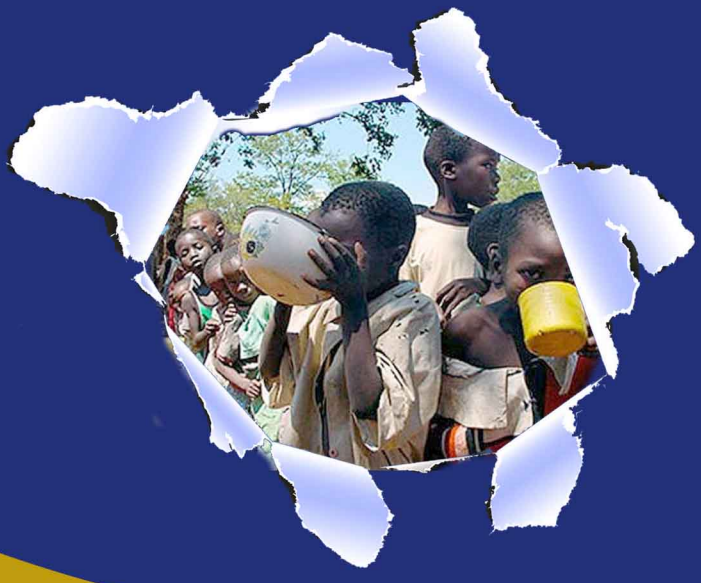
Poverty Dynamics in Namibia:

A comparative study using the 1993/94, 2003/04 and the 2009/10 NHIES surveys



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NOVEMBER 2012

Preface

This report presents an up-to-date comparative analysis of poverty patterns and trends in Namibia, based on the results of the Namibia Household Income and Expenditure Surveys (NHIES). The NHIES is a comprehensive survey collecting data on income, consumption and expenditure patterns of households. Three survey undertakings have been completed since independence (1993/1994. 2003/2004 and 2009/2010), with each survey covering a twelve months period. This report focuses on all three survey rounds, tracing poverty trends in Namibia between 1993 and 2010.

The report presents poverty incidence and poverty gaps for both poor and severely poor. It further cross-examines poverty by educational attainment, sources of income and access to services. It aims at providing poverty evidence for planners and policy makers to design appropriate poverty interventions.

The analysis of this report was carried out by the 2009/2010 NHIES's team of the Namibia Statistics Agency (NSA) with technical assistance of Johannes Ashipala (UNDP, Namibia), Dr Abdelkrim Araar (University of Laval, Canada) and Prof. Jean-Yves Duclos (University of Laval, Canada). Funding for the preparation of the report was made available by the NSA and UNDP, Namibia.

The Namibia Statistics Agency highly appreciates the efforts and contribution made by UNDP-Namibia and University of Laval, Canada, including the Government of the Republic of Namibia in ensuring the provision of quality statistics and production of this report. While the task before us is large; we remain confident that with the support of our development partners, we will continue to deliver timely, relevant and quality statistics to the public in a transparent, professional and cost effective manner.

DR JOHN STEYTLER
STATISTICIAN GENERAL

Executive Summary

This report presents a profile of poverty and inequality in Namibia. The analysis is based on data from the 1993/1994, 2003/2004 and 2009/2010 Namibia Households Income and Expenditure Survey. A poverty line is a cut-off point separating the poor from the non-poor. It is a predetermined level of consumption below which a person is considered to be poor. While poverty focuses on the poor, inequality is a broader measure that is defined over the whole population. Inequality is defined as disparities in the distribution of economic assets (wealth) and income within or between populations or individuals. The report uses adjusted per capita expenditure as an indicator of well-being.

For all three periods, two poverty lines were established for the poor where consumption levels per adult equivalent are lower than N$145.88, N$262.45 and 377.96; and N$106.78, N$184.56 and N$277.54 for severely poor for the year 1993/1994, 2003/2004 and 2009/2010, respectively. Using these definitions the incidence of poor and severely poor individuals are currently estimated at 28.7 and 15.3 percent, respectively. This is 40.5 and 43.6 percentage points fewer than in 1993/1994, continuing a 17-year downward trend. The poverty gap which measures the consumption shortfall relative to the poverty line is estimated at 8.8 percent in 2009/2010, and indicates that on average Namibia has a poverty gap equal to 8.8 percent of the poverty line.

The poor, who are primarily women, subsistence farmers and pensioners, are disproportionately located in rural areas. The rural areas recorded a dramatic decline in poverty incidence from 81.6 percent to 37.4 percent (a significant decline of about 44 percentage points), while the urban areas showed a decline of about 24.3 percentage points, during the same period. Poverty varies significantly between the administrative regions of Namibia.

The highest incidence of poverty is currently found in the Kavango region where more than half (55.2 percent) of the population are poor. This is followed by Caprivi (50 percent) and Oshikoto (44 percent) as the regions with the highest incidence of poverty. The lowest incidence of poverty is found in Erongo region where only 7.1 percent of the population is poor compared to the national poverty rate of 28.7 percent. Seven regions (Kavango, Caprivi, Oshikoto, Otjozondjupa, Omaheke, Kunene and Ohangwena) out of thirteen have poverty incidence rates that are above the national rate of 28.7 percent, while four have more than one third of their population under poverty (Kavango, Caprivi, Oshikoto and Otjozondjupa). Two regions (Kavango and Caprivi) have more than half of their population under poverty. Poverty increased in Caprivi and Khomas, by 13.7 and 2.6 percentage points, respectively between 2003/2004 and 2009/2010. Poverty declines with an increase in educational attainment and correlates positively with distance to facilities and access to services.

The report uses the Gini-Coefficient as a measure of inequality. In Namibia inequality declined between 1993/1994 and 2009/2010, but is still very high by international standards at 0.597, a reduction of about 5 percentage points from 0.646 in 1993/1994. Although there appears to be a declining trend in inequality over the last seventeen years, the rate of decline is slowing down. Inequality is higher in urban than in rural areas, 0.583 and 0.487 respectively. In rural areas, inequality shows a declining trend, however it fluctuates in urban areas, declining between 1993/1994 and 2003/2004 and increasing slightly between 2003/2004 and 2009/2010.

Inequality is highest in Karas at 0.634 and lowest in Ohangwena at 0.405, which however has registered a significant increase in inequality over the past five years between 2003/2004 and 2009/2010. Between 1993/1994 and 2003/2004, inequality declined in almost all regions but increased between 2003/2004 and 2009/2010 in Khomas, Kunene, Ohangwena, Omusati, Caprivi, Karas and Otjozondjupa , i.e. inequality increased in seven out of thirteen regions between 2003/2004 and 2009/2010. Changes in inequality contrast with movements in poverty. Poverty recorded significant reductions at national and regional levels. Overall, Khomas and Caprivi are the two regions that registered increases in both poverty and inequality between 2003/2004 and 2009/2010.

Contents

1. Introduction

Poverty is recognized worldwide as one of the challenges facing several countries, especially in Africa. Poverty indicators can attract the attention of both government and development partners, and encourage them to design and review policies and programmes that can enhance the standards of living.

Changes in poverty and inequality are key indicators of economic progress and social inclusion. Changes in the allocation and remuneration of production factors and public policy overtime will lead to changes in the distribution of income and access to services, thereby leading to changes in poverty and inequality. Low levels of poverty and inequality are therefore useful in reflecting the state of distributive channels of wealth and the effectiveness of public policy. Information on poverty provides evidence on the extent of the population with an unacceptably low level of consumption, while inequality captures the disparities in incomes between different individuals and population groups.

Using Namibia's last three household income and expenditure surveys, this report reviews poverty and inequality developments over the last 17 years. This report discusses changes in the levels and composition of poverty and inequality between 1993 and 2010. It examines the trends and patterns of poverty by locations and population characteristics. In addition to discussing consumption or income deprivation, the paper attempts to relate poverty to other domains of deprivation, such as access to services and ownership of assets. The poverty analysis focuses on the incidence and depth of poverty. The paper further attempts to assess and show the evolution of the characteristics correlated with poverty over time. The focus is on measuring the pattern and extent of changes over the 17-year period.

2. Poverty Profile

2.1 The evolution of wellbeing in Namibia

The report uses household consumption expenditures as a welfare indicator. This indicator is measured as "adjusted per capita expenditures" (apce). It takes into account differences in household size and composition. Adjusted per capita expenditure is obtained by dividing total household expenditures by the number of adult equivalents found in a particular household. To compute the number of adult equivalents, a weight of 0.5 is given to children under the age of 5 years, of 0.75 is assigned to children between 6 and 15 years of age, and of 1 is given to all household members aged 16 years and over.

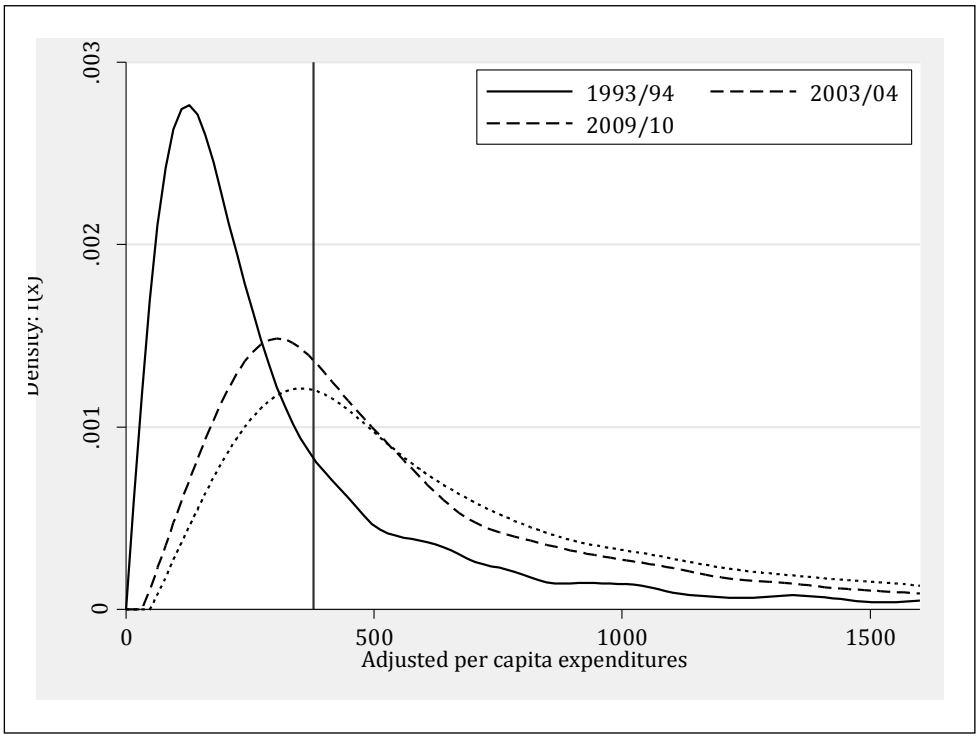
Table 1 indicates the levels of adjusted per capita expenditures over the last 17 years. The table uses both nominal and 2009/2010 constant prices to measure per capita expenditures. The ratio between the poverty lines is used to deflate the nominal value of these expenditures and transform them into constant 2009/2010 prices. The rest of the report uses the deflation procedure to compare living standards over time. Table 1 clearly suggests a general increase in living standards over time.

Table 1: Average monthly adjusted per capita expenditures in Namibia in N$, in 1993/1994, 2003/2004 and 2009/2010 dollars

Wellbeing	1993/1994	2003/2004	2009/2010
Nominal prices			
Average per capita expenditures	187.76	659.32	1151.11
Average adjusted per capita expenditures	214.68	741.52	1288.07
Constant 2009/2010 prices			
Average per capita expenditures	486.47	949.50	1151.11
Average adjusted per capita expenditures	556.21	1067.88	1288.07

Figure 1 plots the population's distribution of adjusted per capita expenditures for 1993/1994, 2003/2004 and 2009/2010. The figure thus displays the pattern of the distribution of consumption between the three periods. The distributions are positively skewed, indicating that the majority of the distribution is below the mean and also providing insights into the inequality of consumption. It is clear from the figure that there has been some shifting in the overall distribution of income. The figure shows that the distribution has moved to the right which indicates an improvement of well-being between 1993 and 2010. Furthermore, the figure indicates a reduction in poverty levels between 1993/1994 and 2009/2010 as indicated by the area enclosed by the three curves and the poverty line.

Figure 1: The density curves of the adjusted per capita expenditures



2.2 Poverty lines

Poverty lines are cut-off points separating the poor from the non-poor, i.e., the predetermined level of consumption below which a person is considered poor. Therefore, the incidence of poverty is measured as the proportion of the population whose consumption expenditure falls below this pre-determined level.

For the analysis of poverty and inequality, we used adjusted per capita expenditure as an indicator of well-being. To allow for the comparison of well-being of individuals living in households of different sizes and composition, adjustments were made to reflect the age of households' members. Adjustments were also made for different price levels to cater for changes in the cost of basic needs over time. Table 2 indicates the poverty lines for the last three survey periods. The upper bound poverty line is a cut-off point indicating the proportion of the population that is poor while the lower bound poverty line serves to indicate the proportion that is severely poor. It is worth noting that the group of the severely poor is a sub-set of the poor. The proportion of the population with consumption expenditure above the upper bound poverty line is considered non poor.

It is worth mentioning that the sample size of the 1993/1994 NHIES was relatively small compared to those of the two more recent surveys. Furthermore, the 1993/1994 survey did not have exactly the same set of consumption questions as those of 2003/2004 and 2009/2010, thus direct comparison with the 1993/94 data should be done with caution. All poverty and inequality analyses in this report are done for the population of individuals, that is, counting individuals and not households.

Table 2 Namibia's poverty lines, monthly N$ per capita, in 1993/1994, 2003/2004 and 2009/2010 dollars

Poverty line	1993/1994	2003/2004	2009/2010
Food poverty line	76.77	127.15	204.05
Lower bound poverty line: "severely poor"	106.78	184.56	277.54
Upper bound poverty line: "poor"	145.88	262.45	377.96

Definitions of poverty measures

Poverty incidence is the proportion of the population identified as poor. Given a poverty line of N$377.96, the poverty incidence is the proportion of the population whose monthly consumption is less than N$377.96

Poverty Gap or the depth of poverty is the extent to which those defined as poor fall below the poverty line. The poverty gap is a measure that captures consumption shortfall relative to the poverty line across the whole population. It could also be defined as the minimum amount of resources needed to eradicate poverty, i e. a poverty gap of 8.8 percent says that on average an amount of N$33.26 additional consumption per person per month is needed to lift all the poor out of poverty. Thus, it provides information on how far individuals are from the poverty line.

Poverty severity looks at both the depth of poverty (how far off the poor are from the poverty line) and inequality within the poor (how deep or severe the poverty is), placing a higher weight on those further away from the poverty line, i.e. the poorest of the poor.

2.3 Patterns and changes in poverty

Table 3 shows that in 2009/2010 about 29 percent of the population lived below the poverty line. This is 9 percentage points fewer than in 2003/2004 and 41 percentage points fewer than in 1993/1994, continuing a 17-year downward trend. To better show the extent of deprivation and its severity, a poverty gap (depth of poverty) and poverty severity indices are also calculated. The poverty gap is a measure that captures consumption shortfall relative to the poverty line across the whole population. It could also be defined as the minimum amount of resources needed to eradicate poverty. It provides information on how far individuals are from the poverty line. Poverty severity looks at both the depth of poverty (how far off the poor are from the poverty line) and inequality within the poor (how deep or severe the poverty is), placing a higher weight on those further away from the poverty line, i.e. the poorest of the poor. Poverty gap and severity are important complements to poverty incidence and require different policy interventions.

