

THE ATTITUDE AND VULNERABILITY OF PEOPLE AS DETERMINANTS OF POVERTY: THE CASE OF LESOTHO

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Abstract

Lesotho is one of the poorest countries in the world. After reviewing the growth and poverty debate, which suggests that policy reforms and economic growth have largely failed to contribute to the alleviation of poverty in Lesotho, the paper explores the core constraints to poverty reduction. It is argued that the attitudes of the people in Lesotho and the extent to which they are vulnerable to exogenous shocks are important variables towards removing structural and fundamental constraints that impede poverty alleviation. To quantify the values of attitude and vulnerability, an econometric model is constructed that uses an HSRC public perceptions survey in Lesotho. The economic significance of this alternative measure provides a new dynamic on how to approach the issue of poverty alleviation in Lesotho.

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1

Background and objective

Lesotho is a small, landlocked and mountainous country with no significant subsoil assets and is surrounded entirely by South Africa. With a population of 2.1 million, per capita GDP was estimated at US\$520 in 2003, about 15 per cent of that of South Africa (IMF country report, 2004: 6). Its economy is small, very open and its people generally very poor. According to the World Bank (2004: 55), 36.4 per cent of the population earn an income of less than \$1 per day. There is, however, no simple and universal solution toward alleviating poverty. The problem is compounded by the fact that conventional measures to solve poverty, such as foreign direct investment, have little or no impact on the income poverty, education poverty, and consumption-based poverty of the poorest of the poor. In Lesotho, the Lesotho Highlands Water Project ("LHWP") clearly illustrates that during the LHWP period *GDP growth rates of 6 per cent per annum for a decade*

were ineffective in making a dent on poverty (World Bank, 2003: 10). An alternative approach to alleviate poverty is required. This is essential since poverty is multidimensional, dynamic and complex. Furthermore, people, acting as economic agents and drivers, form the key to progress, not material means *per se* (Yanagihara & Sambommastu, 1997: 90).

In developing such an alternative approach towards addressing poverty, this paper first considers the state of poverty in Lesotho. This is followed by a discussion of various theories of development accentuating the important notion of the human interface. The following section derives an alternative working instrument or measure of poverty that encompasses the attitudes and vulnerability of people living in Lesotho. The instrument is then applied and the economic significance of the results is explored.

2 Poverty in Lesotho

Poverty, as defined within the context of Lesotho (Kingdom of Lesotho, 2003: 12), has both quantitative and qualitative dimensions. Quantitative poverty is defined as the extent, distribution and nature of poverty and maintains that access to health, education, clean water and addressing unemployment and other basic services are the key components in the reduction of poverty. Qualitative poverty, where the assessment is still underdeveloped, is defined as the presence of ill health and malnutrition, powerlessness, low self-respect and self-esteem, vulnerability and insecurity (Kingdom of Lesotho, 2003: 12).

One of the most serious trends in quantitative poverty is the growing rate of unemployment throughout rural Lesotho due to the retrenchment of Basotho mineworkers in South Africa, leading to significant job losses and political instability² (Kingdom of Lesotho, 2003). The most recent employment estimates, compiled by the Ministry of Labour and the Bureau of Statistics (World Bank, December, 2000: 9), estimates the rate of unemployment as high as 40.5 per cent, leaving a large part of the population dependent on low-yielding activities in subsistence agriculture and the informal sector, which is a major cause of poverty. Agricultural production also continues to decline, and food insecurity has increased to a level where a state of famine was declared by the government in April 2002 (Kingdom of Lesotho, 2003).

Another source of growing poverty is the limited access to basic services. There have been some incidences of typhus that are directly related to a lack of proper sanitation. According to the World Bank (2003: 58), nearly one half of rural households do not have any sanitation compared to only 10 per cent in urban areas. The World Bank further indicates that access to clean water, however, has increased from 52 per cent of households in 1990 and 64 per cent in 1993 to nearly three-quarters of households in 1999. Only an estimated 5 per cent of households (20 000 of the 400 000) had access to electricity in 2001.

Still, the biggest issue is the escalating HIV/Aids epidemic with, as one of its consequences, the fact that the standard of education is declining due to high, and rising, pupil/teacher ratios. This is caused by the increasing number of HIV/Aids-related deaths (Kingdom of Lesotho, 2003). Evidence shows that in terms of the Human Development Index (HDI) ranking³, Lesotho has experienced a decline in human development, particularly in the areas of education, health and life expectancy.

