

A Q-Squared approach to Pro-Poor Policy Formulation in Namibia*

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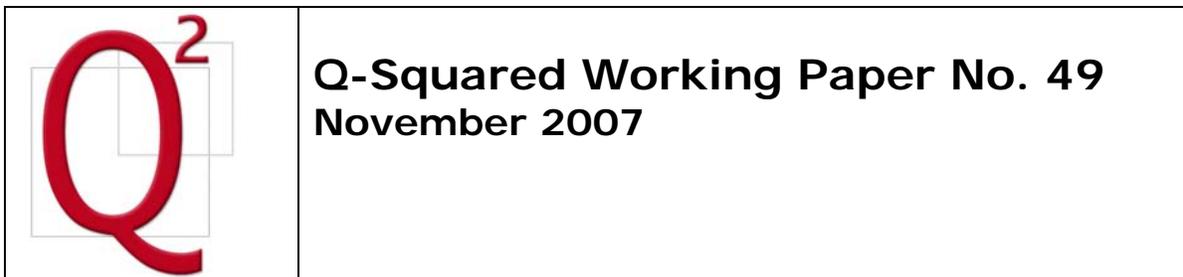
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*An earlier version of this paper was presented at the conference on "Q-Squared in Policy" co-hosted by Vietnamese Academy of Social Sciences, Cornell University and University of Toronto, in Hanoi 7-8 July 2007 and we are grateful for many useful inputs from conference participants. Views expressed in the paper are those of the authors and not the organizations they work for.



1. Introduction

When Namibia achieved Independence in 1990, the new majority government inherited a country marred by widespread poverty and deep inequality after more than a century of colonial rule and Apartheid. According to one conservative estimate at the time, at least two thirds of the population were classified as absolutely poor, including three quarters of the black population (World Bank 1992). The Population Census in 1991 (CBS 1993) and a Demographic Health Survey in 1992 (MOHSS 1993) provided the first real quantitative assessments of the state of social well-being among the Namibian people as a whole at the time of Independence and offered evidence to the deep inequalities in the provision and access to social services—especially between urban areas and the predominantly rural northern regions where the majority of the population lived.

In 1993, the Central Bureau of Statistics conducted the first Namibia Household Income and Expenditure Survey (NHIES), which provided a consumption-based estimate of poverty according to which 38 percent of households were classified as “poor” and 9 percent “severely poor” (CBS 1996a). Geographical divisions were again highlighted but so were vast inequalities according to dimensions of gender, age and ethnicity. Moreover, based on the consumption data in the survey, a Gini-coefficient of 0.7 was derived, which immediately qualified the new country for the unenviable position as having the most unequal income distribution in the world (CBS 1996a; United Nations 2005).

Reduction of poverty and inequality through economic growth and employment generation has subsequently been at the top of the national policy agenda (GRN 1995; GRN 2001). In the course of formulating plans to actively combat poverty, its definition has been broadened to go beyond just monetary measures and include concerns related to capabilities, vulnerability and exclusion (GRN 1998; GRN 2005). A number of studies conducted by the Social Sciences Division at the University of Namibia (e.g. Devereux et al 1996) and a series of *National Human Development Reports* (beginning with UNDP 1996) seem to have played a particularly instructive role in building national consensus on the multiple dimensions of the poverty phenomenon, strengthening capacity for

poverty measurement and facilitating policy analysis and dialogue. Moreover, as national authorities sought to build the national statistics system, a stream of data has been released over the years with the expected variation in both regularity and quality. However, the impact of this information flow on discourse and public policy has been uneven at best for a number of reasons that will be discussed below.

With national policies and development plans expressing a greater ambition towards becoming more evidence and results based (Office of the President 2004), and especially as the next five year National Development Plan is being prepared with poverty reduction again as a main objective, there appears to be a new demand for more systematic interpretation of macro trends and the likely impacts of policies directed towards the poor and vulnerable. Therefore, a key challenge facing policy makers at present is to draw conclusions from and reconcile a multitude of data sources, which often point in different directions and to a host of methodological challenges. The main objective of this paper is to derive some basic conclusions about the nature, level and trends of poverty in Namibia and thereby seek to deepen the debate about the possible impact of post-Independence efforts to reduce poverty. A secondary aim is to identify some of the causes that prevent, or at least impede, poverty research from informing the various stages of the policy and planning cycles.

We begin in Section 2 with an overview of current socio-economic trends to establish the macro picture and to begin exploring some of the complexities and apparent contradictions in economic and social developments in the post-Apartheid era. Section 3 lists a series of micro studies that have been carried out to investigate levels and trends of poverty and focus on the two most recent and extensive studies, the Namibia Household Income and Expenditure Survey (NHIES), based on a quantitative household budget survey methodology, and the Regional Poverty Profiles (RPP), which were conducted primarily using qualitative research approaches. Both research efforts were commissioned by the government specifically to inform the preparation of the next National Development Plan and other strategies aimed at poverty reduction. When viewed separately, the two research processes can be interpreted to represent evidence of

opposing poverty trends in Namibia. However, as explored in Section 4, where we revisit the tradition going back to Jodha (1988) and others in working with contradictions between results emanating from qualitative and quantitative research, much more is gained by combining the approaches than pitting them against each other. We then employ a Q-Squared approach by mixing the information sources to undertake additional analysis on the quantitative dataset and expand the poverty definition beyond income to include access to social services and assets. This helps us draw some preliminary and compatible conclusions about the levels and trends of poverty in Namibia that reflect the heterogeneity of poverty experiences. In the process, we also discuss how changes in survey methodologies have impacted results either by design or by default. In Section 5 we highlight a number of challenges in translating poverty research into policy action before we conclude in Section 6.

2. Poverty amid plenty: some macro trends

In the 2001 Census, the population of Namibia was estimated at 1.8 million and with a total land area of 824,269 sq km (approximately the combined size of Germany and the UK) the country has one of the lowest population densities in the world (CBS 2003). Moreover, Namibia is considered to have the driest climate in sub-Saharan Africa with wide regional variation in annual rainfall; from less than 50 mm in the western Namib and coastal zones to more than 700 mm at the eastern end of the Caprivi Strip (Kolberg 1995; Sweet 1998). Approximately 44 percent of the country is so-called “commercial” farmland with freehold tenure, 41 percent is allocated to communal areas, and the remaining 15 percent is state land including conservation areas (Sweet 1998; Adams and Howell 2001). A profound difference exists between communal areas in the north of the country (inhabited by more than two-thirds of the total population and characterised by farming-based livelihoods) and the commercial areas in the centre and the south of the country, where livestock represents the major income source of a low rural population and an extremely small number of land owners (Chiari 2004). Since 2000, subsistence agriculture has contributed to less than 2 percent of annual GDP (CBS 2006b), yet for 37

percent of the population, subsistence agriculture forms the main source of income (CBS 2006a).

Namibia is classified as a lower middle-income country with an annual average income of around USD 2,800 per capita in 2004 (World Bank 2006). Measured by income alone, the country performs fairly well on a global scale; ranked 75 out of 177 countries. However, when using the Human Development Index, which combines income with other capability measures such as health and education, the country slides 50 places to a rank of 125 (UNDP 2006). In recent years, advances in human development have been rapidly rolled back due to one of the most severe HIV/AIDS epidemics in the world (United Nations 2005; UNDP 2006). Life expectancy is projected to have fallen from 60 years in 1991 to 40 years in 2005 (MOHSS 2001; GRN 2004b). For over a decade, AIDS has been the leading cause of death, while the country has an estimated 100,000 orphans (CBS 2001; MOHSS 2001; GRN 2004b). The relatively high level of average income also masks high levels of poverty due to extreme inequalities in the income distribution (CBS 1996; CBS 1999; Van Rooy et al 2006), which is primarily a result of a long history of racial segregation during the colonial past prior to Independence in 1990 and the country's continued heavy reliance on the extraction of natural resources, notably diamonds, which is invariably capital extensive (United Nations 2005). While some poverty did exist in the pre-colonial era, it is well established how the process of colonisation introduced systematic and generalised processes of impoverishment and dispossession (World Bank 1992; Werner 1993; Devereux et al 1996). Interpreting the impact of macro trends on poverty since then is less straightforward as the following examples should illustrate.

Firstly, national accounts data show that real GDP has grown by 4.1 percent on average annually in the period between 1990 and 2005—a major reversal compared to the economic depression in the decade prior to Independence. However, GDP *per capita* has only increased by 1.6 percent (CBS 2006b) over the same period and, given the tremendous inequality with which income is distributed, a significant impact on poverty levels from economic growth alone is unlikely. Moreover, also using national accounts

data World Bank (1999) concludes that poverty “is on the rise” specifically as a result of an observed contraction in household consumption. However, primarily since household consumption in the national accounts is measured as a residual¹, errors in any of the aggregates will show up in household consumption making it a rather unsatisfactory tracker of individual and household income (CBS 1996b).

Secondly, formal sector employment has fallen between 1997 and 2004 (MOLSW 2006). However, negative effects on household incomes from falling overall employment could be more or less outweighed by comparatively high wages paid to an expanding number of civil servants, including their remitted incomes, and the effects of the near-doubling in real terms of social transfers over the past decade and a half (MOLSW 2001; MOLSW 2006; IPPR database). Moreover, the Labour Force Survey is also likely to underestimate the role of the informal sector and for instance improvements in own-production by households. Namibia has been able to devote an average of 34 percent of GDP in recent years to expenditure on the national budget, and still maintain fiscal stability, largely as a result of receipts from the Southern Africa Customs Union (SACU), which currently contribute nearly one half of total government revenues (MOF 2007). In the longer term, however, pressure is mounting on this revenue source (Flatters and Stern 2006).

Thirdly, a land reform programme has been in place since Independence with the aim to relieve demographic and environmental pressures on communal land, resettle communal farmers on commercial land and, more generally, address historical disparities by transferring ownership to ‘previously disadvantaged groups’. But despite much political attention, progress in implementation has been slow and its pro-poor effects questionable (Werner 2001; Van Donge et al 2005). Finally, as the most arid country in sub-Saharan Africa (Sweet 1998), vulnerability to drought and food insecurity in Namibia remains a persistent challenge to household livelihoods and well-being (Devereux et al 1995; Devereux and Naeraa 1996). Moreover, the HIV/AIDS epidemic is believed to

¹ In other words, as the difference between the GDP and imports on one hand and the final consumption expenditure of government and non-profit institutions, investment, changes in inventories and exports on the other hand.

compound food insecurity and undermine the coping strategies of poor households (de Waal and Whiteside 2003; United Nations 2005). However, during the two major droughts in 1992 and 2002, the government and the international community responded with extensive food assistance. To mitigate rural vulnerability in general, the government has put in place income-support programs of various kinds including social pensions for the elderly and the disabled, a variety of grants for children, labor-based works programs, and shelter and housing programs (Subbarao 1996; Office of the President 2004).

