# TANZANIA POVERTY AND HUMAN DEVELOPMENT REPORT 2005

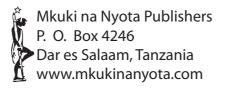




United Republic of Tanzania

# POVERTY AND HUMAN DEVELOPMENT REPORT 2005

# THE RESEARCH AND ANALYSIS WORKING GROUP



This report was prepared by the Research and Analysis Working Group (R & AWG) of the Poverty Monitoring System on behalf of the Government of Tanzania. The group was chaired by the Director of Macro, President's Office - Planning and Privatisation.

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The RAWG thanks the National Bureau of Statistics for making available data for the analysis in this report: the Population and Housing Census of 2002, the Household Budget Survey of 2000/01, the Tanzania Demographic and Health Survey of 2004/05, the Tanzania HIV Indicator Survey of 2003/04 and basic data tables of the Agricultural Sample Census of 2002/03. Thanks also to the Ministry of Education's Statistics Department for data on primary enrolments by district, and the Ministry of Health for information about the location of health facilities.

Background papers were written by the Ifakara Health and Research Development Centre (on health) and by Max Mmuya (on governance issues) and Dr Rutasitara (on the rural economy) both of the University of Dar es Salaam. Poverty mapping work was undertaken by Blandina Kilama and Wietze Lindeboom of REPOA, with technical support from Roy Van de Weide of the World Bank. Additional technical support from Hans Hoogeveen (World Bank) is acknowledged. The support of Simen Jansen Maal in building the statistical models and simulations, Ahmed Makbel of the National Bureau of Statistics and Dr Luvanda of the University of Dar es Salaam in identifying the common variables of the census and household budget survey is also acknowledged. Thanks also to the Bureau of Statistics' Census and Cartographic Teams who matched enumeration areas of the census and the household budget survey and produced digitised maps.

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The report has been edited by Paul Sullivan, who also advised on the layout with Mkuki na Nyota Publishers.

# **EXECUTIVE SUMMARY**

As in the past, this Poverty and Human Development Report 2005 has been prepared under the auspices of the Research and Analysis Working Group of the poverty monitoring system. At the beginning of the fourth phase of Tanzania's Government, the members of the RAWG hope that this report will provide useful material with which to renew efforts for poverty reduction, especially among the poorest of Tanzania's population. Moreover, to do so inclusively, according to the principles of good governance as articulated in MKUKUTA and in the same open spirit in which MKUKUTA itself was developed.

This is the third in a series of Poverty and Human Development Reports. Earlier reports, in 2002 and 2003, provided information about progress towards targets of the first Poverty Reduction Strategy – targets which were similar to the Millennium Development Goals. This 2005 report has been prepared at a time when the PRS itself has been reviewed and revised. The PRS provided a vehicle for increasing public allocations to priority sectors, where education and health featured particularly strongly. The new strategy, the National Strategy for Growth and Reduction of Poverty (NSGRP), MKUKUTA in its Swahili acronym, continues the priority accorded to improving human capabilities and in addition puts emphasis on poverty-reducing growth.

#### NCOME POVERTY REDUCTION AND RURAL GROWTH

GDP growth rates overall, and in agriculture, have increased in recent years, with especially positive growth in 2004 when GDP overall grew by 6.7 per cent and agricultural GDP by 6.0 per cent. The extent to which this growth has reduced poverty is mitigated by changes in inequality and may be affected by international and rural-urban terms of trade. Growth has had a greater impact on poverty reduction in areas where the proportion of households with incomes below the poverty line is lowest, notably in Dar es Salaam. Projections suggest that rural poverty may have been reduced somewhat, but there are uncertainties around data and modelling assumptions.

If MKUKUTA targets are to be met, it is clear that rural poverty reduction needs to be accorded critical priority. Since poverty reduction is sensitive to growth, a strategy must be put in place that ensures high growth for a sustained period of time. This calls for two things to happen. First, agriculture must grow at a sustained rate of at least 6 per cent per annum. Second, growth needs to be broad based and strategies that promote such broad-based growth must be developed and implemented.

Agricultural production has fluctuated around low levels for most food and cash crops. Similarly, productivity has remained low, especially among smallholder farmers who constitute the majority of agricultural producers in Tanzania. The quality of export crops has remained low relative to export crops produced by neighbouring countries. A combination of low production, low productivity and low quality of agricultural produce has significant limiting effects on rural growth and therefore on poverty reduction.

Major factors contributing to this situation include low levels of education and literacy among smallholder farmers, exposure to variable weather conditions, price shocks, limited investments and weak institutional arrangements. These structural problems justify the consideration of alternative institutional arrangements, which would involve smallholders

becoming increasingly better organised - in forms generally referred to as producer associations – and in integrated systems of production, extension services, transportation, processing and marketing. Such an integrated approach could help overcome many of the constraints faced by smallholders by encouraging increased production and productivity, raising prices by increasing the quality of produce and by taking advantage of supply chain linkages and ensuring greater access to productive opportunities.

Producer associations can play a critical role in safeguarding the interests of smallholders. They also provide a vehicle to ensure a steady supply of produce for processing and marketing. Investment in cooperative producers' associations could encourage vertically integrated enterprises of production, processing and marketing, adding value to members' produce. The democratic development of such associations needs to be accelerated under the programme for small and medium-scale enterprises and the Cooperative Reform and Modernisation programme.

There is much the Government can do to encourage the development of such integrated systems. Macroeconomic stability must be sustained, more investment needs to be directed to improving rural infrastructure, action should be taken to reduce the cost of doing business, regulatory mechanisms must be strengthened. Government's own capacity needs to be enhanced to keep up with global changes to help the economy thrive within the international environment in which it is operating.

Improvements in the rural infrastructure are critical – roads, power, communication, water. The development of integrated producer systems will place additional demands on the infrastructure compared with the demands of current systems of production. The more widespread use of cost effective technologies, especially in road improvements and maintenance and in the provision of improved water supplies, will be an important part of a strategy to ensure equitable access.

Households and individuals should be enabled to take full advantage of the emerging opportunities. This is only possible if they are appropriately educated and healthy, and this means that efforts to ensure equitable access to basic social services must be continued and sustained.

#### **EDUCATION**

The Primary Education Development Programme has raised enrolment rates in primary schools. Attendance rates are lower than enrolment, with little gender differential, though boys tend to be in school at an older age than girls. Children with disabilities are much less likely to be in school than other children. Data from the population census and the household budget survey show little difference in attendance by younger, orphaned children compared to those who are not orphaned. After the age of 9, a slightly smaller proportion of orphaned children is attending school compared with children who have not been orphaned.

Estimates of the retention rate (the proportion of children enrolled in standard 1 who stay through standard 7) and the reported primary school leaving examination pass rates both show improvements in 2004.

Some critical inputs to ensure sustained quality of education lag behind the increasing enrolment. Though the number of classrooms and desks have increased with the higher number of children in school, the ratio of teachers to pupils has not kept pace with increased enrolment. There are large geographic disparities in the pupil/teacher ratio,

most pronounced when qualified teachers are taken into account. Many more teachers are needed so that pupil-teacher ratios are reduced, and continued training and retention of trained teachers is important, so that the proportion of teachers who are qualified continues to increase. More books are needed.

#### HEALTH, SURVIVAL, NUTRITION AND HIV/AIDS

Recent data indicate substantial reductions in infant and under-five mortality and more modestly reduced rates of child malnutrition, though the prevalence of stunting in children, 38 per cent, is still very high. Life expectancy at birth, now estimated from the 2002 population census at 51, has changed little since the 1988 census. Maternal mortality is unchanged, and continues to be very high, now estimated to be 578 (per 100,000 live births). More effective prevention and treatment of malaria are likely to be important contributors to improved health, especially in reducing infant and under-five mortality. Immunisation rates have been sustained at a high level.

However, there remain substantial urban-rural, regional and socio-economic differences. Rural poor children are more likely than their urban counterparts to die, and when they survive, they are more likely to be malnourished.

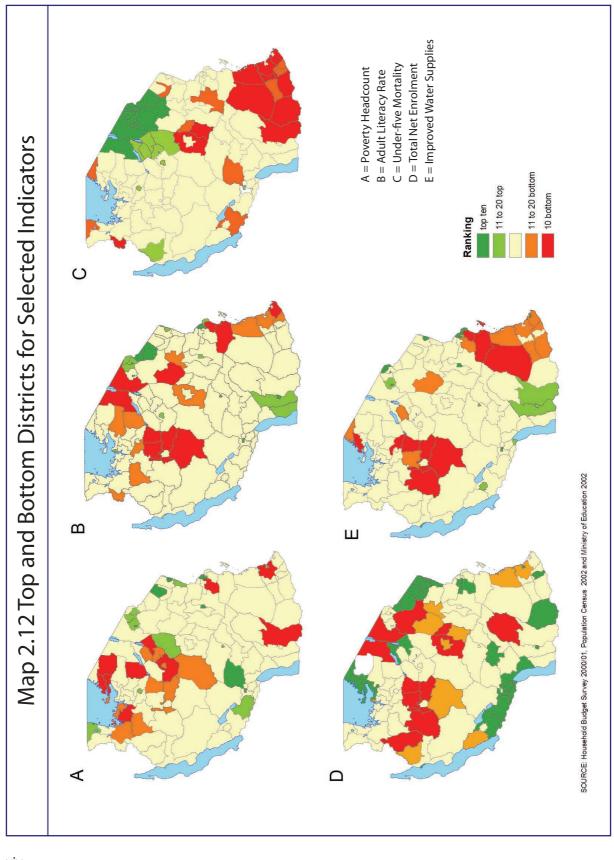
Evidence of changing disparities over time is mixed. In less poor regions/districts and less poor households, rates of stunting in children improved more than in poorer areas, but overall, rural children experienced a reduction in rates of stunting between 1996-2004, while urban children did not. Analysis of infant mortality in the 1990s suggests a widening gap between the poorest and less poor. It is possible that more recent health measures might be helping to redress this.

The lack of qualified human resources for health care is a major limiting factor in implementing health policies and reforms. One of the most critical challenges is the availability and effective use of qualified personnel. Strategies need to be put in place to increase effective capacity and performance. The TEHIP experience is useful here. Training and innovative management tools (for building district planning capacity and improving the performance of health workers) have been key in the TEHIP successes to date.

