



Symptoms of Poverty within a Group of Land Reform Beneficiaries in the Midlands of KwaZulu-Natal: Analysis and Policy Recommendations

L.H. Shinns

Postgraduate Student, Discipline of Agricultural Economics, University of Natal

M.C. Lyne

Professor, Discipline of Agricultural Economics, University of Natal

BASIS CRSP

This posting is provided by the BASIS CRSP Management Entity
Department of Agricultural and Applied Economics,
University of Wisconsin-Madison
Tel: (608) 262-5538
Email: basis-me@facstaff.wisc.edu
<http://www.basis.wisc.edu>

May 2003

L.H. Shinns

Mike Lyne
Lyne@nu.ac.za

BASIS CRSP outputs posted on this website have been formatted to conform with other postings but the contents have not been edited.

This output was made possible in part through support provided by the US Agency for International Development (USAID), under the terms of Grant No. LAG-A-00-96-90016-00, and by funding support from the BASIS Collaborative Research Support Program and its management entity, the Department of Agricultural and Applied Economics, University of Wisconsin-Madison, USA. All views, interpretations, recommendations, and conclusions expressed in this paper are those of the author(s) and not necessarily those of the supporting or cooperating organizations.

Copyright © by author. All rights reserved.

Readers may make verbatim copies of this document for noncommercial purposes by any means, provided that this copyright notice appears on all such copies.

Contents

	<u>Page</u>
ABSTRACT	IV
1. INTRODUCTION	1
2. SYMPTOMS OF POVERTY	1
3. EMPIRICAL ANALYSIS	3
3.1 Data collection	3
3.2 Data analysis	3
3.3 Empirical techniques	4
4. RESULTS	5
4.1 Income and asset “rich” households	6
4.2 Asset “rich” but income poor households	7
4.3 Income “rich” but asset poor households	7
4.4 Income and asset poor – households living in a state of chronic poverty	7
5. POLICY IMPLICATIONS	8
6. CONCLUSIONS	10
REFERENCES	10

ABSTRACT

This study identifies different dimensions of poverty affecting the current and future well-being of households within a community of land reform beneficiaries in the Midlands of KwaZulu-Natal. A census survey of the beneficiary households was conducted in May 2002 to gather data on poverty indicators. Principal Component Analysis was used to construct an index of the standard of housing, which was then combined with variables measuring other symptoms of poverty (income, wealth and health) in a Cluster Analysis of the households. The analysis revealed five clusters representing four distinct groups of poverty; households relatively income and asset rich, households relatively income rich but asset poor, households relatively asset rich but income poor and households with the lowest incomes and assets. While income is an important indicator of current poverty, household wealth (measured in terms of saleable assets) indicates ability to cope with adverse shocks – a key issue as life expectancy is declining and old-age pensioners account for a large share of household income in the survey group. It is concluded that child welfare grants could be increased as pension earnings become less effective in combating the symptoms of poverty in this area. In addition, land reform grants may address poverty more effectively when used to purchase equity in joint ventures with commercial farmers than when used to purchase land that many of the beneficiaries cannot use or transact.

1. INTRODUCTION

The concept of economic poverty has been briefly defined, as the inability to attain goods and services considered essential to human well being. Although poverty is a worldwide phenomenon, the situation in South Africa is fairly unique in that colonialism and apartheid shaped the present poverty and opportunity configurations along racial lines. Disadvantaged groups in rural South Africa have been left with fewer resources, including land, lower levels of education, and spatially divided households due to the need for external incomes (Aliber, 2001: 6).

Two major poverty studies have been conducted in South Africa over the past ten years, the Living Standards Measurement Study (LSMS) and the KwaZulu-Natal Income Dynamics Study (KIDS). The 1993 LSMS was a representative survey that provided hard statistical information about the conditions under which South Africans live. These data were useful in identifying vulnerable households and regions (May *et al*, 2000) and therefore in targeting public resources to alleviate the symptoms of poverty. The Income Dynamics Study carried out in 1998 was a panel survey of the 1993 LSMS within the province of KwaZulu-Natal. May *et al* (2000) used this longitudinal data to distinguish between those households who were sometimes poor and those who were consistently poor over the five-year period of observation.