All the development programmes, such as the Lesotho Highlands Water Project (LHWP), the Rural Road Construction Programme, Privatisation and Private Sector Development Projects, Small/Medium Industrial Development Project, Food Self-Sufficiency Project and Sustainable Agricultural Development Programme, have failed to improve the economic situation of the people of Lesotho.

The result of this is the failure to significantly reduce poverty and can be observed from two perspectives. On the one hand, although the economy grew at an average of 6 per cent per annum during most of the LHWP era, poverty has not declined (World Bank, 2003: 10). Persistent inequalities meant that the poor were unable to participate fully in the benefits of the growth that took place. This is confirmed by the IMF country report (2004: 8) through the number of ultra-poor people growing from 500 000 in 1986/87 to 600 000 in 1994/95 and, as Turner (2003: 50) reports, the Gini coefficient⁴ grew from 0,60 to 0,66 during the same period. In line with this, the study by May (2004: 11) challenges the view that economic reform and fiscal prudence are enough to achieve pro-poor growth by making use of examples, such those of as Ul Haque (1994) and Goldsmith (1995) and a special edition of Third World Quarterly (1996). Furthermore, Dollar and Kraay (2000) point out that the question whether or not standard and conventional economic reform is sufficient to address rural and urban poverty within an African context, is far from being resolved. Also, Sahn and Younger (2004: 73) identify a need to analyse complementary measures and actions, such as non-macro-economic factors, that can spur improvements in living standards. But even among the

countries most committed to the reform agenda of the World Bank and IMF, progress in achieving poverty alleviation has been painfully slow. Therefore Sahn and Younger's judgment is that it is the institutional weaknesses and structural impediments in a country that retard the economic and social progress of Africa's poor (see also Collier & Cuning, 1999a and 1999b; Easterly, 1998; Pritchett, 1997; Olson, 1996).

This evidence shows that an alternative approach to combating poverty is required and that more emphasis should be placed on qualitative poverty. As mentioned before, these are the dimensions of poverty not based on a money-metric and include the lack of human capability as well as the presence of ill health and malnutrition, powerlessness, low self-respect and self-esteem, vulnerability and insecurity. According to the Basotho definition of qualitative poverty, poverty is defined as (Kingdom of Lesotho, 2003: 12):

... powerlessness and exclusion, resulting in denial of access to basic human needs and lack of capacity to influence the direction of one's own life.

In addition, the World Bank (2000: 34) describes qualitative poverty:

...as the intrinsic value through a sense of voicelessness and powerlessness of the poor in the institutions, the state and society, and their vulnerability to exogenous shocks, linked to an inability to cope with them...

These descriptions illustrate the importance of incorporating the human interface to design appropriate and effective measures for the alleviation of poverty. Although these measuring techniques are still underdeveloped, a move towards developing qualitative poverty assessment may have more direct policy relevance and permit a more dynamic process of research, monitoring and policy review (Kingdom of Lesotho, 2003). This paper focuses on this human interface dimension in developing an alternative approach to tackle poverty. The following section emphasises the importance of human interface dimensions through alternative economic theories.

3

Theoretical framework

The main question that arises is the merit of emphasising the human interface when considering strategies and programmes to alleviate poverty and promote economic development. Before embarking on an empirical investigation, a theoretical perspective is warranted.

In the 1970s the best empirical evidence seemed to indicate that growth did not necessarily help the poor (Adelman, 1975: 302). Adelman argued that the human potential of an economy's members must be released before the economy can develop properly. He claims that the *proper long-term goal of national development policy must be the successive relaxation of the systematic obstacles to the full realization of the human potential of its members* (Adelman, 1975: 306). Adelman was therefore convinced of the existence of imbedded obstacles within an economic system that inhibited development and that these obstacles were directly related to the potential of the human interface.

In the early 1980s, Manfred (1981) attempted to incorporate the human interface in economics to practise economics as if people matter, also being dedicated to the reorientation of development in terms of stimulating local self-reliance and satisfying fundamental human needs. In addition, Sen argues that economists will have to take a different view of human economic agents (Sen, 1984 & 1985). Hence, the theories by Manfred and Sen indicate that people, and not economic policies, act as catalysts for development.

Sen's approach changed the development paradigm from promoting economic growth to promoting human well-being; where growth means producing more things regardless of what happens to the people producing and consuming these goods, while human well-being involves *expanding the capabilities of people* (Sen, 1984: 497). The goal of economic development thus becomes expanding individual choices or opportunities and providing more positive freedom to people (Sen, 1984 & 1985).

