

# Crop Post Harvest Programme (CPHP)

## Rural Transport Services Project for Kenya



### Rural Transport System in Kenya:

### A General Overview of Policies, Trends and Challenges

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For

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## TABLE OF CONTENTS

Executive Summary	3
Summary overview	3
Summary outline of major trends in delivery of transport services in Kenya	
Summary of challenges	5
Structure of the paper	6
Infrastructure development as the dominant transport policy concern	
1.1 Infrastructure development as the dominant transport policy concern	7
1.2 The influence of the colonial political-economy	8
1.3 The influence of the colonial political-economy	8
1.4 Problems from mid 1980's.	9
2.0 Rural mobility un-addressed	10
3.0 Poverty Reduction as a Public Policy Imperative: What implications for transport sector?	11
4.0 Current Challenges in Transport Policy	12

## Executive Summary

### Summary overview

i) That transport is an important ingredient to social and economic development is an irrefutable fact. In developing countries, among the key policy questions that transport planning must address itself to, is not the necessity of transport, but the development priorities and targets that it should address. It is generally assumed that the role of transport in development processes is well known. However, what is known is based on observations from societies where structural transformation has replaced peasant production with market institutions. In this context, transport plays a straightforward role as an intermediate economic service geared towards reducing costs of production and distribution - consequently leading to improved economic efficiency. However, in the context of transforming societies - where the vast majority of the populations are partial or non-participants in market economy the goals of transport planning need to be defined somewhat differently. This is especially so that the benefits of transport services can reach the majority of people whose potential for progress might be constrained by remoteness and lack of mobility and access to essential goods and services. In this context, transport planning needs to go beyond road extension, to the questions of other factors that constrain mobility and access to services. This way transport ceases to be a service to an abstract macro economic objective and becomes an integral part of local development priorities based on an acknowledgement of micro-realities.

This paper attempts to sketch together the main policy thrusts that have guided the development of a transport system in Kenya. Key influences to transport policy in Kenya include:

- The various shifts in global development: Global influences include the periods of highly subsidized development assistance, the bulk of which went into transport infrastructure in the 60's, an emphasis on rural development in the 70's, the economic liberalization in the 80's and currently, economic growth and poverty reduction.
- Specific economic and political circumstances. Transport development also closely reflects the general political-economic ideology of a country. Kenya, development planning and policy-making has tended to respond to the formal, highly visible, urban based "modern" sector activities, while bypassing the household-based, quasi-economic rural and urban informal sector activities. The latter are considered to be a residual or transitory phenomena, bound to be replaced by the former. The dual economic structure engendered by the colonial polity, and the regional, class and rural urban disparities that emerged in the post-colonial period are both a cause and a consequence of the differences in transport services, resources and levels of mobility that various groups and regions experience.

## **Summary outline of major trends in delivery of transport services in Kenya**

ii) The construction of the Mombasa-Kampala Railway line was the first significant milestone in the development of the surface transport system in Kenya. The underpinning political and economic need was to open up access to primary products for western markets. It also marked an important step in the eventual establishment of colonial administrative structures. Subsequent to the completion of the railway, large-scale commercial farms were established in what was then referred to as "white highlands". These highly subsidized farming operations were meant to fill in the excess capacity of the railway that could not be met from the Ugandan operations. In the 1940's and 1950's, a relatively dense network of roads had been constructed to link the large-scale farms with the railway line.

iii) The 1960's and 70's saw continued expansion of the road transport infrastructure in Kenya. Just like in many other developing countries, road construction became one of the largest single sectors for investments. Fuelled by bilateral and multi-lateral development assistance programmes, the transport sector was considered an important instrument for promoting the expansion of large-scale commercial development, to replace traditional subsistence oriented production. This was in conformity with the modernisation theory, the dominant development paradigm after the Second World War. Chiefly, development of transport infrastructure was seen as critical in the consolidation of the nation state and the expansion of market economies.