These macro trends are therefore ambiguous at best in terms of gauging the possible net impact on poverty in the post-Independence period. Fortunately, a series of studies using a variety of analytical approaches have been conducted aimed at more directly measuring welfare at the household and community levels.

3. Micro-studies and mixed methods

Over the years, a series of studies on a range of topics related to various aspects of human poverty and welfare have been conducted in Namibia; employing a range of research techniques and approaches either purely quantitative (CBS 1996a; CBS 1999; CBS 2006a), purely participatory (Hay, Pell and Tanner 1990; Reed and Dougill 2002; Samaria and Strand 2006) or purely ethnographic (Friedman 2005; Lorway 2006; Becker 2006). Moreover, several studies have mixed at least two of these methods (Yaron et al 1992; Van Rooy et al 1994; Deveraux and Naeraa 1996; Tvedten and Nangulah 1999; GRN 2004a; Frayne 2005; GRN 2006a, b). In order to analyse the levels and trends of poverty in Namibia, we use the results from two of these research processes; the Namibia Household Income and Expenditure Survey (CBS 1996a; 2006a) and the Regional Poverty Profiles that have been piloted in three regions (GRN 2004a; 2006a, b). We have chosen these two for several reasons. First of all, these two studies are the most recent (carried out between 2004 and 2006) and thus quite timely for our intentions to draw lessons for the next national development strategy which is to commence in 2008. Secondly, both research processes have inter-temporal components that allow us to draw

conclusions related to poverty trends. Thirdly, by drawing on a combination of quantitative and qualitative data sources, we are able to employ a Q-Squared approach, which is considered particularly useful when it comes to poverty analysis (Carvalho and White 1997; Kanbur 2003). Finally, the studies were commissioned by the national government specifically to inform national policy making. However, most efforts have so far been devoted to the field work organisation and gathering of data and to a lesser extent on discussing, analysing and drawing conclusions based on the data.

3.1 Namibia Household Income and Expenditure Survey (NHIES)

The NHIES 2003/2004 was a nationwide representative household budget survey covering 10,000 households and combining a standardised forms collecting basic information about the household and the people living in it, including: age, sex, education and so on, as well as household incomes and expenditure over a 12 month reference period. Using diaries, households recorded all expenditures and receipts, item by item, and included incomes and gifts (received and given out). Each household would record these transactions daily over a four week period. There were 13 of these four week cycles, each with a new set of households. Thus, a key distinguishing factor of the NHIES compared to other surveys conducted in the Namibia (e.g. Labour Force Survey, Demographic Health Survey) is that the NHIES is conducted over a full 12 months period. The main advantage of this is that effects attributable to seasonality during the course of the year are evened out. The highly detailed and labour intensive ‘diary method’ that characterises the NHIES methodology lends itself to measuring poverty using income or expenditures, which reflect budget constraints and consumption choices respectively. But invariably with increased size and sophistication of the survey comes methodological challenges, as we shall explore later.

According to the main report from the 2003/2004 NHIES (CBS 2006a), the estimated total household consumption during the survey period was N\$16 billion (US\$1 approximately buys N\$7). The average total annual consumption per household was N\$42,000 while the annual per capita household consumption was N\$8,500. While rural areas accounted for 60 percent of all households in the country, they only accounted for a

disproportionate 38 percent of total consumption. Average annual per capita consumption was N\$5,000 in rural areas compared to N\$15,000 in urban areas. Female headed households constituted 41 percent of all households, but only accounted for 29 percent of total consumption. Annual consumption per capita in male headed households was N\$10,000 compared to N\$6,000 in households headed by females. Sizable disparities also exist across language groups, with the average annual consumption per capita in households where Khoisan was the main language spoken standing at N\$3,000 in contrast to N\$82,000 in households where the main language was German.

In order to translate consumption-based income levels into a measure of poverty, the Central Bureau of Statistics has relied on the food-ratio method since the first NHIES. This method is based on “Engel’s Law”, which states that poor households devote a greater share of their total budget to food compared to better-off households. Following Lipton (1988), the statistics office classified those households that spent 60 percent or more of their total expenditure on food as “poor”. Moreover, “severely poor” were those that spent 80 percent or more of total expenditure on food (GRN 1996). Following this definition, the share of “poor” households was 28 percent in 2003/2004 down from 38 percent recorded in the survey from 1993/1994. The share of households designated as “severely poor” has more than halved from 9 percent in 1993/1994 to 4 percent in 2003/2004 (Table 1).

According to the NHIES, poverty remained a predominantly rural phenomenon with 42 percent of all households in the rural areas being classified as poor, compared to just 7 percent in the urban areas. The corresponding shares were 49 and 17 percent respectively in the earlier survey. The Kavango Region still had the highest poverty rate in the country but poverty levels there had come down from 71 to 50 percent. In the most populous of the northern regions, Ohangwena, poverty had been cut by almost half. The region with the lowest level of poverty was Khomas with less than 4 percent. Moreover, the Gini-coefficient was found to be 0.6 in the most recent survey. This still reflects one of the most unequal distributions of income in the world (UNDP 2006) but does represent a significant improvement compared to the Gini-coefficient of 0.7 registered in the

previous NHIES. Incidentally, these results compared to the Government's medium term goals indicate that the national targets for reduction in poverty and inequality had been achieved almost down to the decimal point.

In the 2003/2004 NHIES, a concern was not to depart unnecessarily from methodologies used in a previous round of the survey carried out in 1993/1994 to ensure maximum comparability. However, it is to be expected that surveys that are conducted with 10 years intervals will not be completely comparable. Methodologies do change over time and improvements are introduced based on experiences and lessons learned from previous surveys. The main differences between the two NHIES conducted in 1993/1994 and in 2003/2004 include: a doubling of the sample size to reduce sampling errors and allow for more detailed disaggregation; efforts to improve data collection, especially on reported consumption and income, and annual non-food expenditure items, and; use of digital scanning for data capturing and processing. According to the Central Bureau of Statistics, the effects of these changes are difficult to separate from actual developments when the two surveys are compared. While not contradicting the main conclusions of the survey, readers were cautioned to treat observed changes over time between the two surveys "*as more indicative of direction rather than as precise estimates*" (GRN 2006a: 24).

Preliminary results from the NHIES were released to the public in March 2006 and a full report in November of the same year. The immediate response was fairly muted, a reflection of the lack of importance attached to the release of statistical reports by the national media. However, an op-ed piece in the most widely circulated daily newspaper reported on the preliminary results from the NHIES and pointed out that the results suggested a marked fall in income poverty in the country, that, if sustained, would ensure the attainment of the Millennium Development Goal on poverty, and concluded: "*The new survey should be cause for celebration because the results are truly remarkable but, more importantly, the survey should be scrutinised and analysed by researchers and policy makers inside and outside of Government so that we get a better idea of how stable the findings are, how well they really reflect the situation in the country (...) and what are the key factors that have contributed to reducing poverty and inequality*" (Levine,

2006a). A limited debate ensued, which was characterized by a great deal of skepticism of the validity of NHIES results. In a “letter to the editor” one reader of the same paper wrote: *“Namibia's households are not better off today than 10 years ago. The Gini-Coefficient didn't improve. It worsened. No doubt about that (...) To tell us 'severe poverty' exists only among 3.9 percent of the population is so beyond reality! In which country has this survey actually been undertaken? The national statistics offices better withdraw the whole document.”*²

National current affairs magazine Insight reported later on the NHIES also throwing the legitimacy of the results into question under headings such as: “A Statistical Mystery” and “More Statistical Puzzles”. More specifically it was noted: *“Government's newly released household survey shows poverty and inequality have fallen. Economists are wondering how this could have happened.”*³ And: *“When government recently published new statistics showing that poverty in the country had dropped, Insight welcomed the news but asked how this could have happened given strong suspicions that employment had hardly risen.”*⁴ These examples compliment views and suspicions widely shared in meetings and consultations among development planners, and so clearly there is demand for further interpretation of the NHIES results, and more systematic comparison with other data sources in order to uncover those statistical mysteries and provide some first answers to what has happened to poverty in Namibia.

3.2. Regional Poverty Profiles

In this section, we describe the methodologies and results from the Regional Poverty Profiles. The focus is on the three northern regions of Ohangwena, Omaheke and Caprivi (see Map) where the PPAs were piloted in 2003/2004 and where Regional Poverty Profiles have been finalised (GRN 2004a; 2006a; 2006b). These profiles provide useful information for understanding poverty as perceived by the communities and are particularly helpful for further interrogating the NHIES. While it was recognized that

² Letter to the editor, The Namibia, 4 April 2006 by Andreas Peltzer Cheshire.

³ Insight Magazine May 2006.

⁴ Insight Magazine 2006.

“generally, the PPA approach adds to the legitimacy of poverty reduction strategies” the research objective went beyond legitimizing existing policy to shaping it: *“By combining PPA information with quantitative analyses the final poverty assessment is able to more fully analyse the various dimensions of poverty, provide opportunities for more informed policy decisions, and develop an appropriate response to poverty”* (GRN 2006a: 15).

The process of drawing the Regional Poverty Profiles in Namibia sought to make use of all three main approaches identified by Carvalho and White (1997) for combining qualitative and quantitative methods: (i) integrating methodologies, (ii) *“examining, explaining, confirming, refuting, and/or enriching information from one approach with that from the other;”* (Carvalho and White 1997: 16) and (iii) merging the findings into one set of policy recommendations. Firstly, integration of quantitative and qualitative methodologies was pursued primarily in the process of selecting the communities.⁵ Secondly, the Regional Poverty Profiles completed so far do go some way in triangulating various sources of information. One key distinguishing factor of the published profiles is the combined presentation of extensive census, survey and administrative data alongside the qualitative research primarily generated from the PPAs. Finally, policy recommendations and proposals for community and individual action, based on the combined analysis, feature as a separate section in each of the profiles. Research teams applied a number of standard PRA techniques including: village resource mapping, transect walks and drives; poverty trees to analyse causes and effects; poverty trend diagrams; well-being ranking; scheduling diagrams; Venn diagrams; service score cards; semi-structured discussions. These qualitative techniques are described as a family of methods to enable *rural* people to share, enhance, and analyze their knowledge of life and conditions, to plan and to act (Chambers, 1994).

⁵ The PPA process used a two-stage purposive sampling design process to select communities. The first stage of the sampling was the prioritisation constituencies. This was based on a series of welfare indicators including the Human Poverty Index (a composite including survival, illiteracy and access to water), infant and under-5 mortality rates and the number of orphans. The second stage involved the selection of one Primary Sampling Unit (PSU) from each constituency. This selection was based on variations in accessibility, availability of social services and agro-ecological zones. Finally, rural urban differences and coverage by the 2003/2004 NHIES were “taken into account” (GRN 2004a).