The research reported in this paper forms part of a longer-term study to analyse and monitor poverty levels within a community of land reform beneficiaries in the Midlands of KwaZulu-Natal. The beneficiaries were awarded Settlement/Land Acquisition Grants (SLAG) by the Department of Land Affairs to purchase Clipstone, a 630-hectare subdivision of an extensive beef ranch where they lived and once worked. This paper analyses inadequate income, wealth, health and housing as symptoms of poverty using data gathered in a census survey of the 38 beneficiary households residing on Clipstone. Principal Components Analysis is used to construct an index of housing quality, which is then combined with variables measuring the other symptoms of poverty in a Cluster Analysis of the households to identify different dimensions of poverty affecting the community. Evidence of different poverty profiles is important when targeting appropriate forms of poverty relief and when isolating and prioritising the underlying causes of poverty. In addition, the Cluster Analysis provides benchmarks to monitor changes in the level and distribution of poverty over time.

The paper begins with a discussion of the main symptoms of poverty. Section 3 describes the data and empirical techniques used, and Section 4 presents results. These results and their policy implications are discussed in Section 5, with conclusions deferred to the final section.

2. SYMPTOMS OF POVERTY

The ultimate objective of development is to improve the quality of life of people. Developing countries therefore need to identify and implement poverty reducing strategies and to assess the degree of poverty of people before and after any impact on them (Booker *et al*, 1980: 19). Consequently, when measuring levels of poverty it is important to distinguish between the causes and symptoms of poverty, as it is the treatment of root causes rather than the symptoms that will alleviate poverty in the long run. Treatment of the symptoms is however necessary to improve living conditions in the short-run. This paper focuses on the symptoms of poverty,

not only to identify strategies capable of improving living conditions in the short term, but also to shed light on the underlying causes of poverty. A second paper will explore relationships between possible causes of poverty (such as low levels of human and social capital) and their symptoms, including:

- Low levels of income. Woolard (2002: 1) reports that of the 42 million people living in South Africa in 2000 about 8 million were surviving on less than US\$1 per day and 18 million were living on less than US\$2 per day.
- Low levels of economic wealth. Economic wealth derives from assets that can generate income, capital gains or liquidity when households are strapped for cash. Assets such as cattle play an insurance role in the event of adverse shocks such as drought or the loss of a wage worker or pensioner, helping to smooth consumption in areas where households do not have access to efficient insurance and credit markets (Little, 2002). Studies in rural Ethiopia show that after the debilitating effects of drought, households deplete their livestock herds and consume their seed stocks (asset de-accumulation) to try and postpone malnutrition and disease (Little, 2001).
- Low levels of health. High levels of morbidity and infant mortality are often the result of poor nutrition and inadequate health care. In South Africa, AIDS has compounded these problems. It is projected that the total number of HIV infections will reach 5.8 million and that the AIDS death toll will top 5.5 million by 2011 (Development Resources Centre, 2001). In 2001, South Africa's infant mortality rate was 62.8 infants per thousand births, more than ten times higher than the rate in high income countries, and average life expectancy had fallen to 47 from 61 years in 1998 (South African Data Profile, 2002).
- Poor standards of housing. Inadequate housing in urban townships and rural settlements has reached crisis proportions in South Africa, with some seven million people estimated to be living as squatters (Brew, 2002: 1). However, it is not only the type of dwelling (formal versus informal) that is important, but also the density of occupation, what the dwelling is constructed of, and whether or not sanitation is hygienic and water is safe to drink (May, *et al*, 1995: 24). In 1999, only 38% of the poor in South Africa had access to adequate sanitation and 47% to piped water (Woolard, 2002: 3).