iv) In the immediate post-independence period, the development accent tilted towards equitable regional development. Continued dependence on the export of primary goods led to an investment shift in transport facilities that would open up rural areas. The bulk of the investments were directed to areas deemed to have rich agricultural potential. Programmes such as Rural Access Programme (RARP) and Minor Roads Programme (MRP) were implemented with this orientation in mind. Transport infrastructure became one of the largest single sectors for investments during the late 60's and early 70's, with highway construction taking the lion's share.

v) From the late 80's, there was growing international scepticism on the wisdom of continuing with an exclusive focus on expanding infrastructure for motorised vehicles as the only basis for a transport system in developing countries. There was a mounting body of evidence that a continuation along this path was leading to wasteful investments and excess capacity in infrastructure vis-à-vis the growth in motorisation. In general a dual system was evolving, where modern methods of transport were available, but only in limited areas and only accessible to a minority of the people.

vi) The onset of Structural Adjustment Programmes (SAPs) in the 90's signalled more stringent criteria for rationalising investments. The decade

also marked a sharp deterioration in economic performance, accompanied by a rapid decline in donor assisted programmes. Consequently, the country was becoming unable to continue with the infrastructure expansion programmes. Road building had been implemented through massive and unsustainable levels of external financing. Currently the total road network in Kenya is about 150,000 Kms, out of which about 63,000 Kms belong to the Ministry of public works. For the paved parts of the network, close to 9000 km, only 30 per cent is considered to be in good condition, while 20 per cent is considered to be in critical condition. On the other hand, of the remaining 54,000-km of earth and gravel roads, mainly in the rural areas, only 12 per cent is considered to be in good condition. In some urban areas, including Nairobi, portions of the roads have de-generated considerably rendering heavy transport impossible. With changing international development assistance environment, the burden of infrastructure financing was increasingly becoming a Government responsibility. As a reflection of an inherently weak domestic institutional/ financial capacity, there has been sharp regression in infrastructure delivery and quality in the recent years. Considerable effort has been expended on analysis and reforms aimed at changing the institutional framework by which roads are managed. There is a new thrust towards elements of commercialisation, bringing roads to the market place on a pay-as-you-use basis. Road agencies are being created following "sound business practices", funded by dedicated road charges, and managed by the users through road management boards. While this is an important step for the benefit of the country and motorised road users in particular, there is need to take a more comprehensive view of what objectives the transport sector should serve in the country. The challenges confronting the transport sector are summarised below.

### **Summary of challenges**

vii) Resolving the issues of an overstretched institutional framework, arising out of a past investment structure that put more resources in infrastructure development as compared to institutional capacity. Important issues to be addressed include rationalising institutional mandates between various agencies, stakeholders' and users rights and obligations and sustainable financing.

viii) Related to the above, and as part of ongoing institutional reforms in the transport sector, there is a challenge for the transport sector in Kenya to move away from a narrow technocratic focus, to a broader, socially responsive orientation. Conventional processes of developing transport infrastructure are generally top-down, and often based upon criteria that are removed from the day to day concerns of the people. Consequently, average citizens rarely show an active interest on how transport infrastructure is financed used and maintained.

ix) Absence of a strategy for addressing mobility issues at the bottom of the population pyramid, where the vast majority of the population is to be

found. Mobility is conventionally considered a private matter, though the government can influence this through regulatory instruments. In the past, regulatory instruments have been used to influence the cost structure associated with use of different types of motorised transport - private cars, public transport vehicles, commercial transport vehicles etc. As partly demonstrated by the current increase in the use of bicycles as well as second-hand cars - public policy can play an important part in unlocking mobility by facilitating wider choices in means of transport available to different segments of the population. However this needs to be done within a more comprehensive mobility framework. This challenge is made more urgent due to the growing levels of poverty, and the obligation of public policy towards ensuring that the majority of the citizens meet a certain minimum standard of living. In particular, there is need to look for strategies that would increase the benefits of movement, better transport and access to the different segments of society. This means not only focussing on the needs of the modern sector, but also integrating into policy the transport issues related to medium and small scale urban and rural enterprises, and the needs of those engaged in subsistence production.

