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Financing Sustainable Transport in Africa

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Financing Sustainable Transport in Africa

by

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Sustainable Low Carbon Transport Partnership (SLoCaT)

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IV. List of Abbreviations and Acronyms

ADB	Asian Development Bank
AfDB	African Development Bank
A-S-I	Avoid, Shift, Improve
BRT	Bus Rapid Transit
BRT Light	Bus-Based Transport System with some but not all the characteristics of a full BRT system
CAD Fund	China-Africa Development Fund
CBD	China Development Bank
CDM	Clean Development Mechanism
CER	Certified Emissions Reduction
CIF	Climate Investment Fund
CTF	Clean Technology Fund
DAC	Development Assistance Committee
EIB	European Investment Bank
ERP	Electronic Road Pricing
GDP	Gross Domestic Product
GEF	Global Environment Facility
ICA	Infrastructure Consortium for Africa
ICCT	International Clean Transport Council
ICI	The International Climate Initiative
IPCC	UN Intergovernmental Panel on Climate Change
JI	Joint Implementation
JICA	Japan International Cooperation Agency
LAMATA	Lagos Metropolitan Transport Authority
LOC	Lines of Credit
LRT	Light Rail Transit
NAMA	Nationally Appropriate Mitigation Actions

MDG	Millennium Development Goal
ODA	Official Development Assistance
OECD	Organisation for Economic Cooperation and Development
OWG	UN General Assembly Open Working Group
PPP	Public Private Partnership
RMB	Yuan (Chinese currency)
SDG	Sustainable Development Goal
SG	UN Secretary General
SloCaT	Sustainable Low Carbon Transport Partnership
SME	Small and Medium Sized Enterprises
TDM	Transport Demand Management
UA	Units of Accounts - AfDB moving average exchange rate
UN/DESA	United Nations Department of Economic and Social Affairs
US-\$	United States Dollars
VC	Voluntary Commitment
WB	World Bank

V. Summary

Transport and mobility are seen as key factors for successful socio-economic development and climate change mitigation, and essential for reaching the United Nations Millennium Development Goals (MDGs), which are to be met by 2015. In the transport sector, the traditional approach of development agencies for a long time was to focus their support on creating road transport infrastructure projects for private automobiles and road-based freight transport for regional development. This, however, was done at the expense of support for sustainable mobility such as low cost mass public transport, cycling and pedestrian improvements, road safety or institutional capacity building. Through their funding policies, international and national donor organisations – the so-called Official Development Assistance (ODA) – play a lead role in shaping transport policy and planning in developing countries.

In order to explain how future policies in transport should be formulated, it is necessary to understand that sustainability in transport does not only imply transport infrastructure, but can be embedded in a broader policy approach. Financing of infrastructure, investments in public and non-motorised transport, institutional development and road maintenance all require significant funding. Since developing countries face severe financial limitations, budgetary considerations should become the starting point of planning. Available funds – both grants and loans – must be assessed carefully and then spent effectively and rationally. This means tackling the tendency of policy makers to favour prestige projects, and instead convincing them to adopt a sustainability-oriented prioritisation of transport projects.

This will not be easy because there are many private and public actors in transport funding and – even more importantly – there is no global consensus on what sustainable transport is, and which indicators and methods of measuring sustainability are agreeable for donor and partner countries. However – and as a starting point – it is most commonly agreed that sustainable transport means to ensure access to work, education, goods and services, friends and family without compromising the social and ecological environment, including the protection of the planet's climate.

With regards to the target group of this study, we believe that donors in ODA do have massive influence on the way transport systems and infrastructure in developing countries are planned and built. Future ODA funding policies depend increasingly on the way donor agencies understand “sustainable transport” and incorporate it into their funding policies.

In view of the urgent need to develop a more sustainable low-cost and low-carbon transport sector, the future funding policies of donor agencies – especially those for the ODA – must act as a crucial enabler of the required changes. Hence, it is crucial that a wider range of transport-relevant financing is redirected to achieve the paradigm shift towards sustainable transport in ODA.

To include the environmental dimension into ODA, the Organisation for Economic Cooperation and Development (OECD) endorsed clear recommendations in the report Environmental Assessment of Development Assistance Projects and Programmes. Since 1985, multilateral donors – including the World Bank – and major bilateral donors have prepared guidelines for environmental considerations and have applied them while implementing ODA. However, sustainability implies much more than the environmental dimension.

In the specific context of transport there is also growing acknowledgement among governments and donors of its relevance for sustainable development. Several international declarations – like the Kyoto, Bangkok and Bogota Declarations – as well as intergovernmental high level policy forums (EST Forums in Asia and Latin America) indicate this development. There are also first signs of policy shifts in several of the national and multilateral development banks.

On behalf of the Umweltbundesamt (the German “Federal Environment Agency”), the European Institute for Sustainable Transport (EURIST), in close consultation with the SLoCaT Partnership on Sustainable, Low Carbon Transport (www.slocat.net), has conducted a study that identifies, analyses and compares financing and evaluation policies of transport projects in emerging and developing countries – with a particular focus on Sub-Saharan Africa.

Chapter 1 introduces the overall goal of the study which is to help strengthen the links between transport funding and sustainability criteria in the future.

Chapter 2 highlights the current problems and challenges in the African transport sector from an economic, socio-demographic, ecological and political-institutional perspective.

Chapter 3 discusses definitions, criteria and indicators of sustainable transport: What does sustainable transportation mean in the specific context of developing regions like Sub-Saharan Africa? The chapter introduces a multidimensional global definition of what sustainable transportation is – based on the current international debate – and discusses specific considerations for developing countries.

Chapter 4 introduces the fundamentals for decision-making in transport funding: who finances what, why, in which form in the African transport sector and how is it evaluated? The study provides an overview of who is active in the field of financing transport in Africa, with a focus on the current role and policy of bilateral organisations and Multilateral Development Banks. What are the specific policies of the financing bodies and on which types of transport projects are they focused? Moreover the chapter includes several case studies in the African transport sector.

Finally chapters 5 and 6 offer recommendations for action in both the international and German donor communities to link funding closer to sustainability criteria.

1 Project Goal and Methodology

Project Goal and Objectives

The overall goal of the study is to help to link future transport funding and evaluation closer to sustainability criteria and indicators, with a regional focus on Sub-Saharan Africa. The intention is to discuss the transferability of the approach to other developing regions after accomplishment of the study. The expected results include the documentation of current funders, financing practice and transport project evaluation.

The overall goal is based on the perception that there is still a loose link between donor policies and sustainability criteria, together with a bias towards infrastructure funding.

It should become obvious that sustainability in transport does not only imply transport infrastructure but can be embedded in a broader policy approach that includes investments in public and non-motorised transport, institutional development and road safety. As these areas were marginalised in funding for a long time, they now require significant budget allocations in order to achieve sustainable transport patterns in passenger and freight transport in developing countries, especially in Africa.

As most African countries face severe financial limitations, budgetary considerations should become the starting point of planning. Available funds – both grants and loans – must be assessed carefully and then spent effectively and rationally. The tendency of policy makers to invest in expensive prestige projects must be changed into a sustainability-oriented prioritisation of transport projects.

We are aware that this will not be easy because there is no global consensus on what sustainable transport is and which indicators and methods of measuring sustainability are agreeable for donor and partner countries.

It is a positive indication that most funding bodies already agree that sustainable transport generally means to ensure access to work, education, goods and services, friends and family without compromising the social and ecological environment, including the protection of the planet's climate.

Table 1 shows key characteristics of sustainable and unsustainable transport in terms of transport volume, modes, technologies and pricing. For instance the need for many trips and high trip distances – for both passenger and freight movement – is clearly seen as unsustainable compared to lower transport demand achieved through mixed land use or optimised logistics chains.

	Unsustainable Transport	Sustainable Transport
Transport Volume	Requires a high level of numbers of trips and trip distances, due to sprawled urban development and inefficient logistics networks.	The demand for travel is minimised and journeys are short, owing to compact urban development, mixed land use and optimised logistics chains.
Transport Modes	Reliance on private motorised transport for passengers, and heavy goods vehicles for freight.	Most passenger trips are made by public or non-motorised transport, and freight is carried by rail and other low-carbon modes.
Transport Technologies	Vehicles rely on inefficient, fossil-fuel engines.	Low carbon vehicle technologies are mainstreamed, including highly efficient engines, hybrids, plug-in hybrids and electric vehicles.
	The transport network is inefficiently managed.	New technologies such as "Intelligent Transport Systems" and "Smart Logistics" help manage transport systems in highly efficient ways.
Transport Pricing	The price paid by users for vehicles, fuel, parking and road space do not cover the full external costs to society, encouraging motorised vehicle use at the expense of more sustainable choices.	The price paid by transport users fully 'internalises' the true costs, managing growth in motorised vehicle use and encouraging environmentally friendly alternatives.
Resilience to Climate Change	Transport systems are highly vulnerable to changes in the climate.	Transport assets are screened against vulnerability criteria, and are developed in a way that is resilient towards changes in the climate.

Table 1: Key Characteristics of Sustainable and Unsustainable Transport

Source: ITDP 2010

Objectives

Considering the above the study is structured along the following four objectives:

1) What are the most pressing transportation problems in Africa?

Inefficient public transport provision in African cities, ever increasing accident rates on rural and urban roads, and poor institutional frameworks are some of the current challenges the African transport sector faces. The study looks at the continent's transport problems from an economic, socio-demographic, environmental and political-institutional perspective.

The objective is to provide an overview of common problems in many countries of the continent, and how funding could be prioritised to tackle them.

2) What does sustainable transport mean in the specific context of developing countries?

Although it seems almost impossible, there is still no globally accepted definition of sustainable transport. Criteria and manageable indicators have yet to be defined. It is also the question if and how far benchmarks have to be set to give countries and cities orientation on where they stand and guidance in where to head towards to achieve more sustainable structures and patterns in both passenger and freight transport. The recent UN CSD process and an initiative of the global network on Sustainable Low Carbon Transport (SLoCaT) tried to suggest preliminary answers to these questions, as a basis for the Rio+20 Conference and follow-up activities, which might lead to the establishment of a UN-based body to promote and facilitate sustainable transport at the global level.

The objective of the study is to introduce a multidimensional global definition of what sustainable transportation is – based on the current international debate on the understanding of the concept of sustainability and sustainable development. Furthermore, specific regional considerations for an 'African' meaning of sustainable transport shall be identified. To this end, ongoing regional initiatives that address sustainability in transport will be introduced and their achievements summarised.

3) Who finances what, why, and in which form in the African transport sector, and how is it evaluated?

The traditional planning approach of many countries and cities in Africa is to improve mobility, with a focus on cars and trucks at the expense of rail and non-motorised transport. Currently donors as well as national and local funding bodies still support, and invest in, the 'supply side' of transport, namely in road transport infrastructure. Financed predominantly through domestic funding – but also through bi- and multilateral credit – it often creates a long-term burden for national budgets, as expensive infrastructure implies high maintenance costs.

This is often done at the expense of further investments in sustainable low-cost- and low-carbon mobility, such as public transport, cycling and pedestrian infrastructure improvements, and institutional development. The objectives are:

- to provide an overview of who is active in the field of transport finance in Africa, with a focus on the current role and policy of bilateral organisations and Multilateral Development Banks (MDBs);

- to identify the specific policies (or ‘funding philosophy’) of the financial institutions and to identify the types of transport project on which they focus;
 - to try to establish how the donor evaluation process relates to transport funding
- 4) What do donor agencies need to consider in order to base their funding policies closer to sustainability criteria?

Based on the ongoing debate¹ among MDBs, experts and transport research institutions, this chapter indicates how sustainability criteria and indicators can be incorporated into the financing of Official Development Assistance (ODA) transport projects in the long term. Its objective is to recommend actions and measures to decision makers in ODA on the bilateral and multilateral action that can help to link future transport funding more closely to sustainability objectives. For this it will refer to the outcomes of (2), namely the meaning of sustainable transport in the African context.

Selected Donor Institutions

Official Development Assistance (ODA) given by industrialised countries is typically divided into two categories:

- Multilateral assistance through multilateral development banks (MDBs) and other international development organisations like the World Bank, European Investment Bank or the African Development Bank
- Bilateral assistance by national development agencies and banks such as KfW (Germany), JICA (Japan) or China Development Bank

The reason why this study looks at ODA donors is that a major characteristic of ODA in transport (both multilateral and bilateral) is the focus on roads, especially highway and urban ring road construction. Figure 1 shows figures on World Bank transport funding for the period 2001–2006.

More than 75% of transport lending by the World Bank between 2001 and 2006 was for roads. Regional development banks have similar splits in their lending portfolios².

¹ At the Rio+20 Summit the Asian Development Bank (ADB) led a coalition of eight multilateral development banks (MDB) committing \$175 billion, over ten years, towards sustainable transportation projects in the developing world. Sustainable transport issues subsequently jumped up the global development agenda.

² See: Sakamoto and GTZ (cited in HWWI 2010)

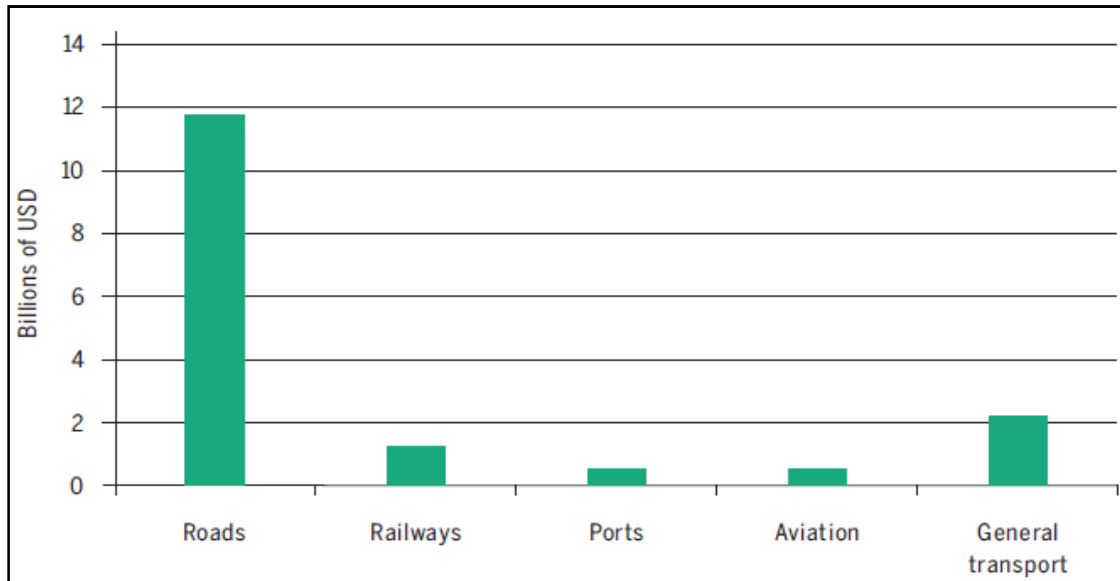


Figure 1: Transport Funding by the World Bank 2001-2006

Source: World Bank Report 2007

A further actor of specific interest for this study is the Infrastructure Consortium for Africa (ICA). ICA consists of the G8 countries' donor agencies and principal multilateral institutions such as the African Development Bank (AfDB), European Investment Bank (EIB) and the World Bank. The ICA seeks public, private and public-private investment opportunities to increase funding for regional and national infrastructure in Africa, with a focus on road infrastructure.

In comparison to economic development and poverty reduction, carbon emissions and environmental sustainability are still given lower priority by Official Development Assistance (ODA), and often are not considered at all.

To examine how the linkage between economic development indicators and sustainable development indicators could be established, this study considers the following donor institutions and agencies:

- WORLD BANK
- AFRICAN DEVELOPMENT BANK
- ASIAN DEVELOPMENT BANK
- INFRASTRUCTURE CONSORTIUM FOR AFRICA
- ISLAMIC DEVELOPMENT BANK
- CHINA DEVELOPMENT ASSISTANCE
- JAPANESE DEVELOPMENT BANK
- GERMAN DEVELOPMENT ASSISTANCE / KfW

Criteria for Selected Case Study Countries

Sub-Saharan Africa consists of 48 countries. Considering the timeframe and budget of this study it was necessary to concentrate on a few case studies. This approach makes it possible to show country funding and evaluation practices of the nine aforementioned donor agencies, partly only in brief due to limited information available. The criteria used in selecting countries were:

- Country should be current focus of bilateral or multilateral development assistance (ODA);
- Availability of minimum information for projects not older than 10 years.

The countries identified through both the desk-based research and the analysis of questionnaire responses (see below) are: Kenya, Burundi, Rwanda, Malawi, Uganda, Zambia, and Togo.

Methodology

To present the funding and evaluation policies of selected bilateral and multilateral agencies it was necessary to document and compare the type of classifications used by different funders and consider how these classifications relate to sustainable transport.

Development Assistance Committee (DAC) Criteria

For this research, the first indication of how projects are evaluated by agencies is whether they refer to the Criteria developed by the Development Assistance Committee (DAC)³ of the OECD⁴. The DAC criteria were established in 1991 and signed by 30 countries and donor banks to follow the DAC in their development of aid programmes. Although useful to know, they are general in nature and therefore do not specifically assess sustainability in transport projects.

The criteria are divided into the following categories: Relevance, Effectiveness, Efficiency, Impact and Sustainability. The latter is, however, defined in a narrow sense and looks to what extent the benefits of a programme or project continue after donor funding ceases and explicitly demands only environmental and financial sustainability.

The Development Assistance Committee further states that developing countries are responsible for their own development. The principles have been prepared mainly for use by aid agencies for evaluating aid-financed activities. However, they should also be useful for authorities in developing countries to make their own evaluations of aid-financed activities and other public programmes and projects. The DAC Criteria are further described in the Annex.

³ The Development Assistance Committee (DAC) Working Party on Aid Evaluation is an international forum where bilateral and multilateral development evaluation experts meet periodically to share experience to improve evaluation practice and strengthen its use as an instrument for development co-operation policy. It consists of 30 representatives from OECD member countries and multilateral development agencies.

⁴ Sources: The DAC Principles for the Evaluation of Development Assistance, OECD (1991), Glossary of Terms Used in Evaluation, in 'Methods and Procedures in Aid Evaluation', OECD (1986), and the Glossary of Evaluation and Results Based Management (RBM) Terms, OECD (2000).

To investigate more closely how the different banks evaluate transport projects, a questionnaire with 14 questions was developed. It was sent to the most relevant donor agencies identified in the study, while a networking-based approach was used to find key contact persons. Experts from non-banking institutions were asked to forward the questionnaire to key figures within the institutions, and to name relevant experts within the institutions to contact. This communication was also used to gain additional views on the topic from different perspectives. We also sent the questionnaire directly to the main address of each institution.

The experts were asked to answer the questions with their knowledge and/or respective documents regarding the current transport financing and evaluation mechanisms.

The questions were designed to find out:

- the donor's partner countries in Africa
- approved transport loan projects
- technical cooperation (grant) projects
- policies for transport lending or assistance
- current evaluation procedure for transport lending
- country strategies guiding the donors' investments in the transport sector
- sector strategies conducted for the transport sector
- quantitative targets guiding transport lending by the donor
- additional guidelines or donors' own definitions of sustainability

EURIST cooperated with the Sustainable Low Carbon Transport Network (SLoCaT)⁵ in the development of the study's methodology and questionnaire.

The results of the desktop research, interviews, case studies and the questionnaire are documented in the following chapters and were used to develop the recommendations laid out in chapters 5 and 6.

⁵ For more information on SLoCaT please see the Annex.

2 Brief Analysis of the African Transport Sector

Urbanisation in Africa is often regarded as proceeding at a lower rate than in other developing and transition regions, but in reality it is happening faster than almost anywhere else in the world. It is assumed that in 2025 almost 70 cities will exceed one million inhabitants⁶, caused by population growth and rural-to-urban migration. This trend leads to new rural and urban mobility patterns and needs in existing and new settlement areas.

According to the African Development Bank, infrastructure has been responsible for more than half of Africa's recent improved economic growth performance (in terms of GDP). In the future it will have to contribute for even more growth. Infrastructure challenges vary largely by the country type: uneven economic geography presents a particular challenge for the region's development of infrastructure. Around 93 billion USD a year is needed to address Africa's infrastructure, one third of which is for maintenance. Africa's infrastructure network is twice as expensive as elsewhere in the world and lags far behind those of other developing regions. This situation, where one can find administrative, regulatory and governance barriers, contributes to Africa's poor economic competitiveness, where limited connectivity causes long delays and increases the cost of international freight. Landlocked countries are affected the most by this issue, hence the growing interest in regional collaboration and key transport corridors.

Environmental Dimension

Transport has a serious negative impact on the environment and accounts for about 13 per cent of global greenhouse gas (GHG) emissions (IPCC 2007). About 80% of additional GHG emissions in the next few decades will be from non-OECD countries.

While the main burden to reduce CO₂ from transport is now on developed countries, the importance of the low carbon transport sector in developing countries will grow.

The need to develop societies and economies in Africa that are less dependent on private cars and road transport in general is crucial. With the steady increase in the level of motorised transport in Africa, this sector has become the fastest growing source of greenhouse gas emissions on the continent.

UNEP (with reference to analysis by the International Clean Transport Council, ICCT) just released the 2012 Emissions Gap report (UNEP, November 2012) in which it states that the transport sector has the potential to reduce emissions by 1.7–2.5 Gt CO₂. This requires rapid action at a global level, including developing countries.

Emissions other than GHGs are of similar concern. Vehicle emission controls are either non-existent or not enforced. In nearly all African countries, leaded gasoline is still the norm. Lead reduction initiatives in Africa remain limited while the public and policymakers are not sufficiently aware of the need for the urgent adoption of clean fuels and vehicles.

⁶ World Urbanization Prospects 2009

Lastly, the destruction of forests and other ecosystems, land degradation and drainage system problems associated with the construction of roads are increasingly becoming a further source of concern.

Social Dimension

Accessibility

In 2000, one in three Africans lived in a city. By 2030, one in two will do so. African cities have so far failed to expand their urban road infrastructure to meet the needs of rapidly growing cities. Urban road density is low and fails to cope with the growing needs of the urban population.

In most cities authorities have had difficulties in meeting the mobility demands of the population, in particularly of the poor. According to the World Bank's Urban Transport Indicators database, the average number of bus seats per thousand urban residents of Latin America, Asia, the Middle East, and Eastern Europe is around 30 – 40. In Africa the average number is only 6 bus seats per thousand residents (Kumar & Barrett 2008, p.31). Waves of informal minibuses largely dominate urban transport services in Africa. The average cost of a one-way trip is about 0.30 \$, which is high in relation to the average household budget. These unaffordable fares are clearly linked to poor people's decision to walk in an environment with poor facilities for non-motorised transport. Inadequate infrastructure affects the ability of the urban poor to access jobs and basic services. The complete lack of transport infrastructure and local services limits the poor's access to a range of facilities, such as schools, health care centres and resources such as food and water, particularly in rural areas.

This lack of transport services and infrastructure can be understood as a contribution to the inability to strengthen human capabilities. The non-motorised account for 90% of the population. Most journeys are made on foot, but most African governments do not actively facilitate and promote walking, the use of bicycles and other means of non-motorised transport to improve the accessibility for all citizens.

No region illustrates the dilemma between the link of transport infrastructure, services and the diverse dimensions of poverty better than Sub-Saharan Africa.

Safety and security

According to the World Health Organisation Status Report on Road Safety (WHO 2009, p.12), at least 90% of the global fatalities from road traffic accidents occur in low- and middle-income countries, which have only 48% of the world's registered vehicles. In Kenya, for instance, pedestrians (47%) was the largest group among reported road traffic fatalities, followed by passengers (33%), drivers (9%), cyclists (9%) and motorcyclists (1%) (WHO 2009, p.125).