A region or locality might have higher poverty incidence but a lower poverty gap (i.e. more poor people but being just below the poverty line) or higher poverty gap but lower poverty incidence (i.e. relatively few poor people but with extremely low levels of consumption). A program may be effective at reducing the incidence of poverty but might have a low impact on the poverty gap if those taken out of poverty have consumption levels just below the poverty line. Likewise, other programs might be effective at reducing the poverty gap but have a low impact on poverty severity, if those poor that are being helped are not the poorest ones. From 37.7 percent in 1993/1994, the poverty gap is estimated at 8.8 percent in 2009/2010, which indicates that on average the population has a poverty gap equal to 8.8 percent of the poverty line. The severity of poverty has been declining from 24.4 percent in 1993/1994 to 3.9 percent in 2009/2010.

28.7%
of the Namibian population are poor.

40.5%
the percentage points by which poverty has declined between 1993/1994 and 2009/2010, a 17 year period.

Table 3 Poor: poverty incidence, gap and severity at individual levels.

Population	Periods			Differences		
	A: 1993/94	B: 2003/04	C: 2009/10	B-A	C-B	C-A
Poverty Incidence	69.3	37.7	28.7	-31.5	-9.0	-40.5
Poverty gap	37.7	12.9	8.8	-24.9	-4.0	-28.9
Poverty severity	24.4	6.1	3.9	-18.7	-2.2	-20.5

Figure 2 presents poverty changes over time. It is clear from the figure that poverty declined over time and although the levels of poverty is still high, the figure indicates that more and more people are moving closer to the poverty line as indicated by changes in the poverty gap.

Figure 2 Poverty levels over time, 1993 - 2010

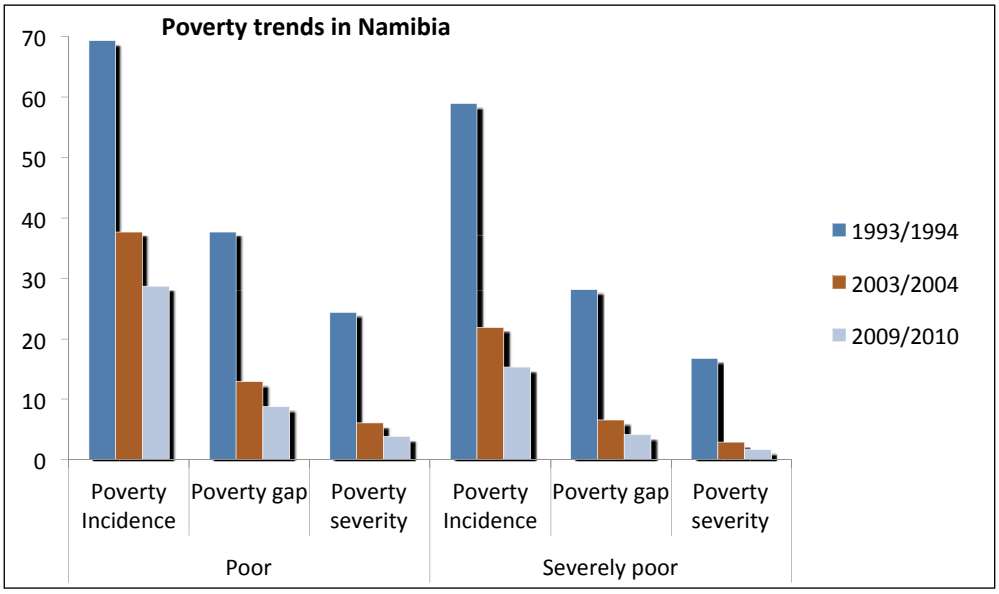


Table 4 presents the results of the three poverty measures for the lower bound poverty line (the severely poor individuals). The table indicates that the incidence of severely poor is estimated at 15 percent, a reduction of about 7 percentage points compared to 2003/2004 and of about 44 percentage points compared to 1993/1994. The poverty gap among the severely poor is 4 percent, a reduction of about 24 percent from 1993/1994.

Table 4 Severely poor: poverty incidence, gap and severity at individual levels.

Population	Periods			Differences		
	A: 1993/94	B: 2003/04	C: 2009/10	B-A	C-B	C-A
Poverty Incidence	58.9	21.9	15.3	-37.0	-6.6	-43.6
Poverty gap	28.1	6.6	4.2	-21.5	-2.4	-24.0
Poverty severity	16.8	2.9	1.7	-13.9	-1.2	-15.1

15.3%
of the population is severely poor.

43.6%
the percentage points by which the incidence of severely poor declined between 1993/1994 and 2009/2010, a 17 year period.

Significance levels

How to interpret the significance levels: * p<0.10, ** p<0.05, *** p<0.01

In statistical terms significant means probably true and not due to chance. A statement that a result is highly significant means that it is very probably true. It is used to determine the probability that the result has not occurred by statistical accident and that the obtained result is not much different from the true figure. The guiding principle is that the obtained result is not different from the true figure such that if it is used for policy decisions it will not mislead policy makers.

* = p<0.10, which means the findings has a 90% chance of being true
** = p<0.05, which means the findings has a 95% chance of being true
*** = p<0.01, which means the findings has a 99% chance of being true

Table 5 shows poverty levels by sex of head of households. This represents another target area for poverty reduction. In Namibia 42 percent of households are headed by women. More women (32 percent) than men (26 percent) are poor with women being almost 1.23 times more likely to be poor than men. This is an improvement from 2003/2004, where about 40 per cent of women and about 36 percent of men were poor.

Poverty is low between the ages of 16-34 years but higher among those aged 35 years and above. However, between 2004 and 2010, poverty declined by more than 11 percentage points for those aged 50 years and above. Poverty has also declined more among the youth by about 10 percentage points. The highest decline among the elderly may suggest that the pension reform is effective as a poverty reducing strategy. The table indicates that poverty has been declining over the years for both men and women, with women registering the highest decline.

Poverty increases with age from 50 years and above.

Table 5 Incidence of poverty by age and sex of head of households, 1993/94, 2003/04 and 2009/10

	Periods			Differences		
	A: 1993/94	B: 2003/04	C: 2009/10	B-A	C-B	C-A
Age of household head						
16-20	72.1	32.2	21.8	-39.9***	-10.4	-50.3***
21-24	50.5	28.8	20.3	-21.7***	-8.5*	-30.2***
25-29	52.6	28.8	20.5	-24.3***	-7.8**	-32.1***
30-34	50.9	25.8	18.7	-25.1***	-7.2***	-32.3***
35-39	56.1	23.7	27.1	-32.4***	3.4	-29.0***
40-44	61.6	29.2	24.0	-32.4***	-5.2*	-37.6***
45-49	73.1	28.3	26.4	-44.8***	-2.0	-46.8***
50-54	71.1	36.4	25.3	-34.7***	-11.1***	-45.8***
55-59	76.2	43.2	31.7	-33.0***	-11.5***	-44.5***
60-64	82.3	51.8	34.1	-30.6***	-17.1***	-48.0***
65+	86.9	57.3	39.8	-29.6***	-17.5***	-47.1***
Sex of household head						
Female	75.9	40.4	32.2	-35.5***	-8.2***	-43.7***
Male	65.2	36.0	26.2	-29.3***	-9.7***	-39.0***
National	69.3	37.8	28.7	-31.5***	-9.0***	-40.5***

* p<0.10, ** p<0.05, *** p<0.01

2.4 Population groups and the evolution of poverty

The past 17 years have seen substantial progress in poverty reduction, though not all localities recorded positive changes. The aim of this section is to describe the evolution of poverty in Namibia. The poverty picture is complex and our broad analysis will not capture all the specifics. However, the evidence is striking and will help us understand the poverty profile in Namibia.

Table 6 indicates that the poor are disproportionately located in rural areas and that poverty varies significantly between the administrative regions of Namibia. People in rural areas are twice as likely to be poor compared to those in urban areas with about 37.4 percent of people living in rural areas being poor compared to 14.6 percent in urban areas. Regional poverty comparisons are important for targeting development programs to poorer areas. The poverty profile of Namibia changed slightly although regional disparities still exists. In 1993/1994 the poorest regions were Ohangwena followed by Oshikoto, Caprivi and Oshana. The pattern has changed in recent years where the highest incidence of poverty is currently found in Kavango region where more than half (55.2 percent) of the population are poor. This is followed by Caprivi (50 percent) and Oshikoto (44 percent) as the regions with the highest incidence of poverty. The lowest incidence of poverty is found in Erongo region where only 7.1 percent of the population is poor compared to the national poverty rate of 28.7 percent. The table shows a general decline in poverty levels nationally and in both rural and urban areas with exception of Caprivi and Khomas regions. This development calls for further analysis specifically pertaining to the regional level characteristics as well as community characteristics to determine why poverty does not follow the same trend across regions.

As can be observed from Table 6, in 1993/1994 poverty incidence in Namibia was estimated at 69.3 percent of the population. The incidence of poverty has since declined to 28.7 percent in 2009/2010, a significant change of 40.5 percentage points. In Khomas, poverty declined from 26.8 percent in 1993/1994 to 8.1 percent in 2003/2004 before it increased again to 10.7 percent in 2009/2010. Notwithstanding the recent increase in poverty levels in Khomas, the region recorded the second lowest poverty in-

cidence in the country after Erongo. The same trend was observed in Caprivi region, where poverty declined from 81.3 percent in 1993/1994 to 36.5 percent in 2003/2004 before it increasing to 50.2 percent in 2009/2010. Table 6 indicates that the decline in poverty was not uniform throughout the country. Rural areas recorded a dramatic decline in poverty incidence from 81.6 percent to 37.4 percent (a significant decline of about 44 percentage points), while in urban areas poverty declined by about 24.3 percentage points, during the same period.

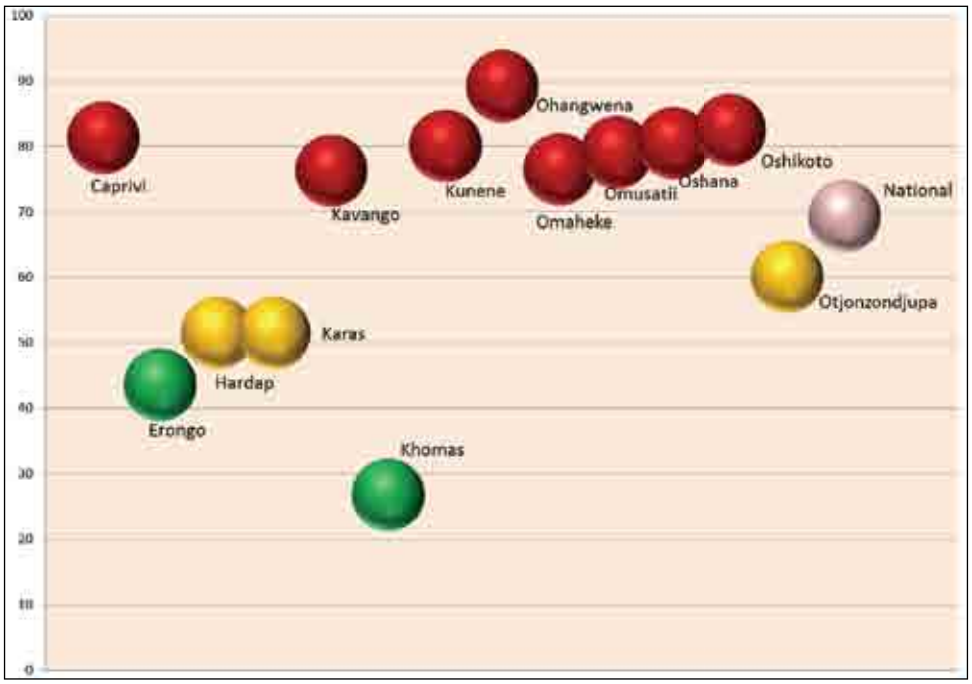
Seven regions (Kavango, Caprivi, Oshikoto, Otjozondjupa, Omaheke, Kunene and Ohangwena) out of thirteen have poverty incidence rates that are above the national rate of 28.7 percent, while four have more than one third of their population under poverty (Kavango, Caprivi, Oshikoto and Otjozondjupa). Two regions (Kavango and Caprivi) have more than half of their population under poverty. If one compares poverty trends between regions over the last five years, poverty has declined in all regions except Caprivi and Khomas, which increased by 13.7 and 2.6 percentage points respectively, although the increase in Khomas is not significant. Oshana region experienced the highest decline (61.2 percentage points) in poverty incidence during this period. Other regions that experienced high poverty reduction are Omusati, Ohangwena, Kunene and Omaheke with 60, 59.1, 49.9 and 45.4 percentage points, respectively.

Table 6 Poor: Estimated poverty changes by regions and localities

		Periods			Differences		
		A: 1993/94	B: 2003/04	C: 2009/10	B-A	C-B	C-A
Locality							
Urban		39.0	17.0	14.6	-21.9***	-2.4	-24.3***
Rural		81.6	48.7	37.4	-32.9***	-11.3***	-44.2***
Region	*Urbanization In 2004*						
Caprivi	29.3	81.3	36.5	50.2	-44.8***	13.7***	-31.1***
Erongo	83.8	43.6	14.3	07.1	-29.2***	-7.8**	-36.4***
Hardap	43.2	51.5	42.0	26.0	-09.6*	-16.0***	-25.6***
Karas	56.1	51.5	32.7	26.9	-18.8***	-5.9	-24.7***
Kavango	18.6	76.3	64.1	55.2	-12.2***	-8.9**	-21.2***
Khomas	94.2	26.8	08.1	10.7	-18.7***	2.6	-16.1***
Kunene	34.6	80.1	36.8	30.2	-34.4***	-6.6	-49.9***
Ohangwena	1.3	89.2	55.5	30.1	-33.6***	-25.5***	-59.1***
Omaheke	24.6	76.5	41.1	31.1	-35.2***	-10.3	-45.4***
Omusati	1.0	79.1	38.4	19.1	-40.7***	-19.3***	-60.0***
Oshana	32.7	80.5	25.7	19.4	-54.8***	-6.3*	-61.2***
Oshikoto	9.2	82.5	49.4	44.2	-33.1***	-5.2	-38.3***
Otjozondjupa	53.8	60.1	39.0	33.7	-21.2***	-5.2	-26.4***
National	34.6	69.3	37.7	28.7	-31.5***	-9.0***	-40.5***

* p<0.10, ** p<0.05, *** p<0.01

Figure 6.1: Percentage of population under poverty in Regions, NHIES 1993 /1994



Oshana, the champion in poverty reduction has reduced poverty by 61.2% percentage points within a 17 year period.

44.2%

the percentage points by which poverty declined in rural areas between 1993/1994 and 2009/2010, a 17 year period.

