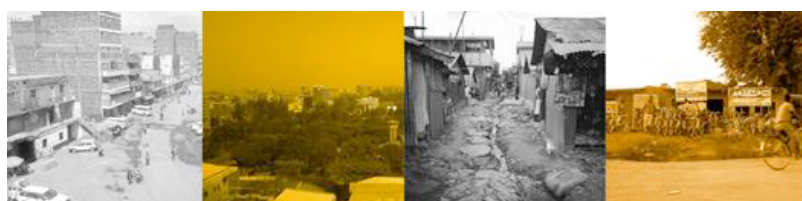




Background Paper: Small and intermediate urban centres in sub-Saharan Africa

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Images: James Millington, landscapemodelling.net

Small and intermediate urban centres in sub-Saharan Africa

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Introduction

This paper describes how a large proportion of sub-Saharan Africa's national (and urban) population lives in urban centres other than large cities² and considers what we know about risk in these urban centres. The region has thousands of urban centres with under 20,000 inhabitants and probably over 1000 with between 20,000 and 49,999 inhabitants. These and other relatively small urban centres also have importance for national economies, for local government services and for producer and consumer service provision to their and to their surrounding (usually predominantly rural) populations.

The paper suggests that within the region's urban population, inadequacies in provision for basic services are usually larger, the smaller the urban centre. Indeed, it seems that most small urban centres in the region have local governments with very little capacity or funding to fulfil their responsibilities for risk reducing infrastructure and services. Of these, the inadequacies in provision for water and sanitation are the best documented. But in some instances, provision for water and sanitation is so poor in large cities that the proportion of their inhabitants lacking adequate provision is as high as those living in small urban centres.

A revived interest in small and intermediate urban centres or secondary cities

There seems to be a growing interest in urban centres other than large cities – which are referred to as small or intermediate urban centres or secondary or intermediary cities³ - although such an interest was also evident during the late 1970s and 1980s.⁴ In part, this growing interest comes from a recognition that a significant and usually growing proportion of national and urban populations live in urban centres other than the largest cities. In part, it is fuelled by a concern for the weakness of local governments in most such centres. For some, the interest in these urban centres is also about the issue of whether promotion of these (or some of these) urban centres would slow migration flows to large cities. But defining these urban centres is problematic. Where is the line between small, intermediate and large urban centres?

Seeking a more precise definition of small urban centre

The statistics in Table 1 show that a sizeable proportion of sub-Saharan Africa's population lives in urban centres with fewer than half a million inhabitants. But this does not fully capture the proportion in 'small urban centres.' To ascertain how many people live in small urban centres requires a more precise definition of 'a small urban centre' – in terms of both a lower threshold (when a rural settlement or village become a small urban centre) and the upper threshold (when an urban centre is too big to be called small). Neither threshold is easily defined. Should it include economic criteria as

² This paper draws on an analysis in Satterthwaite, David (2006), *Outside the Large Cities; the demographic importance of small urban centres and large villages in Africa, Asia and Latin America*, Human Settlements Discussion Paper; Urban Change-3, IIED, London, 30 pages. This covered all low- and middle-income countries; the current paper has a larger range of countries from sub-Saharan Africa and draws on more recent censuses.

³ Roberts, Brian H. (2015), *Managing Systems of Secondary Cities; Policy Responses in International Development*, Cities Alliance, Brussels. See also interest in 'intermediary cities' in UCLG <http://www.uclg.org/en/agenda/intermediary-cities>

⁴ Rondinelli, Dennis A. and Kenneth Ruddle (1978), *Urbanization and Rural Development*, Praeger, New York; Rondinelli, Dennis (1982), "The potential of secondary cities facilitating deconcentrated urbanization in Africa", *African Urban Studies*, Spring; Rondinelli, Dennis A. (1984), "Intermediate cities in developing countries", *Third World Planning Review*, Vol. 4, No. 4, November; Hardoy, Jorge E and David Satterthwaite (editors) (1986), *Small and Intermediate Urban Centres: their Role in National and Regional Development in the Third World*, Hodder and Stoughton (UK) and Westview (USA); Blitzer, Silvia, Julio Davila, Jorge E Hardoy and David Satterthwaite (1988), *Outside the Large Cities: Annotated Bibliography and Guide to the Literature on Small and Intermediate Urban Centres in the Third World*, Human Settlements Programme, IIED, London, 168 pages; Southall, Aidan (editor) (1979), *Small Urban Centres in Rural Development in Africa*, African Studies Program, University of Wisconsin, Madison. There were also many papers or articles on secondary cities during the 1990s, including a special issue of *Environment and Urbanization* on Rural-urban interactions published in 1998.

well as population size? And to set a specific population size that is applied to all nations – for instance that an urban centre stops being ‘small’ when its population exceeds 500,000 – would exclude some urban centres that are ‘small’ within their national context (for instance in Nigeria) and would classify the largest cities in some small-population nations as small.

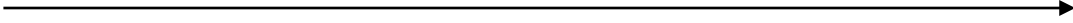
Table 1: Percent of the total population of sub-Saharan Africa in different size categories of urban centres and rural areas

Date	Rural areas	Under 0.5 million	0.5-1.99 million	2-4.99 million	5-9.99 million	10 million plus
1950	89.3%	9.4%	1.3%	0.0%	0.0%	0.0%
1970	81.8%	13.9%	3.3%	1.0%	0.0%	0.0%
1990	72.9%	16.7%	6.6%	3.8%	0.0%	0.0%
2010	64.6%	19.5%	7.2%	5.4%	2.1%	1.3%
2030	54.6%	22.0%	7.7%	5.7%	4.4%	5.6%

SOURCE AND NOTES: Derived from statistics in United Nations (2014)⁵, obviously, the proportion of the population in ‘rural areas’ and ‘urban centres with fewer than 500,000 inhabitants’ is influenced by how urban areas are defined. And obviously, the proportion of the population in larger cities is influenced by how these cities’ boundaries are defined.

Figure 1 highlights the ambiguity – and this ambiguity is important because 20–40 per cent of the population in many nations lives in settlements that could be considered to be either rural or urban – large villages or small urban centres.

Figure 1: The continuum of settlements from rural to urban

RURAL	AMBIGUOUS	URBAN
Unambiguously rural settlements with most of the inhabitants deriving a living from farming and/or forestry or fishing	‘Large villages’, ‘small towns’ and ‘small urban centres’. The proportion of the population in rural and urban areas is influenced by each nation’s definition of ‘urban areas’	Unambiguously urban centres with much of the economically active population deriving their living from manufacturing or services
Populations of rural settlements range from farmsteads to a few hundred inhabitants	Populations range from a few hundred to 20,000 inhabitants	In virtually all nations, settlements with 20,000+ inhabitants are considered as urban
 <p>Increasing population size Increasing importance of non-agricultural economic activities</p>		

Where any government chooses to draw the line between ‘rural’ and ‘urban’ has great significance for the proportion of its national population in ‘rural’ and ‘urban’ areas. It might be assumed that the definition of ‘urban areas’ or ‘urban centres’ is a technical issue. But one of the dominant debates in development for more than 4 decades has been over the relative priority that should be given to ‘rural’

⁵ United Nations (2014), *World Urbanization Prospects: The 2014 Revision*, POP/DB/WUP/Rev.2014/1/F09, Population Division, Department of Economic and Social Affairs, New York.

and 'urban' development. Within this debate, both rural and urban proponents try to establish how much 'poverty' there is in rural and urban areas, to bolster their claims for more attention to 'rural' or 'urban'. As noted above, this debate rarely acknowledges that a large proportion of the population lives in settlements that could be termed either small urban centres (and thus urban) or large villages (and thus rural).

