

## **STOP EXCLUDING THE BICYCLE FROM URBAN TRANSPORT PLANNING IN AFRICA**

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## **ABSTRACT**

There has been general neglect of the bicycle in transport planning in African cities. Though there are experts, research findings and discussions on this issue in workshops, the planning situation for the bicycle mode has not changed substantially in African cities. The research question addressed in this paper is: are there any building blocks and examples of positive steps towards incorporating bicycle in transport planning and programmes in African cities? This paper answers this question by presenting examples of efforts at incorporating bicycle into transport planning and programmes in selected African cities. The examples from Accra, Cape Town, Dar Es Salaam and Nairobi reveal that there is growing recognition among African policy makers and authorities about the importance of bicycle mode in urban transport, and the need to give priority to this mode of transport. Though these efforts are small and still in planning stages in most cases, they indicate a move in the right direction. These promising efforts should be encouraged, supported and pursued. This requires, among others, political commitment and building the institutional capacity required to plan, implement and evaluate investments in sustainable transport. The bicycle should no longer be excluded from urban transport planning. There is evidence from the examples presented to show that inclusion is possible. These ongoing efforts and building blocks demonstrate promising initiatives and practices that can eventually lead to full inclusion of bicycle in urban transport planning in Africa. We look forward to a time when the cities we have used as case studies will be world examples of best practice in bicycle friendly urban and transport planning.

## **1 INTRODUCTION**

There is a general neglect of incorporating the bicycle in transport planning in African cities (Mozer 2005). This state of affair exists despite the growing use of this mode of transport in these cities. Provision of bicycle facilities will not only increase the use of this mode but also improve access for many who use this mode as well safety of cyclists in these cities. There have been several calls to address the neglect of bicycle mode in transport planning in African cities. Though there are experts, research findings and discussions on this issue in workshops, the planning situation for the bicycle has not changed substantially in African cities. The challenge that needs to be addressed is what to do to realize the needed change. This paper contributes to this issue by addressing a key question: are there any building blocks and examples of positive steps towards incorporating the bicycle into transport planning and programmes in African cities? Though there is much more to be done, there are a few positive steps aimed at addressing this neglect. This paper examines the process and direction of this change using selected examples from Accra, Cape Town, Dar es Salaam and Nairobi.

## **2 METHODS**

The evidence used in this paper was extracted from information contained in published and unpublished documents. The documents reviewed have information on urban development, urban transport and bicycle in urban transport planning. Though the focus was on the bicycle in urban transport planning, information was gathered on other dynamics that are important in understanding the overall context for bicycle transport planning. The methods of presentation and interpretation of results for this paper are based on a case study approach..

## **3 RESULTS AND DISCUSSION**

### **3.1 Dilemma of bicycle use in African cities**

Bicycle transport in African cities is broadly speaking one of a dilemma characterized by (Mozer 2005, Khayesi 2003):

- non-existent of bicycle facilities,
- limited use of the bicycle though the potential exists,
- risk of road traffic collisions,
- limited use or non-use of helmets by cyclists, and
- unfavourable policy and institutional framework.

This should not really be the case. In fact, African cities are suitable for bicycle use because of (Gauthier and Hook 2005, Mozer 2005, Howe and Davis 2002):

- flat terrain,
- short trip distances,
- low incomes for majority of inhabitants,
- inadequate public transport,
- environmental and health benefits associated with bicycle, and
- increasing importance of commercial bicycle transport services in facilitating access, income generation and employment creation.

Urban and transport planning in African, Asian, South American and Eastern European cities is repeating the same mistakes that were made in urban and transport planning in Western Europe and North America where greater attention was given to the motor vehicle, neglecting the needs

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of pedestrians and cyclists (Hook 2004, Vasconcellos 2001) . There are, however, a few efforts to reverse this trend and to promote bicycle use in African cities. The efforts have been spearheaded by individuals, groups and institutions operating at local, national and international levels. These efforts may look small and exploratory but they point to a promising future direction. There is a need for research and documentation of these efforts with a view to demonstrating the long way through which the bicycle effort has come in Africa.

