transport

Department:
Transport
REPUBLIC OF SOUTH AFRICA

A

ROLL-OUT PLAN FOR

SHOVA KALULA BICYCLE PROJECT

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SHOVA KALULA BICYCLE PROJECT

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1. EXECUTIVE SUMMARY

The Department of Transport has developed a bicycle implementation strategy to advance the aspirations of the citizens to actively participate in social and economic life. It is anticipated that the promotion and provision of bicycle transport services would facilitate mobility for shorter distances at an affordable cost and would decrease the travel time. Furthermore, the provision of appropriate bicycle infrastructure and ongoing maintenance of the bicycles and bicycle tracks play a critical role in safeguarding the lives of the users. It is also important that complementary measures are implemented as outlined in the roll-out plan to ensure that the project is sustainable.

Statistics issued by Statistics SA as well as the findings of the National Household Travel Survey have confirmed that the rural poor have little or no access to public transport. This situation tends to perpetuate the level of isolation from the economic mainstream and as a result exacerbates the extent of poverty and underdevelopment.

In 2001, The Department introduced Shova Kalula as a pilot project with the aim of improving rural accessibility to education resource centres. In October 2005, the Minister of Transport undertook to accelerate the provision of bicycles by delivering 1 million bicycles by 2010. To give effect to this goal, the Strategic Plan 2007 – 2010 outlined the delivery targets set for the Department to roll out 60,000 bicycles during the 2007/2008 financial year, 200,000 during 2008/2009 and 500,000 during 2009/2010 financial year.

The primary focus is currently on supplying bicycles to learners who meet the set qualification criteria. Beneficiaries of the project will be expanded to include women, farm workers and other vulnerable groups in the community.

The implementation plan spells out key strategic activities to be undertaken in achieving the set goal. Targets, performance measures and timeframes have been indicated in streamlining bicycling into the broader transportation system.

The cycling policy and the process of reviewing the Road Safety Strategy would form a strong basis of integrating cycling into public transport, whereby feeder and stand-alone services could be used to promote inter-modal transport system. It is also anticipated that a strong culture of cycling would be inculcated as the use of this mode is intensified.

There are many benefits, which could be derived from this mode, such as an improved social well-being, reduction of over-reliance on private cars especially when this mode is linked to bus rapid transport system and other intermittent modes.

In addition this mode facilitates compliance to Kyoto protocols and other environmental friendly policies.

Cycling can also be used to address the transport needs of women, whose travel patterns differ from those of men.

2. INTRODUCTION

The Department of Transport (DOT) is engaged in a process of promoting and implementing Shova Kalula Bicycle project with the aim of addressing transport challenges in underserved communities. The project shall facilitate accessibility and mobility to socio-economic opportunities.

Cycling is a low cost mobility solution, which could serve as a catalyst to socio-economic transformation.

A thorough accessibility research, piloting and testing of this project was done in the past four years. An evaluation report has confirmed the demand responsive nature of this project, which has necessitated the need for a long-term sustainable sets of interventions.

Structural and topographical challenges have been addressed and appropriate bicycle specifications, which are suitable to the difficult terrains, have been finalized and approved.

Furthermore, detailed management and distribution mechanisms have been outlined to meet the desired outputs.

In rolling out this plan, the Department is mindful of the fact that, for this project to be more effective, it requires the collaboration and cooperation with all the role-players and stakeholders.

In his keynote address during a Car-Free Day, which was held in Tshwane on 20 October 2005, the Minister of Transport set a target of delivering bicycles. He said: ”*The Department is committed to proceed with the promotion of the Shova Kalula bicycle programme beyond the demonstration phase. One million (1 000 000) bicycles shall be distributed countrywide by 2010”*

In line with the Government's Programme of Action (POA), the Shova Kalula Bicycle Project has been identified as one of the key strategic focus programmes in contributing to the development of the Second Economy.

3. VISION

The vision of the Department is to maximise the use of bicycle transport services to enable communities to access social and economic opportunities in an affordable, safe, reliable and integrated manner.

4. MISSION

- To ensure that communities experience improving levels of mobility and accessibility by integrating rural, peri-urban and urban people into an effective transport system;

- To facilitate an enabling environment that will mainstream cycling and related intermediate transport operations into public transport system through the provision of an appropriate institutional support mechanism; and

- To develop a cadre of micro-businesses that can manage Shova Kalula bicycle shops independently in the long run.

5. OBJECTIVE

To promote cycling as a low cost mobility solution, which shall enhance rural accessibility and urban mobility to enable the underserved communities to participate in socio- economic opportunities, through developmental support to vulnerable groups as identified in the target group.

6. PROBLEM STATEMENTS

6.1. Poverty, spatial-economic marginalisation and related issues

Poverty and geographical isolation has perpetuated the level of marginalisation of many communities living in abject poverty. The spatial fragmentation and dislocation come at a high transport cost that also limits the movement of people and goods. Micro-accessibility and threshold problems to main markets, ports, etc, have also been aggravated by the uncoordinated spatial dispersal of central places of economic activities.

To redress this isolation, especially from a developmental and access-oriented perspective, there are core problems and issues, which transport policies, strategies and related interventions must respond to:

- Rural poverty and underdevelopment in most urban areas, endemic inaccessibility and spatial-economic marginalisation from the economic mainstream;
- Historical backlogs and continuing under-investment in rural transport and related access infrastructure; and
- Bias towards roads, motorised transport and male-defined travel needs and a relative lack of “off-road infrastructure” such as paths and tracks for non-motorised transport modes, access needs of women and affordability issues.

These challenges could be summarised to say that there is inadequate level of access and mobility in rural, peri-urban and urban areas as a result of the lack of and insufficient public transport systems, which limits and affects the development of human capital [with regard to access to education resource centers, public services and access to markets] and the facilitation of income generating activities.

6.2. Structural challenges

The country's spatial development and town planning has left many rural and peri-urban communities in the cold, without any links between them and the urban settlements. The current city setting is predominantly designed to meet the needs of private cars with little room to promote the co-existence between the various modes of transportation. According to the National Travel Household Survey, walking and cycling make up 23% of the modal share, that is, a significant group of commuters walk and cycle to work. The study further indicated that 76% of scholars, including students, walk to education resource centres. Three million learners spend more than an hour walking to and from their places of learning. It has been indicated that 53% of the rural population rely on walking long distances to get to essential services and the most affected category is low-income households. This challenge calls for transportation measures which would respond to these travel patterns.

6.3. Institutional challenges

As indicated in the text, travel patterns of women and men vary extensively due to varying and unrelated trips undertaken. Men's trips are more single-task oriented whilst women's trips are multi-task based. These dynamics are most of the time not factored into transport planning. Transport planning and management put much emphasis on 'peak hour' and neglect the social needs of women.

Transport planning is presumed to be "scientific', and should move from observing vehicles to observing people. Its essence is to resolve conflicts of travel trends through modelling and scientific analysis. This results in planners inclined to model transport plans by focusing solely on "efficiencies" rather than the value to human life. More often cost-benefit-analysis is being used to determine development and

investments, and as a result, little attention is being paid to the value of human life.

Transport planners and resource allocation methodologies, (cost-benefit analysis) tend to look at “vehicle accidents’ as statistics versus the sustainability approach, which considers ‘how many lives are lost’ or “how many people are disabled” and how to make the latter part of the current (public) transport system.

According to the Constitutional values of ‘dignity, equity and freedom’ of choice and movement, these values are not thought of when plans are designed and systems are being modernised.

There is enough statistical evidence that argues for the importance of integrating cycling into the transport system and for the provision of cycling infrastructure.

7. POLICY CONTEXT

The White Paper on National Transport policy, of 1996, provides the context for the formulation of rural transport and development strategies with a developmental approach and thus ensuring: “ …the smooth and efficient interaction that allows society and the economy to assume the preferred form. To play this role, policies in the transport sector must be onward looking, shaped by the needs of the society in general, of the users or customers of transport. Transport can also play a leading role for development or in correcting the spatial distortion…..”.

The rural transport strategy is gravitating towards taking a significant leadership role as a catalyst for development and as a framework which aims to correct this spatial distortion, through its notion of coordinated nodal and linkage development. It is believed that by entrenching this strategic approach it would lead to a viable system of rural transportation and will provide the

basic means of access and mobility to support integration of sustainable rural communities into the social and economic life of South Africa.

8. POLICY THRUSTS

The challenge for the integrated development agenda is to deliver a programme that removes the legacy of dependence on external activities and welfare funding to deprived communities. To achieve this, there is a need to build a foundation of self-sustainability based on economic activity in underdeveloped communities, which is linked to the wider economy. This could be associated with the mechanisms of bridging the divide between the 1st and 2nd economy.

A rural transport development programme, which has been informed by an extensive process of consultations, forms the locus of non-motorised transport and intermediate means of transport development. The transport policy goals and planning principles have tended to focus on motorised modes and regarded non-motorised modes as backward and inefficient and, as a result, these modes were deemed suitable mainly for recreational activities. In the same breath gender related travel purposes were ignored.

The rural typology and rural market surveys have the indicated double burden faced by rural women who spend approximately 70% of their productivity time on collecting firewood, water and walk long kilometres escorting their children to schools as a measure of security.

This unproductive time could be freed up by providing basic levels of transportation, namely, cycling and related intermediate modes, and thus enable the affected households to contribute actively towards local economic development and gross domestic product. It is prudent that movement of small goods over short distances and travel within and around the villages and local markets be recognised by planners and public policy.

In addition, specific counter measures based on target group analysis have been undertaken on gender specific trip purposes and shall be instituted and incorporated into the broader transport delivery programme. What is remaining is a rigorous process of mainstreaming into the transport system.

9. PRINCIPLES GUIDING THE SUSTAINABILITY OF SHOVA KALULA

The principles guiding the sustainability of Shova Kalula are access and affordability, equity, coordination and partnership (multi-sectoral approach), integration, safety and security and sustainability.