The continuing high rate of child malnutrition, especially in young children, remains a concern, and needs attention, with special focus on very young children and mothers, especially adolescent mothers. The modest improvements in nutritional status which have occurred have likely been the result of improved management of malaria and higher rates of micronutrient supplementation. These need to be complemented by much greater attention to strategies for improved feeding practices for young children.

High rates of maternal mortality need to be reduced. Emergency obstetric care needs to be improved, and access to antenatal care and delivery facilitated, including through improved referral services, especially for poor and rural women.

Newly available information which is nationally representative indicates an HIV prevalence rate in adults of 7 per cent. This implies that about 1 million adults in Tanzania are HIV positive. While this is lower than previous estimates based on ante-natal attendance and blood donors, the prevalence of infection is serious in its own right, in its impact on affected individuals and their families, in the provision of care, both formally organised in the health and welfare systems, and informally provided by members of the household and community. The impact is also felt by the many children who are orphaned, whose numbers will increase rapidly.



#### **V**ULNERABLE CHILDREN

Overall, the 2002 population census reports that 10 per cent of children under the age of 18 have lost their mother, or their father, or both. In Makete, almost one-quarter of children (24 per cent) have been orphaned, and in 10 more districts, more than 15 per cent of children have been orphaned. Analysis using poverty mapping techniques¹ and data from the population census suggests that household conditions where these children live have a limited impact on years of schooling or on children's working status. These impacts are felt more in urban than rural environments. This is the first analysis of its kind in Tanzania with a national data set, and it now needs to be complemented with more indepth work in areas most severely affected.

Children living with a disability are significantly deprived of opportunities. They tend to live in poorer areas. Further, their educational performance lags far behind that of physically able children. Census data suggest that the number of disabled children is relatively small, though it is likely that the number is under-reported. Their specific educational needs merit priority attention. Much of the disability reported is physical – loss of capacity in the limbs – and it is expected that future prevalence will be reduced by the sustained high rate of child immunisation against polio. Similarly, trachoma-related loss of vision, most prevalent in the central parts of the country, is likely to be reduced as a result of programmes to provide vitamin A supplementation.

Specific vulnerable groups go largely undetected in most surveys. The small size of these groups makes them statistically invisible, especially in surveys with small sample sizes. Poverty mapping techniques are helpful in these cases. Additional analysis should be undertaken for other groups, such as the elderly, which can be identified from the census information, and it is expected that this will be done soon.

#### WATER AND SANITATION

Improvements in health and education will result from better access to improved water supplies and sanitation. Less than half of rural households have access to an improved source of drinking water. In seven districts, less than 10 per cent of households have such access. Over 90 per cent of households report having toilet facilities – mostly pit latrines, and it is not possible with available data to know whether they constitute basic sanitation.

Cost effective strategies are needed more quickly to increase access to improved water supplies for rural households and for those in peri-urban areas.

#### **SPATIAL ANALYSIS**

There are considerable differences in outcomes among regions and districts and there is some evidence that the unequal outcomes are related to unequal opportunities. Some patterns of relationships are evident, but the general picture is one of variation across geographic areas for the different indicators. This suggests that specific focus may be needed in districts ranking poorly to address the specific issues for which improvements are needed. The accompanying map summarises this information.

<sup>&</sup>lt;sup>1</sup>The methodology is summarised in the chapter, Spatial Analysis, and in more detail in Kilama and Lindeboom, et al., Where are the Poor in Tanzania, forthcoming.

There are some geographic concentrations of districts which have a more general pattern of relatively poor indicators. Districts with the worst indicators tend to cluster in the same areas, while districts with the best indicators are more scattered, and most of them are located in and around urban centres, except for under-five mortality where districts with relatively low mortality rates are also clustered in the North. Districts in the Southeast have the worst adult literacy rates, under five mortality rates and access to improved water. Districts in Kilimanjaro and Arusha (Arumeru and Arusha districts) stand out with strong indicators.

There are important considerations for policy in addressing such disparities and inequities, especially in those districts which have the poorest indicators. Policies and strategies should contribute to greater investment in human resources of the poorest, to greater and more equal access to public services and information, to improved equality of property rights, and to greater fairness in access to markets.

In a resource constrained environment, there may be difficult budget decisions to be made with respect to measures to increase equitable investments in human resources and access to services. The unit cost of an intervention aimed at poor households is likely to be higher if they live in an isolated area, and therefore it is evident that with an equal per capita budget allocation, fewer people will be reached there.

Areas with many people - urban areas - have the highest poverty density, larger numbers of poor people per square kilometre, even though these areas are not the areas with the highest proportions of their population who are poor. Large districts tend to be sparsely populated, and thus have low poverty density, even though a larger proportion of their inhabitants may be among the poorest – living below the poverty line. Hence a trade-off may be needed between a strategy which reaches a larger number of poor people with lower unit costs and one where more is spent per capita on higher unit-cost services to reach people in isolated areas.

The equitable provision of essential services is important for enhancing the capabilities of otherwise disadvantaged poor people to participate in and benefit from social and economic development. Strengthened local authorities' management is necessary, with greater financing through formula-based allocations and with more equitable deployment of staffing for social services. Stronger co-ordinated efforts to improve economic and social conditions and the provision of essential services would do much to reduce the state of generalised insecurity in which many poor Tanzanians live, and would underpin a strategy for social protection, which is a goal of MKUKUTA.

#### RECOMMENDATIONS FOR INDICATORS AND MONITORING SYSTEMS

The monitoring of MKUKUTA, building on the progress of the poverty monitoring system, will need to incorporate a broader array of indicators to help assess progress in achieving growth in the rural economy and indicators of governance. A revised monitoring system, with identification of suitable indicators, is expected to be in place early in 2006. Administrative data systems are an indispensable source of information for annual, routine monitoring, and in some sectors they need substantial strengthening. Governance is one of the three clusters of MKUKUTA, and work is in progress within the review of the poverty monitoring system to develop an agreed set of indicators by which the state of governance may be generally assessed and trends reported.

The analysis of trends in income poverty has been hindered by the low frequency with which

estimates of income poverty are available. It is especially troubling that the analysis of any changes in rural poverty rates is still inconclusive. The survey programme of the National Bureau of Statistics includes a household budget survey and an integrated labour force survey in 2005/06. New information will therefore be available from these surveys which will assist in a more complete assessment of changes in households' economic situation and poverty rates. The National Bureau of Statistics is also considering the development of an annual survey of household income and expenditure to provide more regular and timely assessments of trends in income poverty.

More systematic information is needed for tracking and research purposes and for communicating to a wider public - assessing the flow of finances for basic services, the availability of teachers and health staff and other critical inputs, especially books, drugs and medical supplies - so that trends in performance and differences in performance, between boys and girls, between social and economic groups, and geographic differences, are better understood and can be more effectively addressed. More analytic work is needed with the data sets now available from the National Bureau of Statistics to explore socio-economic differences in outcomes. This analytic work should be complemented by greater systematic use of panel studies and information from surveillance sites. Focused facility based surveys could be useful in monitoring the quality of services provided.

The programme of analytic work needs now to give the greatest priority to understanding what might be the most effective strategies for improving broad-based rural growth. Household surveys need to pay greater attention to income generating strategies, household investments in farm and non-farm enterprises and patterns of asset accumulation. Panel surveys would greatly facilitate the understanding of poverty dynamics and patterns of growth.

Additional analytic work is also required to underpin MKUKUTA's commitment to the development of a national framework for social protection, which needs to incorporate measures to strengthen the capacities of individuals, households and communities to minimise their vulnerability, and to provide the necessary support to those who are in a desperate condition. To complement the quantitative analysis of national data sets, more qualitative and locally-specific analysis is needed in those areas of the country where there are especially vulnerable people.



# INTRODUCTION

This is the third in a series of Poverty and Human Development reports. Earlier reports, published in 2002 and 2003, provided information about progress towards targets of the first Poverty Reduction Strategy – targets which were similar to the Millennium Development Goals. This report in 2005 has been prepared at a time when the PRS itself has been reviewed and revised. The PRS provided a vehicle for increasing public allocations to priority sectors, where education and health featured particularly strongly. The new strategy, the National Strategy for Growth and Reduction of Poverty (NSGRP), MKUKUTA in its Swahili acronym, puts more emphasis on poverty-reducing growth, and this provides the framework for the Poverty and Human Development Report 2005.

Throughout the report there is concern about equity – about equal opportunities for all to enhance their capabilities. This is a critical aspect of equitable development, as well as being a necessary condition to ensure that everyone may fully participate in and benefit from accelerated economic growth.

Governance is one of the three clusters of MKUKUTA, and work is in progress within the review of the poverty monitoring system to develop an agreed set of indicators by which the state of governance may be generally assessed and trends reported. In this current report, information about aspects of governance has been included in the main sections of the report. Future reports will more specifically address governance by reporting on the indicators which are to be agreed in the revised monitoring system.

The report is structured as earlier reports: the next chapter provides recently available data about the status and trends in indicators of poverty in its many dimensions. Indicators from the PRS of income and non-income poverty are included for continuity of the trend analysis. Wherever data are available, they have been used to provide information about MKUKUTA's targets.

The status chapter also reports on evidence of disparities between urban and rural, between males and females and between households with different levels of income. The usual routine information systems are used, but many interesting new analyses are reported from recently available data sets, especially the Demographic and Health Survey of 2004, the Tanzania HIV Survey of 2003/04, the Population Census, 2002 and the Agricultural Sample Census of 2002/03.

Chapter 2, a spatial analysis, provides for the first time in Tanzania, estimates of income poverty for each district. The methodology by which these estimates are derived – poverty mapping - is summarised here and a fuller methodological report is in process. Maps are included in this chapter, plus an assessment of the relationship of income poverty with other indicators of well-being by district. It is expected that the information in this chapter will be particularly useful for local government planning purposes, in assessing the particular priorities for support of local authorities and in the use of formulae for allocating financing across local authorities.

Because of the increasing attention to strategies to strengthen poverty-reducing growth, Chapter 3 provides an analytical view of promoting rural growth, particularly in small-holder agriculture. The constraints faced by smallholders in their efforts to improve their livelihoods and lessons from promising initiatives are explored here.

A concluding chapter assesses the conclusions of each of the preceding chapters and draws out the most critical lessons and challenges.

