

DEVELOPMENT PLANNING

Some implications of the food economy baseline findings in the Limpopo River Basin Complex

In November 2000 FEWS NET, through its implementing partner, the Food Economy Group (F.E.G.), and with close collaboration from the Ministry of Agriculture, the Ministry of Health, and the World Food Programme, conducted a food economy baseline study in the flood-affected area of Gaza Province, Mozambique. The purpose of the study was to investigate how people in this flood prone area normally live - in other words, how they obtain access to food and cash income and how they spend their money in most years.

This baseline understanding is intended to provide a richer context against which to understand the effects of any number of potential 'shocks', including additional flooding, drought, price fluctuations or loss of access to specific markets. In light of the potential value of this information for a wide scope of different users, a number of short targeted pieces were written for specific audiences to help highlight the implications of the baseline work for different decision maker groups in Mozambique. Specific audiences for these briefings included food aid decision-makers, development planners, private traders, and early warning & food security monitors. The following points are directed to the development planning community in hopes that contextual information about livelihoods in the Limpopo Basin will help in the collective effort geared towards continuing to make appropriate decisions.

1. DEVELOPMENT PLANNERS NEED TO TAKE INTO ACCOUNT THAT THE LIMPOPO RIVER BASIN COMPLEX IS A HIGH RISK, HIGH RETURN AREA. EFFORTS OF DEVELOPMENT PLANNERS TO MAXIMIZE RETURNS WITHOUT CONSIDERATION OF THE RISK-MINIMIZING STRATEGIES EMPLOYED BY RESIDENT HOUSEHOLDS MAY INCREASE HOUSEHOLDS' VULNERABILITY TO FLOODS.

Households in the Limpopo River Basin Complex benefit from high yielding alluvial soils found along the Limpopo River. However, household food security in the zone does not appear to rest solely on the principle of maximizing production returns and profits, but includes important elements of risk reduction as well. Households usually plant on at least two plots (including a highland and a lowland plot) and in at least two seasons. If conditions for one plot or one season are not ideal, the other plot or next season usually allows farmers to make up for losses. While it may appear to make sense to concentrate development efforts on maximizing production through concentrating all inputs on the most productive soils in the most productive season, this would also increase the risks of losing more overall production to the vagaries of the weather and to possible flooding.

In addition, it appears that rural households in the Limpopo River Basin Complex keep

Food Economy Baseline Implications for Food Aid Planning - the Limpopo River Basin Complex

large quantities of food in stock, preferring to store, rather than sell a significant proportion of surplus production. It is possible to posit a number of reasons for this tendency: rural markets in southern Gaza, while more active than many other parts of Mozambique, are still not strong enough to absorb the potential production of an area like the Limpopo Basin. It is also likely that remittance income from mining employment in South Africa offsets the need for rural households to sell food crops for cash income. In addition, it may be that given the relatively high likelihood of flooding and seasonal crop loss, keeping stocks in store minimizes the risk of food shortages in any one year.

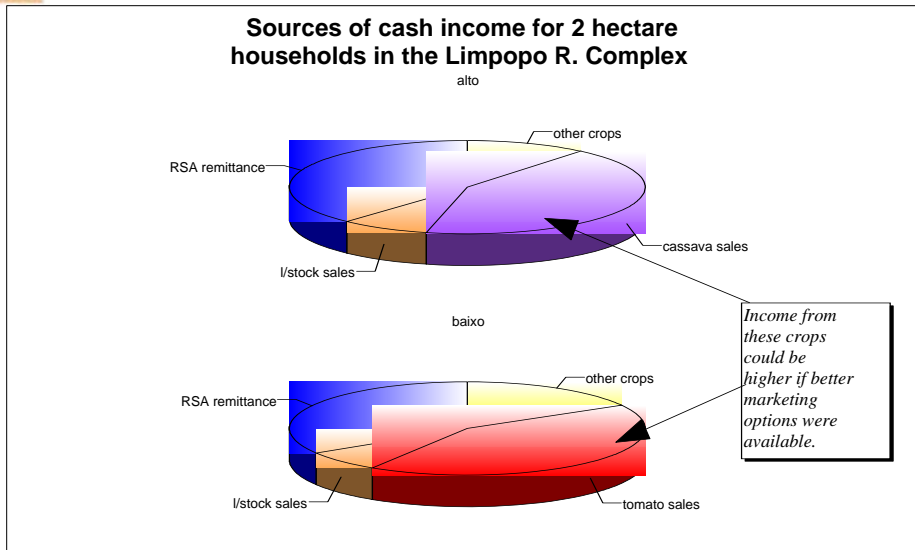
An inordinate focus on increasing agricultural production of staple crops in the areas of highest potential and in particular on marketing surpluses of staple foods may miss the crucial key to life in the area - that the risk of food shortage is low precisely because household reliance on high yield, low-lying agricultural production forms only one component of overall food and cash income. The balance made up by reliance on lower-yielding but less flood-prone areas, storing food rather than selling it, and deriving cash income from outside employment is what makes households in this area food secure.