The symptoms of poverty can be measured in two main ways; First, through objective social indicators such as income and expenditure levels, housing standards and life expectancy (a measure of the quality of life), and second through subjective indicators such as unmet needs and perceptions of the quality of life (May *et al*, 1995: 5). This study employs objectively measured variables representing the broader symptoms of poverty, namely; quality of housing, health, income and household wealth. Where several variables measure the same symptom, an index of the variables is created using Principal Components Analysis (PCA). Cluster Analysis (CA) is then used to group households according to their poverty profiles. In this way, the data and not the researcher define groups of households that differ in the type and relative level of poverty that they face.

3. EMPIRICAL ANALYSIS

3.1 Data collection

A census survey of 38 land reform beneficiary households – members of a Communal Property Association (CPA) established to purchase Clipstone, a 630 hectare subdivision of Sherwood Farm in the Midlands of KwaZulu-Natal - was conducted in May 2002 with the help of two facilitators employed by LIMA Rural Development Foundation. A structured questionnaire was completed for each household with questions answered by the household head. A household was defined as a group of people who live and take meals together, including daily commuters, but excluding weekly commuters and migrants. Income remitted by weekly commuters and migrants is nevertheless treated as a source of household income.

In 1999, farm workers and their families living on Sherwood applied to the Department of Land Affairs (DLA) for “Labour Tenant” status in order to qualify for the DLA’s Settlement/Land Acquisition Grant of R15,000 per beneficiary household. An agreement of sale for Clipstone was negotiated between the owners of Sherwood and the beneficiary households represented by the eGamaletu CPA. All but five of the labour tenant families relocated to Clipstone while waiting for the DLA to award their grants and complete the land transaction. These moves were premature in the sense that the beneficiaries occupied Clipstone without the benefit of a land use plan or essential services. In addition, the beneficiaries face an immediate problem in that Clipstone cannot sustain their collective herd of 300 cattle. Some livestock died during the winter of 2002 and many had to be sold owing to their poor condition.

To address this problem an equity-sharing scheme has been proposed that will allow the beneficiaries to exchange cattle for financial equity in a commercial beef enterprise on neighbouring Sherwood farm. If successful, the joint venture could relieve pressure on Clipstone’s grazing resources, reduce the risk of cattle dying, provide shareholders with a more divisible and liquid store of savings than cattle, and increase the incomes and wealth of shareholders through expert management of a larger commercial herd on Sherwood. Many of the female-headed beneficiary households indicated that they would pay cash for shares in the proposed enterprise as they owned few or no cattle and therefore derived little benefit from the (extensive grazing) land purchased by their CPA. The equity-sharing project is being facilitated by LIMA with funding from USAID’s Broadening Access and Strengthening Market Input Systems (BASIS) Collaborative Research Support Programme (CRSP). Monitoring changes in the welfare of this community over a period of 2-4 years forms an important part of this BASIS CRSP.

3.2 Data analysis

Data gathered in the census surveys were captured in electronic worksheets using Microsoft Excel[®]. Qualitative responses were coded on scales that were ultimately aggregated to construct dummy variables scoring one or zero to indicate the presence or absence of certain attributes. The database was checked for errors by examining descriptive statistics computed using SPSS V.11 (Norusis 1994: 83-109).

3.2.1 Poverty symptoms

The variables used in this analysis are presented in Table 1 along with descriptive statistics (means and their standard errors). The variables are grouped by poverty symptom. Within the housing category, the type of exterior wall was coded as zero for any material other than brick, block or stone. Mud and branches, tarpaulin and iron sheets are inferior in terms of insulation and weathering over time. Protected sources of water (piped water and covered boreholes) are ranked above unprotected sources (rivers, streams and wells) in terms of health standards. Sanitation is considered adequate for ventilated pit latrines, and inadequate for unimproved pit latrines. Household wealth was measured only in terms of livestock as there were few other liquid assets (there is no sale market for land) or financial assets recorded in the survey.

