consumed some of their own produce in the last 2 years, and 6% had sold some of their own produce and a few had exchanged some. This suggests that many people have not relied on their own crop production for a long time. A few people mentioned a need for seeds, although the need does not seem as great as in some other corridor areas. SCF is planning to do some form of seed distribution.

38% of households possess more than one type of animal, with an average of 5 goats, 4 cows, and 3 hens. Only 9% of households regularly consume meat, but 12% sell it. The families interviewed do appear to have some resources.

47% of those interviewed have a family member employed. Private businessmen (officially only 9) run firewood/timber businesses employing, we were told, up to 6,000 workers in the area, and paying up to 74,000 MT/month, and sometimes with food. Some say this is not always paid. In the town 50% of households have someone employed in some form of timber work.

Miners, presumably employed in RSA, are in 7% of households surveyed. This is very common from what other sources said eg. that "most have family in RSA".

Other sources of income include selling traditional beers, or firewood/coals, or baskets (eg. at 500 - 1500 MT each, making one per day).

The main source of fruit and vegetables is the market (of households interviewed, 44% get fruit and 72% get vegetables from the market). Most in the survey (61%) consume fruit and vegetables regularly (ie. at least 5 times a week), and a very few say they eat them rarely. 13% of households report the forest as a source of vegetables.

A majority of households (87%) said they receive donations, but from other sources this was found to be of small amount eg. "1kg per person", and very irregular. There appears no dependence on donations.

SCF runs a feeding programme for malnourished children, and they assess the malnutrition rate as being 6.9% (ie. less than the 3rd percentile). They have 40 registered, the majority of whom come from Combomune Rio and Beirro Dindize, the main areas surveyed.

From observation of these areas, if they are the most in need, the children and adults appear to be healthy, and coping at present with the situation. There is no significant malnutrition related illnesses, and measured levels of malnutrition are at expected levels at the present time. As in other places, there is a chronic shortage of food, but for which there are a large number of coping mechanisms in place and functioning. Donations does not appear to be a significant one at present.

COMBOMUNE2

It is my recommendation that;

* that there liason with SCF(USA) and appropriate seed and agricultural implement distribution to those most in need in the community.

* that there is continued monitoring of market prices, employment / income opportunities, and the health of the community.

* that there is food distribution for each family for two consecutive months, January and February, to coincide with expected preharvest shortfalls in income and food availability, and possible higher prices at this time. Distribution plans should then be reveiwed according to the expected harvest.

METHODS :

1/ Individual interviews.

2/ Market survey.

3/ Group interview.

4/ Household survey on 35 households, accounting for 246 people. These were households in Combomune town, in the Beirro of Dindize, and in the settlement of Combomune Rio, all areas considered to be perhaps in a poorer condition than others in the area.

INTRODUCTION :

Combomune is part of the district of Mabalane. The town is on the railway line northwest of Mabalane, and is about 13 km from the Limpopo River. Combomune Rio is beside the river. There are about 2,500 people in Combomune, including a number of deslocados, and about 2,000 in Combomune Rio.

PUBLIC HEALTH :

*** WATER**

The town is 13 km from the river Limpopo. Wells in the dry river bed are the main source of water (100% of the 35 households in the survey). Another source is the weekly CFM distribution for CFM workers, teachers and the Administration. Two new boreholes are being provided for the population in the town via Geomoc and ICRC.

COMBOMUNE3

Water is available for sale at 300-500 MT/20 - 25 Litres, or 2400 MT/210 Litres.

The average water consumption in the households interveiwed was 10 Litres per person per day. Surprisingly, it was less at Combomune Rio than in the town (8 litres / person / day in Combomune Rio & 13 litres / person / day in the town). This could reflect relative income levels.

* DEATHS

No official figures are available official figures are available.

Opinion varies as to whether or not there has been an increase in the death rate. One Beirro leader said he thought that there had bee two deaths in his Beirro this year, one from TB and one from Aids (SIDA). The mothers of malnourished children suggested that currently, and for the last two years there have been 5 to 6 deaths per week in Combomune.

Household Survey;

13% of those interviewed had a death in the household in the past month. The causes were given as malaria, headache, poisoning and hanging (suicides), "hunger", and "cause unknown".

* DISEASE

Malaria, gonnorrhoea, and diarrhoea are the main recorded diseases seen at the Combomune Health Post.

This is supported by several other interviews, withy the addition by some of TB, odema, and worms.

Observations during our visit do not suggest any obvious nutrition related diseases or any critical health problems.

* HEALTH FACILITIES

The town is served by a small health post. Help has been given by SCF for equipment and building, and there is a Red Cross First Aider and a midwife based there. Serious cases are transferred to Mabalane or to Chokwe.

COMBOMUNE4

2/21

MARKET PRICES :

The main market of this area is in the town of Combomune.

The traders are said to be mainly from places outside Combomune such as Chokwe, XaiXai or Maputo. Of the 35 families interviewed in the household survey, 38% said they had sold something in the market last month, and none in the month of interview. This may be only occasional trading, but it is still a significant percentage of households.

Opinion varies as to whether or not the market is well stocked.

Lack of local warehouses and high transport costs combine to make prices of basic food items high in the market. (For a 50 kg bag to be taken from Chokwe to Combomune, the cost is 5485 MT.) Prices in this, as in other markets, are not fixed.

Market Survey;

CURRENT PRICES AND COMPARISON		
ITEM	PRICE COMPARISON WITH CHOKWE	COMBOMUNE, PRICE PER KG
MAIZE	up 12%	560 MT
FLOUR	down 25%	600 MT
SUGAR	up 31%	2375 MT
SALT	up 35%	470 MT
BEANS	down 20%	2000 MT
OIL	up 13%	(4500 MT/Litre)

Household Survey;

For those resident in town, all but vegetables at the market and most buy fruit there also. For this commodity at least, the market is an important source. Those interviewed in Combomune Rio do not give the market as a main source.

AGRICULTURE :

As in most parts of Gaza there has been a drought for the last couple of years. It is the opinion of some residents interviewed that the situation has been virtually the same since 1983.

Most people have machambas (100% in the town beirros surveyed, and 81% in Combomune Rio), and usually this should be a source of food, even if the owner is employed elsewhere. The average number of machmbas reported to be owned was 4 per household. Some of those in the town report no access to machambas, referring to their machambas in their places of origin.

Cattle are also kept, but herd sizes of 50 to 100 have decreased by large amounts owing to theft during the war.