The report has been prepared, as in the past, under the auspices of the Research and Analysis Working Group of the poverty monitoring system. At the beginning of the next phase of Tanzania's Government, it is the hope of the members of the RAWG that this report will provide useful material with which to renew efforts for poverty reduction, especially among the poorest of Tanzania's population. Moreover, to do so inclusively, according to the principles of good governance as articulated in MKUKUTA and in the same open spirit in which MKUKUTA itself was developed.

The Research and Analysis Working Group welcomes comments and suggestions about the contents of the Poverty and Human Development Reports, and especially looks forward to suggestions which would be helpful in communicating the information in this report to as wide an audience as possible.

# **CONCLUSION OF PHDR, 2005**

This Poverty and Human Development Report, 2005, points to significant achievements of the past few years, especially in primary education and in health outcomes for young children. It is not a coincidence that basic education and health were the main priorities of the Poverty Reduction Strategy and its associated financing. The new strategic framework, MKUKUTA, is broader, with greater focus on growth and on governance. The analysis of this report suggests that growth and governance merit much greater attention to ensure a more rapid reduction of poverty, to generate broad-based growth, and to deliver more equitable access to services and opportunities.

Even though primary education enrolment has achieved national targets and under-five mortality rates have fallen, there are still significant disparities, geographically and socially. Access to teachers, health services, improved water supplies and other essential services and amenities is inequitable. Rural households are disadvantaged compared with their urban peers. And it is in the rural economy where growth has been weakest.

Improved rural growth will depend on increased productivity and quality in agriculture. It will depend on greater private investment in agriculture by private business and by smallholders themselves who need to be more effectively linked into an integrated system of production involving access to improved inputs, extension, transport, processing and marketing. Such integrated systems can be strengthened and made more widely accessible to smallholders to encourage increased production and added quality to their produce.

There is much the Government can do to provide an enabling environment to encourage this development to take place. Macroeconomic stability must be sustained, more investment needs to be directed to improving rural infrastructure, action should be taken to reduce the cost of doing business, regulatory mechanisms must be strengthened. Government's own capacity needs to be enhanced to keep up with global changes to help the economy thrive within the international environment in which it is operating.

Improvements in the rural infrastructure are critical – roads, power, communication, waterand they are given greater priority in MKUKUTA. The more widespread use of cost effective technologies, especially in road improvements and maintenance and the provision of improved water supplies, will be an important part of a strategy to ensure equitable access.

Associations of producers can play a critical role in safeguarding the interests of smallholders, and they can also ensure a steady supply of produce for processing and marketing. Investment in co-operative producers' associations can be encouraged so that vertically integrated enterprises of production, processing and marketing add value to members' produce. The democratic development of such associations needs to be promoted.

The equitable provision of essential services is important for enhancing the capabilities of otherwise disadvantaged poor people to participate in and benefit from social and economic development. Strengthened local authorities' management is necessary, with greater financing through formula-based allocations, and with more equitable deployment of staffing for social services. Stronger co-ordinated efforts to improve economic and social conditions and the provision of essential services would do much to reduce the state of generalised insecurity in which many poor Tanzanians live, and would underpin a strategy for social protection, which is a goal of MKUKUTA.

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# APPENDIX A: DATA

Table A.1 Sources of GDP growth

	Averag	e annual gro	wth rate	Average contribution to growth				
Sector	1990-94	1995-99	2000-04		1990-94	1995-99	2000-04	
Agriculture	3.1%	3.6%	4.8%		1.5%	1.8%	2.3%	
Crops	3.2%	3.9%	4.8%		1.1%	1.4%	1.7%	
Livestock	2.5%	2.7%	4.1%		0.2%	0.2%	0.3%	
Forestry and Hunting	2.8%	2.4%	3.9%		0.1%	0.1%	0.1%	
Fishing	3.4%	3.7%	6.6%		0.1%	0.1%	0.2%	
In al. (abov.)	2.00/	F 40/	0.70/		0.30/	0.00/	1.50/	
Industry	2.0%	5.4%	8.7%		0.3%	0.9%	1.5%	
Mining and Quarrying	11.8%	14.8%	15.2%		0.1%	0.2%	0.4%	
Manufacturing	0.4%	4.6%	7.0%		0.0%	0.4%	0.6%	
Electricity and Water	4.0%	5.7%	4.3%		0.1%	0.1%	0.1%	
Electricity	4.5%	6.3%	4.4%		0.1%	0.1%	0.1%	
Water	0.8%	1.9%	3.6%		0.0%	0.0%	0.0%	
Construction	2.2%	3.5%	10.0%		0.1%	0.2%	0.5%	
Services	1.9%	3.8%	5.9%		0.7%	1.3%	2.0%	
Trade, Hotels and Restaurants	2.0%	4.5%	6.9%		0.3%	0.7%	1.1%	
Transport and Communication	3.6%	4.8%	6.0%		0.2%	0.2%	0.3%	
Financial and Business Services	2.9%	3.6%	4.3%		0.3%	0.4%	0.4%	
Finance and Insurance	2.6%	3.5%	3.6%		0.1%	0.1%	0.1%	
Real Estate	3.0%	3.7%	4.8%		0.2%	0.2%	0.3%	
Business Services	3.6%	4.5%	5.5%		0.0%	0.0%	0.0%	
Public Admin. and Other Services	1.9%	1.6%	3.9%		0.2%	0.1%	0.3%	
Public Administration	0.6%	-0.2%	2.4%		0.0%	0.0%	0.1%	
Education	4.9%	4.2%	6.7%		0.1%	0.0%	0.1%	
Health	3.9%	3.6%	5.9%		0.0%	0.0%	0.0%	
Other Services	4.7%	6.0%	5.4%		0.1%	0.1%	0.1%	
Less Fin. Services (ind.measured)	5.7%	3.4%	3.6%		-0.3%	-0.2%	-0.2%	
Total GDP (factor cost)	2.5%	4.0%	5.8%		2.5%	4.0%	5.8%	

Source: URT, Economic Survey 2004

Table A.2 Attendance in primary school by age and sex, 2002

Age	All	Boys	Girls
7	42%	40%	44%
8	60%	57%	62%
9	72%	70%	74%
10	76%	75%	77%
11	82%	82%	81%
12	81%	81%	80%
13	79%	80%	77%
14	72%	75%	69%
15	57%	61%	53%
16	41%	47%	36%
17	23%	28%	17%

Source: NBS, Census 2002

Table A.3 Estimated enrolment based on projected census population for 2004

Age	All	Boys	Girls		
7	93%	92%	93%		
8	104%	105%	103%		
9	106%	108%	105%		
10	97%	100%	93%		
11	83%	84%	82%		
12	67%	67%	67%		
13	85%	86%	84%		
14	49%	50%	48%		
15	40%	43%	37%		
16	21%	23%	18%		
17	10%	12%	8%		

 $Sources: Ministry\ of\ Education\ and\ Culture,\ Basic\ Statistics,\ 2004;\ NBS,\ Census\ 2002$ 

Table A.4 Cohort retention rates in primary school, girls, 1997-2004.

Girls	1997	1998	1999	2000	2001	2003	2004
Std 1-2	96%	95%	97%	93%	93%	93%	99%
Std 1-3	93%	91%	92%	90%	90%	88%	96%
Std 1-4	90%	87%	87%	86%	90%	84%	94%
Std 1-5	84%	79%	83%	79%	83%	80%	89%
Std 1-6	78%	75%	80%	76%	81%	77%	86%
Std 1-7	75%	68%	76%	70%	76%	72%	81%

Source: Ministry of Education and Culture, Basic Statistics 1997-2004

*Table A.5 Percentage cohort retention rates in primary school, boys, 1997-2004.* 

Boys	1997	1998	1999	2000	2001	2003	2004
Std 1-2	95	93	96	95	94	95	98
Std 1-3	91	89	92	92	91	89	94
Std 1-4	86	84	86	87	88	84	91
Std 1-5	78	74	78	80	79	80	85
Std 1-6	73	69	75	75	76	77	82
Std 1-7	68	63	70	69	71	73	77

Source: Ministry of Education and Culture, Basic Statistics 1997-2004

Table A.6 Distribution of qualified teachers and pupil/qualified teacher ratios, by region, 2001 and 2004

Region	Percent d	iploma and grad	le A teachers	Pupil/diploma - grade A teacher ratio				
	2001	2004	% Change	2001	2004	% Change		
Arusha	51	64	25	95	97	3		
Dar es Salaam	63	78	24	80	67	-16		
Dodoma	41	48	17	109	109	0		
Iringa	53	64	21	82	81	0		
Kagera	52	58	12	90	111	23		
Kigoma	40	51	26	141	145	3		
Kilimanjaro	51	52	2	67	85	26		
Lindi	41	50	22	89	101	14		
Mara	46	49	5	98	129	31		
Mbeya	50	63	27	93	96	4		
Morogoro	48	56	17	88	90	3		
Mtwara	46	50	8	76	103	35		
Mwanza	53	59	10	99	122	23		
Pwani	56	63	13	72	83	14		
Rukwa	46	51	9	116	127	10		
Ruvuma	52	56	7	73	92	26		
Shinyanga	50	64	28	131	111	-15		
Singida	50	51	3	97	119	23		
Tabora	43	50	16	111	131	18		
Tanga	48	53	9	89	112	26		
Total	50	58	16	93	102	10		

Source: Ministry of Education and Culture, 2001 and 2004

Table A.7 Enrolment in secondary education (public and private) and girl/boy ratios, by form, 2001-04

	Form I		Form I Form II Form III		Form IV		Form V		Form VI			
Year	Number	Girl/boy ratio	Number	Girl/boy ratio	Number	Girl/boy ratio	Number	Girl/boy ratio	Number	Girl/boy ratio	Number	Girl/boy ratio
2001	83,509	0.96	75,898	0.94	55,535	0.82	49,950	0.85	13,090	0.49	11,717	0.51
2002	97,694	0.88	84,580	0.96	64,529	0.85	49,726	0.78	14,129	0.50	12,660	0.47
2003	99,744	0.93	99,149	0.92	63,291	0.78	57,303	0.80	14,210	0.55	11,744	0.50
2004	147,490	0.98	113,461	0.93	79,786	0.79	60,861	0.77	17,200	0.55	13,801	0.51

Source: Ministry of Education and Culture, 2001-2004

# DEVELOPING AN INDICATOR FOR THE OPERATIONAL TARGET OF REDUCING CHOLERA OUTBREAKS BY HALF BY 2010

A study is currently being carried out by WaterAid and the Epidemiology Unit of the Department for Preventive Services, Ministry of Health, to develop an indicator for the operational target 'reduce cholera out-breaks by half by 2010'.