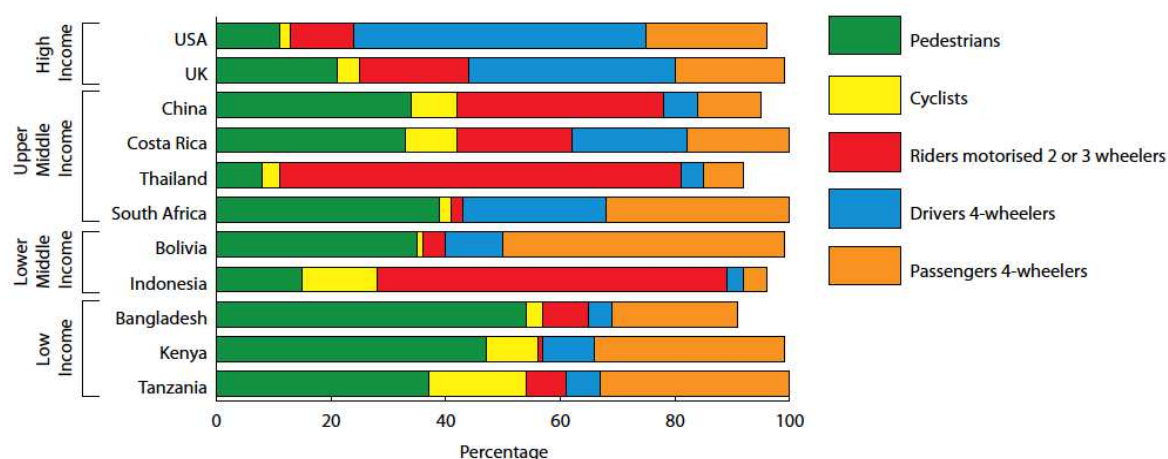


Figure 2: Road casualties by transport mode and country income

Source: Selected countries from WHO (2009): *Global status report on road safety – Time for action*, http://whqlibdoc.who.int/publications/2009/9789241563840_eng.pdf, accessed 2012/8/4.

In Kenya, overloaded minibuses are a major cause of road accidents. People themselves are aware of the risk posed by the public and private bus operators, but have little choice over their mode of transport.

Sub-Saharan Africa has the most dangerous roads, even with a low ratio of cars to people. For example, according to the “Safe and Sustainable Roads Report” by Watkins (2012, p.5), Ethiopia has fewer than 10 cars for every 1,000 inhabitants, but road traffic deaths are twice as high as in India and seven times higher than in the United Kingdom (Watkins 2012, p.7).

Pedestrians and parked vehicles often share one lane, while inadequate lighting and limited segregation of motorised and non-motorised traffic exposes pedestrians and cyclists to road traffic accidents. For a long time the main priority in transport planning has been the development of motorised transport with less attention to adequate road safety management. Poor road safety remains a major challenge, since traffic accidents are the leading cause of death after malaria and HIV/AIDS, with huge societal and economic costs.

Compared to other developing and developed countries, health problems resulting from air pollution in Africa are still very low, but increasingly becoming a key area of concern. Studies by the World Bank (2002) show that the air in Lagos, Nigeria, has a very high level of very small particulate matter. Higher traffic volumes in recent years, the use of old motor vehicles and poor fuel quality have contributed to this problem in Nigeria. Urban air pollution in African cities is becoming a key threat to health, the environment, the economy and the quality of life of millions of Africans, as the level of urbanisation, motorisation and economic activity increases.

Economic Dimension

Infrastructure

Road infrastructure can help to foster economic growth and poverty reduction, as well as enhancing human capital, by improving access to schools and health care centres, lowering the cost of inputs for entrepreneurs, or making existing business more efficient and profitable.

Even though agriculture is seen as an engine of Africa's growth and rural roads should provide substantial benefits to households in low-income countries, especially the poorest, the density of rural road infrastructure has been much less affected by reforms, leaving large areas physically isolated. Only a third of the rural population lives within two kilometers of an all-season road (Briceño-Garmendia & Foster 2010, p. 211). Small entrepreneurs seeking to compete on local or international markets are hampered by the high transport costs and long journey times that weaken economic productivity. Undoubtedly, the increase of the rural road network density represents an institutional challenge as it would be very costly and would absorb more than 1% of GDP a year for a decade⁷. Only a quarter of the road network is in good condition and a further quarter in fair condition (see Figure 3). Poor road conditions incur immense costs in maintenance for the authorities as well as for all road users (e.g. through higher vehicle repair costs, fuel costs, detours).

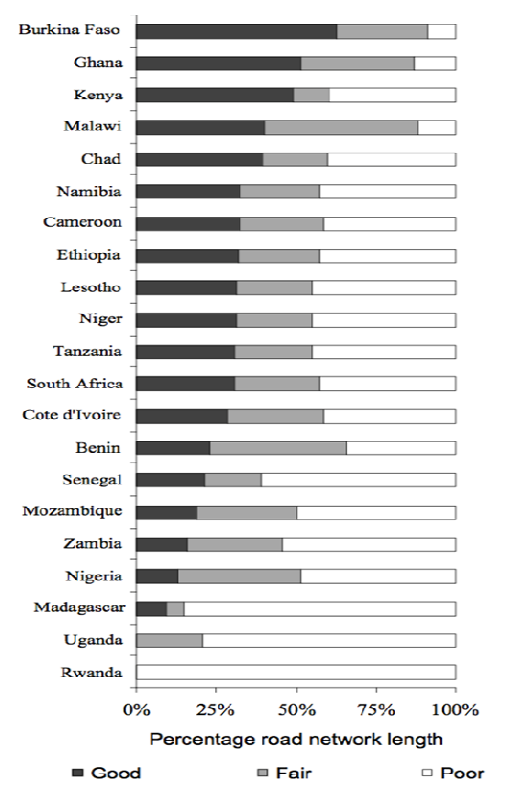


Figure 3: Road conditions in rural regions of selected African countries

Source: Foster & Briceño-Garmendia, 2010, p. 218

In most African cities, the road network is around one third of the size of that in other cities in developing countries. On average, about half of the main network is in good condition, and a further third is in fair condition (see Figure 4). Capacity is limited, service lanes on highways are absent and only minimal street lighting is provided. Traffic behaviour and vehicle conditions are largely uncontrolled. In most metropolitan areas commercial activities take place right on the roadway itself, reducing its capacity and posing a safety risk for drivers and pedestrians alike. This environment results in poor road safety, increasing road congestion and environmental destruction..

⁷ *ibid*

The greatest untapped potential for efficiency lies in practicing preventive maintenance. African countries often have huge investments in their road systems, but little of this is spent on maintenance. Most countries have now developed 'Second Generation Road Funds' financed through fuel levies and other direct charges for road use. But these resulting fiscal resources are rarely spent on road maintenance⁸ - although it is obvious that regular and preventative maintenance reduces the level of funding needed to sustain the road network in the long term.

The challenge of maintaining roads in Africa varies widely with topographical and climatic conditions: countries with mountains and tropical weather tend to have poorer conditions.

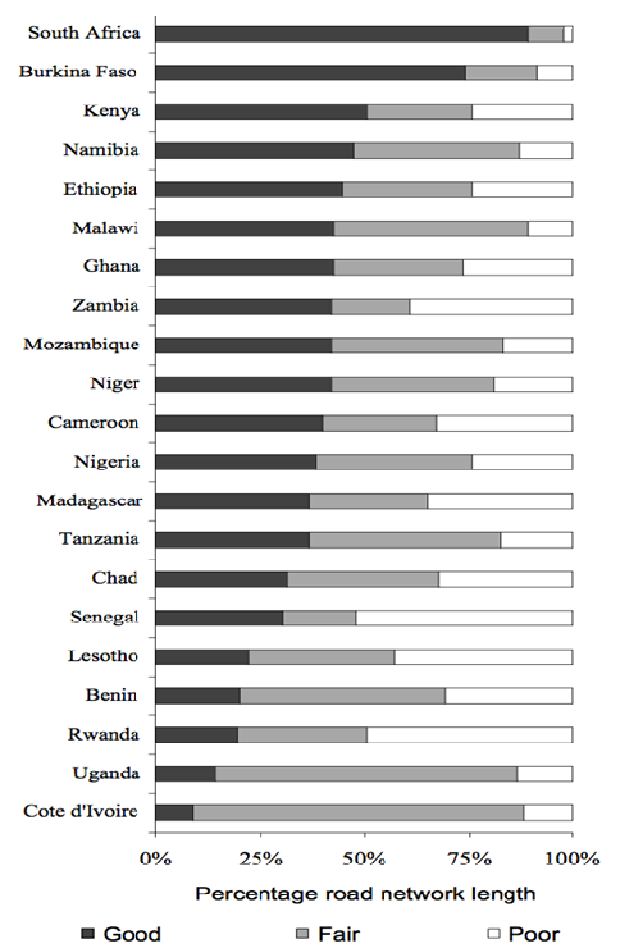


Figure 4: Road conditions in urban areas of selected African countries

Source: Foster & Briceño-Garmendia, 2010, p. 218

⁸ Foster V., Briceño-Garmendia C.: Roads: Broadening the Agenda. In: Africa's Infrastructure. A Time for Transformation. Washington. 2010. p. 215

Transport Governance

Despite the progress towards institutional reform that has been made since the 1960s, this process remains incomplete. Many institutions – be it on the federal, state or local level – perform similar tasks. This leads to an overlap of responsibility between institutions and results in duplication of effort, poor accountability, differing levels of commitment and a lack of coordination.

Kumar and Barrett (2009)⁹ point out that responsibility for urban transport issues extends over multiple levels of government. Many functions are carried out at the national level, while others have been devolved to local government, even though the latter often has to struggle with financial, institutional and staffing difficulties.

Hence transport planning in Africa is not happening in an integrated way. Local authorities face a lack of an effective coordinating institution that is capable of adopting a integrated approach to the challenges of urban and rural transport in Africa. In particular, the ability to develop integrated alternatives is missing locally. Underfunding is an obstacle and the ability to recruit qualified staff is another key challenge. The planning process is sometimes even left to funders, or locally to public transport operators' associations, which lack the incentives and the capacity to fulfil passenger needs and the strategic goals of land use and transport planning.

Faced with these challenges, local decision makers are often overwhelmed. Bent on pursuing the car-centric models of development copied from industrialised countries, they have no alternative strategies to deal with their cities' growing mobility problems. Moreover, transport planning tends to be dominated by engineers and planners whose training focuses on technical aspects, e.g. infrastructure development and congestion management.

In addition most cities have drifted away from regulated provision of public transport by a publicly owned operator to an unregulated system in which the informal sector is now dominant. There is a lack of capacity to enforce existing regulations, control overcrowding of minibuses and strengthen vehicle inspections. Clear guiding principles and an effective coordination institution are still missing in the African transport and land-use planning sector.

In conclusion, the planning and implementation of sustainable transport in Africa faces a large capacity, knowledge and funding gap, which makes it difficult to use a holistic approach to develop a comprehensive transport strategy that both serves people's needs and fosters economic potential.

Infrastructure deficiencies are just one part of the much broader problem of insufficient knowledge transfer to city planners and decision makers, and weak local planning capacity for sustainable transport measures.

⁹ Kumar A., Barrett F.: Stuck in traffic: Urban transport in Africa. Washington. 2009. p. 14.

3 Sustainability in Transport

The study's goal is to identify how funding can be better linked to sustainable transport. However, this term is not well defined. Nowadays 'sustainable transport' is used in many countries, cities and projects. Even companies make use of the term when trying to communicate their ambitions to become more sustainable in their transport-related activities. As a consequence one can find a number of definitions, often based on different perspectives and a narrow range of indicators (like CO₂ emissions or fuel consumption). Car manufacturers define sustainability differently from railway companies, environmental organisations, logistics firms, urban and transport planners, and political decision makers.

The complexity of the term sustainability makes it difficult to define sustainable transport and to relate sustainable transport to a universal set of indicators. Indicators are necessary to assess the level of sustainability in transport and evaluate transport projects and policies, but a common understanding and interpretation of what sustainability in the transport sector means is a prerequisite.

First, it is essential to define the term "sustainable transport" and an appropriate set of criteria-related indicators for sustainable transport, which must then be agreed upon by developing regions as well as by wider stakeholders in the transport sector.

The Brundtland Commission of the United Nations defined sustainable development as "development that meets the needs of the present without compromising the ability of future generations to meet their own needs."

It went on to outline two key concepts:

- the concept of 'needs', in particular the essential needs of the world's poor, to which overriding priority should be given; and
- the idea of limits on the environment's ability to meet present and future needs.¹⁰

The UN definition is not universally accepted and has been interpreted in different ways.

The Need for a Common Definition

For a long time transport played a marginal role in global discussions on sustainability. Transport was not explicitly incorporated into the Sustainable Development Goals developed at the 1992 Rio Conference on Environment and Development. The UN Commission for Sustainable Development (CSD) has concluded that there is no accepted single definition of sustainable transport.

At the 2012 Rio+20 Conference "The Future We Want", the United Nations agreed to develop a set of global sustainable development goals – so-called SDGs – that address and incorporate all dimensions of sustainable development. In early 2012 UN Secretary General Ban-Ki-Moon expressed

¹⁰ World Commission on Environment and Development. "Our Common Future, Chapter 2: Towards Sustainable Development". <http://www.un-documents.net/ocf-02.htm>. Retrieved 2012-05-28.

a willingness to make sustainable transport one of the future SDGs. It is expected to formulate a practical definition of the term in order to make it globally acceptable and workable. To be effective, this definition must be comprehensive but also easy to understand and apply in various contexts and conditions (Litman 2010).

Juhel (2012) relates the three pillars of a sustainable transport system to a number of criteria (see figure 5), framed by sustainability in governance.

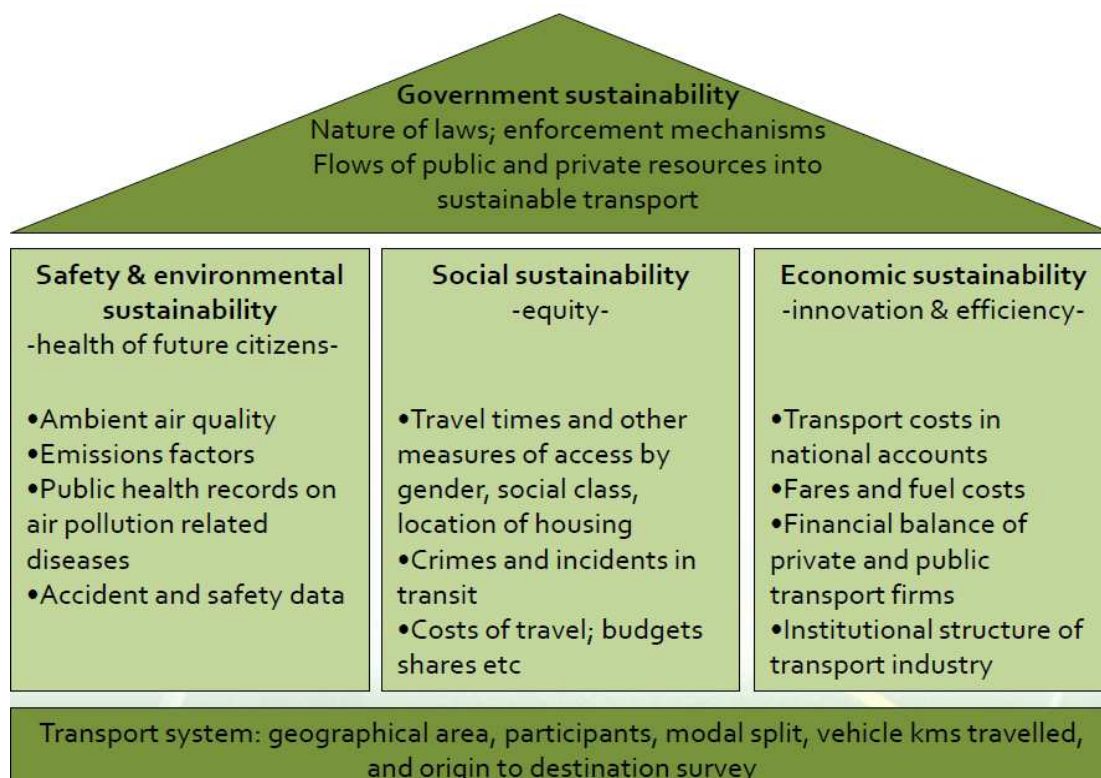


Figure 5: The three pillars of sustainable transport

Source: Juhel, Marc (2012): Sustainability Toolkit for transport projects. TRL/ World Bank.

The Importance of Accessibility

Litman argues that “transport may generally be considered sustainable if it allows basic access and development needs of individuals, businesses, and society to be met efficiently, safely and in a manner consistent with human health. Sustainable transport supports a competitive economy and balanced regional development and promotes equity, including gender equity, within and between successive generations. Environmentally, sustainable transport uses resources (land, energy, money and time) efficiently, and minimises waste and harmful emissions. It uses renewable resources at or below their rates of generation, uses scarce non-renewable resources at or below the rates of development of renewable substitutes, and limits emissions and waste within the planet’s ability to absorb them, incorporating the polluter pays principle. A sustainable transport system offers affordable access to all people, including those who are physically, economically or socially disadvantaged, while operating and pricing services to foster efficiency and quality, taking into account requirements for investment in capacity and the need for maintenance and rehabilitation.”

However, it is not clear how ‘access’, a concept without a common definition, helps to define sustainability.

Transport sector performance for IDA (International Development Agency) countries – for example – is measured by an ‘accessibility index’ that measures the distance between household locations and all-weather roads.

Preliminary Definition of Sustainable Transport

A definition of sustainable transport¹¹ should reflect the extent to which an overall transport system contributes toward sustainable development. It should therefore:

- Build on the basic principles of sustainable development;
- Reflect all dimensions of sustainable development (environmental, economic and social);
- Reflect both positive and negative impacts;
- Reflect the concept of ‘accessibility’ rather than considering mobility an end in itself;
- Recognise that a sustainable transport system is diverse and efficient, and uses each mode of travel for what it does best (walking and cycling for local travel, public transport for travel on busier corridors, and automobile travel only when it is most efficient).

This leads to the following (preliminary) definition, suggested by Litman and Replogle¹²:

“Sustainable transport enables access to goods and services that support equitable development while limiting short and long term adverse consequences for environmental, social and economic services and systems.”

Moreover GTZ (2004) defines a Sustainable Transport System as one that:

... “allows individuals, companies and societies to meet their basic mobility needs in a way that preserves human and ecosystem health, and promotes equity within and between successive generations;

... is affordable, efficient, offers a choice of transport mode and supports a competitive economy as well as balanced regional development; and

...limits emissions and waste within the planet’s ability to absorb them, uses renewable resources at or below their rates of generation, and uses non-renewable resources at or below the rates of development of renewable substitutes, while

¹¹Source: Presentation by Michael Replogle to Rio+20 Learning Event: “Assessing Sustainable Transport in the Context of a Green Economy” June 18, 2012.

¹² ibid.

minimizing the impact on the use of land and the generation of noise” (GTZ Sourcebook Module 5e).

According to Litman and Replogle and considering these definitions, a UN Sustainable Development Goals should call for “Universal Access to Safe, Clean and Affordable Transport”.

Avoid – Shift – Improve

The Avoid – Shift – Improve (ASI) approach, which is widely accepted to reduce CO₂ emissions from transport and make mobility more sustainable, works differently in developed and developing countries (see Table 2). The principal distinction is that motorised individual transport must be reduced in the former, whereas its growth has to be curbed in the latter. In countries with a high share of cycling, the main task is to prevent a further shift from bicycle use to motorcycles or cars.

Technological developments play a supporting role, but expensive technologies like electric cars are not a realistic medium-term perspective in developing countries. It is more feasible to make the vehicle fleet as clean as possible (through unleaded fuels, retrofitting diesel engines, etc.).

Principle	Developed countries	Developing Countries
Avoid	Reduction of vehicle kilometres travelled	Avoid generation of vehicle kilometres travelled
Shift	Shift from private vehicles to public transit and non-motorized transport	Prevent shift from public transit and non-motorized transport to private vehicles
Improve	Amend and downsize existing vehicles	Make future vehicles as clean as possible and discourage the up-sizing of vehicles

Table 2: Avoid, shift and improve objectives in developed and developing countries

Source: HWWI & EURIST 2011

Although of less importance in developing countries, it is important to note that transport policies based on the ASI approach to reduce emissions normally generate considerable co-benefits that are potentially much larger than the benefits accruing from GHG reductions. However, it is often more difficult to measure these co-benefits.

Figure 7 shows the connection between the (direct and indirect) benefits of transportation policies and their measurability. Measurement problems clearly increase with the indirectness of the benefits.

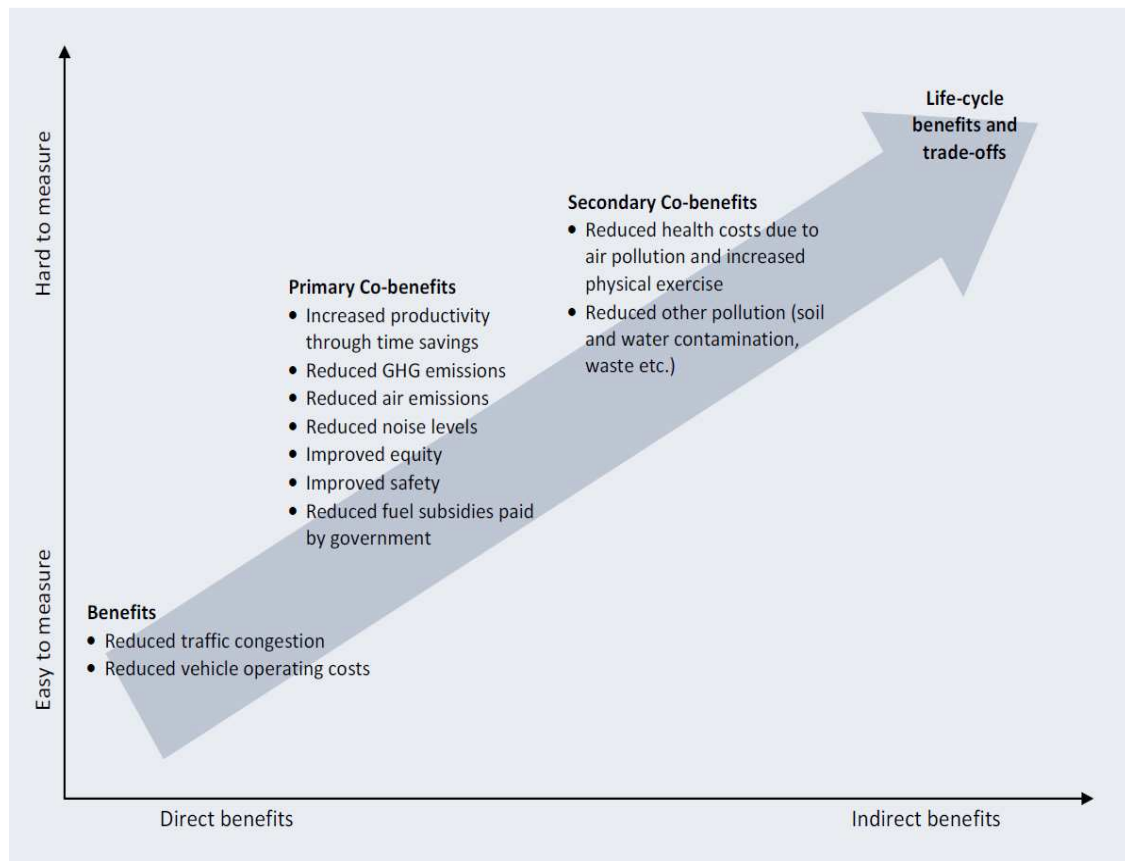


Figure 6: Benefits of transport policies and their measurability

Source: HWWI & EURST 2011

Quantified Targets

The UN Decade of Road Safety has developed quantified targets for road safety, and the EU White Paper on Transport set targets for greenhouse gas emissions. But quantified targets for transport do not exist at a broader level. Achieving this however would foster the developmental function of transport and simultaneously help to limit the negative impacts of transport.