The recurring economic causes of poverty mentioned in the three PPAs included: isolation from service centres, limited infrastructure, unemployment, the lack of livestock and a scarcity of cash income sources. Environmental determinants included: low rainfall and drought, water shortages, and various aspects of environmental degradation (soil infertility, overgrazing, deforestation). Social factors that were highlighted by participants included: ill health and mortality (especially related to HIV/AIDS) food shortages and hunger, high dependency ratios. In addition to these factors, region specific causes were stipulated that tend to reflect livelihood and agro-ecological differentiation as well as degree of urbanisation. As an example, the Ohangwena PPA tends to cite more factors that are likely to affect crop cultivation, whereas the Omaheke PPA lists more livestock related factors. Given the relative dependence on crop farming and livestock rearing in the two regions respectively, this is wholly understandable. Despite such inter-regional variation, agriculture, and associated environmental/climatic phenomena that impinge upon it, were consistently and frequently mentioned as factors underlying poverty.

Turning attention to upward and downward social mobility, falling into poverty was commonly associated with illness and death of a breadwinner, natural disasters, loss of employment, mismanagement and loss of resources. Although it was observed that very few managed to escape poverty, human capital in the form of education and skills, access to financial capital (particularly loans), and livelihood diversification were shared responses. In Caprivi, accessing an old age pension was also seen as critical to improve one's social position, while inheritance and marriage was seen as noteworthy in Omaheke and being able to afford farm equipment and access drought-resistant crop varieties was reported in Ohangwena. In discerning trends in well-being and livelihoods over predefined periods since the time of Independence, there emerges substantial regional and thematic variation. In Omaheke, there was a general view that various dimensions of poverty and living conditions were worse in 2004 relative to pre-Independence Namibia. Caprivi, and to some extent Ohangwena, present a more encouraging front with improvements in certain domains, though in the latter case there remains a belief that

there has been an expansion in the numbers of very poor people (particularly from amongst those who depend on subsistence farming) due to persisting droughts.

In relation to food security, perceptions in Ohangwena and Omaheke were broadly negative. In the former region, communities referred to declining soil quality and insufficient land for crop cultivation due to overpopulation and overexploitation of natural resources, though it was admitted that drought relief helped somewhat during climatic shocks. In Omaheke, the reduction in income due to the casualisation and retrenchment of farm workers, coupled with declining food rations from employers and food price inflation, steadily declining rainfall and poor environmental management were considered salient determinants underlying the declining trend. In contrast, Caprivi seems to exhibit a more positive trend, with good rains in 2004 translating into an equally good harvest, to the extent that households were able to accommodate their own food needs as well as having a surplus available for sale. This reportedly further assisted households by enabling them to afford other important non-food expenditures, such as school fees. As for the benefits accruing from public investment in services (including health care and educational facilities, water supply, electricity, housing and road infrastructure), broadly positive developments were cited in both Ohangwena and Caprivi. While on one hand this is perceived as having notably improved living standards, issues pertaining to the affordability of, and satisfaction with, services such as water and education are raised in several communities. The distinction between the physical availability of services on one hand and uptake and quality on the other are also of increasing concern for central planners and policy makers (Office of the President 2004).

The regional PPAs identified different categories of poverty and their corresponding attributes. While, as will be discussed below, there is substantive heterogeneity amongst the poor both within and between regions, almost all measures of poverty are unified in their emphasis on access to land, livestock and labour endowments. This is not atypical of arid and semi-arid lands in Africa, where such stocks of assets remain important indicators of wealth (Barrett et al 2006; Little et al 2006). The implication of this is that in a setting where climatic shocks (droughts, flooding), health shocks (especially in the

era of HIV/AIDS) and other shocks occur with increasing regularity, it becomes increasingly difficult to discern trends in poverty when examining this phenomenon through the lens of income deprivation using conventional quantitative, money metric approaches.

Although there is some variation in the identification and labelling of the different social categories of poverty in the three regions, there are a set of five broad categories that appear to be roughly equivalent across the regions. These are *the extremely/very poor*, *the poor*, *the moderately poor*, *the better off*, and *the rich*. The ‘extremely or very poor’ lack employment and livestock. They have access to small fields, which they cultivate by hand due to an absence of equipment. In order to ensure their survival, they depend on begging, the harvesting of wild foods, and in some instances piecework for other households in exchange for food or a nominal fee. They also experience almost perennial food shortages, low educational attainment and poor health. In urban areas, this sub-group may also be typified by a lack of formal shelter and access to basic municipal services.

The ‘(slightly less) poor’ are equally deprived in terms of livestock ownership and formal employment. They possess no agricultural equipment but they are physically capable of working for others in exchange for oxen for ploughing. They are able to rely to some extent on social networks in times of need. Their cash income is insufficient to adequately cover school fees or healthcare. ‘Moderately poor’ households tend to have a few livestock, a reasonable harvest due to timely ploughing, someone with a low paying but regular source of employment, and access to government pensions. In communal farming areas, they are able to live off their own produce and labour. They are thus more food secure and are in a better position to cover health and schooling expenses. The ‘better off’ have land, a sizable livestock herd, farm implements, nets and canoes to fish (in the case of Caprivi) and they hire farm labour and tractors. They survive through a combination of crop cultivation, livestock rearing and some formal employment. Their families tend to be more educated and healthier. The ‘rich’ are differentiated by their ownership of a number of businesses, have full-time employment or are in the public

service, have large numbers of livestock and larger fields. They also have good housing, bank savings, own one or more vehicles, and are able to lend money.

In response to shocks, particularly those that are climatic in nature, households tend to rely on a suite of coping strategies such as: borrowing via social networks, even those are being increasingly overstretched; the collecting of natural food resources for own consumption and for sale; drought food aid; bartering unskilled labour for in-kind benefits (food, water) or small fees, and; selling of livestock in extreme cases. Other more region specific responses include temporarily moving livestock to better off areas, and, in urban areas, prostitution and petty crime. The death of livestock herds may also propagate migration to urban areas in order to beg or find unskilled employment. In sum, the qualitative portrayal of poverty contained in the regional profile documents effectively serves to highlight the heterogeneity of the poor in Namibia.

4. Is poverty falling in Namibia?

Through the presentation above it should be clear that the research emanating from the qualitative research, conducted as part of the PPAs and the Regional Poverty Profiles, point to poor communities under enormous stress and to a generally worsening poverty situation, especially when it comes to food insecurity. On the other hand, the results produced by the second round of the NHIES are relatively encouraging. While income poverty and inequality remains high, especially in certain geographical regions and among certain population groups, there are significant improvements for almost every cross-tabulated variable compared to the previous survey. Moreover, these apparent contradictions do not only emerge when comparing results generated by qualitative and quantitative research methods. In fact, since the release of the NHIES report and the publicising of the downward trend in income poverty, critics have pointed to contradictions with the (equally quantitative) 2004 Labour Force Survey (LFS), which was also released in 2006. The results of this survey pointed to a slight worsening in unemployment and a negative job growth between 2000 and 2004 (MOLSW 2006).

When formal sector unemployment increases so must poverty according to this reasoning. So the great puzzle for policy makers and development partners in Namibia today, as they convene to create the next medium term development strategy for the country, is what is happening to poverty? Is it falling or increasing, and why?

4.1 *How to deal with contradictions in poverty analysis*

It is by no means uncommon for data on poverty and wellbeing, particularly those generated through qualitative and quantitative methods, to point in opposite directions. Some examples will illustrate. Firstly, in terms of rural poverty in India between the early 1960s and early 1980s, Jodha (1988) found that those for whom income poverty had worsened according to conventional money-metric poverty measures derived from sample surveys emerged as substantively better off in economic welfare terms when employing intensive qualitative approaches. The conclusion was that the conventional approach to discerning trends between two points in time may not capture gradual changes in economic status, but only the transitory component of income. This widely influential analysis advocated for the coupling of economic and anthropological approaches. It also generated critical discussion around the measurement of poverty (Moore et al 1998; Jodha 1999). One interesting feature of the debate that is pertinent for Namibia was the fact that money-metric measures do not capture the contribution of ‘the social wage’ or the benefits derived from public investment on basic services (water and sanitation, education, health, etc.). Another was the argument about how the occurrence a climatic shock, such as drought in a rain-fed agricultural context, shortly before or during the survey fieldwork period may affect conclusions about changes in material deprivation.

Secondly, the findings of the Uganda Participatory Poverty Assessment Process (UPPAP), conducted in 1999, initially appeared to contradict the principal message offered by household surveys of a reduction in the incidence of poverty during the 1990s. However, the study by McGee (2004) demonstrates that once the conceptual and methodological differences between the two approaches are appropriately taken into account, the evidence derived from them is ultimately compatible rather than

oppositional. Therefore, it is suggested that instead of favouring one approach over another, Q-Squared approaches should be applied to examine why findings differ, which offer new and deeper insights into the understanding of poverty and policy impacts (McGee 2004). Finally, Kozel and Parker (2003) discuss how official quantitative estimates of poverty in India point to steady reductions in poverty and inequality in Uttar Pradesh state from the early 1980s to mid 1990s, followed by a rapid reduction in poverty in the latter half of the 1990s. However, as with the case of the Namibian data, there has been intense debate about whether such trends are credible given methodological changes in the survey. The argument has been that changes introduced to the reference periods for measuring consumption in the 55th Round of the National Sample Survey (NSS) effectively render inter-temporal poverty comparisons incomparable. Despite methodological refinements, the debate continues, though the broad conclusion of an improvement in the poverty picture seems to be increasingly accepted.

In an attempt to reconcile the data sources in Namibia, we discuss first a series of methodological issues around the NHIES data and the PPAs. By so doing, we aim to validate the quantitative trends and highlight the effect of methodological differences and changes that occur by design or by default.

4.2 A complementary analysis of income poverty trends

The two key methodological concerns regarding the income poverty analysis based on the NHIES relate to choice of income poverty measure and changes in the survey instrument. Firstly, a major drawback of setting a poverty line using the food-ratio method, as is practiced in Namibia, is that the relationship between the food share and consumption will generally differ across households for reasons unrelated to poverty, rather reflecting differences in the relative prices, tastes and availability. Also, the income elasticity of demand for food can be close to unity for the poorest households where the need for food is so great that as per capita income rises the proportion spent on food remains the same (Lipton 1988; Ravallion 1992). The Central Bureau of Statistics generally refers to the method as “crude” (CBS 1996a; CBS 2006a) and a national consultative process is currently ongoing, which seeks to adopt an absolute measure of

poverty based on the cost of covering a series of basic food and non-food needs (Van Rooy et al 2006; Levine 2006b). Nevertheless, Ravallion (1992) notes that food share data can sometimes provide a useful supplementary test, particularly if one is worried about the quality of, for instance, the survey data or the price deflator. As an example, Ravallion and Huppi (1991) find that in applying the food share data, the same qualitative conclusions are drawn in comparing poverty over time and sectors in Indonesia as did consumption and income data. This is taken as adding strength to the conclusion of the paper that poverty in Indonesia had declined.