10. POVERTY RELIEF MECHANISM

10.1. Contextualizing Shova Kalula

In line with other definitions, poverty connotes to the notion of a poor state of economic well-being and relates to a state of deprivation. If translated into transport terms, it would be described as **lack of means to access** to essential opportunities. In relation to other research findings poverty also relates to households living below the poverty line.

According to Hamburg (Hamburg et al, 1994), "mobility is a right " and he argues it as follows: *"Mobility is inextricably related to basic individual rights and should therefore be considered a right in the design and development of a nation's transportation system, this right can and should be ensured by public planning processes and infrastructure investment strategies that provide access to mobility for all".*

In addition, rural communities are experiencing high levels of dependency on low levels of internal economic productivity, such as subsistence farming. According to the international acceptable methodology of absolute poverty line refers to an amount $1 (R8.00) a

day per person. This situation is applicable to many households in both rural and urban areas. These poor living conditions are perpetuated by the fact that many households have an average of two youths under the age of 18 years who have mobility difficulties to schools, with an average of one youth under the age of 23 years who is not employed. For example, in the Bohlabela district municipality of Mpumalanga, 60% of the population is not economically active.

Various observations have showed that the lack of effective transportation services is one of the greatest impediments and hinder the full development of rural communities. Measures have to be introduced to promote interaction between various geographically separated land uses, such as work and home. It should also be argued that mobility and economic development are interrelated.

An equity system is promoted mainly to ensure that the poor, underserved and deprived households may enjoy same benefits as other citizens. To afford these households a basic right to services such as free water, housing, etc, the Department is using the Shova Kalula mechanism as a grant to alleviate accessibility challenges.

The Department would then expand transport operations to the said target groups through a range of low cost mobility options.

10.2. Target group orientation

It is endorsed that the selected target group is not homogeneous. This means that support and assistance should be based on needs, available resources and freedom of action. In this regard scholars, youth and women are a critical target group.

As the fundamental aim of rural transport strategy is to strengthen the economic base of these constituencies, which are adversely affected by poverty. Small enterprises and self-help schemes shall be supported so

that they could become part of the economic fold. Development activities and the living conditions of these target groups shall be motivated to yield sustained economic life. This means that any development processes must be capable of continuing independently even after external support and contributions have stopped. The Integrated Sustainable Rural Development Programme (ISRDP), Urban Renewal Programme (URP), rural transport development programme and bicycle projects are seen as vehicles to ensure equity in social and economic well-being.

10.3. Beneficiaries of the grants

Four categories of target beneficiary have been identified, namely, learners, women, youth and farm workers.

It has been indicated that scholars shall receive free bicycles through the schools, whilst other target groups would benefit from the project through subsidisation scheme. The eligible beneficiaries fall within the following categorisation:

1) **Scholars**: These hinge strongly on the level of income by households with dependants who are still at schools, i.e. lower primary and higher primary. Proximity to education resource centres and spending of long travel times to access these facilities are taken into account;

2) **Women** who participate in self–help schemes and related development projects;

3) **Farm workers** who experience accessibility challenges in reaching places of employment - these will include workers at agri-processing plants and small industrial sites; and

4) **Youth** and economic development schemes: Youth and small informal groups who have the potential to utilise cycling for economic activities and development purposes shall be carefully screened and the necessary technical support shall be advanced to them.

11. QUALIFICATION OF SHOVA KALULA GRANT CRITERIA

11.1. Factors for the qualification for bicycle grant

Various factors have been considered to qualify the Shova Kalula grant and subsidisation mechanisms and these centres on four measures:

a) Maximum walking distance - thus, **accessibility** as a criteria - to schools or the nearest public transport which is available, health facilities, social security pay-outs, etc. This translates to the number of person trips made per year/ person kilometres travelled. According to Pushkaven (1982), this is a more accurate measure of mobility than distance, as the relocation of people to a place further away from their work will increase the number of person kilometres travelled, but not necessarily the mobility.

b) Availability of public transport is the second quantifiable indicator. It refers to the existence, provision, reliability and coordination of transport operations.

c) Affordability of public transport services is seen as one of the levers to meet various travel needs. Additional measures to ease the burden of transport would be through telecommunications, which will cut travelling expenditure. Information and Communication Technology (ICT) plays a pivotal role in enhancing access to services.

d) **Convenience** or ease of movement, which refers to the consideration of personal characteristics [age, sex, socio-economic circumstances and physical disability], is another critical element that has a great impact on any trip to be undertaken. To address this dilemma, health issues should be incorporated into the transport agenda.

These factors have been used in defining both financial support mechanisms of the projects' beneficiaries and shall be used in measuring the performance of the project.

11.2. Selection of Shova Kalula bicycles beneficiaries

In line with government policy of eradicating poverty and underdevelopment, the project is providing a package of support services to a range of target group. This attempt aims to improve social cohesion and remove economic dependency. In so doing complimentary services to scholar transport are deemed essential in contributing to human capital development and investment. In addition, local economy would be boosted by linking bicycle interventions to employment opportunities, for example, the development of a utility bike for trade facilitation, the maintenance of bicycles, the assembling of bicycles, the building of bicycle parking racks, facilities/stations, provision of bicycle tracks, bridges and sub-ways bode well with the Expanded Public Works Programme (EPWP).

It is foreseen that many of the beneficiaries will be from settlements with inaccessible public transport due to geographical displacement and as such are isolated from both social and economic participation. The municipal transport plan and current public transport records shall support this information.

The innovative concept development and technology, which are being introduced by battery-powered bicycles, would extend the function of bicycle-taxis into the public transport system. These interventions would

inevitably create more job opportunities and thus increasing the local economic base. There are also safety aspects, which are linked to bicycle massification and intensification process, such as be educational safety project. The value-add of this intervention is to afford the unemployed youth to provide training to schools, communities and so forth.

11.3. Compensation of scholar transport

Scholars that travel more than 3 km of a single trip to access education resource centres are eligible for a subsidised bicycle. The Department has initiated a social compact with schools, which shall be the caretakers of these bicycles. It is however critical to prioritise scholars travelling more than 6 km in the current MTEF.

As a result the bicycles shall be distributed to schools that will use the set criteria to allocate the bicycles to scholars. Maintenance and security services shall be provided through the schools. Small maintenance contracts shall be arranged locally to provide mechanical works and repair services with the schools. This method forms part of the business incubation strategy.

The identification and selection of beneficiaries for bicycles shall be done in accordance with the following criteria. The scholars

- Should come from a low income (poor) family (earning less than R1 500.00 per month on a combined income);
- Have no access to public transport;
- Be unable to afford the costs of a public transport;
- Walk more than 3 kilometres as a single trip to the school;;
- Be between grade 3 and grade 10;
- Be able to understand basic road safety education; and
- Have the capability to ride a bicycle.

11.4. Analysis of the Shova Kalula priority target group

11.4.1. Quantification of the priority group

- According to the findings of the National Household Survey, 2003, there are approximately 13 million scholars.
- About 10 million (76%) of the scholars, including students, walk to education resource centres.
- Three million (23 %) of scholars walk more than 6 kilometres (more than an hour) on a single trip to and from schools. The majority of these scholars attend rural and farm schools. These scholars do not walk by choice, but due to the fact that they cannot afford fares for transport services as a result of poverty. This is the priority group of scholars who require assistance in terms of improving their mobility to access education.
- The process to rollout the 1 million bicycles will prioritise the scholars with the most desperate needs out of the 3 million (23%) scholars who walk more than 6 kilometres of a single trip to schools.
- Provinces that have deep rural areas with poor access roads and high poverty levels will be prioritised in the bicycle rollout. These provinces are:
    - Limpopo;
    - KZN;
    - Eastern Cape;
    - North West;
    - Mpumalanga;
    - Northern Cape; and
    - Free State.

11.4.2. Bicycle distribution scenarios

If the distribution of bicycles is done proportionately (allocated equally to all the 9 provinces), each province would get approximately 111 100 bicycles from of the 1 million bicycles,

However, in view of the differences between the provinces with regard to poverty levels, the extent of deep rural areas as well as the conditions of the impassable access roads, the Department will distribute bicycles in accordance with this formula, which prioritises scholars who walk the longest distances to schools.

With regard to the 3 million scholars who walk more than 6 kilometres to get to schools, the breakdown of scholars per province is as follows:

Province	Scholars walking more than 6 km to schools	% of scholars walking more than 6 km.	Nr of bicycles 2007/08	Nr of bicycles 2008/09	Nr of bicycles 2009/10
Limpopo	400 000	13.3%	7 980	26 600	66 500
KZN	420 000	14 %	8 400	28 000	70 000
Eastern Cape	400 000	13.3%	7 980	26 600	66 500
Mpumalanga	380 000	12.7%	7 620	25 400	63 500
North West	410 000	13.7%	8 220	27 400	68 500
Northern Cape	330 000	11%	6 600	22 000	55 000
Free State	360 000	12%	7 200	24 000	60 000
Western Cape	160 000	5.3%	3 180	10 600	26 500
Gauteng	140 000	4.7%	2 820	9 400	23 500
Total	**3 million Learners**	**100%**	**60 000 bicycles**	**200 000 bicycles**	**500 000 bicycles**

From the above scenarios, it is clear that by the year 2010, 760 000 scholars out of the 3 million who walk more than 6 kms to school would have received bicycles.

The target of 1 million bicycles would only reach 33% of the 3 million scholars who are on the prioritised target audience for the distribution of bicycles. This means a further 2 million bicycles would be required to cover the outstanding 2 million scholars who fall under the first priority category.

Because distances in excess of 12 kms are generally not suitable for cycling by children, any scholar who has to travel more than 12 kms to the nearest school should benefit from the subsidised scholar transport provided by the Department of Education.