Some of the data which are being analysed are presented in Table A.8 below, which shows the cholera attack rate per 100,000 people by region from 1997 to 2004. Overall, there is wide fluctuation year to year. There is also large regional variation due to the localised nature of cholera's epidemiology. For example, over the last 8 years annual attack rates of cholera have surpassed 100 cases per 100,000 population 7 times; in Mtwara (twice), Lindi (twice), Dar es Salaam (twice) and Rukwa (once). However, events like these are too infrequent to provide useful indicators, and so 10 cases per 100,000 may be a more useful threshold to set.

Over the past 8 years around 40 per cent of regional cholera attack rates reported have been above the level of 10 per 100,000. Given that retrospective data will be needed to assess this indicator, the best proxy indicator may be: reducing by half the number of regions experiencing annual attack rates of over 10 per 100,000.

Table A.8 Cholera attack rate per 100,000 people, by region, 1997-2004

Region	1997	1998	1999	2000	2001	2002	2003	2004
Arusha	0.8	3.1	61.4	34.7	18.0	14.9	14.7	18.7
Dar es Salaam	0.0	0.0	6.9	0.0	9.7	141.1	150.2	16.3
Dodoma	10.4	3.0	29.1	3.6	11.5	66.1	47.4	19.6
Iringa	0.0	0.0	0.0	0.0	0.7	0.0	0.2	4.6
Kagera	0.0	4.7	0.0	0.0	0.0	0.0	0.0	0.1
Kigoma	48.8	2.9	18.9	10.9	41.0	67.2	19.4	28.4
Kilimanjaro	20.9	8.3	30.3	11.7	2.0	0.0	0.0	6.2
Lindi	0.0	1.2	36.7	126.7	0.0	53.4	125.4	34.8
Manyara	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.6
Mara	0.0	0.0	0.1	0.0	1.0	0.0	0.5	0.1
Mbeya	12.7	6.2	3.3	0.0	0.0	7.1	14.4	62.9
Morogoro	83.8	47.7	9.8	0.0	1.9	93.0	54.0	46.5
Mtwara	90.6	51.1	1.7	92.3	0.0	6.2	224.6	155.8
Mwanza	26.7	18.1	13.5	0.5	1.7	0.0	0.0	0.0
Pwani	50.2	2.2	5.2	0.0	2.0	13.4	22.3	13.2
Rukwa	6.6	3.3	112.0	0.2	11.6	3.2	24.4	19.0
Ruvuma	28.1	1.8	50.9	1.6	0.0	0.0	24.3	10.0
Shinyanga	0.1	1.2	30.2	3.9	20.8	0.5	3.6	0.0
Singida	18.8	55.0	6.5	40.4	1.0	0.0	30.9	6.4
Tabora	0.0	5.7	6.4	0.3	0.6	0.4	0.0	0.2
Tanga	18.7	7.5	88.3	9.4	6.1	68.0	32.8	37.5
MAINLAND	18.1	10.1	24.8	12.0	6.9	28.5	35.0	20.9

Note: Attack rates ≥ 10 in 100,000 are shaded. Attack rates ≥ than 100 in 100,000 are in bold and shaded.

Appendix Table A.9
See key for explanation of column entries

	District	Α	В	С	D	E	F	G¹	Н	ı	J	K	L	М	N	0	Р	Q
	Lushoto	419,970	103	8,051	0.013	16	16	3	32	42	23	8.8	3.1	6.5	76	86	69	100
	Korogwe	261,004	83	4,910	0.017	31	25	8	30	32	23	9.5	4.0	6.8	77	85	70	100
<b>m</b>	Muheza	279,423	66	4,419	0.015	33	22	8	30	29	24	8.4	2.8	6.3	71	79	64	100
Tanga	Tanga ( U )	243,580	409	8,088	0.051	17	71	4	31	33	15	12.2	5.0	8.5	87	91	83	100
	Pangani	44,107	25	2,928	0.008	22	5	5	32	29	21	10.8	4.2	7.9	73	81	66	100
	Handeni	249,572	31	4,604	0.007	32	10	8	28	31	18	6.8	2.3	5.1	63	72	55	86
	Kilindi	144,359	26	-	-	38	10	10	26	30	17	6.9	1.9	5.4	53	63	44	78
	Kilosa	489,513	34	10,387	0.003	30	10	8	33	30	17	8.5	3.2	6.2	65	72	58	81
_	Morogoro (R)	263,920	20	6,921	0.003	31	6	9	32	32	24	11.8	4.4	8.8	58	72	46	89
Morogoro	Kilombero	322,779	25	8,934	0.003	29	7	8	33	27	14	9.1	3.4	6.6	75	84	67	86
Morc	Ulanga	194,209	9	5,086	0.002	28	2	8	34	27	17	10.3	3.6	7.6	72	82	63	68
	Morogoro ( U )	228,863	426	10,853	0.039	14	60	3	32	31	10	10.8	4.2	8.1	85	90	81	82
	Mvomero	260,525	42	4,803	0.009	26	11	7	31	30	18	9.1	3.6	6.4	68	76	61	81
	Bagamoyo	230,164	27	6,025	0.004	40	11	11	30	29	21	10.8	4.1	8.1	63	73	54	93
	Kibaha	132,045	72	5,048	0.014	32	23	9	30	28	20	11.5	4.7	8.4	74	83	66	100
Pwani	Kisarawe	95,614	20	4,766	0.004	51	10	16	30	27	32	11.8	5.0	8.4	61	71	51	100
Ā	Mkuranga	187,428	69	7,477	0.009	40	27	11	30	27	27	10.5	4.0	7.8	47	58	38	88
	Rufiji	203,102	15	3,673	0.004	34	5	9	30	33	26	9.4	3.2	6.9	51	62	41	86
	Mafia	40,801	68	3,380	0.020	43	29	14	34	28	18	9.9	3.5	7.4	67	77	58	99
_	Kinondoni	1,088,867	1,981	5,162	0.384	14	282	4	36	28	7	12.0	5.4	8.3	92	94	89	88
DSM	Ilala MC	637,573	1,895	3,191	0.594	16	299	4	35	26	8	11.0	4.9	7.9	93	96	90	98
	Temeke	771,500	1,027	6,351	0.162	29	295	9	35	29	8	11.0	4.7	7.9	88	92	83	95
	Monduli	185,237	12	4,393	0.003	24	3	7	33	50	14	8.1	1.1	7.4	43	53	35	71
р	Arumeru	516,814	181	7,352	0.025	18	33	4	30	33	16	7.0	1.7	5.8	79	84	74	99
Arusha	Arusha (U)	282,712	2,596	4,542	0.572	12	319	3	30	32	6	9.0	3.2	6.8	94	96	93	93
_	Karatu	178,434	42	5,932	0.007	39	16	11	29	29	17	7.0	2.1	5.3	71	75	66	100
	Ngorongoro	129,776	8	7,187	0.001	24	2	5	26	51	14	10.5	0.9	9.8	28	38	21	71
	Rombo	246,479	181	6,143	0.029	37	67	9	27	35	25	8.1	2.5	6.5	82	87	78	96
2	Mwanga	115,620	54	2,678	0.020	27	14	6	29	38	25	10.5	3.1	8.3	91	94	88	100
anja	Same	212,325	33	3,781	0.009	34	11	9	31	34	23	7.9	2.6	6.0	90	93	87	100
Kilimanjaro	Moshi (R)	402,431	287	5,424	0.053	28	79	7	29	33	29	9.3	3.1	7.3	89	92	85	99
_	Hai	259,958	117	3,596	0.033	22	26	5	29	32	24	8.8	2.9	6.9	86	89	83	96
	Moshi ( U )	144,336	2,405	7,568	0.318	18	424	4	32	34	8	8.4	3.1	6.5	96	97	95	100
	Babati	303,013	60	7,750	0.008	50	30	16	31	31	19	8.0	2.3	6.2	70	76	64	100
ara	Hanang	205,133	55	7,579	0.007	49	27	15	31	30	15	7.0	1.8	5.6	61	67	54	87
Manyara	Mbulu	237,882	62	7,909	0.008	49	30	16	33	28	19	7.2	2.3	5.2	67	71	62	86
2	Simanjiro	141,676	7	5,041	0.001	24	2	6	30	41	10	6.8	1.4	5.9	62	71	52	72
	Kiteto	152,757	11	10,153	0.001	28	3	7	30	34	13	8.4	1.8	7.0	42	51	33	76

Notes:  $\ensuremath{^{1}}$  expressed as percentage: - indicates that data were not available.