Development plans need to take this balance as a starting point, consider the potential impact of development initiatives on it, and make sure to put in place appropriate means for offsetting increased risks associated with its unintended disruption.

2. CASSAVA SALES IN THE ALTO AREAS AND TOMATO SALES IN THE BAIXO AREAS ARE THE MOST IMPORTANT SOURCES OF CASH INCOME FOR HOUSEHOLDS WITH MORE THAN ½ HA. IMPROVED MARKETING OF THESE CASH CROPS WOULD INCREASE INCOMES FOR RURAL HOUSEHOLDS.

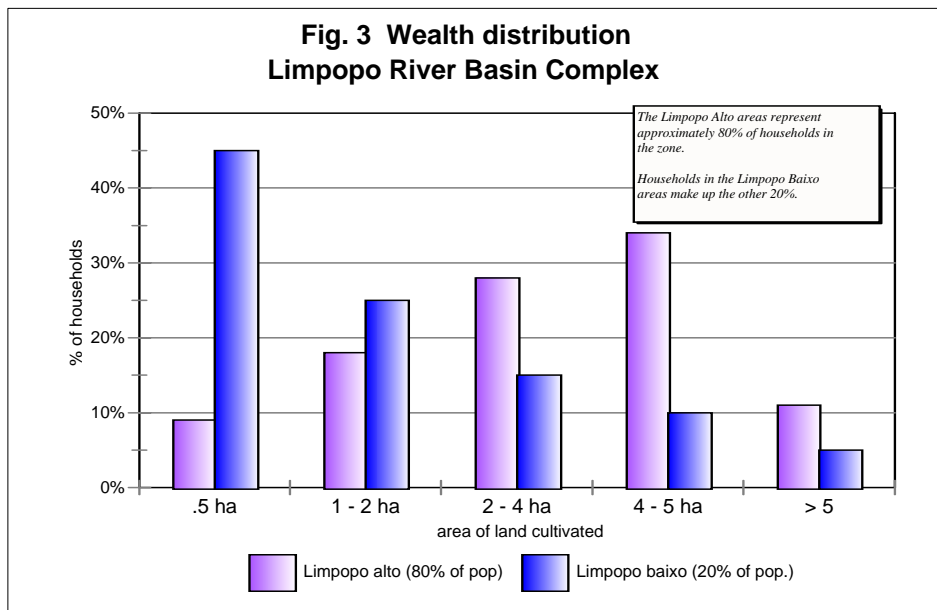
While sales of maize, the main staple crop, tend to be low for average households, cassava and tomatoes, the two major cash crops in the area, provide significant cash resources to middle and richer households alike. Marketing constraints, associated particularly with cassava (grown in *alto* areas that are likely to be further from main roads) undoubtedly keep households from maximizing their income from these sales. Average production for two-hectare households tends to hover around 2 tons.¹ In areas with poor access to marketing routes, however, less than half of this production gets sold. Villagers in these areas stress that production of cassava is not the constraint for them, but rather, access to appropriate marketing means, either through help in transporting cassava using existing transportation routes (e.g. through the introduction of mules, or by encouraging private traders to institute a rural pick-up circuit with 4-wheel drive vehicles), or through improving the rural infrastructure itself.