12. INSTITUTIONAL STRENGTHENING AND ALIGNMENT

A multi-sectoral intervention plan is seen as an appropriate mechanism to adequately address the socio-economic isolation currently being experienced by rural people. As a result, the focus should go beyond the provision of transport related solutions. Information Communication Technology (ICT) is one of the viable solutions to bridge the physical and economical divide and could also be used to lower the cost of transport. The benefits that could be derived from using information and communication technologies would include banking and agricultural market information sectors. This intervention could easily reduce the cost of freight and logistical services and increase returns to SMMEs, thereby growing business and increasing investor confidence.

A big strategic challenge is to align various delivery programmes and policies with other functional areas. It is argued that policy and strategic decisions concerning the interlinked functional areas could have a significant impact on the strategic options of a non-motorised transportation system. Both social and physical infrastructure and services are imperative to strengthen the performance of other departments such as Agriculture, Housing,

Environmental Affairs and Tourism, Sports and Recreation, Telecommunication services, etc.

The other strategic challenge relates to capacity building and monitoring. This refers to the ability of provinces and municipalities to chart and maintain a sustainable development agenda. Attention should be given to the capacity of institutions and their resources. This should however be strengthened by the provision and management of effective support systems and sound administrative processes as part of organisational efficiency to meet the NMT priorities. A significant improvement in capacity building requires long-term and broad based efforts, which include the integration of political, administrative and developmental support to achieve a more equitable allocation of power, wealth and development. On the development front, this capacity building exercise should be manageable, affordable and accessible to development partners.

13. MULTI-DISCIPLINARY PROPOSAL

13.1. Sectoral planning and co-operations

Shova Kalula is a government-sponsored initiative, which provides bicycles at a lower cost to rural and peri-urban beneficiaries. Government enters into an agreement with multiple service providers who, through donations and sponsorships, supply bicycles to government linked outlets and schools.

Key alliances, such as government departments, parastatals, business community, Non-Governmental Organizations (NGOs), community based organizations, civil society associations, cycling community, international community and sports associations, have been identified in collectively meeting the goal of delivering 1 million bicycles by 2010.

It is acknowledged that various departments and agencies are currently implementing a set of development initiatives. In the same spirit the

Shova Kalula bicycle project has to respond to these sets of interactions on optimising service delivery. Programmes such as Housing Settlement Programme, Urban Renewal Programme as well as related processes to enhance access to basic services have to be well coordinated to reinforce the realisation of the desired outcome.

Measures to tighten the delivery agenda have to be multi-dimensional and relate to intra and inter-sectoral integration. Within the transport planning framework and interaction of the land use processes a great potential lies in optimising Shova Kalula operations by linking them to existing and future development plans/ priorities. An outline of linkage development includes amongst others the following:

- Spatial development and other land use activities;
- Extension and linkage to corridor development;
- Residential development and internal transport movements;
- Tourism development and mobility activities;
- Industrial development zones / manufacturing sites and interface to residential mobility;
- Inter-modal infrastructures and public transport services;
- Opportunities for mobile services, which are supported by a good road infrastructure etc;
- Linking road transport service to e-government, as a lack of information doubles transport costs; and
- Provision of adequate street lighting along pedestrian routes, walkways and the visibility of law enforcement officers.

A change of mindset on defining transport in conventional terms, which refers to roads and vehicles, is required. This has proved to be inappropriate and irrelevant for the most vulnerable communities.

Some of the sector departments that have been identified include:

	Department	Reason for involvement
1	Agriculture	Freight logistics services
3	Education	Scholar transport provision
4	Environmental Affairs	Reduction in air pollution, climate change and earning carbon credits
6	Health	Home visits by community health workers, wellness programme
7	Housing	Link bicycles to any RDP houses to enhance mobility
8	Labour	Skills development in building NMT vehicles
9	Trade and Industry	Establishment of micro business enterprises
10	Social Services	Distribute food parcels
11	Minerals and Energy	Address shortage of fuel through the use of bicycles
12	Provincial and Local Government	Extending & alignment of NMT in the ISRSP/URP nodes
13	Public Works	Construction of NMT infrastructure (EPWP programmes)
14	Safety and Liaison	Protection of NMT users
15	Science and Technology	Promotion of research regarding new NMT technology
16	Social Development and Welfare	Food security and community outreach programmes
17	Sport and Recreation	Developing cycling and professional sports
18	Environmental Affairs and Tourism	Complying to environmental measures and support tourism

As the rollout of the bicycle project is extended to the ISRDP/URP nodes and strategic transport nodal points, a multi-sectoral approach is being encouraged, with the aim of linking bicycle projects to other delivery initiatives, which promote social and economic interaction. These collaborations will ensure that bicycles are more accessible to majority of the local people.

It is therefore important to acknowledge existing measures of complementing this mode through donations and sponsorships by various agencies, sporting organizations and other collaborators.

13.2. Stakeholder partnerships beyond government

The partnerships extend beyond the sector departments to research industry and market development expertise. It goes further to include some of the local businesses, NGOs and cycling clubs. International supporters, local industries and universities are also keen to support this programme. A set of Memoranda of Understandings (MOUs) and Memoranda of Agreements (MOAs) are being processed to formalise these partnerships.

These social compacts have one thing in common, which is to build a transport legacy of which the next generation will be proud. A policy statement, which is adopted by provinces and municipalities, is paramount to ensure that cycling is given the necessary priority it deserves. Best practice has shown the invaluable contributions this initiative would bring to the society.

The strategic contribution of bicycle technology and embraced by the strategic alliances in achieving the national objectives are on:

- Providing safe, reliable transport to scholars and low income households at a lower cost;
- Improving accessibility and mobility in the poorly serviced transport areas by integrating bicycle transportation into socio- economic development activities; and
- Fighting poverty and creating job opportunities through labour absorbing programmes whilst producing ecologically sustainable transport networks.

The Department of Transport will ensure that a new policy statement will be binding on all transport projects that will be undertaken country-wide. All new transport developments will provide for and support bicycle interventions. Where transport infrastructure is being upgraded, cycling projects will be included and the existing infrastructure in critical areas, such as major public transport interchanges, will be retrofitted

with bicycle facilities. Five percent (5%) of the infrastructure budget will cater for bicycle development. It is anticipated that these budgetary provisions will be made by all transport sub-sectors.

14. DEVELOPMENT MODELS

14.1. Tested models

As explained in the texts there are various methods of cultivating independency from government coffers in bicycle management system. Examples of the models include:

a) **A NGO set-up:** An NGO arrangement follows an organized network of NGOs, which are trading independently from government management processes and have boards of directors to run and monitor their affairs. In many instances an NGO belongs to a network of bicycle suppliers, which increases their purchasing power by obtaining bicycles at discounted prices.

b) **Facilitating a community based organizational model:** A community shall organize itself and enter into a formal agreement. A trust account shall be opened to manage and control all financial transaction. An example of Calitzdorp's community trust project emulates this business model. A board of trustees is representative of the community members of the project.

   Other tested methods included a community empowerment programme and the Free State Shova Kalula management model.

   The CBO shall be encouraged to identify the potential clients and enter into contracts with schools for the repair of bicycles.

c) **Re- structuring of Shova Kalula shops into independent outlets:** The current Shova Kalula set-ups, which are quasi-

government organizations, shall be re-structured into independent businesses in line with the business incubation mechanism. Provinces, which are promoting the old arrangement, which was introduced during the Phase 1 and 2 of the pilot phase, should terminate dependency on government funding with immediate effect.

The Shova Kalula shop managers shall be re-organized into a CBO or NGO and would form part of the coalition and would then be managed by the community or a non-governmental organization.

15. PROCUREMENT MANAGEMENT SYSTEM

A central procurement system shall be used in procuring the bicycles for Shova Kalula project. This would ensure economies of scale and uniformity and compliance to the whole certification process. The set procurement process and requirements of the PFMA on sound financial controls would be observed. In addition the principles of broad based black empowerment policy shall be promoted.

Only new bicycles shall be procured through a central procurement system to ensure economies of scale and storage facilities shall be secured at the respective schools. The use of containers has proven to be viable due to its flexibility to be relocated to areas where the need has arisen.

15.1. Bicycle specifications of a single speed commuter

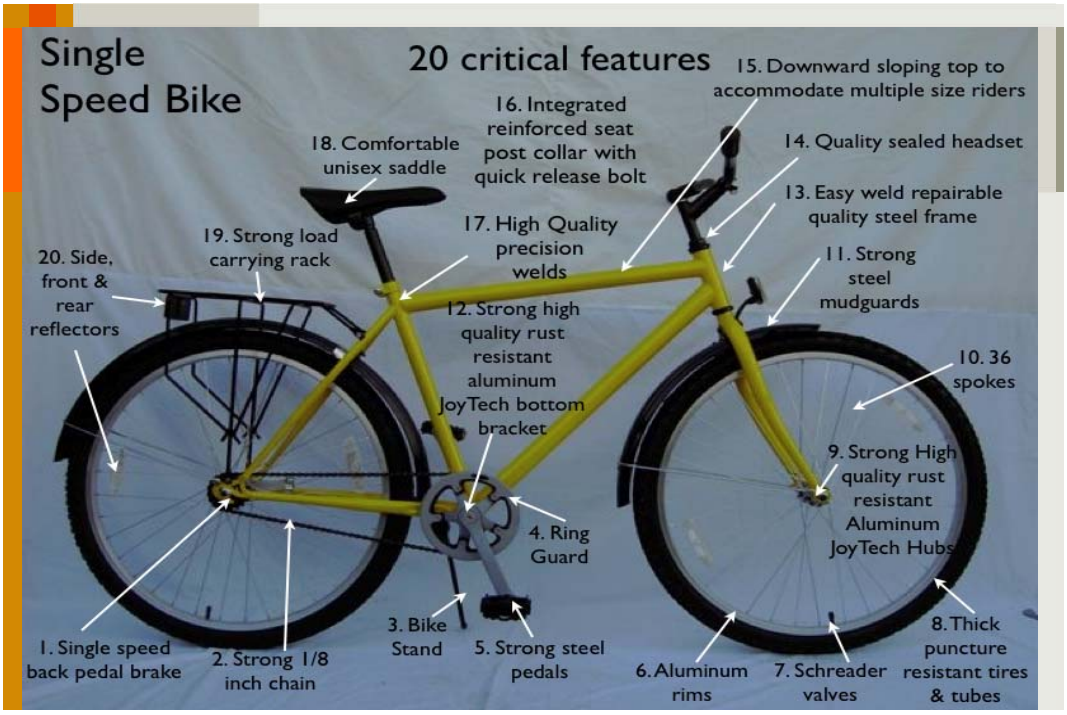
In developing twenty features safety and durability aspects were not compromised in designing this bicycle. Quality, convenience and comfort were also taken into consideration to ensure little disruption on mobility and long-term benefits of using the bicycles in rural areas.