A comprehensive transport policy needs to be built from a detailed understanding of the transport needs confronting the majority, the type of transport systems - infrastructure and services - that are within the general resource and institutional capacities of different users. In general, transport planning should be challenged to find a sensible balance between current realities and future dreams.

### **Structure of the paper**

In this paper, we sketch out in the main trends and challenges in transport policy and planning in Kenya. The paper is organized in 4 main sections.

- Section 1 provides an overview of the main policy and programme thrusts in a historical perspective. This is done in a way that reflects the fact that policies are often easier to interpret on the basis of observed trends and outcomes rather than in the form of clear statements of intent
- Section 2 looks at the issue of rural mobility
- Section 3 looks at the role of transport in addressing poverty, a priority policy concern
- Section 4 provides an overview of key challenges currently facing the transport sector

## SECTION 1

### 1.1 Infrastructure development as the dominant transport policy concern

Like most developing countries, Kenya's transport policy has been geared towards creating modern infrastructure and to support the growth of motorised vehicles. However given worsening poverty and increasing economic and social differentiation, it is legitimate to question whether a continuation of existing transport policies offer the best prospects of bringing improved mobility and accessibility to the majority of the population, especially in rural areas. A major criticism of transport planning in developing countries has been the unquestioned application of the latest tools and models from industrial economies. The first weakness in this approach has been the assumption that the role of transport in development is well known. However, what is known is based on observations from societies where structural transformation has replaced traditional production with market institutions. In such contexts, transport plays a straightforward role as an intermediate economic service geared towards reducing costs of production and distribution - consequently leading to improved economic efficiency. However, in the context of transforming societies - where the vast majority of the populations are partial or non-participants in market economy the goals of transport planning need to be defined somewhat differently. This is especially so that the benefits of transport services can reach the majority of people whose potential for progress might be constrained by remoteness and lack of mobility and access to essential goods and services. The second weakness in transport planning is the absence of a policy response to the low levels of mobility experienced by the majority of the population. This often leads to the development of roads without due regard to needs, capacity utilisation and sustainability.

With the current focus on poverty alleviation, there is increased scope for access and mobility concerns of poor people to become an integral part of transport policy. Additionally, with stakeholder orientated planning becoming a norm in many development disciplines, there is scope for the transport sector to craft institutional arrangements that embed transport policy in the needs of the majority. In this context, transport planning needs to go beyond road extension, to the questions of other factors that constrain mobility and access to services. This way transport ceases to be a service to abstract macro economic objectives and becomes an integral part of local development priorities based on an acknowledgement of micro- realities.



In the sections that follow, we review general policy trends in transport policy in Kenya. Several influences are important in understanding the development of the transport system in Kenya. Key among these are - the colonial economy, post-colonial programmes for national integration, economic adjustment programmes and the current focus on poverty reduction.

Here below is a brief overview of the trends in transport policy and development programmes in Kenya.

## **1.2 The influence of the colonial political-economy**

The development of the transport system in Kenya, and the policies that have guided it over the years reflect the colonial economy and the class-based state character that ensued soon after independence. The completion of the railway line from Mombasa to Kisumu in 1901 played a crucial role in the opening up of the East Africa hinterland. The aim of the colonial administration was to open up a route from the coast to the interior parts of Uganda, a territory that showed more agricultural promise than Kenya. This development was followed by the rapid settlement of settler farmers in areas that were designated as "white highlands". The present railway as it exists today, apart from very few modifications, was in place by 1930. The need for roads in Kenya arose as feeders to the railway. Roads were constructed from stations on the railway line to interior parts that were considered rich in agricultural potential. Areas considered to have relatively low agricultural potential and where the bulk of the indigenous population practiced small scale agricultural and livestock production were peripheralised.