Furthermore, Sen (1999: 48) supports the argument that there are grounds for believing that growth and human development might actually go hand in hand, stating *in achievement than growth-mediated success, where the increase in economic opulence and the enhancement of quality of life tend to move together*. This view on what stimulates economic growth has only recently been acknowledged by the introduction of endogenous growth models (Todaro, 1997) and the work of the Institute of Developing Economics on what is known as the Economic System Approach (“ESA”), showing that economic growth and development are therefore a joint process driven by these subjects (Yanagihara & Sambommastu, 1997: 8-13).

Sen and the ESA to economic growth and development differ quite substantially from the conventional approaches in pursuit of the same goal. Sen’s contribution to the human development approach has been very influential, though his approach has been less successful in terms of the analysis of long-run dynamics, which are characteristic of conventional development economics. Gore (1997: 247) also expressed concerns that the focal variables of the mature specification of Sen’s capability approach exclude the institutional contexts within which individual actions are embedded and consequently give a biased view in development comparisons which, because of their nature, involve complex changes across society in the ways people relate to each other.

On the other hand, the ESA emphasises economic relationships that acknowledge the dynamic nature of the real world. The ESA revolves around building the productive capacity of subjects by focusing on their personal capacities and developing the infrastructure in which they operate. The ESA is descriptive, focusing on people and their capabilities to achieve progress. Additionally, ESA captures the fact that markets (i.e. their quality, volume, scope and nature) can and will be influenced by people and the infrastructure surrounding them. An application of the ESA constitutes a decisive paradigm shift from past practices. The ESA recognises the fact that the

structure of society is complex; it captures the diversity by postulating that markets are an integral part of the diverse economy and its development process. This differs radically from conventional theories with simplifying abstractions, assumptions and functional equations. This creates an environment where markets are not treated as being neutral. The ESA has broken ties with a mechanical and deterministic concept of economic growth and development. It postulates that people and dynamic relationships are essential to economic development.

It is simply not possible to separate economic from non-economic phenomena when dealing with real world development problems. Sen argues that in pursuing the view of development as freedom, *we have to examine – in addition to the freedoms involved in political, social and economic processes – the extent to which people have the opportunity to achieve outcomes that they value and have reason to value* (Sen, 1999: 291). Sen therefore accepts that income levels are an important factor affecting living standards, but he argues that some opportunities that people value (e.g. long life, worthwhile employment, peaceful neighbourhoods) are not strictly linked to economic prosperity. Hence, factors influencing the economic growth, employment and inequality, however, do not operate in a vacuum, but are interactive. This is indicated by the fact that low income also contributes towards poverty.

In line with this, the framework below reflects the linkages between low income, vulnerability and attitudes of the poor. One observes that low levels of living (insufficient life-sustaining goods and inadequate or non-existent education, health and other social services) are all related in one form or another to low income. These low incomes result from the low average productivity. Low labour force productivity can result from poor work attitudes, inadequate skills and under-employment. The important point to remember is that productivity, low incomes and low levels of living are mutually reinforcing phenomena.

Both low self-esteem and limited freedom of choice contribute to low levels of income. Low self-esteem can contribute to low levels of

income when material well being largely determines an individual's identity and value in the eyes of other people. This intrinsic value in life rather than on goods provides instrumental value: *the ability to be well nourished, to avoid escapable morbidity or mortality, to read and write and communicate, to take part in the life of the community, to appear in public without shame* (Sen, 1990: 126). Low self-respect can contribute to low levels of living as a result of poor attitudes toward life, work, cleanliness and self-improvement. In fact, many human motivations get ignored in traditional economic analyses. Sen (1977: 333) draws out some of the important policy implications that follow from adopting a broader view of human behaviour. People work hardest at their jobs *not* when financial rewards and penalties are the greatest, but when they have a sense of commitment and a belief that some important goal is being pursued.