### **3.2 Are winds of change blowing towards the bicycle in African cities?**

The often quoted phrase "winds of change" is associated with the former British Prime Minister Harold Macmillan who used it to describe the decolonization of Africa in the 1960s (UNEP 2005). Ghana was the first African country to gain independence in 1957, ushering in the independence era of the 1960s, which continued into the 1970s, 1980s and to 1994 with the eradication of apartheid in South Africa. Winds of change have continued to blow in a number of ways, some bringing positive outcomes and others bringing deterioration, pain and suffering. There are many examples of activities that can be examined, for example multi-party politics, economic development, female education and religion.

The focus in this paper is on the promising wind of change blowing towards bicycle transport in African cities. There are emerging efforts which can be considered as initial winds of change blowing in the direction of planning for bicycle in Africa. Though there is room to be optimistic, it is important to remember that these initial efforts may take a while before they achieve full results. Nevertheless, it is worthy describing what is happening in these cities as far as including bicycle in urban transport planning is concerned. This is done in the sections that follow using examples from Accra, Cape Town, Dar es Salaam and Nairobi.

#### **3.2.1 Accra**

The urban environment in Accra is unfavourable for bicycle use: risk of road traffic collisions, lack of dedicated infrastructure for cycling, road space is often invaded by informal traders, low use of this mode due to low income of majority of the urban population and negative attitudes towards cycling such as discouraging certain segments of the population especially women and children from cycling (Grieco et al. 1994). However, over the last 5 years, there has emerged an active pro-cycling effort in Accra (Krisch 2003). Planning for cycling development is being undertaken through the Low Cost Mobility Initiatives (LOCOMOTIVES), a programme that brings together nine civil society organizations from different countries from the three continents of Africa, Asia and Latin America to work towards implementation of policies and facilities that promote low cost mobility. The programme provides civil society organizations with technical expertise and supports capacity building. It is funded by the Dutch Government with technical expertise provided by the Interface for Cycling Expertise (I-ce) from the Netherlands. The Centre for Cycling Expertise (CCE) is the local NGO involved in supporting and promoting sustainable non-motorized transport in Ghana (Centre for Cycling Expertise 2004). CCE collaborates with a number of stakeholders: Ministries of Roads and Transport, Local Government and Rural Development, Motor Traffic Unit of the Ghana Police Service, bicycle dealers and cyclists. Other external partners involved are Institute for Transportation and Development Policy (ITDP).

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The work being undertaken by CCE covers the whole of Accra and involves collecting information on status of cycling, factors affecting cycling as well as supporting bicycle master planning. The work involves publicity and advocacy. The bicycle promotion efforts have three areas of focus: increase supply of bicycles, lobbying for provision of infrastructure for bicycles and awareness raising (Krisch 2003).

The following are the key achievements so far:

- **Developing Accra Bicycle Masterplan:** The Accra Bicycle master plan preparation commenced in 2003 and is scheduled for completion in 2006. The work involves traffic surveys and analysis of origin and destination data, mapping existing network and constraints and desirable improvements. Special attention is given to identifying missing links in the potential cycle routes such as broken or un-constructed bridges, possible trunk routes for cyclists and pedestrians only and where to locate parking facilities for cyclists.
- **Publicity and advocacy:** This is done using video documentaries, bicycle caravans, radio talk shows and a newsletter. A video entitled “cyclists are road users too” aimed at raising awareness, especially challenging motorists to respect cyclists, is used for this purpose. Bicycle caravans are cycling events organised to popularise and rise awareness on cycling. CCE has been organising these annual events with support from sponsors. The caravan carries banners with publicity and advocacy messages. The sponsors also advertise their goods and services through T-shirts and other media. The first bicycle caravan was organised in 2003 and similar events have been held each subsequent year. The mayor of Accra has participated in these caravans.
- **Enhancing access to affordable bicycles:** Distribution of bicycles is through a network of importers, wholesalers and retailers. There are bicycle renters in different locations. Bicycle renting is an economic activity that contributes to employment creation and income-generation.