Six global targets were suggested by SLoCaT in support of a possible Sustainable Transport Sustainable Development Goal:

- 1) Access/Equity – Halving of the proportion of the urban and rural poor for whom mobility problems severely restrict access to employment and essential services by 2030 compared to 2010
- 2) Access/Equity/Environment – Maintain 2010 share of personal trips by public and non-motorised transport for countries currently above 50%, and where this share is currently below 50% achieve at least a 10% gain by 2025
- 3) Public Health/Equity – Support the Decade of Action for Road Safety (2011–20) and its objective to halve traffic-related deaths by 2025
- 4) Public Health – Cut the contribution of freight and passenger transport to emissions of harmful air pollutants by half by 2025

- 5) Environment – Cut the average fuel use/km of new light duty goods vehicles by 50% by 2030, compared to 2005 levels
- 6) Environment – Ensure global greenhouse gas emissions from passenger and freight transport peak by 2020 and are cut by at least 40 % by 2050 compared to 2005 levels

However, a fixed percentage for the reduction of transport-related emissions for all countries will probably lead to concerns over the fair distribution of the reduction burden and – especially in Africa – the cost of dealing with the challenge. Such targets would discriminate against poor countries in particular, but also against wealthy countries that have already put a lot of effort into reducing emissions. Hence detailed discussions will be required to finalise these targets, the selection of appropriate base years and the most appropriate indicators to measure progress.

Indicators

Once sustainable transport is defined, the most critical point is the development of an evaluation system based on an appropriate set of indicators.

Indicators operationalise sustainable transport criteria (e.g. road safety) and can help to judge whether a policy or project has led to more sustainable transport structures and improved sustainability at the environmental, societal and economic levels. There is currently no common set of indicators that integrates an assessment of transport sector structure, performance, impacts & governance.

A number of different indicator sets have been proposed by different authors. In the near future, however, it is necessary to name some indicators as core indicators for sustainable transport. At the same time such a set of accepted indicators should remain flexible, so it can be adjusted and/or expanded to regional, national or even local circumstances and specific needs.

The following table of indicators for sustainable transport can be a first draft for discussion among donor agencies and their partner countries on how transport projects can be assessed in terms of sustainability criteria. It also shows current data availability for each indicator.

Indicator	Underlying sustainability goal	Indicator type	Data Availability
Environment			
Land consumption by transport infrastructure (as % of total surface)	Avoid sprawl and destruction of the environment by transport infrastructure	Effect / impact	Medium
Transport GHG emissions per capita	Reduce transport's contribution to climate change	Effect / impact	Medium
Percentage of population affected by local air pollutants (e.g. PM10, non-methane hydrocarbons NMHC emissions, ...)	Reduce detrimental effects on human health and the environment	Effect / impact	Medium
Equity/Social			
Road fatalities	Reduce the number of people killed or injured in road traffic accidents	Effect / impact	High
Modal share of PT/NMT	Support transport modes that are both accessible for a large part of the population and environmentally sound	Outcome	Medium
Share of transport cost from total household expenditure	Provide affordable transportation for all members of society	Outcome	Medium
Economy			
Fuel prices (minimum taxation)	Consider the external costs caused by transportation based on fossil fuels (especially road traffic)	Performance	High
Transport investment by mode	Preferentially support transport modes that are accessible and environmentally sound	Performance	High
PKM/TKM per unit GDP	Decouple economic growth from transport demand	Effect / impact	Medium
Governance			
Participatory transport planning	Involve the public in the decision-making process for transport policies and projects	Performance	Low

Table 3: Assessing Sustainability in Transport

Source: Adapted from: Bongardt, Schmid & Huizenga (2011): "Assessing Sustainability in Transport", 2ndDraft Report February 21st, p.10, Eschborn.

It is also possible to check if given indicators are helpful in specific projects. The following Table 4 shows a number of attributes and their respective quality criteria. An indicator can be described as useful if it satisfies all the desired criteria.

Quality	Explanation
Able to discriminate	Must be able to differentiate between the individual components that are affecting the performance of the system
Able to integrate	Must be able to integrate the sustainability aspects of environmental, social, and economic sustainability
Acceptable	The general community must assist in identifying and developing the performance measures
Accurate	Must be based on accurate information, of known quality and origin
Affordable	Must be based on readily available data or data that can be obtained at a reasonable cost
Appropriate level of detail	Must be specified and used at the appropriate level of detail and level of aggregation for the questions it is intended to answer
Have a target	Must have a target level or benchmark against which to compare it
Measurable	The data must be available, and the tools need to exist to perform the required calculations
Multidimensional	Must be able to be used over time frames, at different geographic areas, with different scales of aggregation, and in the context of multimodal issues
Not influenced	Must not be influenced by exogenous factors that are difficult to control for, or that the planner is not even aware of
Realistic	Within the availability of resources, knowledge and time
Relevant	Must be compatible with overall goals and objectives
Sensitive	Must detect a certain level of change that occurs in the transportation system
Show trends	Must be able to show trends over time and provide early warnings about problems and irreversible trends
Timely	Must be based on timely information that is capable of being updated at regular intervals
Understandable and specific	Must be well defined, understandable and easy to interpret, even by the community at large

Table 4: Attributes of a good performance measure

Source: GIZ / SloCaT: Sustainable Transport Evaluation: Developing Practical Tools for Evaluation in the Context of the CSD Process, Eschborn 2011, based on Texas Transportation Institute 2002

Key Barriers to the Efficient Use of Indicators: Data Availability and Quality

Indicators require data on transport facilities, activities and impacts. Data quality refers to its accuracy, consistency, and availability. These data are essential for many policy planning and management activities, of which sustainable transport indicators are just one category.¹³

In the context of Sub-Saharan Africa, the limiting factor in the assessment of transport sustainability is the poor availability of reliable, valid and objective data (see also table 3 above). There are two main reasons for this: a lack of institutional arrangements and capacity to collect and assess data, and the shortage of financial resources to establish a long term, comprehensive data collection system.

The Global Transport Intelligence Initiative states that “the improvement of transport data availability and quality needs to be considered as an integral part of improving the sustainability of transport.”¹⁴ In order to justify these costs, it is necessary to assure that the data are practically used to achieve a higher level of sustainability in transport.

Conclusion

The term ‘sustainable transport’ is used widely but its meaning in the regional context of Africa is not very clear. African countries need to reflect it related to their specific economic, social, ecological, political and cultural conditions.

Undoubtedly there is also need for a common definition on sustainable transport. Such definition should be based on the general concept of sustainable development and be adoptable to the regional and national situation.

Goals for the region should include a curbing of the growth of motorised transport, while preventing a further shift away from non-motorised transport to motorcycles or cars. Several measures will contribute to this, including travel demand management, substantial investments in road safety for non-motorised transport, and land use planning that mixes urban functions. Quantified targets would foster the developmental function of transport and limit its negative impacts.

To measure quantified targets there is a need for clear indicators and reliable data. But to date there is no common set of indicators to integrate the assessment of transport sector structure, performance, impacts and governance.

Taking the specific difficulties of Africa into account, the region needs a minimum set of indicators to start with. Given the will, such a set could be realised under the current financial conditions and institutional capacity of the region. The following Table 5 lists various indicators that could form the basis of a minimum data set for Africa.

¹³ Further developed from Global Transport Intelligence Initiative (www.slocat.net/key-slocat-prog/466).

¹⁴ Global Transport Intelligence Initiative (www.slocat.net/key-slocat-prog/466).

Category	Subcategory	Indicator	Disaggregation
Travel Activity	Vehicles	Motor vehicle ownership	By type of vehicle, owner demographics, location
	Mobility	Motor vehicle travel	Trip type, traveler type, travel conditions
	Mode split	Portion of trips by auto, public transit, and non-motorized modes	Trip type, traveler type, travel conditions
Air Pollution Emissions	Emissions	Total vehicle emissions	Type of emission, mode, location
	Air pollution exposure	Number of days of exposure per year	Demographic groups affected
	Climate change	Climate change emissions (CO ₂ , CH ₄)	Mode
	Embodied emissions	Emissions from vehicle and facility construction	Type of emission and mode
Traffic risk	Crash Casualties	Crash deaths and injuries	Mode, road, type and cause of collision.
	Crashes	Police-reported crashes	Mode, road, type and cause of collision.
Economic Productivity	Transport costs	Consumer expenditures on transport	Mode, user type, location
	Commute costs (time and money)	Access to employment	Mode, user type, location
	Infrastructure costs	Expenditures on roads, public transit, parking, ports, etc.	Mode, location
Overall Accessibility	Mobility options	Quality of walking, cycling, public transit, driving, taxi, etc.	Trip purpose, location, user
Equity	Affordability – Transport	Portion of household budgets needed to provide adequate transport.	Demographics, especially disadvantaged groups

Table 5: Indicators for a transport-related dataset for Africa. Indicators with the highest priority “A = Proposed for application in virtually every situations and jurisdictions”

Based on: Table 3 Potential Sustainability Indicators in: STI (2008), Sustainable Transportation Indicators, Sustainable Transportation Indicators Subcommittee (ADD40 [1]), Transportation Research Board (www.trb.org); at <http://www.vtpi.org/sustain/sti.pdf>

The adoption of international standards will be another key component of future dataset creation in Africa and other developing countries. This would greatly ease comparisons with projects or policies elsewhere in the world.

4 Fundamentals of Decision-Making in Transport Funding

4.1 Types and Instruments in Financing Transport

1) Domestic Funding

Domestic funding is still the major source of transport investments in developing countries. Many millions of dollars – often a quite substantial part of the national overall budget – are spent each year, predominantly for infrastructure construction and maintenance.

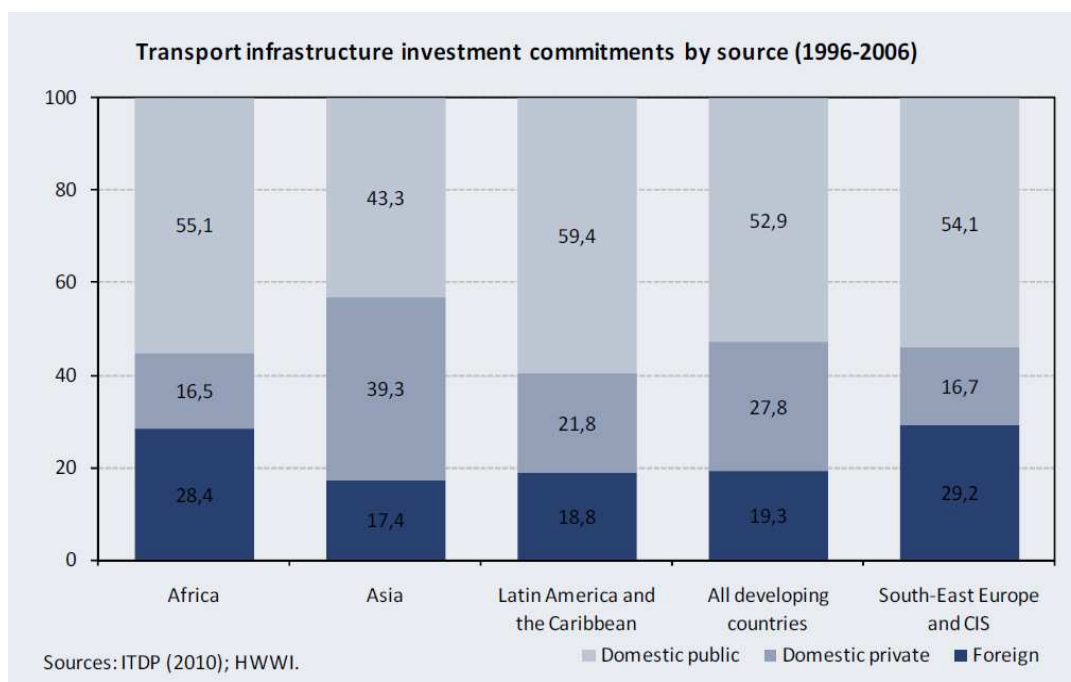


Figure 7: Transport infrastructure investment by source (1996-2006)

Source: ITDP (2010); HWWI

The World Bank argues that transport infrastructure investments in almost all African countries are underfinanced. On average only 50% of the investments needed are covered by domestic spending. Considering the need to invest in fields of sustainable transport other than infrastructure, the amount needed in reality is much higher. An exception is South Africa, which spends five times more money than needed, and is more comparable to industrialised countries than to other African countries.

Another study from AfDB, however, suggests that funding for road infrastructure is almost sufficient in most African countries.

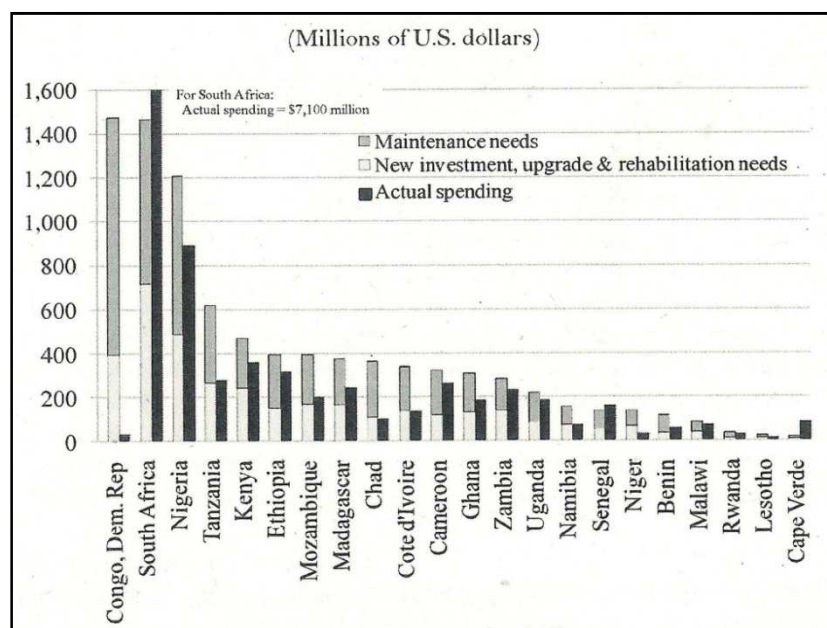


Figure 8: Actual Transport Spending and Estimated Requirements on Transport Investments and Maintenance, Sub-Saharan Africa (US\$ millions)

Source: Briceno-Garmendia a.o. 2008; Carruthers a.o. 2009 in: Andreas Kopp /World Bank: *Turning the Right Corner – Ensuring Development Through a Low Carbon Transport Sector*; 2012.

2) Financing mechanisms for mitigation and adaptation

With regard to the continued debate on how mitigation actions on climate change (especially in developing countries) could be supported by international financing, Carbon Finance Instruments like the CTF (Clean Technology Fund), CIF (Climate Investment Fund) and CDM (Clean Development Mechanism), provided by multi-lateral banks or GEF (by United Nations) are most relevant. Although these instruments can facilitate the transport sector's contribution to CO₂ mitigation, the CDM has only three registered transport projects (Delhi Metro, Medellin Cable Car and Bus Rapid Transit in Bogota).

Climate-oriented financial mechanisms alone will not be enough to achieve the overall paradigm shift required in Sub-Saharan Africa, since they are expected to provide only a part (the 'incremental costs' of projects' climate efficiency) of the overall funding required.¹⁵

3) National Appropriate Mitigation Actions (NAMAs)

NAMAS could become a valuable instrument for mitigation measures in Africa. They are a voluntary measure to reduce emissions from transport and are reported to the UNFCCC

¹⁵ A good overview and comparison regarding the financing mechanisms for mitigation and adaptation is provided in the document "Accessing Climate Finance for Sustainable Transport: A practical overview." (Binsted et al, 2010)

4) Private Sector Funding

Involving the private sector in financing transport infrastructure and services in Africa is an option (it has a current share of 16.5% of all transport infrastructure investment commitments, see Figure 7). Its management needs strong regulation and must be based on legally binding long-term contracts. Public private partnerships are relevant to implement new business models in support of sustainable transport. According to Hara et al. (2008, p. 85), multilateral development institutions have to mitigate risks or a mitigation has “typically taken the form of dollar-denominated revenues – as in the case of sea ports, which account for half of all African infrastructure projects with private participation”.

5) Official Development Assistance (ODA) of Development Agencies and Banks

is defined as “flows of official financing administered with the promotion of the economic development and welfare of developing countries as the main objective, and which are concessional in character with a grant element of at least 25 percent” (OECD, 2009). ODA given by industrialised countries is typically divided into two categories:

- Multilateral assistance through multilateral development banks (MDBs) and other international development organisations like the World Bank, European Investment Bank or the African Development Bank.
- Bilateral assistance by national development agencies and banks such as KfW (Germany), JICA (Japan) or the China Development Bank.

As shown in Figure 7, ODA plays only a minor role – about 20% of total funding – in spending on transport.

Conclusion

This study considers ODA donors in more detail because a major characteristic of ODA in transport (both multilateral and bilateral) is the focus on highway and urban ring road construction.

In view of the pressing need to develop a more sustainable low-cost and low-carbon transport sector, future funding policies of ODA could act as a crucial enabler of the required changes by being reoriented towards sustainable transport.

ODA can also influence other sources of financing, such as domestic or even private funding. To achieve this, the transport sector must improve transparency and accountability of financial flows with regard to sustainability criteria.

It is a positive sign that some bilateral and multilateral agencies like ADB and the World Bank have already started to put the issue of sustainable transport higher on their lending policy agenda.

In the next chapter we outline the key ODA financing agencies in the African region. Their financing and evaluation policies are then analysed by reviewing how MDBs and bilateral development agencies set targets and assess sustainability with respect to transport lending or assistance.

4.2 Financing Bodies in Africa

4.2.1 Survey results

A survey with a questionnaire with 14 questions was distributed to relevant and recommended people engaged in funding transport projects in Africa at multinational and national institutions in May 2012. A reminder was sent to those not responding after the summer break in September 2012.

The response rate was high, with 10 from 14 institutions responding (71%). Unfortunately only three questionnaires were returned from international institutions (21%), while the others responded by email or in a phone call, and provided links and documents for further analysis. As a consequence the outcome of this study mainly depends on desk-based research and does not include all donor agencies in Africa.

While leaving out DfiD and SIDA we had a closer look at the Asian Development Bank. Although the ADB does not fund transport projects in Africa, it was included because ADB has developed a progressive funding approach for future projects, which is highly relevant for other funding bodies. The ADB moreover led the alliance of MDBs in the Rio 175 Billion Dollar-Commitment on sustainable transport and is one of the most active contributors in the SloCaT Partnership.

4.2.2 African Development Bank AfDB

AfDB understands its role as a catalyst to solve African challenges, including transport problems. For this it has national and regional programmes.

In recent years the largest share of African Development Bank Group financing approvals was targeted to the infrastructure sector, comprising transportation, water supply and sanitation, energy, and information. Of the 1.93 billion UA¹⁶ injected into infrastructure in 2007, 756 million UA (39.2% of the total) was allocated to the transport sector.

In all transport programmes AfDB focuses predominantly on infrastructure development and recently announced that it will nearly double its infrastructure spending across the continent to almost \$10 billion over the next five years.

In its 1993 dated Transport Sector Policy Paper AfDB states the following three areas of importance¹⁷:

- Continuous improvement of the standard of servicing of transport infrastructure and equipment;
- Strengthening the efficiency of institutional responsibility for the sector's administration and the structures managing and running transport networks;
- Liberalisation of the transport market.

¹⁶ Units of Accounts: - AfDB moving average exchange rate December 2007 was 1 UA = 1,07728 Euro (see: <http://www.afdb.org/en/documents/financial-information/exchange-rates/>)

¹⁷ Source: African Development Bank and the African Development Fund Annual Report Tunis 2011

At the national level projects financed by the Bank should contribute to reducing infrastructure shortages. AfDB believes that infrastructure shortages are hampering economic growth. The bank intends to select transport infrastructure projects according to their potential to contribute to economic growth. Within its infrastructure-related funding it also invests in strengthening local capacity in managing and implementing such projects.

At the regional level the projects should facilitate the exchange of goods and services between countries but also on regional management capacity improvement. All this is done in close collaboration with NEPAD, the African Union and other regional partners. Programmes identified and financed should contribute to regional integration and market expansion. To achieve higher funding levels, emphasis is also on “Public-Private” partnership – at both the regional and national levels.

In 2011 AfDB invested heavily in roads, although at a lower level than 2007. As shown in Table 1, 1.01 billion US-\$ was spent on 18 transport-related projects. The transport sector received 24.4% of all AfDB funding, of which approximately 80% was provided as loans (11 projects) and 20% as grants (7 projects). Only 0.2% was spent on environmental projects, while urban development projects received nothing.

Sector	Loans			Grants			Total Approvals		
	Number	Amount	%	Number	Amount	%	Number	Amount	%
Agriculture and Rural Development	6	89.87	2.5	5	55.77	9.6	11	145.64	3.5
Social	5	389.46	11.0	22	61.82	10.7	27	451.27	10.9
Education	1	15.00	0.4	5	23.98	4.1	6	38.98	0.9
Health	2	56.00	1.6	–	–	–	2	56.00	1.4
Other	2	318.46	9.0	17	37.83	6.5	19	356.29	8.6
Infrastructure	25	1,407.55	39.7	11	164.72	28.5	36	1,572.27	38.1
Water Supply and Sanitation	3	137.99	3.9	2	1.20	0.2	5	139.19	3.4
Energy Supply	10	403.51	11.4	2	16.63	2.9	12	420.14	10.2
Communication	1	7.57	0.2	–	–	–	1	7.57	0.2
Transportation	11	858.48	24.2	7	146.90	25.4	18	1,005.37	24.4
Finance	10	801.82	22.6	1	0.46	0.1	11	802.29	19.4
Multisector	11	557.28	15.7	36	295.94	51.1	47	853.22	20.7
Industry, mining and quarrying	2	293.69	8.3	–	–	–	2	293.69	7.1
Urban Development	–	–	–	–	–	–	–	–	–
Environment	1	9.57	0.3	–	–	–	1	9.57	0.2
A. Total Loans and Grants	60	3,549.24	100.0	75	578.71	100.0	135	4,127.95	100.0
B. Other Approvals	–	–	–	–	–	–	49	1,592.62	n.a.
HIPC Debt Relief	–	–	–	–	–	–	7	1,350.85	n.a.
Equity Participations	–	–	–	–	–	–	7	53.37	n.a.
Guarantees	–	–	–	–	–	–	–	–	–
Special Funds*	–	–	–	–	–	–	35	188.12	n.a.
Total Approvals (A + B)	60	3,549.24	n.a.	75	578.71	n.a.	184	5,720.29	n.a.

Table 6: AfDB funding approvals in 2011 (in millions of US-\$)

The AfDB's sectoral priorities for the transport sector are:

- Regional transport corridors
- Rural roads
- Structuring projects that facilitate the integration of different modes of transport
- Rehabilitation and maintenance programmes
- Institutional capacity building
- Promoting public-private partnerships and multi-sector projects.

Regional Approach of AfDB: Example East Africa¹⁸

In the regional context of East Africa AfDB has a long history of financing projects and national investments. Since commencing regional operations in East Africa in 1969, the Bank Group has provided financing for 32 operations worth US-\$ 740.5 million. As illustrated in Figure 26, these operations mainly involved infrastructure, with road infrastructure projects dominating.

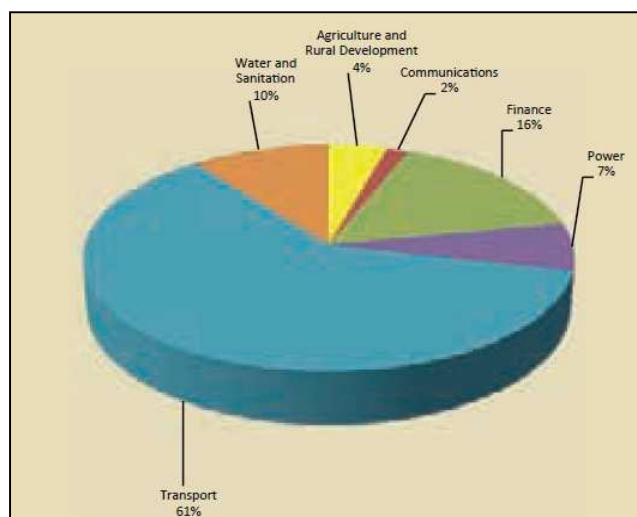


Figure 9: Cumulative Bank Group Multinational Operations by Sector in East Africa (1969-2010)

Source: AfDB Statistics Department, Economic and Social Statistics Division

The high proportion of investments in transport continued in 2011. Transportation still attracts the largest allocation (63.9 percent) of regional infrastructure investment, followed by energy (26.7 percent), and water supply and sanitation (8.9 percent) – see Figure 10.