Low levels of living also influence, and are influenced by, limited freedom. This makes people and nations vulnerable to, dependent on, and often, dominated by those who are materially better off. In times of natural disaster, such as flood or drought, the wage earner is immediately vulnerable to a loss of income and will not be able to purchase many goods (Sen, 1981; Dreáze & Sen, 1989). In addition, limited freedom means that nations and individuals have little or no control over their own destinies (Todaro, 1997). They are therefore likely to have lower opinions of themselves, and to lose some respect in the eyes of others. This lack of security does more than prevent the rural poor from

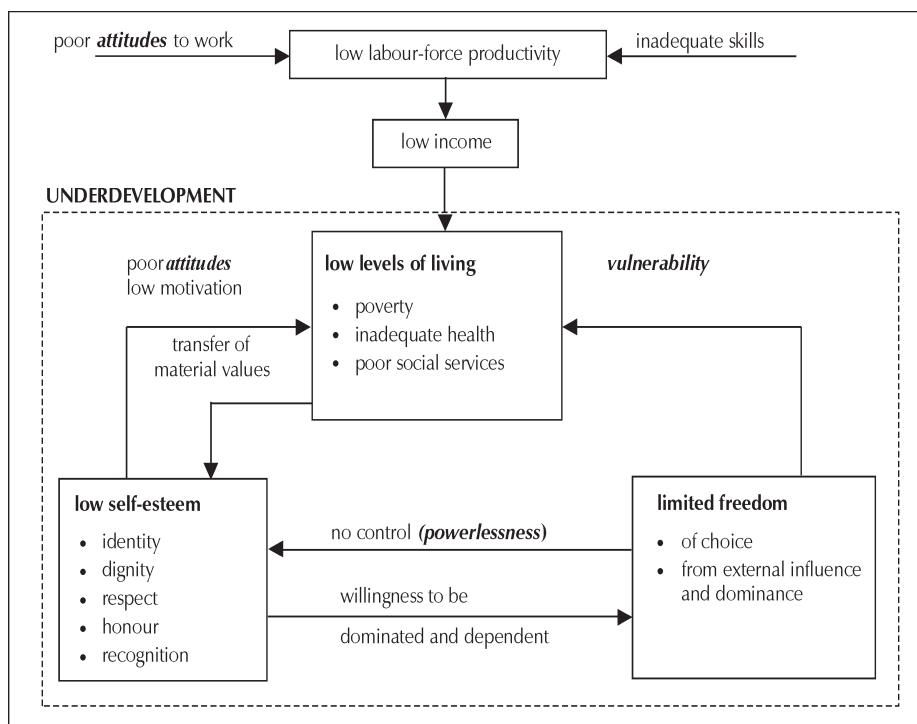
using assets to self-insure; it directly reduces their incentives to accumulate wealth and hence to rise out of poverty (Sahn & Younger, 2004: 80–82). Conversely, nations and people with low self-esteem often do not have the economic, psychological or physical strength to resist domination and a loss of their freedom of choice.

These views clearly illustrate that low levels of living, poor attitudes and vulnerability all work cumulatively and both cause and effect processes that perpetuate underdevelopment. It should be clear that without focusing on people that act as catalysts for development, the prospects for development are practically non-existent.

Kanbur and Squire (2001) acknowledge the importance of Sen's contribution in focusing attention not just on income or expenditure poverty, but also on a range of indicators, including the human interface. They find that the broader definitions allow a better characterisation of poverty, which is valuable in the design of specific programmes to help people escape poverty.

From the foregoing it should be evident that alternative approaches towards poverty alleviation are required. This alternative approach internalises the fact that people act as economic agents and that, should there be any obstacle from a qualitative poverty perspective, then the possible success concerning poverty alleviation is extremely limited. The question therefore is: Is there any relationship between aspects of qualitative poverty and escaping poverty in practice?

Figure 1
Theoretical framework of the attitude and vulnerability economic model



Source: Adapted from: Todaro's model of underdevelopment (Todaro, 1997).

4 Economic model

4.1 Introduction

Sahn and Younger (2004: 80-82) find that the recent increase in research on qualitative poverty emphasises the importance the poor place on vulnerability when they define their own situation. They further suggest that people who are vulnerable are understandably averse to risks. Given the importance that the poor attach to vulnerability and the relative scarcity of policies to deal explicitly with it, Sahn and Younger see this as an area that deserves more attention. This paper will quantify vulnerability via the non-income risks which can be measured by the prevalence of these risks, crime and natural disasters, following the World Bank's definition (2000: 20).

The degree of powerlessness, or the ability of people to influence the social and economic factors that determine their welfare, will be used

as a proxy for determining people's attitudes (Leboela & Turner, 2000). Additionally, the trustworthiness, accountability, responsiveness, respect and fairness of the state and the community will also serve as a proxy for determining people's attitudes (Narayan *et al.*, 2000). It should be remembered that attitudes incorporate human motivations, as mentioned by Sen, where motivation is defined as having a sense of commitment and a belief that some important goal is being pursued.