One of the major concerns related to data quality in Namibia has indeed been the unavailability of regional price data as price surveys were not conducted as part of the rounds of the NHIES nor was consumer price data collected outside of the capital prior to 2003. Another concern that the food-share ratio does away with effectively is the need for adjusting for household size and composition, a subject on which the empirical literature is quite ambiguous, and with which the Central Bureau of Statistics expresses great unease. Under these circumstances, the food share ratio has advantages. On the other hand, the choice of poverty measure exacerbates the challenge emanating from the deliberate efforts in the most recent survey round to improving the collection of non-food expenditure. In the case that non-food expenditure is thus under-reported in the earlier survey, a measure that defines poverty as a proportion of food expenditure to total expenditure (food and non-food) will thus invariably exaggerate the fall in poverty over time.

In an endeavour to isolate the effects of methodological changes from real developments, we therefore conduct an analysis on food expenditure and non-food expenditure separately. For the purposes of this analysis, we use the limited version of the NHIES data set for 2003/2004 that has been ‘anonymised’ and released by the Central Bureau of Statistics. In the analysis, we adjust for composition and size of households by applying

the standard adult equivalence scale used by the statistics office (CBS 1996a; CBS 2006a) and allowing for small economies of scale.⁶

The results suggest that while mean monthly *total* expenditures have increased by a factor of 3.5 over the period, mean monthly *food* expenditure has risen more slowly by a factor of 2.7 (Table 2). Moreover, growth in food expenditure is lower than for total expenditure in all regions although there are significant differences between the increases in food expenditure between the regions. Two of the regions included in the piloted PPAs, Caprivi and Omaheke, respectively, have the highest and (nearly) the lowest growth in food expenditure at factors of 4.1 in the former and only 2.5 in the latter. Next, we break the growth in food and non-food expenditures down by expenditure deciles and calculate the growth ratios between the two surveys focusing specifically on the three PPA pilot regions and the total for Namibia (Table 3). These results show that for both categories of expenditure, growth has been highest among the lowest deciles, which supports the earlier finding of the NHIES of higher relative income growth among the poorest households. Total monthly expenditure among the poorest 10 percent of households has increased by a factor of 4.5 between the two surveys and by a factor of 3.7 for the richest 10 percent. Food expenditure has growth by a factor of 4.4 for the poorest 10 percent of households compared to a factor of 2.5 for the richest 10 percent. Considering that the annual rate of food price inflation has averaged around 8 percent between the surveys, the real value of food expenditure by the highest decile has remained constant, but nearly doubled for the lowest decile.

Between 1993/1994 and 2003/2004, there has been little change in the main income sources of Namibian households in aggregate, with the only noteworthy exception being a modest decline in subsistence farming (Table 4). This decline appears to be driven by a significant reduction among the poorest quintile, although households in this quintile remain dependent primarily on subsistence farming, followed by salary/wages and pensions. Access to a salaried income has increased marginally and the share of the

⁶ More specifically we assume adult equivalence of 0-5years: 0.5; 6-15 years: 0.75; over 16 years: 1.0 for both men and women, and an economies of scale parameter of 0.9.

poorest households depending on a pensionable income has remained unchanged. Most of the up take has unfortunately fallen into the 'other' category. This would include sources such as cash and in-kind remittances, but may also mask the emergence of more sensitive and precarious livelihoods activities, such as prostitution and petty crime. This drop in the share of the poorest households that derive their income from subsistence farming is much less pronounced in other quintiles. Possibilities include an attempt to diversify incomes or the consequence of asset loss in response to persistent climatic shocks, or a combination of the two. Within the poorest quintile, there is a fairly sizable discrepancy in livelihoods between rural and urban residents, as well as between the three regions of interest. At the other end of the expenditure distribution, salaried incomes predominate for the fourth and wealthiest quintiles.

Improvement in the incomes of the poorest, and the resulting reduction in inequality, appears to be largely attributable to an increased uptake of pensions for the elderly, veterans and the disabled, and other social grants such as those for orphans and vulnerable children, and the positive effects of remitted incomes such as those from civil servants in urban centres to rural communities. The ratio of average annual income between 1993/1994 and 2003/2004 in households where the main source of income is cash remittances and grants for instance is 3.3 (i.e. income is 3.3 times higher) compared to a ratio of 2.5 in households where the main source of income is from salaries and wages. The latter households still have much higher incomes in absolute terms and lower levels of poverty, but the growth in these incomes in these households has not been as fast.

To sum up, this complementary analysis tends to validate the earlier conclusions that the incomes of the poorest have increased disproportionately leading to falling levels of income poverty and inequality. But there is need to caution against regarding the results from the two surveys as two discreet points in time that can be connected by a simple straight and downward-sloping line to reflect a long-term trend. This would ignore the myriad of changes, shocks and volatilities, cyclical and structural in nature that occur in between, as well as before and after survey periods, and which invariably will affect even

the consumption data of the survey. While statistics offices in general are advised not to conduct any major surveys or censuses in abnormal years, is there really such a thing as a normal representative year in vulnerable and exposed communities? Moreover, although poverty is often discussed in terms of static levels of living, variability of income is as serious for the poor as a low level of income (Devereux et al 1996). In fact, the Central Bureau of Statistics in Namibia deliberately avoided fielding the NHIES surveys in 2002 as it was a drought year and, as such, comparability was sought with a similar survey carried out two years after the previous major drought in 1992. Nevertheless, even if these surveys are carried out in recovery years, food production still reaches very different levels for the main staple, *mahangu* or millet (Figure 1). In order for more definitive statements to be made about the longer term trend in income poverty more data points are needed. Therefore, data collection needs to be more frequent than once a decade. This could be achieved with less detailed instruments in between the major NHIES rounds, such as those suggested by Lanjouw and Lanjouw (1997).

4.3 Labour, land and livestock

What the PPA pilot exercises suggest is that the stock of productive assets that households and individuals have managed to accumulate is fundamental to determining their poverty status and social mobility, especially in the face of adverse shocks. The limited set of variables in the official release version of the NHIES do constrain the extent to which the PPA information can be used to confirm, enrich or refute the quantitative poverty analysis. However, some preliminary quantitative observations can be made that draw on the PPA findings and go beyond household income and consumption to examine the role of financial, physical, natural, social and human assets in understanding poverty. The particular strengths of such an asset based approach versus an income or consumption based approach are encapsulated by Barrett et al (2006:169) as follows: “...*flow measures tend to be more subject to considerable measurement error than stock variables, even in well-run surveys, because they can only rarely be directly observed and verified. Moreover, productive assets are durable inputs used to generate income...Understanding the dynamics of assets is thus fundamental to understanding persistent poverty and longer-term socio-economic dynamics*”.

The data suggest that a sizable shift in respect of the ownership and access to fields for cultivating crops has occurred in Namibia in the period between the 1993/1994 and 2003/2004 household surveys (Table 5). In the earlier round of interviewing, approximately half of the respondent households indicated that they owned land for crop farming purposes (51%), while a further 13 percent claimed they did not own but had access to such land. A decade later, during the 2003/2004 survey round, ownership had dropped dramatically to 25 percent of households. Equally, those who have access but do not own fields for cultivation had increased to 29 percent, while those without access altogether rose from 36 to 45 percent over the period. This trend is obviously in stark contradiction to the objectives of the national land reform programme, which seeks to expand ownership and access to farm land. Disaggregating the ownership of this natural asset by expenditure quintiles shows that the effect is evident across the distribution.. Obviously, in terms of percentage points, the change is most acute for the poorest quintiles where ownership has dropped from more than two-thirds to three-quarters of households down to approximately a third. As at the national level, most have managed to retain access to crop land, though the share without access does exhibit a worrying upward trend. The difficulty is trying to ascribe these patterns to any particular factor or set of determinants. The PPAs refer to overpopulation, overgrazing and declining soil fertility as salient developments over the decade.

By comparison, ownership to grazing land has remained more stable at the national level over the survey round interval. In 1993/1994, only 8 percent of households owned grazing land and by 2003/2004 this had decreased slightly to 5 percent. Those households tend to have access to grazing land without owning it. In the earlier round, 56 percent cited access to grazing land, while this figure stood at 52 percent in the latest round. The share without any form of access had increased from approximately a third to just over two-fifths of households over the period. Again there is some evidence to support subgroup differences, with the poorest being worse affected than those who are materially better off. Approximately 15 percent of households in the poorest quintile lost ownership

and access to grazing land. The PPAs are again an important reference for understanding this dynamic.

In Omaheke, a region where livestock rearing for subsistence and commercial purposes is more common than crop farming, intensive use of natural resources such as grazing land was mentioned as a cause of poverty. Poor grazing conditions was further associated with arid conditions, termite damage, and a proliferation of unpalatable grass species.⁷ Also, the Labour Force Surveys of 1997 and 2004 point to a decline in employment in communal and commercial agriculture from an estimated 147,000 to 103,000 labourers (MOLSW 2001, 2006). The Omaheke PPA notes that farm workers may, at the discretion of the owner, enjoy indirect use of farm resources such as allowing some cattle to graze. In such contexts, farm worker retrenchments may also indirectly have affected access to this critical asset.

In Ohangwena, insufficient grazing land was commonly referred to, which may again be associated with demographic change and environmental degradation. More specifically, grazing areas are said to have disappeared due to a confluence of increased settlement, land clearing and cropping, while soil fertility has diminished in the absence of animal manure to provide much needed nutrients (GRN, 2004a: 136). With population growth, former pasture land is being used for cultivation purposes and increasingly small plots are being fenced off. Trees and shrubs have been extensively exploited for building and fencing purposes, while some grass species previously reserved for grazing purposes are currently used as roofing materials. This scarcity of pastures in Ohangwena, especially in the more densely populated western parts of the region, has resulted in many farmers allowing their cattle to use bush surround settlements as a substitute, sending cattle away to cattle posts outside the area, and even resorted to grazing cattle across the border in Angola.

⁷ “The grass has gone visiting” was a refrain used by one community to describe this situation.

The situation does not improve when one looks at physical assets in the form of livestock holdings. The five main types of livestock that the data permits us to examine in both survey rounds are cattle, goats, sheep, pigs and poultry. Nationally, there has been a small reduction in the share of households owning cattle, goats and sheep, though a more noteworthy downturn in chicken ownership. In all instances, these losses have been more acutely felt at the poorest end of the expenditure distribution, with the largest percentage point declines amongst the poorest quintile being reported for chickens (17%), cattle (13%) and goats (11%). Unfortunately, the available datasets does not permit detailed analysis of changes in different types of livestock for those who have managed to maintain ownership or access.

The significance of these dynamics with regard to land and livestock assets in the country, and for the poor especially, lies in the fact that they provide an illustration of apparent depletion of certain crucial assets (through loss or sales) amongst the poor in contrast to the reduction in income poverty according to conventional poverty measures. The qualitative material was significant in that it provided evidence for the relationship between low levels of assets and poverty but also some suggestions as to the underlying reasons why these assets may be eroding.

