

The current extent of coverage and the costs of water supply and sanitation provision in the urban areas of South Africa*

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Abstract

This paper presents figures for the current extent of coverage and the costs of water supply and sanitation provision in the urban areas of South Africa for 1990, together with simple methods for determining them. These figures provide a first estimate of coverage and costs and serve as both a starting point and a global check for the collection of more detailed figures. The coverage figures presented indicate that out of the current urban population of 22m. people, 4m. (20%) have minimal water supply provision, 7m. (30%) have minimal sanitation and 13 to 14m. (60%) have good provision of both water supply and sanitation. The cost figures presented include the costs of the bulk services and show that, reduced to a figure per site, the capital costs of the bulk services are of the same order of magnitude as the internal services.

1 Introduction

An early step in developing "appropriate strategies and approaches to improve water supply and sanitation on an integrated, affordable and sustainable basis for all communities (in South Africa) in a situation of increasing need and limited resources" (Water and Sanitation 2000, 1991) is to know what the current status is, particularly in terms of coverage, but also in terms of the cost of that provision.

At the close of the United Nations International Drinking Water Supply and Sanitation Decade (1981 to 1990) this was not clearly known and a call was made for intensification of baseline data collection for future quantitative evaluation of progress in this regard (Van Vuuren and Coombs, 1990).

In this paper the current extent of coverage and the costs of water supply and sanitation provision in the urban areas of South Africa are presented together with simple methods for determining them.

These figures provide a first estimate of coverage and cost figures for urban areas of the country and serve as both a starting point and a global check for the collection of more detailed figures.

One component of the existing situation is obviously the numbers; but perhaps of more importance is the identification of what numbers need to be collected and of a plan for collecting them. Lack of data and of a plan for collecting them points to a deficiency in overall water supply and sanitation strategy rather than simply a shortage of correct numbers. The collection of relevant data needs to be an ongoing part of a strategy of provision of water supply and sanitation.

In providing an overview of the existing situation of water supply and sanitation provision in the urban areas, this paper is therefore as much an attempt to contribute to the definition of that framework as to provide the numbers.

Four broad areas are addressed in this paper:

- definition of the areas covered: "urban areas of South Africa"
- definition of the levels of service for water supply and sanitation provision
- coverage statistics for water supply and sanitation provision
- costs of different options for provision.

2 Definition of the area covered: "Urban areas of South Africa"

The lack of commonly agreed areas to which any kind of data referred as well as the lack of co-ordinated responsibility for the different areas made comprehensive data difficult to obtain. Much of the difficulty stemmed from a lack of agreement as to what constitutes the "urban areas of South Africa"

At the outset the term "South Africa" is used in this paper in its broadest sense to include the independent homelands and self-governing territories in addition to the narrow definition of the term. For the term "urban areas", the Urban Foundation (UF) definition has been used. This definition follows the international trend of defining urban areas "according to density and economic criteria (i.e. the absence of agricultural activity, and high population density)" (Urban Foundation, 1990b). This has meant that official census statistics have been disaggregated and/or reagggregated "into social and geographical categories that are more functional than those often used by officials, who tend to operate in terms of the assumptions of a particular political framework" (Urban Foundation, 1990b).

More specifically, the UF Demographic Projection Model (Urban Foundation, 1990a) recognises 4 categories of areas: metropolitan areas, cities and towns, dense (or closer) settlements and rural areas. The model also makes a distinction between the homeland areas and the South African areas (in the narrow definition).

Eight metropolitan areas are identified: the PWV, Durban, Pietermaritzburg, Cape Town, Port Elizabeth, Bloemfontein/Botshabelo, OFS Goldfields and East London. As has been done throughout the UF demographic research work, these centres have been defined "as including all suburbs or settlements in which the bulk of the population interact with each other on a daily basis" (Urban Foundation, 1990b:23). Most of these metropolitan areas

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