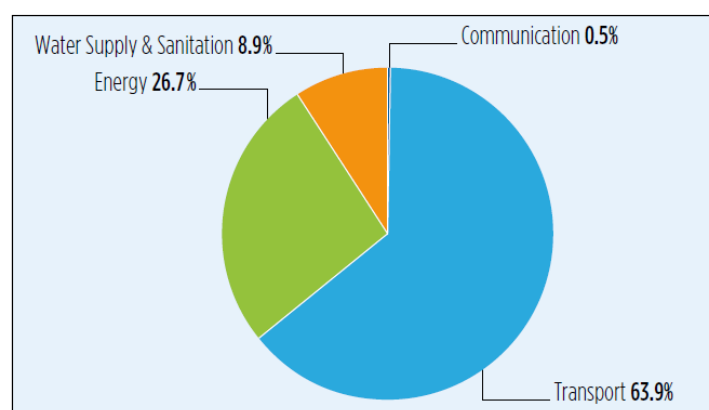


Figure 10: AfDB Regional Spending in East Africa

Source: African Development Bank and the African Development Fund Annual Report, Tunis 2011

¹⁸ Source: African Development Bank and the African Development Fund Annual Report, Tunis 2011

Conclusion

Lending by AfDB has been traditionally dominated by infrastructure projects – and within these the transport sector investments account for two thirds of the overall share. The AfDB believes in roads and infrastructure as the key drivers of socio-economic development in Africa, with most of these investments going to regional and local road building, road extensions and road rehabilitation projects. The negative impacts of an increasing dependency on road-based transport have been ignored, and other mobility needs have been largely neglected. The following example highlights the current approach of the bank.

Example: Kenya Nairobi–Thika Superhighway

In September 2012 the Presidents of Kenya, Mwai Kibaki, and the African Development Bank, Donald Kaberuka, launched “the most ambitious infrastructure project in Kenya’s history”: The Nairobi–Thika superhighway.

This eight-lane “ultra-modern superhighway” was built from Nairobi to the outskirts of Thika, some 50 kilometres away. The project cost (US \$360 million) was financed by the African Development Bank (US \$180) million, the Government of Kenya (US \$80 million) and the Exim Bank of China (US \$100 million).



Figure 11: The Kenya Nairobi–Thika Superhighway as it is presented on the AfDB Website.

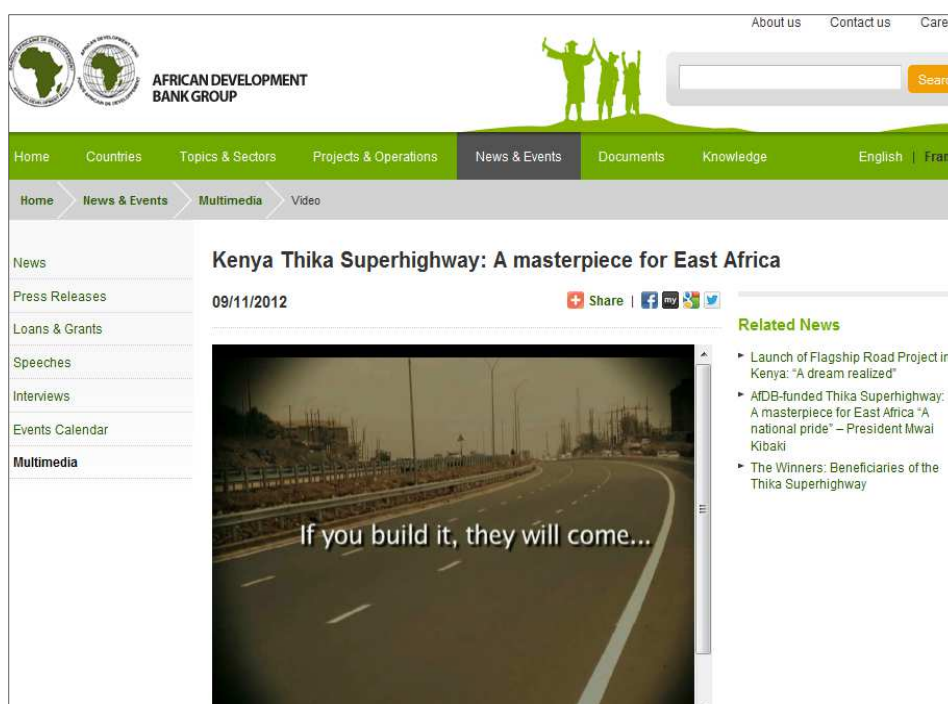
Source: <http://www.afdb.org/fileadmin/uploads/afdb/Photos/Road-Kenya-1.jpg>

It highlights the Bank’s focus on infrastructure and the strong belief in supply-side related measures. At the launch, AfDB President Donald Kaberuka said that, “this ultramodern superhighway will strongly contribute to the achievement of inclusive growth in the region by reducing the cost of doing business in Kenya”, and that, “This road plays a critical role at several levels. It is first an important commercial and transport corridor. It is also part of the Great North Trans-African Highway (Cape Town to Cairo)”. On AfDB website one can find a short video that shows the project in a positive and emotive way¹⁹. In addition one can read the following AfDB comments:

¹⁹ See: “Thika Road – A Masterpiece for East Africa”: <http://www.afdb.org/en/news-and-events/multimedia/video/kenya-thika-superhighway-a-masterpiece-for-east-africa-482/> to watch the video.

- Commuters are already enjoying faster, more reliable, comfortable and more affordable journeys. The time taken to travel between Thika-Town and Nairobi has dropped from two to three hours to 30-45 minutes.
- Consequently, pollution resulting from vehicle emissions has considerably fallen.
- Beneficiaries of the highway are predominantly people living along the route engaged in various economic activities. More importantly, it serves commuters who travel daily to work in secondary and tertiary sectors within Nairobi city's Central Business District (CBD).
- Transport operators, especially buses and hauliers, and non-motorised road users are among other beneficiaries of the project. Also included are horticultural and dairy farmers along the road who require an efficient and reliable transportation system.
- Other users include local administrations, and social service providers (NGO/CBOs) working in the districts of Murang'a, Maragwa, Kirinyaga, Embu, Meru and Nyeri.

The donor philosophy of AfDB might be described best by watching the Thika-project-video “Thika Road – A Masterpiece for East Africa”, which ends with a picture of an empty, several lane wide highway and the related slogan: “If you build it – they will come...” – to be understood in a way that once a highway is constructed the city can be sure that it will soon be filled by vehicles.



Screenshot of “Thika Road – A Masterpiece for East Africa”

<http://www.afdb.org/en/news-and-events/multimedia/video/kenya-thika-superhighway-a-masterpiece-for-east-africa-482/>

4.2.3 European Investment Bank (EIB)²⁰

The general policy of the European Investment Bank (EIB) is to ensure that its funds are employed as rationally as possible. The EIB principles in lending are open international competition, non-discrimination of tenderers, fairness and transparency. For transport projects there is no direct link to sustainability criteria.

The EIB often works through third parties (Promoters). Promoters are fully responsible for implementing projects financed by the Bank, in particular for all aspects of the procurement process, from drafting tender documents and awarding contracts through to implementing contracts. The involvement of the Bank is confined solely to verifying whether or not the conditions attached to its financing are met.

There is no specific policy for transport projects. However the EIB aims to “add value by enhancing the environmental and social sustainability of all the projects, including transport, that it is financing, and as such all projects must comply with the environmental and social requirements of the Bank.

The Promoters are responsible for preparing, implementing and operating projects financed by the Bank and for the fulfilment of Bank environmental and social requirements. The latter are summarised in the “EIB Statement of Environmental and Social Principles and Standards 2009”.

In its preamble EIB states that all the projects it finances are made acceptable in environmental and social terms by applying appropriate safeguards to all its operations.

An EIB-funded project should promote one or more of the following EU policy objectives:

- Provide an appropriate response to the threat of climate change
- Contribute to sustainable natural resource management
- Improve the quality of urban life, including the promotion of sustainable communities
- Safeguard human health through enhancements to the natural and built environment.

In the transport sector, EIB seeks to finance projects that add value through the protection and improvement of the natural environment and the promotion of sustainable communities. EIB further makes clear reference to the Millennium Development Goals and focus on encouraging transparency, participation and consultation, social inclusion, integrated planning and more equitable access to goods and services.

It is notable that for transport related emissions projects in developing countries, the Bank requires that all projects “comply with national legislation, including international conventions ratified by the host country, as well as EU standards. Where EU standards are more stringent than national standards, the higher EU standards are required wherever practical and feasible.”

²⁰ Source: “Guide to Procurement for projects financed by the EIB”, Updated version of June 2011 Brussels 2011 and “EIB Statement of Environmental and Social Principles and Standards”, Brussels 2009

Social standards

On social standards EIB has a policy on Indigenous People and Other Vulnerable Groups: “All policies, practices, programmes and activities developed and implemented by the promoter should pay special attention to the rights of vulnerable groups. Such groups may include indigenous people, ethnic minorities, women, migrants, the very young and the very old. The livelihoods of vulnerable groups are especially sensitive to changes in the socio-economic context and are dependent on access to essential services and participation in decision-making.”

Cultural Heritage

On cultural heritage the EIB approach is based on a number of conventions ratified by the EU, and reflects a broad concept of cultural heritage as an instrument for human development, intercultural dialogue and the achievement of balanced spatial development.

Consultation, Participation and Public Disclosure

In EIB funded projects “stakeholder concerns should be considered as early as possible in the project assessment process in order to reduce risks and provide for timely resolution of conflicts. For all projects for which the EIB requires a formal EIA [Environmental Impact Assessment], the promoter should conduct a meaningful, transparent, and culturally appropriate public consultation of affected communities and provide for a timely disclosure of appropriate information in a suitable form.”

Climate Change

The EIB has endorsed the findings of the reports of the UN Intergovernmental Panel on Climate Change (IPCC). For transport-related projects the Bank claims to recognise that projects it finances today have a role in determining the level of GHGs in the atmosphere for several decades to come, and therefore the extent of climate change in the future.

As a general conclusion and from the donor policy point of view, many aspects of sustainability in project funding are mentioned in the current EIB lending principles. However it was not possible to analyse the application of these principles in EIB transport projects. Moreover the lack of published data and reports on transport projects made it impossible to draw clear conclusions as to how far the bank is implementing the aforementioned principles in its current and future transport projects.

4.2.4 World Bank (WB)

The main concepts behind the development lending of the World Bank are evolving from a very narrow focus on economic growth and poverty alleviation towards a wider set of criteria including social concerns, governance, corruption, and climate change.²¹

As with all other multi- and bilateral co-operations, the lending operation itself “is a product of an interactive process involving the partner-country government and the Bank”²². Project loans –

²¹ According to Mitric, S., Urban transport lending by the World Bank: The Last Decade, Research in Transportation Economics (2012), <http://dx.doi.org/10.1016/j.retrec.2012.06.036>

²² See reference above

especially to cities – are the main operational instrument for urban transport projects and follow a specific structure:

- 1) An investment programme co-financed by the client government's equity and the Bank's loan, sometimes with additional co-financiers
- 2) An agenda of policy reforms relevant to the same context; and
- 3) An agenda for institutional change relevant to the context in which investments are taking place

All three parts of the instrument must be implemented, while the emphasis depends on the specific project. This should lead to the following three 'streams' of benefits²³:

"Type A: a stream of direct benefits to some target population generated through the investment component; it is these benefits that feature in both ex-ante and post-implementation evaluation of investments, in economic and/or financial terms;

Type B: a stream of benefits generated through the implementation of institutional and policy changes, albeit often in a less direct cause and effect sequence than that of project investments, and along a different time scale;

Type C: benefits arising from a combination of using rigorous selection criteria for investments, and rigorous procedures for preparing and implementing them."

Type C benefits developed in the last few years are more oriented towards sustainability. The benefits should also arise in new areas, and therefore evaluation has to look not only at the financial management but also at environmental impacts, involuntary relocation, land compensation, and public participation.

The World Bank Policy Paper "Cities on the Move" (World Bank 2002) recognised "that a cautious and systematic approach was necessary given oft-observed unhappy experiences of poor investment choices and implementation problems" (Mitric 2012, p.3) in metro projects and other rapid transport systems. It recommended a "thorough evaluation of design options, strategic nesting of the selected option into its 'host' urban transport system, special attention to financial viability, and a public/private partnership approach to implementation and operation." (Mitric 2012, p.3)

The World Bank initially focussed on road transport and traffic management in Africa. In the period up to 1997 only one project had specifically finalised the public transport sector (the construction of a bus depot) (Mitric 2012, p.6). This triggered a shift to a broader understanding of transport and mobility, with support for a number of public transport projects following since 1997. A best practice example is Bus Rapid Transit and Public Transport Reform in Lagos, which started in 1997 and was finished in 2009.

²³ See reference above. p.2

World Bank Flagship Report

The need for an orientation of World Bank funding towards all three pillars of sustainability is reflected in the 2012 flagship report “Turning The Right Corner – Towards A Low-Emission Transport Sector”²⁴. It can be seen as a draft strategy of the bank for climate-friendly transport systems in developing countries, requiring a shift of funding to non-technological solutions that can contribute to a low-carbon transport sector. It is based on the assumption that the transport sector in developing regions will become the leading emitter of GHG if current trends continue (business-as-usual-scenario). A main conclusion of the report states that a shift to environmentally sound means of transport has to be achieved, which will have co-benefits including improved health, reduced costs from congestion and road accidents, as well as quality gains in urban liveability. Viable tools are listed such as improved land use planning, laws, regulations and internalisation of external costs. It further suggests removing fuel subsidies and introducing more pricing and fiscal instruments to achieve the envisaged shifts. The report criticises the low significance and inefficiency of the climate finance mechanism for the transport sector and clearly states that technological solutions are an inadequate answer to transport problems in developing countries.

World Bank “Sustainability Toolkit for Transport Projects”

On behalf of the World Bank, TRL recently finalised a “Sustainability Toolkit for Transport Projects”. It includes a progressive set of core sustainability principles for loans and grants to developing countries. Its overall objective is...

“to make development projects more sustainable by reducing the risk of failure of projects attaining their long-term development goals and enhance the prospects for their sustained impact on development ensuring that there is local commitment to longer-term buy-in”.

It also helps to demonstrate the World Bank’s intention to procure sustainable “products” in transport funding. Moreover the Toolkit shall enable recipient country clients to incorporate core sustainability principles into transport projects at every stage of project planning, design and delivery.

This should assure long-term sustainability and will enhance the long-term impacts of the Bank’s development projects. The key criteria for the toolkit²⁵ are:

- Institutional capacity;
- Embedment;
- Political support;

²⁴ Andreas Kopp: Flagship Report „Turning The Right Corner – Towards A Low-Emission Transport Sector”, World Bank, Washington 2012

²⁵ <http://siteresources.worldbank.org/INTTRANSPORT/Resources/336291-1239112757744/5997693-1294344242332/Final-Toolkit.pdf>

- Balancing the roles & responsibilities of the public & private sector;
- Financial sustainability & economic viability;
- Stakeholder engagement & social acceptance;
- Environmental sustainability;
- Adaptation to climate change; and
- Technological appropriateness.

Examples from the World Bank

A number of World Bank projects in Sub-Saharan Africa have shown that:

- initiatives need to be demand-driven and developed in a participatory manner;
- borrower capacity needs to be enhanced to enable proactive and effective contract administration;
- in railway projects it is important to involve the private sector in concession design;
- supervision and monitoring of works – especially for rural roads that are small but spread over large areas – can be difficult;
- maintenance of existing assets needs to be given priority over the expansion of road networks.

More detailed information on these projects can be found here:

- 1) Chad National Transport Program Support Project: <http://go.worldbank.org/QPZ3VPJMW0>
- 2) Ethiopia Road Sector Development Program <http://go.worldbank.org/89460JJJB0>
- 3) Cameroon Railway Concessions Project <http://go.worldbank.org/RONXY92L50>
- 4) Ghana Road Sector Development Program <http://go.worldbank.org/WDMKHXY0R0>

4.2.5 Chinese Development Assistance

China has become one of the major bilateral players in the African infrastructure sector with currently more than 20% market share in contracting infrastructure projects. The estimated share of future commitments to the African infrastructure sector is approximately 15%. The principal financing method is direct funding by the government through the China EXIM Bank, China Development Bank (via the China-Africa Development Fund) or the Chinese Ministry of Commerce in

the form of concessional loans, development aid, soft loans and export seller's credit.²⁶ For example, the Nairobi "Thika Road Project" – discussed under AfDB above – was co-financed by the EXIM Bank.

Around two thirds of Chinese infrastructure financing is in the energy and transport sector, with a focus on rail, harbour and road projects. There is a regional concentration in a few African countries, i.e. Ghana, Nigeria and Mali, Southern Africa (South Africa, Zambia and Botswana) and Central Africa (Cameroon).

This bilateral cooperation was reinforced by three deals in Ghana in 2010, including US-\$ 9.87bn provided by the Chinese EXIM Bank for road, railway and dam works.

China Development Bank (CDB)

The China Development Bank (CDB) is the world's largest development financial institution with total assets greater than those of the World Bank, Asian Development Bank and African Development Bank combined. CDB is dedicated to national strategies and inclusive finance, building a financial system available to everyone, and promoting the joint development of the financial sector within and outside China. CDB is China's largest outbound investment and financing bank.

Regarding transport-related investments one can find only basic information in the bank's documents and publications. There are no transport project case studies available. The CDB's funding policies in the transport sector are not clear. The 2011 annual report states only the following principles for international cooperation policies:

"The bank has attached great importance to realistic assessment and accommodation of the local conditions and demands in developing countries."

"Overseas investment is not a zero-sum game; it is important to stick to the principles of mutual benefit, win-win results and local development... When we make investments in developing countries, it is especially important to bear in mind the development of local infrastructure, people's livelihood, agriculture, employment, environmental protection, and in particular the capacity building for the host country to achieve an independent and sustainable future."

China-Africa Development Fund

As the only Chinese fund specialising in investment in Africa, the China-Africa Development Fund (CAD Fund) was launched on 26 June 2007. Through fund investment and advisory services, the CAD Fund leads and supports many Chinese enterprises to invest directly in Africa, and aims to promote economic development and improve people's wellbeing in African countries in a market-oriented way. With this ethos, the following industries have been given priority: agriculture and manufacturing industries, infrastructure and utilities (electric power and other energy facilities, transport, telecommunications and urban water supply and drainage).

²⁶ See ICA Members' Commitments Towards Regional Projects in 2010, 2011, p. 44

According to the 2011 annual report²⁷, CAD Funding has a solid performance and started with an own investment of US-\$ 700 million. Total capital of US\$ 1 billion has been invested in Phase I and Phase II.

Special Loan for the Development of African SMEs

The loan was announced in November 2009, with the aim to broaden the funding channels of small and medium sized enterprises (SMEs), vitalise the local economy, create employment opportunities, enlarge trade volume and increase living standards. The loan specially supports the following target sectors: basic industries; tertiary industry; infrastructure (power, agricultural water conservancy and irrigation, transportation).

In September 2010, the CDB and Ghanaian Ministry of Finance signed a Framework Agreement for an Overall Financing Cooperation. Within this cooperation, a loan of US\$ 100 million is devoted to support the Micro-finance and Small Loans Centre (MASLOC) and the development of SMEs in public transport and other sectors.

Alongside the China Development Bank, many Chinese state-owned or state-governed corporations are very active in the transportation sector in African countries. These corporations mainly work directly on the construction of road infrastructure, for instance the China Civil Engineering Construction Corporation (CCECC) and China GEO-Engineering Corporation (CGC).

In conclusion the policy of Chinese development assistance for the transport sector is not directly linked to sustainable development. Financing is geared to foster independent economic development of its African partner countries, with a strong focus on infrastructure development (roads, harbours, rail). Project impacts as well as future funding plans are not communicated transparently. It is difficult to know if the infrastructure bias of the CDB and EXIM Banks will change .

As the biggest donors for Africa this will be of high significance for the overall development of the transport sector. It is therefore essential to engage the Chinese banks in a debate on sustainable development of the African transport sector.

4.2.6 Asian Development Bank

Developing a Sustainable Transport Appraisal Framework: Initial Work at ADB²⁸

Although the ADB is not directly involved in financing transport projects in Africa, the Bank has recently developed a progressive approach towards a shift in transport funding, which could influence funding bodies focussed on Africa.

²⁷ CDB, 2011. China Development Bank, Annual Report Year 2011. Pages 53, 57.
<http://www.cdb.com.cn/Web/Column.asp?ColumnId=5>, accessed in 2012/8/2.

²⁸ Duncan, Tyrrell: Developing a Sustainable Transport Appraisal Framework: Initial Work at ADB. Presentation held at "Assessing Sustainable Transport in the context of Green Economy" Rio de Janeiro, 18 June 2012.

Transport has been one of ADB's main sectors over the past four decades and currently accounts for nearly 32% of total lending. A previous focus on road infrastructure has given way to a revised approach.

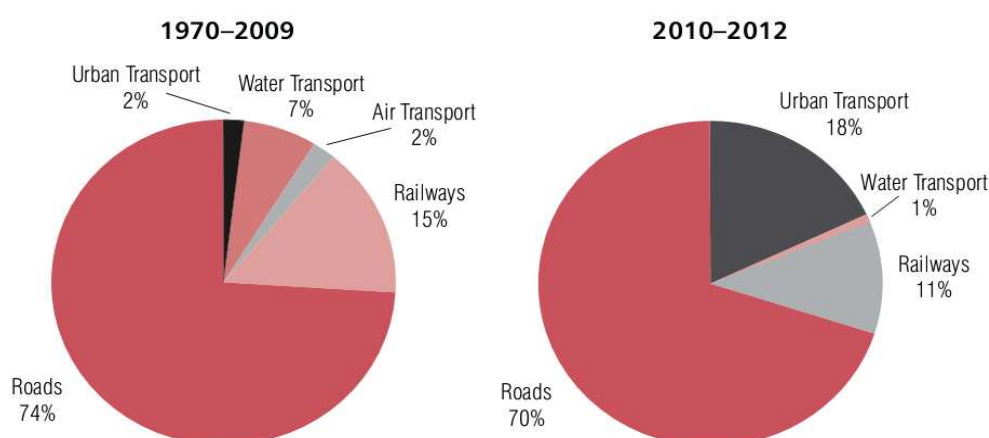


Figure 12: ADB Transport Lending (Public Sector)

Source: ADB

Aligned with the ADB's Strategy 2020, the four focus areas of the Sustainable Transport Initiative are:

- Scaling-up urban transport
- Mainstreaming climate change
- Improving cross-border transport and logistics
- Supporting road safety and social sustainability

One part of the implementation process of the Sustainable Transport Initiative, ADB is currently developing a Sustainable Transport Appraisal Framework, which aims to go beyond traditional economic appraisals.