In general, this first phase of the development of a road transport system in Kenya was shaped by the colonial political economy. The transport system was primarily developed as a means to facilitate movement of food to growing urban centres, primary products to export markets and the establishment of internal judicial and administrative services.

The transport system was an important part of the enclave economy, and mechanised transport was only available to a privileged colonial class.

## **1.3 Post-colonial infrastructure expansion programmes**

In the first decade of independence, and with considerable support from international development assistance programmes, road infrastructure was pursued earnestly. The investments were justified on the need to consolidate the nation state and to integrate more regions into the "modern" market economy.

The mid-70's marked the beginning of a shift in investment resources from arterial roads to secondary and feeder roads. In part this was largely a

reflection of the view that a basic skeleton of transport network was already in place. In addition, it was also a response to the increased priority being attached to small-scale agricultural production, and opening up of rural trading activities. Within this overall thrust, the Special Purpose Roads Programme (SPRP), the Rural Access Roads Programme (RARP) and the Minor Roads Programme (MRP) were implemented. The following transport infrastructure programmes were implemented.

- **Special Purpose Roads Programme:** This involved the construction and/or improvement of those roads that served specific rural development objectives. These included access roads to areas that produce cash crops such as wheat, tea, sugar, rice and coffee; roads to regions with potential for tourism and fisheries; and those that serve settlement and other rural development efforts. Under this programme, the various ministries or agencies which required specific road improvements to support their activities were required to finance the needed improvements. The Ministry of Works acted only in an advisory and/or contractual capacity.
- **Rural Access Roads Programme (RARP):** Initiated in 1974, with the objective of providing all weather access between high potential farming areas and markets. RARP involved construction of all-weather farm-market roads (new links) in high potential agricultural areas, using labour-intensive technologies.
- **Minor Roads Programme:** This was the successor to MRP and started in 1985. It consisted of improvements to the existing links through gravelling, improving bridges and culverting and was geared towards the improvement of the lower classified roads using labour-based methods. The donors who have participated in the programme include SIDA, CIDA, Netherlands, DANIDA, Swiss Development Cooperation (SDC) and NORAD. At the end of June 1992, the two programmes covered a total of 31 districts mainly in Nyanza, Western, Coast, Central, Eastern, and Rift Valley Provinces.

#### **1.4. Problems from mid 1980's**

Up to early 1980's, Kenya enjoyed a higher standard of transport infrastructure, and lower transport costs than most countries in the region. The reason for this was to be found in the amount of investments - mainly donor supported - that had gone into the sector over a 3-decade period. Currently, the reverse is the case. General transport conditions are deteriorating in terms of quality and service standards, while community level infrastructure - tracks and paths - previously maintained by local authorities have been ignored, with the result that many have been eaten away by private developments and others are completely unusable in rainy weather. The strategy of developing infrastructure through hierarchical stages - few primary links, to secondary and then tertiary connections - was not completed or sustained. The infrastructure so created has fallen back due to fragile

institutional and financial capacity. Both national and feeder roads have been neglected, as budgets have become unavailable to maintain previous investments, much less create new ones.

In retrospect, most of the infrastructure so created was well beyond the existing capacity of the central and local government institutions to maintain. A large proportion of the road network remains "unclassified", and maintenance responsibilities are ambiguously split between poorly instituted local authorities and weakly coordinated efforts by line ministries.

The 'classified' component of the road network is under the Ministry of Roads and Public Works, and covers the main links from Mombasa through Nairobi to the borders with neighbouring countries. Annex 1 shows the length of "classified" road network by province. Though comprising a total of over 60,000 km, the condition and standard of the network varies substantially between regions. For the paved parts of the network, close to 9000 km, only 30 per cent is considered to be in good condition, while 20 per cent is considered to be in critical condition. On the other hand, of the remaining 54,000-km of earth and gravel roads, mainly in the rural areas, only 12 per cent is considered to be in good condition. In some urban areas, including Nairobi, portions of the roads have de-generated considerably rendering heavy transport impossible.