Many 'predominantly rural' nations would become less rural or even predominantly urban if their 'large villages' were reclassified as 'small urban centres'. For example, in Mauritius, in the 2000 census, around a quarter of the population lived in settlements with between 5000 and 20,000 inhabitants. These settlements included various district capitals that were not classified as urban areas.⁶ If they had been classified as urban centres, Mauritius's population would have been more than two-thirds urban in 2000, rather than less than half urban.

The lower threshold, to establish at what point a growing rural settlement should be classified as urban, is not easily defined. Within most nations, there are many settlements with concentrations of shops and services and some manufacturing (indicative of urban economies) with 1,000 to 2,000 inhabitants, while within many low-income nations there are other larger settlements with several thousand inhabitants that have few shops and services and with most of the population engaged in farming (indicative of a rural settlement).

This difficulty in establishing a clear typology of settlements also illustrates the difficulties in drawing a distinction between 'rural' and 'urban' since the line between the two can be based on settlement size or administrative importance or economic structure. Even when settlement size is chosen as the sole or main criterion for distinguishing rural from urban settlements, there are the ambiguities as to where settlement boundaries should be drawn. There are also forms of 'urban' settlement for which boundaries are not easily drawn – for instance where 'urban' activities are clustered along each side of a road for considerable distances. There is also the inertia in government systems that often means that settlements' official boundaries are much smaller than their built-up area, as boundaries have not been adjusted to reflect population growth and growth in the built-up area. There are also many urban centres whose boundaries encompass large tracts of rural land and significant numbers of farmers.

The demographic importance of 'small' urban centres

If small urban centres are taken to mean all settlements defined by governments as 'urban' with fewer than half a million inhabitants, then by 2015, around 196 million people lived in small urban centres, in sub-Saharan Africa – equivalent to almost half of the urban population and a fifth of the total population.⁷

However, taking 'small urban centres' to be those settlements defined as urban by their government with fewer than half a million inhabitants is an inadequate definition because it includes such a diverse set of urban centres. For some relatively rural and small population nations, their largest city is under half a million inhabitants. There are many urban centres with under half a million inhabitants that are among the most important and successful urban centres in their region or nation – and these should not be classified in the same category as urban centres with a few thousand inhabitants and no strong economic base.

In this paper, we look at the proportion of national populations that are within seven categories of urban centres defined by population size – see Tables 2 and 3. These are not uniform categories in the sense of having the same population range – but they are structured to show the demographic importance of urban centres with under 20,000 inhabitants and of between 20,000 and 49,999 inhabitants, as well as larger urban centres. What needs to be emphasized is that most urban centres

⁶ <http://www.clgf.org.uk/2005updates/Mauritius.pdf>; <http://www.citypopulation.de/>.

⁷ Derived from statistics in United Nations 2014, op. cit.

in sub-Saharan Africa have less than 50,000 inhabitants and in many nations, these have more than 15 percent of the national population.

Table 2: The division of national populations between rural areas and urban centres of different sizes

Nation and date of census	Rural areas	Proportion of the population in urban centres with (number of inhabitants):						
		Under 20,000	20,000 – 49,999	50,000– 199,999	200,000 – 499,999	0.5– 1.99 million	2–4.99 million	5 million +
Benin (2013)	56.8	8.9 ⁸	12.4	7.4	7.7	6.8	–	–
Botswana (2011)	36.4	15.8 ⁹	19.8	16.5	11.4	–	–	–
Burkina Faso (2006)	77.6	1.7	4.2	2.5	3.5	10.5	–	–
Burundi (2008)	90.2	1.3	2.3		6.2			
Cameroon (2005)	51.5	8.0	5.8	8.0	5.4	21.3	–	–
Central African R (2003)	62.1	7.8	9.0	5.2		16.0	–	–
Chad (2009)	78.2	3.0	6.2	4.0	–	8.6	–	–
Congo (2007)	27.8 ¹⁰	7.9	3.7	4.2	-	56.5		
Congo DR (2004e)	63.0	0.9	3.7	5.1	6.0	7.4		13.8
Cote d'Ivoire (1998)	57.3	4.7	7.0	9.2	3.0	-	18.7	–
Eritrea (1997)	71.8 ¹¹	5.1	6.5	2.1	14.4			
Ethiopia (2013)	81.5	8.9	2.9	1.5	1.5	–	3.6	–
Gabon (2003)	18.0	24.6	8.2		13.8	35.5		
Ghana (2000)	56.1	14.5	6.5	6.9	1.1	15.0	–	–
Guinea (1996)	70.2	2.6	4.8	7.1	–	15.3	–	–
Guinea Bissau (2009)	55.8	13.9	4.8		25.5			
Kenya (2009)	76.8	2.9	3.0	4.2	2.7	2.4	8.1	–
Liberia (2008)	52.9	9.1	5.6	3.1		29.4		
Mali (2009)	64.9	10.8	3.6	6.7	1.6	12.5	–	–
Mauritania (2013)	37.5 ¹²	8.1	19.0	8.3	–	27.1	–	–
Mauritius (2011)	30.9	24.3	3.6	41.3				
Malawi (2008)	84.7	1.2	2.1	1.7		10.2	–	–
Mozambique (2014)	68.4	1.4	3.8	8.0	7.4	10.9	–	–
Namibia (2011)	57.3	9.4	12.0	5.9	15.4	–	–	–
Niger (2012)	88.0	4.1	2.7	2.5	2.9	5.7	–	–

⁸ This includes 2.1% from named urban centres and 6.8% from unnamed urban centres

⁹ This includes all settlements listed in <http://www.citypopulation.de/Botswana.html> as cities, towns and urban villages. Using this increases Botswana's level of urbanization by a few percentage points.

¹⁰ This is based on the urban population that is the sum of populations of settlements listed as urban rather than the official definition which is the population of six communes

¹¹ Much more urbanized than in United Nations 2014, op. cit, (17.6% in 2000). But the official urban definition reported in UN 2014 is localities with more than 2,000 inhabitants and the data on which these figures are based only had localities above 4000 inhabitants.

¹² This set of statistics for Mauritius is based on including as urban centres all settlements with 7,500+ inhabitants in the 2011 census. But the UN Population Division reports just 40.6% of the population in urban areas in 2010 based on 'towns with proclaimed legal limits' (United Nations 2014, op. cit.)

Nigeria (1991) ¹³	68.5	na	6.1	9.0	4.7	7.9	2.4	5.8
Rwanda (2011)	75.0	12.9	1.7	2.2	–	8.2	–	–
Senegal (2013)	52.2	2.4	4.6	5.1	10.5	5.6	19.6	–
Sierra Leone (2004)	63.4	11.1	1.1	8.9		15.5		
South Africa (2011)	37.2	6.3	6.0	9.0	6.6	7.7	12.0	15.2
Tanzania (2002)	76.7	5.5	2.7	4.0	4.3	–	6.8	–
Uganda (2014)	84.2	1.8	3.6	5.2	0.9	4.3	–	–
Zambia (2010)	61.3	3.3	2.8	10.4	5.0	17.2	–	–
Zimbabwe (2012)	67.0	5.5	3.4	5.5	2.5	16.2	–	–

SOURCES AND NOTES FOR TABLE 2: These figures are derived from census data – from lists of urban centres and their populations (for virtually all nations listed here, these come from www.citypopulation.de/) and from figures for national urban and rural populations, drawn mostly from government websites and The United Nations Population Division.¹⁴

Some nations are not included because they have no census data in the last two decades. The two exceptions are two large population nations that are included despite having no census data for the last 20 years – Congo DR using 2004 estimates and Nigeria using 1991 census data (the accuracy of more recent censuses has been called into question) – because of the size and relative importance of their urban population within the region.

The proportion of the population in urban centres with under 20,000 inhabitants is what is left when the rural population and the population in urban centres with 20,000+ inhabitants is subtracted from the national population. For some nations, this is entirely made up of named urban centres (and their populations); for others, only a proportion of this is made up of named urban centres.