4.2 The data

The data used in this paper originate from the HSRC survey of public opinion on development issues conducted in Lesotho, September 2000. A 21-page questionnaire, which formed the nucleus of this study, was used to collect information throughout Lesotho. This formed a representative sample of 704 respondents, aged 18 years or older, highlighting the voices of the public. Although the population of

Lesotho is highly homogenous, 99 per cent being Sesotho-speaking, all ten of the country's administrative regions were included to ensure adequate coverage of attitudinal diversity that might emerge. The number of respondents from each region reflected the different regions' relative population size exactly. The sample of 704 was divided across Lesotho's districts in accordance with the urban-rural divide in each enumerator area, i.e. 20 per cent urban and 80 per cent rural. To make this survey even more representative, 60 per cent of the sample depicts the attitudes of those who are poor.

The detailed individual reports had to be adjusted to improve their usability (this involved the setting of relevant criteria to eliminate incomplete information and calculate relevant averages for each attitude variable). In Annexure A the different vulnerability and attitude variables and their respective definitions are

provided. In addition to these seven attitude variables, an eighth variable, vulnerability, as defined above, was included in the model.

A series of Granger causality tests were undertaken to determine whether the levels of income are influenced by the attitude and vulnerability variables or whether the attitude and vulnerability variables are influenced by income. It was established that, within this sample, income is mostly (80 per cent) influenced by the attitude and vulnerability variables and not *vice versa*.

Each respondent had to indicate his or her perception with respect to the variables mentioned according to a scale provided in the questionnaire (see Table 1). Each variable therefore had a variety of plausible outcomes per respondent and it was necessary to incorporate all of these outcomes in a functional equation, to be discussed subsequently.

Table 1

The specific dimensions (or scale) for each of the independent variables from which the respondents could choose

X	Model independent variables	Dimensions (or scale) of the variables
2	Service delivery perceptions	1 – Improved substantially, 2 – Improved, 3 – Stayed the same, 4 – Worsened, 5 – Worsened substantially
3	Perceptions towards honest conduct and corruption	1 – Too high priority, 2 – Sufficient priority, 3 – Too low priority
4	National economic policies in Lesotho	1 – Bad, 2 – Hardly any effect, 3 – Good
5	Perceptions of economic issues	1 – Got a lot worse, 2 – Got a little worse, 3 – Stayed the same, 4 – Got a little better, 5 – Got a lot better
6	Governance	1 – Very satisfied, 2 – Satisfied, 3 – Neutral, 4 – Dissatisfied, 5 – Very dissatisfied
7	Institutional trust	1 – Strong trust, 2 – Trust, 3 – Neither, 4 – Distrust, 5 – Strong Distrust
8	Crime	Victimisation: 1 – Twice or more, 2 – Once, 3 – Not once and Perceptions of safety: 1 – Very safe, 2 – Safe, 3 – Unsafe, 4 – Very unsafe
9	Vulnerability	1 – Most vulnerable, 2 – Vulnerable, 3 – Less vulnerable

4.3 The model

The model used tests the relationship between personal income and the human interface in the Lesotho economy for an improvement of attitudes and vulnerability, as per the list of variables discussed above. An individual's

income was taken as the dependent variable, and a variety of variables explaining attitude and vulnerability were used as exogenous variables. As the individual income level has an exponential relationship with the explanatory variables, the natural log of the

income level was used. The other variables were used in their natural form. By using multiple regression analysis, the functional coefficients of each variable are derived simultaneously. Thus, the model specification is as follows:

$$In Y_i = \beta_1 + \beta_2 X_{2i} + \beta_3 X_{3i} + \dots + \beta_9 X_{9i} + \epsilon_i$$

For example:

- $$X_{6i} = \begin{cases} 1 & \text{the number of individuals that are very satisfied} \\ 2 & \text{the number of individuals that are satisfied} \\ 3 & \text{the number of individuals that are neutral} \\ 4 & \text{the number of individuals that are dissatisfied} \\ 5 & \text{the number of individuals that are very dissatisfied} \end{cases}$$

or

- $$X_{9i} = \begin{cases} 1 & \text{the number of individuals that are most vulnerable} \\ 2 & \text{the number of individuals that are vulnerable} \\ 3 & \text{the number of individuals that are less vulnerable.} \end{cases}$$

To estimate the correlation between the natural log of income and the exogenous variables, the

database in its totality was used in a single regression. In addition, all the attitude and vulnerability dimensions (or scales) identified are treated in this single regression.