Figure 13: ADB Sustainable Transport Appraisal

Source: "Assessing Sustainable Transport in the context of Green Economy", Rio de Janeiro, 18 June 2012 Tyrrell Duncan, Director East Asia Transport Division, Asian Development Bank

Besides the traditional transport economic appraisal, the ADB wants to include environmental impacts, wider economic impacts and social impacts into the newly developed sustainable transport appraisal. The approach of the ADB is²⁹ to formulate economic, social and environmental objectives in order to determine the sustainability of transport projects:

Economic objectives

1	Mobility	Improve accessibility and mobility levels of people and goods, by reducing their perceived transport costs
2	Efficiency	Reduce the operating costs of transport systems
3	Reliability	Improve the reliability of transport systems and services
4	Employment	Generate quality employment opportunities
5	Wider economic impacts	- Facilitate the cross-border movement of goods and people in the region - Foster agglomeration in urban areas - Enable rural agricultural development and increased food security



Figure 14: ADB Economic Objectives

Source: "Assessing Sustainable Transport in the context of Green Economy", Rio de Janeiro, 18 June 2012, Tyrrell Duncan, Director East Asia Transport Division, Asian Development Bank

Economic objectives are defined in the five fields of Mobility, Efficiency, Reliability, Employment and 'Wider economic impacts' (see Figure 14).

²⁹ From presentation "Assessing Sustainable Transport in the context of Green Economy", Rio de Janeiro, 18 June 2012 Tyrrell Duncan, Director East Asia Transport Division, Asian Development Bank

Social objectives are defined in five additional fields: Basic accessibility, Affordability, Inclusion, Social cohesion, and 'Safety, security and health' (see Figure 15).

Social objectives

6	Basic accessibility	Improve people's access to basic needs and social services, particularly health care and education
7	Affordability	Provide transport opportunities that are financially affordable
8	Inclusion	Provide transport opportunities that are accessible to all groups of society
9	Social cohesion	Foster social cohesion and interaction, minimize severance of communities and resettlement
10	Safety, security and health	- Improve the safety and security of road users and local communities - Reduce human trafficking and the spread of communicable diseases along transport axes



Figure 15: ADB Social Objectives

Source: "Assessing Sustainable Transport in the context of Green Economy", Rio de Janeiro, 18 June 2012 Tyrrell Duncan, Director East Asia Transport Division, Asian Development Bank.

Finally environmental objectives are defined for the four areas "Transport-related emissions and pollution", "Natural and built environment", "Natural and built environment", Resource efficiency and Resilience.

Environmental objectives

11	Transport-related emissions and pollution	• Reduce transport-related emissions of air pollutants, greenhouse gases, noise, vibration and light, and pollution of surface and ground water, as well as soil
12	Natural and built environment	• Preserve the natural environment and maintain integrity of ecosystems, biodiversity and the services they provide • Enhance the built environment, landscape, townscape, physical cultural resources and their setting
13	Resource efficiency	• Reduce transport systems' use of natural resources, including materials, energy and water and minimize waste and land-take
14	Resilience	• Improve resilience to extreme weather events, natural disasters and climate change.



Figure 16: ADB Environmental Objectives

Source: "Assessing Sustainable Transport in the context of Green Economy", Rio de Janeiro, 18 June 2012 Tyrrell Duncan, Director East Asia Transport Division, Asian Development Bank

The ADB developed indicators and methodologies that can be used to measure a project's contribution to a specific objective, including qualitative and quantitative indicators and monetisation techniques (to embed in Cost Benefit Analysis). The following example shows indicators for road safety :

- Number of road deaths
- Number of serious road injuries
- Number of deaths of non-motorised transport users
- Annual number of saved road death fatalities
- Kilometres of roads with IRAP rating of two stars or less / three stars or more
- Length of pedestrian or bike paths per 10,000 km urban road network
- Amount of funding for dedicated road safety improvement programmes

Figure 17 illustrates the way in which the ADB evaluates the overall sustainability of transport projects through a rating system for the three areas of economic, social and environmental sustainability. In addition there is a risk rating for uncertainties and financial and institutional risks.

3. Evaluating overall sustainability

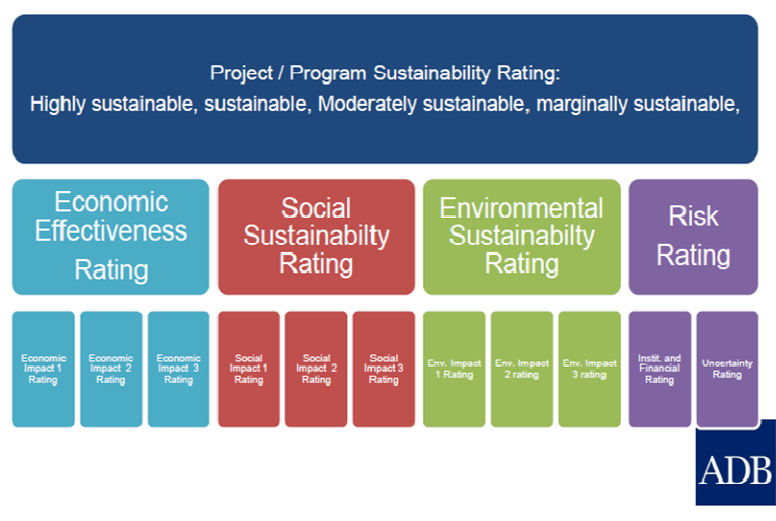


Figure 17: ADB Evaluation Process

Source: "Assessing Sustainable Transport in the context of Green Economy", Rio de Janeiro, 18 June 2012 Tyrrell Duncan, Director East Asia Transport Division, Asian Development Bank.

4.2.7 Japan Development Cooperation JICA/JBIC

Until 2008 the Japanese Bank for International Cooperation (JBIC) 2002 Guidelines and the Japan International Cooperation Agency (JICA) 2004 Guidelines for Environmental and Social Considerations had been the basis for loans and technical cooperation. In 2008 the three forms of the JICA and JBIC wings of the ODA assistance (technical cooperation, loan aid, and grant aid) were integrated in the "JICA Guidelines for Environmental and Social Considerations"³⁰.

JICA clearly states that it implements cooperation activities in accordance with the guidelines. JICA also encourages host country governments, including local governments, borrowers, and project proponents, to implement appropriate measures for environmental and social considerations when engaging in cooperation activities.

In theory JICA's ODA policy provides support to projects that promote environmental conservation and contribute to the protection of the global environment, e.g. by reducing greenhouse gas emissions. JICA intends to be actively involved in supporting the enhancement of environmental and social considerations in developing countries, giving consideration to the conditions of the socially vulnerable and to the gap between rich and poor. The ODA policy states that measures shall be implemented by ensuring a wide range of meaningful stakeholder participation with transparency in decision-making.

³⁰ JICA Japan International Cooperation Agency: Guidelines for Environmental and Social Considerations, Tokyo 2010.

To prevent unacceptable adverse impacts, JICA has created clear requirements regarding environmental and social considerations. In its guidelines (JICA 2010, p.10) JICA recognises seven principles to be very important:

- 1) A wide range of impacts must be addressed.
- 2) Measures for environmental and social considerations must be implemented from an early stage to a monitoring stage.
- 3) JICA is responsible for accountability when implementing cooperation projects.
- 4) JICA asks stakeholders for their participation.
- 5) JICA discloses information.
- 5) JICA enhances organisational capacity.
- 6) JICA makes serious attempts at promptness.

While project proponents, etc. consult with local stakeholders, JICA should assist by implementing cooperation projects as needed. The policy paper explains that JICA assistance varies by project category:

- In the case of Category A³¹ projects, JICA encourages project proponents, etc. to consult with local stakeholders about development needs, adverse impacts on the environment and society, and the analysis of alternatives. JICA can assist when needed.
- In the case of Category B³² projects, JICA encourages project proponents, etc. to consult with local stakeholders when necessary.

Regarding the Social Environment and Human Rights JICA respects the principles of internationally established human rights standards and gives them special attention when implementing projects. JICA says that it integrates local human rights situations into decision-making processes.

In the policy paper JICA confirms that projects should meet the terms of laws or standards related to the environment and local communities in host countries. The terms do not differ significantly from the World Bank's Safeguard Policies.

JICA intends to incorporate good governance and transparency with reference to the laws relevant for project proponents.

The guidelines describe JICA's decision-making process as having two steps. The first part has a focus on loan aid, grant aid, and technical cooperation projects:

*"JICA is willing to undertake loan aid, grant aid, or technical cooperation projects, if appropriate environmental and social considerations are ensured."*³³

³¹ These are projects with significant adverse impacts on the environment and society, with impacts that are difficult to evaluate and/or are wide ranging in nature and/or irreversible.

³² Potential impacts on the environment and society are less adverse than those of Category A projects.

“When it is certain that environmental and social considerations will be enforced, JICA intends to ensure this through agreement documents.”

Monitoring of the environmental and social considerations, as well as a non-fulfillment of the guidelines, has to be reported to JICA.

Project proponents must attempt to hold discussions with local stakeholders, should problems occur. If they have not met the conditions set out in the guidelines, JICA may make changes to the agreement.

The second part concentrates on Technical Cooperation for Development Planning and Preliminary Studies of Grant Aid Projects undertaken by the Ministry of Foreign Affairs (MOFA):

“JICA takes necessary measures to ensure that cooperation projects have suitable environmental and social considerations and recommends that MOFA end to operate cooperation projects, when JICA concludes that it is impossible to ensure environmental and social considerations.”³⁴

Conclusion

From its donor policy framework JICA wants to play a key role in contributing to sustainable development in developing countries, including Sub-Saharan Africa. But the statements made in its funding policy documents seem to “greenwash” JICA’s past and current projects in transport in Africa. Almost all projects are on road transport, with a focus on motorised individual transport while neglecting care for the majority of road users (public and non-motorised transport), road safety, institutional capacity and the long-term development of a low-carbon transport sector.

In the following four case study countries (Burundi, Malawi, Uganda and Zambia) one can see that JICA funding shows a focus on supply side measures. Financial aid is provided predominantly for road construction and road capacity enhancements, in the belief that more roads are the solution for increasing traffic volumes. No projects have sought to improve accessibility for the urban non-motorised population.

4.2.8 Examples from JICA

Burundi

In Burundi three projects are currently being funded by JICA in the infrastructure sector. One is assisting Burundi to improve its geographical maps through a training project, while another helped the national government to purchase 98 buses for the national transport network. The only urban project is 2.7 billion Yen grant signed in June 2010. It will finance “rehabilitation of roads and

³³ JICA Japan International Cooperation Agency and Guidelines for Environmental And Social Considerations, Tokyo 2008

³⁴ See reference above

infrastructure”³⁵, especially the new 3km highway for Bujumbura (400,000 inhabitants). According to JICA, “the project shall reduce the traffic jams in the rush hours by providing an alternative by pass to the western part of the city and close to the port.”³⁶

“Come next year and motorists in Bujumbura, the capital city of Burundi, shall be enjoying driving on a brand new paved road financed by the Japanese Government and a part of which has a beautiful view of Lake Tanganyika.”³⁷



Figure 18: “The new road being built in Bujumbura shall reduce congestion in the town drastically”

Source: <http://www.jica.go.jp/burundi/english/activities/activity03.html>

It is most likely, however, that this road capacity growth will increase the amount of traffic in the long-term, while the absence of traffic jams and congestion will be only temporary.³⁸

Zambia

JICA’s transportation activities in Zambia consist of one project. Its purpose is the “Improvement of the Living Environment in the Southern Area of Lusaka” by building the “Inner Ring Project”, an inner ring road which is supported by Grant Aid of 2,776 Million JY. The project period is June 2011 to January 2015.

See for updated information: <http://www.jica.go.jp/zambia/english/index.html>

³⁵ Source: <http://www.jica.go.jp/burundi/english/index.html>

³⁶ See reference above

³⁷ See reference above

³⁸ See for updated information: <http://www.jica.go.jp/burundi/english/index.html>

Malawi

JICA says the following with regard to transport infrastructure projects in Malawi:

“Malawi, just like many other developing countries, faces a lot of challenges in providing this kind of transport network. On the one hand, while a lot is being done by the Government of Malawi (GoM) to increase the length of paved roads network in the country, there are a lot bridges that need replacement either because they were constructed as single lane traffic bridges or were constructed with timber due to limited resources at the time of construction, or due to frequent wash away during rainy seasons.

On the other hand, due to increasing motor vehicle population in urban areas, most roads are not able to cope with traffic volumes and this result in slow movement of vehicles causing a lot of inconvenience for commuters and travellers. There is, therefore, an ever increasing need to improve the traffic volume capacity for urban roads. Noting that road is the most frequently used mode of transport in Malawi, JICA has over the years assisted the GoM in its efforts to improve its infrastructure in the areas of road reconstruction and bridge replacement. This approach is likely to continue for the foreseeable future with a possibility of extending further assistance to other modes of transport like air.”³⁹

JICA focuses on reconstruction to increase the capacity. Instead of more project in sustainable transport, JICA future plan is to extend the cooperation in air transport, which has no positive impact on the local and urban transport situation.

Uganda

JICA’s activities in Uganda are geared to improving traffic flow in the Greater Kampala Metropolitan Area (GKMA). In 2009 JICA offered a grant to develop a urban highway as well as flyovers to ease congestion in the city center. Pedestrians, cyclists and users of non-motorised vehicles shall be separated from road traffic through extensive construction of pedestrian bridges at the main intersections to assure traffic flow.

While the World Bank promoted the development of a bus rapid transit (BRT) system, JICA did not initially allocate funding for separate lanes for public transport. After intense discussions over the past three years it is now up to the country to decide on the measures it wishes to see implemented. A World Bank BRT feasibility study will be finalised in early 2013 and it is most likely that the Ministry will give the green light for implementation later the same year.

Thanks to the World Bank’s promotion of BRT and strong advocacy of national and international NGOs, JICA’s plans are unlikely to be realised.⁴⁰

4.2.9 KfW

KfW Entwicklungsbank (KfW) sees transport as the basis for a stable economy and indispensable for production and trade, and is therefore seen as a key poverty reduction instrument. KfW has a pro-

³⁹ See for more information: <http://www.jica.go.jp/malawi/english/activities/activity03.html>

⁴⁰ Own source

poor approach and published a discussion paper in 2003 that aimed “to show possible effects on poverty of transport sector projects.” In the paper KfW stated that “if appropriately designed, transport sector projects can make a considerable contribution to reducing poverty” (KfW 2003, p. 6).

To support its investment in transport systems, KfW also looks at the underlying sectoral conditions and helps to develop good governance. Political and structural reforms are often initiated and advanced through transport projects (see KfW Entwicklungsbank 2012). KfW activities are guided by the values of humanity, responsibility, market economy, sustainability and tolerance.

Ex-ante target group analyses are conducted in the preliminary stages of KfW-supported projects. The aim “is to ensure that the help reaches those who need it most as quickly and effectively as possible”. Ex-post impact analyses should show whether the impact of the completed project is sustainable. The analyses consist of an assessment of the “extent to which the improvement of the transport situation has affected people's daily lives and especially their work and income situations”.

KfW focuses on projects which help as many people as possible, especially women. In the transport sector KfW helps to overcome mobility barriers and fosters access to markets for the urban and rural poor. It is also involved in areas where too much traffic harms the environment and the population through air pollution and other damage.

In many projects KfW works together with a network of international donor institutions and technical cooperation agencies. Evaluations are performed by a separate evaluation department that reports directly to the Board of Managing Directors and is independent from those responsible for the planning and implementation of projects (KfW Entwicklungsbank 2012b). The evaluation is based on internal and external evaluation standards, but has no transport-specific criteria.

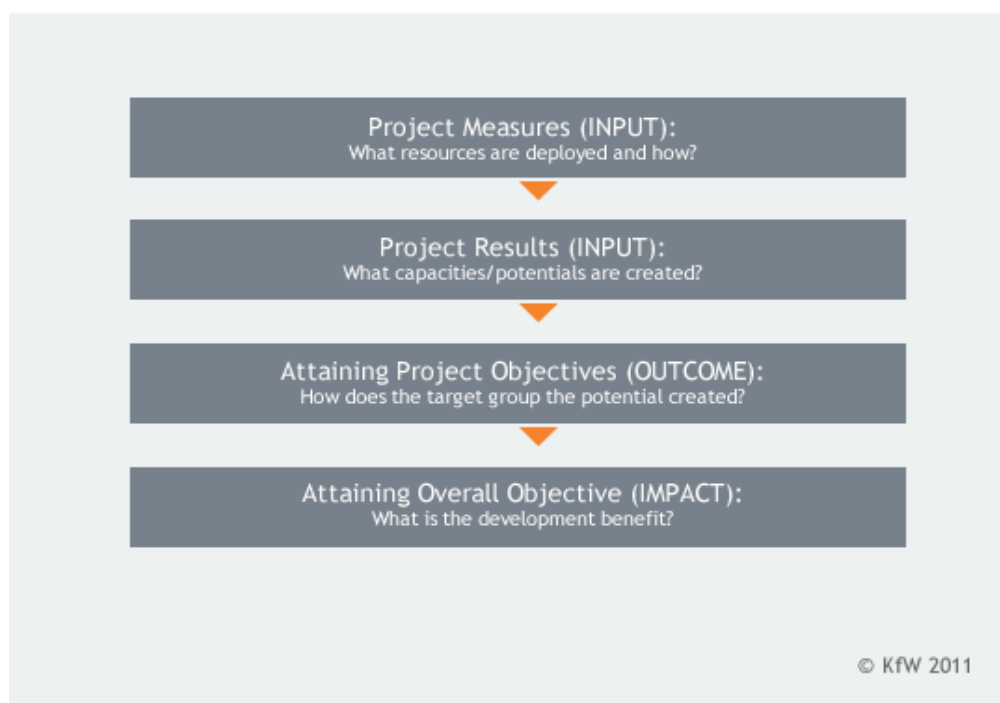


Figure 19: Impact chain for KfW-projects

Source: KfW http://www.kfw-entwicklungsbank.de/ebank/Bilder/Inhalt/Infografiken_Diagramme-540Pixel/Wirkungskette_en.gif

The size of the evaluation depends on the specific project (e.g. regarding data availability).

The key criteria for the success of a project are:

- Relevance;
- Effectiveness;
- Efficiency;
- Overarching Developmental Impact;
- Sustainability.⁴¹

The final evaluation of a project's success is summarised in six grades (see Figure 20).

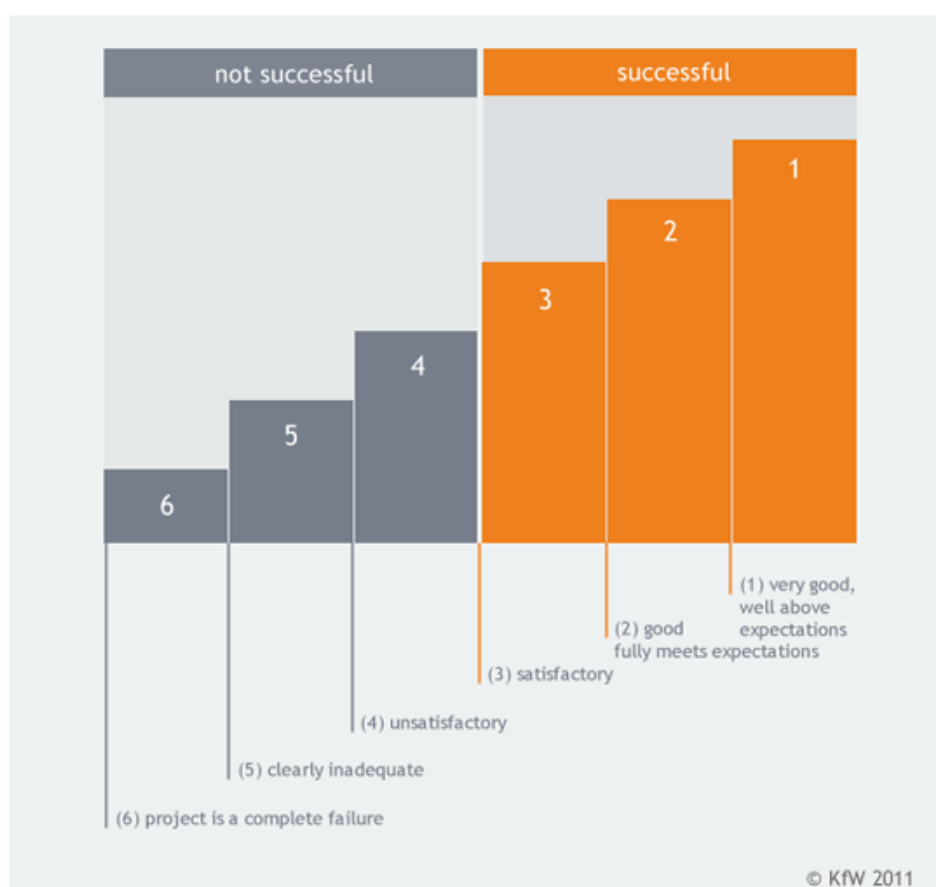


Figure 20: Rating scale for the final evaluation of a project's success

Source: http://www.KfW-entwicklungsbank.de/ebank/EN_Home/Evaluation/Ex_Post_Evaluation/The_Rating_Scale/index.jsp

⁴¹ In accordance with the DAC principles.

KfW has also started to undertake ‘thematic evaluations’ with the aim to “investigate complex impact chains, sectoral questions and also development concepts of KfW Entwicklungsbank more in-depth and with various so-called robust evaluation methods”. However, the first evaluations were not in the transport sector.

Nevertheless, a KfW transport sector discussion paper (KfW-Entwicklungsbank 2006) explains how sustainability can be measured in the final ex-post project evaluation. Different transport sectors are specified in greater detail (transport services, rail-based rapid transit, road networks, rural road networks, land).

- Many discussion points are economic in nature, including the socio-economic approach of pro-poor transport. Environmental sustainability is mentioned: it can be quantified with the help of indicators like noise reduction and CO₂ emission savings (in comparison to the status quo, without KfW assistance). Economic factors like time savings due to better accessibility are not mentioned.
- The KfW approach is a good starting point to include more sustainability factors in the evaluation criteria.

Namibia: Trans-Caprivi Highway III, Rehabilitation of Mururani Gate–Rundu Highway, Labour-intensive Road Construction II, Rehabilitation of Ondangwa – Oshikango Highway

In 2009 an ex-post evaluation was carried out for these projects, which were implemented between 1998 and 2004.

“The projects, Trans-Caprivi Highway III and Rehabilitation of Mururani Gate-Rundu Highway, comprised the rehabilitation of two sections measuring 117 km and 142 km of the Caprivi Corridor that connects Zambia with the Walvis Bay seaport in Namibia. They are part of the rehabilitation of the whole road corridor, which was largely carried out by German FC projects. Project costs amounted to EUR 23 million and EUR 13.9 million, of which 39% and 55% were respectively financed from German FC funds.” (KfW Entwicklungsbank 2009, p.1)

The projects were executed in part with labour-intensive work methods to create jobs for the local population. The evaluation shows good results from a macro-economic viewpoint, but sustainability is narrowly defined as “sustainability pertains here to the functional and financial sustainability of the road sector in general and the Roads Authorities in particular” (KfW Entwicklungsbank 2009, p.4). Environmental sustainability was not explicitly considered in the ex-post evaluation report.

4.2.10 Other Funders

4.2.10.1 Arab Partners

Arab and Islamic partners continue to play a significant role in financing infrastructure in Africa and almost doubled their commitments in 2010. The Arab Fund for Economic and Social Development and the Islamic Development Bank are the strongest Arabian supporters of African infrastructure with total commitments around US-\$ 1.1bn, and a share of total Arab donations of 33% each.⁴²

28 African countries benefitted from Arab support in 2010. There is a focus on the North Africa Region with 64% (US-\$ 2.1bn), followed by the East Africa Region with 19% (US-\$ 0.6bn) and the West Africa Region with 10% (US-\$ 0.3bn). Major recipient countries accounting for 75% of total commitments were: Morocco with 26% (US-\$ 865million), Egypt with 23% (US-\$ 752m), Sudan and Tunisia both with 13% (appr. US-\$ 420million).