We were told that most people had prepared their machambas but some had neither rain nor seed. A shortage of agricultural implements was described by some of those interviewed. There appeared to be less of a demand for seed here than in many other places we visited. Near the river there are a number of small machambas which are irrigated by hand.

Lack of **seeds, agricultural implements, and cattle** could mean that when the rains do come, many people will not be able to get maximum production from their land.

Household Survey;

Most households surveyed reported no harvests for at least 2 years. This suggests a long term or chronic food shortage rather than an acute one.

<u>TIME OF LAST HARVEST</u>	<u>FAMILIES WHO HARVESTED</u>	
	<u>Beirro Dindize</u>	<u>Combomune Rio</u>
1st Half, 1991	14%	19%
2nd Half, 1991	7%	0
1st Half, 1992	0	19%
<u>TIME HARVESTS EXPECTED</u>	<u>FAMILIES EXPECTING HARVETS</u>	
1992	0	14%
1993	0	0

COMBOMUNE6

OF HOUSEHOLDS INTERVIEWED			
TYPE OF CROP	% ALREADY PLANTED	% ALREADY HARVESTED	% STILL TO HARVEST
MAIZE *	16%	5%	3%
MAPIRA	3%	0	0
MEXOEIRA	3%	0	0
MANDIOCA	5%	0	3%
BEANS	5%	0	3%
GROUNDNUTS	3%	0	0
SUGAR CANE	5%	0	3%
VEGETABLES	7%	2%	0
FRUIT	7%	0	3%
TOBACCO	10%	0	5%
SWEET POTATOE	3%	3%	3%
PEPPERS	3%	3%	3%

(* Beirro Dindize households only reported having maize).
 An insignificant number of people (6%) reported selling any of their produce in the last two years and one or two had exchanged some for clothes.

Of the households with livestock, 12% say they sell some for meat.

38% of households possess more than one type of animal. A small number also keep pigs.

AVERAGE PER	NUMBER OF LIVESTOCK	
	BEIRRO DINDIZE	COMBOMUNE RIO
TYPE OF ANIMAL		
GOAT	2	7
HENS	4	2
COWS	2	6
DUCKS	1	5

COMBOMUNE7

EMPLOYMENT :

The most common employment according to those interviewed was in timber (many also exchange firewood and coals for flour). Some businessmen (from Chokwe, Xai Xai, and officially 9 from Combomune) employ others in this. We were told the figure employed was 6,000, which would obviously be from an area wider than Combomune itself. Reported income from this is up to 74000MT/month, if it is paid. There can also be payment in food.

We were also told that most families have a family member working in RSA. Some of these work illegally (which may affect the reporting accuracy of occupations in the household survey).

Other employment exists only on a small scale, eg. a shop worker might receive 25000MT per month. There was comment in general on most salaries being low.

Household survey;

57% of households said they had none of their members employed (43% in Beirro Dindize, & 70% in Combomune Rio). Of 35 families, 2 gave no information.

Incomes known for those employed ranged from 16000 MT to 99800 MT in one month. Only 9 families gave a figure.

TYPE OF EMPLOYMENT	PERCENTAGE OF ALL HOUSEHOLDS WITH MEMBER EMPLOYED		
	BEIRRO DINDIZE	COMBOMUNE RIVER	AVERAGE
MINER (? location)	0	14%	7%
CATTLE WORKER	0	5%	3%
COOK	0	5%	3%
MARKET TRADER	0	5%	3%
TIMBER WORKER	50%	10%	30%
TEACHER	7%	0	4%
OFFICE WORKER	7%	0	4%
MILITARY	7%	0	4%

It seems that employment is limited to work in the timber and coal business, and mining (presumably in RSA).

COMBOMUNE8

ALTERNATIVE SOURCES OF INCOME/FOOD :

As in Mabalane, many people are selling firewood and coals or exchanging them for flour. Selling of poles or baskets also occurs (making one per day which sell for 500-1500 MT each). Selling traditional beer is more common now; in 1990 to 1991 it was made with maize, but with lack of maize they now use a forest plant, "palmeira sylvestre".

None of the households reported selling anything in the market in the month of the interview, but 43% in Beirro Dindize and 33% in Combomune Rio had sold something the previous month. Articles sold included carvings, firewood and other unstated items.

Some people acquire wild plants for food eg. ngulu tree, chola, l'chao, and chicutze roots (the latter is found only at distances of up to 35km).

Among those surveyed, only 2 families reported using this as a usual source of food, and these were including the wild plants as part of a varied diet.

Opinion was divided as to whether or not there was a large amount of theft.

No one spontaneously reported receiving donations, but in the survey, 87% of households said they had received donations (none in the last month).

NUTRITION :

In Combomune there is a feeding programme for malnourished children run by SCF(USA). There were 40 children registered at the time of our visit; Most come from Dindize (28%), and from Combomune Rio (25%). These are the areas used for the household survey. Others came from Saute, Combomune village, Machel, Mangaze, and Mavawapas. The malnutrition rate SCF give from July 1992 is 6.9% (ie. less than the 3rd percentile).

COMBOMUNE9

SOURCE OF FRUIT OR VEGETABLES	% OF RIO H'HOLDS			
	COMBOMUNE	FRUIT	BEIRRO	DINDIZE
	VEG.	FRUIT	VEG.	FRUIT
MACHAMBA	52%	29%	29%	29%
MARKET	43%	38%	100%	50%
SHOP	5%	10%	0	0
BLACKMARKET	14%	5%	7%	0
EXCHANGE	0	43%	0	21%
GIFT	14%	5%	0	7%
WILD PLANTS/FOREST	19%	5%	7%	0

Of those who own animals, only 9% eat of the meat.

Those who regularly consume fruit and vegetables (ie. 5 times per week) are 61% of those interviewed.

Those consuming fruit/vegetables once a week are 35%, and those consuming them rarely are 3%. There does seem from replies that people consume a wide variety of foods.

From observations, no nutrition related illness and no significant amount of malnutrition was obvious in these communities.

CONCLUSIONS :

This survey suggests a community that has not been able to rely on harvests for food for a period of at least 2 years. The situation is one of a chronic problem rather than an acute one, one in which coping mechanisms have developed. The main coping mechanisms being timber felling/trade and the sale of firewood and coals, and income from family members migrated to RSA.