4.4 The 'Social Wage': access to public goods and services

One important dimension that should be emphasised in relation to Namibia's poverty debate is the contributory role of the 'social wage' to poverty reduction. The social wage is essentially 'a measure of how much better off individuals are with the provision of publicly funded welfare services than they would be without these 'in kind' benefits' (Sefton, 2002:1). A sizeable share of government spending is devoted to social grants, such as the old age pension, in addition to improved public services for all, including health care, education, electricity, water, sanitation and housing. The value of such services can be conceived as an income in-kind, or a social wage, representing a substantial supplement to the cash income of individuals or households, especially for those towards the lower end of the income distribution. Although most conventional measures of poverty and inequality ignore the value of benefits in kind, their inclusion is

potentially very significant in monitoring the impact of government policies on the poorest households. The social wage is therefore of great policy relevance given Government's commitment to reducing poverty and inequality.

The NHIES rounds included questions to assess the status of basic services, such as electricity, drinking water and sanitation. Given that services such as these were historically provided along ethnic lines and biased towards urban centres and commercial farms, the surveys offer the opportunity to examine the effect of post-Independence delivery efforts. This section will not address changes in access to educational and health facilities, as the questions included in the two rounds varied in their measure of proximity.⁸ With regard to electricity, progress has been made over the decade with 36 percent of households using electricity at least for basic lighting purposes in 2003/2004 compared with 27 percent in 1993/1994. While improvements were reported in each of the expenditure quintiles, levels of access in the wealthiest quintile are eleven times higher than in the poorest (85% versus 8% respectively).

Making direct comparisons in relation to households' main source of drinking water is complicated by the use of different coded options in the two survey instruments. However, some categories are comparable to the extent to which we gain a meaningful impression of change over the interval (Table 6). The results point again to lingering disparities, with the percentage of households in the wealthiest quintile with a piped water in their dwelling in 2003/2004 standing at 25 times that for the poorest quintile (80% versus 3%). However, access to clean and safe water has improved, especially in rural areas where new boreholes have been provided, old boreholes have been rehabilitated and pipelines developed (GRN 2004b). Corresponding to this is a decreasing reliance on more insecure sources of drinking water, such as flowing water (rivers, canals or lakes), wells, and dams, pools and stagnant water.

⁸ The earlier survey used walking time while the recent survey relied on physical distance in kilometres.

Poor access to sanitation remains a considerable challenge in Namibia. In 1993/1994, just 35 percent of households in Namibia had a flush toilet and 8 percent a pit latrine, while 56 percent were not possessing basic sanitation and using the bush. Ten years later, the share of households with a flush toilet had only increased to 37 percent, access to latrines had remained static, while those using the bush stood at 53 percent. The gradient of access to sanitation varies significantly by expenditure quintile. An estimated 83 percent of households in the poorest quintile had no form of basic sanitation in 2003/2004, whereas 87 percent of households in the wealthiest quintile had flush toilets. In 2003/2004, Oshanaana and Caprivi were the regions with the lowest levels of access, with 90 percent and 85 percent of households respectively having no basic sanitation. The disparities between urban and rural areas remain equally stark, with 79 percent of rural households having no toilet compared to 16 percent of urban households.

Therefore, despite some improvements in delivery and access over the period, the poor continue to have meagre endowments of infrastructure and basic services. This form of living environment deprivation constitutes another key aspect of what it means to be poor in Namibia, and poses a real threat to the health and welfare of families. It also relates to the remoteness that many poor communities mentioned during the PPAs as a cause of poverty. The absence of an impressive increase in social services amongst the poorest is therefore likely to condition views of changing living standards and poverty as reflected by respondents in the PPAs and explains at least some of what the conventional poverty measures are missing in the quantitative assessment.

5. Making policy evidence-based

In this section, we discuss a number of challenges that are likely to affect the process through which poverty research informs the formulation of national development policies. We are particularly concerned with the use of data and research as a basis for designing, implementing and monitoring strategies, policies and interventions intended to

reduce poverty.⁹ Some of the challenges that we encounter are directly related to the application of Q-Squared research approaches, while others are more general to the national planning process. We argue that in order for national policies in the area of poverty reduction to become more results-oriented, focus must be on strengthening the information base as represented by the national statistical system and improving the capacities of and dialogue between data users and producers in the system.

5.1 Adding value or creating confusion.

Combining data sources and mixing methods can help bring out the real complexities and assist in a greater understating of the multiple dimensions of the poverty phenomenon, as the analysis above should have shown. Invariably, a flip-side is possible confusion and defiance among a target audience, such as those responsible for policy development and planning, which may not have a high threshold for absorbing complexity and nuance. For instance, when exploring the differences between levels of income poverty compared to other indicators of human welfare, it helps if there is a basic understanding for the range of definitions that are associated with poverty. Moreover, explaining why it is perfectly reasonable to expect the results from the NHIES and LFS to differ, and by implication suggesting a less than simple, unidirectional relationship between reported levels of employment and household welfare, one has to look at issues related to the survey instruments. Notably, this includes the difficulties the latter has in measuring informal sector employment and the inclusion of all sources of income equivalents, including own-produce, cash transfers and gifts in the former. Therefore, even if an increase in employment levels are likely to contribute positively to household incomes many other factors determine household consumption, which is why surveys of consumption are preferred over surveys of income for poverty analysis.

⁹ Kiregyera (2005) highlights six stages of a poverty reduction strategy, which depend on data and research inputs: 1) Establishing a poverty baseline. 2) Setting poverty reduction targets. 3) Defining pro-poor development strategy. 4) Monitoring progress. 5) Feeding back results of monitoring into policy-making. 6) Evaluating the impact of policy on poverty

An even greater confusion can arise if the levels of unemployment between the two types of surveys are compared, as the NHIES includes fetching fire wood and water for home consumption in its definition of economic activities, unlike the LFS, which also uses a different age cut-off point. As a result, levels of recorded unemployment are much lower—especially in the poorer and rural households—in NHIES. More generally, comparison between the surveys are complicated by the fact that while the LFS is conducted over a one month period, the NHIES covers a full 12 month cycle to even out effects attributable to seasonality. At any given general level of statistical literacy, the conditions necessary to build appreciation of such definitional issues can be hard to come by.

5.2 Results may be inconvenient and a challenge to political powers and pre-conceived ideas about what Namibia is becoming.

Such “inconvenience” can take several forms. For instance, a consultative forum held in preparation of the Poverty Monitoring Strategy (GRN 2001) and the national progress report on the Millennium Development Goals (GRN 2004) recommended that the country change the methodology for calculating poverty levels from the food-share method to one that relies on a cost of food and non-food needs. However, the subsequent analysis that followed through on the recommendations led to an upward adjustment in the poverty incidence of nearly 20 percentage points (Van Rooy et al 2006), strictly because of the change in methodology. While the methodology itself was never seriously questioned, the results were deemed politically unacceptable, and ultimately were never officially released, especially as they were being prepared in an election year (Levine 2006b). It is particularly troubling if the statistical offices are unable to withstand this type of external pressure and are pushed to adjust their methodologies accordingly.

The results from the combined approach presented in this paper may equally be considered “inconvenient” for at least two very different reasons related to political ideology. Firstly, our confirmation of the fall in income poverty is likely to contravene

strong preconceived notions that society has been in a general decline after, and a frustrated minority will even argue because of, the introduction of majority-rule in 1990. In this connection it is interesting to note how some of those comparing NHIES and the LFS tend to discredit the (more positive) results of the former on grounds of methodological inadequacy while accepting the (more negative) results of the latter without an equal concern about methodology.¹⁰ Secondly, those more favourable towards government policies may disapprove of the important qualifier offered by our analysis which states that while income poverty may be improving, once other considerations related to welfare are taken into account, the net result is less positive.

5.3 Limited tradition for absorbing debates and research on poverty; in development planning the focus is heavily on process issues.

This issue refers to a general problem in development planning bureaucracies that the authors and others have observed, whereby the overarching goal of the strategy formulation process becomes the formulation of the strategy itself in order to satisfy certain bureaucratic conditions rather than the identification of substantive elements (which would endeavour to satisfy the intended beneficiaries of government policy). In this environment, most of the focus and energy of the planning cadre is devoted to the establishment of “technical working groups”, conducting workshops and engaging in lengthy consultations, which in themselves are worthy efforts but too often take place outside a context that would enable policy change and the transfer of power. An overemphasis on producing documents rather than improving underlying policy processes is by no means unique to Namibia but a challenge facing planning authorities in many developing countries (World Bank 2005). The situation among producers of statistics is somewhat similar. We get the impression that the production of surveys is disproportionately focused on the organisation of the fieldwork, with very little emphasis

¹⁰ Such a concern could focus on questioning at least two aspects of the LFS. Notably, the most recent survey from 2004 reports the category of employed in “real estate, renting and business activities” is reduced to one quarter of the level reported in the 2000 round of the survey. Moreover, the labour force participation rate for those over the age of 65 has dropped by 80 percent over the period. Plausible explanations that can account for these changes are yet to be presented.

on reviews and discussions of lessons, methodologies and survey findings. This situation has not been helped by donor assistance, which has strongly favoured the production side. It is somewhat symptomatic that rather than engage in a process of scrutiny and interrogation of the LFS results to uncover the causes of its inconsistencies, authorities would rather field a whole new survey.

5.4 Quantitative and qualitative schools are in opposition and combined approaches in the past have been externally driven.

Especially in the preparation of the PPAs, fieldworkers found that engaging the Central Bureau of Statistics was made difficult because of the strong quantitative traditions prevailing there. Discussions that the authors have had with national statisticians confirm a continued scepticism concerning the real value that qualitative research can bring, especially due to its lack of statistical and mathematical basis. There is also a widespread perception that qualitative studies are too easily manipulated to conform with whatever results the researcher is looking for. This can also help explain why early intentions of “integrating” the Regional Poverty Profiles and the NHIES for instance by combining sampled enumeration areas with PPA sites, did not materialise. As previously noted, a number of studies have been conducted in Namibia combining qualitative and quantitative approaches, which could have served to demonstrate the value of Q-Squared approaches and strengthen national capacities in the area. However, these studies have predominantly been led by external researchers, often foreign nationals loosely attached to local consultancies, and are largely unknown to the staff of the Central Bureau of Statistics. This absence of collaboration is not conducive for capacity building or for promoting the application of mixed methods. In fact, there are suggestions that, once in the field, some of the more quantitatively-oriented statisticians began to appreciate the PPA process as a way of explaining and interpreting poverty trends.