About 48% of the total commitments went to projects in the energy sector, 42% to transport projects and 10% to the water sector. Examples of commitments to Sub Sahara African transport infrastructure by Members of the Arab Coordination Group in 2010:

Project: Khartoum new International airport / Country: Sudan

- Financier: Islamic Development Bank / Commitment: US-\$ 150.0m

Project: AIBD Dakar airport / Country: Senegal

- Financier: Islamic Development Bank / Commitment: US-\$ 97.5m

4.2.10.2 India

India's commitments for infrastructure projects in the region averaged US-\$ 500m a year from 2003 to 2007. More recently India has committed funding to twenty African infrastructure projects worth a total of US-\$ 2.6bn.⁴³

The India EXIM Bank has provided Lines of Credit (LOC) to finance food processing plants and equipment purchases. A LOC is basically a tied loan used for payment for goods and services from India. An exact amount of LOCs that went to infrastructure is difficult to assess.⁴⁴ In May 2011 India's prime minister, Manmohan Singh, promised railway lines, training schemes and cash for peacekeeping on top of the three-year credit line.⁴⁵

⁴² See ICA Members' Commitments Towards Regional Projects in 2010, 2011, p. 42

⁴³ See Foster, "The changing landscape of infrastructure finance in Africa. Non-traditional sources take on a growing role", 2008

⁴⁴ See The Financial Express, <http://www.financialexpress.com/news/exim-bank-may-extend-600m-loc-to-africa/438069/>, 2009

⁴⁵ See Katrina Manson, Financial Times, "India pledges second US-\$5bn loan to Africa"; <http://www.ft.com/indepth/africachina>, 2011

4.2.11 Infrastructure Consortium for Africa (ICA)

Launched at the G8 Summit in 2005, the Infrastructure Consortium for Africa (ICA, based in Tunis) encourages a joined-up approach to meet Africa's urgent infrastructure needs to support economic growth. It seeks public, private and public-private investment opportunities. The members of ICA are Canada, France, Germany, Italy, Japan, Russia, the United States, the United Kingdom and multilateral institutions such as the African Development Bank Group, European Commission, European Investment Bank, Development Bank of Southern Africa and the World Bank Group.

The goal of the ICA is to “increase the amount of finance going to sustainable regional and national infrastructure in Africa, to facilitate greater co-operation between members of the ICA and other sources of finance (such as China, India, Arab partners and the private sector), to highlight and help remove policy and technical blockages to progress and to increase knowledge of the infrastructure sector in Africa through monitoring and reporting on key trends and development.”⁴⁶



Figure 21: African highway presented on the ICA website

Source: Infrastructure Consortium for Africa, 2012

The infrastructure measures promoted by ICA are intended to connect capitals, ports, border crossings and secondary cities with a good quality road network. Secondly, funding should be used to ensure all-season road access to Africa's high-value agricultural land.

ICA Transport Sector Platform

- The ICA Transport Sector Platform was launched in 2010 and is led by the Japan International Cooperation Agency (JICA) and the European Investment Bank (EIB). Its objectives are to:
- Facilitate effective dialogue between African partners and development partners,
- Coordinate development partners to make their interventions even more effective,
- Deepen transport infrastructure knowledge sharing among African partners and development partners,

⁴⁶ Bruno Alves: “Infrastructure Investor Africa Intelligence Report, PEI 2011

- Support the ICA Knowledge Center.

Commitments to the transport sector accounted for the largest part of ICA commitments in 2009. In 2010 energy received the largest share of funding, while commitments to the transport sector remained stable at US-\$ 6.9bn.

ICA members' support for most of Sub-Saharan Africa decreased, being compensated by support for North Africa being doubled to US-\$ 2.8bn. Commitments to West Africa remained stable. For transport, 70% (US-\$ 4.87bn) of commitments came from multilateral donors in 2010. This share decreased from US-\$ 5.8bn in 2009, but was compensated by bilateral support (US-\$ 2.0bn).

Multilateral and bilateral commitments to the transport sector in the form of Official Development Assistance were equally balanced. The top multilateral financiers were the World Bank (US-\$ 2.13bn) and African Development Bank (US-\$ 1.45bn), while the strongest bilateral support in this sector came from France with US-\$ 1.04bn and Japan with US-\$ 0.71bn. Levels were similar to previous years.

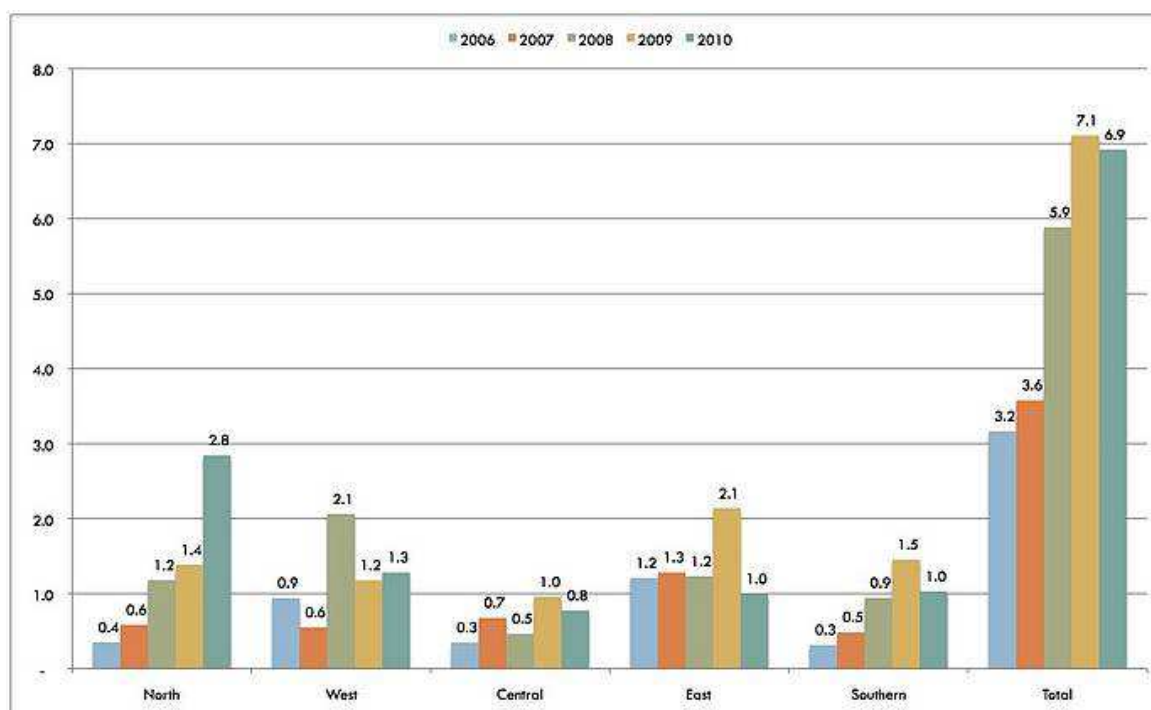


Figure 22: ICA Funding for Transport Sector by Region, 2006-2010, in billions US\$

Infrastructure Consortium for Africa (August 2011): Annual Report 2010 Financial Commitments and Disbursements for Infrastructure in Africa for 2010.

In transport more than 75% of overall spending is domestically sourced: \$13.2 billion of annual spending is financed by the African taxpayer and infrastructure user, and a further \$3 billion comes from external sources.⁴⁷

⁴⁷ Africa's Infrastructure: A Time For Transformation, Africa Development Forum 2012

According to the Public-Private Infrastructure Advisory Facility (PPIAF)⁴⁸, 42 countries in Sub-Saharan Africa implemented 246 infrastructure projects with private participation (PPP) between 2000 and 2010, with a focus on Nigeria and South Africa. The transport sector had a share of 12% (US-\$ 10.9bn), with the total of 60 projects in 20 countries.

Conclusion

From its mandate it is natural that ICA concentrates on infrastructure measures and the filling of funding gaps.

Considering all sectors (see Table 7), about 60 percent of the funding gap relates to power. The remainder relates to water and irrigation. ICA concludes that there is no significant funding gap for transport infrastructure. This is surprising, as many funding agencies still focus on this sub-sector, and the World Bank states that a substantial funding gap for road infrastructure remains (see Figure 8).

As donors and their partner countries have their own mechanisms to assess needs for building more transport infrastructure, there are many differing perspectives how to calculate the actual gap in funding for transport infrastructure.

Item	Electricity	ICT	Irrigation	Transport	WSS	Cross-sector gain	Total
Infrastructure spending needs	(40.8)	(9.0)	(3.4)	(18.2)	(21.9)	n.a.	(93.3)
Existing spending	11.6	9.0	0.9	16.2	7.6	n.a.	45.3
Efficiency gap	6.0	1.3	0.1	3.8	2.9	3.3	17.4
Gain from raising capital execution	0.2	0.0	0.1	1.3	0.2	n.a.	1.9
Gain from eliminating operational inefficiencies	3.4	1.2	—	2.4	1.0	n.a.	8.0
Gain from tariff cost recovery	2.3	—	—	0.1	1.8	n.a.	4.2
Potential for reallocation	n.a.	n.a.	n.a.	n.a.	n.a.	3.3	3.3
Funding gap	(23.2)	1.3	(2.4)	1.9	(11.4)	3.3	(30.6)

Table 7: Finding Resources – The Funding Gap (US-\$ billion p.a.)

Source: Foster (2008): “The changing landscape of infrastructure finance in Africa Nontraditional sources take on a growing role”.

⁴⁸ The Public-Private Infrastructure Advisory Facility (PPIAF) is a multi-donor trust fund that provides technical assistance to governments in developing countries. It facilitates an enabling environment conducive to private investment, including the necessary policies, laws, regulations, institutions, and government capacity. It also supports governments in the development of specific infrastructure projects with private sector participation. Transport is not a specific theme in PPIAF.

4.3 Conclusion

By summarising the findings of the desk-based research, the results of the questionnaire and the interviews, a clearer picture emerges of how most donor agencies currently invest in Africa's transport sector.

Looking at current Africa-related transport sector funding, infrastructure investment in roads is the main focus. Sustainable transport projects do not play a substantial role in most donor portfolios.

JICA, Chinese Development Assistance and the African Development Bank have not yet started to address sustainable transport in a comprehensive way. A lack of data (e.g. for road safety, modal split or emissions) does not appear to concern many donors.

The "Strategy 2020" of the Asian Development Bank could become a model for other donor agencies. The "Sustainability Toolkit for Transport Projects" and the "Flagship Report" of the World Bank are also progressive attempts to incorporate sustainability considerations in transport projects. As domestic funding will remain the driver of transport investments in Africa, there is a pressing need for sustainability criteria to be used when prioritising policies and projects.

The diverse policy directions of the different banks could be oriented more towards sustainability by fostering a transparent inter-agency debate on the issue of sustainable transport in Africa. Agencies as well as funding beneficiaries must increase their in-house capacities and knowledge bases with regard to sustainable transport challenges through training and collaboration. Involvement of the African countries themselves in knowledge and capacity building will be a key component to shift funding towards sustainable approaches in transport.

4.4 Latest Regional and International developments, Networks and Forums

In the context of this study it is important to name and briefly describe the latest regional and international developments with regard to sustainable transport.

- a) A number of intergovernmental sustainable transport forums with a focus on sustainable inland transport have been established or are currently being established. Some of these have a formal intergovernmental character while others are in the form of multi-stakeholder partnerships:
 - The regional intergovernmental Environmentally Sustainable Transport Forum (EST) in Asia, which has resulted in the Bangkok Declaration
 - With support from the Inter-American Development Bank, the United Nations Centre for Regional Development (UNCRD) initiated a similar intergovernmental forum in Latin America in 2011: this includes nine Latin American countries and resulted in the Bogotá Declaration (June 2011).⁴⁹

⁴⁹ See: <http://www.uncrdlac.org/fts/BogotaDeclaration.pdf>

- An intergovernmental environmentally sustainable transport forum for Africa is currently being developed and is expected to meet for the first time in 2013. The World Bank is taking the lead on the development of this Environmental Sustainable Transport Forum (EST), in coordination with United Nations Department of Economic and Social Affairs (UN/DESA)/UNCRD⁵⁰. It is actively incorporating the lessons learned in the Sub-Saharan Africa Transport Policy Programme, which is a World Bank coordinated partnership of 36 African countries, 8 regional economic communities, 3 African institutions, and many national and international development partners – all dedicated to ensuring that the transport sector fosters Africa's poverty reduction, pro-poor growth and regional integration.
- b) Other sustainable transport related partnerships that include a specific sustainable transport dimension include:
- The Friends of Fossil Fuel Subsidies Reform is a group of non-G20 countries that was formed in June 2010 to support G20 and APEC leaders' commitments to phase out inefficient fossil fuel subsidies;⁵¹
 - Global Decade of Action on Road Safety, which has now evolved into an official UN campaign;⁵²
 - 50 by 50 Campaign, aimed at improving fleet fuel efficiency by 50 per cent by 2050, initiated by the Federation Internationale de l'Automobile (FIA Foundation), International Energy Agency, the International Council for Clean Transport, the International Transport Forum and the United Nations Environment Programme;⁵³
 - Doubling the share of public transport by 2025, initiated by the public transport sector and coordinated by the International Association of Public Transport (UITP);⁵⁴
 - Partnership on Clean Fuels and Vehicles, which aims to eliminate lead and promote lower sulphur fuels and clean vehicles;⁵⁵ and
 - Bridging the Gap Initiative The initiative "Bridging the Gap: Pathways for Transport in a Post 2012 process" is comprised of German International Cooperation, Transport Research Laboratory, Veolia/Transdev, Institute for Transportation and Development

⁵⁰ The United Nations Centre for Regional Development (UNCRD) is administered by the Division for Sustainable Development (DSD) of the United Nations Department of Economic and Social Affairs (UN/DESA).

⁵¹ See: <http://www.mfat.govt.nz/fffsr/tabs/friends.php>. Current members include Costa Rica, Denmark, Ethiopia, Finland, New Zealand, Norway, Sweden and Switzerland.

⁵² See: <http://www.who.int/roadsafety/en/>

⁵³ See: www.50by50campaign.org

⁵⁴ See: <http://www.ptx2uitp.org/content/ptx2-project>

⁵⁵ See: www.unep.org/transport/pcfvr

Policy and International Association of Public Transport. The initiative was formed at the Conference of Parties (COP)14 in Poznan 2008 to encourage international recognition that land transport should play a more important role in addressing climate change in the post 2012 agreement.⁵⁶

c) The MDB 175 Billion US-\$ Commitment

The “175 US-\$ billion voluntary commitment on sustainable transport” by 8 MDBs, made at Rio+20 and led by the Asian Development Bank (ADB), could be a ground-breaking instrument to adopt and implement sustainable transport solutions in Africa⁵⁷. This voluntary commitment on policy, financing, knowledge management and capacity building by 15 organisations aims to assist national and local governments to develop, adopt and implement sustainable transport policies, programmes and projects.

Although it is not new money, the pledge of the MDBs to invest 175 Billion US-\$ of its approved budget for sustainable transport in their partner countries in the next 10 years could mean a breakthrough in transport financing in ODA.

However it is still an open question as to how the donor community can best assess how to spend this amount.

d) Key UN Processes and Actors with a focus on the Post 2015 Development Agenda

The UN has acknowledged the central role of transport towards sustainable development. In the Rio+20 outcome document it states:

*“We note that transportation and mobility are central to sustainable development. Sustainable transportation can enhance economic growth and improve accessibility. Sustainable transport achieves better integration of the economy while respecting the environment. We recognise the importance of the efficient movement of people and goods, and access to environmentally sound, safe and affordable transportation as a means to improve social equity, health, resilience of cities, urban-rural linkages and productivity of rural areas. In this regard, we take into account road safety as part of our efforts to achieve sustainable development”.*⁵⁸

At the UN level two interconnected processes are driving discussions on the future of sustainable development, both of which are related to the Secretary General (SG) action plan on sustainable transport.

⁵⁶ See: www.transport2012.org

⁵⁷ See: <http://www.adb.org/sites/default/files/news/statement-commitment-sustainable-transport.pdf>

⁵⁸ See: the Rio+20 outcome document: “The Future We Want” (para.132)

- The first is the follow-up to the Rio+20 workshop: the UN General Assembly Open Working Group (OWG) on sustainable development goals will work further on sustainable development goals, an integral part of the post-2015 development framework. There is potential for transport to be included in a new SDG from 2015. This would help to mainstream the importance of sustainable transport on a global scale.
- The second is a UN System Task Team established by the SG in September 2011: in consultation with all stakeholders, this supports UN system-wide preparations for the post-2015 UN development agenda.

The High-level Panel of Eminent Persons on the Post-2015 Development Agenda, set up by the SG to provide recommendations on possible components of a post-2015 UN development agenda, as well as to contribute to the overall political process, is an important part of the SG's wider efforts to develop an effective consensus on the post 2015 Development Agenda.

e) The SLoCaT partnership

At the global level and with a focus on both developed and developing countries, the Sustainable Low Carbon Transport Partnership (SLoCaT) works to improve knowledge on sustainable low carbon transport and helps to develop better policies as well as catalyze their implementation. About 60 members from among the UN community, MDBs, NGOs, academic institutions and the business sector are now playing a lead role in promoting the integration of sustainable transport in the post-Rio process.⁵⁹

In this context a global report on sustainable transport has been suggested by SLoCaT to synthesise different perceptions of sustainable transport. A comprehensive report on the current sustainable transport debate could "bridge the gaps between the multiple dimensions of sustainable transport: climate change, energy security, safety, air quality, poverty alleviation, green jobs, etc." It could also help to discourage the growth of unsustainable transport.

The Asian Development Bank has already indicated that it might take the lead on funding such a study. There is need however to get 'buy-in' from other development banks to ensure its recommendations are taken up more widely.

⁵⁹ See: www.slocat.net. For the efforts of the SLoCaT Partnership related to Rio+20, see <http://www.slocat.net/rio-plus-20>.

Conclusion

The next few years will offer great opportunities to integrate sustainable transport into global policy processes on sustainable development.

Sustainable transport is now seen as an essential component of sustainable development in Africa and other developing regions. In the next few decades it is mainly up to donor agencies how the broader sustainable development goal of poverty alleviation can be achieved without prioritising the expansion of road infrastructure. A continuation of the unsustainable growth trajectory of the transport sector will threaten environmental sustainability and social development goals. The assessment and measurement of how the “US-\$ 175 Billion MDB Commitment” will be spent is a golden opportunity to ensure the funding is spent on sustainable transport measures.

5 Recommendations for Multi Development Banks and National Donor Agencies

The recommendations listed below are based on the findings in this study and are targeted at Multilateral Development Banks and national donor agencies. This chapter is followed by specific recommendations for the German national donor community.

1) All transport funding should be based on transport-related sustainability criteria as soon as possible.

Donors need to apply sustainability criteria for transport in their funding policies: to make substantial progress in implementing sustainable transport in developing countries, all transport funding should be based on transport-related sustainability criteria.

Although most financing institutions follow some criteria or name important goals in their funding policies (like environmental protection or participative approaches), a commitment towards a comprehensive set of criteria is missing in most donor agencies. A future sustainable transport development agenda could be based on the key principles given in the DAC Guidelines. To identify a specific globally acceptable definition for sustainable transport, an initial sets of indicators is already available (described in Chapter 3). All funding agencies could immediately decide which of these are best suited to their funding programmes and policies – and put them into practice as soon as possible.

2) Funding principles to reflect concept of Accessibility

Developing countries can only avoid the planning mistakes made in the north if accessibility becomes a core element of funding: fully based on the principles of sustainable development, transport investment would no longer be considered merely as a tool to foster economic development. It would also reflect the social and the environmental dimensions of sustainable development and recognise – in a more balanced way – the function of transport to improve access to opportunities by the entire population. This is also reflected in the definition on sustainable transport on page 26.

Moreover, improved accessibility for the majority of the population has a crucial role in poverty reduction, which will remain a key global problem in the coming decades.

All decisions on grants and loans for transport projects should therefore reflect the concept of accessibility rather than considering mobility an end in itself. This means decisions should assess the extent to which the envisaged investments will improve the level of access to goods and services in the partner country or city or region. In this way transport funding will support poverty reduction.

3) Paradigm shift in Funding: from infrastructure to integrated sustainable mobility concepts – application of the Avoid-Shift-Improve approach

Experts agree that there is no single policy, measure or tool that can make transport more sustainable. A combination of tools is needed for a successful strategy – and that such a combined package of measures should be tailor-made and adaptable to local circumstances. The current focus on investing in transport infrastructure leads to greater road transport volumes. Instead, integrated and affordable mobility concepts for the entire population are needed, requiring a more holistic way of thinking in transport policy and planning. The ‘Avoid-Shift-Improve’ (ASI) approach is the most promising policy framework for donor agencies to guide the expansion of transport services in Africa and other developing regions.

Efforts are required in all three areas. If a donor agency decides to focus on only one or two ASI measures, it should assess the impact of this on the overall efficacy of the grant or loan.

SUMPs

In many cases of urban transport project funding it would make sense to make it mandatory for cities and communities to develop ‘Sustainable Urban Mobility Plans’ (SUMPs). These are “strategic plans designed to satisfy the mobility needs of people and businesses in cities and their surroundings for a better quality of life. They build on existing planning practices and take due consideration of integration, participation, and evaluation principles.”⁶⁰

The policies and measures defined in a SUMP should balance economic development, social equity and environmental quality. It should build local capacity and cover all modes and forms of transport in the entire urban agglomeration, including public and private, passenger and freight transport, as well as motorised and non-motorised modes.

The European Commission's Action Plan on Urban Mobility calls for an increase in the take-up of Sustainable Urban Mobility Plans in Europe. It could be helpful to apply such principles in developing countries in Africa and beyond.⁶¹

According to the EU, SUMPs have an “integrated approach: of practices and policies between policy sectors (e.g. transport, land-use, environment, economic development, social inclusion, gender equity, health, safety), between authority levels (e.g. district, municipality, agglomeration, region, nation, EU), and between neighbouring authorities (inter-municipal, inter-regional, transnational, etc.)”⁶²

⁶⁰ See: GUIDELINES – Developing and Implementing a Sustainable Urban Mobility Plan, page 5

⁶¹ See: <http://www.mobilityplans.eu/index.php?ID1=8&id=8>

⁶² See: GUIDELINES – Developing and Implementing a Sustainable Urban Mobility Plan, page 6

In the African context a SUMP would seek to reduce the shift to individual motorised transport (private cars), while increasing the share of mass public transport and preserving high levels of non-motorised transport.

4) Adaptation and the scaling up of proven sustainable transport solutions

There are several easy entry points to implement sustainable transport quickly: much can be learned from cities and regions that have developed sustainable transport solutions in the past 2 decades.⁶³

There is no time left to waste: the main focus of the African transport sector in the coming years needs to be on rapidly scaling up proven sustainable transport solutions in both passenger and freight.

Donors should examine closely which of these solutions are most appropriate in their African partner countries (what works and what can be replicated in the regional or local context?).

Moreover successful solutions should be adapted to expedite their rapid implementation, which should be monitored as part of an implementation system. Knowledge transfer, capacity building and the fostering of political will are also vital requirements for long term success.

⁶³ **Some Best Transport Practise are evaluated in the following publications:**

“Achieving sustainability in urban transport in developing and transition countries” by Bräuninger/Schulze/Leschus (Hamburg Institute of International Economics) & Perschon/Hertel/Field/Foletta European Institute for Sustainable Transport (EURIST), Hamburg, on behalf of the Federal Environment Agency (Germany) 2012:
<http://eurist.info/app/download/5781081304/Achieving+sustainability+in+urban+transport+in+developing+and+transition+countries.pdf>

“Sustainable Mobility Policy Paper”:
http://eurist.info/app/download/5781081396/SEF_Paper_English.pdf

“SSATP Second Development Plan & Progress Report”, January to June 2012:
<http://siteresources.worldbank.org/EXTAFRSubSAHTRA/Resources/1513929-1345840638268/Progress-Report-January-June2012.pdf>

“Background information Reya Vaya BRT Johannesburg”: <http://www.sutp.org/en-projects/brt-jb>
 and the “The BRT Standard 2013”: <http://www.itdp.org/library/publications/the-brt-standard-2013>

Various Case Studies are mentioned here: <http://www.sutp.org/en-dn-cs>

5) MDBs to cooperate with the UN on “Voluntary Commitment on Sustainable Transport” and making a transport-specific sustainable development goal (SDG)

Many global players and influential politicians are heading in the right direction: the action plan of the UN *Secretary-General* on sustainable transport might help the implementation of the voluntary commitments for sustainable transport made at the UN Rio+20 Conference, including the US-\$175 billion commitment of the MDBs⁶⁴.