COMBOMUNE10

SOURCES :

- * Administrator of the Post of Combomune.
- * Market Vendors.
- * Agriculture (forestry) representative.
- * Red Cross First Aider, Combomune Health Post.
- * Health Workers, SCF Nutrition Centre.
- * Local Businessman.
- * Beirro leaders in Dindize Beirro and Combomune Rio, plus 35 representatives of families in these areas.

KATHY CARTER. RGN. RM. CTCM&H.
NOVEMBER, 1992.

COMBOMUNE11

SURVEY REPORT - WORLD RELIEF

LOCATION : MABALANE, MABALANE DISTRICT, GAZA PROVINCE.

DATES : 11-11-92 to 12-11-92

AIM :

To assess the current nutrition situation of the population in and immediately surrounding the town of Mabalane, in the light of past events and future possibilities.

SUMMARY AND RECOMMENDATIONS :

The majority of the households interviewed get their water from the river (71%), although some receive via CFM. With the average daily consumption among the households interviewed being 7 litres per person per day, the situation is much better than most other areas we have surveyed. For some, irrigation is also possible, with help from SCF(USA) or the "work for irrigation" system worked out between some residents and local private farmers. Despite this, water is still said by some to be the main problem here.

There are several private farmers in the area providing a small amount of employment. Some planting has occurred, especially near the river where hand irrigation is possible, although this was not reported by the households interviewed. Seed stocks are said to be low, although some is obtained from other farmers. 29% of those interviewed do not own machambas, suggesting that the population relies on other sources of income.

Many are said by local residents to have family working in RSA (in our survey, 9%. Another 9% said they had family members who are miners). Another large source of income is the selling of firewood and coals, which are well organised in this area by businessmen who transport it to Maputo.

Other sources of income include selling of traditional beers and other items in the market. Some say that most of the market vendors are from outside of Mabalane, but 25 % of the households we interviewed had sold something in the market in the month of interviewing.

Basic food items are more expensive in Mabalane except for beans, which are 11% less than in Chokwe, and flour, which the same price as in Chokwe.

INTRODUCTION :

The town of Mabalane is about 5,000 people, some of whom are deslocados. It is situated on the railway line northwest of Chokwe 100 km, and 5 km from the Limpopo river. There are some deslocados, many of whom have been resident a number of years.

PUBLIC HEALTH :

*** WATER**

In comparison with many other towns the water situation in Mabalane is not critical. Although crop production is low, there is also more land irrigation being carried out here.

The main sources are CFM, which is supplied by a bore and by 2 railway trucks per week, and the river, which is only 5 km away. Temporary wells are dug in the dry river bed for this purpose. There is a community standpipe said to working well.

Household survey;

Of the households interviewed, the amount of water available each day is 7 litres/person/day.

An average of 71% of households get their water from the river.

Water can be purchased for 500MT for 20-25 litres.

<u>SOURCE OF WATER</u>	BEIRROS 8&9, & COKWE VILLAGE	BEIRROS 3 & 4
CFM	0	61%
RIVER	100%	42%
BORE	0	22%

Alternative sources of food do include forest fruits/leaves (up to 12% of those in our survey), but the main source of fruit and vegetables is still the market. Of the families interviewed, 85% get vegetables and 56% get fruit from the market, so it is presumed that the majority do have at least a limited source of income.

There have been surveys in both July '92 and October '92 by SCF in Mabalane showing a malnutrition rate (ie. less than the 3rd percentile) of 6.3%. No increase in nutrition related illness has been reported. Of those interviewed, although 25% of the families had had someone die in the last month, only 3 of the 10 deaths reported could possibly have even a small relation to underlying nutrition problems.

Several people resident in Mabalane suggest that for those in the town the situation is relatively normal. They also suggested that outlying villages and Combomune were the areas most in need in the Mabalane district. Our observations and surveys would appear to support this. The situation in the river villages between Mabalane and Combomune did not, from observation, seem a lot different to that in Mabalane, although without more time investigating we cannot be totally sure.

It is my recommendation;

* that there is seed and agricultural implement distribution to those in the community most vulnerable, eg. deslocados, in liason with the SCF seed distribution programme.

* that continued monitoring is carried out on market prices, employment / income opportunities, and the health of the community, in case food distribution is needed in the future.

METHODS :

1/ Individual interviews

2/ Group interview

3/ Market survey

4/ Household surveys on a total of 42 households, accounting for an aggregate of 328 people. These households were in Beirros 3 and 4, 8 and 9, and in the nearby village/Beirro of Cokwe. (Beirros 8,9 & Cokwe were regarded as being worse off nutritionally than other parts of the town).

* DEATHS

Although no official figures are available, in the household survey there were 10 deaths reported in the last month (in 8 households), from the 42 households. The causes of death were as follows; paralysis, accident, war, vomiting, diarrhoea, alcohol poisoning, haemorrhage, stomach disorder, odema, and cause unknown. These appear fairly unrelated to each other or to possible malnutrition, and it is my guess that the high number is due to coincidence or poor reporting. This is worth investigating during future surveys.

* DISEASE

No increase in nutrition-related diseases was reported. Malaria and sexually transmitted diseases were said to be the main ones in the community, along with "stomach problems", TB, uterine infections, "malnutrition" and odema. There were several comments on the increase of alcohol consumption in recent times. This is not at present an obvious health problem, but could become so in the future.

* HEALTH FACILITIES

The community is served by a hospital/health centre. There is a shortage of medicines common to the country, which affects several small health posts it supplies.

The more serious cases can be transported to Chokwe.

MARKET PRICES :

We were told there was no local warehouse. This, combined with high transport costs was said to account for the present high prices. Some said the market did not cater for the needs of the residents.

Those who trade in the market are both residents and people from outside eg. Chokwe.

CURRENT PRICES AND COMPARISON		
ITEM	PRICE COMPARISON WITH CHOKWE	MABALANE, PRICE PER KG
MAIZE	up 20%	600MT
FLOUR	same	400MT
SUGAR	up 38%	2500MT
SALT	up 80%	630MT
BEANS	down 11%	2200MT
OIL	up 25%	(5000MT/Litre)

AGRICULTURE :

In normal times most of this population will feed themselves from their own land. An average of 71% of the households interviewed have machambas. More of those in Beirros 8 & 9 and Cokwe said they had machambas than those in Beirros 3 & 4. The average number of machambas owned is 2.

The government have given some land to private farmers to help them assist the population; half is kept by the farmers, and the other half given to the population. The farmers then irrigate all the land given to the population in return for those people working 3 days a week on the farmers land. This scheme is limited with the current drought.

Land has also been recovered and given to 60 families via SCF.