In 2005 the Government produced a first national Poverty Monitoring Strategy with an overarching purpose: “to ensure that information on poverty is collected, analysed and disseminated on a regular basis to inform policy decisions and programme

implementation” (GRN 2005: 6). The strategy recognizes the importance of combining qualitative and quantitative information to broaden the analysis of and reporting on poverty and it proposes to draw on and utilize information from a wide range of sources including: “national surveys, management information systems, administrative records and the Participatory Poverty Assessments” (GRN 2005: 6). Nonetheless a recent review of the national statistical system in Namibia found that “currently, there is little analysis that combines data from different surveys and sources. In particular, there is little integration of qualitative and quantitative data in analysis e.g. of the poverty phenomenon and its various manifestations” (Kiregyera 2004: 85). Moreover, while the importance of combining quantitative and qualitative data is recognized in both the draft National Statistical Plan (CBS, undated) and the Poverty Monitoring Strategy, neither looks to past experiences nor do they include specific proposals for actually promoting combined approaches.

5.5 Data collection, analysis and planning cycles are not synchronised.

There are several examples of how delays and bad timing has rendered statistical outputs unavailable for important policy initiatives. For instance, the first NHIES, with its critical data on poverty and inequality, was released just *after* the first National Development Plan was prepared—with poverty reduction as one of its main objectives—instead of in time to underpin and guide the policies and initiatives proposed in the Plan. The mid-term review of NDP2 made use mostly of data from the Census, which is from 2001—the year NDP2 actually began. Presently, a comprehensive analysis of poverty levels and trends from the latest round of the NHIES is still pending further data cleaning and consensus on technical issues, such as the appropriate poverty measure and use of equivalence scales. Only if the process of finalizing the next national development plan is further delayed (the previous plan expired already in 2006) will a comprehensive analysis on income poverty make it into the document, but this will only be as part of an introductory overview and not as a basis for the policies and strategies that have been worked out independently of a quantitative analysis.

Delays in surveys and ‘bad timing’ are partly a reflection of capacity challenges in the national statistics system, which are severe as discussed by Kiregyera (2005). However, the level of complexity of the surveys and research processes exacerbate capacity constraints. Delays in cleaning and releasing the data from the NHIES are linked to capacity problems from managers, field workers and statisticians, but invariably the doubling of its sample size and its reliance on a very comprehensive diary based questionnaire invariably plays a role. Moreover, we get the inescapable feeling that ‘fatigue’ and frustration towards the tail end of a survey process creates a demand for a ‘clean slate’ with a new survey, with plenty of unfinished business and abandoned processes. For instance, three years after the finalization of the field work for the 2003/04 NHIES, only the consumption data has been cleaned (partially), but the data on income has not (like in the NHIES a decade ago), nor has the extensive data collected on weight and height of all household members.

5.6 Institutionalised research capacities are deteriorating.

The impact of the problem of timing in the data gathering and policy making cycles, and the general capacity constraints at the Central Bureau of Statistics, would be lessened if there were substantive capacities outside government to conduct policy relevant analysis. While such capacities exist, unfortunately they have been in decline in recent years. The most notable example is the Namibia Economic Policy Research Unit, a government-funded think tank charged with carrying out independent policy analysis, which has been caught in a destructive spiral of mis-management, under-funding and a brain drain that has crippled its performance and influence. Likewise, the independently run Institute for Public Policy Research has significantly scaled back activities and the Social Sciences Division of the University of Namibia, once so prolific in the area of poverty research, has not recorded any new publications for the past several years. A common challenge facing these institutions seems to be the inability to attract funds that can be committed to a comprehensive research agenda over a longer term period, and the dependence instead on short-term consultancy opportunities to provide cash flow relief.

5.7 Challenges to sharing and access to data and further research.

An unfortunate tradition has been established in Namibia where data sets are not made available to researchers for analysis, and rarely are collaborative efforts undertaken to combine external analytical capacity with the internal knowledge of the Bureau. As a result, official poverty data is seldom analysed and interrogated beyond the simple tabulations presented in printed reports. Often the protection of respondent anonymity is offered as explanation for not releasing datasets, but this should be fairly easily overcome (e.g. through confidentiality agreements, anonymised datasets, licensing of users or “sterile chambers”). Moreover, access to data is further complicated by problems of data storage and documentation. As a result, some older datasets have now become unrecoverable. Overcoming these technical issues and, more generally, improving the dialogue and collaboration between the users and producers of poverty related data should be seen as essential steps towards strengthening the knowledge base, and in turn informing policy.

One possible explanation for the general lack of focus on strengthening poverty research capacities and the overwhelming absence of concern that development policies lack a firm evidence-base can be tracked back to the prioritization of national development objectives and the resultant sub-ordination of social and poverty goals to economic ones. This is reflected in the preeminence of fiscal and monetary policies, which include strict budget and debt ceilings, a pegging of the national currency to the South African Rand and, by association, monetary policy based on the neighbors’ inflation targeting regime. However, this is not a particularly satisfactory explanation, especially in light of the large share of social expenditure on the national budget traditionally devoted to education, health and social transfers for instance. More plausible is the explanation that these expenditures are being allocated and dispersed in an environment where results have been measured by the magnitude of inputs and less so by the achieved impacts. A strengthening of the results-orientation of national policies towards a greater focus on outcomes and impacts will require a significant strengthening of the national statistical system. However, our analysis also points to the need for a shift in policy focus.

In terms of assessing the overall impact of post-Independence policies in Namibia, we have pointed to the potential significant impact of the social safety net and remitted incomes in increasing levels of household incomes and driving income poverty and inequality down (although the magnitude of this impact cannot be measured on the data that is currently available). Public spending priorities thus appear to have improved household incomes of the poorest directly through cash transfers or indirectly through the support mechanisms that allow wages of those in public employ to be shared between households. The social transfer mechanisms are critical for providing immediate relief to the poorest and most vulnerable, redress historical imbalances. Assuming a certain degree of causality between inequality and economic growth (e.g. in terms of lesser risk of social unrest and more healthy and productive labour force), this will positively affect long term sustainability of the transfer schemes. On the other hand, overall employment opportunities appear to have fallen and the share of households where wages form the main source of household income have stagnated. A major policy implication is therefore that without a turnaround in employment opportunities, and given the increased medium-term pressure on the public budget, stemming primarily from uncertainty regarding future flows from SACU, it is going to be increasingly problematic for Namibia to rely on public expenditure as the main contributor to poverty reduction. In the absence of new sources of income, the erosion in household assets that this analysis has demonstrated is underway is likely to continue. For the poorest of the poor, this adversity is further exacerbated by very low levels of coverage of access to basic services such as safe water and sanitation, where improvements over the past decade appear to have accrued only to the top-end of the income distribution.

6. Conclusion

This paper has, in part, contributed to rather than resolved the growing debate on the rather impressive progress in reducing income poverty that is indicated by the official results of the 2003/2004 round of the NHIES. The nature of this public debate has tended thus far to focus on the apparent statistical inconsistencies and contradictions with other

research and surveys, including the PPAs and the latest LFS. However, while methodological change between the two NHIES rounds present a real challenge, analysis presented in this paper indicates that the broad direction of change, in consumption-based income levels and the associated poverty measure, over the decade is robust. However, this represents only part of the picture.

By using the information for the three regions in which pilot PPAs were conducted, this qualitative information was made to provide further insight into the confounding findings emerging from the household surveys and thereby impart some further commentary on the validity of the quantitative poverty analysis. In undertaking this, particular attention was on the locally held definitions and characteristics of poverty and vulnerability, the causes of poverty and drivers of social mobility, in addition to views on the dynamics of poverty. In common with other recent assessments from elsewhere (Kozel and Parker 2003, 2007; McGee 2004), the PPA data assist in making possible a deeper understanding of poverty in Namibia and how it has been changing since the early 1990s. Through this analysis, the poor emerge as a heterogeneous group and, as such, the potential exists for the quantitative sources to overlook some of the factors underlying poverty. The qualitative PPA results were specifically used to direct and sharpen the focus the quantitative analysis, especially in examining whether the apparent improvement in consumption poverty between 1993/1994 and 2003/2004 was manifest in a broader suite of welfare indicators. Attention was drawn to the role of livelihoods, environmental shocks and their impact on key physical asset stocks (land and livestock), as well as infrastructural assets (the social wage). The survey results were able to provide additional clarification of these issues by showing the importance of productive assets to the poor and by offering signs of the challenges they have faced in preserving their assets in the face of having to cope with environmental and other shocks and stresses. Also, despite government efforts at addressing inequalities in access to services, many poor communities still lack even basic services. Therefore, the analysis has demonstrated that poverty involves deprivation in a range of different domains, and that the relative importance of these deprivations can vary widely across both space and time.

We also came across a series of methodological challenges, some of which had to do with inherent differences in approaches that are being used, but also several that had to do with inadequacies in the national statistical system. These include the infrequency of data collection, slow process of data processing, changes in definitions and lack of harmonisation between survey instruments. The process of establishing an integrated household survey programme such as the one proposed in the National Statistics Plan (CBS, undated), which has been in draft form for several years, could be one way for stakeholders in the national statistical system to begin addressing these challenges.

Thinking prospectively towards the continuing analysis of the new qualitative and quantitative data resources, the parallel process of formulating, implementing and monitoring national development plans, and the next round of the household survey, our study does point to a number of suggestions that should be afforded consideration. Firstly, the pilot PPAs have pointed to some of the limitations of the household survey instruments. The qualitative findings thus present decision-makers with an opportunity to refine the questionnaires before the third round of the survey is conducted. Doing so will ensure that the poverty trends are better captured and understood, especially in relation to ongoing public action to address the needs of the poorest. Secondly, the focus of our analysis has focused on a select set of priorities, and has thus not resolved all the puzzles and complexities associated with mapping out changes in poverty in the country. There consequently remains scope for substantial further work on issues such as livelihoods and income dynamics, alcohol abuse and the purchasing of alcoholic beverages, demographic change and, where possible, on morbidity and mortality. Moreover, as the remaining ten Regional Profiles based on PPAs become available, more in-depth analysis can be undertaken to ascertain the principal sources of this change and construct a more complete narrative to the dynamics of poverty in post-Independence Namibia. Finally, recognising that at least some of the PPA sites were placed within the same sampling frame as the representative household surveys, exploring these linkages with combined techniques would better enable us to locate the qualitative observations within a broader context (Kanbur, 2003).

Although the introduction of the PPAs during the NHIES field round was an important development, the risk is that, in the absence of a sequential phasing of the qualitative and quantitative research, the two informational bases will not be fully integrated into a combined approach and treated as two related but mostly discreet inputs into national development policy processes. By means of a modest and preliminary application, this paper thus serves as an illustration of the intrinsic value of crossing the disciplinary divide and adopting a Q-Squared approach. Based on newly available data, the different approaches have yielded salient insights into the varied meanings of being poor. While this approach may not produce easy, one-dimensional solutions to some of the hard questions being posed about the nature of poverty trends, it does facilitate an improved evidence base with which to improve the design and targeting of policy responses. However, we are fully aware of a range of issues that may impede or even prevent this type of poverty research for informing the policy-making process. In order for national policies in the area of poverty reduction to become more results-oriented, focus must be on strengthening the information base as represented by the national statistical system and improve the capacities of and dialogue between data users and producers in the system.