Figure 6.2: Percentage of population under poverty in Regions, NHIES 2003 /2004

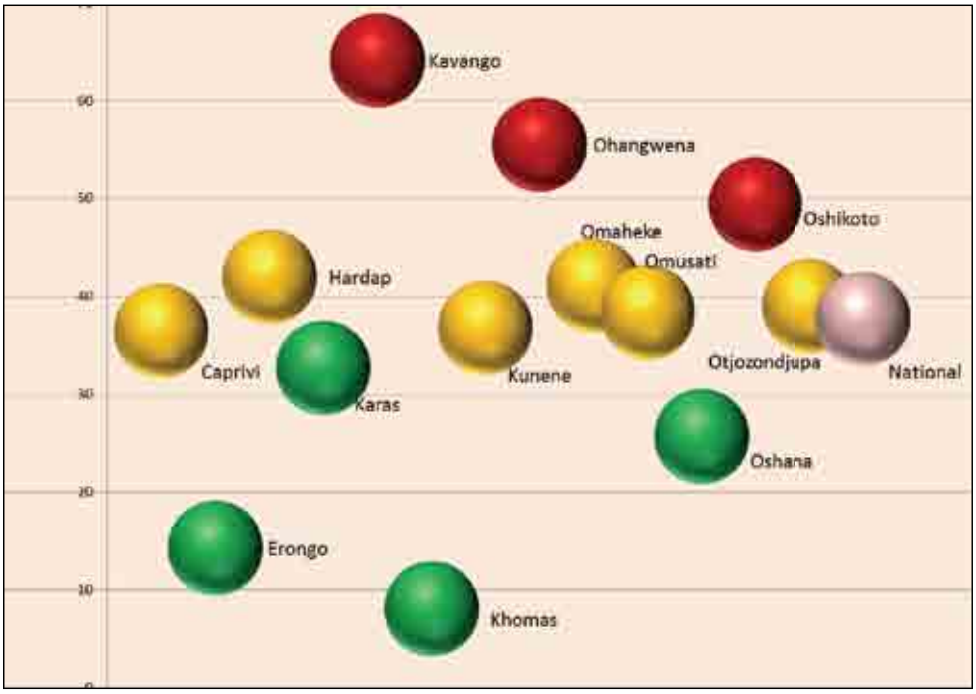


Figure 6.3: Percentage of population under poverty in Regions, NHIES 2009 /2010

Kavango and Caprivi, the two regions with more than half of their population under poverty.

Oshikoto and Otjozon-djupa, the regions with more than one third of their population under poverty.

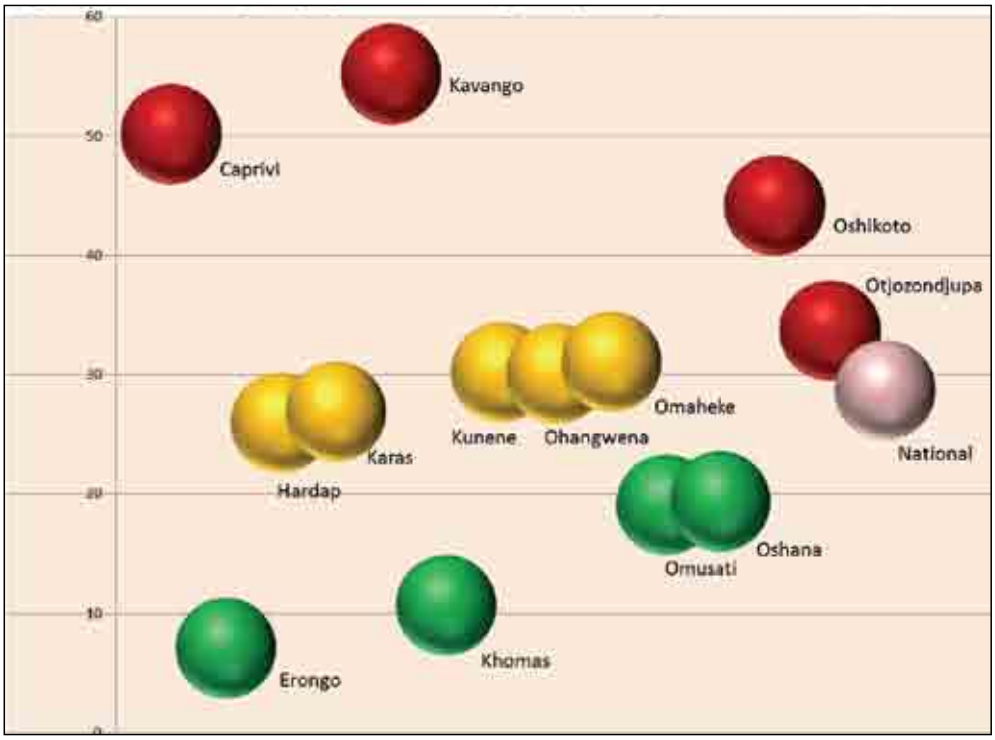


Figure 3 indicates that in 2003/2004 Kavango, Ohangwena and Oshikoto were the poorest regions in Namibia. By 2009/2010 Ohangwena moved out of this group and the most three poorest regions in Namibia are Kavango, Caprivi and Oshikoto. The reduction in poverty has occurred most sharply in Ohangwena, Omusati, Hardap and Omaheke.

Figure 3 Regional poverty levels, 2003/2004 and 2009/2010

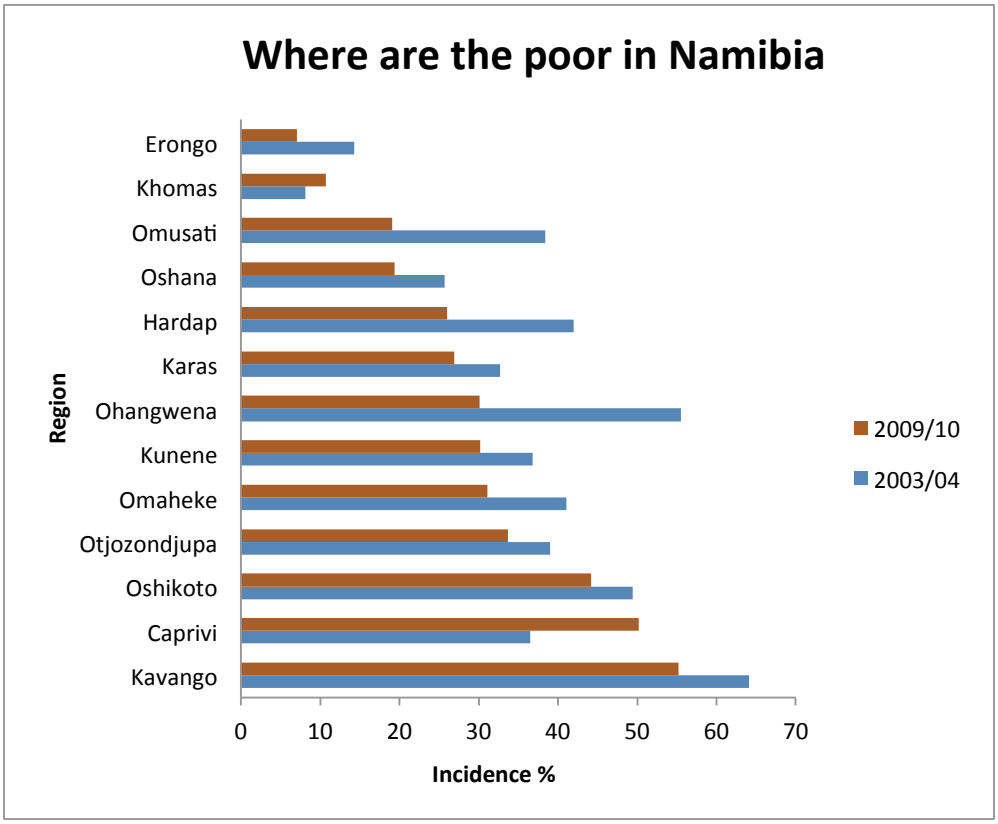
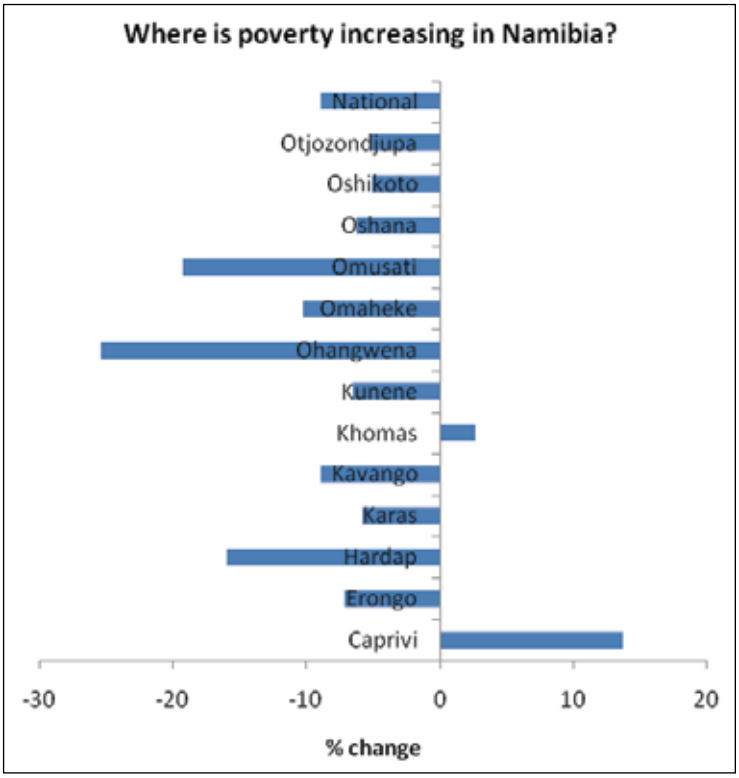


Figure 4 illustrates that poverty declined in all regions except Khomas and Caprivi. The figure further indicates that poverty declined most in Ohangwena, Omusati and Hardap during the same period.

Figure 4 Percentage points changes in poverty between 2003/2004 and 2009/2010



Caprivi and Khomas, are the regions where poverty increased between 2003/2004 and 2009/2010.

Figure 5 indicates that poverty has declined since 1993 both in urban and rural areas. However, in all three years poverty is substantially higher in rural areas than urban areas so that poverty in Namibia is disproportionately a rural phenomenon.

Figure 5 Urban/ rural poverty levels, 1993/1994, 2003/2004 and 2009/2010

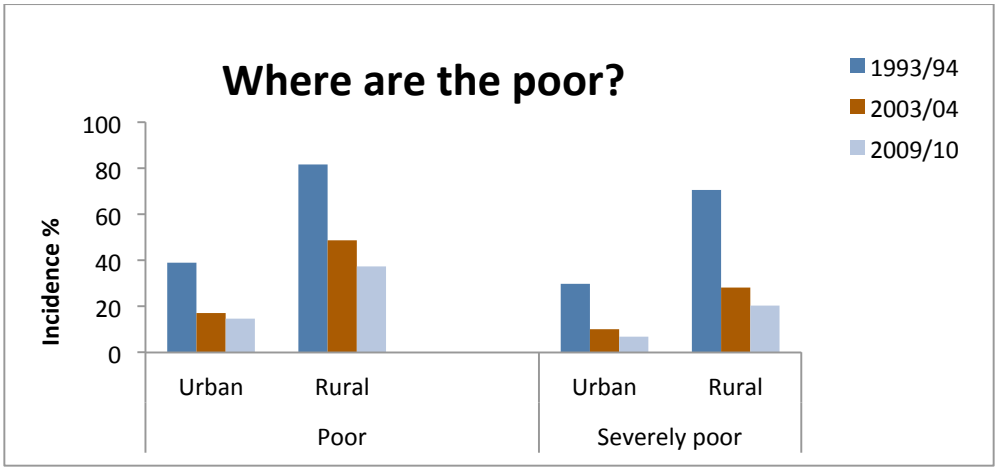


Table 7 shows poverty incidence using the lower bound poverty line (severely poor). The incidence of severely poor in urban areas is estimated at 7 percent compared to 20.4 percent in rural areas. The table indicates that there has been a major decline at the national level over the last 17 years, from about 59 percent in 1993/1994 down to 15.3 percent in 2009/2010 (from about 22 percent in 2003/2004). The highest incidence of severe poverty is observed in Caprivi and Kavango regions at 35 percent, while Erongo is lowest at 3 percent. Severe poverty incidence shows a declining trend in all regions except in Caprivi and Khomas.

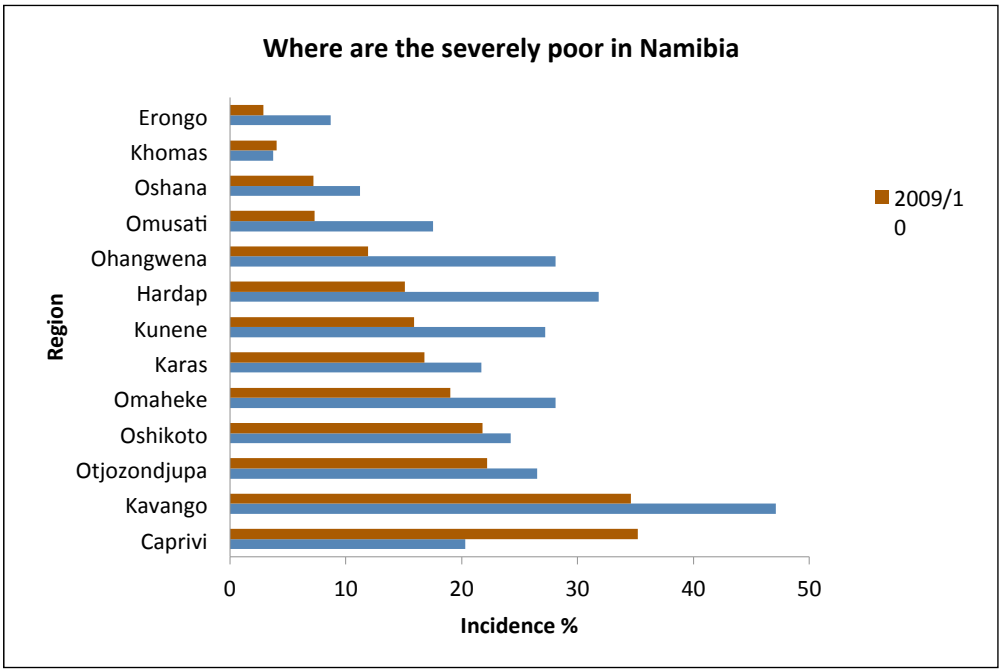
Table 7 Severely poor: Estimated poverty changes by regions and localities

Locality	A:1993/94	B: 2003	C: 2010	B-A	C-B	C-A
Urban	29.8	10.0	7.0	-19.8	-3.0	-22.8
Rural	70.7	28.3	20.4	-42.5	-7.8	-50.3
Region						
Caprivi	74.7	20.3	35.2	-54.5	15.0	-39.5
Erongo	33.2	8.7	2.9	-24.4	-5.9	-30.3
Hardap	42.9	31.8	15.1	-11.1	-16.7	-27.7
Karas	41.1	21.7	16.8	-19.4	-4.8	-24.2
Khomas	19.6	3.7	4.0	27.5	-12.5	15.0
Kunene	72.4	27.2	15.9	-68.6	0.3	-68.4
Ohangwena	80.8	28.1	11.9	-53.6	-11.2	-64.8
Kavango	61.6	47.1	34.6	-33.5	-16.2	-49.7
Omaheke	61.2	28.1	19.0	-33.1	-9.1	-42.2
Omusati	66.2	17.5	7.3	-48.8	-10.1	-58.9
Oshana	68.9	11.2	7.2	-57.7	-4.0	-61.7
Oshikoto	72.2	24.2	21.8	-48.0	-2.4	-50.4
Otjozondjupa	48.7	26.5	22.2	-22.2	-4.3	-26.5
Namibia	58.9	21.9	15.3	-37.0	-6.6	-43.6

20.4%
the percentage of population in rural areas that are severely poor.

Figure 6 illustrates the trend in the incidence of severely poor for the thirteen regions in Namibia. There are sharp variations in the patterns of poverty especially between Kavango and Caprivi and the rest of the regions. The reduction in severely poor has occurred most sharply in Ohangwena, Hardap, Kunene and Kavango.