Table 1: Household descriptives for the symptoms of poverty

Poverty symptom	Variables	Definition	Mean	Standard error
Housing	Walls	Brick, block or stone =1, 0 otherwise	7.89%	27.3
	Water	Protected water source =1, 0 otherwise	5.26%	22.6
	Sanitation	Adequate = 1, 0 otherwise	63.2%	48.9
Income	Income	Monthly cash income (Rands/A.E.)	R219.92	185.08
Health	Morbidity	Number of household members that have visited a doctor in the last two months per A.E.	0.133	0.226
Wealth	Livestock	Resale value of livestock (Rands/A.E.)	R2570.90	2299.66

Note: AE = Adult equivalents = (adults + (0.5) children)^{0.9}

3.3 Empirical techniques

Principal Component Analysis (PCA) was used to construct an interval level index for the housing symptom from the variables *walls*, *water* and *sanitation*. Density of occupation was excluded from the PCA because additional rooms were still being added to many of the new homesteads at Clipstone. PCA can be regarded as a data reduction method that seeks to create an entirely new set of indexes or components to partially or completely replace the original set of variables (Hair *et al*, 1998: 90). The number of components to retain depends on:

- The percentage of variance accounted for by the component
- The absolute variance accounted for by the component (its eigen value should exceed unity)
- The ability of the components to be interpreted meaningfully (Daultry, 1976: 54).

Cluster Analysis is commonly used to define groups of observations with maximal homogeneity within the groups and maximum heterogeneity between the groups. The technique is often used to better understand the basic structures of the data set or to create a

foundation for subsequent analysis of dependence relationships (Norusis, 1994: 100). Cluster Analysis is based on measures of proximity (such as Euclidian distance) that are used to compare individual observations. The basic data for cluster analysis describe a set of N individuals or cases on which p measurements (variables) have been recorded.

There are a number of cluster algorithms but two basic categories can be distinguished, namely Hierarchical and K-Means Cluster Analysis (Hair *et al*, 1998: 91). K-Means Cluster Analysis produces only one solution for a predetermined set of clusters. Hierarchical Cluster Analysis, the method employed in this study, involves the construction of a hierarchy of treelike structures with each observation starting out in its own cluster and, at each successive step, observations or clusters of observations are merged into fewer and fewer ‘natural groupings’ (Norusis, 1994: 100). Although there is no objective way of choosing an optimum number of groups, the decision is usually guided by a substantial increase in the measure of proximity (*i.e.* loss of homogeneity within groups). In this study a set of $N=38$ cases or households was analysed across $p=4$ variables (the symptoms of poverty indicated in Table 1).

4. RESULTS

The results of the PCA are shown in Table 2. Bartlett’s Sphericity test was significant indicating that the variables *walls*, *water* and *sanitation* are correlated. Only the first principal component (PC_1) had an eigen value greater than unity. This component explained 45.5 percent of the total variation in the three variables. The loadings in PC_1 all carry positive signs showing that a change in one variable will be accompanied by similar changes in the other two, *i.e.* better sanitation is associated with better quality water and walls. The first principal component was therefore used to compute scores for a composite variable interpreted as a positive index of a better standard of housing.

The cluster analysis revealed five distinct natural groupings of households. The mean distance within clusters increases markedly from 0.467 to 0.691 when the number of clusters diminishes from five to four indicating a sudden loss of homogeneity when fewer than five clusters are retained. Table 3 presents descriptive statistics computed for each cluster. These benchmarks could be used to track changes in both the level and distribution of poverty over time. It is clear that the clusters identify different dimensions of poverty. The next section discusses these poverty profiles and their implications in more detail.