References

- Adams, M & J Howell. 2001. "Redistributive land reform in southern Africa," *Natural Resource Perspectives*, 64.
- Barrett, C., Carter, M.R., and P.D. Little (2006) 'Understanding and Reducing Persistent Poverty in Africa: Introduction to a Special Issue', *Journal of Development Studies*, Vol. 42, No. 2, pp.167–177.
- Becker, H. 2006. "New Things after Independence': Gender and Traditional Authorities in Postcolonial Namibia," *Journal of Southern African Studies*, 32(1): pp 29-48.
- Carvalho, S. and White, H. 1997. "Combining the Quantitative and Qualitative Approaches to Poverty Measurement and Analysis," World Bank Technical Paper 366.
- Central Bureau of Statistics (CBS). 2006a. "2003/2004 Namibia Household Income Expenditure Survey," Windhoek: GRN, National Planning Commission.
- CBS. 2006b, "National Accounts 1995-2005," Windhoek: GRN, National Planning Commission.
- CBS. 2003. "Population and Housing Census 2001," Windhoek: GRN, National Planning Commission.
- CBS. 1999. "Levels of Living Survey" Windhoek: GRN, National Planning Commission.
- CBS. 1996a. "Living conditions in Namibia 1993/1994: Economic and Social Indicators from the Namibian Household Income and Expenditure Survey," Windhoek: GRN, National Planning Commission.
- CBS. 1996b. "The 1993/1994 Namibian Household Income and Expenditure Survey," Windhoek: GRN, National Planning Commission.
- CBS. 1993. "Population and Housing Census 1991," Windhoek: GRN, National Planning Commission.
- CBS. undated. "Namibian Third National Statistical Plan," unpublished.
- Chambers, R. 1994. "The Origins and Practice of Participatory Rural Appraisal," *World Development*, Vol. 22, No. 7, pp 953-969.
- Chiari, G. P. 2004. "Report of the UNDP Mission on Rural Livelihoods and Poverty in Namibia," Windhoek: UNDP.
- Devereux, S. and Naeraa, T. 1996. "Drought and survival in rural Namibia," *Journal of Southern African Studies*, 22(3), pp.421-440.
- Devereux, S., Fuller B., Moorsom, R., and Solomon. C. 1996. "Namibia Poverty Profile," *SSD Discussion Paper No. 21*. Windhoek: University of Namibia.
- Devereux, S., Rimmer, M., LeBeau, D., and W. Pendleton. 1995. "*The 1992–93 Drought in Namibia: An Evaluation of its Socio-Economic Impact on Affected Householders*," Windhoek: Gamsberg Macmillan.
- van Donge, J. K., with Eiseb G. and Mosimane, A. 2005. "Land Reform in Namibia: Issues of Equity and Poverty. Institute for Social Studies and UNDP *Land, Poverty and Public Action Policy Paper No. 8*. December. The Hague.
- Flatters, F. and Stern M. "SACU Revenue Sharing: Issues and Options," August 2006. Accessed from <http://www.sega2.org.za/studies.php> on 4 September 2007.
- Friedman, J. T. 2005. "Making Politics, Making History: Chiefship and the Post-Apartheid State in Namibia," *Journal of Southern African Studies*, 31(1): pp 23-52.
- Government of the Republic of Namibia (GRN). 1995. "First National Development Plan, 1995/6-1999/00 (NDP1)," Windhoek: GRN, National Planning Commission.
- GRN. 1998. "Poverty Reduction Strategy for Namibia," Windhoek: GRN, National Planning Commission
- GRN. 2001. "Second National Development Plan, 2001-2006 (NDP2)," Windhoek: GRN, National Planning Commission.

- GRN. 2002. "National Poverty Reduction Action Programme, 2001-2005," Windhoek: GRN, National Planning Commission.
- GRN. 2004a. "Regional Poverty Profile Based on Village-level Participatory Poverty Assessments in Ohangwena Region, Namibia in October/November 2003," Windhoek: GRN, National Planning Commission.
- GRN. 2004b. "Namibia 2004 Millennium Development Goals," Windhoek: GRN, National Planning Commission.
- GRN. 2005. "Poverty Monitoring Strategy, Windhoek: Poverty Reduction and Equity Sub-division," National Planning Commission.
- GRN. 2006a. "Regional Poverty Profile Based on Village-level Participatory Poverty Assessments in Omaheke Region, Namibia," Windhoek: GRN, National Planning Commission.
- GRN. 2006b. "Regional Poverty Profile Based on Village-level Participatory Poverty Assessments in Caprivi Region, Namibia," Windhoek: GRN, National Planning Commission.
- Hay, R., Pell, J. and Tanner, C. February 1990. Household Food Security in Northern Namibia: Report Prepared for UNICEF. Windhoek. Oxford: International Development Centre, Food Studies Group.
- Howe, G. and McKay, A. "Combining Quantitative and Qualitative Methods in Assessing Chronic Poverty: The Case of Rwanda," *World Development*, 2007, 35(2), pp 197-211.
- Isaacson, B. (Ed.) 1995. "Namibia food security and nutrition assessment report," National Food Security and Nutrition Technical Committee, Windhoek.
- Institute for Public Policy Research (IPPR) database available at www.ippr.org.na
- Jodha, N.S. 1988. "Poverty Debate in India: A Minority View," *Economic and Political Weekly*, November.
- Jodha, N.S. 1999. "Poverty Debate in India: A Minority View Revisited," *Economic and Political Weekly*.
- Kanbur, R. 2003. "Q-Squared? A commentary on qualitative and quantitative poverty appraisal," in R. Kanbur (ed.) *Q-Squared: qualitative and quantitative poverty appraisal* (Delhi: Permanent Black, Delhi).
- Kanbur, R. and Shaffer, P. 2006. "Epistemology, Normative Theory and Poverty Analysis: Implications for Q-Squared in Practice," *World Development*, 35(2): pp 183-196.
- Kiregyera, B. 2004, "Report on the Evaluation of the National Statistical System," unpublished.
- Kolberg, H., 1995. "Namibia: Country Report to the FAO International Technical Conference on Plant Genetic Resources," Windhoek: National Plant Genetics Resource Centre.
- Kozel, V. and B. Parker (2003) A Profile and Diagnostic of Poverty in Uttar Pradesh, *Economic and Political Weekly*, January 25, pp.385-403.
- Labetoulle, L. 2000. "Nutritional Survey of Rural Communities in the North Central Regions of Namibia," Research Report to the French Mission for Co-operation, Windhoek.
- Lanjouw, J. O. and Lanjouw, P. 1997. "Poverty Comparisons with Non-Compatible Data: Theory and Illustrations," Policy Research Working Paper No. 1709, World Bank: Washington, DC.
- Levine, S. 2006a. "Namibia on Track to Meet Global Poverty Goal," *The Namibian*, 31 March.
- Levine, S. 2006b. "Measuring Progress Towards Global Poverty Goals: Lessons and Challenges from Southern Africa," *African Statistical Journal*, Vol 3, November.
- Lipton, M. "The Poor and the Poorest: Some Interim Findings," World Bank Discussion Paper no 25, April 1988, World Bank: Washington, DC.
- Little, P.D., Stone, M.P., Mogues, T., Castro, A.P. and W. Negatu (2006) 'Moving in Place': Drought and Poverty Dynamics in South Wollo, Ethiopia, *Journal of Development Studies*, Vol. 42, No. 2, pp.200-225.

- Lorway, R., "Dispelling 'Hetero-Sexual African AIDS' in Namibia: Same Sex Sexuality in the Township of Katutura," *Culture, Health and Sexuality*, September-October 2006, 8(5), pp 435-449.
- Mallet, M. and du Plessis, P. 2001. "Mahagngu Post-Harvest Systems," Research Report prepared for Ministry of Agriculture, Water and Rural Development and Namibia Agronomic Board, Windhoek.
- McGee, R. 2004. "Constructing Poverty Trends in Uganda: A Multi-Disciplinary Perspective," *Development and Change*, 35(3), pp499-523.
- Ministry of Agriculture, Water and Forestry. 2005. "Agricultural Statistics Bulletin," Directorate of Planning, GRN: Windhoek.
- Ministry of Finance. 2007. "Estimates of Revenue and Expenditure for the Financial Years 1 April 2007 – 31 March 2010." Windhoek.
- Ministry of Health and Social Services (MOHSS). 2001. "First Report of the Working Group on HIV/AIDS Impact Projections for Namibia." GRN: Windhoek.
- MOHSS. 1993. "Demographic and Health Survey 1992," GRN: Windhoek.
- Ministry of Labour and Social Welfare. 2006. "Labour Force Survey 2004," GRN: Windhoek.
- Moore, M., Choudhary, M. and N. Singh. 1998. "How Can We Know What They Want? Understanding Local Perceptions of Poverty and Ill-being in Asia". IDS Working Paper 80, Brighton: Institute of Development Studies, University of Sussex.
- Office of the President. 2004. "Namibia Vision 2030: Policy Framework for Long Term Development," Government of the Republic of Namibia, Windhoek.
- Ravallion, M. 1992. "Poverty Comparisons: A Guide to Concepts and Methods," LSMS Working Paper No. 88, World Bank: Washington, DC.
- Ravallion, M. and Huppi, M. 1991. "Measuring Changes in Poverty: A Methodological Case Study of Indonesia During an Adjustment Period," *World Bank Economic Review* Vol. 5, pp: 57-84.
- Reed, M. S. and Dougill, A. J. 2002. "Participatory selection process for indicators of rangeland condition in the Kalahari," *The Geographical Journal*, 168(3): pp 224-234.
- Samaria, L., and Strand, C. 2006. "Diary from the Land of the Brave," Africa Groups of Sweden, Windhoek.
- Sefton, T. 2002. "Recent Changes in the Distribution of the Social Wage," CASE Discussion Paper 62, Centre for Analysis of Social Exclusion, London School of Economics.
- Sweet, J. 1998. "Livestock: Coping with Drought. Namibia - a case study," prepared for the Grassland Group of the Crop and Grassland Service (AGPC) of FAO for the FAO/AGAP electronic conference on "Livestock - Coping with Drought". December.
- Subbarao, K. 1996. "Namibia's Social Safety Net: Issues and Options for Reform," Poverty Reduction and Economic Management Network, World Bank, Washington.
- Tvedten, I., and Pomuti, A. 1994. 'The Oshakati human settlement improvement project: A socio-economic baseline study.' *SSD Research Report No. 9*. Windhoek: University of Namibia.
- Tvedten, I. and Nangulah, S. 1999. "Social Relations of Poverty: A Case-Study from Owambo, Namibia," Bergen: Christian Michelsen Institute.
- United Nations. 2004. "Common Country Assessment for Namibia," Windhoek.
- UNDP. 1996. "Namibia Human Development Report," Windhoek.
- UNDP. 2006, 'Human Development Report: Beyond Scarcity: Power, Poverty and the Global Water Crisis,' New York.
- Uno, D. 2005. "Farmer's Selection of Local and Improved Pearl Millet Varieties in Ovamboland, Northern Namibia," *African Study Monographs*, Suppl.30: pp 107-117.