No one in Beirros 8 & 9 or Cokwe appears to have had a harvest since before 1991. In Beirros 3 & 4, 6% of households had harvests in the beginning of 1991 and 1992, and in the second half of 1991. Of these households in Beirros 3 & 4, 6% of them expect to harvest before the end of 1992, and 11% in 1993 (type and quantities are unknown). No one in the other Beirros questioned said they expected any harvest this year or next.

HOUSEHOLDS INTERVIEWED -			
TYPE OF CROP	% ALREADY PLANTED	% ALREADY HARVESTED	% STILL TO HARVEST
MAIZE	3 %	0	3 %

TYPE OF EMPLOYMENT	PERCENTAGE OF ALL HOUSEHOLDS WITH MEMBER EMPLOYED		
	BEIRROS 3 & 4	BEIRROS 8 & 9, & COKWE	AVERAGE
TRADER	11%	0	6%
WOODCUTTER	22%	4%	13%
MACHINE OPERATOR	6%	17%	12%
CRAFTSMAN	6%	0	3%
MINER (?LOCATION)	0	17%	9%
MILITARY	0	8%	4%
UNSPECIFIED WORK IN RSA	0	17%	9%

ALTERNATIVE SOURCES OF INCOME/FOOD :

Many people are selling firewood and coals ("everyone", according to one person interviewed), and some sell traditional beers for an income. Some also sell livestock.

Of those surveyed, 7% last month and 25% this month sold something in the market, with an average stated income of 9691 MT in the month.

Types of articles sold included crafts, firewood and coals, beer, and bread/sugar.

Some believe theft to have increased, although livestock theft tends to be by those from outside the area.

Donations have occurred, but do not appear to have been significant.

Of those surveyed, 86% had received some form of donations, with 3% in the last month.

Forest fruits/wild plants are gathered by a few, eg. macuacua, dngolo, odongungo etc.

Few who were surveyed said they ate such things.

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Of those who have harvested, none have sold any of their produce. Of those who have livestock (23 households), 14% report selling the meat.

Those with livestock are mostly in Beirros 8,9 and Cokwe, where 50% of those interviewed have more than one type of animal. In all areas surveyed, a small number of families had pigs or sheep.

AVERAGE TYPE OF ANIMAL	NUMBER OF LIVESTOCK PER HOUSEHOLD	
	BEIRROS 3 & 4	BEIRROS 8,9, & COKWE
GOATS	1	3
HENS	2	5
COWS	0	1

The official figures from the Ministry of Agriculture show that in the district in 1990 there were 13000 head of cattle. In 1991 this figure was 8000, and now the number is 5000 (these numbers are the number of cattle registered).

EMPLOYMENT :

Some employment is provided by the 23 local private farmers, some work in CFM, or are in the military. "Everyone" is said to be selling firewood and coals. Many are reported to work in RSA, some illegally.

Household Survey;

Those households with no one employed are 19%.

Incomes of those employed range from 10,000MT to 71,000MT per month, although only 6 households gave a figure. 7 households gave no information, while 8 out of 42 had no one working. All of those employed contribute to the household income.

NUTRITION :

Surveys done by SCF(USA) in Mabalane in both July and October 1992 give 6.3% as the malnutrition rate (ie. less than the 3rd percentile).

There is no reported increase in death rates or in nutrition related illness. During the household survey, we saw one child with probable malnutrition. Other cases were reported to us, but from observation in Mabalane and in the river villages between Mabalane and Combomune, there were no malnourished children obvious.

Household Survey;

The average reported intake appears to be varied, with most people having a mixture of maize, vegetables, and beans.

Of the households with livestock, 24% report eating meat from their animals.

Households who report consuming fruit/vegetables regularly (ie. 5 days /week) is 65%. Those rarely consuming them is 9%, and those consuming them once a week is reported as being 28%.

It is significant that most people are able to rely on the market for fruit and vegetables, suggesting some amount of income.

SOURCE OF FRUIT or VEGETABLES	% OF HOUSEHOLDS	
	VEGETABLES	FRUIT
MACHAMBA	15%	6%
MARKET	85%	56%
SHOP	5%	4%
BLACKMARKET	12%	3%
EXCHANGE	10%	12%
GIFT	8%	2%
WILD PLANTS/FOREST	8%	0
OTHERS	7%	0

CONCLUSIONS :

There exists a shortage of water in Mabalane, but this appears to be critical for agricultural production much more than for individual consumption.

There does exist a need for seeds for many people, which although available for those with connections or money, are difficult to obtain for the poorer part of the community.

It was suggested by people at several different levels of the community that the town of Mabalane at present is "normal" regarding nutrition. They also suggested that the Beirros on the edge of the town (Beirros 8 & 9, and Cokwe, which we surveyed) and the river villages were in the worst condition.

It would seem that people in Mabalane DO have a normal situation. The Beirros we surveyed seemed to have a worse condition, but not one which represents a critical food shortage. This is neither suggested by an increase in death rates or in nutrition related illness.

The future of these people will be affected if there large price increases with no increase in income, and if there is no rain in the next few months. If there is resettlement this population may not be affected as much as others, due to the fact that many of the deslocados here have been here for a long time.

SOURCES :

- * Administrator
- * SCF Agricultural representative and Administrator's assistant.
- * Hospital
- * Group of 16 people in the market
- * Director of Agriculture/Emergency Coordinator.
- * Beirro leaders and 42 family representatives in Beirros 3,4,8,9,and Cokwe.

Kathy Cartar. RGN. RM. CTCM&H.
WORLD RELIEF MOZAMBIQUE.
NOVEMBER 1992.

appendix 2
INFORMATION REQUIRED IN SURVEYS.

- 1/ What is the health and nutrition situation ?
eg. death rates; disease outbreaks; health threats.
- 2/ What are the causes of the problems ?
- 3/ How do people normally obtain their food ?
eg. a normal diet in a good year; buying from ___ with cash from ___; household produce; food aid; bartering.
- 4/ How have recent events unusually affected access to food ?
eg. condition of livestock; water availability; harvests, and seed availability; markets - availability and prices; security situation.
- 5/ How are people coping with the problem of food scarcity now ?
eg. food stocks; sale of assets; aid; migration; eating less; increased petty trading; cheap labour; loans; scavenging; gathering of wild foods.
- 6/ Who is the most affected/ most vulnerable ?
eg. area; sector of the community.
- 7/ How has food scarcity affected people in the past ?
eg. previous droughts; previous aid programmes.
- 8/ What are the government and other agencies doing ?
- 9/ What future events will influence the situation ?