Table 2: Principal component results

Variable	Loadings for PC_1
<i>Sanitation</i>	0.40
<i>Water</i>	0.81
<i>Walls</i>	0.65
Eigen value	1.37
Percentage variance accounted for	45.5

According to Table 3, Cluster 1 contains households that have relatively higher incomes and wealth. Households in Cluster 2 are relatively asset rich but income poor, whereas those in Cluster 3 are relatively asset poor but income rich. Clusters 4 and 5 represent household's poor in both income and assets, but households in Cluster 4 have better health and housing than those in Cluster 5.

4.1 Income and asset “rich” households

Cluster 1 gathers households characterised by relatively higher incomes and wealth amongst the groups. These (seven) cases account for just 18% of the households at Clipstone. The mean monthly income per adult equivalent (R328.77) is similar to that of Cluster 3, but almost three times greater than that of Cluster 2 – the group with the next highest income. The mean value of livestock per adult equivalent (R3361) is surpassed only by Cluster 2 and is almost 80% higher than that of Cluster 4 – the next wealthiest. Despite their relative wealth, households in Cluster 1 are poor in absolute terms. The mean monthly income per adult equivalent falls short of the 2001 poverty datum line (R353) for rural South Africa (Development Resources Centre, 2001) and the average household income (R1060 per month) is less than a quarter of the inflation adjusted national estimate (R4556) for the year 2000 (South African Data Profile, 2002). Although healthy, households in Cluster 1 have relatively poor housing. It seems that not even Clipstone's wealthier households can afford to invest in both housing and cattle.

Table 3: Cluster membership and characteristics, N=38

Cluster number	Cluster size (Hhlds)	Household numbers	Income per A.E. (R/Mth)	Livestock per A.E. (Rands)	Household members sick per A.E.	Standard of housing index
1	7	3,7,11,12,17,18 & 23	328.77	3361.29	0.000	-0.487
2	11	1,5,10,14,15,16, 20,26,31,33 & 37	116.89	4502.13	0.075	0.185
3	11	4,6,13,19,22,24, 27,28,35,36 & 38	367.93	911.15	0.094	-0.516
4	4	2,8,30 & 32	110.67	1899.46	0.091	2.062
5	5	9,21,25,29 & 34	77.96	1404.26	0.563	-0.237
Overall mean			219.92	2570.90	0.133	0
F-Value for different means			6.48**	3.92**	6.24**	11.01**

Note: ** Denotes statistical significance at the 1% level of probability

4.2 Asset “rich” but income poor households

Cluster 2, representing 29% of the Clipstone community, accounts for households with low incomes but relatively high asset wealth. The mean monthly income per adult equivalent (R116) is approximately one-third that of Clusters 1 and 3 - the highest income groups. On the other hand, Cluster 2 has, by far, the highest mean value of livestock per adult equivalent (R4502). It also has the second highest score on the housing index (0.185). However, this score is very low relative to the highest mean (2.062 for Cluster 4) reinforcing the view that even Clipstone’s “wealthy” households are unable to invest in both livestock and quality housing.

4.3 Income “rich” but asset poor households

Cluster 3, also representing 29% of the community, contains households with low asset wealth but the highest incomes. Average household income (R1430 per month) exceeds the poverty line (R1278) estimated for South Africa in 2002 (City Press, 2002) but still falls far short of the national average (R4556) estimated for 2000 (South African Data Profile, 2002). The mean value of livestock per adult equivalent (R911) is well below the market price of a large stock unit highlighting the fact that 35% of households in Cluster 3 own no cattle at all. In addition, Cluster 3 has the worst score on the housing index, and a relatively high incidence of morbidity. The anomaly of low asset wealth and poor health in households with “high” incomes is most likely explained by the importance of pensioners as a source of income in these households relative to those in Cluster 1.