In addition, basic manufacturing requirements were aimed at improving longevity and minimize the need for regular maintenance and thus

make the vehicle more sustainable, whilst reducing the cost of maintenance.

Figure 1: Rural bicycle specifications

Figure 2: Critical features of a commuter bicycle



The various bicycle options indicated above respond well to different rural topologies. The intention is to provide a set of differentiated means of mobility and broaden the users' choices.

15.2. Certification process

In line with safety standards and compliance with the road safety strategy, the bicycle specifications has been revised and adapted to suit the rural topography. The revision of the specifications was aimed at addressing poor quality of bicycles supplied throughout the pilot phase. As indicated in the text; safety, quality, usability, flexibility and sustainability were of utmost importance and the specifications had to provide for these mitigating factors.

This minimalist approach and advocacy for change in the manufacturing and the supply chain aims to ensure compliance where the Department would upon distribution require a service issue a guarantee to the recipient to use the bicycles. In so doing the Department would be removing what is normally referred to as "fly by night ' of unscrupulous suppliers of bicycles who do not comply with the manufacturing specifications. The process would also prevent litigations and the extent of accidents, which come as a result of un-roadworthy bicycles.

Additional surety measures would include training of learners on road safety before they receive the bicycles. A training programme for repairs and mechanical works shall be provided to the maintenance teams and /or SMMEs that shall service the bicycles. The spare parts and bicycle components shall be checked to meet the quality standards as set out in these specifications.

16. MAINTENANCE OF THE BICYCLES

The bicycle specifications and the illustration of basic features required for a commuter bicycle, provides little room for regular maintenance. For example, a high quality rust resistant aluminum hub, a strong aluminum braking and gear shifting system, strong steel mudguards, etc, were intended to improve the capacity and reduce the serviceability of the bicycle. These technical and visual characteristics of the bicycle were previously ignored and when integrated into manufacturing process would lower the cost of maintenance.

It is also important that the Department supports and secures these bicycles from reputable and creditable manufacturers, such as Trek. This company is very popular and is currently being used by many countries such as Ghana, Tanzania, Senegal and certain dealership in South Africa. The company has developed strong links with China for its bicycle parts.

It is thus crucial that the Department considers these establishments, which through its network is pooling the manufacturing resources to minimize the cost of the bicycles whilst guaranteeing quality at the same time. However, when taking the shipping and transportation costs, for the bicycle components, replenishment of bicycle parts, storage costs at the port/sea, it is recommended that the Department should negotiate for rebates on the importation of these products with the Department of Trade and Industry. The relevance of the rebates and discounted surcharge fees would impact on the maintenance and repair costs of the bicycle, and thus providing an incentive to the development of SMMEs and indirect rewards to be enjoyed by the bicycle users. This policy shift would also encourage the mushrooming and development of many assembly plants including the manufacturing plant in South Africa.

An added advantage is that if the costs of importing and transporting the bikes are lower this would subsequently make the bicycles more affordable, and would also increase the level of distribution and an improved delivery /supply trend.

Another strategic approach to maintenance is to link the bicycle mechanical team to schools for contracts and periodic repairs at the schools. A workshop on the wheel as illustrated below is one simple and quick solution to the maintenance issue.

Figure 3: Shova Kalula bicycle shop

17. DISTRIBUTION MECHANISM

In preparing for the distribution of bicycles, the Department is currently evaluating provincial business plans for the requisition of bicycles to schools. To date the number of bicycles required as per business plans is 28 000 for 2007/08.

Each quarter a total of at least 30,000 bicycles will be delivered to schools. The number of bicycles to be supplied shall be based on the total ordered per year and delivery would be staggered throughout the financial years.

Once the bicycles have been distributed, they will be parked in bicycle parking racks while the learners are at school. The Department will install the parking racks and supply a cable lock with each bicycle.

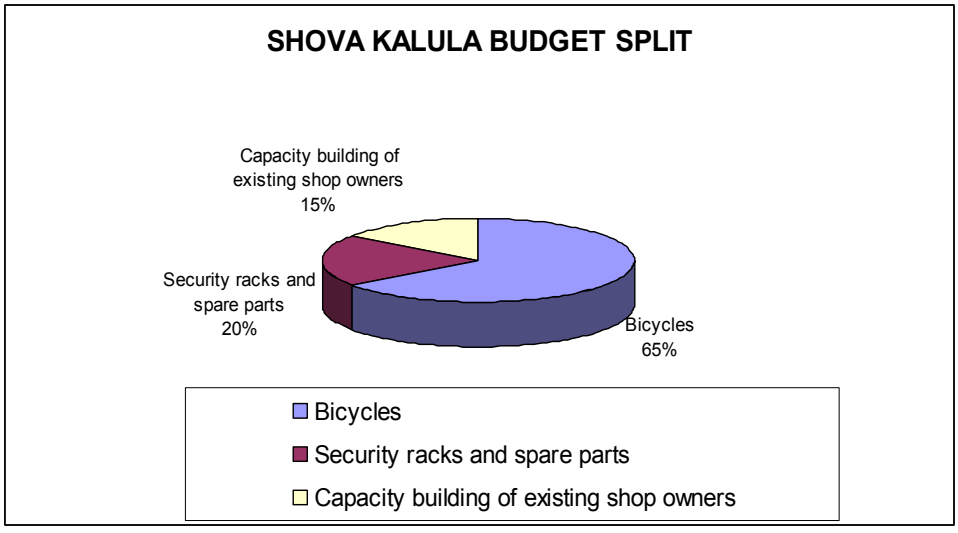
Figure 4: Example of a small bicycle parking rack

18. ESTIMATED MTEF (3-YEAR) BUDGETARY PROVISION

18.1. MTEF budgetary requirements

Apart from the procurement of bicycles, DOT must ensure that the basic spares for the maintenance of the bicycles are available, people within the communities are trained to maintain the bicycles and that there are parking facilities available at the schools where learners receive bicycles.

Figure 5: Shova Kalula budget split



The following budget would be required by the Department to meet the targets of the coming three years:

- During the 2007/08 financial year, an estimated budget of R74,095,200 is required to roll out 60 000 bicycles and set up 45 containers;
- An amount of about R271,726,500 is required for the 2008/09 budget to roll out 200 000 bicycles and set up 153 containers; and
- In the 2009/2010 financial year, an amount of R762,301,550 is required to roll out 500 000 bicycles and set up 333 containers.

The above costs have been based on the costs of bicycles procured for the bicycle ride at the end of the Non-motorised Transport and Intermediate Means of Transport Conference and Exhibition in February 2007. The breakdown of costs is as follows: a California bicycle costs about R1.200.00, a second-hand 40-foot shipping container stocked with the basic spare parts for the maintenance of bicycles costs approximately R31 560.00 and the costs of transporting these containers to certain distribution points costs around R15 000, including VAT.

The number of containers to be supplied to provinces have been calculated according to the number of bicycles, with 1 container for every 1,333 bicycles distributed.

SHOVA KALULA BUDGET – 2007 – 2010

2007/2008 FINANCIAL YEAR					
ITEM	UNIT COST	QUANTITY PER PROVINCE	COST PER PROVINCE	SA QUANTITY	SA COST
CONTAINER WITH SPARES	R 31,560.00	5	R 157,800.00	5	R 1,420,200.00
TRANPORT OF CONTAINER	R 15,000.00		R 75,000.00	X 9	R 675,000.00
subtotal container	R 46,560.00		R 232,800.00	**45**	R 2,095,200.00
BICYCLES FOR PROVINCES	R 1,200.00	6,600	R 7,920,000.00	59,400	R 71,280,000.00
BICYCLES FOR DOT	R 1,200.00			600	R 720,000.00
TOTAL BICYCLES				**60,000**	R 72,000,000.00
GRAND TOTAL 2007/2008					**R 74,095,200.00**

2008/2009 FINANCIAL YEAR					
ITEM	UNIT COST	QUANTITY PER PROVINCE	COST PER PROVINCE	SA QUANTITY	SA COST
CONTAINER WITH SPARES	R 34,000.00	17	R 578,000.00	17	R 5,202,000.00
TRANPORT OF CONTAINER	R 16,500.00		R 280,500.00	X 9	R 2,524,500.00
subtotal container	R 50,500.00		R 858,500.00	**153**	R 7,726,500.00
BICYCLES FOR PROVINCES	R 1,320.00	22,150	R 29,238,000.00	199,350	R 263,142,000.00
BICYCLES FOR DOT	R 1,320.00			650	R 858,000.00
TOTAL BICYCLES				**200,000**	R 264,000,000.00
TOTAL					**R 271,726,500.00**

2009/2010 FINANCIAL YEAR					
ITEM	UNIT COST	QUANTITY PER PROVINCE	COST PER PROVINCE	SA QUANTITY	SA COST
CONTAINER WITH SPARES	R 37,400.00	37	R 1,383,800.00	37	R 12,454,200.00
TRANPORT OF CONTAINER	R 18,150.00		R 671,550.00	X 9	R 24,847,350.00
subtotal container	R 55,550.00		R 2,055,350.00	**333**	R 37,301,550.00
BICYCLES FOR PROVINCES	R 1,450.00	55,500	R 80,475,000.00	499,500	R 724,275,000.00
BICYCLES FOR DOT	R 1,450.00			500	R 725,000.00
TOTAL BICYCLES				**500,000**	R 725,000,000.00
TOTAL					**R 762,301,550.00**

This budget does not include the cost of the bicycle parking racks - which would add at least R1 million to the 2007/2008 budget - or the cost of capacity building – which could add another R1 million to this year's budget.