SUMMARY

- 1/ ACCESS to food, money or employment.
- 2/ ACCESS to water and land.
- 3/ INFORMATION re. deaths / cases of malnutrition.

SOURCES OF INFORMATION

Administration personnel; traders; local employers; local businessmen; local farmers; hospital staff/health workers; local residents; aid agencies.

METHOD OF INFORMATION COLLECTION

- 1/ Individual interviews.
- 2/ Group interviews/discussions.
- 3/ Observations and informal conversations.

(reference: "Food Scarcity & Famine ", by Helen Young.)

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SURVEY REPORT - WORLD RELIEF

LOCATION : BARRAGEM, Chokwe District, Gaza Province.

DATE : 15th to 26th October, 1992.

AIM :

The aim of this survey was to make a short yet comprehensive assessment of the nutrition and food security situation among the Barragem population in the light of past events and future possibilities.

SUMMARY AND RECOMMENDATIONS :

From the health point of view there is no indication that poor nutrition is a problem in the community of Barragem. The rate of malnourished children (is. less than 80% weight for height) is **2.9 %** from our nutrition survey of children between 6 months and 5 yearsold.

Although levels of local employment are down, people appear to be finding ways of exchanging goods for money. If the drought continues and thus levels of employment continue to be low, this could, alongside some sharp trends in food price increase, cause severe difficulty in access to food for the Barragem population.

There appear to be no major disease problems connected with lack of food, but continued drought will mean a reduction in quantity of water available and increase the effects of poor water quality. Should rain occur, poor sanitation conditions could also increase spread of diarrhoeal disease and other illness.

I would recommend ;

- * that there is NO immediate food distribution to this area, as there are many coping mechanisms functioning. If seed distribution were imminent, a one off food distribution could perhaps be considered if it were thought that the seeds were likely to be eaten.
- * that there is continued monitoring of market prices, employment opportunity, rain levels, and water availability for the population.

METHODS :

- 1/ Individual interviews... (see list of sources)
- 2/ Group interviews.
- 3/ Market survey; comparison of prices to that on 19-8-92.
- 4/ Nutritional survey of 240 children, 6 months to 5 years old, using the cluster sample method.

INTRODUCTION:

Barragem is a village beside the Limpopo River, 25 km north of Chokwe town. It has an estimated population of about 10,000, although informants suggested variations of between 6,000 and 23,000 in the village and surrounding area.

The origin of most people is the dozen or so villages in the surrounding area of Maccaretane, with only 544 who are original Barragem residents. Security problems have been minimal since 1989, the last reported incident being a bandit attack on a village a few miles from Barragem in June 1992.

PUBLIC HEALTH:

* WATER

River water is the main source in this community. Much of this has been stagnating and although there is official policy to encourage people to boil the water, this is not often done.

CFM have a bore hole which provides limited water to a small number of people in the population.

There are also a number of hand dug wells. Some of these have dried up already.

From several conversations, the range of water consumption per day was given as being from 17 to 30 litres per person.

In general the quantity of water available is enough to negate the poor quality of most of the water. In even 2 or 3 weeks this could be very different.

* SANITATION

This is an important factor in the health of this population. There are a lot of people living in a small area in Barragem. Between 1 and 10 families share 1 toilet. These factors present a potential problem both with contamination of surface water and increase in disease if there is rain, and lack of hygiene and increase in skin infections if there is not enough water.

* DISEASES AND DEATHS

The main diseases seen in Barragem Hospital are said to be venereal diseases, malaria, TB, anaemia, conjunctivitis, cholera, malnutrition, and cholera. No statistics were available except a verbal report from one interviewee that there was a cholera outbreak last May with 20 to 30 cases.

*NUTRITION

There are said to be 650 children in the hospital clinic programme for malnourished children from the area. (The admission criteria is not as strict as most supplementary feeding programmes, so this does not represent exact numbers of malnourished children.

The survey undertaken by World Relief staff gave a figure of 2.9% of children more than 6 months and less than 5 years in Barragem to be less than 80% weight for height.

From observation also there appears to be no large amounts of malnutrition or nutrition related illness among the population. This is supported by the children's nutrition survey.

* HEALTH FACILITIES

The Barragem hospital serves the population. It has 3 nurses and 1 medical agent, but there are no night time facilities. For some people interviewed no night time facilities was seen as a big problem.

MARKET PRICES :

In the market of Barragem there seemed to be a great variety of both foodstuffs and other items. Vegetables, especially tomatoes were present in large quantities.

Locals told us that most people get what they can to sell in the market, even if it is in small amounts. People of Chokwe are known to visit Barragem either for personal buying or to buy items that are cheap for resale in Chokwe town, eg. at the time of surveying, tomatoes. Prices are not always cheaper in Barragem than in Chokwe.

There are some people who sell firewood, coals, traditional beers, poles for building, and reeds for roofing.

One comment repeated by several people is that hygiene in the market place is poor and presents a potential problem for the health of the community. Another health problem suggested by some people was the increase in beer sales and consumption in the community.

PRICE COMPARISON IN BARRAGEM MARKET BETWEEN AUGUST AND OCTOBER 1992

PRICE DECREASES

MILHO down 20%
MEAT down 11%

PRICE INCREASES

FARINHA up 20%
ACUCAR up 25%
FEIJAU up 166%

Prices of other commodities are reasonable stable.

AGRICULTURE :

The majority of Barragem residents would usually get both food and income from their own machambas. Locally, cotton, maize, wheat, beans and tomatoes are grown in quantity.

Original residents of Barragem are said to all have farms / machambas. These include 4 - 5 private farmers. Lomaco is one that owns a large proportion of the land in the area. The deslocados, who are the majority in this community, can get access to land only via family in Barragem. Some of these deslocados work in the daytime on their own machambas in their places of origin, but this depends on the distance from Barragem and the security situation.

As in other areas there has been a reduction in the number of cattle due to theft, drought, and many were sold for food during the '85, '86 war.

There is less planting than usual because of the drought. Private farmers are planting but producing only as much as they can afford to irrigate. The price of diesel is currently high and this limits use of pumps (150,000 MT for 210 litres), and the high price of fertilisers also is said to affect this. A Lomaco representative said that 100 hectares rather than the usual 500 hectares of wheat was harvested this winter. Low prices for wheat compounded this problem.