4.4 Income and asset poor – households living in a state of chronic poverty

Clusters 4 and 5 both contain households with relatively low incomes and wealth. Households in Cluster 5 may be somewhat poorer than those in Cluster 4, but the real distinction between these clusters lies in their health and housing scores. Households in Cluster 5 have the worst health, and those in Cluster 4 have the best housing. Cluster 5, with 13% of all the households, represents those trapped in a state of chronic poverty. Constrained by very low incomes, these households have not accumulated assets and appear to be unable to finance adequate nutrition (resulting in high morbidity). While households in Cluster 4 share the same burden of low incomes and wealth, this may not always have been the case. These households, representing almost ten percent of the community, may have joined the poorest in recent times following the loss of income and/or the liquidation of saleable assets. Their prospects for recovery may be reasonable (as in the case of temporary unemployment) or bleak (as in the case of losing a wage earner or pensioner).

In summary, Cluster 1 represents the least vulnerable of the poor households at Clipstone. These households also enjoy relatively good health - possibly a reflection of reliable nutrition and clothing standards afforded by a combination of their relatively high incomes and liquid livestock assets. Households in Cluster 2, although poor in terms of current cash income, are relatively wealthy in livestock and consequently better equipped to deal with adverse shocks than are households in Clusters 3,4 and 5. Households in Cluster 3 are very poor in terms of

both livestock and housing, but benefit from pension earnings that distinguish them from their less fortunate neighbours in Clusters 4 and 5. The latter live in a state of chronic poverty, particularly those in Cluster 5 who seem to have been trapped in poverty for longer than those in Cluster 4.

5. POLICY IMPLICATIONS

As this study focuses on the symptoms of poverty, no explicit statements can be made about the underlying causes of poverty or ways in which these fundamentals can be addressed. These issues form the core of a second paper that relates differences between the clusters to possible causes of poverty. Nevertheless, the Cluster Analysis does reveal dimensions of poverty that help to distinguish between short-term strategies needed to relieve the symptoms of poverty and longer-term policies required to build household assets that make them more resistant to poverty traps.

With regard to short-term strategies, it is clear that state pensions are keeping about one-third of Clipstone's households (mostly in Cluster 3) out of chronic poverty. Unfortunately, pension payments will become less and less effective at alleviating poverty over the next two decades. At present, only 12% of Clipstone's population is older than 45 years of age. Of these, 50% are already older than 60, suggesting a reduction in the number of pension earners in future years, and a worsening distribution of poverty as households in Cluster 3 become poorer.

The anticipated decline in life expectancy will not only reduce future pension earnings but also the productivity of household labour. It is projected that by 2011 one in four working age adults will be infected with HIV, and that one in six will have succumbed to AIDS or related diseases (Development Resource Centre, 2001). On average, one-half of South African households could have a member infected with HIV, and about one-third could have lost an infected adult by the year 2011. These households will suffer diminished capacity to generate both future and current income and subsistence goods, and will incur additional costs caring for the sick. In terms of this study, these problems are expected to shift more of Clipstone's households into Cluster 4, *ceteris paribus*.

Increasing the size of state pensions from their current monthly level of R600 will not assist the growing proportion of households devoid of members old enough to claim them, and lends some support to popular calls for a basic income grant (BIG) in South Africa. The proposed BIG (South African Council of Churches, 2001: 3) involves an income grant of R100 per month available to all South Africans. This approach avoids the cost of means testing applicants and encourages self-selection by those most needy, as the after-tax benefit would be small relative to transaction costs for wealthy households. According to the Development Resources Centre (2001), this BIG will nearly triple the average per capita income of poor households, from R46 to R120 per month, and close the average poverty gap by 80% for people in the bottom two income quintiles.

Table 4 shows the impact of the proposed BIG on the average monthly income (per adult equivalent) of households in each of the four poverty groups described in section 4. For this community, the BIG would more than double the current earnings of households with the lowest incomes (groups 2 and 4). The largest improvement (180%) would be for households that are both income and asset poor. For wealthier households, some of the extra income may

be used to accumulate savings and assets making them more resistant to adverse shocks and poverty traps. However, a study in the communal areas of rural KwaZulu-Natal (Hendriks and Lyne, 2003) estimates the expenditure elasticity for investment to be less than 0.5, even for the wealthiest decile.