- Van Rooy, G., Roberts, B., Schier, C., Swartz, J., and Levine, S. 2006 "Poverty and Inequality in Namibia", *SSD Discussion Paper No 1*. Windhoek: University of Namibia.
- Van Rooy, G., Naruseb, G., Maasdorp, M., Eele, G., Hoddinot, J., and Stone, S. 1994. "Household Subsistence Levels: Three Selected Communities in Namibia," *SSD Research Report No. 9*. Windhoek: University of Namibia.
- De Waal, A. and Whiteside, A. "'New Variant Famine': AIDS and Food Crisis in Southern Africa," *The Lancet* 2003; 362: pp 1234-37.
- Werner, W. 2001. "Land Reform and Poverty Alleviation: Experiences from Namibia," NEPRU Working Paper no. 78, Windhoek: Namibia Economic Policy Research Unit.
- Werner, W. 1993. "A Brief History of Land Dispossession in Namibia," *Journal of Southern African Studies*, 19(1): pp. 135-146.
- World Bank. 2006. "World Development Indicators 2006," CD-ROM. Washington, D.C.
- World Bank. 2005. "The Poverty Reduction Strategy Initiative: Findings From 10 Case Studies of World Bank and IMF Support." Washington D.C.
- World Bank. 1992. "Namibia: Poverty Alleviation with Sustainable Growth," Washington, D.C.
- Yaron, G., Janssen, G. and Maamberua, U. 1992. "Rural Development in the Okavango Region: an Assessment of Needs, Opportunities and Constraints." NISER: Windhoek.

Table 2: Changes in mean expenditure

Region	Monthly expenditure		Monthly food expenditure		Ratio of 2003/2004 to 1993/1994 expenditure	Ratio of 2003/2004 to 1993/1993 food expenditure
	1993/1994	2003/2004	1993/1994	2003/2004		
	Namibian \$					
Caprivi	147	688	72	290	4.7	4.1
Erongo	458	1855	132	342	4.0	2.6
Hardap	421	1488	115	297	3.5	2.6
Karas	515	1474	140	330	2.9	2.4
Kavango	172	529	99	211	3.1	2.1
Khomas	1054	2842	167	345	2.7	2.1
Kunene	219	875	87	316	4.0	3.6
Ohangwena	113	516	57	201	4.6	3.5
Omaheke	461	1319	142	355	2.9	2.5
Omusati	142	632	71	267	4.5	3.8
Oshana	196	1139	84	310	5.8	3.7
Oshikoto	195	661	85	233	3.4	2.7
Otjozondjupa	395	1153	124	277	2.9	2.2
Namibia	370	1284	106	286	3.5	2.7

Notes: The 1993 values have not been adjusted to 2003 prices, as the CPI series was based exclusively on Windhoek price baskets. Figures in bold indicate that the mean regional expenditure value falls below the national average, while the ratio exceeds the national average

Source: Authors' calculations based on NHIES datasets

Table 3: Ratios of 2003/2004 to 1993/1994 expenditures

Income Deciles	Monthly expenditure				Monthly food expenditure			
	Caprivi	Ohang-wena	Oma-heke	Namibia	Caprivi	Ohang-wena	Oma-heke	Namibia
10	6.5	5.8	3.3	4.5	6.9	10.0	3.1	4.4
20	5.5	5.5	3.2	4.3	5.4	6.7	3.1	3.9
30	5.3	5.2	3.5	4.1	5.2	5.2	3.0	3.5
40	5.4	4.5	3.5	3.9	5.1	4.7	2.8	3.3
50	5.2	4.5	3.6	3.8	5.0	4.2	3.3	3.1
60	5.3	4.3	3.9	3.8	4.2	3.8	3.2	2.9
70	5.3	4.2	4.1	3.6	4.1	3.6	3.4	2.8
80	4.6	4.4	4.3	3.7	3.8	3.3	3.1	2.6
90	4.2	4.3	3.9	3.7	3.6	2.8	3.0	2.5

Source: Authors' calculations based on NHIES datasets

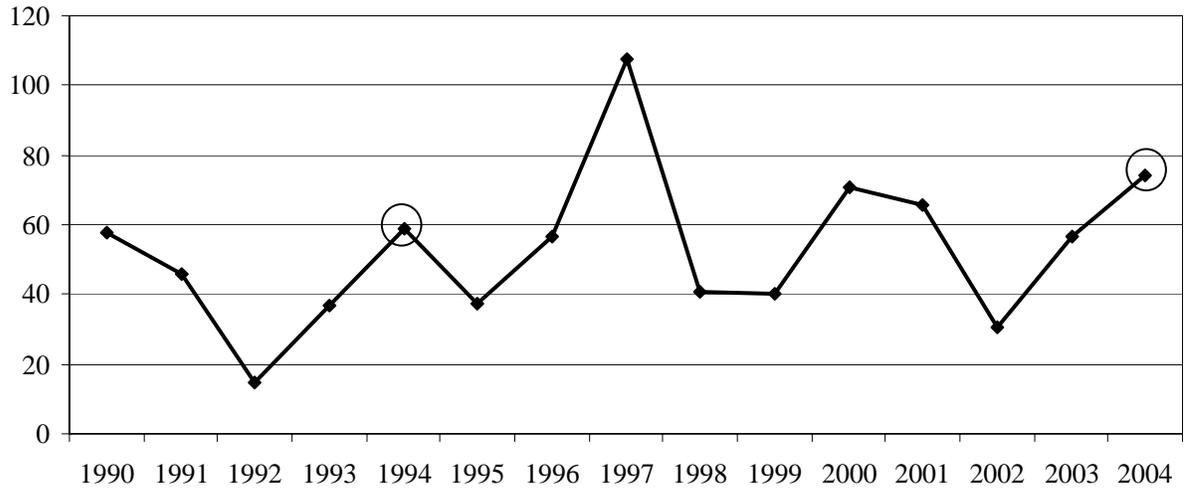
Table 4: Main Income Sources

	Poorest 20 percent		2nd quintile		3rd quintile		4th quintile		Wealthiest 20 percent		Overall	
	1993/1994	2003/2004	1993/1994	2003/2004	1993/1994	2003/2004	1993/1994	2003/2004	1993/1994	2003/2004	1993/1994	2003/2004
	- percentage -											
Salary/wages	18	22	25	29	39	41	61	64	76	77	44	47
Subsistence farming	53	39	49	47	42	38	24	17	6	4	35	29
Commercial farming	0	0	0	0	0	0	..	3	0	1
Non-farming business activities	4	7	4	5	3	6	3	8	7	8	4	7
Pensions	18	18	14	11	11	8	8	5	5	5	11	9
Cash remittances*	5	n.a	6	n.a	5	n.a	4	n.a	2	n.a	4	n.a
Other	0	13	0	7	0	7	0	6	..	3	0	7

* In the public release 2003/2004 NHIES dataset, certain discrete categories in response to the main income source have been grouped together and subsumed under the generic 'other' category. These include livelihoods from cash remittances, in kind receipts, rental income, interest from savings/investments, maintenance grants, drought relief assistance. Of these, cash remittances, in kind receipts and 'other' sources which would include prostitution, petty crime and piecework predominate.

Source: Authors' calculations based on NHIES datasets

Figure 1: Production of *mahangu* (millet) in communal areas (1000 tonnes)



Sources: Ministry of Agriculture, Water and Forestry (2005)

Note: Circled years indicate timing of fieldwork for the two household budget surveys

Table 5: Owns or has access to land and livestock

	Poorest 20 percent		2 nd quintile		3rd quintile		4th quintile		Wealthiest 20 percent		Overall	
	1993/ 1994	2003/ 2004	1993/ 1994	2003/ 2004	1993/ 1994	2003/ 2004	1993/ 1994	2003/ 2004	1993/ 1994	2003/ 2004	1993/ 1994	2003/ 2004
	- percentage -											
Field for crops												
Owns	72	36	69	31	57	27	40	20	21	12	51	25
Access	9	31	11	41	15	34	19	25	10	14	13	29
Neither	20	33	20	28	28	39	41	54	69	74	36	45
Grazing land												
Owns	9	2	7	3	8	3	8	5	10	9	8	5
Access	68	60	69	66	65	59	50	48	27	27	56	52
Neither	22	38	24	31	28	38	41	47	62	64	35	43
Cattle												
Owns	43	30	40	37	40	35	36	36	26	30	37	34
Access	8	11	6	9	7	8	5	5	3	3	6	7
Neither	49	59	54	54	53	56	59	59	70	67	57	59
Goats												
Owns	50	39	50	48	45	42	39	39	26	27	42	39
Access	1	3	2	4	2	5	3	4	2	2	2	4
Neither	49	58	49	49	53	53	58	57	71	70	56	57
Sheep												
Owns	5	4	7	4	7	5	9	7	11	12	8	6
Access	0	1	1	2	1	2	1	2	1	1	1	1
Neither	94	95	92	94	92	93	90	91	87	88	91	92
Pigs												
Owns	21	15	17	23	17	17	10	11	5	4	14	14
Access	0	0	0	1	0	1	0	1	1	1	0	1
Neither	79	84	82	75	83	81	89	87	94	94	85	84
Poultry												
Owns	78	60	77	66	68	56	55	39	26	22	61	49
Access	1	1	1	2	1	3	2	3	2	2	1	2
Neither	22	38	22	32	30	41	43	57	71	76	38	49

Source: Authors' calculations based on NHIES datasets

Table 6: Access to water and sanitation

	Poorest 20 percent		2nd quintile		3rd quintile		4th quintile		Wealthiest 20 percent		Overall	
	1993/ 1994	2003/ 2004	1993/ 1994	2003/ 2004	1993/ 1994	2003/ 2004	1993/ 1994	2003/ 2004	1993/ 1994	2003/ 2004	1993/ 1994	2003/ 2004
	<i>- percentage -</i>											
Main water source												
Piped in dwelling	2	3	5	8	12	16	32	36	74	80	25	29
Piped on site	9	11	15	13	18	17	19	22	9	11	14	15
Public pipe	35	36	31	35	28	31	22	22	9	4	25	26
River, canal, lake	14	10	13	5	14	5	7	3	2	1	10	5
Sanitation facility												
Flush toilet	7	7	13	14	25	26	46	50	83	87	35	37
Pit Latrine	9	7	10	8	8	10	10	12	5	5	8	8
Bucket	1	2	1	1	1	1	0	1	1	0	1	1
Bush	82	83	76	76	66	63	43	36	11	8	56	53

Source: Authors' calculations based on NHIES datasets