	District	R	S	Т	U	V	W	Χ	Υ	Z	AA	AB	AC	AD	AE	AF	AG	АН	AI
	Lushoto	63	74	5.7	3.6	44	46	3.5	48	0.4	13	1.5	90	83	36	2.8	1.3	91	147
	Korogwe	50	76	9.7	4.6	51	55	6.6	50	2.2	27	7.8	73	67	48	2.6	1.9	115	192
	Muheze	63	77	5.2	4.2	24	32	1.9	50	1.9	31	5.8	80	78	67	2.4	1.7	96	158
ıda	Tanga ( U )	51	80	4.5	2.0	66	89	21.0	70	13.1	44	36.6	29	33	33	2.2	1.2	75	118
Tar	Pangani	49	55	7.5	5.4	59	65	8.9	60	1.6	44	10.7	70	70	70	2.0	2.1	105	173
	Handeni	64	82	8.6	7.6	38	41	5.0	45	1.1	37	4.8	85	89	68	2.6	1.5	104	172
	Kilindi	67	76	18.9	17.4	29	29	1.2	41	0.1	35	0.1	94	78	75	3.1	1.8	108	179
	Kilosa	53	13	12.5	9.6	55	62	2.8	45	0.5	37	4.4	84	45	62	2.4	2.3	101	166
	Morogoro (R)	59	101	7.4	5.6	41	42	0.5	50	0.4	22	0.9	89	68	66	2.0	3.2	125	209
S.	Kilombero	59	79	5.7	4.0	45	60	11.0	42	0.7	46	6.1	79	40	55	2.2	2.6	99	160
rogo	Ulanga	44	56	7.0	6.4	56	60	2.2	36	0.3	26	1.0	92	59	78	2.4	3.0	96	156
ĕ	Kilombero Ulanga Morogoro ( U )	35	76	2.7	2.1	21	88	17.1	71	11.1	35	32.7	32	19	8	2.2	1.4	77	123
	Mvomero	49	83	12.8	9.1	51	56	1.5	47	0.8	37	3.4	82	44	56	2.1	2.9	92	148
	Bagamoyo	59	67	11.5	9.9	22	31	1.5	60	2.5	40	6.0	80	84	64	2.2	2.4	105	174
	Kibaha	44	66	3.1	2.8	28	60	5.0	68	6.2	36	10.2	57	60	34	1.9	2.5	98	160
ani	Kisarawe	49	52	5.9	3.9	18	25	1.2	59	1.4	31	3.9	86	88	63	1.8	3.8	94	152
Ą	Kisarawe Mkuranga	59	102	7.4	7.1	7	9	0.3	63	0.6	35	0.6	90	92	79	2.0	2.5	105	173
	Rufiji	47	51	8.4	6.5	9	21	0.8	51	1.4	34	2.4	89	90	79	2.1	2.5	97	158
	Mafia	66	60	3.1	2.7	3	17	1.5	71	1.0	29	11.5	73	86	82	2.0	1.6	107	176
	Kinondoni	49	103	1.7	1.2	48	92	15.6	76	22.4	16	45.5	12	8	3	2.2	1.0	86	138
DSM	Ilala MC	47	83	1.9	1.4	21	81	20.4	76	24.1	15	46.3	12	7	3	2.2	1.1	82	130
	Temeke	56	82	2.2	1.8	35	89	11.8	74	14.6	14	34.8	15	8	6	2.2	1.3	84	134
	Monduli	49	66	26.5	24.4	39	49	1.3	35	1.7	15	3.1	87	84	75	2.2	1.5	35	48
ø	Arumeru	63	75	6.8	3.9	82	85	5.0	70	6.7	24	11.4	67	50	22	2.4	1.2	41	58
Arusha	Arusha ( U )	46	87	1.6	1.2	97	99	21.7	79	15.9	19	41.9	33	44	2	2.4	0.7	39	55
⋖	Karatu	64	69	22.5	16.4	61	64	1.2	44	2.3	27	3.5	82	74	55	2.9	2.3	61	93
	Ngorongoro	77	77	28.4	24.4	31	34	1.5	16	1.0	3	2.0	94	96	90	3.3	1.6	31	40
	Rombo	53	65	1.8	0.7	93	93	1.7	67	1.9	31	7.7	68	35	3	2.2	1.6	49	73
٥	Mwanga	38	49	12.0	2.0	82	74	4.3	73	4.0	23	22.1	53	38	14	1.9	1.9	47	68
Kilimanjaro	Same	44	53	2.6	1.7	52	66	1.8	57	1.8	20	9.8	66	32	28	2.3	1.7	55	84
ilima	Moshi (R)	43	49	3.5	1.5	76	75	3.7	76	3.9	16	10.9	56	44	8	2.2	1.5	40	57
×	Hai	42	59	3.9	2.4	66	68	3.5	77	4.4	30	14.8	54	35	10	2.2	1.6	44	65
	Moshi ( U )	40	61	1.8	1.0	0	92	36.1	83	15.4	23	46.6	13	6	0	2.1	1.1	44	63
	Babati	66	71	4.5	3.7	49	56	1.5	43	1.1	37	4.6	82	46	56	2.8	2.3	59	91
ē	Hanang	71	91	7.9	5.8	40	45	0.8	30	0.7	29	3.3	90	65	76	3.0	2.2	66	103
Manyara	Mbulu	63	63	2.8	2.3	17	24	0.6	27	0.6	25	2.2	92	86	79	3.0	2.5	69	107
ž	Simanjiro	66	92	22.4	20.1	37	36	0.8	50	5.4	22	9.1	65	52	50	2.7	1.2	40	57
	Kiteto	68	89	18.2	17.2	18	23	0.4	39	0.6	31	1.5	93	58	66	3.1	1.9	101	167

	District	Α	В	C	D	E	F	G¹	Н	1	J	K	L	М	N	0	Р	Q
	Nzega	417,097	51	10,380	0.005	35	18	10	31	29	23	7.4	3.4	5.0	49	58	41	65
	Igunga	325,547	45	9,003	0.005	48	22	15	30	28	19	6.9	2.5	5.0	49	58	42	67
Tabora	Uyui	282,272	25	9,693	0.003	48	12	15	30	26	21	5.5	2.4	3.8	49	58	41	58
Tab	Urambo	370,796	17	10,863	0.002	41	7	12	31	25	18	6.6	2.5	4.7	57	67	48	69
	Sikonge	133,388	5	6,986	0.001	43	2	12	31	32	20	5.7	2.5	4.0	49	57	41	75
	Tabora ( U )	188,808	123	4,273	0.029	23	29	6	33	33	17	9.5	4.1	6.5	77	85	71	86
	Kibondo	414,764	95	7,013	0.014	39	37	11	30	33	19	6.8	2.1	5.2	59	70	50	63
Kigoma	Kasulu	628,677	62	10,109	0.006	40	25	12	31	29	20	6.8	2.1	5.2	64	74	57	74
Kigo	Kigoma (R)	490,816	35	8,436	0.004	39	14	12	33	31	17	8.6	2.8	6.4	60	72	50	87
	Kigoma ( U )	144,852	576	12,021	0.048	27	153	8	38	33	13	10.2	3.4	7.9	79	88	72	100
	Bariadi	605,509	58	14,722	0.004	46	26	14	30	37	18	8.7	2.3	7.1	51	63	42	80
	Maswa	305,473	82	15,220	0.005	44	36	13	30	35	20	7.5	2.8	5.6	60	71	51	91
_	Shinyanga (R)	277,518	74	8,916	0.008	43	32	13	31	32	21	7.1	2.8	5.0	57	67	47	87
Shinyanga	Kahama	596,456	68	19,830	0.003	37	25	11	32	29	16	6.6	2.6	4.8	57	67	47	84
hiny	Bukombe	396,423	40	26,353	0.002	48	19	15	30	26	13	6.1	2.2	4.4	53	64	42	81
S	Meatu	248,949	27	10,792	0.002	53	14	17	31	36	18	8.2	2.7	6.3	55	65	45	97
	Shinyanga ( U )	135,166	243	3,957	0.061	22	53	6	32	33	14	9.6	3.8	7.1	75	82	69	95
	Kishapu	240,086	56	7,478	0.007	46	25	14	30	32	19	7.1	3.0	5.0	61	70	52	97
	Karagwe	425,476	54	12,479	0.004	27	14	7	32	28	16	11.4	3.3	9.5	67	73	61	87
	Bukoba (R)	395,130	84	7,036	0.012	18	15	4	32	36	25	18.2	6.9	14.8	76	81	72	85
era	Muleba	386,328	112	12,840	0.009	27	30	7	32	31	22	14.1	5.0	11.4	68	76	61	86
Kagera	Biharamulo	410,794	40	14,621	0.003	48	19	15	32	25	16	8.0	2.5	6.3	58	68	49	82
	Ngara	334,939	96	8,360	0.011	34	33	10	32	30	16	12.2	4.2	9.4	57	68	47	96
	Bukoba ( U )	81,221	892	7,352	0.121	11	99	3	33	34	10	16.3	6.7	13.3	92	94	90	96
	Ukerewe	261,944	373	13,728	0.027	48	181	16	34	29	21	8.5	2.8	6.5	78	86	72	100
	Magu	416,113	135	9,222	0.015	37	50	11	33	36	20	9.9	3.4	7.6	64	73	56	100
	Nyamagana	210,735	5,638	5,245	1.075	15	854	4	32	30	7	11.2	4.6	8.3	93	96	89	100
nza	Kwimba	316,180	97	10,159	0.001	40	39	12	31	33	22	6.7	2.7	4.9	57	67	49	97
Mwanza	Sengerema	501,915	164	9,596	0.017	46	76	15	34	30	17	8.0	2.9	5.9	67	76	58	97
_	Geita	712,195	105	15,087	0.007	62	66	24	34	26	15	7.3	2.9	5.2	61	72	51	98
	Misungwi	257,155	98	7,318	0.013	40	39	12	31	30	22	7.6	2.6	5.7	64	73	56	99
	Ilemela	265,911	677	2,303	0.294	26	174	7	34	34	9	9.6	3.4	7.6	84	89	78	75
	Tarime	492,798	126	9,088	0.014	32	40	9	32	42	17	14.9	3.1	13.1	71	82	63	100
	Serengeti	176,609	16	5,502	0.003	61	10	22	33	41	16	15.5	3.0	13.7	67	78	57	_
Mara	Musoma (R)	330,953	87		0.012	64	55	25	34	36	21	11.2	2.9	9.3	76	85	68	100
2	Bunda	260,000	90	8,929	0.010	68	61	28	33	38	20	11.1	3.2	8.9	75	85	68	100
	Musoma ( U )	108,242			0.342	38	539	12	33	39	12	12.0	4.0	9.6	87	94	81	100
	Kondoa	429,824	31		0.004	21	7	5	28	33	24	8.3	2.9	6.2	69	76	61	88
	Mpwapwa	254,500	34		0.005	28	10	7	29	34	18	7.0	2.4	5.2	62	71	54	79
Dodoma	Kongwa	249,760	65		0.007	40	26	12	30	31	17	7.2	2.6	5.3	58	66	50	72
Ď	Dodoma (R)	440,565	30		0.005	43	13	13	29	38	21	10.0	2.7	7.9	52	59	45	66
	Dodoma (U)	324,347	125		0.021	27	33	7	41	33	16	10.8	3.6	8.5	74	81	69	75