A universal basic income grant that complements existing social security programmes will be expensive to implement and sustain due to sheer numbers of beneficiaries. At a monthly level of R100 per citizen, the grants alone would amount to approximately R44 billion per year. Individuals in the top three income quintiles of the population would capture one-half of this amount (Samson, 2002: 3), but the middle and upper income earners would return a substantial part of the BIG through income taxes. Samson (2002: 3) estimates the annual net cost of these grants at R24 billion. Of course, this estimate excludes administration costs. Prohibitive costs aside, a universal BIG poses formidable logistical problems in delivery, especially to poor people who are not employed, do not have a bank accounts, live in remote areas and who may not have identity documents to prove their citizenship.

Extending existing child welfare grants might offer a more cost-effective way of relieving the symptoms of poverty. The child support grant (CSG) is a means tested grant of R140 per month presently available to children under the age of seven. Recently the government announced its intention to extend the age of eligibility to fourteen. To qualify for the CSG, the child must have a South African identity number (*ie* a birth certificate or ID book) and the caregiver must produce an ID book with a bar-coded ID number, proof of income and assets (or an affidavit from a welfare officer declaring them to be unemployed) and an application form. Assuming that all of the study households would satisfy these criteria, Table 4 shows that extending the age of eligibility to 14 will improve the earnings of low income households most (30 – 50%), with the biggest gains accruing to households that are both income and asset poor (group 4). Indeed, for the same overall gains, group 4 is targeted more effectively by the CSG than by the proposed BIG. Extending the age of eligibility for the CSG to 18 alters the level of gains but does not change their distribution much.

Table 4: Income effects of welfare grants on study households facing different dimensions of poverty

		Current situation	Proposed BIG	CSG extended to age 14	CSG extended to age 18
Poverty dimension	Poverty group	Mean household income per A.E. (R/Mth)			
Income and asset “rich”	1	329	483	357	367
Asset “rich” but income poor	2	117	251	156	166
Income “rich” but asset poor	3	368	497	386	402
Income and asset poor	4	93	309	167	196

Extending the CSG would be logistically simpler than introducing an entirely new grant such as the proposed BIG, and the treasury costs would be much more manageable. These findings

support the government's decision to extend the CSG rather than introduce a BIG. Further savings could be achieved by offsetting the CSG against existing care dependency grants and foster care grants. Such savings might allow government to extend the CSG to children aged 18, so benefiting more poor households for a longer period of time and providing for disadvantaged children until they are old enough to complete their schooling. It must be noted, however, that the Clipstone community is very small and recommendations based on these findings will require further testing on a much broader front.

A school lunch programme also has advantages in that it dispenses with individual means testing and prevents beneficiaries from spending grants on non-essentials. However, Hendriks and Lyne (2003) estimate relatively low expenditure elasticities for alcohol and tobacco (0.78) relative to food (1.05), health (1.89), housing (1.65) and utilities (6.67) amongst the wealthiest decile of poor households in rural KwaZulu-Natal.

With regard to longer-term strategies aimed at addressing the underlying causes of poverty, the results of this analysis lend support to programmes that seek to improve the distribution of wealth in South Africa. The land restitution and redistribution programmes should be consistent with this approach, but this is hardly the case at Clipstone where the poorest households have no livestock and consequently have not been able to benefit from the purchase of extensive grazing land that they cannot use, lease out or sell. These families could have benefited from dividends and capital gains had they been given the option of purchasing a smaller parcel of land for residential purposes and investing the balance of their land grants as equity in an existing commercial farm. Indeed, the SLAG programme has done little to enhance the day to day life of the poorest beneficiaries as it has not yet provided any new or improved services and infrastructure.