The pro-cycling effort is faced with a number of challenges, the main ones being:

- **Limited resources:** The development and implementation of a bicycle master plan requires substantial financial and human resources which are not readily available. CCE has limited financial resources for developing and implementing the bicycle Masterplan.
- **Continuity:** The Locomotives programme ends in 2006 and there is uncertainty about continuity of technical support for the programme after 2006.
- **Securing political support for bus rapid transit programme for Accra:** Ghana is working on plans to develop a bus rapid transit system which will incorporate facilities for non-motorised transport. Such a development would be a major catalyst for developing non-motorised transport facilities. However, the programme requires political commitment, which is yet to be fully secured.
- **Overcoming negative attitude towards cycling:** This is a major challenge given the prevailing situation of negative attitude towards cycling in general.

### **3.2.2 Cape Town**

Cape Town, like other cities of South Africa, inherited a dualistic transport system that was developed within the planning ideology of apartheid. The separate development policy led to transport inequalities, for example, great distances between residential areas of the poor and work places, leading to long journey to work trips. Cape Town is making an effort to address not only the general transport system but also specific issues such as non-motorised transport. As pointed

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out by Pendulum (2005), "the City of Cape Town has until now not had a comprehensive plan guiding the planning and implementation of programmes and facilities to respond to the multiple needs of non-motorised transport users. The non-motorised transport strategy for the City of Cape Town aims to address this critical shortcoming in two ways. Firstly, it presents a policy, accompanied by a set of objectives and strategies to realise an improved non-motorised transport environment and culture in Cape Town. Secondly, it develops a non-motorised transport Master Plan for Cape Town that would identify areas and routes that should be considered as key non-motorised transport routes and places in Cape Town where non-motorised transport users would receive a certain degree of consideration, if not priority." A non-motorised transport strategy for Cape Town is under preparation. Cape Town is also planning to introduce a bus rapid transit system. Bicycle Empowerment Network Cycling is a key player in advocating and promoting bicycle planning in Cape Town.

The developments taking place in Cape Town have been lauded as good examples of integrating non-motorised transport into urban and transport planning. For example, IC-e (2005) notes: "The city of Cape Town started the implementation of dignified urban areas and cycling facilities, along with developing a strategy on non motorised transport and master plans for the different parts of the city. At several locations along the Klipfontein Corridor, pedestrians and street vendors have been given much more space. These constructions go in advance of plans to create a Bus Rapid System and cycling and walking facilities on this corridor, Klipfontein Corridor crosses Cape Town from the East into the Central Business District."

### **3.2.3 Dar es Salaam**

Dar es Salaam, like many cities in sub-Saharan Africa, is experiencing fairly rapid growth of the urban population but with inadequate public transport services. The public transport system is chaotic and inefficient, dominated by small minibuses commonly known as dala dala (Ngowi 2005). Non-motorised transport which could play a vital part in enhancing access, especially for the poor urban majority, has generally been neglected. Despite lack of cycling infrastructure, the modal share of cycling is about 5% (Japan International Cooperation Agency 1995), mostly for:

- going to work,
- going to the market,
- selling goods,
- going to health facilities, and
- visiting friends and relatives.

There have been efforts to incorporate the bicycle into urban transport planning in Dar es Salaam. A non-motorized transport pilot project was implemented in Ward 14 of Temeke Municipality of Dar es Salaam city from 1995 to 1999. This project was undertaken under the Sub-Sahara Africa Transport Programme (Wilson 2002). The project was aimed at identifying implementable policies and interventions for urban walking and cycling as an efficient and affordable urban form of transport for the majority of residents of Dar es Salaam. It also involved finding a feasible organizational model of planning, implementing and maintaining such policies and interventions at the municipal level. The Temeke pilot project was initiated within a context of poor transportation network and service. The project became a catalyst for similar interventions that have been implemented in Temeke as well as other municipalities in the city. The interventions replicated in other areas following the example of Temeke pilot project include:

- Implementation of designated pedestrian walkways along major roads being rehabilitated in Dar es Salaam.

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- Construction of flat-top speed humps in areas of pedestrian crossing along major roads in Dar es Salaam.
- Construction of foot bridges across some of the major roads.

The implementation process and some of the outcomes have led to greater awareness and development of interest and commitment to address non-motorised transport user needs. The National Transport Policy of 2003 clearly states that urban transport consists of both motorized and non-motorised modes. In July 2004, a transportation unit was established in Dar es Salaam City Council to coordinate transport initiatives.