It is clear that the target of 60 000 for 2007/08 would be a challenge to achieve due to budgetary constrains. It would be appropriate to source funding from other sources.

18.2. Alternative route for reasonable prices

The Department has to rigorously lobby and re-consider various avenues of procuring bicycles at a lower price. Intermittent measures would including reduced import costs, discounted or free storage fees at the seashore, establishing a local manufacturing plant in South Africa, direct contracting and /or negotiated contract with the 'sole' manufacturer, namely TREK, developing relations with companies that are directly involved in building bicycle parts, which are in China, etc.

A further possibility is to become part of the Global Bicycle Network and procure bicycles at a discounted price. The bicycle cost could be lowered to R800.00 for a quality bicycle, which is suitable for urban and rural use. The price is inclusive of shipping cost.

2007/2008 FINANCIAL YEAR					
ITEM	UNIT COST	QUANTITY PER PROVINCE	COST PER PROVINCE	SA QUANTITY	SA COST
CONTAINER	R 32,000.00	5	R 160,000.00	45	R 1,440,000.00
BICYCLES FOR PROVINCES	R 800.00	6,600	R 5,280,000.00	59,400	R 47,520,000.00
BICYCLES FOR DOT	R 800.00			600	R 480,000.00
TOTAL BICYCLES				**60,000**	R 48,000,000.00
GRAND TOTAL 2007/2008					**R 49,440,000.00**

2008/2009 FINANCIAL YEAR					
ITEM	UNIT COST	QUANTITY PER PROVINCE	COST PER PROVINCE	SA QUANTITY	SA COST
CONTAINER	R 35,000.00	5	R 175,000.00	45	R 1,575,000.00
BICYCLES FOR PROVINCES	R 880.00	22,150	R 19,492,000.00	199,350	R 175,428,000.00
BICYCLES FOR DOT	R 880.00			650	R 572,000.00
TOTAL BICYCLES				**200,000**	R 176,000,000.00
TOTAL					**R 177,575,000.00**

2009/2010 FINANCIAL YEAR					
ITEM	UNIT COST	QUANTITY PER PROVINCE	COST PER PROVINCE	SA QUANTITY	SA COST
CONTAINER	R 38,500.00	5	R 192,500.00	45	R 1,732,500.00
BICYCLES FOR PROVINCES	R 970.00	55,500	R 53,835,000.00	499,500	R 484,515,000.00
BICYCLES FOR DOT	R 970.00			500	R 485,000.00
TOTAL BICYCLES				**500,000**	R 485,000,000.00
TOTAL					**R 486,732,500.00**

Should the coalition arrangement be approved by the Department, a possible schedule of timelines for distribution shall be drawn and adhered to by the bicycle coalition / consortium. An indicator of the distribution table is shown hereunder:

1st Delivery of 10 000 bicycles	Oct 2007
2nd: Delivery of a further 10 000 bicycles	Nov 2008
3rd: Delivery of a further 10 000 bicycles	Jan 2008

The quantities have been reduced due to budgetary constraints as indicated above.

18.3. Possible funding sources

Lobbying of sponsors, donors, provinces, municipalities etc, for complementary services in meeting the set targets will be undertaken. These complementary services do not provide for other key activities as outlined in the implementation plan as well as bicycle infrastructure.

Additional funding for infrastructure shall be negotiated separately. The infrastructure process may tap into the MIG, 2010 Soccer World Cup, Public Transport Infrastructure and Systems Grant, and other funding sources. The implementation plan requires internal and external support from other countries and other role-players.

Other sources of funding which exist will also be used to provide for NMT infrastructure and related amenities for example, EPWP for maintenance of infrastructure, DoT and Provincial DoT dedicated funding, discretionary funds, etc.

Provinces and municipalities would be required to start budgeting for bicycle projects to complement DoT's assistance. On 24 May 2006, the Minister and MECs (MINMEC) took a decision that provinces shall include in their budgets an amount of R5 million per annum for the MTEF cycle to contribute towards the rollout of 1 million bicycles.

It is however very important to realize the overall achievement of the delivery of bicycles.

It should be noted that a mix of funding options to fund and sustain the bicycle project should also provide for the subsidization of other target groups as indicated in the text.

18.4. Parameters of using Shova Kalula funds by municipalities

To allow a degree of flexibility and avoiding measures that are too stringent. Shova Kalula funds will be utilized according to the following conditions:

- The funds will cover the procurement process and payment of services rendered. This relates specifically to the supply of bicycles and spares;

- Technical support for training programmes with specific reference to project management, educational programmes, business process development; communication and promotional activities,
- Fund infrastructure-related projects such as retrofitting of inter-modal facilities, cycle tracks, parking kiosks/ racks as well as road markings and signage;
- NMT related transport initiatives such as corridor projects and other NMT activities.

19. BICYCLE PACTS

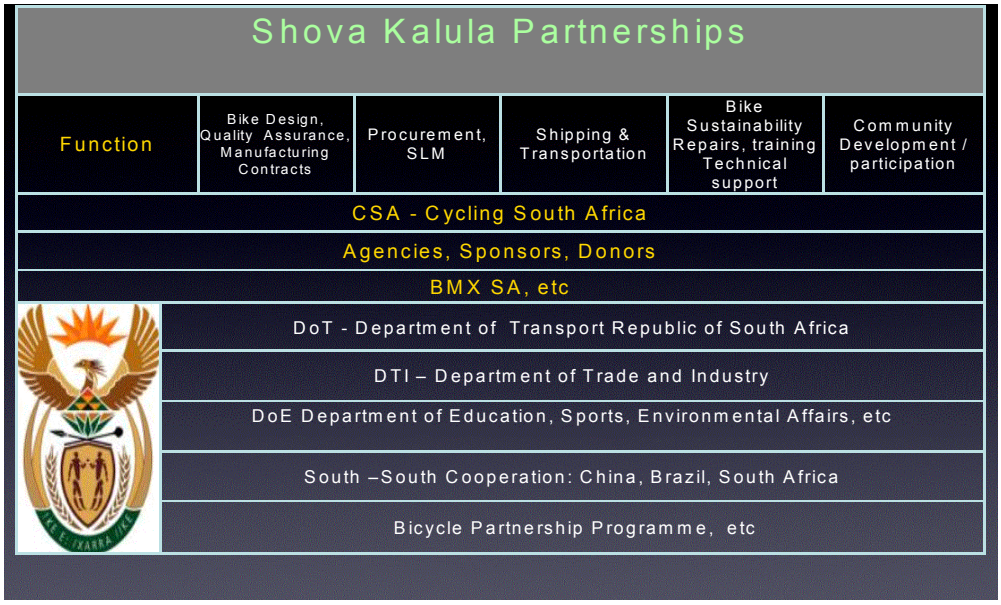
19.1. Partnership coalition

The Department is looking at an inclusive approach of participation in the supply chain of a million bicycles. A stakeholder workshop was held in June 2007 to provide a platform for discussion in the supply of bicycles. A variety of proposals would be looked at with the aim of consolidating the role-players involved in this sub-sector, such as the NGOs, CBOs, SMMEs, business community, potential suppliers and the civil society group, etc, to discuss possible consortium or bicycle co-operatives. This network would then be used to mobilize, supply and maintain the bicycles. A service agreement shall be entered into to manage and monitor the whole value chain.

After a stakeholders' pact/ agreement has been signed together with the service level agreement, the roles and responsibilities will be outlined to meet the delivery targets.

An advisory team shall be established to ensure performance on the agreed roles and tasks whilst ensuring value for money, that is, quality assurance.

Figure 6: A possible partnership structure



20. DEFINITION OF ROLES BY SPHERES AND AGENCIES

The roles of various role-players have been summarized to include the following, although these roles are not conclusive yet. The transport sector institutions shall prioritize and align NMT infrastructure in their strategic plans and budgetary processes.

20.1. The role of the Department of Transport

The Department shall:

a) Provide strategic direction and guidance on the implementation of the project;
b) Manage the funds of the project, and monitor the spending patterns;
c) Monitor the implementation of the projects by key role-players;
d) Oversee and manage the central procurement process and develop bicycle specifications and standards;
e) Facilitate bicycle alignment to priority transport areas and other nodal areas through transport planning;
f) Facilitate the provision of inter-modal facilities and link non-motorized transport to a wider public transport system;

g) Ensure implementation of the bicycle infrastructure guidelines;
h) Formulate a chapter on cycling and road traffic rules for all road users for inclusion in the driver's manual;
i) Establish management / coordination structures with the role-players;
j) Facilitate the drafting of contracts with the role-players and monitor the distribution of bicycles according to contracts and business plans;
k) Facilitate impact assessment and evaluation of the programme;
l) Develop a policy on NMT; and
m) Revise the National Road Traffic Act.

20.2. SA National Roads Agency and Provincial Roads Agencies

a) The South African National Roads Agency (SANRAL) shall use its community development fund to complement Shova Kalula Bicycle programme and other NMT operations.
b) The agencies' business plan shall incorporate the provision of bicycle facilities to include the building of appropriate infrastructure such as bicycle corridors, overhead bridges and related road safety measures such as road signage, etc. It is anticipated that Provinces shall collaborate with the Provincial Road Agencies to increase this support.