	District	R	S	Т	U	V	W	Х	Υ	Z	AA	AB	AC	AD	AE	AF	AG	АН	AI
	Nzega	57	83	33.0	28.0	21	25	1.2	45	1.3	59	2.5	89	28	82	2.5	1.8	81	129
	Igunga	68	83	23.7	18.8	5	9	0.8	34	0.5	58	1.6	93	14	86	2.9	1.8	84	134
Tabora	Uyui	77	84	37.6	32.7	10	11	0.3	41	0.2	62	0.3	94	59	85	3.2	1.4	88	141
Tab	Urambo	79	90	16.5	14.1	11	14	0.9	42	0.3	55	0.3	90	46	84	2.6	1.4	78	124
	Sikonge	79	66	38.6	28.5	4	7	0.3	41	0.2	52	0.2	92	67	84	3.1	1.9	87	139
	Tabora (U)	45	87	6.1	4.7	11	68	9.5	54	6.1	46	23.8	50	43	25	2.4	1.9	78	123
	Kibondo	65	67	13.5	7.9	54	56	0.5	31	0.4	27	0.4	95	64	76	2.6	3.6	85	136
Kigoma	Kasulu	69	100	4.2	3.0	65	67	0.6	46	0.6	46	0.2	93	21	73	2.5	2.2	70	109
Kigo	Kigoma (R)	217	123	7.0	5.0	41	40	0.5	48	0.5	27	1.8	90	22	74	2.4	2.1	114	191
	Kigoma ( U )	29	102	3.5	2.0	61	89	10.1	61	6.2	15	18.9	49	43	26	2.3	1.7	101	167
	Bariadi	69	92	18.7	15.6	50	53	0.6	37	0.3	56	1.0	93	6	51	3.5	2.1	108	178
	Maswa	63	71	28.5	13.2	32	36	1.3	44	0.8	57	2.8	90	1	78	2.7	2.0	90	146
	Shinyanga (R)	68	-	16.1	12.9	27	27	0.4	47	0.6	67	0.6	94	4	85	2.7	2.0	90	145
Shinyanga	Kahama	72	82	16.1	14.1	33	34	2.5	55	1.8	60	4.2	82	23	70	2.9	1.6	80	127
Shin,	Bukombe	92	112	25.3	19.1	27	32	0.8	50	0.3	62	0.3	91	64	68	3.4	2.0	88	141
	Meatu	93	105	12.9	8.9	36	35	0.5	34	0.5	51	1.2	94	3	76	3.5	2.0	104	172
	Shinyanga ( U )	52	83	10.7	5.6	61	69	12.1	66	8.2	55	20.8	49	0	36	2.2	1.6	77	113
	Kishapu	64	75	30.4	12.4	10	13	3.6	42	1.2	60	3.8	91	1	87	2.5	1.9	91	147
	Karagwe	73	87	12.9	5.9	45	45	2.9	41	0.3	25	1.6	90	83	37	2.1	2.5	113	189
	Bukoba (R)	48	64	5.4	2.1	57	58	1.4	49	0.9	40	2.0	85	66	40	1.8	2.4	122	204
Kagera	Muleba	65	89	8.2	6.0	34	34	1.0	45	0.6	36	1.1	90	76	45	2.2	1.9	110	182
Kaç	Biharamulo	88	90	12.4	9.5	42	45	2.4	48	0.4	44	0.2	88	55	65	3.5	2.4	94	153
	Ngara	67	85	7.7	6.7	49	50	1.4	35	0.6	20	0.4	93	80	63	2.2	3.2	126	212
	Bukoba ( U )	37	68	3.5	1.4	48	68	22.5	68	7.2	29	35.1	30	12	4	2.3	1.3	72	113
	Ukerewe	83	93	16.5	3.8	50	53	2.1	67	0.7	41	0.4	85	51	47	3.3	3.0	106	176
	Magu	73	74	11.9	6.3	44	46	1.6	61	1.0	55	2.0	82	5	60	2.8	2.0	96	156
	Nyamagana	62	104	1.7	1.1	0	97	24.8	76	15.8	13	27.6	25	0	0	2.6	1.2	65	100
Mwanza	Kwimba	77	91	15.0	10.8	65	67	0.5	49	0.4	65	1.1	90	4	78	2.7	2.3	77	122
××	Sengerema	74	124	11.9	7.7	35	37	0.8	70	1.6	58	1.4	85	19	59	3.0	2.1	80	127
	Geita	71	111	17.5	12.6	29	34	1.3	58	1.1	58	0.8	83	27	57	3.3	1.8	88	142
	Misungwi	65	103	33.0	12.4	54	56	0.8	55	0.5	61	1.3	87	6	78	2.8	1.9	84	133
	Ilemela	62	113	3.5	2.6	63	72	24.6	75	9.1	28	13.4	42	3	15	2.7	1.8	87	140
	Tarime	69	80	8.8	4.6	15	22	1.7	45	0.8	35	2.7	84	74	68	3.3	2.5	123	207
	Serengeti	67	74	5.8	4.1	46	47	2.1	45	0.5	36	0.5	88	73	78	2.8	2.2	109	181
Mara	Musoma (R)	63	100	5.7	4.3	16	17	1.6	52	0.4	44	1.4	87	20	68	3.1	2.5	115	191
	Bunda	56	77	5.5	3.1	41	51	4.7	61	0.6	44	4.7	78	15	58	3.1	2.3	102	166
	Musoma ( U )	51	77	1.0	0.7	3	92	23.5	64	8.7	41	32.6	36	1	8	2.6	1.8	84	134
	Kondoa	59	72	4.2	3.7	36	39	0.4	45	0.4	31	1.7	89	16	53	2.5	2.2	70	110
na	Mpwapwa	51	78	8.7	7.7	62	65	1.7	39	0.6	19	3.5	90	32	73	2.4	2.2	128	217
Dodoma	Kongwa	51	81	10.2	9.2	72	74	0.6	49	0.2	39	0.9	91	31	46	2.5	2.1	116	195
۵	Dodoma (R)	50	63	12.3	10.5	51	51	0.4	31	0.3	22	0.2	95	42	86	2.5	2.8	142	239
	Dodoma (U)	48	88	4.3	3.5	38	64	14.0	60	7.2	32	23.0	58	2	32	2.2	1.8	94	153

	District	А	В	С	D	Е	F	G <sup>1</sup>	Н	I	J	K	L	М	N	0	Р	Q
	Iramba	368,131	47	7,647	0.006	43	20	13	31	32	23	7.6	2.9	5.5	63	72	56	82
Singida	Singida (R)	401,850	35	9,100	0.004	56	19	17	29	34	21	9.0	2.2	7.4	70	79	62	85
Sing	Manyoni	205,423	7	5,527	0.001	49	3	16	34	32	20	9.5	3.3	7.0	61	69	54	82
	Singida ( U )	115,354	180	6,756	0.027	46	83	14	41	36	16	9.4	2.7	7.7	82	89	77	98
	Iringa (R)	245,623	11	2,883	0.004	31	4	8	32	40	21	15.0	5.7	11.6	71	82	63	98
	Mufindi	283,032	34	5,641	0.006	32	11	9	35	42	17	15.8	6.3	12.3	76	87	67	100
_	Makete	106,061	26	3,526	0.007	24	6	7	43	44	25	24.2	8.1	20.7	65	77	55	100
ringa	Njombe	420,348	34	4,709	0.007	25	9	6	32	41	17	14.3	5.2	11.5	79	87	73	99
_	Ludewa	128,520	21	2,786	0.008	24	5	6	36	39	16	14.2	5.0	11.3	82	89	76	100
	Iringa ( U )	106,668	724	3,940	0.184	18	132	5	35	39	11	18.7	8.1	14.4	91	96	87	89
	Kilolo	205,081	23	-	-	29	7	7	31	37	19	12.2	4.7	9.4	75	84	67	98
	Chunya	206,615	7	6,056	0.001	25	2	7	35	29	15	10.1	4.2	7.4	59	68	49	81
	Mbeya (R)	254,897	90	6,197	0.015	31	28	8	30	38	18	13.2	4.6	10.4	69	81	60	100
	Kyela	174,470	236	6,438	0.037	24	56	7	33	33	23	19.4	6.9	15.8	74	84	66	100
ya	Rungwe	307,270	146	5,375	0.027	32	46	9	34	33	28	17.4	6.8	13.8	69	78	61	100
Mbe	Rungwe Ileje	110,194	55	4,776	0.011	31	17	9	30	36	22	10.7	3.5	8.7	71	81	63	100
	Mbozi	515,270	57	11,944	0.005	21	12	6	32	35	15	10.2	3.8	7.7	68	78	59	100
	Mbarali	234,908	17	4,877	0.004	13	2	4	31	35	17	11.2	4.4	8.6	64	72	57	86
	Mbeya ( U )	266,422	1,051	6,640	0.158	12	130	3	36	37	10	16.2	6.0	13.2	90	95	85	94
	Mpanda	412,683	9	10,524	0.001	38	3	11	36	27	15	7.7	2.8	6.0	58	68	49	83
ĘĢ.	Sumbawanga	373,080	34	4,374	0.008	34	12	10	30	32	13	7.2	2.4	5.7	61	74	48	100
Rukw	(R) Nkansi	208,497	21	6,910	0.003	44	9	13	32	26	12	7.8	3.2	5.6	60	71	50	75
	Sumbawanga (U)	147,483	98	4,895	0.020	27	27	7	32	35	11	10.4	3.9	8.0	77	85	71	90
	Kilwa	171,850	13	4,276	0.003	35	4	9	28	33	21	8.9	3.0	6.8	52	65	41	76
	Lindi (R)	215,764	33	13,430	0.002	51	17	17	32	32	24	10.5	4.0	7.8	53	64	44	79
÷	Nachingwea	162,087	27	6,211	0.004	41	11	11	28	31	21	7.9	3.2	5.5	71	78	65	88
Lindi	Liwale	75,546	2	3,578	0.001	38	1	12	30	22	17	7.5	3.1	5.1	64	76	55	96
	Rwangwa	124,516	50	6,889	0.007	30	15	7	28	33	23	8.8	3.1	6.4	58	68	50	87
	Lindi ( U)	41,549	165	1,141	0.144	18	30	4	29	36	18	11.8	4.6	8.8	71	77	66	100
	Mtwara (R)	204,770	52	11,342	0.005	37	19	10	29	29	21	9.5	3.4	6.9	46	60	35	90
_	Newala	183,930	88	8,731	0.010	43	38	13	30	31	24	9.5	3.4	6.9	64	73	56	100
Mtwara	Masasi	442,573	46	8,820	0.005	37	17	11	31	30	20	8.7	3.3	6.1	69	74	64	90
ğ	Tandahimba	204,648	95	8,154	0.012	34	32	10	30	29	22	8.6	2.8	6.5	54	65	45	97
	Mtwara ( U )	92,602	471		0.118	38	181	13	32	34	13	11.7	4.6	8.2	73	80	65	97
	Tunduru	247,976	12		0.002	39	5	11	30	24	19	7.0	2.9	4.8	59	68	51	100
_	Songea (R)	147,924	11		0.002	41	4	12	30	26	18	9.4	3.5	7.0	83	88	79	97
Ruvuma	Mbinga	404,799	47		0.007	28	13	7	30	22	14	8.2	2.7	6.3	84	89	80	98
Ruv	Songea ( U )	131,336	375		0.080	32	119	10	36	33	11	11.5	4.5	8.7	90	94	87	100
	Namtumbo	185,131	8		0.001	55	5	18	29	17	17	6.9	2.8	4.7	72	80	64	93