Figure 6 Regional Severe poverty levels, 2003 - 2010



The information presented so far only concerns those classified as poor, without considering how poor they are. The depth of poverty, the proportion by which the average consumption level of the poor falls below the poverty gives an indication of how intense poverty has been in Namibia. Table 8 indicates the depth of poverty in Namibia. The table indicates that the depth of poverty has declined both at the local and national levels. The depth of poverty has declined from 38 percent in 1993/1994 to about 9 percent in 2009/2010. This indicates that on average the poverty gap of the population is about 9 percent below the poverty line. In urban areas, the poverty gap is about 4 percent below the poverty line, compared to 12 percent in rural areas. The poverty gap is highest in Khomas, Caprivi and Otjozondjupa and lowest in Erongo and Kunene region.

Table 8 Poverty gap by locality and region, 1993/94, 2003/04 and 2009/10

	Periods			Differences		
	A: 1993/94	B: 2003/04	C: 2009/10	B-A	C-B	C-A
Locality						
Urban	17.9	6.0	4.4	-11.9***	-1.6**	-13.5***
Rural	45.8	16.5	11.6	-29.3***	-4.9***	-34.2***
Region						
Caprivi	48.4	11.9	18.9	-36.5***	7.0***	-29.6***
Erongo	19.2	5.0	1.8	-14.2***	-3.2**	-17.3***
Hardap	27.6	18.1	8.5	-9.5	-9.5***	-19.0**
Karas	26.8	13.4	9.5	-13.4**	-3.9	-17.3***
Khomas	12.3	27.6	19.3	15.3***	-8.3***	7.1*
Kunene	46.1	2.1	2.6	-44.0***	0.5	-43.5***
Ohangwena	53.7	14.8	9.5	-38.9***	-5.3	-44.3***
Kavango	37.7	16.5	7.4	-21.2***	-9.1***	-30.3***
Omaheke	37.3	16.2	11.6	-21.1***	-4.6	-25.7***
Omusati	43.1	10.4	4.1	-32.7***	-6.3***	-39.0***
Oshana	42.8	7.0	4.6	-35.8***	-2.4*	-38.2***
Oshikoto	47.2	14.3	11.8	-32.9***	-2.4	-35.4***
Otjozondjupa	31.9	15.4	13.8	-16.5***	-1.6	-18.1***
National	37.7	12.9	8.8	-24.9***	-4.0***	-28.9***

* p<0.10, ** p<0.05, *** p<0.01

Using the lower bound poverty line, Table 9 shows the poverty gap among those who are considered to be severely poor. The poverty gap among those who are severely poor is currently estimated at 4.2 percent and at 5.4 and 2.2 percent for rural and urban areas, respectively. The highest poverty gap is observed in Caprivi at 10.1 percent followed by Kavango region at 10 percent and Otjozondjupa region at 9 percent.

Table 9 Severely poor: Poverty gap by locality and region, 1993/94, 2003/04 and 2009/10

Locality	A:1993	B:2003	C:2010	B-A	C-B	C-A
Urban	12.0	3.3	2.2	-8.7	-1.1	-9.8
Rural	34.7	8.3	5.4	-26.3	-3.0	-29.3
Region						
Caprivi	37.5	5.7	10.1	-31.8	4.5	-27.3
Erongo	12.2	2.7	0.7	-9.5	-2.0	-11.5
Hardap	20.7	11.2	4.2	-9.4	-7.0	-16.5
Karas	20.0	8.3	5.1	-11.8	-3.1	-14.9
Khomas	8.0	0.9	1.1	9.0	-7.1	1.9
Kunene	34.8	8.6	5.3	-34.0	0.2	-33.7
Ohangwena	42.5	6.7	2.4	-33.9	-3.3	-37.3
Kavango	26.1	17.0	9.9	-19.4	-4.4	-23.7
Omaheke	26.1	9.5	6.0	-16.6	-3.5	-20.1
Omusati	31.8	4.4	1.2	-27.4	-3.2	-30.7
Oshana	31.5	2.7	1.7	-28.8	-1.0	-29.8
Oshikoto	36.1	5.8	4.6	-30.3	-1.3	-31.6
Otjozondjupa	23.8	9.0	8.6	-14.8	-0.4	-15.2
Namibia	28.1	6.6	4.2	-21.5	-2.4	-24.0

2.5 Poverty by language group

Table 10 presents the findings of the relationship between poverty and main language spoken. Poverty is more prevalent among those who speak Khoisan, Rukavango and Caprivi as their main language. Poverty has declined for all language groups between 1993/1994 and 2003/2004. However, over the past five years, between 2003/2004 and 2009/2010, poverty has increased among those who speak Caprivi language by about 13 percentage points. During the period under study, poverty declined more among Oshiwambo, Otjiherero and Nama/Damara speaking people. Poverty has declined lowest among the Khoisan, a decline of about 8 percentage points during the entire period.

Table 10 Poverty incidence by language groups, 1993/94, 2003/04 and 2009/10

	Periods			Differences		
	A: 1993/94	B: 2003/04	C: 2009/10	B-A	C-B	C-A
Main spoken language						
Khoisan	75.6	71.6	68.0	-4.0	-3.5	-7.6
Caprivi	76.3	31.8	44.3	-44.4***	12.5***	-31.9***
Otjiherero	66.8	24.4	21.2	-42.3***	-3.2	-45.6***
Rukavango	75.6	63.5	53.7	-12.0***	-9.8**	-21.8***
Nama/Damara	70.4	44.8	33.5	-25.6***	-11.3***	-36.9***
Oshiwambo	79.0	37.9	23.1	-41.1***	-14.8***	-55.9***
Setswana	34.4	17.7	12.2	-16.7***	-5.5	-22.2***
Afrikaans	18.5	11.3	6.9	-7.2***	-4.3**	-11.5***
Other	54.5	9.1	6.2	-45.4***	-3.0	-48.4***
National	69.3	37.7	28.7	-31.5***	-9.0***	-40.5***

* p<0.10, ** p<0.05, *** p<0.01

68.0%
the percentage of the people who speak Khoisan as their main language are poor. Only 6.9% of people who speaks Afrikaans are poor.

Figure 7 illustrates poverty trends by language groups. Poverty is highest among those who speak Khoisan and Rukavango and lowest among those who speak Afrikaans and Setswana. Poverty declined sharply among those who speak Oshiwambo, Nama/Damara and Rukavango.

Figure 7 Poverty levels by language groups (percent of population under poverty)

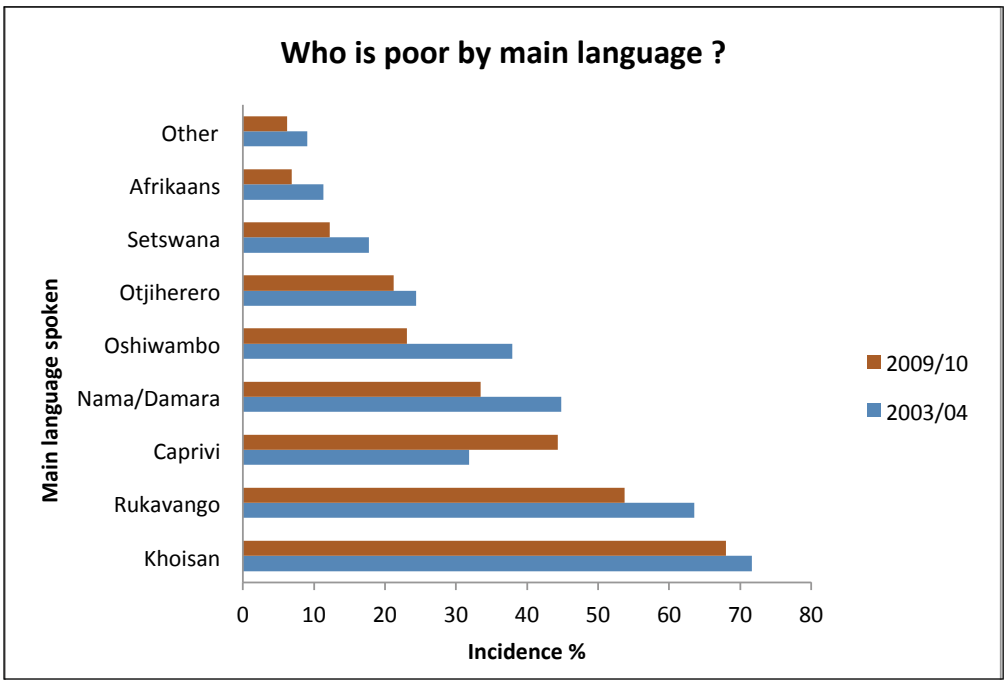


Figure 7.1 Percentage of poor people in the main language group, NHIES 1993/94

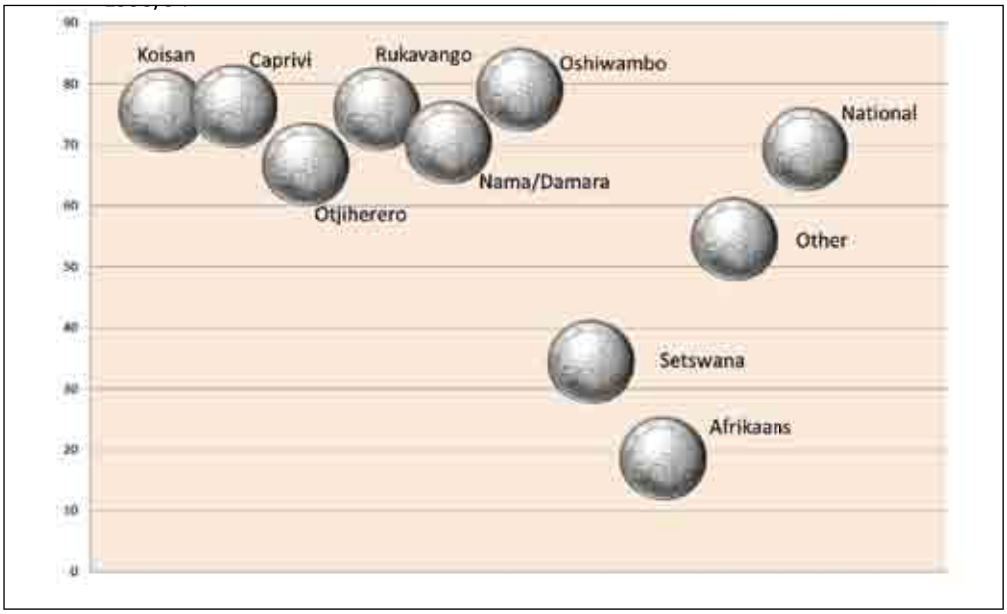


Figure 7.2 Percentage of poor people in the main language group, NHIES 2003/2004

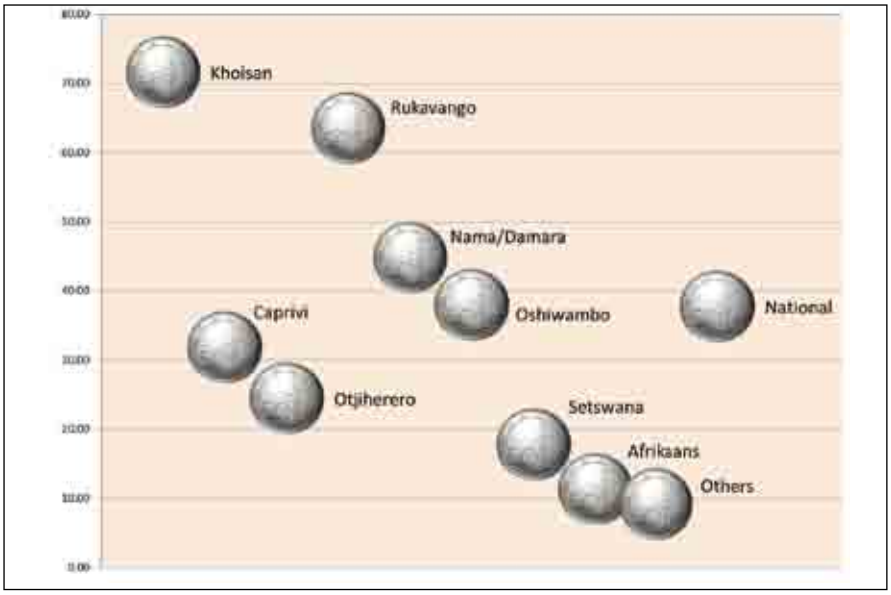
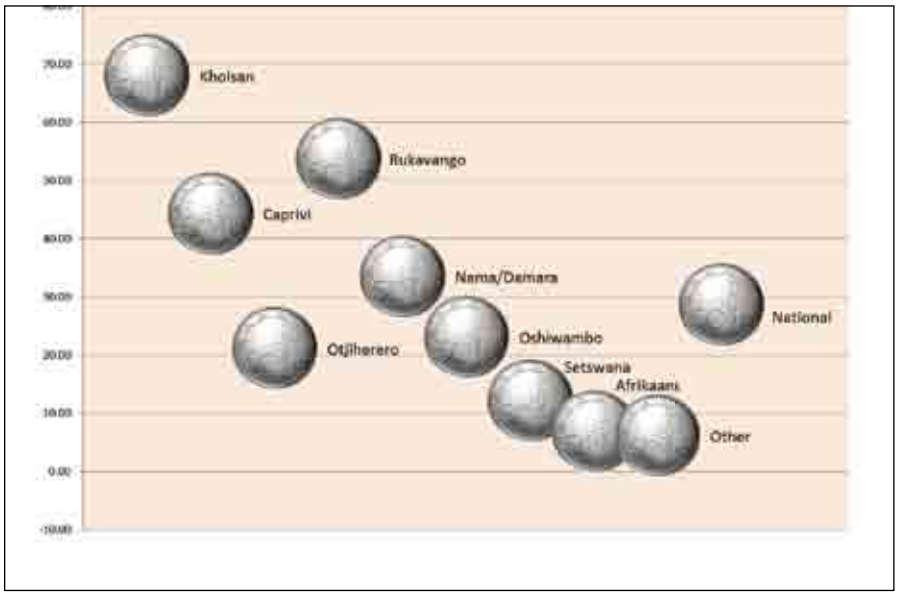


Figure 7.3 Percentage of poor people in the main language group, NHIES 2009/2010



The poverty gap follow the same trend as poverty incidence with those who speak Khoisan, Rukavango and Caprivian as their main language being more affected. This is shown in tables 11.

Table 11 Poverty gap by language groups, 1993/94, 2003/04 and 2009/10

	Periods			Differences		
	A: 1993/94	B: 2003/04	C: 2009/10	B-A	C-B	C-A
Main spoken language						
Khoisan	49.6	32.3	29.0	-17.3*	-3.3	-20.7**
Caprivi	44.2	10.2	16.0	-34.0***	5.8***	-28.2***
Otjiherero	34.3	8.6	6.7	-25.7***	-1.9	-27.5***
Rukavango	39.3	27.0	18.9	-12.4***	-8.0***	-20.4***
Nama/Damara	36.9	19.4	12.5	-17.4***	-6.9***	-24.4***
Oshiwambo	44.2	10.7	5.4	-33.5***	-5.3***	-38.8***
Setswana	11.2	3.0	3.4	-8.2**	0.4	-7.8*
Afrikaans	8.0	3.5	1.5	-4.5**	-2.0**	-6.5***
Other	28.6	3.4	2.4	-25.2***	-1.0	-26.2***
National	37.7	12.9	8.9	-24.9***	-4.0***	-28.9***

* p<0.10, ** p<0.05, *** p<0.01

2.6 Poverty by population characteristics

2.6.1 Poverty by educational attainment

Education is regarded as a human capital endowment that can be used for empowerment purposes. A negative relationship is normally expected between poverty and education with those better educated having higher income and thus less likely to be poor.