20.3. Provinces

The Provinces shall:

a) Facilitate the implementation and proper control of the projects, by facilitating integration with other sectors;
b) Determine projections for the short, medium and long–term rollout plan and allocate resources adequately;
c) Monitor and ensure performance as per service level agreements with the respective service providers, partners and schools;

d) Ensure that a coordinating mechanism with the stakeholders is in place and managed properly; and
e) Ensure that identification plates are mounted on Shova Kalula bikes for promotional and security purposes.

The Departments of Transport shall liaise with town planners and the Department of Public Works on better planning and use of public space, such as using the road reserve for sidewalks, cut kerbs for cycle ways, bicycle parking facilities in selected areas, etc.

In addition, provinces and municipalities shall develop public awareness programmes and link up with school campaigns.

20.4. Municipalities

As delivery takes place within municipalities, a stronger coordination mechanism and the alignment of plans are critical. Municipalities have to play a leading role in ensuring that all modes of transport are being provided for in their service delivery programme. Among others they have to ensure that the following processes take place:

a) Integrate cycling and NMT broadly into the budgetary processes;
b) Develop bicycle master plans in terms of IDPs which are reflective of transport objectives;
c) Provide bicycle infrastructure such as cycling subways, overhead bridges, dedicated bicycle lanes, parking facilities, adequate street lighting and furniture for all categories of NMT users;
d) Develop by-laws to streamline NMT activities and enforcing the by-laws;
e) Provide speed calming measures and redesign the traffic signage for cyclists; and
f) Work closely with participating departments (education, agriculture, sports and recreation, environment affairs, housing, municipal traffic departments, etc) in entrenching the role of NMT transport to other fields.

20.5. Communities and public participation

Communities shall:

a) Participate in local development planning, and the provision and management of transport related projects;
b) Provide an oversight role at community level and co-manage the bicycle projects through community structures; and
c) Provide guidance and leadership at community development structures, which may comprise of the district councilor, school representatives (scholar, teacher, parent), community representatives (including a traditional representative), public transport operator, business representative, local representatives from the transport forum, etc.

Bicycle community structures shall be trained in road safety education. A good coordinating plan has to be developed and agreed upon by the key role-players. Volunteers / marshals of bicycle road safety shall be encouraged in all communities. Bicycle activities shall be extended to health and wellness community projects in promoting bicycle initiatives. Partnerships with Non-governmental Organizations, the business community and the cycling community would be established for the formation of cycling clubs.

Public participation shall be facilitated to ensure involvement in income generating activities through cycling interventions, e.g. bicycle infrastructure provision and maintenance, bicycle operations and related aspects of the value chain.

21. ANCHORING SHOVA KALULA PROJECTS WITH OTHER SECTORS

The Department policies and strategic programmes are promoting linkage development and coordination of government priorities. In the same breath the Shova Kalula bicycle project shall play a catalytic role in strengthening sector s service delivery processes. Few examples have been selected to demonstrate sector support and optimizing social development and economic growth.

Support to the Department of Education on access to education resource centers through collaborations with the private sector and the local community. On the 19 May 2007 Axiz/Qhubeka donated 350 California bicycles and 350 helmets to Huntington school in Mpumalanga. In addition, Sabie Game Lodge contributed R500 000.00 to the local community bicycle trust. A community cycling club has been established to sustain this project.

Figure 7: scholars walking more than an hour to school

22. IMPLEMENTING OTHER BICYCLE TECHNOLOGIES

22.1. SABS –Disa technology

The Department has commissioned the SABS-Design Institute South Africa to undertake a research and comparative analysis on the demand and technical requirements of the non-motorized transportation, which are currently being used in various villages. The research findings have highlighted a number of challenges and non–conformity to safety standards. Amongst others the social, environmental, technical and technological aspects were incorporated into the project. This process has led to the design of the appropriate bicycle concepts, the refinement of the industrial designs, experimental models and the building of prototypes. These prototypes have been tested and are undergoing the final stage of modification to meet the basic functionality, ergonomics, aesthetics and social acceptance of the final products.

An amount of R1, 6 million has been spent on this project. Subsequent to this phase the Department would then be able to use the specifications of the prototypes to develop standards for the new bicycles, which meet the needs of all age groups, including women. These bicycles would then be integrated into the bicycle implementation plan in a phased approach. More importantly is to note the inter-changeable roles these new bicycles are playing in support of other sectors.

Figure 8: SABS –DISA technologies

Figure 9: A multi-purpose bicycle for women

22.2. Passenger bicycle taxi

With the advent of technology and innovative mechanisms of improving accessibility, bicycles that are propelled by a mini-engine, with a little reliance on human effort, have been being designed and would soon be entering the transport market. However these technologies have to go through a process of safety inspection and be certified by the manufacturers before they become part of the public transport system. Some of these are powered by battery.

These bicycles would be transporting passengers within shorter distances and thus adding value and continuity of the travel chain. These interventions are being implemented in other countries and have proved to be very effective. They are commonly known as taxi bicycles.

The primary objectives of these sets of vehicles is to make transport more affordable and provide convenience of mobility especially for shorter distances and provide feeder services to other modes, and thus contribute to efficiency of the transport system.

An incremental approach shall be adopted in introducing and integrating these interventions into the bicycle implementation plan.

Figure 10: Supporting scholar transport

22.3. Local community initiatives on sporting facilities through bicycling

Figure 11: BMX cycling track in Soweto

A partnership initiative with Axiz/Qhubeka and the Gauteng BMX Cycling Club is a model for public private partnership. The cycling track in Soweto is managed by the local community. The facility was opened in March 2007 by a coalition of cycling network. Axiz/Qhubeka donated 50 professional bicycles and helmets to scholars.

Figure 12: BMX Cycling track in Soweto

22.4. Support to the health / social Development sectors

Figure 13: Bicycle trailer for the transportation of patients

22.5. Promotion of environment through eco-school project in Diepsloot

22.6. Rewards and incentive to a clean neighbourhood

23. SHOVA KALULA ACTION PLAN

Key Strategic Areas	Priority actions	Key Performance Indicators	Targeted Outcomes	Timelines
Institutional strengthening	• Institute and facilitate capacity building in municipalities for technical, managerial and financial skills • Develop and set-up requisite support systems at municipal level • Appoint or have dedicated transport coordinators to deal with transport matters	• Development of transport plans and inclusion of cycling plans into the IDP • Availability of cycling master plans and route maps for interlinked service network	• Improved transport operations to basic resources	• May 2007
	• Provision of complementary funding by National and Provincial Transport Departments on cycling projects for research and implementation	• Dedicated equitable budget	• Sufficient budget to reach targets	March 2008
	• Establishment of partnerships and signing of agreements on cycling promotions, with sector departments, NGOs and targeted communities	• Agreements signed	• 1 per month	Ongoing from March 2007
	• Reprioritisation of cycling, coordination of transport activities and alignment with local delivery plans within the district municipalities	• Cycling plans included in IDPs	• District delivery programme inclusive of cycling	March 2008
Resource mobilisation	• Convene the bicycle suppliers stakeholders workshop	• A management structure which is representative of the bicycle suppliers • Stakeholder pact	• A multi-party participation and cooperation in distributing the bicycle	June 2007
	• Embark on an NMT outreach programmes	• Provinces visited	• Promotion and support of the project	• July 2007
	• Conduct surveys and market assessment	• Municipalities' survey reports	• Alignment of bicycle plans	• Aug 2007

Key Strategic Areas	Priority actions	Key Performance Indicators	Targeted Outcomes	Timelines
	• Facilitate the development of school safety programmes	• Sector departments playing a role in the programme	• Improved collabora-tions and unified delivery efforts	• June 2007
Establishing bicycle supply chain coalition	• Sign partnership agreements with key alliances	• Formalised and sustainable partnership with key alliances	• Quality assurance in the provision of bicycles	• June 2007
	• Facilitate the signing of contracts on service level agreements	• Established cycling management structures	• Improved public participation	• June 2007
	• Establish local plants	• Established local plants	• Increased number of bicycles in communities	• Sept 2007
	• Facilitate mentoring programme for the transport coordinator	• Mentoring programmes	• Improved management of the outlets	• Nov 2007
Promotion of cycling through the three spheres of government	• Feasibility studies • Needs assessment • project/business proposals	• Reports of studies and consultations	• proper coordination and serving the right target group	• Feb 2007
	• Mobilisation and negotiations on discounted prices with the manufacturer	• Contract and delivery notes	• Achievable target of bicycles	• Sept 2007
Promotion of bicycles with key role -players	• Negotiations with DTI on free import surcharges	• Reduced import charges on bicycle components	• Affordable bicycle parts supplied and increased number of bicycles to be procured	• Sept 2007
	• Negotiations with the National Ports Authority	• A signed Agreement	• Reduced tariffs at sea and ultimate reduced transport cost	• Sept 2007
	• Building of bicycle components, spare parts, accessories, containers for importation into South	• Established bicycle units	• Increased number of bicycles in communities	• Sept