	District	R	S	Т	U	V	W	Χ	Υ	Z	AA	AB	AC	AD	AE	AF	AG	АН	Al
	Iramba	58	76	11.0	7.9	30	30	0.3	34	0.3	31	0.8	95	10	82	2.4	2.7	79	125
Singida	Singida (R)	67	105	13.0	9.2	38	39	0.4	31	0.3	26	0.5	95	20	83	2.6	2.8	79	126
Sing	Manyoni	62	76	22.9	16.5	34	36	0.9	44	0.7	28	2.1	86	41	71	2.6	2.5	100	165
	Singida ( U )	51	87	2.3	1.5	32	61	7.9	49	6.2	23	25.1	64	4	39	2.6	2.0	69	108
	Iringa (R)	59	62	5.3	3.6	52	52	2.1	39	0.7	34	2.0	83	14	62	2.1	2.5	114	191
	Mufindi	55	61	9.8	5.4	46	50	2.1	41	1.2	34	4.3	77	20	59	2.0	2.3	98	160
æ	Makete	44	60	4.3	3.6	52	54	0.5	39	0.4	13	1.0	88	17	58	2.2	3.1	109	180
Iring	Njombe	51	62	5.6	3.6	59	64	4.0	47	1.2	43	6.0	69	9	52	1.8	2.2	101	166
_	Ludewa	54	53	2.5	2.1	55	55	0.8	40	0.3	19	0.6	83	11	55	1.9	2.8	98	160
	Iringa ( U )	33	13	3.3	8.0	17	85	23.4	64	12.3	23	43.7	18	5	4	2.0	1.1	83	133
	Kilolo	58	61	7.6	4.4	48	51	0.7	40	0.3	27	1.1	86	28	63	2.0	2.3	103	170
	Chunya	66	75	7.6	6.4	29	34	0.3	51	0.4	31	2.0	86	21	76	2.8	1.2	101	165
	Mbeya (R)	52	79	6.3	3.7	40	48	0.9	44	0.8	19	2.1	82	4	43	2.5	1.2	-	-
	Kyela	49	121	2.7	1.9	83	85	6.9	38	1.3	47	3.8	78	44	66	2.5	1.6	105	172
eya	Rungwe Ileje	67	90	3.2	2.3	56	59	1.6	38	1.0	15	4.4	81	7	52	2.5	1.7	103	170
₹	lleje	54	58	1.8	1.3	48	49	1.1	40	0.3	15	0.9	91	4	69	2.6	1.5	91	146
	Mbozi	74	92	6.9	6.2	35	40	1.2	42	0.4	29	3.3	86	6	53	2.8	1.2	101	165
	Mbarali	75	73	11.5	9.5	63	68	3.0	49	0.7	42	2.0	80	26	72	2.7	1.3	115	192
	Mbeya ( U )	48	83	1.5	1.0	83	96	12.8	69	8.2	23	23.3	31	0	3	2.1	0.9	68	106
	Mpanda	73	97	20.2	18.0	44	52	2.2	40	0.8	49	3.6	86	22	80	2.8	1.1	100	164
cwa	Sumbawanga (R) Nkansi	27	73	8.3	7.5	45	45	0.3	29	0.3	24	0.1	93	10	86	3.2	1.3	117	195
Rul	Nkansi	57	645	11.5	8.4	54	61	1.3	30	0.4	17	0.3	90	4	85	2.9	1.0	111	185
	Sumbawanga (U)	127	69	5.0	4.2	54	75	11.3	43	2.5	32	14.2	59	0	44	2.6	0.7	86	138
	Kilwa	60	58	10.3	8.5	14	22	0.8	42	0.4	30	1.1	91	94	87	2.3	2.4	129	217
	Lindi (R)	46	64	7.7	6.6	18	23	0.3	32	0.2	22	0.4	95	91	87	1.8	2.3	130	220
Lindi	Nachingwea	50	65	3.6	3.1	23	25	2.3	44	0.4	47	6.4	89	57	75	2.0	2.9	118	198
:5	Liwale	48	-	7.9	6.9	8	16	1.0	49	0.2	49	2.6	92	88	68	2.4	2.5	130	221
	Rwangwa	51	69	7.5	6.7	41	47	0.3	36	0.2	33	0.6	96	87	82	1.8	2.2	148	250
	Lindi ( U)	40	42	3.8	3.4	35	71	6.0	57	4.1	28	23.3	58	54	44	1.7	1.4	98	159
	Mtwara (R)	61	66	4.4	3.9	27	26	0.4	30	0.1	36	0.1	95	95	85	1.8	3.0	136	231
ī.	Newala	43	73	4.2	3.1	56	60	0.7	29	0.6	36	2.3	93	78	71	1.8	2.8	117	197
Mtwara	Masasi	54	79	8.1	7.3	20	26	0.7	38	0.3	31	1.4	93	53	82	2.2	3.5	134	225
2	Tandahimba	54	71	9.0	7.0	20	25	0.3	29	0.1	44	0.7	94	59	69	1.6	2.4	119	200
	Mtwara ( U )	41	71	4.1	2.5	79	96	5.0	56	4.7	39	21.2	49	46	32	1.9	2.2	90	146
	Tunduru	53	70	7.7	6.8	46	49	1.6	37	0.5	29	2.3	92	45	83	2.0	2.3	126	212
Ja	Songea (R)	37	49	7.4	3.6	76	77	2.4	54	0.3	39	0.5	83	11	67	1.8	3.7	106	175
Ruvuma	Mbinga	57	61	5.0	2.7	38	42	1.4	42	0.6	21	0.3	82	4	54	1.8	2.2	79	125
줖	Songea ( U )	46	67	1.6	1.1	55	85	22.1	72	4.5	37	24.1	37	3	19	1.8	1.7	99	162
	Namtumbo	56	64	5.3	4.4	79	79	0.6	51	0.4	40	0.2	88	13	73	1.9	2.6	126	213

#### **KEY TO COLUMN ENTRIES**

Column	Description
Α	Total population, 2002
В	Population, 2002, per km2
C	Population per health facility, 2002
D	Number of health facilities per km2
E	p(0): per cent of the population below the poverty line, 2000/01
F	Number of poor, 2000/01, per km2
G	p(1): poverty gap, 2000/01
Н	Gini coefficient, 2000/01
1	Per cent of households which are female-headed, 2002
J	Per cent of households headed by a person 60 or older, 2002
K	Per cent of children under 18 who are orphaned – mother or father has died, or both have died, 2002
L	Per cent of children under 18 whose mother has died, 20002
M	Per cent of children under 18 whose father has died, 2002
N	Per cent of people 15 and older who are literate, 2002
0	Per cent of males 15 and older who are literate, 2002
Р	Per cent of females 15 and older who are literate, 2002
Q	Primary education net enrolment rate, 2004
R	Primary education pupil-teacher ratio, 2004
S	Primary education pupil-classroom ratio, 2004
T	Per cent of children aged 7 to 13 who are economically active, 2002
U	Per cent of children aged 7 to 13 who are economically active and not attending school, 2002
V	Per cent of rural households using piped or protected water source, 2002
W	Per cent of households using piped or protected water source, 2002
Χ	Per cent of households using flush toilet or ventilated improved pit latrine, 2002
Υ	Per cent of households owning a radio, 2002
Z	Per cent of households owning a telephone, 2002
AA	Per cent of households owning a bicycle, 2002
AB	Per cent of households having electricity, 2002
AC	Per cent of households having earth floor, 2002
AD	Per cent of households having poor quality material for walls, 2002
AE	Per cent of households having poor quality roofing, 20002
AF	Number of household members per room, 2002
AG	Per cent of population with a disability, 2002
AH	Infant mortality rate (per 1,000 live births), 2002
Al	Under-five mortality rate (per 1,000 live births), 2002

Note: Sources are as noted in the text

Appendix Table A. 10 Estimates of the % of the population below the basic needs poverty line, 2000/01 and the standard errors of the estimates

D	Poverty H	eadcount	D	Poverty	Headcount
Region and district	Estimate	Std Error	Region and district	Estimate	Std Error
Arusha			Kigoma		
Monduli	23.9	2.6	Kibondo	39.4	3.9
Arumeru	18.1	1.7	Kasulu	40.4	3.5
Arusha ( U )	12.3	1.8	Kigoma (R)	38.5	3.6
Karatu	39.4	2.7	Kigoma ( U )	26.6	2.5
Ngorongoro	23.7	5.5	Kilimanjaro		
Dar es Salaam			Rombo	37.2	2.3
Kinondoni	14.3	1.5	Mwanga	26.6	1.9
Ilala	15.8	1.7	Same	34.1	1.9
Temeke	28.7	2.2	Moshi (R)	27.6	2.5
Dodoma			Hai	21.8	1.9
Kondoa	20.9	2.9	Moshi Urban	17.6	2.1
Mpwapwa	27.8	2.9	Lindi		
Kongwa	40.2	5.6	Kilwa	34.6	3.0
Dodoma (R)	42.9	4.4	Lindi (R)	51.4	6.2
Dodoma ( U )	26.6	2.2	Nachingwea	41.4	3.3
Iringa			Liwale	38.3	4.5
Iringa (R)	31.0	3.0	Rwangwa	29.7	2.8
Mufindi	32.3	1.9	Lindi ( U )	18.3	1.8
Makete	24.2	3.3	Manyara		
Njombe	25.0	2.1	Babati	50.2	2.5
Ludewa	24.1	2.3	Hanang	49.2	2.6
Iringa (R)	18.2	2.9	Mbulu	49.3	3.7
Kilolo	29.0	2.5	Simanjiro	23.6	3.6
Kagera			Kiteto	28.1	4.7
Karagwe	26.6	2.9	Mara		
Bukoba ( R )	17.5	2.7	Tarime	31.9	4.5
Muleba	26.9	3.5	Serengeti	60.6	4.3
Biharamulo	47.7	4.3	Musoma (R)	63.7	4.6
Ngara	34.0	4.1	Bunda	67.7	3.6
Bukoba ( U )	11.1	1.8	Musoma ( U )	37.9	2.9