On the whole, paucity of resources has reduced the emphasis on infrastructure development, especially in urban areas, to maintenance of existing network. Funds for road construction and maintenance declined by 60 per cent between fiscal 1988/89 and fiscal 1993/94. Though much lauded, the Road Maintenance Levy Fund started by the government is yet to generate a reasonable portion of the funds required.

## **2.0 Rural mobility un-addressed**

In both academic and general literature on transport in Kenya, there seems to be little perception of how slow progress has been made in the use of motorised transport by the mass of the population, which is the underlying assumption behind the construction of roads. The bulk of the population, more than 70% is considered rural and are only partial participants in the market economy. High levels of (income) poverty limit the extent to which motorisation can be the exclusive basis for broad mobility especially in rural areas, not only in Kenya, but also in most of Sub-Saharan Africa.

In fact, and despite the apparent increase in motor vehicles, fuelled by entry of second-hand imports into the market, the current stock of vehicles - about 14 vehicles /1,000 persons - is still extremely low, for example as compared to 769/1000 in the US, or 441/1000 in the UK. With an average vehicle density of 3.9 vehicles per km, many of Kenyan roads are seriously under trafficked. Additionally, it is estimated that over 75% of the total vehicle fleet

is located in the urban areas with Nairobi alone accounting for over 60% of the total motor vehicles in Kenya.

In a seminal study in Kirinyaga and Embu areas, Kaira (1983) was the first to point out at the limitations of motorised transport services in addressing the transport demand of the rural population in Kenya. In the areas that he studied, he observed that motor vehicles services were limited, and mostly inflexible in addressing the transport demands of the rural population.

He characterised the bulk of rural transport activities as consisting of short trips and movements of small loads over short distances, along narrow paths and tracks off the formal roads and highways, and within a radius of about 7-10 km. These mainly involve farmwork, water collection, transportation of food and cash crops to the market and agricultural inputs from local trading centres, trips to the grinding mills, collection of firewood, etc. Although some of these trips could be made by motorized vehicles such as pick-ups, the small size of the loads and the short distances render many of the trips uneconomic to make by motorized transport. On the other hand, the drudgery of head or back loading, mostly by women and children, in the rural areas tends to perpetuate low productivity in most economic activities, especially in agriculture in which the majority of the population is currently engaged.

Contributing to an already growing body of literature on means of transport rural transport, Kaira confirmed the necessity to explore wider use of Intermediate Means of Transport (IMTs). IMTs would range from low-cost motorised vehicles, motorcycles and their adaptations for load carrying, bicycles and their adaptations to animal drawn carts and pack animals.

In Kenya, the two dominant modes of local level transportation are bicycles and animal based transport. Bicycle based passenger transport for example is now common in many parts of Kenya. In central parts of the country, donkey and ox-carts are an integral part of the local agricultural economies, whereas in Kitui, donkeys are a key means of supplying water. The principal advantage of IMTs to a household is that they are likely to match more closely, the needs of the users, are likely to be more affordable and available. Their other characteristics are:

- They are more efficient than headloading and walking, which is the mode they tend to substitute.
- Have significantly lower investment costs
- Their manufacture, sales and maintenance can be decentralised.
- They provide the link between villages and markets.
- A range of different IMTs can provide integrated transport services - for passengers and goods - at the downstream end of the transport hierarchy

### **3.0 Poverty Reduction as a Public Policy Imperative: What response from the transport sector?**

Although poverty has been a daily reality for millions of Kenyans in the last 3 decades, its depth and extent intensified in the late 80s and throughout the 1990's. The proportion of Kenyans living below the poverty line in both urban and rural areas had increased from 40.1% (or 10.6 million people) in 1992 to 52.6% (i.e. 13 million people) in 1997. This represented a 10 percent increase in a period of 5 years. The increase in poverty has, among other causes, been attributed to the implementation of Structural Adjustment Programmes in the 80's and early 90's.