Two of the important lessons from this pilot project are:

- The need to have designated roads for cycling as well as pedestrian walkways.
- The need to have policies to ensure inclusion of non-motorised transport in plans for new roads to be built in future.

Another effort is a programme that has been initiated by a non-governmental organisation called Association for Advancing Low Cost Mobility (AALOCOM), which is collaborating with the City of Dar es Salaam in efforts to facilitate cycling in the city. AALCOM is part of Low Cost Mobility Initiatives (LOCOMOTIVES). This programme receives financial and technical support from Interface for Cycling Expertise from the Netherlands. The LOCOMOTIVES programme aims at developing a master plan for pedestrian and cycling route network for Dar es Salaam City and spearheading integration of non-motorised transport into the Dar es Salaam Bus Rapid Transit Programme. The Bus Rapid Transit Programme has been initiated by the Dar es Salaam City Council to address the unsatisfactory public transport situation. Dar es Salaam is likely to be the first City in Africa to have a fully fledged Bus Rapid Transit System (Fjellstrom 2005).

Another effort, already mentioned, is the development of a bus rapid transit system for Dar es Salaam. This is a mass transit system project that was officially launched on 5 October 2005 (Fjellstrom 2005). Planning is still going on. The system will not only improve public transport services but also lead to improvement in overall transport and landuse planning. One of the aspects to be considered is integration of non-motorised into the system. It will involve implementing pilot projects for construction of the cycle path networks along the corridors targeted for phase one of the Dar es Salaam BRT Project. The initial implementation will consist of a 21-kilometre corridor on Morogoro road. If successfully implemented, this project will provide an example of integration of different modes and the role that transport can play a planning tool for organising urban landuse and activities. This has been done with success in cities such as Curitiba (McKibben 2005)

### **3.2.4 Nairobi**

There were bicycle lanes on some roads in Nairobi in the 1960s and 1970s. There was also bicycle parking at some work places. These facilities were neglected and left to disuse.

In the 1990s, under the Sub-Saharan Africa Transport Policy Program, Nairobi was chosen as one of the four cities for implementing non-motorised transport pilot projects. Three distinct interventions were planned: building special infrastructure for pedestrians and cyclists, introduction of traffic calming measures and supply of bicycles (Pendakur 2005). Non-motorised transport interventions were implemented on Jogoo Road and Nile Road in Nairobi. Pendakur

(2005) reveals that proposals for more significant interventions on Jogoo road were abandoned because the City Engineer did not approve the designs on the ground they comprised narrowing the road and pedestrian crossing. Subsequent to the pilot non-motorised transport activities, pedestrian bridges and lanes have been constructed on this road. Like other cities, the non-motorised transport pilot interventions in Nairobi demonstrated that relatively small interventions can lead to significant improvements (Pendakur 2005). This project also significantly increased awareness among politicians, planners, engineers and the public of the importance of addressing the needs of non-motorized transport users (Pendakur 2005).

At the macro level, in 2002, the government of Kenya eliminated bicycle import duties. This reduced the price of imported bicycles, making them affordable.

The recently developed transport policy paper has a section on non-motorised transport in urban transport (Republic of Kenya 2004). Hopefully, the city of Nairobi authorities and pro-bicycle transport groups will utilize this policy option to develop the necessary non-motorised infrastructure and address hindrances to the use of the bicycle in this city.

#### **4 CONCLUSION**

There is growing recognition among some African policy makers and authorities in the selected case studies about the importance of bicycle mode in urban transport and the need to give priority to this mode by local and national government authorities. While these efforts are small and still in planning stages for some, they indicate a move in the right direction. These promising efforts should be encouraged, supported and pursued. This requires, among other things, political commitment and building the institutional capacity required to plan, implement and evaluate investments in sustainable transport. The bicycle should no longer be excluded from urban transport planning in Africa. There is evidence from the examples presented to show that inclusion is possible. These ongoing efforts and building blocks demonstrate promising initiatives and practices that can eventually lead to full inclusion of bicycle in urban transport planning in Africa. We look forward to a time when the cities we have used as case studies will be world examples of best practice in bicycle friendly urban and transport planning.

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