Getting the data for any nation for a table such as this depends on having population figures for a complete list of all urban centres. Inter-country comparisons of the proportion of the population in rural areas and in urban centres with fewer than 20,000 inhabitants are not valid because of the differences between nations in how urban populations are defined. Inter-country comparisons of the proportion of the population in large cities only have limited validity because of the differences in the ways that governments set boundaries for large cities. Two points need emphasizing. The first is that the size of ‘large cities’, and thus the proportion of the population in ‘large cities’, is much influenced by the way in which governments define large cities’ boundaries. For many large cities, their total population is overstated because the city boundaries encompass large areas that are rural and also villages and small urban centres that are at some distance from the city’s built-up area. This helps to explain why significant proportions of the workforce in some large cities work in agriculture. By contrast, the total population of some large cities is greatly understated, as boundaries have not expanded to reflect the large numbers of people and enterprises that have spilled over the official boundaries. For nations with large cities, it is possible to create two different tables showing the population distribution in different-size urban centres: one based on the population of cities, the other based on the population of metropolitan areas or urban agglomerations (where the population of the metropolitan areas or the largest urban agglomerations are made up of several and often many different cities). Where there were data on both, the populations in metropolitan areas and urban agglomerations were used for this table.

Care is needed in comparing populations in the different population-size categories for any nation because these are not the same year. But what the preparation of this table and table 4 wanted to

¹³ The sum of all urban centres with 40,000 plus inhabitants in 1991 represents 31.5% of the national population. But for all urban areas (including those with under 40,000 inhabitants) Nigeria’s level of urbanization is reported as 29.7 in 1990 and 32.2 in 1995 (United Nations 2014, op. cit.)

¹⁴ United Nations 2014, op. cit.

highlight is the number of ‘small’ urban centres in many nations and in some how their populations represent a significant proportion of the national urban population. In addition, our previous work on small and intermediate urban centres¹⁵ had shown the importance of many urban centres with under 50,000 inhabitants.

The number of small and intermediate urban centres

Table 3 gives the number of urban centres across sub-Saharan Africa with 500,000+ inhabitants while Table 4 gives this for individual nations but including details for all urban centres

Table 3: Number of urban centres in sub-Saharan Africa with 500,000+ inhabitants

Date	City population size categories			
	0.5-1.99 million	2-4.99 million	5-9.99 million	10 million plus
1950	2			
1970	12	1		
1990	35	6		
2010	63	15	2	1
Projected for 2030	104	24	10	5

Table 4: Number of urban centres in different size categories by nation

Nation and date of census	Proportion of the population in urban centres with (number of inhabitants):						
	Under 20,000	20,000–49,999	50,000–199,999	200,000 – 499,999	0.5–1.99 million	2–4.99 million	5 million +
Benin (2013)	13+	39	10	3	1	–	–
Botswana (2011)	38	12	5	1	–	–	–
Burkina Faso (2006)	15	21	5	1	1	–	–
Burundi (2008)	19	6		1			
Cameroon (2005)	21+	33	17	4	2	–	–
Central African R (2003)	23+	11	2	-	1	–	–
Chad (2009)	17+	22	5	-	1	–	–
Congo (2007)	28	5	2	-	2		
Congo DR (2004e)	58+	29	10	4	0	1	
Cote d’Ivoire (1998)	29+	34	15	1		1	–
Eritrea (1997)	13	6	1	1			
Ethiopia (2013)	25+	84	30	5	–	1	–
Gabon (2003)	16+	4	-	2	1		
Ghana (2000)	13+	42	14	1	2	–	–
Guinea (1996)	13+	9	6		1	–	–
Guinea-Bissau (2009)	30+	2	-	1			
Kenya (2009)	38	35	19	4	1	1	–
Liberia (2008)	13+	7	2	-	1		
Mali (2009)	17	17	10	1	1	–	–

¹⁵ See Hardoy and Satterthwaite 1986 and Blitzer et al 1989 op. cit.

Mauritania (2013)	18	23	4	–	1	–	–
Mauritius (2011)	27	2	5				
Malawi (2008)	14	10	2	-	2	–	–
Mozambique (2014)	30	30	21	7	3	–	–
Namibia (2011)	28	9	2	1			
Niger (2012)	44+	16	5	2	1		
Nigeria (1991)			4	13	9	1	1
Rwanda (2011)	17	6	3	0	1		
Senegal (2013)	23	22	8	6	1	1	
Sierra Leone (2004)	22+	2	4		1		
South Africa (2011)	53+	99	49	11	4	2	1
Tanzania (2002)	97+	29	13	5		1	
Uganda (2014)	36	38	19	1	1		
Zambia (2010)	18+	12	14	2	2		
Zimbabwe (2012)	16	14	7	1	2		

SOURCES: These figures are derived from census data – from lists of urban centres and their populations (for virtually all nations listed here, these come from www.citypopulation.de/)

Where a plus mark is added to a figure, this means that the number of urban centres in this size category is larger than this; the figure reported is all named urban centres with under 20,000 inhabitants from what is known to be an incomplete list of urban centres in this size category

In 2010, sub-Saharan Africa had 81 urban centres with 500,000+ inhabitants (Table 3). The sum of all urban centres with under 20,000 inhabitants for the incomplete list of sub-Saharan African nations that is in Table 4 is 882 while for urban centres with between 20,000 and 49,999 it is 730. If there was complete coverage (all sub-Saharan African nations, all nations with recent censuses), both these numbers would rise significantly – especially if recent data were available for Nigeria. These numbers would rise even more if it was possible to get complete lists of all urban centres and their populations; for many nations in table 4, the number of urban centres with under 20,000 inhabitants is incomplete because there was no full list of all urban centres from the census to draw from.

There are also some studies that show particular nations having much larger numbers of urban centres with less than 20,000 inhabitants than that shown in Table 4. For instance, the list of urban centres in Ethiopia in 2013 included 25 urban centres with under 20,000 inhabitants. But this is a very incomplete list; the smallest urban centre in the list was Awubere with 13,100 inhabitants but the definition for urban centres is localities with 2,000 or more inhabitants. A study that drew on the 1994 census in Ethiopia suggested that the urban population was made up of 925 urban centres and this included 858 urban centres with under 15,000 inhabitants and 396 with fewer than 2000 inhabitants.¹⁶

¹⁶ Golini, Antonio, Mohammed Said, Oliviero Casacchia, Cecilia Reynaud, Sara Basso, Lorenzo Cassata and Massimiliano Crisci (2001), Migration and Urbanization in Ethiopia, with Special Reference to Addis Ababa, Central Statistical Authority, Addis Ababa and Institute for Population Research, National Research Council (Irp-Cnr), Rome, Addis Ababa and Rome; <http://www.irpps.cnr.it/etiopia/sito/progetto3.htm>

Some studies of provision for water and sanitation point to large numbers of small urban centres. For Cameroon, in the 2005 census, the list of urban centres went down to Ekondo-Titi with 15,370 inhabitants and included 77 urban centres. But the urban definition in Cameroon includes localities with more than 5,000 inhabitants and with sufficient socio-economic and administrative infrastructures¹⁷ and so this list is likely to be very incomplete. A study in Cameroon in the late 1990s noted that there were 320 urban centres.¹⁸ In Senegal, the list of urban centres included 61 urban centres in the 2013 census but this did not list all urban agglomerations of 10,000 or more inhabitants (the urban definition). A study in Senegal focused on just one department (Matam) noted that there were 47 small towns with between 2,000 and 15,000 inhabitants that were part of a water management support programme.¹⁹ A study in Ghana noted that there were 357 urban centres in the 2000 census²⁰ but the list of urban centres with populations listed was 72. A study in Nigeria noted that some 40 million people are estimated to live in 3,000 “small towns” in 2000 and it included a survey of 37 small towns and peri-urban settlements with between 5000 and 20,000 or more inhabitants in 1997.²¹