¹Not all of the 2 ha is devoted to cassava, naturally. With average yields around 2.8 MT per ha, 2 tonnes is a fair estimate of total production, assuming that around 3/4 of a hectare is planted with cassava.



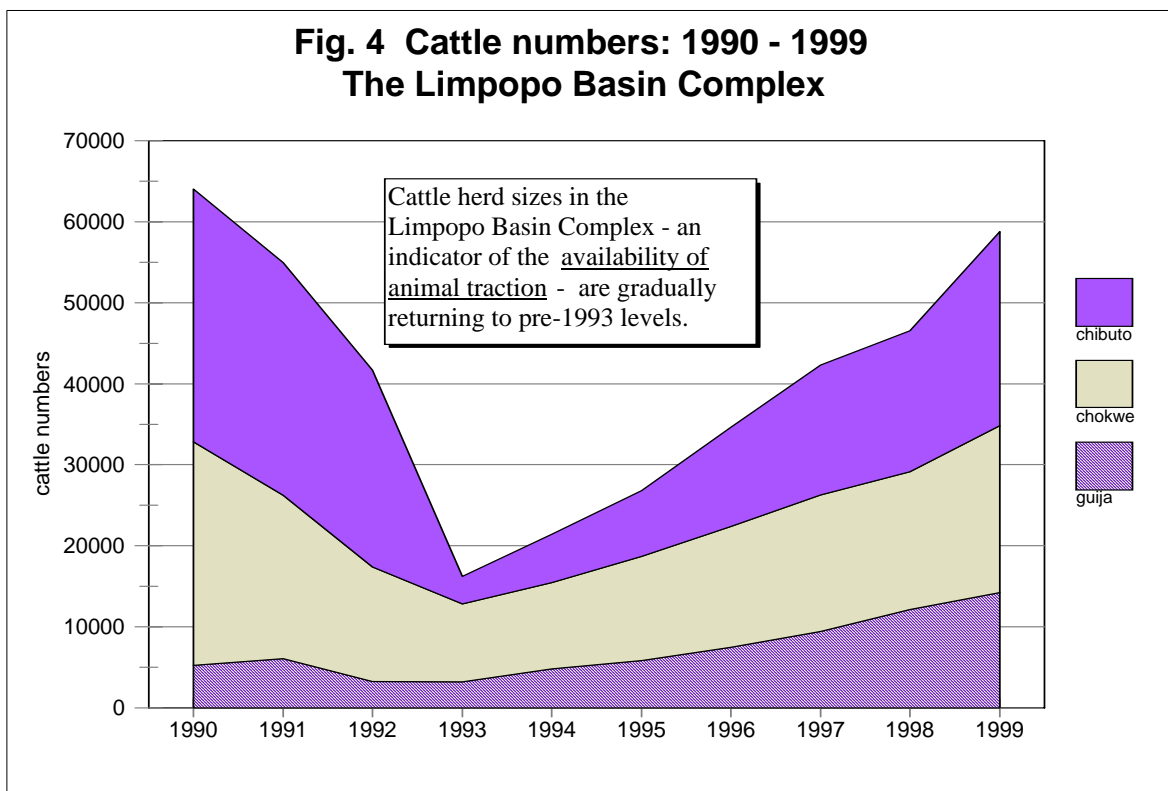
3. ANIMAL TRACTION FILLS AN IMPORTANT LABOR GAP IN THE LIMPOPO RIVER BASIN COMPLEX. CONTINUED EFFORTS AT RESTOCKING AND IMPROVED ANIMAL HEALTH ARE WELL-PLACED.

Land is not the critical constraint to increased productivity in the Limpopo River Basin Complex, **labor** is. It is true that competition for prime land in the lowland areas near to the river is tight. But the population in these areas accounts for only about 20% of the zone. In the other 80%, the majority of households cultivate at least 2 hectares, more land than most households can manage without hiring outside labor for critical periods such as



land preparation and weeding.