6. CONCLUSIONS

Rural households at Clipstone have different poverty profiles. Most are vulnerable to adverse shocks because they have either low incomes or low wealth. Some have low incomes and low wealth, and are living in abject poverty. Pension payments still play an important role in alleviating the symptoms of poverty, but their effectiveness is diminishing because life expectancy is falling. While this problem lends support to recent calls for a universal basic income grant, prohibitive costs and logistical problems suggest that it would be more useful to extend the existing child support grant as has been proposed, to include children up to the age of fourteen or even eighteen, partially replacing care dependency grants and foster care grants. In the longer term it is necessary to focus on asset accumulation. Contrary to expectations, the poorest households at Clipstone have not benefited much from their land grants as they do not own cattle. For them, investing their land grants as equity in a joint venture with a commercial farmer may have been a better option.

REFERENCES

ALIBER, M. (2001). Study of the incidence and nature of chronic poverty and development policy in South Africa: an overview. Unpublished Programme for Land and Agrarian Studies Paper, University of the Western Cape, Cape Town.

- BOOKER, W., SINGH, P. & SAVANE, L. (1980). Household survey experience in Africa. World Bank LSMS Working Paper No. 6. Washington, D.C., USA.
- BREW, J. (2002). South African housing for the urban poor. African News Service – Bulletin d'information Africaine (ANB-BIA) Supplement, Issue/Edition Nr 430. Belgium.
- CITY PRESS. (2002). Half of SA live in poverty, Published Article.
- DAULTRY, S. (1976). *Concepts and techniques in modern geography*. Geo Abstracts, No. 8, University of East Anglia, UK.
- DEVELOPMENT RESOURCES CENTRE (2001). Report on South Africans for a Basic Income Grant. Development Resources Centre, Johannesburg.
- GUTHRIE, T. (2001). Social assistance provisioning for children in South Africa, Fact Sheet 2. The Children's Institute, University of Cape Town.
- HAIR, J.F., ANDERSON, R.E., TATHAM, R.L. & BLACK, W.C. (1998). *Multivariate data analysis*, 5th ed., Prentice Hall, New Jersey, USA.
- HENDRICKS, S. & LYNE, M. (2003). Expenditure patterns and elasticities of rural households sampled in two communal areas of KwaZulu-Natal. *Development Southern Africa* 20(1), forthcoming.
- LITTLE, P. D. (2001). Asset cycles and livelihoods – addressing food insecurity in the Horn of Africa and Central America. Unpublished report, Institute for Developing Anthropology, University of Kentucky, Lexington, USA.
- LITTLE, P.D. (2002). Building assets for sustainable recovery and food security. Basis Brief, Number 5. University of Wisconsin-Madison, USA.
- MAY, J., CARTER, M. & POSEL, D. (1995). The composition and persistence of poverty in rural South Africa, an entitlements approach to poverty. Land and Agriculture Policy Centre, Policy Paper No. 14., Johannesburg.
- MAY, J., CARTER, M.R., HADDAD, L. & MALUCCIO, J. (2000). KwaZulu-Natal Income Dynamics Study (KIDS), 1993-1998: A longitudinal household data set for South African policy analysis. *Development Southern Africa* Vol. 17 (4): 567-581.
- NORUSIS, M.J. (1994). *SPSS professional statistics 6.1*. SPSS Inc, Chicago, USA.
- SAMSON, M. (2002). Research review on social security reform and the basic income grant for South Africa. Economic Policy Research Institute, Policy Report No. 31, University of Cape Town, Cape Town.
- SOUTH AFRICAN COUNCIL OF CHURCHES. (2001). South Africans for a Basic Income Grant: Platform. Unpublished report prepared by the Public Policy Liaison Office of the South African Council of Churches for Professor Vivienne Taylor, Head of the Committee of Inquiry into Comprehensive Social Security for South Africa, Cape Town.
- SOUTH AFRICAN DATA PROFILE. (2002). World Development Indicators Database, World Bank, Washington, D.C., USA.
- WOOLARD, I. (2002). An overview of poverty and inequality in South Africa. Working Paper prepared for DFID (SA), UK Department of International Development, Pretoria.