It is a very positive indication that MDBs under the leadership of the ADB have also resolved that MDB spending shall fit into the sustainable development agenda and be linked to sustainability criteria in transport.

It is also recommended to consider the SLoCaT proposal to develop an initial results framework for sustainable transport-related voluntary commitments, which would help to streamline these activities and make them more visible and understandable by the larger transport and development community.

There is a good chance that transport will be the subject of a new sustainable development goal (SDG) from 2015. MDBs could lobby and argue for sustainable transport as a SDG, which would help to raise significant awareness of sustainable transport and facilitate the uptake of new mobility concepts in many developing countries.

6) Awareness and capacity building in donor agencies and their partner countries

Education lays the foundations for policy changes in transport funding: Thanks to the regional EST-forums, regional agreements such as the Bangkok- or Bogota-Declarations, and organisations engaged in the SLoCaT network, the sustainable transport issue now is much higher on the global agenda. Some donor agencies (like the ADB) are active partners in these forums and networks and recently have developed excellent approaches to raise awareness further.

This is only the beginning: awareness and knowledge must be increased in all donor agencies. Moreover it is also important to change the perception of how a good transport policy should look, i.e. an integrated approach with less emphasis on road construction. Knowledge exchange between the donor agencies and their partner countries is thus extremely important for this process. Discussions on good transport governance should reflect the latest developments at the regional and global (UN) levels.

Intra-agency capacity building on sustainable transport should be started immediately, including work towards agreements on criteria and indicators, monitoring and evaluation processes, and how this could be communicated to partner countries.

As multilateral and bilateral aid usually depends on the demand expressed by partner countries and their national transport ministries, there must be a fundamental acceptance to follow this new path.

⁶⁴ See <http://sustainabledevelopment.un.org/index.php?section=1004&type=12&page=view&nr=391&menu=809&str=&46=on> and <http://www.slocat.net/rio20-VC>

7) Transparent inter-agency debate

Partners in the South need to be involved from the beginning: greater coordination between the banks would be a great step forward and help all banks to convince their African partner countries to review their current transport policies to reflect sustainability criteria.

For this results must be made transparent and communicated openly to the international expert audience in the transport sector to help develop common agreements on criteria, indicators and viable evaluation procedures. New approaches like those of ADB (Strategy 2020) or World Bank (Toolkit Sustainable Transport; Flagship Report) should become part of this.

Increased transparency and communication would also support the aim to make transport a global sustainable development goal from 2015.

8) Transport data: support for the establishment of minimum datasets, standards and guidelines

The data issue is heavily neglected: Several studies show that data availability and quality in the majority of developing countries do not allow an objective assessment of transport project impacts. This deficiency must be rectified if transport projects and policies are to meet their objectives.

Donors should support the establishment and adoption of national standards and guidelines for transport data and their assessment in partner countries. They should meet international standards where possible.

As most countries lack the financial resources to gather comprehensive data, it is recommended that data surveys should be funded as part of projects where data is lacking, obsolete or otherwise unreliable.

9) Transport funding and climate change

Climate protection is important in developing countries: 80% of additional GHG emissions in the next decades will be from non-OECD countries. The need to develop societies and economies in Africa that are less dependent on private cars and road freight is crucial. Recognition of the low-carbon transport sector in donor funding will contribute to the environmental sustainability of projects and programmes.

As recent climate finance mechanisms were not applicable for the vast majority of transport projects, the donor community should identify new instruments in order to include transport in climate finance schemes.

In this context it would also make sense to monitor developments on transport NAMAs (National Mitigation Actions).

6 Recommendations for German Development Assistance

The nine recommendations listed above can also be useful for bilateral cooperation in German Official Development Assistance. However, there are some specific circumstances to consider when identifying Germany's future role in development cooperation in the transport sector of developing countries:

- 1) Firstly, Germany is internationally regarded as one of the leading countries in developing new solutions to transport problems. There are good practices in developing energy efficient vehicles, integrated public transport systems, improving road safety, promoting cycling and sustainable land use planning like car-free residential areas. German cities and regions also offer a great variety of good examples in freight and logistics.
- 2) Most German cities still have high levels of individual car use (in mode share and transport volume), low cycling shares and limited public transport share in medium-sized and smaller cities⁶⁵. The country's emissions from road-based freight traffic are still increasing⁶⁶. Due to the commitment of the German government to climate protection (Kyoto Protocol) and the goal of reducing CO₂ from transport by 60% by 2050 (goal of the 2011 EU White Paper on Transport), new strategies in German cities and regions are needed. Ever increasing freight and passenger transport volumes are a heavy burden on infrastructure and national budgets. Germany can therefore also learn from good practice in the global South.

It would be helpful to evaluate new options both in Germany and in partner countries. Support for tailor-made knowledge exchange with partner countries could become one of the new additional pillars of German ODA. However, this would need to include other German institutions like BMVBS or BMU⁶⁷.

RECOMMENDATION 1:

Support partner countries to take up German transport best practice but also transfer practice from "South to North"

German bilateral aid should actively support partner countries to study and take up best practice in transport as showcased in a number of German cities and regions. Such knowledge can be used to identify and adjust technologies or sustainable transport planning approaches in a quicker way. In order to make successful examples from countries of the South available in Germany it would be of additional value to facilitate an exchange from South to North, involving other German institutions.

⁶⁵ http://www.mobilitaet-in-deutschland.de/pdf/VortragMiD_VDV_Marketingkongress2010.pdf, page 6 and 7

⁶⁶ <http://www.bmvbs.de/cae/servlet/contentblob/30886/publicationFile/10534/gueterverkehrs-prognose-2050.pdf>, page 9

⁶⁷ Bundesministerium für Verkehr, Bauwesen, Städtebau / Bundesministerium für Umwelt

The International Climate Initiative (ICI) complements Germany's existing development assistance by supporting climate change mitigation and adaptation in transition and developing countries. ICI indicates that Germany has a strong commitment to climate change and supports countries with capacity building and policy transfer projects on energy efficiency and renewable energy. However, only a small fraction of the annual € 120 m budget is spent on transport, while the share of GHG emissions from the transport sector continues to grow.

It would be helpful to adjust the share of transport projects in the ICI budget to the growing relevance of transport in climate change.

RECOMMENDATION 2:**Adjust the share of transport projects in The International Climate Initiative (ICI)**

German ICI should start a debate to adjust the share of transport projects in the ICI budget to reflect transport's contribution to climate change. This might require an increase in the overall ICI budget.

Germany has a leading role in the UN CSD process and a deep insight in the current international debate. Agencies in Germany that deal with transport should remain interested in these developments and actively follow and influence the global debate on sustainable transport, especially at the UN level. Germany has the potential to play an active role in the Post UN Rio Process and the inclusion of transport in the post 2015 framework. The institution best suited to follow this up should be identified.

One recent development is that some Ambassadors to the UN are in the process of establishing a group of "Friends of Transport" (under leadership of the Netherlands) willing to support a Sustainable Development Goal (SDG) in the Post Rio 2015 Framework for Sustainable Development. The group will probably commence its work in the first half of 2013. While a list of members is not yet published, it would be desirable for the German UN Ambassador to join this group. This would support efforts to put transport high on the global (UN) agenda.

RECOMMENDATION 3:**Actively follow up current UN process and join the "Friends of transport" group of UN Ambassadors**

Germany has the potential to play an active role in the Post Rio Process. Among other activities to support a future SDG on transport, German development agencies should encourage the German UN Ambassador to join the "Friends of transport" group of UN Ambassadors.

In the last few years, German research institutes (Universities like TU Munich, TU Dresden, TU Hamburg-Harburg, and other organisations such as the Wuppertal Institute) have invested in research on transport at the national, regional (EU) and global level. Moreover NGOs like VCD, BUND, Robin Wood, Ecologic Institute, German Watch and EURIST) have extended their activities in the international transport sector.

Many of them are partners in European and international networks on sustainable passenger and freight transport, but their activities have not been systematically coordinated (in the German context this has been attempted by the SoliMob-Initiative – see www.solimob.de).

This knowledge is of high value for the German ODA and should be made available by establishing a German platform that gives these actors a well structured and moderated possibility to exchange and reflect research findings and thus influence German ODA's future role in transport funding. A "German Sustainable Transport Expertise Network for Developing & Transition Countries", would help to facilitate sustainable transport development in Germany's partner countries, building on official German ODA through GIZ/BMZ and KfW.

RECOMMENDATION 4:**Establish a German platform to reflect and discuss Germany's role in transport funding**

A network for all the relevant German actors, researchers, institutes and NGOs could influence sustainable transport funding principles and approaches in German ODA. The feasibility of such a platform should be investigated.

7 Annex

7.1 Bibliography

African Development Bank, et al. (2012): Joint Statement to the Rio+20 United Nations Conference on Sustainable Development - Commitment to Sustainable Transport, <http://www.adb.org/sites/default/files/news/statement-commitment-sustainable-transport.pdf>.

Binsted, Anne; Bongardt, Daniel; Dalkmann, Holger and Sakamoto Ko (2010): Accessing Climate Finance for Sustainable Transport: A practical overview. Eschborn. http://www.transport2012.org/bridging/ressources/files/1/956,TD05_FinGuid.pdf

Bongardt, Daniel; Schmid, Dominik; Huizenga, Cornie (2011): Assessing Sustainability in Transport, 2ndDraft Report February21st, Eschborn

Briceño-Garmendia, Cecilia and Foster, Vivien (2010): Roads: Broadening the Agenda. In: Africa's Infrastructure. A Time for Transformation, Washington

CAD Fund (2012): Investment Targets, http://www.cadfund.com/en/Article_List.aspx?columnID=183, accessed in 2012/8/2.

CDB (2011): Annual Report Year 2011, <http://www.cdb.com.cn/Web/Column.asp?ColumnId=5>, accessed in 2012/8/2.

CDB (2012): Report "Special Loan for the Development of African SMEs", <http://www.cdb.com.cn/WebSite/cdb/UpFile/File2987.pdf>, accessed in 2012/8/2.

Duncan, Tyrrell (2012): Developing a Sustainable Transport Appraisal Framework: Initial Work at ADB. Presentation held at "Assessing Sustainable Transport in the context of Green Economy" Rio de Janeiro.

GFEI (2012): 50by50campaign, www.50by50campaign.org, accessed in 2012/8/2.

GIZ / SloCaT (2011): Sustainable Transport Evaluation : Developing Practical Tools for Evaluation in the Context of the CSD Process, http://www.un.org/esa/dsd/resources/res_pdfs/csd-19/Background%20Paper%2010%20-%20transport.pdf, accessed in 2012/8/2.

GTZ (2010): Financing Sustainable Urban Transport, Sustainable transport – A sourcebook for policy-makers in developing cities, Module 1f, Eschborn

Hara, Jennifer; Weygandt, Nicole; and James Machulak (2008): Financing transportation projects in Africa. In: EMEA finance April/May 2008, p.85-87, www.emeafinance.com.

HWWI & EURIST (2011): Achieving sustainability in urban transport in developing and transition countries. UBA Texte: 02/2012. <http://www.umweltdaten.de/publikationen/fpdf-l/4239.pdf>

International Transport Forum / OECD (2008): Annual Summit: Transport and Energy - The Challenge of Climate Change, <http://www.internationaltransportforum.org/Topics/forum2008.html>, accessed in 2012/8/4.

International Transport Forum / OECD (2011): Annual Summit: Transport for Society, <http://www.internationaltransportforum.org/2011/index.html>, accessed in 2012/8/4.

IPPC: Fourth Assessment Report: Climate Change 2007. Available at <http://www.ipcc.ch/pdf/assessment-report/ar4/wg3/ar4-wg3-ts.pdf>. Accessed October 8th, 2012, p.29.

ITDP – Institute for Transport & Development Policy: Key Characteristics of sustainable and unsustainable transport, New York 2010

JICA (2010): Guidelines for Environmental And Social Considerations, Tokyo.

JICA (2012): Countries & Regions, Africa, Burundi, <http://www.jica.go.jp/burundi/english/index.html>, accessed in 2012/10/11.

JICA (2012): Countries & Regions, Africa, Zambia, <http://www.jica.go.jp/zambia/english/index.html>, accessed in 2012/10/11.

JICA (2012): Countries & Regions, Africa, Malawi, Activities in Malawi, Infrastructure Development, <http://www.jica.go.jp/malawi/english/activities/activity03.html>, accessed in 2012/10/11.

KfW (2003): Transport infrastructure. Investing in Transport Infrastructure. A Contribution to Fight Poverty. Discussion Paper No. 30. http://www.KfW-entwicklungsbank.de/ebank/DE_Home/I/Download_Center/PDF-Dokumente_Diskussionsbeitraege/AMD30_eng.pdf

KfW Entwicklungsbank (2006): Transportsektor. Zur Berücksichtigung der Nachhaltigkeit durch die KfW in Schlussprüfungen von Transportprojekten. http://www.KfW-entwicklungsbank.de/ebank/DE_Home/I/Download_Center/PDF-Dokumente_Diskussionsbeitraege/AMD_47.pdf

KfW Entwicklungsbank (2009): Namibia: Trans-Caprivi Highway III, Rehabilitation of Mururani Gate–Rundu Highway, Labour-intensive Road Construction II, Rehabilitation of Ondangwa – Oshikango Highway. Ex-post Evaluation Report. http://www.KfW-entwicklungsbank.de/ebank/EN_Home/Evaluation/Ex-post_evaluation_reports/PDF-Dokumente_LP/Namibia_Verkehr_E.pdf.

KfW Entwicklungsbank (2012a): Transport - No Development without Transport. http://www.KfW-Entwicklungsbank.de/ebank/EN_Home/Sectors/Transport/index.jsp, accessed in 2012/10/3.

KfW Entwicklungsbank (2012b): Evaluation. http://www.KfW-entwicklungsbank.de/ebank/EN_Home/Evaluation/index.jsp, accessed in 2012/10/3.

Kumar Ajay, Barrett F. (2008): Stuck in traffic: Urban transport in Africa. Washington, <http://siteresources.worldbank.org/EXTAFRUBSAHTRA/Resources/Stuck-in-Traffic.pdf>, accessed in 2012/8/3.

Litman, Todd (2011): Well Measured: Developing Indicators for Comprehensive and Sustainable Transport Planning, Victoria Transport Policy Institute (www.vtpi.org); at www.vtpi.org/wellmeas.pdf, accessed in 2012/8/2.

Ministry of Transport (2012): Transport Indicators, <http://www.transport.govt.nz/ourwork/TMIF/Pages/default.aspx>, accessed in 2012/8/2.

Ministry of Foreign Affairs and Trade (2012): Who are the Friends? <http://www.mfat.govt.nz/ffsr/tabs/friends.php>, accessed in 2012/8/2.

OECD (1986): Glossary of Terms Used in Evaluation, in *Methods and Procedures in Aid Evaluation: A Compendium of Donor Practice and Experience*, Organisation for Economic Co-operation and Development

OECD (1991): DAC Principles for Evaluation of Development Assistance - Development Assistance Committee, <http://www.oecd.org/development/evaluationofdevelopmentprogrammes/2755284.pdf>, accessed in 2012/8/2.

OECD (2000): Glossary of Evaluation and Results Based Management (RBM) Terms, <http://www.oecd.org/dac/evaluationofdevelopmentprogrammes/dcdndep/31950400.pdf>, accessed in 2012/8/4.

Replogle, Michael (2012): Presentation to Rio+20 Learning Event: "Assessing Sustainable Transport in the Context of a Green Economy"

SLOCAT (2012): Rio+20 UN Conference on Sustainable Development, <http://www.slocat.net/rio-plus-20>, accessed in 2012/8/2.

SLOCAT (2012): Global Transport Intelligence Initiative, www.slocat.net/key-slocat-prog/466, accessed in 2012/8/2.

SLOCAT (2012): Rio+20: a Breakthrough for Sustainable Transport, http://www.slocat.net/sites/default/files/slocatfiles/slocat_letter_uncsd_focal_points_sustainable_transport_13_june.pdf, accessed in 2012/8/2.

SLOCAT (2012): Rio+20 Voluntary Commitments on Sustainable Transport, <http://www.slocat.net/rio20-VC>, accessed in 2012/8/2.

STI (2008): Sustainable Transportation Indicators, Sustainable Transportation Indicators Subcommittee (ADD40 [1]), Transportation Research Board (www.trb.org), www.vtpi.org/sustain/sti.pdf, accessed in 2012/8/2.

The Earth Charter Initiative (2000): The Earth Charter, <http://www.earthcharterinaction.org/content/pages/What-is-the-Earth-Charter%3F.html>, accessed in 2012/8/2.

UITP (2011): PTx2Project, <http://www.ptx2uitp.org/content/ptx2-project>, accessed in 2012/8/2.

UN (2012): UN Press release: UN secretary-general appoints high-level panel on post-2015 development agenda, http://www.un.org/millenniumgoals/Press%20release_post-2015panel.pdf.

UN (2012): UN System task team on the post-2015 UN development agenda – sustainable urbanization thematic think piece UN Habitat, http://www.un.org/millenniumgoals/pdf/Think%20Pieces/18_urbanization.pdf, accessed in 2012/8/3.

UN (2012): Commitments on sustainable development, <http://sustainabledevelopment.un.org/index.php?section=1004&type=12&page=view&nr=391&menu=809&str=&46=on>, accessed in 2012/8/3.

UNCRD (2010): Bangkok Declaration for 2020 – Sustainable Transport Goals for 2010-2020, Fifth Regional EST Forum, http://www.uncrd.or.jp/env/5th-regional-est-forum/doc/bangkok_declaration.pdf, accessed in 2012/8/2.

UNCSD (2012): The future we want, <http://www.uncsd2012.org/content/documents/727The%20Future%20We%20Want%2019%20June%201230pm.pdf>, accessed in 2012/8/2.

UNCRD (2011): Bogota declaration - sustainable transport objectives, <http://www.uncrdlac.org/fts/BogotaDeclaration.pdf>, accessed in 2012/8/4.

UNECE (2012): The pep - making the link - transport choices for our health, environment and prosperity, <http://www.unece.org/thepep/en/welcome.html>, accessed in 2012/8/2.

UNEP (2012): Partnership for Clean Fuels and Vehicles, www.unep.org/transport/pcfvr, accessed in 2012/8/2.

UNEP (November 2012): The Emissions Gap Report 2012. UNEP Synthesis Report. Washington November 2012.

UNEP 2012. The Emissions Gap Report 2012. United Nations Environment Programme (UNEP), Nairobi. <http://www.unep.org/publications/ebooks/emissionsgap2012/>

UNFCCC (2012): ADP update: History in the making - The inaugural session of the ADP http://unfccc.int/press/news_room/newsletter/items/6844.php, accessed in 2012/8/2.

Watkins, Kevin (2012): Safe and Sustainable Roads: An Agenda for Rio +20. 2012. Available at http://www.roadssafetyfund.org/Documents/Rio20/rio+20_report_lr.pdf . Accessed October 1st, 2012. p. 5

WCED (1986): Our Common Future, Chapter 2: Towards Sustainable Development, <http://www.un-documents.net/ocf-02.htm>, accessed 2012/05/28.

WHO (2009): Global status report on road safety -Time for action, http://whqlibdoc.who.int/publications/2009/9789241563840_eng.pdf, accessed 2012/8/4.

WHO (2012) World Health Organisation: One year on, global commitment to the Decade of Action for Road Safety 2011-2020 intensifies, <http://www.who.int/roadsafety/en/>, accessed 2012/05/27.

World Bank (2002): Cities on the move. A World Bank urban transport strategy review, http://www.worldbank.org/external/default/WDSPContentServer/WDSP/IB/2002/10/12/000094946_02100204022071/Rendered/PDF/multi0page.pdf, accessed in 2012/8/4.

World Bank (2012): World Bank: Turning the right corner – Ensuring Development through a low carbon transport sector, www.worldbank.org/INTTRANSPORT/Resources/336291-1227561426235/Turning-the-Right-Corner.pdf, accessed in 2012/8/4.

World Bank: Sustainability Toolkit for Transport Projects, Washington 2011: <http://siteresources.worldbank.org/INTTRANSPORT/Resources/336291-1239112757744/5997693-1294344242332/Final-Toolkit.pdf>

7.2 Information about the Partnership on Sustainable, Low Carbon Transport, SLoCaT

SLoCaT (the Partnership on Sustainable, Low Carbon Transport) builds knowledge on sustainable low carbon transport, helps develop better policies and catalyses their implementation. Currently 68 organisations (see: www.slocat.net/?q=members/by-name) have joined the Partnership, including UN organisations, multilateral development banks, technical cooperation agencies, NGOs, research organisations and other organisations.

SLoCaT is a voluntary multi-stakeholder initiative that contributes to the implementation of Agenda 21, Rio+5 and the Johannesburg Plan of Implementation (JPOI). The Partnership is documented on the UN Partnership website:

<http://webapps01.un.org/dsd/partnerships/public/partnerships/2728.html>.

The thematic scope of the Partnership is on land transport in developing countries and includes freight and passenger transport. Both motorised and non-motorised transport is included. The Partnership will initially focus on Asia, Latin America and Africa.

The Partnership's overarching goal is to mobilise global support to reduce the growth of GHG emissions generated by land transport in developing countries, through the promotion of sustainable, low carbon transport. The partnership has four specific objectives:

- The integration of sustainable, low carbon transport in climate negotiations, as well as national and local climate policies and programmes;
- The integration of climate considerations in regional, national and local transport policies;
- To mainstream sustainable, low carbon transport in the strategies and operations of international development organisations;
- To contribute to sustainable development and the millennium development goals, especially in the improvement of access to goods and services by lower income groups.

More information: www.slocat.net

Source: Adapted from: <http://www.slocat.net/scope-and-objectives>, 27.03.2012.