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EMPLOYMENT :

A major source of employment is private farms. These are said to pay 1500 MT per day, or about 42000 MT / month. Lomaco, employing people in both factory and fields, salaries are said to range from 30000 MT to 90000 MT per month. They employ about 900 permanent staff, with a further 1000 to 1800 at the beginning of the season for thinning (about December), and a further 3000 or more for about a month between April and August. Employees also are able to buy food at lower than market prices and are sometimes paid in food. The levels employed at the moment are lower than usual at this time of year. In a good year most people will be working on their own machambas and it is apparently more difficult for a workforce to be found, whereas now, there is a workforce ready.

Many in Barragem have family members employed in RSA in the mines or factories. This especially is true of families in Beirro 1. This number has decreased apparently ^{due to falling gold prices} and miners being laid off work.

A small number of people are employed in Chokwe, and a few are employed in the military.

In general there sounds to be more unemployment than usual due to the current economic climate and compounded by the drought.

ALTERNATIVE INCOME AND FOOD SOURCES :

As mentioned before, a large number of people make an income by selling. ie. wood, coal, poles, reeds, traditional alcohol, clothes (bought cheap from Maputo), and gathered leaves (cacana).

The selling of household items exists but is not widespread at all (we were told that the last things to be sold would be beds and young bulls).

Thefts are said by many people to be on the increase - others disagree.

Donations are reported to have been received by some but at a level that is not always significant.

CONCLUSIONS :

There appears to be a stable situation in the community of Barragem. A shortage of food exists for some of the population, and lack of employment is common. Despite lack of employment, people seem to have coping mechanisms that are operating well, particularly that of small trade.

There is nothing to suggest at the present time that there is an increase in deaths or illness as a result of a poor nutrition situation. The figure of 2.9 % malnutrition rate supports this. The health of the population could change should there be large amounts of rain in a short period of time or large reduction in the amount of water available; agglomeration of the houses and lack of good quality water would cause such health problems.

For the future this community's future is dependent on the presence of sufficient water for crops to grow - for both food and employment. Another factor is that many people in Barragem wish to return to their places of origin; with the present shortage of income and loss of household items, cattle, and agricultural implements over the years, these people will have perhaps greater needs on their return home.

SOURCES :

- * Administrator and representatives of leaders in all 8 Beirros.
- * Local farmers.
- * Local householders in Beirros 6 & 7.
- * Two groups of 25 people each, one of men and one of women, from Beirros 4 to 7.

KATHY CARTER. RGN. RM. CTCM&H.
World Relief Mozambique.
NOVEMBER 1992.

SURVEY REPORT - WORLD RELIEF

LOCATION :

CANICADO, CHIMBEMBE, DZINEDZINE, CHIVONGUENE, & NAMPONGWAN, in the DISTRICT of GUIJA.

DATE : 6-11-92 to 9-11-92 .

AIM :

To assess the current nutritional situation of the populations of Canicado and several small communities in the district of Guija, in the light of past events and future possibilities.

SUMMARY AND RECOMMENDATIONS :

There is a shortage of water in these places, but one which is not critical at present. The average intake per person in the households interviewed = 11 litres/person/day. Whether the shortage of water will continue or not is a critical question for the large number of people with machambas.

Most people have machambas in these areas. Less than half report planting any crops, although about half are hopeful of some harvest, even if they have not yet planted. Seed is in short supply and expensive, which adds to the water shortage in reducing harvest expectations. Cashews are harvested in these places, especially in Chivonguene/Nampongwan. For some this is an important source of income.

This is a fertile area, and any rains will add to the likelihood of future harvests.

This area is near to Chokwe. This helps the fact that small trade is common eg. in Dzindzine where there is least employment (only 21% of families have a family member employed), 80% of families surveyed had sold something the previous month such as firewood, coals, toolhandles, and traditional beers.

A percentage of those surveyed have a family member working as a miner (presumably in RSA) - in Chimbembe and Dzinedzine, 14% each, and in Chivonguene/Nampongwan, 29%. This is the most common type of paid employment found in all of the villages.

There does seem to be a variety of income possibilities for the population in these areas.

An average intake of **0,93 KG** flour/person/day, among those families (17) who specified amounts, is sufficient. Most of these families (13) are reliant on selling or exchanging things for an income and have no one employed. Selling seems to give the majority of families an adequate income for basic staple foods.

There has been a reduction in the percentage of low birthweight babies born in the Guija District Hospital from 1991 to 1992.

An increase in the death rate from 1991 to 1992 is likely to be from the reported increase in deaths from a cholera outbreak earlier in the year, which is no longer a big problem.

The Guija Hospital malnutrition rate is acceptable at 5% but the origin of those measured is not clear. I would guess that these children are from many areas, including Chokwe. The rate given by SCF, in July this year, of 14% is more serious.

It is felt that the villages surveyed give a fair representation of villages in the Guija district. Those currently resident in the town of Canicado are a small number. A large proportion of the population still remain resident in the towns of Chokwe, Lionde and Chilembene, areas not included in this survey.

If many people return to their places of origin within a short space of time it would be expected that any shortages will be made worse.

The people in this area depend a lot on the market for both buying and selling; large price increases in basic food items could particularly badly affect these communities.

I would recommend that;

- * there is a distribution of seed to villages in the Guija district.
- * there is further investigation into the situation in villages from where there are higher numbers of malnourished children coming.
- * the market prices, crop state, general health, and movement of the population are monitored in order to anticipate increase in the effect of food shortages and assistance needed.
- * there is a food distribution to families of children registered as malnourished, monthly in January, February and March.
- * there is a general food distribution for two months, January and February, as there is a likely to be higher prices and less food available immediately preharvest.

METHODS :

- 1/ Individual interviews.
- 2/ Group interview.
- 3/ Canicado market survey.
- 4/ Household survey on 42 households in the small communities of Chimbembe(14), Dzinedzine(14), Chivonguene(8), and Nampongwane(6). These households represented an aggregate of 313 people. These villages are in the district of Guija.

INTRODUCTION :

Canicado is the main town in the district of Guija, and is only a few km from the city of Chokwe. The population is fluctuating in number. A large number of the population live in Canicado by day and stay in Chokwe at night. This number has decreased in recent times.

Chimbembe is a village of about 2500 people, 27 km from Canicado. In this village most inhabitants are natural residents; only a few have left due to the war, and only a few deslocados have moved to live there. There are soldiers based in the village.

Dzinedzine is a village of about 800 people, 20 km from Canicado. As in Chimbembe, most people have stayed despite the war.