The smallest urban centres and large villages

In most nations, many of the settlements with fewer than 20,000 inhabitants (for instance all those with more than 2,500 or more than 5,000 inhabitants) are considered urban centres; in a few, all settlements with fewer than 20,000 inhabitants are regarded as rural. For nations that have urban definitions with low population thresholds, up to 25% of their national population can live in urban centres with fewer than 20,000 inhabitants. Table 5 shows the proportion of national populations living in urban centres with under 20,000 inhabitants, although this needs to be interpreted with caution because, for each nation, this proportion is heavily influenced by how urban centres are defined. The nations with the highest proportion of their national populations in urban centres with fewer than 20,000 inhabitants tend to be relatively urbanized nations that also have urban definitions that include most settlements with a few thousand inhabitants as ‘urban’

Table 5: Number of urban centres with under 20,000 inhabitants and the proportion of the national population they contain

Nation (and date of census used)	% of national population in urban centres with under 20,000 inhabitants	Number of urban centres with less than 20,000 inhabitants
Gabon (2003)y	24.6	16+
Mauritius (2011)	24.3	27
Botswana (2011)	15.8	38
Ghana (2000)	14.5	13+
Guinea Bissau (2009)	13.9	30+
Rwanda (2011)	12.9	17
Sierra Leone (2004)	11.1	22+
Mali (2009)	10.8	17

¹⁷ United Nations 2014, op. cit.

¹⁸ Tanawa, Emile (1998) L’approvisionnement en eau dans les villes du Cameroun, *Lettre du pS-Eau* 30, 2-3.

¹⁹ Estienne, C. (2000), *The PAGE Water Supply Management Support Programme*, Case study submitted to the Small Towns Water and Sanitation: Third Electronic Conference.

²⁰ WaterAid (2005), *Ghana: National Water Sector Assessment*, accessed at www.wateraid.org, WaterAid, London, 6 pages; World Bank (2004) “Project appraisal document on a proposed credit in the amount of SDR 17.8 million (USD 26.0 million equivalent) to the Government of Ghana for a Small Towns Water Supply And Sanitation Project in support of the second phase of the Community Water And Sanitation Program”, July.

²¹ Stoveland, S. and B.U. Basse (2000) “Status of water supply and sanitation in 37 small towns in Nigeria”, Paper presented at the Donor Conference in Abuja, Nigeria, 2-4 February.

Namibia (2011)	9.4	28
Liberia (2008)	9.1	13+
Benin (2013)	8.9	13+
Ethiopia (2013)	8.9	25+
Mauritania (2013)	8.1	18
Cameroon (2005)	8	21+
Congo (2007)	7.9	28
Central African R (2003)	7.8	23+
South Africa (2011)	6.3	53+
Tanzania (2002)	5.5	97+
Zimbabwe (2012)	5.5	16
Eritrea (1997)	5.1	13

SOURCES AND NOTE: Census data; see Table 3. The figures in this table depend heavily on how urban centres are defined. For the nations with low proportions of national population in urban centres of under 20,000 inhabitants (and the many nations with much lower proportions that are not included in this table – see Table 4), changing their urban definition could increase the proportion considerably.²²

Many censuses do not publish figures for the populations of all the smaller urban centres or give details of their numbers and the people they include. This is why most of the countries in table 3 have the number of urban centres with less than 20,000 inhabitants marked with a plus sign; here, a complete list of all urban centres was not available. But Table 4 does highlight how it is common for nations to have 20 or more urban centres in this category – and much more than this for Botswana, South Africa and Tanzania. Ghana had 298 urban centres with 5,000–20,000 inhabitants in 2000 and a total population of 2.7 million.²³

Settlements with fewer than 20,000 inhabitants can have strong and obvious urban characteristics – for instance, economies and employment structures dominated by industry, services or large, diverse concentrations of retail stores.²⁴ They can include some settlements considered as cities – usually urban centres that are important historically but not successful in recent decades. They also include millions of settlements in which much of the population works in agriculture, forestry or fishing.

One way to get more clarity in regard to whether a settlement is rural or urban is to define urban centres based not only on population thresholds but also on the extent of non-agricultural economic activities or the proportion of the economically active population working in non-agricultural activities. But this is problematic because many very small settlements have most of their workforce in non-agricultural activities (for instance small mining centres, tourist centres or small river ports) while some much larger settlements can have much of their workforce still involved in agriculture. In addition, many rural and urban households have both ‘rural’ and ‘urban’ components to their livelihoods so it is

²² This is discussed at length in Satterthwaite, David (2007), *The Transition to a Predominantly Urban World and its Underpinnings*, Human Settlements Discussion Paper, IIED, London, 86 pages.

²³ Owusu, George (2005), ‘Small towns in Ghana: justifications for their promotion under Ghana’s decentralisation programme’, *African Studies Quarterly*, Vol 8, Issue 2, pages 48-68.

²⁴ For many examples: see references listed in footnote 4; also Tacoli, Cecilia and David Satterthwaite (2003), *The Urban Part of Rural Development: the Role of Small and Intermediate Urban Centres in Rural and Regional Development and Poverty Reduction*, Rural-urban working papers series, No 9, IIED, London, 64 pages.

difficult to classify them as either 'rural' or 'urban'.²⁵ For instance, is a rural household that derives most of its income from family members who commute daily to an urban centre 'rural' or 'urban'? Is an urban household that draws most of its income from farming 'rural' or 'urban'? And an urban centre may have most of its workforce engaged in activities classified as non-agricultural but with a high proportion based on processing local crops or providing goods and services to local farmers and local rural populations.²⁶ A study in Benin of Bérubouay with 5,000 inhabitants, and So-Zounko, a lakeside settlement of 8,750 inhabitants dependent on fishing and trade noted that both were considered villages.²⁷

For any settlement, being classified as 'urban' often brings some potential advantages if it means that there is a local government there with capacity to contribute to the provision of basic services. Being designated as an urban centre can mean more scope for local revenue-generation too – but it may also bring changes feared by local elites, which may oppose their settlement being classified as 'urban'.

This issue of the lower threshold used to determine when a settlement becomes urban can be politically charged in that both governments and international agencies make decisions about resource allocations between rural and urban areas depending on the proportions of the population living in them. They also have 'rural' and 'urban' programmes which may be applicable only in areas designated as 'rural' or 'urban' so the possibilities of getting government funding may depend on a settlement being reclassified as 'urban' or on avoiding such a reclassification, long after the settlement has developed a strong non-agricultural economic and employment base. There are also some anomalies – for instance 'small town' programmes that are for rural areas or implemented within rural programmes and even statements claiming that small towns are not urban areas.

In one sense, it may not matter that a settlement with a significant concentration of people and non-agricultural economic activities remains 'rural' – and this may be advantageous for particular groups if it enables support from 'rural' development programmes. However, one worry is that if such a settlement is seen as 'rural' by government agencies, it may inhibit the development there of infrastructure and services that would have strong economic and social benefits and perhaps inhibit the development of a local government through which lower-income groups might get more voice and accountability. Increasing concentrations of people and non-agricultural economic activities usually implies a greater need for water and wastewater/sanitation management and often for solid-waste management – regardless of whether this concentration of people is in a settlement classified as a village, town or urban centre. There will be economies of scale and proximity in most of these settlements, which can lower unit costs for better provision for these. There may be important synergies between demand from households and from enterprises (including many household enterprises). This link between economic activities and domestic needs may also span rural–urban definitions, as demand for water for livestock and crops can help to fund improved provision for water serving both these and also domestic needs. In many such settlements, there may also be sufficient demand for electricity, and economies of scale and proximity, which make its provision economically feasible – and this brings obvious advantages with regard to power for local economic activities and for water pumping, as well as for domestic use.

²⁵ Tacoli, Cecilia (1998), 'Rural–urban interactions: a guide to the literature', *Environment and Urbanization*, Vol 10, No 1, pages 147–166; Tacoli, Cecilia (1998), *Bridging the Divide: Rural-Urban Interactions and Livelihood Strategies*, Gatekeeper Series 77, IIED Sustainable Agriculture and Rural Livelihoods Programme, London, 17 pages.

²⁶ See many empirical studies summarized and discussed in Hardoy and Satterthwaite 1986, op. cit., especially chapters 2–7.

²⁷ Etienne, Janique (1998) 'Formes de la demande et modes de gestion des services d'eau potable en Afrique subsaharienne: spécificité des 'milieux semi-urbains'', ENPC, Paris, 299 pages plus annexes (PhD thesis).

As the interest in small urban centres or other categories of settlements such as secondary cities or intermediate cities has begun to grow, certain myths about them have become more common (Box 3).

Box 1: Common myths about small urban centres

Myth 1: Small urban centres are growing faster than large cities. Actually, there is great diversity among such urban centres, however defined in their inter-census population growth rates although some such urban centres usually figure among the fastest growing urban centres in their nation while others figure as among the slowest growing. An analysis of population growth rates for all urban centres for the most recent inter-census period for 70 nations (and for many other nations for other inter-census periods) showed that there is great diversity among small urban centres within each nation with regard to their inter-census population growth rates; also great diversity in the extent of in-migration and out-migration. It is not possible to generalize about demographic trends in small urban centres. A review of population growth rates between censuses for all urban centres in a nation usually shows great diversity – including a group of small urban centres that grew very rapidly and a group that grew very slowly (and often some that did not grow or even some that had declining populations). Certainly, some small urban centres will have grown faster than the largest cities, but this can be misleading in that adding 1 million people to a city of 10 million in a decade appears as a slower population growth rate than adding 600 people to an urban centre of 5,000 inhabitants in that same decade. Analysing why there are such large differentials in the population growth rates of different urban centres, and what underpinned any rapid growth, is more useful for policy purposes than any attempt to find relationships between the size of settlements and their population growth rates. The potential of small urban centres to grow and develop more prosperous economic bases depends not so much on their current size but, rather, on their location, on the competence and capacity of their government, on their links with other urban centres, and on the scale and nature of economic change in their region and nation. Generally, there is also considerable diversity between large cities in terms of growth rates, although many of the largest cities experienced considerable slow-downs in their population-growth rates during the 1980s and/or the 1990s, and proved to be much smaller in 2000 than had been anticipated.

Myth 2: There are valid generalizations about small urban centres' economic base or employment structure. Again, there is generally too much diversity in the economic or employment base of small urban centres to allow generalizations, although agriculture-related goods and services and local government services and employees are generally important for the employment base of most small urban centres. In most nations, there are small urban centres that have among the most dynamic and the least dynamic economies

The proportion of people living in urban centres with 20,000+ inhabitants

Table 6 shows how high a proportion of national populations can live in urban centres with 20,000 to 49,999 inhabitants – for instance close to a fifth of the national population in Botswana (2011) and in Mauritania (2013).

Combining data from Tables 2 and 4, of the 33 nations for which data are available, 7 had more than a fifth of their national population in urban centres with under 50,000 inhabitants while a further 11 had between a fifth and a tenth.

In ten nations, the most recently available census data shows more people living in urban centres under 50,000 inhabitants than in urban centres with more than 200,000 or more inhabitants: Benin (2013), Botswana (2011), Central African Republic (2003), Chad (2009), Ghana (2000), Mali (2009), Mauritius (2011), Namibia (2011), Rwanda (2011), Uganda (2014) – although for Mauritius, this is because no urban centre exceeded 200,000 in 2011.

Table 6: Number of urban centres with 20,000–49,999 inhabitants and the proportion of the national population they contain

Nation (and date of census used)	% of national population in urban centres with 20,000-49,999 inhabitants	Number of urban centres with 20,000-49,999 inhabitants
Botswana (2011)	19.8	12
Mauritania (2013)	19	23
Benin (2013)	12.4	39
Namibia (2011)	12	9
Central African R (2003)	9	11
Gabon (2003)	8.2	4
Cote d'Ivoire (1998)	7	34
Eritrea (1997)	6.5	6
Ghana (2000)	6.5	42
Chad (2009)	6.2	22
South Africa (2011)	6	99
Cameroon (2005)	5.8	33
Liberia (2008)	5.6	7

Only three nations had 10 per cent or more of their national populations in urban centres with between 50,000 and 199,999 inhabitants (Table 7). But what is worth noting is the number of urban centres in this size category in many nations – for instance 49 in South Africa, 21 in Mozambique and between 10 and 20 in eight other nations.

Table 7: Number of urban centres with 50,000–199,999 inhabitants and the proportion of the national population they contain

Nation (and date of census used)	% of national population in urban centres with 50,000-199,999 inhabitants	Number of urban centres with 50,000-199,999 inhabitants
Mauritius (2011)	41.3	5
Botswana (2011)	16.5	5
Zambia (2010)	10.4	14
Cote d'Ivoire (1998)	9.2	15
Nigeria (1991)[6]	9	4
South Africa (2011)	9	49
Sierra Leone (2004)	8.9	4
Mauritania (2013)	8.3	4
Cameroon (2005)	8	17

Mozambique (2014)	8	21
Benin (2013)	7.4	10
Guinea (1996)	7.1	6
Ghana (2000)	6.9	14
Mali (2009)	6.7	10
Namibia (2011)	5.9	2
Zimbabwe (2012)	5.5	7
Central African R (2003)	5.2	2
Uganda (2014)	5.2	19
Congo DR (2004e)	5.1	10
Senegal (2013)	5.1	8

In regard to urban centres with between 200,000 and 499,999 inhabitants (Table 8), there is a group of low-income nations within this table with several urban centres in this size category that are important regional centres, including some that may have increasing economic and demographic importance, if their economies grow – for instance in Cameroon and Tanzania. There is also a group of small-population nations that had no urban centre in this size category for the census year reported, because their largest urban centre had over 500,000 inhabitants, with the next-largest urban centres having fewer than 200,000 inhabitants – for instance Benin, Chad, Guinea, Rwanda and Uganda.

A few small population nations also have a relatively high proportion of their population in urban centres with between 200,000 and 499,999 because their largest city falls into this category – as in Botswana in 2011, Burundi in 2008, Eritrea in 1997, Namibia in 2011, and Guinea Bissau in 2009,

Table 8: Number of urban centres with 200,000–499,999 inhabitants and the proportion of the national population they contain

Nation (and date of census used)	% of national population in urban centres with 200,000-499,999 inhabitants	Number of urban centres with 200,000-499,999 inhabitants
Guinea Bissau (2009)	25.5	1
Namibia (2011)	15.4	1
Eritrea (1997)	14.4	1
Gabon (2003)	13.8	2
Botswana (2011)	11.4	1
Senegal (2013)	10.5	6
Benin (2013)	7.7	3
Mozambique (2014)	7.4	7
South Africa (2011)	6.6	11
Burundi (2008)	6.2	1
Congo DR (2004e)	6	4
Cameroon (2005)	5.4	4
Zambia (2010)	5	2

Small urban centres and the rural–urban continuum

Two conclusions can be drawn from the above. First, small urban centres have a high proportion of the urban population in most nations and a high proportion of the national population in many, especially in relatively urbanized nations. Second, the pattern of small urban centres and their relation to rural settlements and other urban centres defies simple categorization or description. The spatial distribution of any nation's urban population is best understood as the 'geography' of its non-agricultural economy and government system.²⁸ Or, to put it another way, it is the map of where people whose main income source is not from agriculture or forestry make a living.²⁹ In general, as a nation's per capita income increases, so too does the concentration of its population in urban centres, because most new investment and income-earning opportunities are concentrated there. Most low-income nations and all middle-income nations have less than half of their GDP in agriculture, and all nations with growing economies have decreasing proportions of their GDP derived from agriculture and decreasing proportions of their labour force in agriculture.³⁰ These figures on the proportion of GDP or of the labour force in industry and services can be misleading in that a considerable part of the growth in industry in many low-income nations may be from forward and backward linkages with agriculture – for instance, the production and sale of agricultural machinery, fertilizers and other agricultural inputs, cold stores, and packaging and processing industries.³¹ In addition, a considerable part of the growth in urban services can be to meet demand from agricultural producers and rural populations.³²

As noted above, it is difficult to generalize about the economic bases of small urban centres. In most nations, many will be 'market towns', concentrating markets and services for local agricultural producers and retail and service outlets for their populations and the surrounding populations (including entertainment and financial services). Many are 'administrative towns', in that a significant proportion of their populations directly or indirectly derive income from the concentration of government functions there – including the employees of the local district government and those who work for government-funded services (such as in health care, hospitals, schools, postal services, the police and courts). Among the many other economic underpinnings of small urban centres are mining enterprises, tourism, border posts, river ports (or 'land ports' in the sense of being key nodes linking local settlements to larger markets), education centres (for instance, with one or more secondary schools or a higher education institution), hotels/boarding houses for migrant/temporary workers,

²⁸ See Satterthwaite 2006, *op. cit.* This often also reflects in part the nation's or region's agricultural economy, as the areas with the most prosperous agriculture often have among the most dynamic urban centres, which are markets and service centres for farmers and rural households.

²⁹ There are exceptions – for instance, urban growth in places where retired people choose to live or in tourist resorts but, even here, the growth is largely due to the growth in enterprises there to meet the demand for goods and services generated by retired people and/or tourists. Advanced telecommunication systems and the Internet also allow some spatial disconnect, as a proportion of those who work for city-based enterprises can work from locations outside the city (including working from homes that are outside the city); these may be growing in importance, but are unlikely to be significant in low-income and most middle-income nations. Most urban centres also have farmers and agricultural workers among their populations.

³⁰ See tables at the back of recent World Development Reports, published by the World Bank.

³¹ In many nations, a significant proportion of the total value of agricultural production is within urban areas (from urban agriculture), but it may also be due in part to city boundaries encompassing large areas of agricultural land so that the produce grown in what are clearly agricultural areas (with no urban characteristics) is counted as urban.

³² Tacoli and Satterthwaite (2003), *op. cit.* For a detailed case study of this, see Manzanal, Mabel and Cesar Vapnarsky (1986), 'The development of the Upper Valley of Rio Negro and its periphery within the Comahue Region, Argentina', in Hardoy and Satterthwaite (1986), *op. cit.*, pages 18–79.

agricultural processing, retirement centres (sometimes with foreign retirees being an important economic underpinning for the urban centre) or centres for the armed services. Most urban centres will also have a proportion of their population working in agriculture. Economic trends in small urban centres will also vary – usually from among the most dynamic to among the least dynamic within each nation. Many urban centres close to large and prosperous cities may develop stronger economic bases as they attract new enterprises whose output largely serves demands in the large city or external demands organized by enterprises located in the large city. They may also develop into dormitory towns, or at least have their economy strengthened by having a proportion of their workforce commuting to the larger city.

With regard to comparing small urban centres' economic and employment bases between different size categories, empirical studies have found no easily defined or clear dividing line although, in general, the larger the urban centre's population, the smaller the proportion of the economically active population working in agriculture and the greater its importance within the government's administrative hierarchy. In nations with effective decentralization, including democratic reforms, many municipal governments in small urban centres have become more successful in supporting economic growth and in improving infrastructure provision.³³

Dividing a nation's population into 'rural' and 'urban' and assuming that these have particular characteristics in terms of the settlements they live in and the sector in which they earn a living misses the extent to which (poor and non-poor) rural households rely on urban income sources (through remittances from family members, commuting, or producing for urban markets) while many urban households in low-income nations rely on rural resources and reciprocal relationships with rural households.³⁴ Most small urban centres exhibit a mix of urban and rural characteristics. However, most rural specialists choose not to recognize the importance of small urban centres within 'rural development.' Rural specialists may even talk at length about rural industrialization and 'off-farm' and 'non-farm' employment without mentioning 'urban', although much of the so-called 'rural industrialization' and much of the non-farm employment is actually in small urban centres.³⁵ Meanwhile, most urban specialists fail to recognize the importance of prosperous agriculture and a prosperous agricultural population for urban development.³⁶ Recognition of the demographic, economic, social and political importance of small urban centres might help to shift such biases.

Less importance should be given to this rural–urban divide with more attention to seeing all settlements as being within a continuum with regard to both their population size and the extent of their non-agricultural economic base. Figure 3 illustrates this: key 'rural characteristics' are listed on the left and key 'urban characteristics' on the right. But the characteristics listed in each column form two ends of a wide spectrum. As noted already, many rural settlements have households that rely on non-agricultural jobs, and non-agricultural employment opportunities may be very important for reducing rural poverty. Meanwhile, many urban areas exhibit some rural characteristics – such as the importance of urban agriculture for many low-income urban households. In addition, in the middle of this continuum between 'rural characteristics' and 'urban characteristics' there is a 'rural–urban' interface.

³³ See, for instance UN-Habitat (2006), *Meeting Development Goals in Small Urban Centres: Water and Sanitation in the World's Cities 2006*, Earthscan Publications, London,

³⁴ See *Environment and Urbanization*, Vol 10, No 1 (1998) and Vol 15, No 1 (2003), both on rural–urban linkages. See also Tacoli 1998, op. cit.

³⁵ See Tacoli and Satterthwaite 2003, op. cit.

³⁶ Manzanal and Vapnarsky (1986), op. cit.

Figure 2: The rural–urban continuum

RURAL	URBAN
<p>Livelihoods drawn from crop cultivation, livestock, forestry or fishing (i.e. key for livelihood is access to natural capital)</p> <p>Access to land for housing and building materials not generally a problem</p> <p>More distant from government as regulator and provider of services</p> <p>Access to infrastructure and services limited (largely because of distance, low density and limited capacity to pay?)</p> <p>Fewer opportunities for earning cash, more for self-provisioning; greater reliance on favourable weather conditions</p> <p>Access to natural capital as the key asset and basis for livelihood</p>	<p>Livelihoods drawn from labour markets within non-agricultural production or making/selling goods or services</p> <p>Access to land for housing very difficult; housing and land markets highly commercialized</p> <p>More vulnerable to ‘bad’ (oppressive) government</p> <p>Access to infrastructure and services difficult for low-income groups because of high prices, illegal nature of their homes (for many) and poor governance</p> <p>Greater reliance on cash for access to food, water, sanitation, employment and garbage disposal.</p> <p>Greater reliance on house as an economic resource (space for production, access to income-earning opportunities; asset and income earner for owners – including <i>de facto</i> owners)</p>
<p>Urban characteristics in rural locations (e.g. prosperous tourist areas, mining areas, areas with high-value crops and many local multiplier links, rural areas with diverse non-agricultural production and strong links to cities)</p>	<p>Rural characteristics in urban locations (urban agriculture, ‘village’ enclaves, access to land for housing through non-monetary traditional forms.)</p>

SOURCE: Tacoli, Cecilia and David Satterthwaite (2003), *The Urban Part of Rural Development: the Role of Small and Intermediate Urban Centres in Rural and Regional Development and Poverty Reduction*, Rural-urban working papers series, No 9, IIED, London, 64 pages.

Here, rural and urban characteristics are mixed, and most small urban centres in low- and middle-income nations will have such a mix. So too will many peri-urban locations around cities, as proximity to the city brings changes in, among other things, land and labour markets and agricultural and non-agricultural production.

This suggests the need to consider changes to the long-established classification of all human settlements as ‘rural’ or ‘urban.’ This simple classification system adopted for the collection and dissemination of population data does not reflect “the blurring of rural and urban areas, the diversity of settlements within urban and rural contexts, the increasing scale and complexity of urban systems, and

the new forms of urbanization that are emerging” in low- and middle-income nations, as well as high income nations.³⁷ It also tells us nothing of each settlement’s functional linkages with other settlements.³⁸ Hopefully, new classification systems will help make apparent the social, economic, political and demographic importance of ‘small urban centres and large villages’ while also highlighting their diversity.

What data are available on risk in small and intermediate urban centres?

There are so few recent studies of small and intermediate urban centres in sub-Saharan Africa; this reflects the limited attention given to urban issues in sub-Saharan Africa and within this the fact that most of the focus is on large cities. Among the studies that do look at small and intermediate urban centres in this region, few look at risk – the 2013 paper on Karonga by Mtafu Manda is one notable exception.³⁹

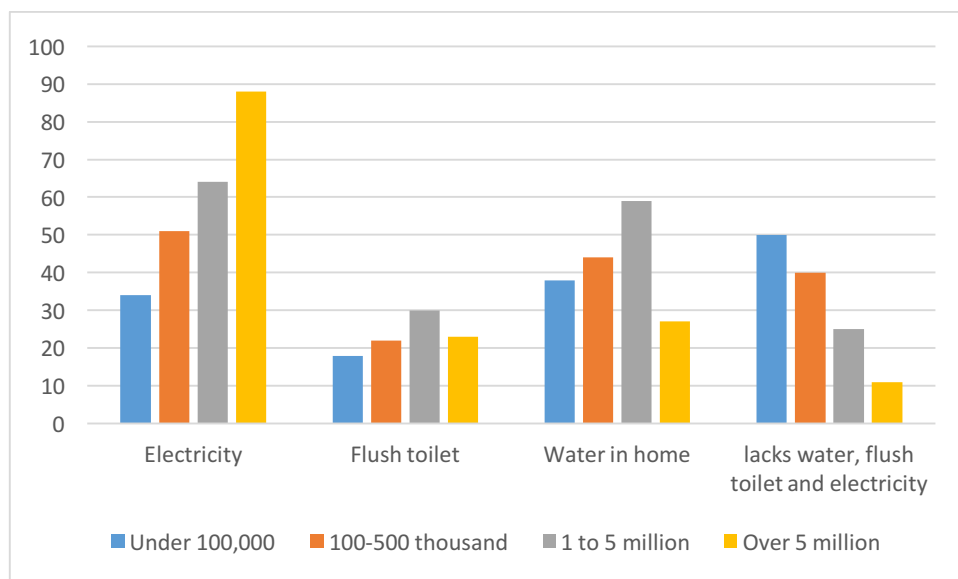
In the absence of data on risk – for instance risk of premature death from a communicable disease or from a traffic accident, fire or flood – there are some data and some case studies on provision for water, sanitation, solid waste collection and electricity; provision for these can and should contribute to risk reduction. But available data on these and other services that contribute to risk reduction are usually too aggregated to show provision for these in small urban centres. The official UN database on provision for water and sanitation only gives statistics for ‘urban’ and ‘rural’ populations. The UN datasets on provision for water and sanitation and some other services (for instance electricity) are mostly drawn from national sample surveys that have sample sizes too small to allow more disaggregated data – for instance how provision for water and sanitation varies by size-category of cities. Most governments have census data that can provide some information on the quality of housing and extent of provision for water and sanitation in all urban centres – but this is not made available for individual urban centres. Local government officials have difficulties accessing census data about their urban centre in a form that is useful for identifying and acting on deficiencies in housing and provision for water, sanitation, solid waste collection and services. There are case studies that show how inadequate provision is for particular small urban centres but we cannot generalize from a few case studies.

Figure 3: Sub Saharan Africa; service provision in different size-classes for urban centres

³⁷ Hugo, Graeme and Tony Champion (2004), "Conclusions and recommendations", in Tony Champion and Graeme Hugo (editors), *New Forms of Urbanization: Beyond the Urban-Rural Dichotomy*, Ashgate, Aldershot, page 384. This book also discusses new classification systems.

³⁸ Ibid.

³⁹ See Manda, Mtafu (2014), "Where there is no local government: addressing disaster risk reduction in a small town in Malawi", *Environment and Urbanization*, Vol. 26, No. 2.



SOURCE: Hewett, Paul C and Mark R Montgomery (2002) *Poverty and Public Services in Developing Country Cities*, Population Council, New York, 62 pages

But an analysis of service provision in urban areas of 43 low and middle income nations drawn from Demographic and Health Surveys, published in 2002 showed that provision for water and sanitation is usually worse in small urban centres – see Figure 3. This shows the vast inadequacies in provision for flush toilets (with the inadequacies largest in smaller urban centres) and water in the home (although here the largest cities have less provision than urban centres with under 100,000 inhabitants). Provision for electricity shows so clearly the increase in provision with city-size category – while the number of households lacking all three decrease with city size.

A UN Habitat Report published in 2006⁴⁰ sought a more detailed understanding of provision for water, sanitation and solid waste collection in small urban centres and this included summaries drawn from case studies. Some examples drawn from this Report are given below

Various national or regional studies show that provision for water and sanitation is usually very inadequate in small urban centres. For instance, in Cameroon in the late 1990s, only 99 of the 320 urban centres were served by the network of the national water company (SNEC).⁴¹ In Senegal, a study in Matam department of 47 small towns with between 2,000 and 15,000 inhabitants that are part of a water management support programme highlighted the inadequacies – very few or no individual water connections and in towns of 5,000 or more inhabitants, uncontrolled expansion of the original network causes water pressure imbalances and leaks.⁴² In Ghana, a 2005 assessment showed the lack of capacity in the urban utility (the Ghana Water Company Limited) that manages water supply systems for the 100 largest urban centres (the 2000 census suggested that there were 357 urban centres). Only 40 percent of the urban population was covered by this utility's networks. There was no provision for sewers in small towns and very inadequate provision for sewers in other urban centres.⁴³ In Nigeria, some 40 million people are estimated to live in 3,000 "small towns" in 2000. A survey of 37 small towns and peri-urban settlements with between 5000 and 20,000 inhabitants in 1997 showed that less than 10% had access to safe water. Only 0.4% of households had piped water from yard, shared or public standpipes. 27.4% relied on water from rivers and streams, while 24.5% used yard wells. The rest obtained water

⁴⁰ UN Habitat 2006, op. cit.

⁴¹ Tanawa 1998, op. cit.

⁴² Estienne 2000, op. cit.

⁴³ WaterAid 2005 op. cit.

from community wells (13.4%), water sellers (8.6%), springs (6.6%) boreholes (5.1%) and water tankers (4%) and other sources, such as ponds (8.2%). Many motorized boreholes in the towns were no longer working. The quality of water is poor, and cases of water-related diseases such as diarrhoea, dysentery, typhoid and cholera were prevalent. Distance from water supply (up to 600m in some cases) and intermittency of supply were also problems. For sanitation, only 0.7% of households had septic tanks, 4.9 % used pour-flush toilets and 74.6% used simple pit latrines. 15% had no sanitation facility and solutions included using public toilets, the bush or the farm. However, the majority (73.2 %) of households had toilets located within 20 metres of their homes.⁴⁴

Kumi town in Uganda is a district capital and had a population estimated at 17,000 inhabitants in 2000. The Town Council is responsible for water and sanitation services. The town's water supply comes from boreholes and pumps plus overhead tanks feeding a piped distribution network with public kiosks (at the time of the study there were 15 kiosks but two were closed) and a few household connections. Water was available for two hours a day. Virtually all households are reliant on water kiosks or water vendors. Around 60 percent of households have pit latrines and there are two public pit latrines although one was locked when visited by a study in 2000.⁴⁵

Kyotera (Uganda) has around 10,000 inhabitants and no public water supply. The town relies mainly on piped water supplied by a local church project although the water is of poor quality and supply is frequently interrupted due to power failures. The town has no sewers. Around two thirds of the population have pit latrines, around 20 percent use four public toilets. There is no domestic solid waste collection service and the storm drain system is very inadequate. The few drains that do exist are clogged with solid waste.⁴⁶

Mandiana (Guinea) is an administrative centre of 7,640 inhabitants.⁴⁷ Water provision comes from two boreholes with solar pumps managed by the national water company (SEEG) which supply a water tower that serves 12 active standpipes (with two taps each); there are also 3 inactive standpipes. Each standpipe serves an average of 50 people. These standpipes are regularly used by 85% of households during the dry season (when traditional wells have dried up) and 55% of households during the winter period. The high cost of water from the standpipes means that it is used primarily for cooking/drinking, rather than washing which is carried out either at the river or at home.