Table 12 shows poverty by educational attainment of household head. There has been a steady decline of individuals living in households whose heads do not have formal education or primary education and an increase for those with secondary and tertiary education. About 13 percent of the population 15 years and above do not have formal education with primary and secondary education recorded at 27 and 51 percent respectively. Among those without formal education, almost half (46 percent) are poor while about one third of those with primary education are poor. Education and the likelihood of living in poverty were closely related among those without formal education and primary education. The incidence of being poor declines as educational attainment rises. Poverty incidence among those with primary education is estimated at more than one third compared to 17 percent for those with secondary education. Attainment of tertiary education substantially lowers a person's likelihood of being poor. About 6 percent of the population above 15 years and above has attained tertiary education and poverty levels among this group is non-existent, currently estimated at less than one percent, a reduction of about 18 percentage points during this period. However, since 1993/1994, poverty declined more among those without formal education and among those with primary education by 40 and 45 percentage points, respectively.

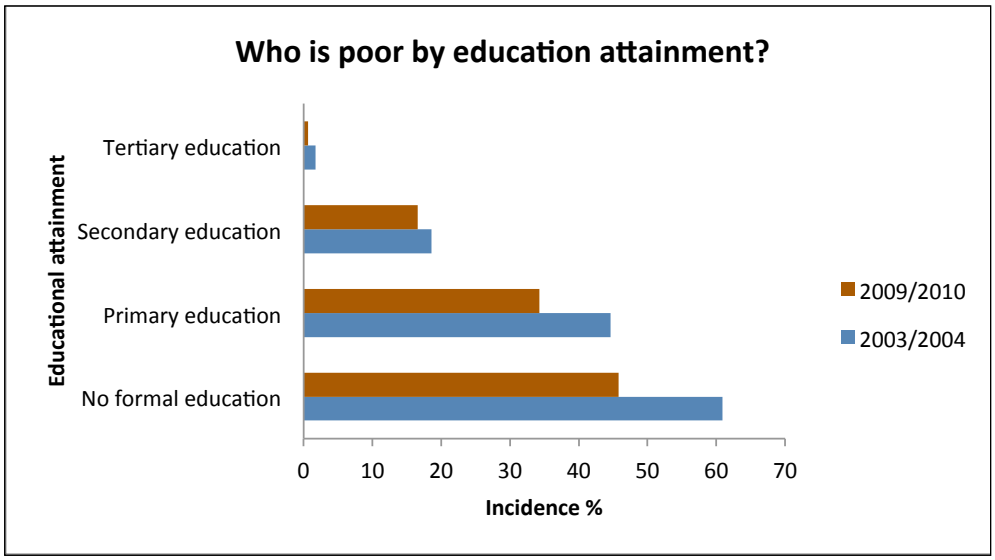
Table 12 Poverty incidence by educational attainment, 1993/94, 2003/04 and 2009/10

	Periods			Differences		
	A: 1993/94	B: 2003/04	C: 2009/10	B-A	C-B	C-A
Educational attainment of HH head						
No formal education	86.2	60.9	45.8	-25.3***	-15.1***	-40.4***
Primary education	79.5	44.6	34.3	-34.9***	-10.3***	-45.2***
Secondary education	45.3	18.6	16.6	-26.8***	-2.0	-28.8***
Tertiary education	18.7	1.7	0.6	-17.0***	-1.1	-18.1***
National	69.3	37.7	28.7	-31.5***	-9.0***	-40.5***

* p<0.10, ** p<0.05, *** p<0.01

Figure 8 illustrate that poverty is prevalent among those living in households whose head do not have formal education and primary education and does not exist among those with tertiary education. However, poverty has also declined sharply among those who live in households whose head of household do not have formal and primary education.

Figure 8 Poverty levels by educational attainment of the head of the household



45.8%

the percentage of people with no formal education that are poor.

Table 13 shows the average poverty gap by educational attainment, with poverty gap declining with the level of educational attainment. The poverty gap shows a declining trend for all levels of education.

Table 13 Poverty gap by educational attainment of the head of household, 1993/94, 2003/04 and 2009/10

	Periods			Differences		
	A: 1993/94	B: 2003/04	C: 2009/10	B-A	C-B	C-A
Educational attainment of HH head						
No formal education	50.8	22.3	15.2	-28.6***	-7.0***	-35.6***
Primary education	42.9	14.8	10.5	-28.2***	-4.3***	-32.5***
Secondary education	21.3	5.4	4.3	-15.9***	-1.1*	-17.0***
Tertiary education	7.2	0.4	0.0	-6.8***	-0.4	-7.2***
National	37.7	12.9	8.8	-24.9***	-4.0***	-28.9***

* p<0.10, ** p<0.05, *** p<0.01

2.6.2 Poverty by source of income

Besides geographic and educational patterns it is also crucial to relate poverty and trends in poverty to households' main sources of income. The main source of income in Namibia is salaries and wages, followed by subsistence farming, pensions and business income. As reported earlier and as shown in Table 14 in 2009/2010, 29 percent of the population lived below the poverty line. Poverty however, was disproportionately found among pensioners, subsistence farmers and those with household business income. Table 14 also suggests that the ability of Namibians to escape poverty could depend on their ability to obtain wages and salaries from employment. Poverty is more prevalent among pensioners and subsistence farmers, at 44 and 39 percent, respectively while about a quarter of those with household business income as their main source are poor. In contrast, about 16 percent of workers are classified as poor, these are individuals who are working but whose consumption fell below the poverty line. This rate is 31 percentage points less than in 1993/1994, continuing a 17 years downward trend. This rate further gives us an indication of the relationship between poverty and employment. The incidence of poverty has declined by more than 30 percentage points in all income categories, with subsistence farmers and pensioners registering a decline of more than 40 percentage points over the past seventeen years.

Tables 15 report analogous evidence on poverty gaps, indicating again that poverty is more intense among those whose main income source is not salaries and or wages.

Table 14 Poverty incidence by source of income, 1993/94, 2003/04 and 2009/10

	Periods			Differences		
	A: 1993/94	B: 2003/04	C: 2009/10	B-A	C-B	C-A
Main income source						
Salaries and wages	46.2	19.5	15.7	-26.7***	-3.8***	-30.5***
Subsistence farming	85.2	48.3	39.4	-36.9***	-8.9***	-45.8***
Pension	86.1	65.3	43.5	-20.8***	-21.8***	-42.6***
Household Business	61.3	32.2	24.5	-29.2***	-7.6**	-36.8***
Other inc. source	74.9	50.5	40.2	-24.4***	-10.3***	-34.7***
National	69.3	37.7	28.7	-31.5***	-9.0***	-40.5***

* p<0.10, ** p<0.05, *** p<0.01

39.4%

the percentage of sub-sistence farmers who are poor compared to 15.7% of poor who receive salaries and wages as their main source of income.

Figure 9 presents the incidence of poverty by main source of income. In both years poverty is highest among pensioners and subsistence farmers. All groups experienced reduction in poverty during this period but to different degrees.

Figure 9 Poverty levels by main source of income

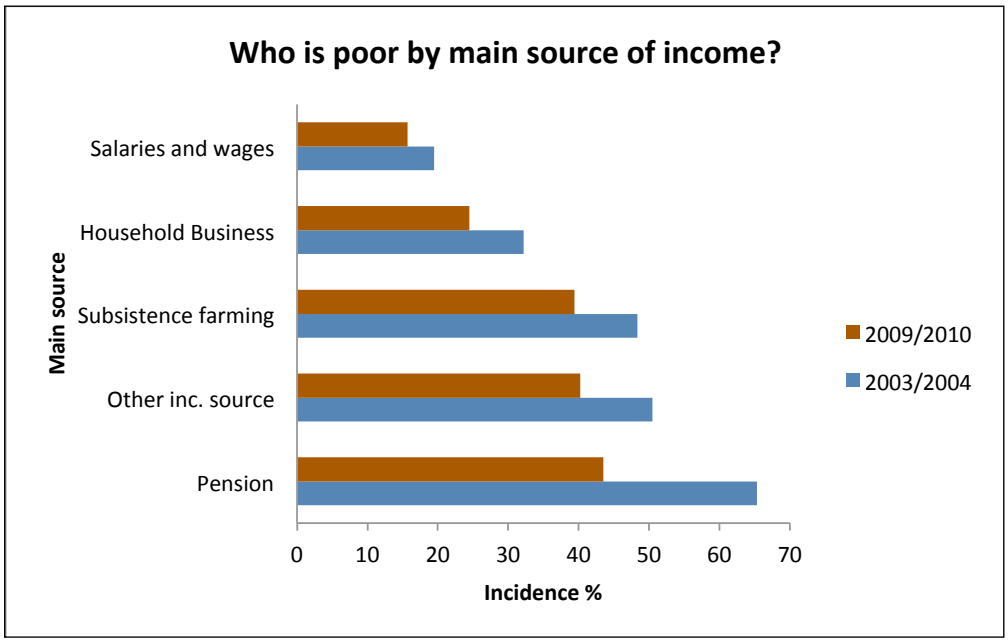


Table 15 Poverty gap by source of income, 1993/94, 2003/04 and 2009/10

	Periods			Differences		
	A: 1993/94	B: 2003/04	C: 2009/10	B-A	C-B	C-A
Main income source						
Salaries and wages	21.5	6.6	4.7	-15.0***	-1.9***	-16.8***
Subsistence farming	47.9	14.6	11.5	-33.2***	-3.1***	-36.4***
Pension	52.0	24.9	14.1	-27.1***	-10.8***	-37.9***
Household Business	35.1	11.7	6.7	-23.5***	-5.0***	-28.5***
Other inc. source	42.6	22.5	15.3	-20.1***	-7.3***	-27.3***
National	37.7	12.9	8.8	-24.9***	-4.0***	-28.9***

* p<0.10, ** p<0.05, *** p<0.01

2.7 Living conditions, ownership and access

The analysis of income poverty has confirmed a picture of positive gains in poverty reduction; however it is important to ascertain how the poor are deprived in other dimensions of wellbeing. Thus, to better understand who the poor are, this section provides information on the poor's access to and use of government services, their living standards in terms of access to health facilities, schools, drinking water, sanitation facilities, assets and local shops.

2.7.1 Poverty by source of drinking water

Table 16 relates poverty to the main sources of drinking water. The table indicates what fraction of the poor has access to which source of drinking water. Households were asked to indicate their main source of drinking water. People who have piped water in dwelling are far less likely to live in poverty than others. On average, the poor have lower access to services. Poverty is highest among those whose sources of drinking water are rivers or "oshanas", dams and public taps at 48, 45 and 40 percent, respectively. About 36 percent and 24 percent of those using wells and those owning piped water in the yard are poor. In Namibia, water is considered to be safe for drinking if it comes from piped water, public tap, boreholes covered/with pumps, and from protected well. The table indicates that, among those whose sources of drinking water are unsafe, the majority are poor. Their main sources of drinking water are wells, dams and rivers, canals, lakes or oshanas. There is a general declining trend in poverty incidence by sources of drinking water. The table indicates that poverty has declined by more than one third in all categories except among those using piped water in dwelling as a source. Only about 7 percent of those using piped water in dwelling are poor. Poverty has declined by more than half among those using wells as their main source of drinking water.

47.7%
the percentage of people who use river, lake, canal or oshanas as their main source of drinking water who are poor.

Table 16 Poverty incidence by source of drinking water, 1993/94, 2003/04 and 2009/10

	Periods			Differences		
	A: 1993/94	B: 2003/04	C: 2009/10	B-A	C-B	C-A
Source of drinking water						
Piped water indoors	23.3	6.6	6.7	-16.6***	0.1	-16.5***
Piped water in yard	68.3	31.3	23.8	-37.0***	-7.5**	-44.5***
Public pipe	82.1	48.7	40.2	-33.4***	-8.5***	-41.9***
Well	86.9	52.3	36.2	-34.6***	-16.1***	-50.7***
Dam	79.7	54.6	45.0	-25.1***	-9.5**	-34.7***
River, canal, lake or oshana	84.5	61.3	47.7	-23.2***	-13.5**	-36.8***
National	69.3	37.7	28.7	-31.5***	-9.0***	-40.5***

* p<0.10, ** p<0.05, *** p<0.01

The poverty gap has declined across the board over the last seventeen years. However, Table 17 indicates that it is still high among the poorest, those who source their drinking water from dams, rivers and oshanas.

Table 17 Poverty gap by source of drinking water, 1993/94, 2003/04 and 2009/10

	Periods			Differences		
	A: 1993/94	B: 2003/04	C: 2009/10	B-A	C-B	C-A
Source of drinking water						
Piped water indoors	8.8	1.9	1.6	-7.0***	-0.2	-7.2***
Piped water in yard	33.5	10.5	7.0	-23.0***	-3.4***	-26.4***
Public pipe	46.2	16.2	12.7	-30.0***	-3.5***	-33.5***
Well	51.3	16.9	9.7	-34.4***	-7.2***	-41.6***
Dam	43.1	19.1	15.9	-24.0***	-3.2	-27.1***
River, canal, lake or oshana	46.4	26.4	14.9	-20.0***	-11.5***	-31.4***
National	37.7	12.9	8.8	-24.9***	-4.0***	-28.9***

* p<0.10, ** p<0.05, *** p<0.01

2.7.2 Poverty by sanitation facilities

Table 18 indicates an improvement in the poverty status of those who do not have access to decent sanitation facilities. Among those who use pitlatines, buckets and bushes there has been a reduction of poverty incidence by more than 40 percentage points. However, among those who use buckets, more than 30 percent are poor while among those who use bushes more than 40 percent are poor. Of those who use pitlatines, 22 percent are poor. Only about 8 percent of those who use flush toilets connected to a public sewerage are poor, while about 16 percent of those who use flush toilets connected to a septic tank are poor.

Tables 18 and 19 confirm these trends and differences in the context of poverty intensity.

Table 18 Poverty incidence by sanitation facilities, 1993/94, 2003/04 and 2009/10

42.1%
the percentage of people who use bush/ no toilet who are poor. Only 7.7% of those who use flush toilet connected to a public sewerage system are poor.

	Periods			Differences		
	A: 1993/94	B: 2003/04	C: 2009/10	B-A	C-B	C-A
sanitation facilities						
Flush toilet connected to a public sewage system	29.5	8.9	7.7	-20.7***	-1.2	-21.8***
Flush toilet connected to a septic tank	60.0	16.8	16.1	-43.2***	-0.8	-43.9***
Pit	74.8	34.2	22.2	-40.7***	-12.0***	-52.7***
Bucket, pail	77.2	47.9	30.9	-29.4***	-17.0*	-46.3***
Bush/no toilet	84.7	52.8	42.1	-31.9***	-10.7***	-42.6***
Other	44.5	20.2	41.2	-24.3**	21.0*	-3.3
National	69.3	37.7	28.7	-31.5***	-9.0***	-40.5***

* p<0.10, ** p<0.05, *** p<0.01

Table 19 Poverty gap by sanitation facilities, 1993/94, 2003/04 and 2009/10

	Periods			Differences		
	A: 1993/94	B: 2003/04	C: 2009/10	B-A	C-B	C-A
sanitation facilities						
Flush toilet connected to a public sewage system	11.7	2.7	2.0	-9.0***	-0.7	-9.7***
Flush toilet connected to a septic tank	30.5	3.9	5.1	-26.5***	1.5	-25.4***
Pit	41.3	10.6	6.2	-30.6***	-4.5***	-35.1***
Bucket, pail	46.7	18.3	12.6	-28.5***	-5.7	-34.1***
Bush/no toilet	47.9	18.3	13.3	-29.6***	-5.1***	-34.7***
Other	29.8	6.3	11.1	-23.5	4.8	-18.7
National	37.7	12.9	8.8	-24.9***	-4.0***	-28.9***

* p<0.10, ** p<0.05, *** p<0.01

2.7.3 Poverty by ownership/access to assets

Availability and use of communication services is a key development indicator. The assets that poor people possess or have access to presents them with opportunities and thus affect their prospects of escaping poverty. Thus, expanding the assets of the poor affords them an opportunity to strengthen their position and escape poverty. Apart from consumption which defines whether a household is poor, there are other economic characteristics that can be correlated with poverty, such as properties and assets owned by the households. Table 20 shows that ownership of radio and telephone increased in the last two decades while it has declined for ownership of ploughs and goats. The proportion of people who neither owns nor has access to goats, cattle, grazing land and field for crops has increased over time. Ownership of grazing land has fluctuated though currently higher at 12 percent compared 10 percent in 1993/1994. Ownership of fields for crops has fluctuated from 60 percent in 1993/1994 to 29 percent in 2003/2004 before it increased to 42 percent in 2009/2010. However, the proportion of the population who neither own nor has access to fields for crops indicates an increasing trend from 29 percent in 1993/1994 to 41 percent in 2009/2010 an increase of about 13 percentage points.