4.4 The results

Table 2 provides the regression results obtained and the following observations are important:

- The regression results are satisfactory. The R-squared, which is normally used as a yardstick to describe the quality of the correlation, is 0.27. Though low, this is to be expected for cross-section regression analysis,
- From the t-statistics generated it is evident that most of the independent variables play a statistically significant role in explaining the variation of LN INCOME.

A series of diagnostic tests (see Table 3) were undertaken to determine whether or not the estimated regression and its parameters are acceptable. In particular, alternative specifications were investigated to determine the robustness of the estimated attitude and vulnerability effects and it was clear that the results obtained are stable.

Table 2
Regression results for total database

Dependent Variable: LOG_NETTO Method: Least Squares Sample: 704				
Variable	Variable	Coefficient	T-Statistic	P-Value
Age	AGE	0.160	2.191	0.029
Current employment status	EMPLOYMENT	0.110	7.557	0.000
Male or female	GENDER	-0.329	-2.040	0.042
Urban or rural	AREA	0.268	4.397	0.000
If unemployed, what is the regularity of earnings	UNEMPL_INC	-0.410	-4.700	0.000
Delivery of educational services	EDUCATION	0.090	3.355	0.001
Delivery of basic services	BASIC SERVICES	-0.147	-2.886	0.004
Delivery of health services	HEALTH	0.189	2.603	0.011
Perceptions of honest conduct and corruption	HONEST	-0.184	-2.757	0.006
Vulnerability	VUL	0.212	2.499	0.013
Perceived effect of government policies	POLICY	0.123	2.758	0.006

Improvement of economic and political situation	ECON_SIT	0.079	2.356	0.018
Victimisation of crime experience	CRIME	0.226	3.430	0.001
Trust or distrust in institutions	TRUST	-0.157	-2.399	0.017
Attitude towards governance	GOVERNANCE	-0.111	-3.430	0.001
Perceptions of safety	SAFETY	-0.059	-2.484	0.021
Constant term	C	0.022	1.024	0.981
R-squared		0.269		
F-statistic		15.0414 (0.000)		
Degrees of Freedom		703		

Table 3
Diagnostic tests

Test for	Test Applied	P-value	Conclusion
Normality	JB	0.062	Errors not normally distributed
Serial Correlation	LM	0.348	No serial correlation
	Durbin-Watson	DW1.902 ⁵	No serial correlation
Heteroscedasticity	ARCH	0.437	No heteroscedasticity
Stability	RESET	0.049	Model is stable but there might be specification error

In the next section the results obtained are used to reflect the economic significance of focusing on people as economic agents in order to alleviate poverty.

5 Economic significance of attitude and vulnerability

The economic significance is evaluated by simulating changes in income that would be implied by changes in these qualitative measures; i.e. the attitude and vulnerability of people. The changes in these qualitative measures are suggested by progressing from the current state of attitudes and vulnerability of the people to the most optimistic scenario, within the dimensions of the HSRC survey.

5.1 Individual's income level

The current average monthly individual income level is obtained from taking the anti-log from the estimated income. Thereafter, an optimistic view was taken for each variable. This optimistic

view is obtained by taking the anti-log of simulated income after the exogenous variables are improved, *ceteris paribus*, i.e. changing the variable from the current dimension to the most optimistic dimension. The economic significance is revealed with the comparison between the optimistic scenario income levels and the current average income levels. Table 4 depicts this comparison between the current and optimistic income levels for the various attitude and vulnerability variables.

In column one the current average personal income, M33 per month is given. The second column presents the current average dimensions of attitudes and vulnerability of the people in Lesotho; for example, the current attitude towards safety is that people feel very unsafe and the individual is mostly vulnerable. The third column depicts the simulated income levels, obtained by changing the current dimension of each specific variable to the most optimistic dimensions (column 4), *ceteris paribus*. Column five estimates the marginal impact on an individual's average monthly income for having this optimistic attitude and

being less vulnerable. This marginal impact is the difference between the optimistic income level (column three) and the current income level (column one) for each variable.