In Wobulemzi (Uganda) with 12,000 inhabitants in 2000, the Town council is responsible for water and sanitation but has delegated responsibility to a water users association. A piped water network covers most of the town and feeds 31 kiosks, 64 private connections and 6 institutions.⁴⁸

In Bunda (Tanzania) with 46,178 inhabitants in 2002, around half the population is served with a piped water system with water available for 8 hours every two days. Many new areas are unserved (including low income areas) and their inhabitants get water from the lake or wells or from street vendors. In 2004, there were just 365 connections, 191 of which were metered. There are no sewers and only a few houses have septic tanks. There is no public provision for solid waste collection in residential areas and the drainage system is inadequate.⁴⁹

⁴⁴ Stoveland and Bassey 2000, op. cit.

⁴⁵ Colin, Jeremy and Joy Morgan (2000), *Provision of Water and Sanitation Services to Small Towns; Part B: Case Studies in Uganda and India*, Well Studies in Water, Sanitation and Environmental Health Task 323, WELL, Loughborough and London, 53 pages.

⁴⁶ UN Habitat (2004), *Lake Victoria Region Water and Sanitation Initiative; Supporting Secondary Urban Centres in the Lake Victoria Region to Achieve the Millennium Development Goals*, Water for African Cities Programme, United Nations Human Settlements Programme, UN Habitat, Nairobi.

⁴⁷ Bureau Laforêt (1997) *Etude Socio-Economique du Centre d'Alimentation en Eau Potable de Mandiana (Guinée)*, Conakry : Ministère Français de la Coopération, August 1997.

⁴⁸ Colin and Morgan 2000, op. cit.

⁴⁹ UN Habitat 2004, op. cit.

Homa Bay (Kenya) is a trading centre, fishing centre and district headquarters with around 32,600 inhabitants. Water quality in the water supply system is often poor, water volume is far below demand and supply is not continuous. The town has several unplanned informal settlements and most of their inhabitants get their water direct from the lake. Only 22% of the population is connected to sewers; most people use pit latrines or toilets connected to septic tanks or the bush. Overflowing toilets are common during rainy seasons. Storm drains are not available for most of the town and provision for the collection of solid wastes is very inadequate, so it is common for drainage networks to be blocked.⁵⁰

A project to improve provision for water and sanitation in 60 small urban centres in Uganda found that in all but one urban centre relied mainly on untreated river or shallow well water from vendors (at high cost), and to a lesser extent on a few boreholes with hand or motorized pumps. The exception was Iganga (with 38009 inhabitants in the 2002 census) that had a water network covering about 10 per cent of the population with water available for two or three hours per day. Most of the population use unimproved pit latrines.⁵¹

In Mbandjock (Cameroon), only about 20 per cent of the population (estimated at 20,000 in 1996) have access to piped water; the rest rely on wells and springs for their water supply but tests found that all spring and well waters presented evidence of faecal contamination from human and/or animal origin. The city has no sewer system and the only method of sewage disposal is by pit latrines or septic tanks.⁵²

Kindia (Guinea) has 100,000 inhabitants and water is provided by a piped network to a small proportion of the population in central areas and to a number of standpipes managed by private operators which are used by almost a third of the population. Most water is drawn from wells and springs and rainwater is a major source during the wet season.⁵³

There is little reason to think that the case studies summarized above are unusual. Three points are worth highlighting. The first is how few of the population (or in some instances none of the population) in most small urban centres have access to a piped water system within their home or yard (i.e. a private connection). In most case study urban centres, much of the access to piped supplies is through standpipes or kiosks. The second is the high proportion of the population in most of the case study urban centres that rely on untreated water at least for part of their needs. The third is the lack of provision for sanitation. Most small urban centres in sub-Saharan Africa have no sewers and for those that do, it serves a small proportion of their population. Many case studies also pointed to no other forms of public provision for sanitation – for instance no service to empty pit latrines. Some case studies highlighted how significant proportions of the population had no latrine in or close to their home and how communal or public latrines were common. Many case studies also mention the lack of provision for solid waste collection and for drainage.

We know that the absence of risk reducing infrastructure and services, poor quality, overcrowded housing and use of dirty fuels greatly increase risks of premature death, serious illness and injury in urban areas. Although most of the documentation of this in sub-Saharan Africa is for relatively large cities, there is no reason to think that this does not apply to smaller urban centres – smaller concentrations of urban populations, especially high density concentrations. We also know how

⁵⁰ UN Habitat 2004, op. cit.

⁵¹ African Development Bank website [www.afdb.org]; African Development Fund (2004) "Uganda Small Towns Water Supply and Sanitation Project Appraisal Report", August.

⁵² Tchounwou, P.B., D.M. Lantum, A. Monkiedje, I. Takougang and P.H. Barbazan (1997), "The urgent need for environmental sanitation and safe drinking water in Mbandjock, Cameroon", *Archives of Environmental Contamination and Toxicology*, Vol. 33, No. 1, pages 17-22.

⁵³ Programme Solidarité Eau (1998) *Eau potable et assainissement dans les quartiers périurbains et les petits centres*, Paris: GRET (Groupe de recherche et d'échanges technologiques) December, p.94-96.

addressing these risks depends heavily on the competence and capacity of local governments both in what they do and what they support. So too do measures to identify and act on disaster risk. This paper is intended as a reminder of the need to consider risk in small urban centres, in part because of their demographic and economic importance, in part because it is here that so much risk is concentrated and usually with so little local capacity to address it.

ANNEXE: SOURCES FOR THE STATISTICS IN THIS PAPER

It is important for the reader to be aware of possible sources of error. For all nations in Table 2 and tables 4-8, the calculations for the proportions of the national population in these different urban-size categories were made from lists of all urban centres with their populations; virtually all of these were drawn from <http://www.citypopulation.de/>. The proportion of national populations in urban centres with under 20,000 inhabitants is drawn from two sources. The first is the sum of the population of urban centres listed with under 20,000 inhabitants. The second is from subtracting the total population in urban centres with 20,000+ inhabitants from the total urban population (drawn from United Nations 2014). For some nations, the sum from the first of these equalled the sum of the second, as the list of urban centres with under 20,000 inhabitants with their populations included all urban centres under 20,000 inhabitants. However, usually the sum of the first was well below the sum of the second – implying that the list of urban centres with under 20,000 inhabitants was incomplete.

However, for each nation, other data sources were consulted to check consistency with these figures, for instance through examining each nation's urban criteria, to see if the figure for the proportion of the national population in urban centres with under 20,000 inhabitants was consistent with this and through reviewing other census data – for instance on the number of urban centres.

Another factor that limits the validity of inter-country comparisons is the different criteria for defining urban boundaries for each urban centre (or specifically for larger urban centres). Wherever there were two sets of figures for cities – one based on cities, one based on urban agglomerations (with large cities made up of more than one 'city') – the figures for urban agglomerations were used.

This paper drew on United Nations 2014 for the statistics in Tables 1 and 3, for each nation's urban definition and for verification of the size of some nation's national, urban and rural populations, although this was done only when this report was drawing on the same censuses used for Tables 2 and 4-7.



The contents of this Working Paper reflect the views of the author only and not those of the UK Department for International Development or the Economic and Social Research Council.