Table 20 Proportion of population by ownership/access to assets

	Periods			Differences		
	D1: 1993/94	D2: 2003/04	D3: 2009/10	D2-D1	D3-D1	D3-D2
Radio						
Owns	67.5	74.2	74.5	6.7***	7.0***	0.3
Neither owns nor has access	27.8	13.9	15.2	-13.9***	-12.6***	1.3
Telephone /Cell phone						
Owns	13.5	31.7	82.7	18.1***	69.1***	51.0***
Neither owns nor has access	82.8	34.0	9.0	-48.8***	-73.8***	-25.0***
Plough						
Owns	32.5	31.2	29.9	-1.4	-2.6	-1.3
Neither owns nor has access	60.6	55.5	58.5	-5.1**	-2.1	3.0*
Cattle						
Owns	45.1	41.0	42.1	-4.2**	-3.0*	1.2
Neither owns nor has access	49.8	51.7	51.0	1.91	1.21	-.69
Goat						
Owns	50.9	47.6	45.7	-3.3*	-5.2***	-2.0
Neither owns nor has access	47.2	49.1	51.5	1.8	4.3**	2.5*
Grazing land						
Owns	9.6	4.6	11.8	-5.0***	2.2	7.2***
Neither owns nor has access	29.0	35.3	36.4	6.26***	7.4***	1.14
Field for crops						
Owns	60.2	29.5	41.6	-30.7***	-18.5***	12.2***
Neither owns nor has access	28.6	36.5	41.2	7.9***	12.6***	4.7***

41.6%

the percentage of people who own land for crops. Only 11.8% owns land for grazing.

34.7%
the percentage of people who own land for crops who are poor.

Table 21 indicates how ownership of such assets is correlated with poverty. Access to the media is crucial both in terms of receiving information and communicating outside the community or region. About a quarter of those who own radios are poor, while about 43 percent of those who have access to a radio are in poverty. However, more than one third (38 percent) of those that do not own nor have access to a radio are poor. Only 24 percent of those who own a telephone are in poverty, while 49 percent of those who have access to a telephone are poor. More than half (58 percent) of those who do not own or do not have access to a telephone are poor. Poverty is common among those who own cattle and goats; about 51 percent of those who either own or have access to grazing land are in poverty. About 68 percent of those who either own or have access to a field for crops are poor and about 21 percent of those that neither own nor have access to a field for crops are poor.

Table 22 presents analogous evidence when looking at the poverty gap instead of poverty incidence.

Table 21 Poverty incidence by ownership/access to assets

	Periods			Differences		
	D1: 1993/94	D2: 2003/04	D3: 2009/10	D2-D1	D3-D1	D3-D2
Radio						
Owns	63.1	33.3	24.8	-29.8***	-38.3***	-8.5***
Neither owns nor has access	83.0	47.5	38.3	-35.5***	-44.7***	-9.2***
Telephone (landline)/Cell telephone						
Owns	14.2	8.9	23.5	-5.3**	9.3***	14.6***
Neither owns nor has access	78.7	56.8	57.8	-21.9***	-20.9***	1.1
Plough						
Owns	80.7	45.0	32.7	-35.7***	-48.0***	-12.3***
Neither owns nor has access	62.1	30.5	24.1	-31.6***	-38.0***	-6.5***
Cattle						
Owns	74.8	36.5	26.0	-38.4***	-48.9***	-10.5***
Neither owns nor has access	63.5	36.7	29.1	-26.8***	-34.4***	-7.7***
Goat						
Owns	76.4	38.9	27.2	-37.5***	-49.3***	-11.7***
Neither owns nor has access	62.0	37.0	30.4	-25.0***	-31.7***	-6.6***
Grazing land						
Owns	66.3	20.6	19.2	-45.7***	-47.1***	-1.4
Neither owns nor has access	49.8	30.9	27.3	-18.9***	-22.5***	-3.6*
Field for crops						
Owns	81.0	46.8	34.7	-34.2***	-46.3***	-12.1***
Neither owns nor has access	47.2	26.0	21.0	-21.1***	-26.2***	-5.0***

Table 22 Poverty gap by ownership/access to assets

	Periods			Differences		
	D1: 1993/94	D2: 2003/04	D3: 2009/10	D2-D1	D3-D1	D3-D2
Radio						
Owns	33.3	10.9	7.4	-22.4***	-25.8***	-3.5***
Neither owns nor has access	47.3	17.8	12.4	-29.5***	-35.0***	-5.5***
Telephone (landline)/Cell telephone						
Owns	4.4	2.3	6.5	-2.1**	2.2**	4.2***
Neither owns nor has access	43.7	21.0	22.3	-22.6***	-21.4***	1.3
Plough						
Owns	45.5	13.5	9.2	-32.0***	-36.4***	-4.3***
Neither owns nor has access	32.9	11.3	7.8	-21.6***	-25.1***	-3.5***
Cattle						
Owns	41.7	11.3	7.2	-30.3***	-34.4***	-4.1***
Neither owns nor has access	33.7	13.1	9.4	-20.6***	-24.3***	-3.7***
Goat						
Owns	42.4	11.6	7.8	-30.8***	-34.6***	-3.8***
Neither owns nor has access	33.0	14.2	9.9	-18.8***	-23.2***	-4.3***
Grazing land						
Owns	37.3	6.5	4.4	-30.8***	-32.9***	-2.1
Neither owns nor has access	25.7	12.1	9.1	-13.6***	-16.5***	-3.0***
Field for crops						
Owns	45.5	16.7	10.1	-28.8***	-35.4***	-6.6***

2.7.4 Poverty by distance to facilities

Access to facilities is a good indicator of standards of living. Access to drinking water has a direct impact on the population's health standards. It could also impact the general development of communities. Communities' access to local shops or market is also crucial as it offers job opportunities as well as access to goods and services. Table 23 indicates the proportion of the population that has access to different facilities within one kilometer walking distance. About 6 percent of the population has lived within one kilometer of a clinic in the last two decades. More than two thirds of the population has lived within one kilometer to drinking water, while 22 percent have lived within one kilometer to a local shop or market. Just over one third has lived within one kilometer of public transport

Table 23 Proportion of population with distances to facilities and services less than 1 km

	Period		Difference
	D1: 2003/04	D2: 2009/10	D2-D1
Drinking water	58.4	67.9	9.4***
Local shop, market	22.1	21.9	-0.2
Hospital or clinic	5.7	6.5	0.8
Mobile clinic	95.2	90.9	-4.3***
Public transport	34.6	37.2	2.6
Primary school	12.8	15.2	2.3*
High school	4.0	5.9	1.8**
Combined school	6.3	19.6	13.3***
Police station	4.4	3.9	-0.5
Post office	3.7	3.6	-0.1
Magistrate court	1.9	1.9	0.1
Pension pay point		8.9	

* p<0.10, ** p<0.05, *** p<0.01

67.9%
the percentage of people with a distance of less than 1km to drinking water.

Table 24 presents poverty status according to availability of public services. The table shows that about 41 percent of those who live one kilometer or more away from a drinking water source are poor, while 23 percent of those live within one kilometer of drinking water are in poverty. The table also indicates a declining poverty trend among those who live far from drinking water, though still high at 41 percent. The poverty rate among those who live within one kilometer of a hospital or clinic has remained the same, while those who live one kilometer or more away from drinking water have seen a decline of their poverty rate from 53 percent in 2003/2004 to 41 percent in 2009/2010. Distance from school is also an important factor determining poverty. While about a quarter of those who live within one kilometer are poor, about 30 percent of those who live one kilometer or more away from a primary school are in poverty. Access to market is another factor that provides people with an opportunity to either sell their produce or provide services to the nearest market. About 30 percent of those who live one kilometer or more away from local shops or market are in poverty, while that rate is only 26 percent for those who live within one kilometer. Although the data indicates a general declining trend over the years, the rates increase as the distance to facilities and services increases. While the table presents the incidence of poverty by access to services, some of these services do have a compounding effect on poverty and as such should not be viewed in isolation.

40.5%

the percentage of people with a distance of 1Km or more to drinking water who are poor.

Table 25 presents the results in terms of poverty gap.

Table 24 Poverty incidence by distances to facilities and services

	Period				Difference	
	2003/04		2009/10			
	A: <1 km	B: 1 km and more	C:< 1 km	D: 1 km and more	C-A	D-B
Mobile clinic	37.4	45.4	28.3	33.2	-9.1	1.5***
Drinking water	26.6	53.3	23.1	40.5	-3.5**	1.5**
Local shop, market	28.1	40.5	26.3	29.4	-1.8	2.5
Hospital or clinic	19.7	38.8	19.8	29.4	0.0	5.3
Public transport	25.6	44.2	22.0	32.7	-3.6*	1.9*
Primary school	29.4	39.0	24.3	29.5	-5.2	3.3
High school	14.6	38.7	11.3	29.8	-3.4	3.2
Combined school	23.9	38.7	17.0	31.6	-7.0**	3.5**
Police station	18.7	38.6	10.7	29.5	-8.0	5.3
Post office	11.6	38.8	5.0	29.6	-6.6	3.6*
Magistrate court	15.4	38.2	8.4	29.1	-7.0	4.6
Pension pay point			25.1	29.1		

* p<0.10, ** p<0.05, *** p<0.01

Table 25 Poverty gap by distances to facilities and services

	Period				Difference	
	2003/04		2009/10			
	A: <1 km	B: 1 km and more	C:< 1 km	D: 1 km and more	C-A	D-B
Mobile clinic	12.8	14.1	8.8	9.6	-4.0***	0.7***
Drinking water	9.3	17.8	7.1	12.5	-2.2***	0.6***
Local shop, market	10.0	13.7	8.5	8.9	-1.5	1.1
Hospital or clinic	6.7	13.2	6.9	9.0	0.2	2.2
Public transport	9.5	14.7	7.1	9.9	-2.3***	0.9***
Primary school	11.4	13.1	8.0	9.0	-3.4**	1.5**
High school	5.1	13.2	3.2	9.2	-1.9	1.3
Combined school	8.7	13.1	5.2	9.7	-3.5**	1.7**
Police station	7.7	13.1	3.6	9.1	-4.1*	2.2*
Post office	5.3	13.1	1.3	9.1	-4.0**	1.9**
Magistrate court	6.3	13.0	1.8	9.0	-4.5**	2.1**
Pension pay point			9.3	8.8		

* p<0.10, ** p<0.05, *** p<0.01

3. Sectorial decomposition of changes in poverty

This section aims at sifting the causes of poverty changes observed overtime. It is essential to understand whether poverty changes are a result of demographic changes or are a direct result of changes in poverty. The findings are critical in designing poverty interventions.

Table 26 uses a sectorial decomposition technique to show how changes in the demographic shares of the different population groups (called a "sectorial effect") and changes in the poverty rates of these different groups (called a "poverty effect") have affected overall poverty overtime. Changes in the demographic share of population groups can decrease total poverty, for instance, if movements of population from groups with higher poverty rates to groups with lower poverty rates are observed. Changes in the poverty rates of different demographic groups have an impact on total poverty that is directly proportional to the demographic shares of those groups. The table indicates that the Namibian population has become slightly more urbanised over the last decade: the urban share moved from 35 percent to 38 percent between 2003/2004 and 2009/2010. However, at about 1 percentage point, the effect of this demographic change on poverty is minimal or negligible. Thus, the reduction in poverty is driven by the group poverty components which are responsible for about 8 percentage points of the reduction in total poverty. Rural poverty itself is responsible for about 89 percentage points of the decline in total poverty.

Table 26: Sectorial decomposition of change in poverty by areas

	Population Share		Sectorial effect	Within group poverty		Poverty effect
	2003/04	**2009/10**	**C1**	**2003/04**	**2009/10**	**C2**
Urban	34.64	37.92	**0.52**	17.02	14.59	**-0.88**
Rural	65.36	62.08	**-1.41**	48.71	37.37	**-7.23**
Total	100.0	100.0	**-0.89**			**-8.11**

Table 27 indicates that the sectorial effect of changes in regional demographic shares is relatively small. While the Kavango, Khomas and Erongo regions registered a net increase in population, the opposite was true for almost all other regions. The decrease in poverty in Ohangwena explains about 36 percent of the total decrease in poverty, while that in Omusati and Kavango was responsible for about 27 and 13 percent, respectively. The effect of an increase in poverty in Caprivi and Khomas was responsible for slowing down the decline in poverty by about 0.7 and 0.4 percentage points respectively.

Table 27: Sectorial decomposition of change in poverty by regions

		Population Share		Sectorial effect	Within group poverty		Poverty effect
	Urbanization in 2003/04	**2003/04**	**2009/10**	**C1**	**2003/04**	**2009/10**	**C2**
Caprivi	29.3	4.7	4.9	**0.06**	36.51	50.18	**0.65**
Erongo	83.8	5.4	6.7	**0.14**	14.32	7.14	**-0.43**
Hardap	43.2	3.7	3.3	**-0.16**	41.96	25.97	**-0.56**
Karas	56.1	3.4	3.8	**0.11**	32.65	26.78	**-0.21**
Kavango	18.6	11.4	13.7	**1.40**	64.10	55.16	**-1.12**
Khomas	94.2	14.1	16.5	**0.22**	8.12	10.74	**0.40**
Kunene	34.6	3.4	3.6	**0.08**	36.76	30.18	**-0.23**
Ohangwena	1.3	12.9	11.5	**-0.60**	55.51	30.06	**-3.11**
Omaheke	24.6	3.1	3.0	**-0.01**	41.36	31.10	**-0.31**
Omusati	1.0	12.3	11.4	**-0.27**	38.39	19.11	**-2.29**
Oshana	32.7	9.3	8.3	**-0.23**	25.70	19.38	**-0.56**
Oshikoto	9.2	9.4	7.8	**-0.76**	49.39	44.24	**-0.44**
Otjozondjupa	53.8	6.8	5.6	**-0.45**	38.96	33.73	**-0.32**
Total	34.6	100	100	**-0.46**			**-8.54**

Table 28 indicates that the 2009/2010 period was characterised by fewer younger and fewer elderly heads of households. In total the sectorial effect was zero. About 58 percent of the reduction in poverty is attributable to the improvement in the wellbeing of those living in households with heads aged 60 years and above.

