

The Bicycle in southern Africa

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Summary

In Southern Africa the bicycle mode of travel plays various roles in the 16 countries south of the equator. This paper discusses these roles and makes recommendations to authorities, and encourages certain present trends, to make the bicycle a much more significant transportation mode in both rural and urban areas.

Southern African countries can all be described as developing nations - rich in its own cultures and greatly influenced by the global growth of modern technology. Motor vehicles, aircraft, satellite television, cellular telephones etc, are found everywhere, yet there are still millions of citizens who cannot afford these luxuries and with respect to transport are considered either “stranded” or “captive”.

The bicycle - especially the mountain bike - can contribute greatly to the mobility for many and job creation in several areas. Afribike is a recently established association to encourage utility cycling. Afribike headquarters are in Johannesburg and is presently expanding its activities through Africa. Already over 1000 Africans have benefited from this program in Johannesburg and authorities are beginning to realise how the humble but efficient bicycle can contribute to better health, environment, mobility and improve the quality of life for many people.

Recommendations for better bicycle use in Southern Africa are made.

1. Introduction

This paper deals with the use of the bicycle in the African countries south of the equator. Details of the South African situation is given in greater detail mainly due to the availability of more statistics, but could be considered fairly representative of surrounding countries.

Despite the global technological improvements in the transportation field there are still many folk in Southern Africa who simply cannot afford personal motorised transport. These people are considered either as “stranded” or “captive”.

For the South African case the Government’s 1998 Moving South Africa transport strategy listed amongst its urban population the following :

“Stranded” (no affordable public transport available)	-	2,8 million
“Survival” (captive to cheapest public transport option)	-	4,1 million
“Strider” (prefers to walk or cycle)	-	5,4 million
These groups total just over 50% of the urban population		

The development of the mountain bicycle has resulted in cycling on some of Africa’s unsurfaced roads being much more pleasant and safer. The wider and thicker tyres of the mountain bike and efficient gearing eases riding on poor roads, up steeper gradients and allows heavier loads to be transported. For greater use of this most efficient mode of travel, a number of beliefs or myths must be overcome, viz:

- The bicycle is not just for the poor - it can be used by all for many purposes, such as commuting, recreation, touring and transporting items for gain.
- Status in life is not necessarily gained from graduating from cycling to owning a motor vehicle.
- There should be no stigma attached to women acquiring and riding bicycles.

2. Bicycle Use in Southern Africa

Mobility is the main reason the bicycle is used in Southern Africa, viz trips to work or for shopping purposes. In Tanzania and Zambia many single speed roadsters are noted, often with a carrier, transporting food or a passenger. Many of these bicycles are of Chinese origin. Not many studies have been carried out on the role of the bicycle in central African countries but it is plain for all who visit that it is significant.

Zanzibar is very bicycle friendly and the work related bicycle is in great demand. Many bicycles have been adapted to carry large loads of home crafts to tourist areas for selling. Stone Town functions well because of the bicycle in its many forms.

In urban areas, formal bicycle path networks are non-existent. In Harare efforts have been made at intersections to assist cyclists to cross safely but in general the bicycle simply has to move with traffic in Southern African cities and towns.

In South Africa bicycles are used in many areas. It is estimated that 15 million functional bicycles are in existence and sales are roughly 300 000 per annum. Bicycle use can be broadly classified as follows :

Sport related (mainly racing bicycles)	-	20%
Leisure/touring/recreation (mountain bikes mainly)	-	35%
Work/transport of goods	-	10%
Commuting	-	5%
- Adults	-	5%
- Scholars	-	25%
Social	-	<u>5%</u>
		100%

The sport/leisure combination adds up to more than half the South African use. This is due to the many Pedal Power Associations (PPA) that have been operating regionally for the past 25 years. The largest PPA is in Cape Town which started and now assists with the organisation of the annual Pick _ Pay Argus Cycle Tour which in March 2000 attracted 43 000 entries for the 109 km course.

Bicycle touring has grown in recent years with Botswana introducing tours through their national parks to view wild animals. The Victoria Falls area is another exciting venue for cycling. South Africa has many spectacular scenic areas for the touring cyclist with many bed and breakfast establishments and camping facilities on offer.

3. Lessons Learnt

Bicycle demonstration projects carried out in South Africa in urban areas (Pretoria, Randburg and Cape Town) have taught city officials and the bicycle designers the following :

- Bicycle path networks must be continuous - i.e. do not leave cyclists to find their own way to the next bicycle path.
- Adequate width, good surfaces, informative signs and safe intersection crossings attract cyclists. (There was a 30% increase in scholar commuting after completion of Cape Town's 22km network of paths in the Rondebosch/Newlands area).
- Supply adequate bicycle parking.
- Do sufficient surveys, before and after implementation for monitoring purposes and to inform the public how their taxes were spent.
- Maintenance is vital as bicycles do not "sweep" roads like motorised vehicles.
- Traffic enforcement must take bicycle paths into account to prevent motor vehicles stopping or parking in bicycle paths.