Key Strategic Areas	Priority actions	Key Performance Indicators	Targeted Outcomes	Timelines
	Africa			
	• Develop cycling master plans	• Integrated transport network	• Dedicated cycle lanes	• Ongoing
	• Incorporation of cycling in the Provincial Land Transport Framework	• Cycling included in PLTF	• Cycling guideline manual	• August 2007
	• Guide the built environment and the pavements to promote cycling	• Provision of cycling infrastructure in accordance with the guidelines	• Cycling guideline manual	• August 2007
	• Erection of bicycle road signage	• Approved budgets and orders produced	• Guidelines approved	• May 2008
	• Introduce SABS approved and tested cycles	• Operation of approved specifications	• Quality rural cycles	• April 2008
	• Review road transport legislation for all road users	• Adherence to cycling safety norms and standards	• Safety for cyclists	• Ongoing
Market research	• 2nd leg of feasibility study of additional schools	Research on report	• Increased supply of bicycles	• Feb 2008
	• Conduct surveys and market assessment in other municipalities	• Beneficiaries identified	• Fair distribution of cycles	• March 2007
Procurement of bicycles	• Approval of business plans	• Approved provincial plans	• Commitment on implementing the project	• April 2007
	• Approval and signing of MoAs	• Signed agreements	• Increased distribution to schools	• May 2007
	• Preparation of central tender process to procure the 30 000 bicycles	• Tender document, specs	• Approved tender • BEE participation and empower-ment	• May 2007
	• Distribution of 30 000 bikes bi-monthly	• Distribution of the first batch of bicycles=5 000	• Increased number of bicycles in	• Sept 2007

Key Strategic Areas	Priority actions	Key Performance Indicators	Targeted Outcomes	Timelines
		• delivery report	communities • s Improved accessibility	
Traffic engineering for bicycling	• Introduce appropriate traffic signals to accommodate cycling	• Approvals on the traffic signal projects	• Cycling guideline manual	2008 and 2009
Trade facilitation	• Facilitate local manufacturing plant for bicycle components	• Bicycle manufacturing plant	• Local manufacturer of cycles	• From 2008/2009
	• Coordinate the establishment of assembly plants/points	• Bicycle assembly plants for 60 000 bicycles	• Local assembly of bicycles	• Ongoing from November 2007
	• Lobbying DTI for reduced import tariffs for facilitation of business process development	• Reduced costs	• Affordable bicycles	• August 2007
	• Negotiate with SARS for tax reduction on the import, manufacture and assembly of bicycles tariffs	• Reduced costs	• Affordable bicycles	• June 2007
Monitor the effectiveness of the bicycle shops	• Assess the effectiveness of cycle shops • Conduct periodic reviews and inspections	• Location of shops researched	• Accessible and effective shops	• Bi-monthly • Ongoing
Mainstream NMT into the World Cup 2010 plans	• Assess city priority statements	• Dedicated cycling infrastructure and facilities at the soccer stadiums and public transport interchanges	• Improved cycling infrastructure	• Apr 2007
	• Align the cities' cycling plans with other modes and other services	• Integration of cycling with other modes of transport	• Integrated transport	• Ongoing
	• Incorporate bicycle infrastructure and operations into the transport plans	• Integrated transport	• Parking facilities for bicycles in host cities	• Ongoing
Provision of bicycle infrastructure	• Implement the bicycle infrastructure plans on bridges, sub-ways, corridors	• Dedicated NMT facilities at the soccer stadiums and the railways to accommodate	• Promotion of access to public transport	• 2009

Key Strategic Areas	Priority actions	Key Performance Indicators	Targeted Outcomes	Timelines
		the 2010 world cup tournament and beyond.		
	• Provide bicycle lanes, cycling/pedestrian tracks, parking kiosk at identified points, street lighting and street furniture	• % of NMT infrastructure and facilities built, upgraded and maintained	• Promotion of access to public transport	• 2009
	• Parking and storage facilities at schools, railways, bus stations, local service centres, etc	• % of NMT infrastructure and facilities built, upgraded and maintained	• Promotion of access to public transport	• 2009
Introduction and promotion of other bicycle technologies	• Introduce new bicycle technologies • Facilitate operations for freight services and passenger • Permit to operate the carts and linkage to transport system • Regulate the operations	• % of mainstreamed NMT services at all spheres of government • Number of licenses granted to operators • MOAs /MOUs signed through collaborations • % number of scholars accessing education resource centres • % NMT enterprises established	• Improved turnaround in transport services • Increased access to markets • Number of jobs created • Growth of local economies • Improved travel time due to accessible routes and • Improved road transport network	• 2009
Develop policy and strategy for cycling	• Finalise a bicycle policy	• An approved bicycle policy	• Guidance to bicycle practi-tioners, users/opera-tors, etc	• July 2007

24. REGULATORY ISSUES

The National Road Traffic Act (Act no 93 of 1996) indicates that any person riding a pedal cycle on a public road shall ride on a single file except in the course of overtaking another pedal cycle. In addition, two or more person(s) riding pedal cycles shall not overtake another vehicle at the same time. In order to maintain the safety of cyclist on public roads, all motor vehicles overtaking pedal cycles should keep a passing distance of 2 meters.

Road transport legislation and road traffic management laws should allow and protect equal utilisation and sharing of the road infrastructure by the critical mass of cyclists.

Figure : Cycling tour in Soweto

25. SAFETY OF PEDESTRIANS AND CYCLIST ON PUBLIC ROADS

Various studies have shown that a significant number of pedestrians and cyclist are killed on the roads each year. This could be ascribed to inadequate road safety measures. To curb the high rate of road accidents involving

pedestrians and cyclists, appropriate NMT infrastructure such as walkways and cycle tracks should be provided alongside public roads. Suspension bridges and footbridges should also be provided on busy streets particularly on urban roads. The necessary infrastructure features such as speed calming measures, pedestrian crossings and signage are of utmost importance to complement the programme.

The road safety divisions of the provincial Departments of Transport will ensure that the learners receive basic road safety education before they receive bicycles. A certificate of competency will be issued as proof upon successful completion of the training.

The municipal traffic and engineering departments, with the assistance of DoT, shall provide road signage and marking and monitor safety of the learners while on public roads.

Demonstration of road safety methods

26. TRANSVERSAL PERFORMANCE CRITERIA

Cycling interventions could ignite a lot of developmental potential and environmental sustainability. It is also acknowledged that, to meet the challenges of gender and cycling mainstreaming and full reform of underdeveloped communities, an integrated, multi-pronged and multi-sectoral approach is essential. These interventions have to be supported by prioritisation of budgets and review of current legislation, policies and strategic programmes. The complimentary of delivery programmes would also aid the country in meeting the Millennium Development Goals (MDGs).

A programmatic approach is critical to consider other interventions, which will bring rural communities into the mainstream economy. The need for the transport system is to meet the developmental approach, of which two categories of performance criteria have been identified:

a). Internal **operational efficiency criteria,** which refers to the internal efficiency of the transport system through effective coordination and linkages of other modes; and

b). External **developmental effectiveness criteria,** referring to the **direct impacts** of transport delivery on job creation, enterprise development and general capacity building among the vulnerable groups. **Indirect impacts** would be on the mainstreaming of rural economies and the creation of sustainable livelihoods. This could be achieved also through the wider developmental goals as decreasing poverty and hardship and promoting more sustainable spatial development patterns.

Local assembling plants

27. SUSTAINING THE SHOVA KALULA PROJECT

Provinces and municipalities shall incorporate cycling measures into their spatial development and accessibility plans. Special budgetary provisions to address bicycle development needs are also critical to ensure continuity of the project in subsequent implementation of the rollout plan. Alignment with the Human Settlement Development programme and other anchor projects in the municipalities could be used to strengthen the role of cycling.

On the infrastructure side it is critical to provide bicycle infrastructure and facilities that feed into the transport network. Intermodal facilities at key public transport precincts and regular maintenance of the infrastructure is vital to streamlining bicycling into transport operations.

The location of these facilities is critical to the provision of non-motorised transport (NMT) infrastructure, bicycle infrastructure specifically, and related facilities. Bicycle facilities should be closest to the public transport stations and

planning for built-up residential areas should include the reduction of speed limits and proper signage for bicycling as a mode of transport.

Local bicycle manufacturers, distribution and assembly plants as well as vehicle repair enterprises would contribute immensely to the development and sustainability of the programme. The Department will continue providing strategic guidance on all aspects of bicycle provisions. It is also acknowledged that capacity development plays a pivotal role in sustainability. The focus areas would include research on innovative transport development and a project appraisal support system to enhance the capacity to deliver on the Shova Kalula programme.

The national, provincial and municipalities shall ensure the integration of bicycle in the IDP review process to include bicycle master plans as part of transport plans.

28. LEVERS TO ENCOURAGE CYCLING

- Provision of financial assistance to projects and planning processes which integrate NMT into the transport development programmes;
- Expanding the relations beyond South Africa, e.g. through the Bicycle Partnership Programme and pursue the South-South co-operations;
- Pool resources with key role players, local partners and stakeholders;
- Trade facilitation and reducing import duties / discounted shipping costs (Senegal and Kenya have no import tax on bicycles);
- Political support and commitment of stakeholders;
- Set up a good institutional arrangement and funding mechanism;
- Regulatory and monitoring systems for the implementation of NMT and municipal by-laws that promote multiple modes of transport;
- Prioritise cycling over motorists especially at road intersections; and
- Build a common goal with communities to reinforce the integration of cycling.

However, the requirements to fully transform the cities, towns and rural areas have to promote diversity and safe environment for co-existence.

29. MONITORING AND EVALUATION

Monitoring of the bicycles will take place with the Department of Education's assistance.

The Shova Kalula bicycles shall be identified by means of a logo and branding as well as an indelible serial numbers as a measure of security. The Departments of Transport shall facilitate the identification of the bicycles. The contracts shall be entered into between the provincial Departments of Transport and the respective schools. Distribution of the bicycles shall be made directly to schools.

The bicycles will become property of the schools and appropriate maintenance programmes shall be arranged with local bicycle shops.