Table 4
Comparison of individuals' monthly income levels

Variable	Current state		Optimistic scenario		Marginal advantage [Maloti per month]
	Average individual income [Maloti per month] 1	Dimension of variable 2	Average individual income [Maloti per month] 3	Dimension of variable 4	
Service delivery perceptions	33	Stayed the same	52	Improved	19
Honest conduct and corruption	33	Low priority	48	High priority	15
National economic policies in Lesotho	33	Bad	42	Good	9
Perceptions of economic issues	33	Stayed the same	39	Got a lot better	6
Governance	33	Dissatisfied	46	Satisfied	13
Institutional trust	33	Distrust	45	Trust	12
Crime	33	Twice or more	52	Not once	19
Safety	33	Very unsafe	39	Very safe	6
Vulnerability	33	Most	51	Less	18

From Table 4 the following aspects are of importance:

- Most of the variables show a significant impact on the individual's monthly income by simulating a change in the variables from their current level to an optimistic one.
- As the theories discussed suggest, this will increase levels of living and consequently income levels will increase. The average marginal impact on the individual's income will be M19 per month.
- Changes in people's perceptions of service deliveries and crime are the two categories that are likely to have the greatest impact.

5.2 National income level

The national impact is calculated by multiplying the income levels in Table 4 (columns one and three respectively) by

Lesotho's population. This comparison between the current and optimistic national income levels is represented below.

In column one the current average national income, M69 million per month, is given. The second column shows the simulated national income levels, obtained by changing the current dimension of each specific variable to the most optimistic dimensions, *ceteris paribus*. Column three estimates the marginal advantage on the monthly national income levels implied by these optimistic dimensions of institutional trust, feels very safe and is less vulnerable. The marginal difference between the obtained optimistic national income levels (column two) and the current national income levels (column one) represents the increase in income. Column four represents the percentage increase in income⁶ on a national scale.

Table 5
Comparison of national monthly income levels

Variable	Average national income- Maloti (millions per month)			Increase in income (percentage) 4
	Current state 1	Optimistic scenario 2	Increase in income 3	
Service delivery perceptions	69	109	40	58%
Honest conduct and corruption	69	101	32	45%
National economic policies in Lesotho	69	88	19	27%
Perceptions of economic issues	69	82	13	18%
Governance	69	97	27	39%
Institutional trust	69	95	25	36%
Crime	69	109	40	58%
Safety	69	82	13	18%
Vulnerability	69	107	38	55%
Total	624	869	246	39%

From Table 5 the following aspects are of importance:

- The link between qualitative measures such as the attitude and vulnerability of people, standards of living and income levels is emphasised again.
- Within this optimistic view, the total impact on national income is M246 million per month, representing almost 35 per cent of Lesotho's GDP in 2002 prices⁷.
- On the other hand, income will increase by an average of almost 40 per cent due to the improved attitudes of the poor and vulnerability of the poor.

6

Conclusion and recommendations

In this paper the argument of an alternative measure to alleviate poverty is set forth, as the conventional measures have not been able to improve poverty significantly. Indicators of qualitative poverty have been used to assess whether or not they are significant when considering levels of income and hence the prospective impact of these qualitative poverty

indicators on poverty alleviation in general. Qualitative poverty measures used in this study are attitude and vulnerability as measured by the perceptions of the people in Lesotho on development issues and the prevalence of non-income risks, respectively. This approach is taken to emphasise that it is people and their capabilities, capacities and general commitment that drive economic processes and not material goods, such as capital.

To address this link between qualitative poverty, income and poverty alleviation a model has been designed to incorporate all these aspects. The economic model uses cross-sectional regression analysis to estimate the relationship income levels and qualitative measures. A series of Granger causality tests was undertaken and it was established that, within this sample, income is mostly influenced by attitude and vulnerability variables and not *vice versa*. Hence, the relationship was estimated between attitude and vulnerability as independent variables and personal income levels as the dependent variable. These relationships were established by using the HSRC (2000) survey of public opinion, consisting of 704 respondents, of whom 60 per cent were poor.

In general the estimated relationships could be described as satisfactory and most of the *t*-values are higher than two in absolute terms.

The economic significance of attitude and vulnerability is emphasised by the results obtained. On an individual level, the average marginal impact on the individual's income will be M19 per month by simulating a change in the current attitude and vulnerability of the people towards an optimistic scenario where motivated people will have more freedom of choice and power. The total impact on national income levels represents almost 35 per cent of the current GDP in Lesotho. On the other hand, with this most optimistic view, income will increase by an average of almost 40 per cent.

However, further empirical investigation is required to test these results.