Implementation of measures to stem the tide of poverty has become one of the global priorities. Kenya, like many other poor countries has developed home-grown poverty reduction strategies. These have become important elements of public policy. Consequently, different sectors are obligated to reposition their programmes in a way that makes a clear contribution to poverty reduction. This poses conceptual challenges to such sectors as transport whose effect on social welfare (and poverty) is conventionally thought to be the indirect outcome of economic growth that it facilitates.

The Poverty Reduction Strategy Paper (PRSP) produced in 2001 provided an integrated sectoral framework for addressing poverty. Need for improved transport facilities and services for the poor were highlighted and this is thought to have influenced the removal of import duty on bicycles. This is generally an important development to poor urban workers and is also an incentive to people operating bicycle based passenger services - *boda bodas*.

Of and by itself, transport may lay no special claim to being a cost effective policy instrument for the redistribution of welfare to the poor. However refocusing the objectives of transport policy to include improved access to activities that help people in self-improvement efforts can be a significant step towards poverty reduction. Transport increases the range of options available to the poor. It improves physical access to jobs, health, education and other amenities without which welfare improvements cannot be achieved. Transport also reduces isolation, which is a dimension of poverty. Isolation is sometimes physical, (for example, geographical distribution of poverty follows is strongly correlated remote areas) other times social (disconnection from the mainstream, as in urban slums). Availability of affordable transport stimulates the desire for mobility and interaction, therefore reducing physical and social disconnection.

While the links between lack of transport and poverty may seem readily apparent there is need to understand what other complimentary factors provide an essential interface with transport, in order to effectively achieve poverty reducing outcomes.

## 4.0 Current Challenges in Transport Policy

In general, the general perception and practice of transport planning derives from a classic top-down model of development. A key challenge now is to reorient transport planning into a tool that is relevant to the needs of the majority, addresses priority development problems and is embedded in local institutional capacities and resources.

Key challenges for transport policy include:

- Rationalising the institutional framework: In order to harmonise the roles of various agencies and interests, adopts and is responsive to stakeholders approach, defines ownership levels (roles and responsibilities of communities, local authorities and sectoral agencies) in regard to infrastructure financing and management. The Kenya Roads Board - while primarily mandated to focus on the financing of national level infrastructure could play an important role in stimulating dialogue on ownership and financing of infrastructure at all levels including village level links.
- Improving overall levels of mobility: Any rural household-level travel and transport study will show that lack transport - both personal and for goods carriage - is undertaken with considerable difficulties. It is conventional for the public sector to be pre-occupied with the provision of transport infrastructure, while leaving the private sector to supply the vehicles. While this looks eminently possible, the capacity of the private sector to provide for the mobility of the different segments of society depends on the incentive structure for the development of different sub-markets for transport services. There is need for policy support to improve the efficiency of walking and back loading for example through innovations in low-cost vehicle technologies. In the past, regulatory instruments have been used to influence the cost structure associated with use of different types of motorised transport - private cars, public transport vehicles, commercial transport vehicles etc. As partly demonstrated by the current increase in the use of bicycles as well as second-hand cars - public policy can play an important part in unlocking mobility by facilitating wider choices in means of transport available to different segments of the population. However this needs to be done within a more comprehensive mobility framework.
- Integrating goals of poverty reduction into transport policy while improving overall efficiency of transport operations: this requires support to the development of cost effective and replicable methods for delivery of transport services to a highly segmented transport market. This is in support of the disparate production systems (quasi market sectors, informal rural and urban producers, agriculturists and pastoralists, small scale and large-scale economic units etc) as well as in meeting basic social development objectives.