Table 28: Sectorial decomposition of change in poverty by group age of the household head

	Population share		Sectorial effect	Within group poverty		Poverty effect
	2003/04	**2009/10**	**C1**	**2003/04**	**2009/10**	**C2**
16-20	1.05	0.86	**-0.05**	32.21	21.78	**-0.10**
21-24	2.68	2.44	**-0.06**	28.83	20.31	**-0.22**
25-29	6.75	6.51	**-0.06**	28.28	20.46	**-0.52**
30-34	9.96	10.01	**0.01**	25.84	18.65	**-0.72**
35-39	11.80	11.18	**-0.16**	23.70	27.12	**0.39**
40-44	12.18	11.43	**-0.20**	29.21	24.04	**-0.61**
45-49	9.84	11.08	**0.34**	28.31	26.35	**-0.21**
50-54	8.86	9.11	**0.08**	36.43	25.29	**-1.00**
55-59	6.79	7.97	**0.44**	43.22	31.71	**-0.85**
60-64	7.40	7.19	**-0.09**	51.76	34.38	**-1.27**
65+	22.71	22.19	**-0.25**	57.32	39.79	**-3.94**
Total	100.00	100.00	**0.00**			**-9.03**

Table 29 indicates that there has been a decline in the population share of those with no formal education and primary education. The sectorial effect is about -0.83 percentage point, which indicates that the demographic shift towards being more educated (see in particular the decline in no-formal and primary education levels and the increase in the population share of secondary education) has contributed to poverty reduction of the order of 0.83 percentage point out of the total fall of 9 percentage points between 2003/2004 and 2009/2010. The table shows that poverty declined significantly within each of the groups, with the reduction among those without formal education responsible for about 50 percent of the total reduction in poverty.

Table 29: Sectorial decomposition of change in poverty by education level of the household head

	Population share		Sectorial effect	Within group poverty		Poverty effect
	2003/04	**2009/10**	**C1**	**2003/04**	**2009/10**	**C2**
No formal education	28.10	26.35	**-0.94**	60.91	45.81	**-4.11**
Primary education	33.46	30.73	**-1.08**	44.56	34.25	**-3.31**
Secondary education	30.01	36.86	**1.20**	18.56	16.56	**-0.67**
Tertiary education	8.43	6.07	**-0.03**	1.69	0.59	**-0.08**
Total	100.00	100.00	**-0.83**			**-8.17**

Table 30 indicates that subsistence farming as a main source of income declined between the two periods. This has contributed to a decline in poverty by about 3 percentage points, while the increase in pension as a source of income has slowed down poverty reduction by about 1 percentage point. The overall poverty effect is about 8 percent, with about two thirds of the reduction in poverty attributable to poverty reduction among subsistence farmers and pensioners.

Table 30: Sectorial decomposition of change in poverty by the main income source

	Population share		Sectorial effect	Within group poverty		Poverty effect
	2003/04	**2009/10**	**C1**	**2003/04**	**2009/10**	**C2**
Salaries and wages	39.82	42.80	**0.52**	19.51	15.68	**-1.58**
Subsistence farming	36.46	29.44	**-3.08**	48.33	39.42	**-2.94**
Pension	10.36	13.08	**1.48**	65.29	43.49	**-2.56**
Household Business	6.36	7.47	**0.31**	32.15	24.52	**-0.53**
Other inc. source	6.99	7.21	**0.10**	50.53	40.20	**-0.73**
Total	100.00	100.00	**-0.66**			**-8.34**

Table 31 indicates that there was a significant increase in the population share of those who speak Rukavango as a main language. Given that the majority of the Rukavango speaking population is relatively poor, this has contributed to an increase in poverty by about 2 percentage points. The total poverty effect is about 10 percentage points, with about 73 percent of the reduction in poverty attributable to poverty reduction among those whose main language is Oshiwambo. Those whose main language is Nama/Damara and Rukavango were responsible for a reduction of about 1.2 and 1.3 percentage points in poverty respectively.

Table 31: Sectorial decomposition of change in poverty by main spoken language

	Population share		Sectorial effect	Within group poverty		Poverty effect
	2003/04	**2009/10**	**C1**	**2003/04**	**2009/10**	**C2**
Khoisan	1.53	1.34	**-0.13**	71.57	68.02	**-0.05**
Caprivi	4.92	4.83	**-0.03**	31.83	44.32	**0.61**
Otjiherero	8.14	8.36	**0.05**	24.40	21.20	**-0.26**
Rukavango	11.75	15.02	**1.92**	63.51	53.74	**-1.31**
Nama/Damara	10.50	11.85	**0.53**	44.83	33.51	**-1.26**
Oshiwambo	51.95	48.30	**-1.11**	37.91	23.11	**-7.42**
Setswana	0.31	0.23	**-0.01**	17.71	12.18	**-0.01**
Afrikaans	8.15	7.20	**-0.09**	11.25	6.94	**-0.33**
Other	2.75	2.86	**0.01**	9.14	6.15	**-0.08**
Total	100.00	100.00	**1.13**			**-10.13**

4. The evolution of inequality in Namibia

While poverty focuses on the poor, inequality is a broader measure that is defined over the entire population. Inequality is defined as disparities in the distribution of economic assets (wealth) and income within or between populations or individuals.

Table 32 gives a snapshot of the changes in the national distribution of adjusted per capita expenditures between 2003/2004 and 2009/2010. This gives us a hint of the key results of welfare analysis in this paper. The table sorts the Namibian population from the poorest to the richest and shows the growth rate of consumption for each decile or for each tenth of the population distribution. The table indicates an increase in the distribution of consumption between 2003 and 2010 for all deciles. The table shows that on average the middle class (represented by deciles 6 to 8) has registered the highest growth rate. It can also be observed that the first decile, which represents the poorest group, has registered a relatively high growth rate. This growth in the first decile is good as it contributes most to the reduction in the severity of poverty. Thus, this picture helps explain changes in both poverty and inequality between 2003/2004 and 2009/2010.

Table 32: Average adjusted per capita expenditures by deciles, 2003/04 and 2009/10

Deciles	2003/04	2009/10	Growth (in %)	Difference
1	141.9	173.9	22.6	32.0***
2	231.9	275.0	18.6	43.1***
3	296.1	351.4	18.7	55.3***
4	357.7	428.3	19.7	70.5***
5	434.5	526.7	21.2	92.2***
6	533.2	661.4	24.1	128.3***
7	684.4	861.0	25.8	176.7***
8	951.6	1185.1	24.5	233.5***
9	1535.4	1876.7	22.2	341.3***
10	5506.4	6538.1	18.7	1031.7***
National	**1067.9**	**1288.1**	**20.6**	**220.2*** **

* p<0.10, ** p<0.05, *** p<0.01

In literature, the Gini Coefficient is often used to show the extent of inequality in the distribution of well-being. Unlike poverty analysis, which focuses only on the section of the population that is poor, inequality analysis considers the entire population. The Gini Coeffient has a value of zero for perfect equality and 1 for perfect inequality. Lorenz curves are also often used to show inequality graphically. The Lorenz curve shows the share in total income of those among some bottom population shares.

In order to analyze the change in inequality between 2003/2004 and 2009/2010, the Lorenz curves of the two periods are compared in Figure 10. The difference between the two curves is minimal.

Figure 10 Lorenz curves of 2003/04 and 2009/10

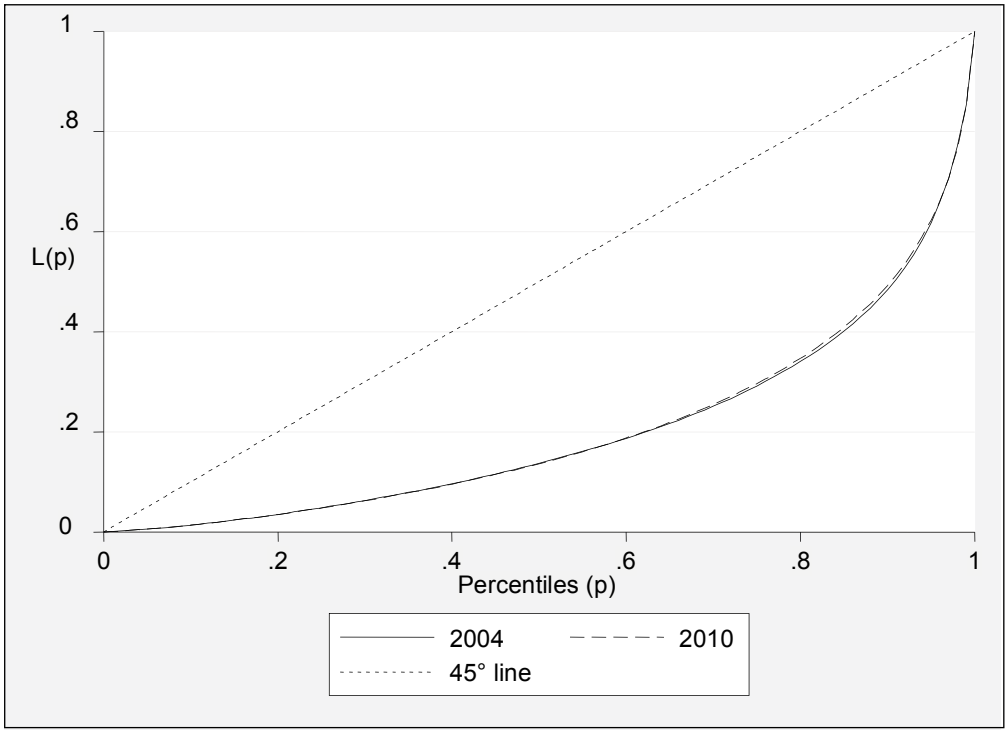


Table 33 indicates that inequality in Namibia has declined between 1993/1994 and 2003/2004, but is still very high by international standards. The decline between 2003/2004 and 2009/2010 is not statistically significant. Inequality is currently estimated at 0.597, a reduction of about 5 percentage points from 0.646 in 1993/1994. Although inequality is showing a declining trend over the last seventeen years, the rate of decline is slowing.

Table 33 Inequality in Namibia

	Gini Index	Std. Err.	t	P>t	[95% Conf.]	
A: 1993/94	0.6455	0.0174	37.0004	0.0000	0.6111	0.6799
B: 2003/04	0.6003	0.0117	51.4635	0.0000	0.5774	0.6232
C: 2009/10	0.5971	0.0102	58.3345	0.0000	0.5770	0.6172
Difference(B-A)	-0.0452	0.0210	-2.1537	0.0317	**-0.0864**	**-0.0040**
Difference(C-B)	-0.0032	0.0155	-0.2088	0.8347	**-0.0337**	**0.0272**

4.1 Inequality by population groups

Although we observe minimal changes in overall inequality over time, this does not mean that within-group inequality and between-group inequality have remained the same overtime. Such components of total inequality are shown in Figure 12 and Table 42. Within-group inequality shows how much inequality there is within each of the various demographic groups. Between-group inequality shows how much inequality there is between those various groups, by showing the inequality of the average consumption expenditures of each of these groups.

Table 34 shows the evolution of inequality in rural and urban areas and in the thirteen administrative regions of Namibia. Table 34 also indicates between and within group inequality across these areas and regions. The table indicates that consumption varies inside the locality or inside each region leading to within-group inequality. This is essential as it can help direct regional economic development planning. The table shows a large between-area component of inequality thereby suggesting that a significant proportion of inequality is explained by differences in living standards across the different areas of the country. While income increased overtime at the national, locality and regional levels, the changes in inequality within the different groups of the population have not been similar. At the national level, inequality declined overtime as evident from Table 34. Inequality is higher in urban than in rural areas, 0.583 and 0.487 respectively. In rural areas, inequality shows a declining trend, however it fluctuates in urban areas, declining between 1993/1994 and 2003/2004 and increasing slightly between 2003/2004 and 2009/2010. The rural areas registered a steady decline in inequality over the past seventeen years, thus changes in rural areas seem to be driving the observed changes at the national level.

Comparing inequality between the thirteen administrative regions leads to mixed conclusions. Inequality is highest in Karas at 0.634 and lowest in Ohangwena at 0.405, which however has registered a significant increase in inequality over the past five years between 2003/2004 and 2009/2010. Inequality fluctuated between 1993/1994 and 2009/2010. Between 1993/1994 and 2003/2004, inequality declined in almost all regions but increased between 2003/2004 and 2009/2010 in Khomas, Kunene, Ohangwena, Omusati, Caprivi, Karas and Otjozondjupa, i.e. inequality increases in seven regions out of thirteen between 2003/2004 and 2009/2010. Changes in inequality contrast with movements in poverty. Poverty recorded significant reductions at national, locality and regional levels, with poverty increasing only in Khomas and Caprivi region. Overall, Khomas and Caprivi are the two regions to have registered increases in both poverty and inequality between 2003/2004 and 2009/2010.

Khomas, Kunene, Ohangwena, Omusati, Caprivi, Karas and Otjozondjupa, the regions with increases in inequality between 2003/2004 and 2009/2010.

Table 34 Estimated changes in inequality by regions and localities

	Gini			Differences	
	A: 1993/94	B: 2003/04	C: 2009/10	B-A	C-A
Urban	0.615	0.574	0.583	-.0416	.0094
Rural	0.541	0.503	0.487	-.0385	-.0152
Within	0.262	0.250	0.250	-0.012	0.001
Between	0.305	0.261	0.261	-0.045	0.000
Overlap	0.079	0.090	0.086	0.012	-0.004
Caprivi	0.481	0.436	0.493	-.0442	.0569**
Erongo	0.557	0.566	0.518	.0089	-.0484
Hardap	0.617	0.657	0.592	.0406	-.0659*
Karas	0.631	0.620	0.634	-.011	.0139
Kavango	0.616	0.494	0.456	-.1228***	-.0378
Khomas	0.572	0.567	0.607	-.005	.0397*
Kunene	0.460	0.492	0.513	.032	.0207
Ohangwena	0.436	0.360	0.405	-.0754**	.0448
Omaheke	0.681	0.635	0.587	-.0458	-.0479
Omusati	0.459	0.378	0.410	-.0809**	.032
Oshana	0.525	0.517	0.515	-.0081	-.0029
Oshikoto	0.533	0.457	0.444	-.0757	-.0138
Otjozondjupa	0.601	0.583	0.593	-.0173	.0098
Within	0.052	0.053	0.060	0.001	0.007
Between	0.386	0.346	0.326	-0.040	-0.020
Overlap	0.208	0.202	0.211	-0.006	0.009

As indicated in Table 34, Figure 12 illustrates that though modestly inequality declined overtime in rural areas while in urban areas inequality declined between 1993/1994 and 2003/2004 but increased slightly between 2003/2004 and 2009/2010.