Land preparation, plowing and planting is traditionally done with the help of animal traction. The civil war had a devastating impact on livestock numbers all over Mozambique, with many animals being slaughtered to feed transient troops. See figure 4 below.



In recent years, livestock numbers have begun to recover with the help of targeted restocking programs, but more significantly through a gradual process of natural reproduction.² Given the high cost per animal of the restocking-through-transplanting³, combined with the strong likelihood that many households can raise enough money through remittances from South Africa to purchase starter cattle, it makes sense to concentrate restocking efforts on 1. Improved veterinary support to ensure the continued growth of recovering herds and 2. Livestock marketing support to ensure that households with sufficient income to purchase starter herds have access to female cattle at

² In an EC-Food Security Unit sponsored document detailing lessons learned from the restocking efforts of a number of agencies, it is estimated that around 90% of the cattle restocking to date in Mozambique has occurred through natural reproduction, and only 10% due to transplanting animals from other areas like South Africa.

³ See EC document referred to above for details.

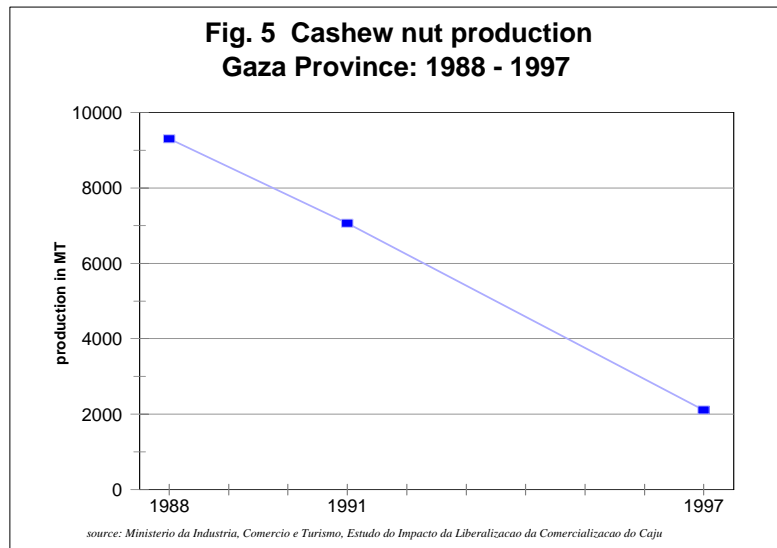
reasonable prices.

4. CASHEW TREES WERE ONCE AN IMPORTANT SOURCE OF CASH INCOME IN THE LIMPOPO BASIN COMPLEX. REPLANTING AND MAINTENANCE OF THIS RESOURCE COULD BRING ADDITIONAL INCOME TO RURAL HOUSEHOLDS.

Cashew nut production and sale once formed an important component of rural income for households in the Limpopo Basin Complex. Harvesting and selling traditionally took place just before the important October/November planting season, coinciding with a seasonal cash flow stress for households needing cash to hire labor and oxen and purchase other agricultural inputs. Cashew sales used to help ease this stress.

The last decade has seen a clear decline in cashew production. See Figure 5. Most trees are visibly beyond their prime. For unknown reasons – perhaps because of the war, or maybe because of tenure issues - very little maintenance and/or replanting seems to have taken place over the past twenty years.

Investment in cashew production seems a logical activity given the area’s clear potential demonstrated by past performance. It is particularly important to begin investing in alternative income sources now because of a reported decline in access to mining income in South Africa, an activity that has provided the most important source of cash to poor households in this area since colonial times. With sufficient planning, cashew sales might gradually be able to fill the income gap created as mining income drops off.



Before making any investment, however, it is important to determine and understand why replanting has not taken place in the past. It will be necessary to clarify tree-tenure issues and establish appropriate maintenance plans with beneficiary communities before starting new planting projects.