Chivonguene is a village 14 km from Canicado. Originally there was a population of 5000. Owing to the war it was abandoned, and so far one out of five Beirros have returned (possibly about 1000 people).

Nampongwan is another small village, 7 km from Lionde and 14 km from Canicado that had been abandoned. About 30 families have returned here, while many others stay in Lionde and return during the daylight hours (as they do in Chivonguene).

PUBLIC HEALTH :

* WATER

Canicado

- The 3 main water sources are a public bore, individual wells, and hand dug temporary wells in the river. The bore serves a small number of the population via taps at a cost of 500 MT per month.

Many of the private wells are drying up due to the drought. Temporary wells in the river/river water is the source for many people. (One of the local farmers does pump river water for the use of the local population).

Chimbembe/Dzinedzine

- Usually between these two villages there are fresh water lakes. Normally inhabitants would get from these or from wells. Functional wells exist, 2 km from both villages. There is a shortage of water, but the reported average intake of **11 litres/person/day** (Chimbembe) and **9 Litres/person/day** (Dzinedzine) is high in comparison with many areas in Gaza.

Chivonguene/Nampongwan

- Usually reliant on freshwater lakes, the populations of these villages are now dependent on wells, 3 to 5 km away. The average reported intake is **12 Litres/person/day**.

* DEATHS

The **official death rate** in Canicado hospital is less than 6 per month. No specific main cause was given.

January - September 1991, **Death rate = 0.06 %**

January - September 1992, **Death rate = 0.22 %**

The **unofficial death rate** is not high, although according to people in the Chimbembe area there were 68 deaths in the area from cholera in the 3 months from August to October. There was generally thought to be an increase in deaths this year, due to cholera, which is now no longer a significant health problem. Last year the main cause was "from the war".

*** DISEASE**

Malaria, malnutrition, diarrhoea, worms, pneumonia, and anaemia are the main diseases seen at Canicado hospital. This was supported by opinion of local residents interviewed. Cholera was reported to be very common earlier in the year in the Chimbembe and M'pilane areas.

Official **Low Birthweight Rate**(Canicado hospital),
January to September, 1991 = 5 %
January to September, 1992 = 2.21 %

This represents a decrease in the last year, and although not all women deliver in the hospital and although there may be other factors involved in the change, it is a positive indicator of women's health.

Poverty but no widespread illness was observed in the areas visited.

*** HEALTH FACILITIES**

Guija District Hospital is at Canicado. It has 42 beds. This is the main point of referral. Even residents from Chokwe prefer to attend hospital in Canicado, as it has a good reputation. The other places visited do not have any functioning health facility.

MARKET PRICES :

There is a reported **increase in business** in Canicado town, especially in small trade.

Of the six main merchants in the town, there are 4 local people, 1 person from Chokwe, and 1 "foreign person". Some of the local businessmen have been unwilling until recently to move goods from Chokwe warehouses due to **security** problems.

There is also reported **increases in basic food prices, taxes, and transport costs.**

Credit was said by some to be increasing, although one local businessman said that while in the past he would give credit until harvest-time made repayment possible, for now he does not do this.

CURRENT PRICES AND COMPARISON		
ITEM	PRICE COMPARISON WITH CHOKWE	CANICADO, PRICE PER KG
MAIZE	DOWN 7%	467 MT
FLOUR	DOWN 31%	555 MT
SUGAR	UP 5%	1900 MT
SALT	SAME	350 MT
BEANS	DOWN 33%	not available
OIL	UP 12.5%	4500 MT

Household Survey;

The market appears to be the **main source** of vegetables for the households interviewed in Dzinedzine, Chivonguene and Nampongwan.

It does not appear to be an important source of fruit in any of the communities surveyed. (See chart under "nutrition").

AGRICULTURE :

In most of the villages visited the population normally would grow crops (100% of the households interviewed said they have machambas), and would also normally keep cattle. It is said that this district used to be the second largest cattle area in the country. The average in Dzinedzine used to be 55 per family, whereas now there are an estimated 55 in the whole village. In other areas the story is similar.

Maize, beans and groundnuts are the most common crops, and in a few places, also pumpkins and melons, and in others near the river, onions, tomatoes, cabbage, garlic, and potatoes.

Cashew trees are still abundant in these areas, especially in Nampongwan where with about 150 trees left, 30 families have moved back in order to look after them. The fruit is sold as fruit, nuts or drink.

TIME OF HARVEST	% OF PEOPLE WHO HAVE / WHO WILL HARVEST:		
	CHIMBEMBE	DZINEDZINE	CHIVONGUENE & NAMPONGWAN
1ST HALF, 1991	36%	7%	14%
2ND HALF, 1991	29%	0	14%
1ST HALF, 1992	0	0	0
2ND HALF, 1992	7%	21%	29%
1993	21%	43%	29%

REPORTED PLANTING AND HARVESTING IN CHIMBEMBE			
TYPE OF CROP	% OF FAMILIES REPORTING -		
	-ALREADY PLANTED	-ALREADY HARVESTED	-WILL HARVEST
MANDIOCA	14%	0	0
BEANS	14%	0	0
VEGETABLES	14%	0	14%
MANGOS	14%	0	14%
OTHERS	14%	14%	0

In **DZINEDZINE** there was no reported planting or definite expected harvest.

REPORTED PLANTING AND HARVESTING IN CHIVONGUENE & NAMPONGWAN			
TYPE OF CROP	% OF FAMILIES REPORTING -		
	-ALREADY PLANTED	-ALREADY HARVESTED	-WILL HARVEST
MANDIOCA	0	0	0
BEANS	0	0	0
VEGETABLES	0	0	0
MANGOS	14%	0	0
CASHEW	14%	0	0

In a population who all have machambas, the harvests gathered and those expected are at a low level. Maize planted in Chimbembe in the June rains has died. This is a very fertile area, and when the rains come again, planting will begin again. The area of Chimbembe appears to have the best expectation of harvests in the future, and the other areas, although no planting has been said to occur, are nevertheless hopeful of harvests in the future.

Only in Chivonguene have any of the households surveyed sold (21%) or consumed (86%) any of their produce in the last 2 years.

The problem expressed here with seed is that it is expensive, as well as being in short supply, although some is procured through friends or other farmers.

The animals observed appeared to be in good condition. One or two households also reported owning pigs. The average number of households owning more than one type of animal is 26% (Chimbembe 43%, Dzinedzine 29%, and Chivonguene/Nampongwan 7%).