Figure 11 Inequality trends in Urban and rural areas, 1993/1994, 2003/2004, 2009/2010

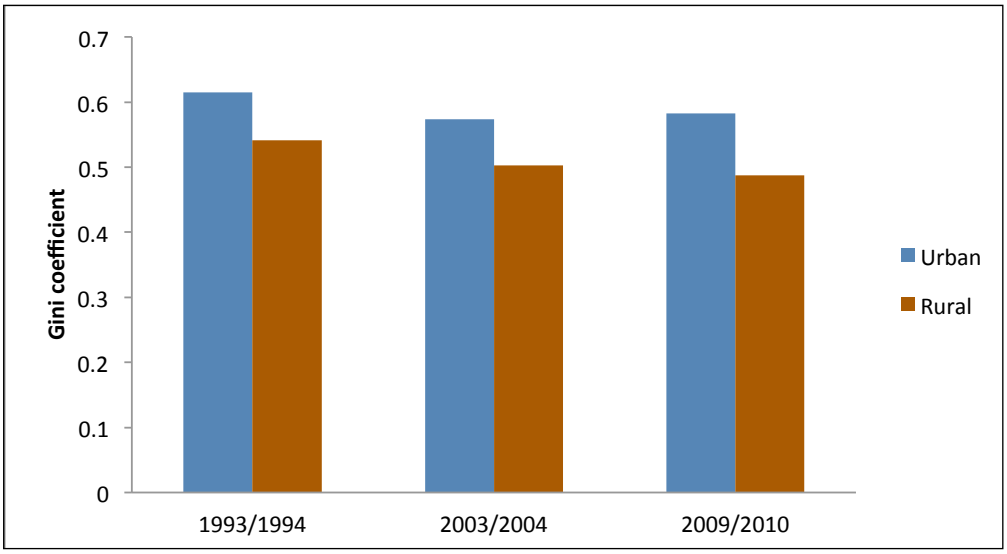
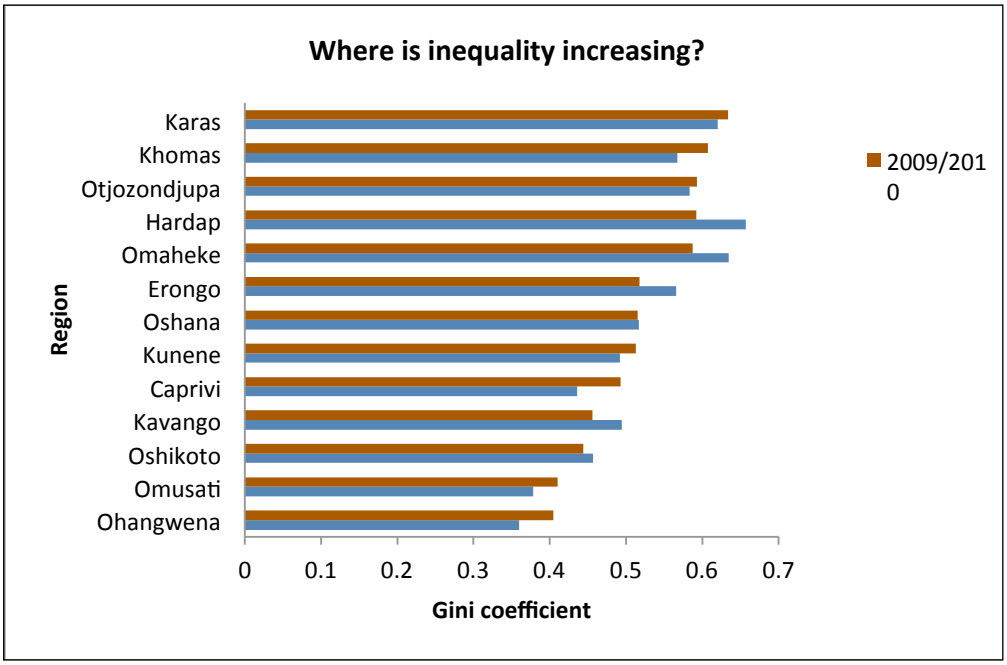


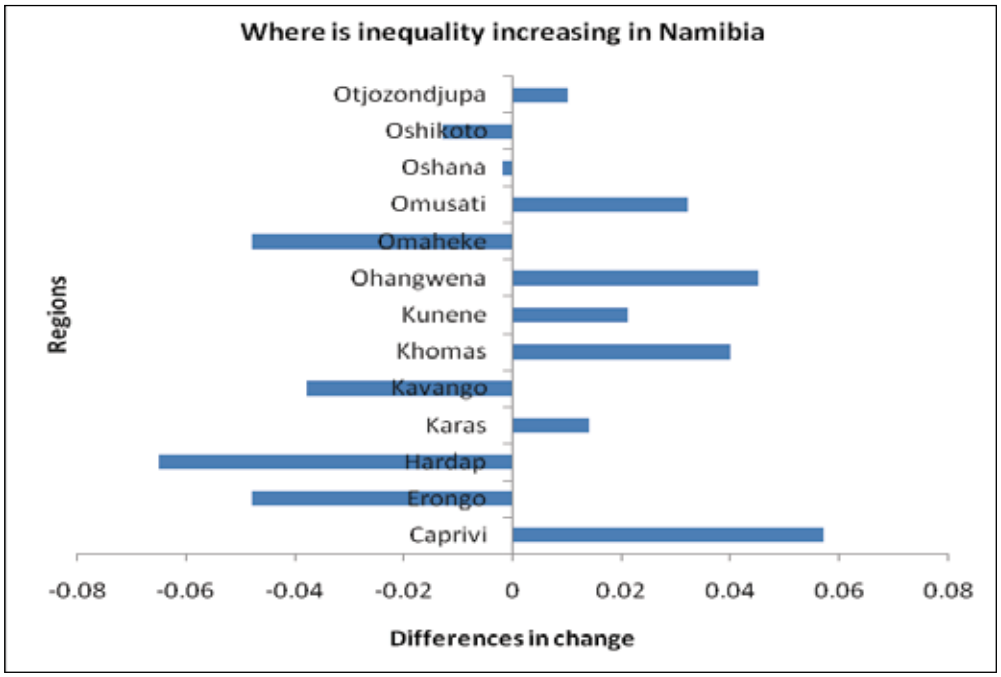
Figure 12 shows regional inequality levels between 2003/2004 and 2009/2010. As indicated earlier the figure shows that inequality is highest in Karas region and lowest in Ohangwena region though Ohangwena is one of the regions that experienced an increase in inequality between 2003/2004 and 2009/2010.

Figure 12 Inequality by regions



While Figure 12 illustrate inequality levels by regions, Figure 13 shows the movements in inequality between 2003/2004 and 2009/2010 by regions. The figure shows that inequality increased in seven regions mostly in Caprivi, Ohangwena, Khomas and Omusati. Between 2003/2004 and 2009/2010 inequality declined most in Hardap, Omaheke, Erongo and Kavango regions.

Figure 13 Estimated changes in inequality by regions



4.2 Inequality by population characteristics

The gender comparison in Table 35 indicates that, at 0.622, inequality is higher among individuals living in male-headed households than among those living in female-headed households. Although, inequality declined among individuals living in both male and female headed households, the decline in both cases has been marginal. If one considers educational attainment, inequality is highest among those with secondary education and lowest among those with primary education. While inequality declined at all educational attainment levels between 1993/1994 and 2003/2004, inequality increased among all those without formal education, primary education and secondary education between 2003/2004 and 2009/2010. Inequality indicates a declining trend among those with tertiary education. The table indicates that the between group component of inequality is high. A significant increase is observed among those without formal education experiencing an increase of about 70 percent. While poverty is highest among subsistence farmers, this group experience the lowest inequality when one considers inequality by main sources of income. At 0.401, inequality is lowest among subsistence farmers, compared with 0.656 among those whose main source of income is household business. Inequality declined across all income sources between 1993/1994 and 2003/2004 but fluctuated among those having subsistence farming as their main source of income between 1993 and 2010. A significant increase is observed between 2003 and 2010 among subsistence farmers from 0.346 to 0.401. The between income source component of inequality explains most of total inequality.

Table 35 Estimated changes in inequality by the household head characteristics

	Gini			Differences	
	A: 1993/94	**B: 2003/04**	**C: 2009/10**	**B-A**	**C-A**
Female	0.547	0.523	0.513	-.0235	-.0101
Male	0.671	0.628	0.622	-.0437**	-.0056
Within	0.363	0.321	0.308	-0.042	-0.013
Between	0.125	0.104	0.135	-0.020	0.031
Overlap	0.158	0.175	0.154	0.017	-0.021
No formal education	0.439	0.372	0.523	-.0673***	.1506***
Primary education	0.467	0.405	0.433	-.0621***	.0279
Secondary education	0.613	0.533	0.540	-.0797***	.007
Tertiary education	0.578	0.505	0.503	-.0736**	-.0022
Within	0.133	0.111	0.135	-0.023	0.025
Between	0.407	0.409	0.324	0.002	-0.085
Overlap	0.105	0.081	0.138	-0.025	0.057
Salaries and wages	0.6032	0.5666	0.5676	-.0366*	.0009
Subsistence farming	0.4406	0.3462	0.4005	-.0943***	.0543**
Pension	0.5939	0.5728	0.4867	-.0211	-.0861*
Household Business	0.7626	0.6637	0.656	-.0989**	-.0078
Other inc. source	0.7449	0.7186	0.6906	-.0263	-.0279
Within	0.1799	0.1671	0.177	-0.013	0.010
Between	0.3083	0.2617	0.2349	-0.047	-0.027
Overlap	0.1573	0.1714	0.1852	0.014	0.014

5. Growth, inequality and poverty change

A change in poverty can be shown to be a function of growth, distribution or changes in distribution. Furthermore, it is often argued that the best policy option in reducing poverty is to grow the economy. It is also argued that poverty could further be reduced by redistributing resources. This section aims at examining the causes of the poverty reduction we are observing.

Table 44 shows the result of a decomposition of how much of the observed decline in poverty can be attributable to changes in the inequality of the distribution of consumption and to changes (increases) in mean consumption. This is known in literature as a decomposition of the change in poverty by growth and inequality components. Two technical approaches are used for this purpose, the Datt and Ravallion (1992) approach and the Shapley approach.

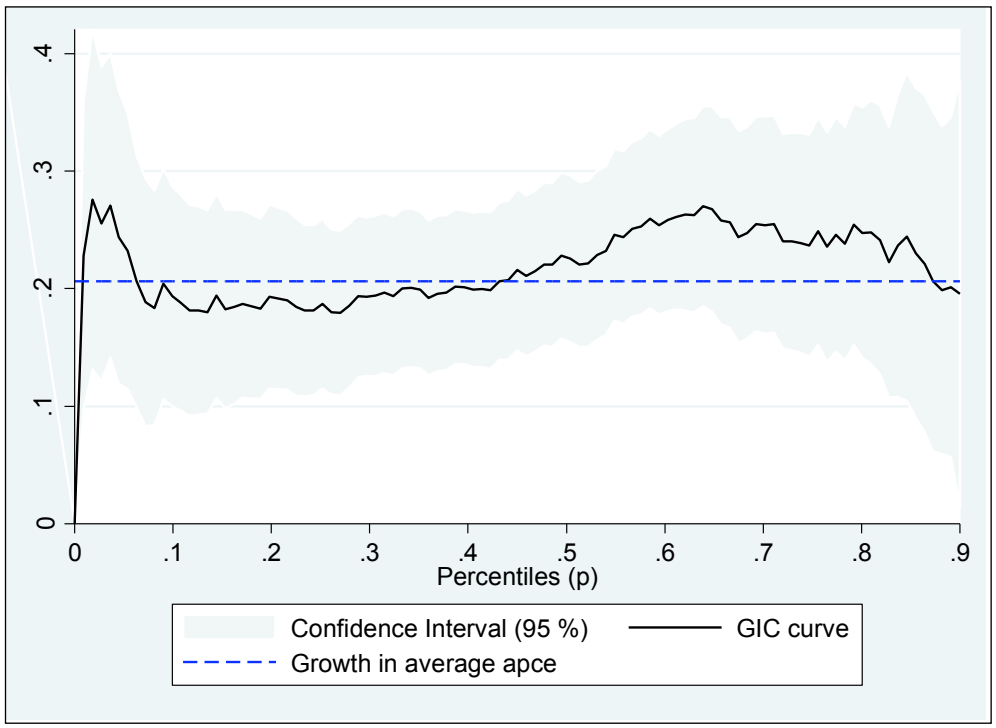
Table 36 indicates that the observed reduction observed in poverty headcount, poverty gap and severity is mainly a result of the growth component, i.e., a result of the general increase in the consumption by Namibians. The growth in mean consumption is responsible for a poverty reduction of about 9 percentage points, of about 4 percentage points reduction in poverty gap and of about 2 percentage points reduction in poverty severity. In contrast, the minimal observed reduction in inequality contributed only an additional poverty reduction of less than one percentage point. Thus, the table indicates that the redistributional impact of changes in inequality on poverty reduction is minimal.

Table 36: Decomposing the change in poverty by growth and inequality components

	Datt and Ravallion (1992) approach		Shapley approach
	Reference period		
	Initial	*Final*	
Headcount			
Growth	-9.74	-9.44	-9.59
Redistribution	0.44	0.73	0.59
Residue	0.30	-0.30	
Poverty gap			
Growth	-4.20	-4.24	-4.22
Redistribution	0.23	0.19	0.21
Residue	-0.05	0.05	
Poverty severity			
Growth	-2.15	-2.23	-2.19
Redistribution	0.06	-0.02	0.02
Residue	-0.07	0.07	

Figure 14 shows what is termed the Growth Incidence Curve in literature. The growth incidence curve shows the percentage change in consumption of those at different percentiles in a distribution of living standards. It serves to display whether growth has been pro-poor, in the sense of increasing the living standards of those at lower percentiles more than for those at higher percentiles. Figure 3 indicates that the Growth Incidence curve is nearly horizontal. This happens when consumption increases by about the same proportion at all percentiles. When this happens, changes in inequality are minor.

Figure 14: The growth incidence curve (adjusted per capita expenditure)



6. Conclusion

This report has focused on the patterns of poverty and inequality in Namibia over the last seventeen years. The general findings indicate a declining trend for both poverty and inequality. Employment creation was found to be among the best policy options in reducing poverty as the data suggested that the ability of Namibians to escape poverty could depend on their ability to obtain wages and or salaries from employment.

Poverty was found to be varying across different regions of the country and across rural and urban areas. The incidence of poverty is currently estimated at 28.7 percent of the population with more women (32 percent) than men (26 percent) being poor. About 37.4 percent of the poor live in rural areas compared to 14.6 percent in urban areas. The depth of poverty is estimated at 8.8 percent while poverty severity is 3.9 percent. Using the lower bound poverty line (the severely poor individuals), the incidence of severely poor is estimated at 15.3 percent, while the poverty gap among the severely poor is estimated at 4.2 percent. At location levels, the incidence of the severely poor is estimated at 7.0 percent in urban areas compared to 20.4 percent in rural areas.

With poverty incidence of 55.2 and 50.2 percent, Kavango and Caprivi are the poorest regions in Namibia. The lowest poverty incidence was observed in Erongo and Khomas at 7.1 and 10.7 percent, respectively. Seven regions (Kavango, Caprivi, Oshikoto, Otjozondjupa, Omaheke, Kunene and Ohangwena) out of thirteen have poverty incidence rates that are above the national rate of 28.7 percent, while four have more than one third of their population under poverty (Kavango, Caprivi, Oshikoto and Otjozondjupa). Two regions (Kavango and Caprivi) have more than half of their population under poverty. Over the last seventeen years, poverty was found to have declined in all regions, except Khomas and Caprivi were poverty increased by 13.7 and 2.6 percentage points respectively. Subsistence farmers and pensioners face a greater likelihood of living in poverty.

The poor were found to have disproportionately lower levels of education and lower access to services. Access to information was found to be lower among the poor, with only relatively fewer of the poor owning a radio. Sixty-eight percent of those owning or having access to a field for crops were found to be poor, while just over half (51 percent) of those owning or with access to grazing land are in poverty. With a Gini-coefficient of 0.597, Namibia is still among nations with the highest income inequality. Inequality is high in urban than in rural areas and among men than among women. At the national level and in rural areas, inequality declined overtime, however it fluctuates in urban areas and in the regions of Khomas, Kunene, Ohangwena, Omusati, Caprivi, Karas and Otjozondjupa. Inequality is highest in Karas at 0.634 and lowest in Ohangwena at 0.405, which has registered a significant increase in inequality over the past five years between 2003/2004 and 2009/2010. Between 1993/1994 and 2003/2004, inequality declined in all regions but increased between 2003/2004 and 2009/2010 in Khomas, Kunene, Ohangwena, Omusati, Caprivi, Karas and Otjozondjupa, i.e. inequality increases in seven regions out of thirteen between 2003/2004 and 2009/2010. Inequality increases in urban areas between 2003/2004 and 2009/2010. Khomas and Caprivi are the two regions to have registered increases in both poverty and inequality between 2003/2004 and 2009/2010.

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NOTES

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