The following management rules shall be instituted and enforced:

- The school shall acknowledge receipt of the bicycles (in a roadworthy condition). An asset register shall be kept in this regard;
- The use of bicycles shall be mainly for school purposes and the bicycles shall always be in a roadworthy condition;
- Bicycles are to be parked in the school yard (bicycle racks and lock up facilities shall be provided by the Departments of Transport);
- The learner shall come to school by bicycle at all times;
- The school shall coordinate the servicing and general maintenance of the bicycles with Shova Kalula shops managers/contractors. The school shall institute fund raising activities to raise funds for the maintenance of the bicycles. Each learner may be requested to contribute an amount of R5 a month that will assist in the maintenance of bicycles. In addition the school may subsidize the maintenance of bicycle where possible;
- A learner shall not sell, lease etc. the bicycle to any other person while he/she is still attending the school where the learner benefited the bicycle;

- When a learner leaves the school, the school shall retain the bicycle as the property of the school;
- The school has the right to withdraw the bicycle from the learner who does not comply with the condition of this criteria and who:
- Is not taking good care of the bicycle;
- leases, lends, and neglects the bicycle;
- is not cycling to school regularly.
- who replaces and exchanges the parts of the bicycle.

The impact of the programme shall be assessed after three years. The necessary supporting documents such as contract forms and forms for monitoring and evaluation are provided separately.

30. CONCLUSION

Shova Kalula is one of the key programmes of the Department of Transport. Its strategic aim is to reduce poverty, facilitate the creation of job opportunities and overall mainstreaming of poor people into the economy.

It has become apparent that geographical isolation has perpetuated the level of marginalization of many communities living in abject poverty and this scenario necessitated an intervention on the status quo. This has resulted in developing a set of measures as detailed in the action plan.

The implementation of the rollout plan is, nonetheless, not without challenges.

The first of these challenges relate to budgetary constraints. The current budget for the whole of the Chief Directorate Integrated Delivery Programme - which is also responsible for Rural Transport Development Programmes of which the provision of bicycles forms part - amounts to less than R40 million for the 2007/2008 financial year. This is far less than the R100, 8 million needed to roll out 60,000 bicycles and set up 108 shops during the next 12 months.

Another challenge is presented by the provinces, who are indispensable in rolling out Shova Kalula. In order to implement the Shova Kalula programme and to successfully monitor and evaluate the programme, provinces will need sufficient dedicated human resources, as well as additional budget as per the MINMEC resolutions taken during 2005. This budget shall be ringfenced for bicycle infrastructure.

It is also of utmost importance for the success of the Shova Kalula programme that it enjoys the full support and backing of political heads as well as administrative top management on all three levels of government.

If these challenges are not properly addressed, there is a real risk of the Department not being able to roll out the targeted 1 million bicycles by 2010.

It is, however, anticipated that the Shova Kalula project and related initiatives would contribute immensely in promoting growth and development, and in particular reduce the unemployment over a period of 10 years. The setting up of 108 bicycle shops per year will create 216 permanent jobs per year.

LIST OF ABBREVIATIONS

BEE	Black Economic Empowerment
BEN	Bicycle Empowerment Network
CBO	Community Based Organisation
CDW	Community Development Workers
DISA	Design Institute of South Africa
DoT	Department of Transport
DTI	Department of Trade and Industry
EPWP	Expanded Public Works Projects
ICT	Information Communication Technology
IMT	Intermediate Means of Transport
ITDP	Institute for Transportation and Development Policy
ISRDP	Integrated and Sustainable Rural Development Programme
MDG	Millennium Development Goals
MIG	Municipal Infrastructure Grant
MINMEC	Minister and Members of the Executive Committee
MOA	Memoranda of Agreement

MOU	Memoranda of Understanding
MTEF	Medium Term Expenditure Framework
NGO	Non Government Organisation
NMT	Non-motorised Transport
PFMA	Public Finance Management Act
PLTF	Provincial Land Transport Framework
POA	Programme of Action
RDP	Reconstruction and Development Programme
SABS	South African Bureau of Standards
SANRAL	South African National Roads Agency Limited
SLA	Service Level Agreement
SMME	Small Medium Micro Enterprise
URP	Urban Renewal Programme

ANNEXURE 1

MONITORING & EVALUATION FORMS

FOR

SHOVA KALULA BICYCLE PROJECT

A. BICYCLE SHOP

ENTITY / SHOP DATA (General information).

(Data to be collected monthly and reviewed quarterly)

1. Province: _____
2. Municipality: _____
3. District: _____
4. Shop address: _____

   _____
5. Name of the contact person (s): _____
6. ID number: _____
7. Telephone number: _____
8. Fax number: _____

PROFILE ASSESSMENT (Data to be collected quarterly)

1. Name of the shop: _____
2. Number of bicycle shops in the district: _____
3. Number of bicycles received by the municipality: _____
4. Is the shop accessible to all bicycle recipients: _____
5. What do you think should be done to address accessibility problem: ____

   _____
6. How many bicycles are sent for repair monthly: _____

7. What kinds of repairs has the shop or others done on the bicycles _____

   _____

8. How much is charged to repair a bicycle: _____
9. Can bicycle recipients afford to pay this amount: _____
10. What is the common problem reported by bicycle recipients: _____
11. What do you think should be improved in the current make of bicycles: __
12. In your opinion, has the introduction of the shop facilitated the promotion of cycling in the community: _____

    COMMENTS:

    _____

    _____

    _____

    _____

    _____

CAPACITY ASSESSMENT

1. Does the shop have the necessary shelter: _____
2. Does it have appropriate equipments to fix bicycles: _____
3. Have the personnel been trained to fix bicycles: _____
4. If yes, what is the name of the service provider who provided this training:

   _____

5. Was the training accredited /certificated: _____
6. Do personnel need further training in the field of bicycle repair: _____
7. What challenges are the shop manager facing: _____

   _____

8. What does he/she think should be done to address these challenges:

   _____

   _____

   COMMENTS:

   _____

   _____

   _____

   _____

   _____

FINANCIAL MANAGEMENT ASSESSMENT

(Data to be collected monthly)

1. How does the manager administer accumulated funds: _____

   _____

2. Does he have a system to register daily income: _____
3. Does he have a bank account dedicated to the bicycle shop: _____
4. Is the bank account registered in the name of the shop: _____
5. What expenses are these funds utilized for: _____

   _____

6. Are these funds enough to sustain the shop: _____
7. Is there a system in place to record daily income: _____
8. If yes, what kind of record: _____
9. Does the manager have records for funds deposited in the bank: ____

10. Does he have a requisition form for withdrawal of funds in the bank: __
11. Training received on financial management: _____
12. What is the name of the service provider who provided this training: __

    _____

13. Was this training accredited/certificated: _____

    COMMENTS

_____

_____

_____

_____

_____

RISK ASSESSMENT

(Data to be collected monthly)

1. Is the shop known to the local authorities (headman / chief / municipality):

   _____

2. Is there a history of theft from the shop: _____
3. Are the shop and its assets insured: _____
4. What security system does the shop have in place: _____
5. Was the appointment of shop manager procedural: _____
6. Does he have an asset register in place: _____
7. Is the asset register updated monthly/quarterly): _____
8. Does the shop manager have a system to record the vouchers of the above expenditure? _____

COMMENTS

_____

_____

_____

_____

_____

MONTHLY EXPENSES

Inputs categories	**Amount spent**	**Date**
1. Material (Specify)		
Project admin cost (water, electricity, phone)		

Equipment bought (specify)		
Service provider (specify the service rendered)		
Other (specify)		
GRAND TOTAL		

COMMENTS

_____

_____

_____

_____

_____

B. BENEFICIARY QUESTIONNAIRE

1. Personal Details (Please note that names are not compulsory)

Respondent	
Age	
Gender	

2 What transport problems do you face (as an individual and as a community)? _____

_____

3. What solutions would you suggest for these for these transport problems? _____

_____

_____

4. Which is your most time-consuming transport task? _____

_____

5. How often do you perform the task? _____

_____

6. How long does it take? _____

7. How could it be alleviated? _____

8. What would you do with the time (and energy) you save if this transport element were reduced / you did not have to perform the task? _____

_____

9. How much did you pay for your bicycle? _____

10. When did you buy the bicycle? _____

11. What kind of repairs have you and others done on your bicycle? _____

_____

12. Who else will use it? _____.(Father, son, mother, daughter, other)

13. Who will use it most? _____(Father, son, mother, daughter, other)

14. For what purpose? _____

15. How often? _____

16. Can you ride a bicycle? _____ (Yes/No)

17. When did you last ride? _____

18. Where and at which age did you learn how to ride a bicycle? _____

_____

19. Why do not more women ride bicycles? _____

_____

20. How could use of bicycles be encouraged among women? _____

_____

21. What do men think of women who ride bicycles? _____

_____

22. What do women think of women who ride bicycle? _____

_____

23. What is your opinion on the method of bicycle disbursement that was employed by the shop (subsidies; promotion; etc)? _____

_____

24. What is your opinion of the bicycle you bought?

Robustness	Affordability	Utility

25. Main uses of bicycle?

	School	Shops	Work	Social visits	Other (Specify)
Distance					

26. Will any significant time savings and productivity gains be achieved by using the bicycle? _____

27. What has been the impact of the introduction of bicycles in the community (positive + negative)? _____

_____

28. What is the community's perception of cyclists? _____

_____

29. What strategy could be employed to entrench cycling in the community?

_____

30. Are safety issues important to you individually and the community in general? _____

31. If yes, what has been done about that? _____

_____

32. Would you say your purchase was good value for money? _____

33. Why? _____

_____

34. Would there be a risk that others in your house would monopolize the bicycle for their travel and transport needs? _____

35. If yes, who? _____

35. Would the risk exist for other intermediate means of transport modes? ___

36. Is it likely that men could assume more transport responsibilities/burden if a bicycle is available? _____

37. Monthly household incomes (Rand)

0-600	601-1 000	1 001-1 500	1 501-2 000	2 001-3 000	3 000+

38. Household expenditure pattern

	Groceries	Transport	Water	Energy	Dependents	Medical	Other (Specify)
Expenditure							

39. Would you say that the use of the bicycle would result in the improvement of the quality of your life? _____

……

Name of the officer:

……

Signature:

Date: