POVERTY AND INEQUALITY IN NAMIBIA:

AN OVERVIEW

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1. INTRODUCTION

Almost twenty years have passed since Namibia became independent. Despite many promises and efforts to develop the country, poverty and inequality are still prominent features of Namibian society. The reasons and possible solutions for these concerns are widely debated by politicians and the general public, but these discussions are often based on emotions and not on actual evidence. That is why the Institute for Public Policy Research (IPPR) decided in 2008 to conduct a thorough investigation into what happened to poverty and inequality in post-Independence Namibia. It analysed the available household data and applied new methods on how to measure poverty and inequality, as well as access to public services by the poor. The research results were published in a series of briefing papers in the course of 2009. The present report contains an overview of the findings from these briefing papers. In order to make the extensive research undertaken available to a wide audience, the language is kept in an accessible style that refrains from technical jargon as far as possible. It is hoped that this report will contribute to public debate about the levels and trends of poverty and inequality, based on rigorous data analysis. Those readers who wish to find out more about the research can download the IPPR's briefing papers on the website <u>www.ippr.org.na</u>. The paper titles are also listed at the end of this report.

The following section describes how poverty is measured and which data can be used in this regard. Section 3 provides an overview of poverty levels in post-Independence Namibia, both nationally and for urban and rural areas. Section 4 deals with various economic sectors and their relevance for poverty reduction. The question of whether growth has been pro-poor in Namibia is addressed in section 5. Inequality trends are presented in section 6, along with an explanation of the Gini inequality measure. In section 7, access to public services by the poor is discussed, as well as the prospects of achieving the related national targets. Finally, section 8 concludes.



2. MEASURING POVERTY AND INEQUALITY

Poverty is a broad term that indicates a shortage of common things such as food, clothing, shelter and safe drinking water, all of which determine the quality of life.¹ Measuring poverty is therefore not a straight-forward exercise. Who is poorer: someone who earns enough money to send her children to school but doesn't have access to safe drinking water, or someone who has safe drinking water but can't pay for the education of her children? A common measure used to determine the welfare of a household is income, which can pay for many basic needs. However, it is difficult to measure household income in developing countries, where many people don't have formal jobs with salaries, but make a living from selling services or goods in the informal market. That is why consumption spending is often used as a better measure for welfare: by recording how many things a household buys over a period of time, we can learn something about the standard of living it enjoys. By combining the consumed goods with their typical prices, a consumption value in Namibia dollars can be calculated for each household. The more people live in a household, the more things they need to buy, of course, so household size has to be taken into account.

The data which is used to measure poverty and inequality in Namibia stems from country-wide surveys, in which households are questioned about their consumption. The households are asked to recall how much of some goods they consumed, and for more frequent goods (mainly food items) they have to keep a journal recording daily quantities. The interviewers also record characteristics for each household, such as the number of household members, where they live or what level of education each member has. Two surveys called Namibia Household Income and Expenditure Surveys (NHIES) have been conducted by the government since Independence, one in 1993/94 and the other in 2003/04. This means we only have information on household welfare for these two periods. When politicians refer to the changes in poverty over time, they usually compare the results of the two surveys.

The next step is to determine when we can call a household poor. For that, most researchers use a so-called poverty line. Based on the NHIES data, the poverty lines are estimated at N\$105 per month for each adult in 1993/94 and at N\$264 per month for each adult in 2003/04. Once the poverty line is established, we still need to think of how to measure the extent of poverty in the population. One of the simplest ways is to calculate the poverty share, which measures the percentage of poor households or individuals in the total population. Since poorer households tend to be larger than better-off ones, measuring poverty by households may lead to an underestimation of poverty rates in the population. That is why we focus on individuals, and assume that members of the same household have the same consumption level. We also consider the fact that children normally need less food and other household goods than adults.

How is the poverty line determined?

The poverty line determines the minimum standard of living one has to achieve to be considered non-poor. In other words, any household below the poverty line is considered poor. There are different types of poverty lines: Some of them state, for example, that the 20% of households with the lowest consumption per member are defined as "poor". That is called a relative poverty line. It is a very simple definition, but it also means that always 20% of households are poor. It is therefore of little use when we want to find out if poverty is getting better or worse, or if we want to compare two regions with each other.

In order to do that, we need to calculate an "absolute" poverty line. The method that is used in Namibia today, as well as in many other countries, is called the cost-of-basic-needs (CBN) method. Firstly, it looks at how much food an average person needs to eat per day, and how much it would cost. That is then called the "food poverty line": the amount of money needed to buy just enough food to survive. To that, the cost of other non-food basic needs, such as shelter and clothing, is added to obtain the absolute "poverty line". If a household spends less than that amount per adult, it is considered "poor". In Namibia, this poverty line was N\$264 per month for each adult in the household in 2003/04.

This CBN poverty line is a good approach, but of course it is not perfect. Persons spending N\$263 per month have almost the same level of consumption as someone spending N\$265, but they are considered poor and the others are not. There is unfortunately no ideal, objective way to measure poverty, but the CBN method is better than most.

¹ http://en.wikipedia.org/wiki/Poverty

3. POVERTY IN NAMIBIA

The IPPR's research finds that the number of people living in poverty in Namibia decreased from 58% of individuals in 1993/94 to 38% of individuals in 2003/04. It is also found that poverty was more than twice as common in rural as in urban areas. Among the urban population, poverty decreased from 31% to 17%, while in rural areas the poverty share dropped from 69% to just below 50%. Table 1 below sums up these findings.

Share of poor individuals in %	1993/04	2003/04
Namibia	58%	38%
Urban areas	31%	17%
Rural areas	69%	49%

Table 1: Poverty rates for Namibia, urban and rural areas

We also observe a wide variety of poverty rates when looking at the regions, as presented in Table 2 below. In 2003/04, the highest poverty rate was found in Kavango, with 64% of the population considered poor. With only 8%, Khomas had the lowest level of poverty during that period. All regions with the exception of Kavango and Hardap saw a significant improvement in poverty levels over time. Kavango registered an average poverty rate of 58% in 1993/94, which worsened to 64% by 2003/04. Hardap registered no change in its poverty rate of 42%. Caprivi, Kunene and Oshana registered the largest absolute drop in poverty, improving from being some of the poorest regions in 1993/94 to being better-off than the average in 2003/04.

Share of poor individuals in %	1993/04	2003/04
Kavango	58%	64%
Ohangwena	78%	56%
Oshikoto	70%	49%
Hardap	42%	42%
Omaheke	61%	41%
Otjozondjupa	47%	39%
Omusati	64%	38%
Kunene	73%	37%
Caprivi	75%	37%
Karas	44%	33%
Oshana	70%	26%
Erongo	33%	14%
Khomas	22%	8%

Table 2: Poverty rates by region, ranked for 2003/04



4. ECONOMIC SECTORS AND POVERTY

An interesting question that is often neglected is which sectors of the Namibian economy have the highest poverty rates. It is difficult to get detailed data to answer this question, but we can use the main source of income for the household to get a broad picture. Table 3 below gives an overview of the share of poor individuals by the main household income source. According to the surveys, wage earners in urban areas had the lowest incidence of poverty in both survey years, followed by urban non-farming business owners. These two groups also registered the fastest reduction in poverty. Subsistence farmers saw their poverty rate drop at a slower rate, but they realised the largest absolute decrease from 72% in 1993/94 to 48% in 2003/04. It is no surprise that poverty is highest for those households mainly relying on pensions and remittances, with poverty rates standing at 65% and 52% respectively in 2003/04. After all, what these households lack is a significant income from productive activities.

Share of poor individuals in %	1993/04	2003/04
Wages and salaries (Urban)	25%	14%
Wages and salaries (Rural)	51%	31%
Subsistence farming	72%	48%
Non-farming business (Urban)	41%	18%
Non-farming business (Rural)	75%	50%
Remittances	70%	52%
Pensions	78%	65%

Table 3: Poverty rates by main source of income

Note: Categories "Commercial farming" and "Other source of income" were left out due to their small sample size.

Besides the poverty rates for these sectors, we need to look at how many people are dependent on them in order to consider their importance for poverty in the country. Subsistence farming is the largest sector, with 36% of the population depending on it in 2003/04. This is a significant reduction in its share, which stood at 42% of the population in 1993/94. Urban wage labour, the second most important sector, saw its share increase from 23% to 27%. Rural wage labour registered a small decrease in its population share from 15% to 13%. The changing shares in these three major categories point towards a trend of urbanisation, whereby people from rural areas are moving to the towns and cities in search of a better life. Overall, the share of the urban population increased from 29% in 1993/94 to 35% ten years later.

Given the importance of subsistence farming, the poverty reduction that happened in that sector accounts for about half of the overall reduction in Namibia. This means that if we want to understand poverty reduction in the country, we need to take a closer look at subsistence farming. What the data cannot tell us, unfortunately, is what caused the drop in poverty there. It may have come about because the poorest subsistence farmers left the sector and found a better life doing something else, for example by moving to urban areas, or because the situation for the poorest farmers improved significantly. This certainly calls for further examination.



5. PRO-POOR GROWTH

We measure poverty as a lack of money being spent on consumption, and as a general rule, the faster consumption grows, the more people will be lifted out of poverty. Consumption growth is closely related to economic growth, which at the national level is often measured by looking at the change in the Gross Domestic Product (GDP). Based on the NHIES data, average household consumption grew by 4.6% annually over the period 1993/94 to 2003/04, which is somewhat higher than the average GDP growth of 4.3% for that period. This growth is expressed at constant prices, or in "real" terms, as economists call it. In relation to growth and poverty reduction, the IPPR's research tries to answer two questions: Firstly, whether this consumption growth can be called "pro-poor"; and secondly, if there was pro-poor growth, can we say how pro-poor it was? A first step to answering these questions is to define what we mean by "pro-poor growth". We rely on a popular relative definition of pro-poorness: growth has to be higher for the average poor person than for the overall population.

What is pro-poor growth?

Pro-poor growth has become a buzzword in the development literature, but a closer look reveals that the term is not clearly defined. The most common definitions can be divided into an absolute and a relative type. The absolute definition of pro-poor growth requires that poor people must benefit from growth in absolute terms. In other words, as long as growth leads to a decrease in poverty, no matter how small that decrease is, it is called "pro-poor". The problem with this definition is that even if only a tiny share of growth benefits the poor directly, we would still consider it pro-poor – understandably, this goes against many people's common sense.

That is why a different, relative definition of the term has become more popular: growth is only pro-poor if the poor benefit on average more from it than the non-poor. In practice, a typical test is to see whether the average income (or expenditure) growth rate was higher for poor households than that for the overall population. This implies that poverty falls more under pro-poor growth than it would have done had the income of all – poor and non-poor – households grown at the same rate.

Looking at the growth of consumption expenditure along the whole income distribution, we find that poorer households, as well as the richest ones, gained more from growth than the middle classes. The highest growth rates were actually registered right at the bottom of the distribution, which explains why we observe such a significant decrease in poverty levels between the two surveys. For the average poor household, consumption grew by 5.6% per year, which is 1 percentage point higher than the 4.6% annual growth for the overall population. This means growth was indeed "pro-poor" over the period under review.

This is confirmed by another measure, which considers the change in poverty that would have occurred if all households had gained equally at the mean consumption growth rate of 4.6%. Applying this rate to the 1993/94 household data, we find that poverty in Namibia for 2003/04 would have been 1.5 percentage points higher than it actually turned out.

6. INEQUALITY IN NAMIBIA

As confirmed by various studies, Namibia has one of highest degrees of income inequality in the world. Inequality is most commonly estimated by the Gini coefficient, which is described in the text box below. Based on consumption data from the NHIES, the Gini coefficient for Namibia is estimated at 0.61 for 1993/94, and decreased slightly to 0.60 in 2003/04. In fact, the sample size of the surveys does not allow us to say with confidence that it has decreased at all. This finding is at odds with the official line that inequality decreased significantly in Namibia over the period. How did this impression of declining inequality come about?

What is the Gini coefficient?

The most popular measure of inequality is the Gini coefficient. It ranges from 0, which represents perfect equality, to 1, which represents perfect inequality. Perfect equality would be achieved if every person in a population had the same income or expenditure. Perfect inequality describes the case where one person has all the income in society, and everyone else has nothing. In a recent compilation, Sweden had the lowest Gini coefficient of all countries for which data was available (at 0.23), while Namibia was ranked right at the top of the table.

These rankings may give a broad indication of how countries compare, for example that Scandinavian countries have little inequality and sub-Saharan Africa has a lot, but one should not read too much into their precision. For many countries there is no household data available or it is based on old surveys, and methodologies on data collection and calculating the Gini coefficient vary from country to country.

The government's report from the household surveys states that there was a reduction in the Gini coefficient from 0.70 in 1993/94 to 0.60 in 2003/04. What was apparently not checked, however, is the basis on which the high coefficient for 1993/94 was calculated. More likely, different methods were used for its calculation, but unfortunately no written record thereof exists. One of the main differences appears to be the fact that in the first survey, children were weighted equally as adults, whereas the calculation for 2003/04 used lower weights.

When applying the same methodology to both surveys, we cannot say that there has been any change at all in inequality. However, one contradiction still needs to be resolved: if the poor registered a higher growth rate than the rest of the population, as was stated in Section 5, then surely inequality should have decreased? This decrease did not happen because the richest households also gained more than the average. We observe a situation where the catching-up of the poor is accompanied by the rich pulling away at the top of the distribution: these two developments roughly cancel each other out in their impact on overall inequality, so that the Gini coefficient remains unchanged.

7. Access to Public Services

An aspect of welfare that has received relatively little attention in Namibia is that of access to public services by the poor. Besides poverty measures like income and expenditure, such access has a profound impact on people's well-being. The NHIES can be analysed to find out how unequal the availability of public services is, and whether potential improvements in their provision have favoured the poor. To that end, we define the poorest four deciles (a decile refers to 10% of the total) of the population as "poor" and compare their access rates with the average access for the population. If access to a service improved faster among the poor, then we can say its provision has been "pro-poor", similar to what was found in section 5.

Based on the available survey data, the analysis focuses on access to four different public services by poor households: electricity, piped water, decent sanitation and school enrolment. For the three household utilities, we also compare the developments with the targets the government has set itself in the Third National Development Plan (NDP3), which ends in 2012. Based on the past growth trend, we forecast the time required to achieve those targets, and whether this will happen within the NDP3 deadline.

ELECTRICITY

Access to electricity is measured by the use of electricity as the main energy source for lighting in the household. Between 1993/94 and 2003/04, this use increased from 27% to 36% of all households. For poor households, it increased from 5% to 11%. This indicates that growth (i.e. the relative change over time) in access to electricity showed a strongly pro-poor trend. However, in 2003/04 the use of electric lighting was still twelve times higher among the richest decile than among the poorest.

The pro-poor growth trend is confirmed for both urban and rural areas. In absolute terms, however, there are major differences between the two locations: urban areas saw little improvement, while rural areas saw access more than double. This diverging trend is partly due to the fact that rural areas started from a much lower access rate in 1993/94 (5% of households compared to 71% in urban areas). This means that even at the high rural growth rate, the urban-rural gap in access to electricity is closing only slowly.

NDP3 stipulates a target of 20% of rural households to be electrified by 2012. Starting from a base of 12% of rural households with electricity in 2004, and assuming that growth continued at the past trend, this target would already be achieved by 2010. Perhaps government should have set a more ambitious target; continuing at the past growth trend, the electrification of 24% of rural households by 2012 could be achieved.





PIPED WATER

The inequality in access to safe, piped water is slightly less than that of electricity, but households in the richest decile still have much higher access (95% in 2003/04) than those in the poorest decile (15% in 2003/04). Average access was 43% of households in 2003/04, with access for poor households standing at 18%. Poor households registered on average the same increase of around 10% over the 10-year period between the surveys. This means that one additional household for every ten existing ones was connected to the public water piping system.

An interesting trend emerges when looking at urban and rural locations separately. In urban areas, the access rates have actually worsened, in particular among the poor. For the entire urban population, access dropped by 11%, while for poor households it decreased by 28%. Only the richest two deciles of the population saw an improvement. A possible explanation for the worsening coverage in urban areas is that water provision could not keep up with the inflow of migrants from rural areas. This is supported by the shift in population shares from rural to urban areas, which is especially large among the poor. In rural areas, on the other hand, we observe a notable improvement in access, albeit at much lower levels than in urban areas.

NDP3 contains the target of providing 92% of rural and 100% of urban household with safe (piped) drinking water. At the past growth trend, it would take until 2050 to achieve the rural target. In order to get there by 2012, growth would need to be 19% annually. For urban areas, average annual growth in would have to be 4%.

SANITATION

For the average Namibian, access to a flush toilet system increased from 28% to 34% of households between 1993/94 and 2003/04. Over the same period, access by the poor increased from 7% to 9% of households. Nonetheless, inequality in access is still rife. Only one in twenty households in the poorest decile owned a water closet in 2003/04, compared to nineteen in twenty households in the richest decile.

As with access to piped water, there is a marked difference in the trends for urban and rural households. Urban households saw declining access to flush toilet systems, with the poor affected the most. The reduction in access for the urban poor was 14%

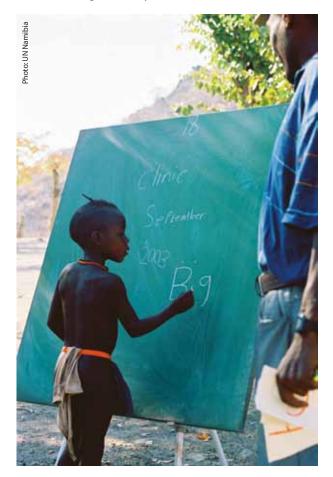
over the ten-year period, while mean urban access declined by 2%. In rural areas, on the other hand, there was strongly positive growth in access, in particular among the poorer deciles. Flush toilet ownership still continues to be significantly lower in rural than in urban areas.

SCHOOL ENROLMENT

In order to find out how school enrolment has developed over time for children from poor households, enrolment rates for the age group 7 to 16 years were calculated. The enrolment rate refers to those children that were attending school at the time of the survey as a share of the total number of children in that age group. The data confirms that poor families are less likely to send their children to school than non-poor families: The poorest decile had an enrolment rate of only 81% in 2003/04, compared to 89% for the average and 95% for the richest decile.

A worrying trend is that school enrolment seems to have fallen between the two surveys, especially for children in the poorest two deciles of the population. While overall, school enrolment declined by 1.7%, the poorest decile saw enrolment drop by 5.7%. This worsening trend among the poor is most pronounced in rural areas. The reductions in enrolment rates are a cause for concern and should be investigated further.

Regarding the NDP3 targets for providing 'adequate' sanitation, a similar situation as with piped water is found. The national target of 65% of households would only be reached in 2036 at the past average growth rate of 2%, whereas 8% annual growth in access are needed to get there by 2012.



8. SUMMARY AND CONCLUSIONS

Based on the newly introduced cost-of-basic-needs poverty line, the IPPR's research confirms previous findings that the incidence of poverty in Namibia decreased significantly between 1993/94 and 2003/04. This is observed in both rural and urban areas, as well as all regions with the exception of Kavango and Hardap. Subsistence farming is the largest sector in the economy in terms of employment, with more than a third of the population depending on it. Moreover, half of the total poverty reduction between the two surveys is found within subsistence farming. In order to get a better idea of how to tackle poverty in Namibia, the sector needs to be better understood.



A closer look at economic growth, as measured by household consumption growth, reveals that it has generally been propoor. Indeed, it appears that poor households and those right at the top benefited more from growth than the middle classes. Inequality has remained unchanged at one of the highest levels in the world, with a Gini coefficient of 0.60 in 2003/04. This is contrary to the official line that inequality has decreased in Namibia since Independence, which appears to be the result of incorrectly comparing different methods to calculate the Gini coefficient.

Regarding access to public services, stark inequality, but also significant pro-poor growth are found in the case of the three household utilities electricity, piped water and sanitation. Urban areas experienced much slower growth than rural areas, albeit from a higher base. Urban access to piped water and sanitation even worsened, most notably among poor households. Demographic changes suggest that rural-urban migration explains at least part of this observation. Given the past growth trends, the government's targets contained in NDP3 for 2012 would be achieved for rural electrification, but a significant acceleration would be required to meet the targeted access rates for safe water and sanitation.

School enrolment rates are lower for poor households than for non-poor ones. More surprisingly, enrolment declined over the period under review, in particular among poor households in rural areas. The reasons behind this decline need to be looked into, in particular if the trend has continued since the last NHIES.

FURTHER READING:

This overview of poverty and inequality is based on a series of Institute for Public Policy Research Briefing Papers from 2009, which are available on the IPPR's website:

The Estimation of Poverty Trends in Post-Independence Namibia, IPPR Briefing Paper 45.

Access to Public Services in Namibia: Has There Been Pro-poor Growth?, IPPR Briefing Paper 47.

Poverty, Inequality and Growth Linkages: National and Sectoral Evidence from Post-Independence Namibia, IPPR Briefing Paper 48.

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