TYPE OF LIVESTOCK	LIVESTOCK REPORTED		
	AVERAGE	NUMBER	PER HOUSEHOLD
	CHIMBEMBE	DZINEDZINE	CHIVONGUENE / NAMPONGWAN
GOATS	less than 1	1	less than 1
HENS	2	1	" " "
COWS	4	2	" " "
DUCKS	less than 1	1	" " "

EMPLOYMENT :

The main employment in the town of Canicado appears to be a mixture of small trade, work in RSA or Zimbabwe, working for private farmers, or some sort of employment in Chokwe. This also applies, in varying degrees, to the villages out of Canicado.

Small trade includes sales of beer, cashews(3 for 100 to 200 MT), mats (at 1000 MT per mat, ie. 5000 MT per week), salt (at 300 MT per 1 litre tin, ie. 6000), toolhandles, coals, and firewood. The last two items are particularly common.

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Many of the families in Canicado and surrounding villages have relatives working in RSA, according to residents. In Dzinedzine we were told that someone in every household works in RSA. (There are generally many people working there illegally, since the closure in 1979 of major employment agencies.) Migration to other places for work occurs, eg. to Xai-Xai or to Maputo.

One private farmer interviewed in Canicado employs 300 workers in his fields. Another businessman interviewed employs 250 (more if there is no drought), paying between 43000 MT and 200000 MT / month.

The local salaries are thought to be low in this area.

Household survey;

Of the households interviewed, an average of 52% have a family member employed (Chimbembe -100%, Dzinedzine - 21%, Chivonguene / Nampongwan - 36%). The range of salaries is 6,000 MT - 166000 MT per month. Some households in the survey did not specify the type of employment their family members were in.

TYPE OF EMPLOYMENT	% HOUSEHOLDS WITH MEMBER EMPLOYED		
	CHIMBEMBE	DZINEDZINE	CHIVONGUENE / NAMPONGWAN
MINERS	14%	14%	29%
CRAFTSMEN	0	79%	0
MACHINE OPERATOR	0	0	14%
MILITARY	0	0	7%
MILITIA	14%	0	0
TIMBER WORKER	0	0	7%

ALTERNATIVE SOURCES OF INCOME/FOOD :

The main alternative source of income in these communities is **small trade**. More than before, people are selling traditional beers. Others are firewood, coals, and other items listed above.

Theft of farm produce, cattle and chickens is said to increasing.

Household survey;

The percentage of families interviewed who **sold** something in the month prior to the interview was **59%** (Chimbembe - 57%, Dzinedzine - 79%, Chivonguene/Nampongwan - 43%).

The percentage of families interviewed who said they were receiving **donations** = 79% (Chimbembe - 93%, Dzinedzine - 71%, Chivonguene - 64%). An average of 66% said they had received donations in the last month.

On average, 36% of these make use of **wild plants/forest fruits**.

NUTRITION :

WHERE FAMILIES PRECURE VEGETABLES AND FRUIT	CHIMB	EMBE	DZINE	DZINE	CHIVON NAMPON	GUENE GWAN
SOURCE	VEG.	FRUIT	VEG.	FRUIT	VEG.	FRUIT
MACHAMBA	57%	7%	7%	36%	7%	7%
MARKET	29%	7%	64%	7%	62%	36%
SHOPS	0	0	0	0	0	0
BLACK MARKET	0	0	0	0	0	0
EXCHANGE	0	0	0	0	7%	56%
GIFTS	0	0	0	0	29%	21%
WILD PLANTS	0	29%	79%	71%	7%	21%

From those interviewed in the **household survey**, an average of **29%** reported eating fruit and vegetables regularly (ie. at least 5 days a week.)

- Chimbembe, 36%
- Dzinedzine, 21%
- Chivonguene/Nampongwan, 29%.

A further **29%** reported eating fruit and vegetables once a week

- Chimbembe, 36%
- Dzinedzine, 36%
- Chivonguene/Nampongwan, 14%.

A further **31%** reported eating vegetables rarely

- Chimbembe, 21%
- Dzinedzine, 36%
- Chivonguene/Nampongwan, 36%.

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If the reporting is accurate, the vegetable and fruit intake is low in about a third of the families interviewed.

Of those families who specified quantities of flour eaten per day (ie. 17 families from Chivonguene and Dzinedzine), people consume an average of 0,93 KG per person per day, along with other food. This is a substantial amount. Of these families, 13 had reported there was no one in their family employed, but that most gained income from selling.

There appears to be a reliance on the market for vegetables and fruit, except in Chimbembe, where the main source is the machamba, and where the agricultural situation has more potential than the other areas surveyed. Forest fruits are plentiful in some of these areas and are used.

SCF(USA) gave in July 1992, a rate of 14% malnutrition (ie. less than the 3rd percentile) among the children. They have a supplementary feeding programme.

Guija Hospital malnutrition rates;

January to September, are 1991 = 1.2 %
January to September, are 1992 = 5 %

In the hospital there were 30 children with malnutrition at the time of interview. The hospital receives patients from all of the district, so these figures represent a variety of living conditions. Observations in the villages visited do not suggest a lot of malnutrition, and nowhere did we see a large amount of nutrition related illness.

From the information collected, I would estimate a small percentage of the population, scattered throughout all the areas visited are at present suffering from a food shortage. Others have a food shortage but are at the present time coping with it.

CONCLUSIONS :

There is some shortage of water in the Guija areas of Canicado, Chimbembe, Dzinedzine, and Chivonguene/Nampongwan.

In these areas, based on the rate of malnutrition there are probably small numbers of people suffering from a shortage of food. This is not obvious from either surveys or observations; these rather support a food shortage, but one where there are a variety of sources of income and coping mechanisms, and one which is not appearing to affect either the disease incidence or the death rates in the community.

Many of the Guija population are still resident in Chokwe or Lionde. With large scale population movement back into the area, it is thought that coping resources would be stretched to their limits. Should there be no further rains the situation could also deteriorate, but at present the situation appears to be stable.

SOURCES :

- * Administrator, Guija District.
- * Guija District Hospital Nurses.
- * Market vendor.
- * Local businessman.
- * Local farmer.
- * Group of local residents in Canicado town.
- * Community leaders in Chimbembe, Dzinedzine, Chivonguene, and Nampongwan.
- * Household representatives in the villages of Chimbembe (14), Dzinedzine (14), Chivonguene (8), and Nampongwan (6).

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