	Poverty He	eadcount	B	Poverty H	leadcount
Region and district	Estimate	Std Error	Region and district	Estimate	Std Error
Mbeya			Pwani		
Chunya	25.4	3.0	Bagamoyo	40.2	2.9
Mbeya ( R )	31.4	3.8	Kibaha	31.6	2.5
Kyela	23.8	3.7	Kisarawe	51.0	3.9
Rungwe	31.8	2.8	Mkuranga	39.9	3.2
lleje	31.4	3.5	Rufiji	33.7	2.8
Mbozi	21.2	1.5	Mafia	42.6	4.2
Mbarali	13.1	1.6	Rukwa		
Mbeya ( U )	12.4	1.4	Mpanda	37.6	3.9
Morogoro			Sumbawanga (R)	34.0	2.6
Morogoro (R)	31.2	4.0	Nkansi	44.4	2.9
Kilombero	29.0	4.4	Sumbawanga ( U )	27.4	2.5
Ulanga	27.6	4.4	Ruvuma		
Morogoro ( U )	14.0	1.1	Tunduru	38.7	3.0
Mvomero	26.4	2.6	Songea (R)	40.8	2.8
<b>Atwara</b>			Mbinga	28.0	3.0
Mtwara (R)	36.8	2.8	Songea ( U )	31.6	2.4
Newala	43.4	2.8	Namtumbo	54.8	3.3
Masasi	37.4	2.7	Shinyanga		
Tandahimba	34.3	3.5	Bariadi	45.7	4.4
Mtwara ( U )	38.3	2.5	Maswa	43.5	4.2
Mwanza			Shinyanga (R)	42.7	4.7
Ukerewe	48.4	3.7	Kahama	37.3	3.3
Magu	37.3	2.7	Bukombe	48.0	4.8
Nyamagana	15.1	2.6	Meatu	52.9	4.5
Kwimba	40.0	3.3	Shinyanga ( U )	21.8	3.1
Sengerema	46.3	3.5	Kishapu	45.7	3.8
Geita	62.3	4.6	Singida		
Misungwi	39.9	3.9	Iramba	42.9	3.9
llemela	25.6	3.3	Singida (R)	55.6	3.9
			Manyoni	48.7	4.2
			Singida ( U )	46.1	3.3

Danian and district	Poverty H	eadcount	Donion and district	Poverty H	eadcount
Region and district	Estimate	Std Error	Region and district	Estimate	Std Error
Tabora			Tanga		
Nzega	35.0	3.4	Lushoto	15.6	2.5
lgunga	47.8	4.1	Korogwe	30.5	2.9
Uyui	48.1	4.6	Muheza	32.5	2.7
Urambo	40.6	4.1	Tanga ( U )	17.3	1.4
Sikonge	42.5	5.7	Pangani	21.9	3.6
Tabora ( U )	23.4	2.3	Handeni	31.9	3.6
			Kilindi	38.2	4.4

#### POVERTY MEASURES AND THEIR USE IN TANZANIA

The incidence of poverty is the percentage of the population whose per capita consumption is below the poverty line, that is, the population that cannot afford the basic basket of goods. <sup>87</sup> The poverty gap is a measure of the amount relative to the poverty line that has to be transferred to poor households to bring their incomes up to the poverty threshold. The severity of poverty is the total of the squared income shortfall (expressed in proportion to the poverty line) of families whose incomes are below the poverty threshold, divided by the total number of families. It is a poverty measure which is sensitive to the income distribution among the poor – the worse the distribution, the more severe is poverty. While the incidence of poverty is a key indicator, it is useful to complement it with the depth and severity of poverty to see what happens to the poorest, especially if inequality is great. Previous studies that have analysed the status and trend of poverty have focused on the incidence of poverty measurement. MKUKUTA and the Millennium Development Goals (MDG) have targets to halve the incidence of poverty by 2010 and 2015 respectively. <sup>88</sup>

#### Is Tanzania's poverty line too low?

Expressed in US dollars and using the December 2000 exchange rate of about TShs 1,000 to the US dollar, Tanzania's poverty line appears low: about \$ 0.26 per adult equivalent. Such expressions can be deceptive, however, as the international poverty line is expressed in 1993 PPP dollars. Expressing Tanzania's national poverty line of TShs 7,253 per adult equivalent per 28 days (December 2000 prices) in 1993 prices results in a poverty line of TShs 3,329. Applying the 1993 purchasing power parity exchange rate of 118.3 TShs to the dollar, this is equivalent to \$1.00 per adult equivalent per day. At an adult equivalent to population ratio of 1.27, this is equivalent to \$ 0.79 per capita per day. This is considerably less than the 1.08 "dollar a day" poverty line often used in international poverty comparisons. If one were to calculate poverty in Tanzania using the international dollar a day poverty line, the poverty line expressed in local currency would be TShs 9,900 and poverty incidence would be around 57.5 per cent of the population.

One can compare Tanzania's poverty line with that used elsewhere in the region. According to Appleton (2001), Uganda's poverty line, for instance, is higher, \$ 1.12 per capita per day. Using the PPP exchange rate between Uganda and Tanzania (of 3.12 UShs to the TShs in 1993) to calculate Tanzania's poverty incidence, gives a poverty line of TShs 10,163 and a poverty incidence of 59.8 per cent, considerably more than the estimates of 35.6 per cent included in analyses in Tanzania.

It seems safe to conclude that Tanzania's poverty line is low from an international and a regional perspective.

<sup>87</sup> This comprises all consumption including that which is not bought on the market but produced for own consumption.

<sup>88</sup> see PHDR 2002 and 2003 and URT, 2005.

# **APPENDIX C**

Table C.1 Poverty indicators, baselines and targets

	Baseline		Trend				Targe	ts
Indicator %	Estimate	Year	2001	2002	2003	2004	PRS 2003	MKUKUTA 2010
INCOME, EMPLOYMENT								
Population below basic needs poverty line	36	2000/01	-	-	-	-	30	19
Population below the food poverty line	19	2000/01	-	-	-	-	15	10
GDP growth rate	4.9	2000	5.7	6.2	5.7	6.7	6	6-8
Agricultural growth rate	3.4	2000	5.5	5.0	4.0	6.0	5	10
Inflation rate	5.9	2000	5.2	4.5	3.5	4.1	4	4
Working age population currently unemployed	13	2000/01	-	-	-	-		7
Nutrition								
Stunting in under-fives	44	1999	-	-	-	38		20
Education		2611			-	6.		
Primary net enrolment rate	59	2000	66	81	89	91	70	99
Girls Boys	60 59		66 66	79 82	87 90	90 91		99
Cohort completing standard 7	70	2000	74	-	72	79		90
Pupils passing standard 7 exams							50	
Girls	15	2000	21	20	33		50	60
Boys	29		36	34	48			60
Secondary net enrolment rate, forms 1-4							7	
Girls	-	-	-	7	7	9	,	50
Boys	-	-	-	6	6	7		50
Adult literacy rate (15 +)	71	2000	-	69	-	-	100	
Female	64			62				80
Male	80			78				80
Health, survival								
Under-five mortality rate (per 1,000 live births)							127	79
DHS	147	1999 <sup>86</sup>	-	-	-	11286		
Census			-	16286	-	-		
1 year-olds immunised against measles	78	1999	-	-	-	80	85	
DPT (3)	81		-	-	-	86	85	
Maternal mortality ratio (per 100,000 live births)	529	1996 <sup>86</sup>	-	-	-	578 <sup>86</sup>	450	265
Births attended by trained personnel	36	1999	-	-	-	46	80	80
HIV/AIDS	-	-	-	-	6.8	-	-	
HIV in pregnant women 15-24 years								5
Water and sanitation								
Population with access to clean and safe water	_		_	42			55	65
Rural Urban	_	_	-	85	-	_	-	90
Orban				33				50
				91				

Sources: NBS 2002, HBS 2000/01; URT Economic Surveys, various; NBS/Macro International 1999 and 2005; NBS 2003, Population and Housing Census 2002, MoEC Basic Statistics Education, various

<sup>86</sup> Estimates are recorded against the year of data collection, but under-five mortality rates refer to deaths during five-year period prior to survey and three-year period prior to census, maternal mortality to ten-year period prior to survey.

# **ABBREVIATIONS**

AIDS Acquired Immune Deficiency Syndrome
AMMP Adult Mortality and Morbidity Project

AMO Assistant Medical Officer

ANC Ante-natal Care

BSE Basic Statistics Education

CFR Case Fatality Rates

DfIF Department for International Development

DHS Demographic and Health Survey
DPT Diphtheria, Pertusis and Tetanus
DSS Demographic Surveillance Site

EPI Expanded Programme of Immunisation
ESRF Economic and Social Research Foundation

GDP Gross Domestic Product
GoT Government of Tanzania
HBS Household Budget Survey

HIV Human Immunodeficiency Virus

HMIS Health Management Information System

IDRC International Development Research Centre

IDWE Infectious Diseases Week Ending reports

IHRDC Ifakara Health and Research Development Centre

ILFS Integrated Labour Force Survey

IMCI Integrated Management of Childhood Illnesses
KCGA Kilombero Sugar Cane Growers Association

MCH Maternal and Child Health
MDG Millennium Development Goal

MKUKUTA Mkakati Kukuza Uchumi na Kupunguza Umasikini Tanzania

MoEC Ministry of Education and Culture

MoF Ministry of Finance MoH Ministry of Health

NACP National AIDS Control Programme

NBS National Bureau of Statistics

NMCP National Malaria Control programme

NSGRP National Strategy for Growth and Reduction of Poverty

PEDP Primary Education Development Programme

PER Public Expenditure Review

PETS Public Expenditure Tracking Study

PHDR Poverty and Human Development Report

PO-RALG President's Office-Regional Administration and Local Government

PRS Poverty Reduction Strategy Paper