In conclusion, this paper found that although low income is only one of several poverty indicators, this alternative approach towards addressing poverty uses the relationship between income levels and the human interface via the vulnerability and attitudes of the people. This new dynamic qualitative poverty measure suggests that perceptions of safety, self-esteem, freedom of choice and power are important determinants to income rises. The importance is evident to incorporate people as economic agents and to place more emphasis on this non-economic phenomenon. It is simply not possible, however, to separate economic from non-economic phenomena when dealing with the real world problems.

Annexure A

Description and dimensions of the variables

Service delivery perceptions: an average was calculated for four main poverty influencing service deliveries, namely, delivery of education, basic services (including water, sanitation and electricity) and services relating to health. Respondents had to rate services according to five categories, namely, improved substantially, improved, stayed the same, worsened and worsened substantially. The dimensions specified in the survey, for all service deliveries aforementioned, were 1 – improved substantially, 2 – improved, 3 – stayed the same, 4 – worsened, 5 – worsened substantially.

Perceptions towards honest conduct and corruption: an average was calculated of the respondents' feelings regarding the prioritisation of good, honest and open conduct by officials. Here, the point was to try and understand the degree to which people felt that principles of honest leadership were being adhered to and pursued by the government. The generalised feeling that officials were corrupt, and had no spirit of public service is confirmed by the data. The dimensions specified in the survey for this variable was 1 – too high priority, 2 – sufficient priority, 3 – too low priority.

National economic policies in Lesotho: an average of the perceived effect of government policies on the financial situation of individuals, the general economic situation and the prices people had to pay for goods and services respectively. The verdict was negative in that one in ten, or fewer, were of opinion that these policies had impacted positively on the economic or financial situation, especially in relation to the prices people had to pay. The dimensions specified in the survey for the perceived effect of above mentioned government policies were 1 – bad, 2 – hardly any effect, 3 – good.

Perceptions of economic issues: reflects the respondents' attitude towards the financial, political and economic situation in Lesotho during the past 12 months, prior to the September 2000 survey. A mood of pessimism seemed to pervade the attitudes of Lesotho's citizens as far as the national financial, economic and political situation is concerned. The respondents' attitude towards the financial, political and economic situation in Lesotho was specified as follows; 1 – got a lot worse, 2 – got a little worse, 3 – stayed the same, 4 – got a little better, 5 – got a lot better.

Governance: relates to respondents' perceptions of, and opinions on, governance and labour unions, from local to national levels. The findings show a pattern of general satisfaction of issues directly related to governance in their local communities, but less satisfaction towards district and country governance. Lesotho's residents appear to favour a strong role for the government in the national economy, and an active labour movement to defend their interests. The respondents perception towards governance and labour unions were revealed as; 1 – very satisfied, 2 – satisfied, 3 – neutral, 4 – dissatisfied, 5 – very dissatisfied.

Institutional Trust: an average was estimated for the level of trust, or distrust, with regard to 14 specified governmental and civil society institutions. Trust towards government and civil society institutions was specified as; 1– strong trust, 2 – trust, 3 – neither, 4 – distrust and 5 – strong distrust.

Crime reports on responses to the crime situation in Lesotho during the September 2000 survey, namely the perceptions of safety, victimisation, experience of crime, and government control over crime. Note should be taken of the fact that safety is used as a separate variable, and an average of victimisation and government control as another variable. From the survey, of concern is the fact that one in five adults had been victims of crime, and more than half of the population indicated that they felt very unsafe on most days. The survey specified this variable as Victimisation: 1 – twice or more, 2 – once, 3 – not once and Perceptions of safety: 1 – very safe, 2 – safe, 3 – unsafe, 4 – very unsafe

Vulnerability: was calculated as the average prevalence to non-income risks (crime, natural disasters, etc). Vulnerability was specified according to the prevalence of non-income risks as 1– most vulnerable, 2 – vulnerable, and 3 – less vulnerable.

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Endnotes

- ¹ The views expressed are those of the authors and do not necessarily reflect those of any institution they may be involved with.
- ² Referring to the political disturbances during the aftermath of the disputed May 1998 elections during which many businesses were destroyed.
- ³ In 2000 Lesotho ranked 127 (0.497) out of 174 countries and dropped to 132 in 2002 (World Bank, 2003:21).
- ⁴ The most widely recognised statistic on income inequality, where 0 is perfect equality and 1 is perfect inequality.
- ⁵ Portrays the actual Durbin-Watson statistic and not the p-value as indicated.
- ⁶ The percentage increase is calculated by dividing column three by column one.
- ⁷ The GDP is reflected as \$714 million in 2002 (World Bank 2004:187).