4. The Future of the Bicycle in Southern Africa

The bicycle in Southern Africa satisfies the needs for its citizens in many ways - it is up to Government, City Officials and Non-Government Organisations (NGO's) to appreciate the many benefits greater use of the bicycle can bring to the standard of living.

4.1 Afribike

One of the most encouraging developments in recent times is the creation of Afribike - an incorporated association not for gain. Afribike was set up with the assistance of the Institute for Transportation and Development Policy (ITDP) and addition funding from United Nations Development Program (UNDP) and the Danish Development Agency (DANSED).

Afribike procure used bicycles and after refurbishment are sold to the public at a minimal cost of a new bicycle. Several bicycles are also remodelled to carry loads on carriers or by the addition of trailers.

In addition a skill program is offered covering bicycle maintenance, repairs and riding safely. Women are especially encouraged to attend these courses and participants are handed bicycles on completion. Advanced courses are also conducted informing participants how to cope with more complex mechanical problems and especially how to boost their income using these Afribike work bicycles.

Another aim of Afribike is to work with other NGO's to assist local entrepreneurs establish their own bicycle shops and work bike - based mobile businesses.

Afribike's head office is in Mellville, Johannesburg with an office in Cape Town and will shortly be opening an office in KwaZulu/Natal.

Bicycle Brigade is an innovative messenger/delivery service in Cape Town. For a fee of R11-00 a messenger on a bicycle will deliver or collect a letter or parcel anywhere in the central area.

The future of the bicycle in Southern Africa is bright as long as authorities become aware of its many benefits and assist via legislation to make cycling safer and providing bicycle paths and parking facilities in urban areas. The 4 classes of bicycle paths to be considered for urban areas are illustrated in Figure 1 on the next page which is an extract from the South African Bicycles standards manual.

5. Recommendations

- 5.1** All countries in Southern Africa should maximise the advantages of the bicycle in both rural and urban areas.
- 5.2** Afribike could assist by setting up offices in countries in Southern Africa to encourage greater use of bicycle transport.
- 5.3** Bicycle touring should be encouraged as it is a good foreign exchange earner.

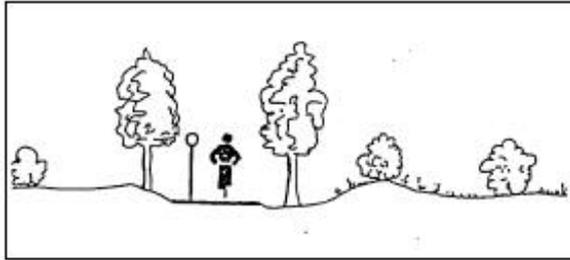
Lastly, the bicycle:

- Is the most energy efficient mode of transport existing on this planet,
- Does not pollute,
- Provides many work related activities,
- Is reasonable cheap to acquire, and
- Provides excellent mobility for the user.

It is irresponsible to ignore the benefits of bicycling.

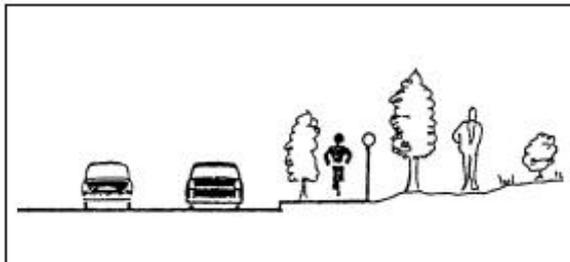
Figure 1: Standards.

The guidelines for Bicycle Facilities have classified 4 types of bicycle paths as indicated below.



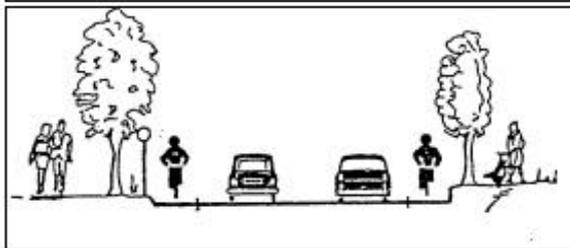
CLASS 1

Path on independent alignment and reserved for either cyclists, or cyclists and pedestrians, only.



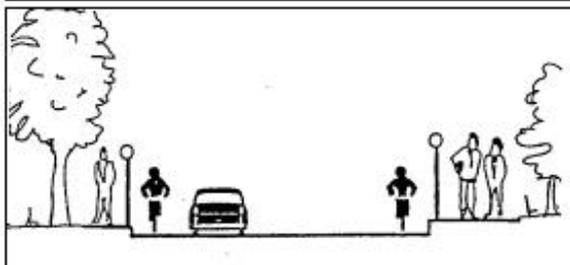
CLASS 2

Path which is located within a road reserve and separated from other traffic and for the use of cyclists, or cyclists and pedestrians, only.



CLASS 3

Path forming a part of the street or carriageway and marked accordingly. This path is also known as a cycle lane.



CLASS 4

Path located on a low volume street to serve as a link in a network of bicycle paths. The path is indicated by signs and markings.

Roadmarking, signs and traffic signals have all been standardised. Route markers are encouraged for continuity and information for cyclists.