7.3 Table of Acting Institutions with Fields of Operation and Countries

Actor	Field of Operation	Countries
Multilateral Development Banks		
African Development Bank	Roads: development of National Networks; Regional Links; Road safety Rail Ports, Maritime Infrastructure and Waterways Air Transport	All African Countries
European Investment Bank	Financing of infrastructure projects Project preparatory technical assistance	All over Africa
Islamic Development Bank	Financing the development of major roads, railways, ports and air services	North and Sub Saharan Africa
United Nations	Development of transport policies, strategies and programmes organise multi-stakeholder Regional Implementation Meetings (RIMs) and provide regional inputs into CSD work	All African Countries
World Bank	Financing and management of infrastructure networks Market- oriented public- private partnership Fundamental restructuring of transport industry Direct investment in rehabilitating infrastructure (Roads; rural & urban transport; Air transport; Railways; Ports; regional transport)	Sub Saharan Africa

Actor	Field of Operation	Countries
National Development Banks		
Agence Francaise de Developpement	Financing and assisting large transportation projects	South Africa, Angola, Benin, Botswana, Burkina Faso, Burundi, Cameroon, Cape Verde, Central African Republic, Chad, Comoros, Congo, Côte d'Ivoire, Democratic Republic of the Congo, Djibouti, Ethiopia, Gabon, Ghana, Guinea, Guinea Bissau, Kenya, Madagascar, Mali, Mauritius, Mauritania, Mozambique, Namibia, Nigeria, Niger, Rwanda, Sao Tome and Principe, Senegal, Sudan, South Sudan, Tanzania, Togo, Uganda, Zambia, Zimbabwe
Brazilian Development Bank	Direct investment in rural and urban infrastructure-, port and airport, urban transport projects	Angola, Ghana, Mozambique, South Africa
China Development Bank	Fund investment and advisory service through China- Africa Development Fund in transport projects	All over Africa
JICA	Economic Infrastructure Development (Supporting and implementing programmes/ project formulation; Corridor Development)	Benin, Botswana, Burkina, Cameroon, Cote d'Ivoire, Congo, Djibouti, Ethiopia, Gabon, Ghana, Kenya, Liberia, Madagascar, Malawi, Mozambique, Namibia, Niger, Nigeria, Rwanda, Senegal, Sierra Leone, South Africa, South Sudan, Tanzania, Uganda, Zambia, Zimbabwe
Industrial Development Corporation of South Africa	Providing project funds to transport entrepreneurs	Rural regions, townships and underdeveloped provinces in South Africa
Kenya National Bank	Asset financing for Transportation and construction Equipment, Machine tools	Regions within Kenya

Actor	Field of Operation	Countries
Kreditanstalt für Wiederaufbau (KfW)	Funding construction of roads, bridges, airports, railways Funding transport & urban design programmes	Cameroon, Mauritius, Rwanda, Kenya, Congo, Tunisia, Mauritania, Benin, Côte d'Ivoire, Zambia, Togo, Liberia, Nigeria, Burkina Faso, Senegal, South Africa, Burundi, Namibia, Mali, Uganda, Tanzania, Mozambique, Ghana, Egypt, Ethiopia (2010)
Swedish International Development Cooperation Agency	Human resource development and institutional development Road safety Investments, rehabilitation and maintenance of roads, railways and bridges Development of alternative road construction methods (appropriate technology) Reconstruction in areas affected by conflicts and disasters Urban transport Sector reforms International training programmes	Botswana, Burkina Faso, Democratic Republic of Congo, Ethiopia, Kenya, Liberia, Mali, Mozambique, Namibia, Rwanda, Sierra Leone, Somalia, South Africa, Sudan, Tanzania, Uganda, Zambia
UK Department for International Development	Financing road building	Angola, Burundi, Cameroon, Congo (Democratic Republic of), Eritrea, Ethiopia, Kenya, Lesotho, Malawi, Mozambique, Somalia, Sudan, Tanzania, Uganda, Zambia, Zimbabwe, Ghana, Liberia, Niger, Nigeria, Rwanda, Sierra Leone, Gambia

Source: Own table with information from the website of the institution.

7.4 List of Contacted Persons

ACET (Africa-based Volvo center) / SSATP	Mr. Fleischhacker (KfW)	Rainer Koblo (KfW)
Africa Climate Policy Centre (Joint programme of UNECA, AfDB, UNEP)	Lew Fulton, International Energy Agency	Andreas Kopp, World Bank
African Union	Mr. Gier (KfW)	Paul Kwamusi
Julien Allaire, CODATU ☒	Roger Gorham (SSATP)	Mark Mayor (EU Commission)
Peerke de Bakker UNHABITAT	Henrik Gudmundsson, Transport Institute, Danish Technical University	Marianne van der Schuren (Uni Cape Town)
Udo Becker (TUD)	Tom Hamlin, UN-DESA	Dieter Schwela (SEI)
Sara Candiracci (UNEP)	Dario Hidalgo, EMBARQ/World Resource Institute	Lloyd Wright, Asian Development Bank
Francois Cuenot, International Energy Agency	Gail Jennings, Mobility South Africa	Yang Jiang, China Sustainable Transportation Centre
Michael Cramer (MEP)	Rob de Jong UNEP	
Tony Dufays/Eric Kouakou/Mohammed Mezghany (UATP /UITP)	Dorian Kivumbi (EU Africa)	

7.5 Information about MDBs, Focused in this Study

African Development Bank

The African Development Bank (AfDB) Group was founded in 1964. The institution aims at assisting African countries – individually and collectively - in their efforts to achieve sustainable economic development and social progress.

More information: <http://www.afdb.org/en/about-us/>

Asian Development Bank

Founded in 1966. ADB is committed to helping developing member countries evolve into thriving, modern economies that are well integrated with each other and the world. The main devices for assistance are loans, grants, policy dialogue, technical assistance and equity investments.

More information: <http://www.adb.org/about/overview>

Brazilian Development Bank

The Brazilian Development Bank was founded in 1952. The Bank offers several financial support mechanisms to Brazilian companies of all sizes as well as public administration entities, enabling investments in all economic sectors. In any supported undertaking, from the analysis phase up to the monitoring, the BNDES emphasises three factors it considers strategic: innovation, local development and socio-environmental development.

More information:

http://www.bndes.gov.br/SiteBNDES/bndes/bndes_en/Institucional/The_BNDES/

China Development Bank

China Development Bank, founded in March 1994 has been a major player in long-term financing for key projects and supportive construction in infrastructure, and basic and pillar industries.

More information: <http://www.cdb.com.cn/english/Column.asp?ColumnId=96>

Islamic Development Bank

The Islamic Development Bank was founded in 1973. The purpose of the Bank is to foster the economic development and social progress of member countries and Muslim communities individually as well as jointly in accordance with the principles of Shari'ah i.e., Islamic Law.

More information: <http://www.isdb.org/irj/portal/anonymous?NavigationTarget=navurl://24de0d5f10da906da85e96ac356b7af0>

Japanese Development Bank

The Development Bank of Japan was founded in 2008, it succeeds the Japan Development Bank. Community development, environmental conservation and sustainable societies, and creation of

technological and economic vitality are some of their efforts.
More information: <http://www.dbj.jp/en/co/info/privatization.html>

Kenya Development Bank

The Kenya Development Bank has been founded in 1963. It concentrated its investment in a wide range of sectors spanning from the agriculture, manufacturing to construction, communication and tourism encompassing all major investment sectors in Kenya.

More information:

<http://www.devbank.com/about.php?subcat=2&title=Historical%20%20Background>

KfW Entwicklungsbank

KfW Entwicklungsbank is the leading development bank in Germany and an integral part of KfW Bankengruppe. The bank cooperates with partners all over the world. The main client is the Federal Ministry for Economic Cooperation and Development (BMZ) and other German federal ministries, as well as the European Commission and governments of other countries. More information:

http://www.KfW-entwicklungsbank.de/ebank/EN_Home/About_Us/Our_bank/index.jsp

SIDA Sweden

The Swedish International Development Cooperation Agency. Sida seeks to create partnerships with companies, popular movements, organisations, universities, and government agencies for its development projects.

More information: <http://www.sida.se/English/About-us/>

UK Department for International Development

The DFID was founded in 1997 it made fighting world poverty its top priority. Among its key objectives, DFID set out to make global development a national priority and promote it to audiences in the UK and overseas, while fostering a new 'aid relationship' with governments of developing countries.

More information: <http://www.dfid.gov.uk/About-us/History/>

World Bank

Established in 1944, the World Bank is headquartered in Washington, D.C. The World Bank provides low-interest loans, interest-free credits, and grants to developing countries. These support a wide array of investments in such areas as education, health, public administration, infrastructure, financial and private sector development, agriculture, and environmental and natural resource management.

More information: <http://www.worldbank.org/>

7.6 The 14 Questions of the Questionnaire

- 1) In which Sub Saharan African countries are you funding transport related projects?
- 2) Can you list or provide a document, which lists approved transport loan projects for the period 2007 – 2011?
- 3) Can you document or provide a list of technical cooperation (grant) projects in the transport sector for the period 2007-2011? If so, please explain.
- 4) What are your policies for transport lending or assistance?
- 5) Please provide us with an overview of your standard evaluation procedure for transport lending?
- 6) Please indicate any specific requirements to assess sustainability in your lending or assistance to the transport sector?
- 7) Do you have any further overall comment or helpful documents?
- 8) Please provide us with 2-3 representative country strategies guiding your investments in the transport sector..
- 9) If available please provide us with sector roadmaps conducted for the transport sector, either at country or at (sub-) regional level.
- 10) Please indicate whether and how quantitative targets guide transport lending.
- 11) Please explain how transport lending is recorded by sub-sector or by key activities.
- 12) Has any evaluation study been conducted of transport sector at the regional level or for key countries in Sub-Saharan Africa? If so, please explain.
- 13) Is your organisation currently involved in developing additional guidelines to support the mainstreaming of sustainability in the design and/or evaluation of transport projects? If so, please explain.
- 14) Has your organisation defined sustainability in the context of transport lending? If so, please explain.

7.7 Answers to the Questionnaire

Personal views from following Institution:	Answers, comments and sources for documents			
	ADB	AFRICAN DEVELOPMENT BANK (AfDB)	DFID	VIVA (NGO)
1.) In which Sub Saharan African countries are you funding transport related projects?	N/A	The regional members of the AfDB include all African countries and all of there are eligible for financing in all sectors including transport. www.afdb.org	DFID makes all data public: please search our database. http://projects.dfid.gov.uk/	Kenya, South Africa, and Uganda
2.) Can you list or provide a document, which lists approved transport loan projects for the period 2007 – 2011?	Yes but for Asia and Pacific http://www.adb.org/sectors/transport/main http://www.adb.org/sectors/transport/projects	The list maybe accessed through the website www.afdb.org by selecting projects and then “transport” http://www.afdb.org/en/projects-and-operations/project-portfolio/#c10693	Yes (see 1.)	Viva is an NGO and thus does not have loan projects. All projects are grant-based technical assistance.
3.) Can you document or provide a list of technical cooperation (grant) projects in the transport sector for the period 2007-2011?	As above	These are included as part of the above mentioned website, and usually are attached to projects. AfDB usually offers the technical cooperation or Technical Assistance (grants) as part of a bigger loan project. There are also cases where grants are provided for stand alone operations such as studies. http://www.afdb.org/en/projects-and-operations/project-portfolio/#c10693	Yes (eg. enter “procurement of services” into our project database)	Cape Town BRT and NMT, Johannesburg BRT, Ekurhuleni BRT, Pretoria BRT, Kampala pedestrianization and BRT, Nairobi Mass Rapid Transit and parking policy
4.) What are your	ADB Sustainable Transport Initiative	The project has to be identified within the framework of the respective “Country Strategy	DFID does not have sector policies.	Our policy is to select initiatives that

Personal views from following Institution:	Answers, comments and sources for documents			
	ADB	AFRICAN DEVELOPMENT BANK (AfDB)	DFID	VIVA (NGO)
policies for transport lending or assistance?	Operational Plan provides the guidance of sector focus http://www.adb.org/documents/sustainable-transport-initiative-operational-plan?ref=sectors/transport/publications?ref=sectors/transport/publications	Paper CSP” for the specific country, or the “Regional Integration Strategy Paper RISP” in the case of regional projects. The projects are included within these papers as a result of a dialogue with the respective Governments. The CSP may sometimes identifies a sub-sector as opposed to specific projects. The dialogue with the Government is held within the frameworks of the Government’s development plans and the Bank’s strategies. Each identified project will then have to satisfy various criteria assessed through an appraisal exercise, that include amongst other, technical, economic, social , and sustainability aspects. http://www.afdb.org/fileadmin/uploads/afdb/Documents/Policy-Documents/18-%20EN-%20Transport-Policy.pdf	Spending decisions are made on the basis of Country Operational Plans (all public).	are sufficiently high quality to serve as demonstrations for the region.
5.) Please provide us with an overview of your standard evaluation procedure for transport lending?	Current ADB evaluation uses typical transport time and cost evaluation for economic analysis. We are currently developing a more comprehensive (economic/social/environmental)	The Bank’s website provides details on the project cycle of the Bank with some introduction to evaluation and appraisal. On a more specific note, however, transport projects in general are evaluated for various aspects, as highlighted above. For example these include; project developmental impact, soundness of technical design, economic and/ or financial viability, social impact, environmental impact, sustainability arrangement, gender mainstreaming, climate change impact, governance and institutional	Our standard procedure for evaluating projects is outlined on our website http://www.dfid.gov.uk/About-us/Our-organisation/blue-book/Blue-Book-index-A-to-C/B2-Design-Appraisal-	We do not provide lending.

Personal views from following Institution:	Answers, comments and sources for documents			
	ADB	AFRICAN DEVELOPMENT BANK (AfDB)	DFID	VIVA (NGO)
	assessment methodology. This will be ready towards the end of 2012.	arrangements. http://www.afdb.org/en/projects-and-operations/project-cycle/ http://www.afdb.org/en/projects-and-operations/project-cycle/project-appraisal/	Approval-of-Business-Case/	
6.) Please indicate any specific requirements to assess sustainability in your lending or assistance to the transport sector?	Knowledge products in this area tend to focus on the issues and to some extent theoretical aspects. Very few if any provide practical tools that can be used to assess and evaluate sustainability of transport comprehensively.	Ensuring project sustainability is a key criteria for approval of projects finance by the Bank, and this includes financial, economic, and technical sustainability. While no specific indicators are applied, each project document has to demonstrate with evidence that the specific project will be sustainable. This is usually demonstrated through detailed analysis, which differ from one type of project to another. For example analysis of airports sustainability differ considerably from those of road projects.	All spending is subject to a Climate and Environment categorisation and impact assessment. DFID has outlined it's work on the environment in a new position paper: http://www.dfid.gov.uk/Documents/publications1/supporting-healthy-environment.pdf	Project must represent a best practice example that will have further replication potential.
7.) Do you have any further overall comment or helpful documents?	Updated country strategies are aligned with STI-OP. Other work of interest would be UNDESA EST forum and country EST strategies.	None at this stage		None.

Personal views from following Institution:	Answers, comments and sources for documents			
	ADB	AFRICAN DEVELOPMENT BANK (AfDB)	DFID	VIVA (NGO)
8.) Please provide us with 2-3 representative country strategies guiding your investments in the transport sector.	Some examples provided at country level http://www.adb.org/documents/vietnam-socialist-republic-transport-sector-assessment-strategy-and-road-map http://www.adb.org/documents/thailand-transport-sector-assessment-strategy-and-road-map	http://www.afdb.org/en/search/?tx_mnogosearch_pi1%5Bq%5D=country+strategy+paper	Eg. DFID DRC Or DFID regional work in Africa www.dfid.gov.uk/Documents/publications1/op/drc-2011.pdf www.dfid.gov.uk/Documents/publications1/op/afr-reg-2011.pdf	We do not develop full country strategies as we focus on the local level.
9.) If available please provide us with sector roadmaps conducted for the transport sector, either at country or at (sub-) regional level.	The evaluation methodology will have both quantitative and qualitative assessment.	There is no such document as sector roadmap, but there is a transport policy that will be updated soon http://www.afdb.org/fileadmin/uploads/afdb/Documents/Policy-Documents/18-%20EN-%20Transport-Policy.pdf	We have not conducted our own sector road maps	None.
10.) Please indicate whether and how quantitative targets guide transport	STI-OP has sub-sector targets, although these are not necessarily key activities. For	As per the Appraisal exercise, a project must have a logical framework with clear date specific and measurable indicators, at the impact level, outcome and output levels. Each road project for example have to indicate how long each road is	DFID does not have global quantitative targets for transport projects.	None.

Personal views from following Institution:	Answers, comments and sources for documents			
	ADB	AFRICAN DEVELOPMENT BANK (AfDB)	DFID	VIVA (NGO)
lending.	example climate change mitigation can be good and bad in certain sub-sectors, it is not simply black and white for sustainable transport as it might be in other sectors such as energy. This might explain why transport has been slow to address or demonstrate its role in sustainable development.	and to what standard, and specification. It should also indicate how the outcome (e.g. reduction in transport costs, increased mobility, etc etc) of this project will be measured and when and similarly for the impact (e.g. increasing trade between city X and city Y by X% by the year xx). These indicators vary widely by nature of project and its objectives. Sustainability is also addressed within.		
11.) Please explain how transport lending is recorded by sub-sector or by key activities.	N/A	Question not clear	All spending is allocated to DAC sector code (all sectors and sub sectors are listed under the DFID projects site http://projects.dfid.gov.uk/	None.
12.) Has any evaluation study been conducted of transport sector at the regional level or for key	Yes and will define in detail in upcoming report	Yes the Bank's evaluation office has conducted an evaluation on regional projects, which is expected to be launched soon. Not bilaterally, but several initiatives with others (corridor	Not bilaterally, but several initiatives with others (corridor studies, PIDA, etc.	We have conducted evaluation studies of our major city projects. Thus, we

Personal views from following Institution:	Answers, comments and sources for documents			
	ADB	AFRICAN DEVELOPMENT BANK (AfDB)	DFID	VIVA (NGO)
countries in Sub-Saharan Africa?		studies, PIDA, etc.	www.eastafricancorridors.org/cds http://www.afdb.org/en/news-and-events/programme-for-infrastructure-development-in-africa-pida/	have technical evaluations of the Cape Town and Johannesburg BRT systems.
13.) Is your organisation currently involved in developing additional guidelines to support the mainstreaming of sustainability in the design and/or evaluation of transport projects?		The Bank is currently developing its Long Term Strategy which will capture various aspects of Green Growth and sustainability amongst other aspects. No	No	Yes, we are producing the BRT Planning Guide.
14.) Has your organisation defined sustainability in the context of transport lending?		http://www.afdb.org/fileadmin/uploads/afdb/Documents/Policy-Documents/18-%20EN-%20Transport-Policy.pdf	No, DFID has not issued a definition of sustainable transport	We define sustainability through the Avoid-Shift-Improve framework.

7.8 Development Assistance Committee: Principles for Evaluation of Development Assistance (DAC Criteria) in short

Criteria	Content	Considerations
Relevance	The extent to which the aid activity is suited to the priorities and policies of the target group, recipient and donor.	To what extent are the objectives of the programme still valid? Are the activities and outputs of the programme consistent with the overall goal and the attainment of its objectives? Are the activities and outputs of the programme consistent with the intended impacts and effects?
Effectiveness	The extent to which an aid activity attains its objectives.	To what extent were the objectives achieved / are likely to be achieved? What were the major factors influencing the achievement or non-achievement of the objectives?
Efficiency	The extent the aid uses the least costly resources possible in order to achieve the desired results.	Were activities cost-efficient? Were objectives achieved on time? Was the programme or project implemented in the most efficient way compared to alternatives?
Impact	Describes the positive and negative changes produced by a development intervention, directly or indirectly, intended or unintended. It involves the main impacts and effects resulting from the activity on the local social, economic, environmental and other development indicators	What has happened as a result of the programme or project? What real difference has the activity made to the beneficiaries? How many people have been affected?
Sustainability	Describes whether the benefits of an activity are likely to continue after donor funding has been withdrawn. Projects need to be environmentally as well as financially sustainable.	To what extent did the benefits of a programme or project continue after donor funding ceased? What were the major factors which influenced the achievement or non-achievement of sustainability of the programme or project?

7.9 Website: www.financing-sustainable-transport.info

The Website of the „Sustainability Criteria as a Basis for Financing and Evaluation of Transport Projects in Africa” study will be an integrated part of the European Institute for Sustainable Transport (EURIST) website. It will be accessible under the main domain name www.financing-sustainable-transport.info. It provides background information about the Study Partners (SLoCaT, UBA and EURIST) and focus donor institutions and the study results. In addition, links of transport related institutions and studies will be given. A download section will provide relevant publications on:

- Sustainable transport definition
- Indicators on sustainable transport
- Data on transport finance in developing countries/ Sub Saharan Africa
- Other relevant information (SLoCaT updates + reports, project reports, evaluation documents and the latest information about UN level developments)

The Website will be online from January 2013 on and will be structured as followed:

Index Tab	Content/ Subpage
Introduction	Project Partners Introducing UBA EURIST SLoCaT
	Goal and objectives of the Study
	Current Situation in financing transport in Africa
	Study approach & Methodology
Donor Institutions	Information about donor institutions, focused in this study:
	MDB's (Multi Development Banks): AFDB, ADB, World Bank, IBRD, EBRD, IDB
	Bilateral Development Institutions: KfW, DfiD, AFD, JICA, Chinese Development Bank Interactive map with donor agencies and banks.
Sustainable Development Criteria	Key characteristics of transport
Current transport infrastructure funding	Information on "How sustainable are current transport infrastructure funding policies?"
Recommendations	How to link transport funding in Africa closer to sustainability criteria in transport?
Conclusion	Conclusion of the study
Download Section	Sustainable transport definition
	Indicators on sustainable transport
	Data on transport finance in developing countries/ Sub Saharan Africa
	Other relevant information (project reports, evaluation documents)
Additional Links	Links of transport related institutions, of the three project partners, the donor institutions and further studies
Contact	Contact of UBA, EURIST and SLoCaT

EURIST intends to update the website twice a year from internal resources.

7.10 Partners of the “Commitment to Sustainable Transport”


**UNITED NATIONS
SUSTAINABLE DEVELOPMENT KNOWLEDGE PLATFORM**

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Commitment to Sustainable Transport

Partner(s)

African Development Bank, Asian Development Bank, CAF - Development Bank of Latin America, European Bank for Reconstruction and Development, European Investment Bank, Inter-American Development Bank, Islamic Development Bank, World Bank

Description/achievement of initiative

Over the coming decade we will build on our long history of supporting transport, and continue to play a leading role in providing financial support for transport in developing countries. These investments will help to develop more sustainable transport: transport that is accessible, affordable, efficient, financially sustainable, environment friendly, and safe.

The financial support provided by our organizations will help develop and implement sound policies for sustainable transport, build capacity of institutions, finance projects and disseminate best practices.

Implementation methodologies

We will achieve our commitment in cooperation with recipient countries, development partners, donor countries and civil society.

We will work with other development partners and civil society organizations to leverage each others' strengths, and through multi-stakeholder partnerships including the Partnership on Sustainable Low Carbon Transport (SLoCaT).

We expect that particular aspects of the sustainable transport agenda - such as improving access and mobility for the poor, reducing transport-related GHG emissions, and improving road safety - will justify the establishing of special financing facilities by donor countries and, potentially, sovereign wealth funds and the private sector. Based on our specific comparative advantages and mandates within our respective countries of operations, our institutions stand ready to assist in the creation and administering of such special facilities.

To monitor our progress towards meeting our commitment, we will introduce annual reporting on our sustainable transport related lending and to developing common arrangements for this purpose. Together with 66 agencies that form the Partnership on Sustainable, Low Carbon Transport (SLoCaT), we have initiated work on definitions, setting targets and choosing indicators for sustainable transport/mobility and assistance provided to support sustainable transport/mobility, with a view to finalizing these within 2012.

INFORMATION

- Submitted by: *Asian Development Bank (ADB)*
- Topic: Sustainable transport
- Keywords: sustainable transport, transport, multilateral development banks, financing
- Location: All world regions, in particular developing countries
- Date of completion: 2022-06-20
- [Click for more information](#)

DELIVERABLES & RESOURCES

- 4 deliverable(s)
- 3 resource(s)

ACTION NETWORK

- This voluntary initiative came from Rio+20 Conference website





Sustainable Development in Action

SD IN ACTION
HIGHLIGHT OF
SUSTAINABLE DEVELOPMENT

High level
political forum
on Sustainable
Development

Partnership
on Sustainable
Low Carbon
Transport

DELIVERABLES	
Deliverable	Date
Knowledge and expertise on sustainable transport is generated, disseminated and widely used in more than 150 recipient countries served by our MDBs collectively to support the development of sustainable transport	2022
Institutional capacity to support sustainable transport is built in more than 150 recipient countries served by our MDBs collectively	2022
Policies supportive of sustainable transport are developed and implemented in more than 150 recipient countries served by our MDBs collectively	2022
Financial resources of \$175 billion mobilized for transport	2022

RESOURCES	
Type	Details
Financing (in USD)	\$175,000,000,000
Staff / Technical expertise	Approximately 500 staff from participating Multilateral Development Banks to provide knowledge and technical expertise in support of sustainable transport.
Other, please specify	Participating Multilateral Development Banks to provide more than [billion] for transport during the next 10 years.

Source: <http://sustainabledevelopment.un.org/index.php?page=view&type=1006&menu=1348&nr=290>

7.11 International Development Finance Club (IDFC)

IDFC – The International Development Finance Club

- A global network of leading national and sub-regional development banks -

List of member institutions

Institution	Country / Region
Agence Française de Développement (AFD)	France
Banco Estado (BE)	Chile
Bancoldex S.A.	Colombia
Banco Nacional de Desenvolvimento Econômico e Social (BNDES)	Brazil
Black Sea Trade and Development Bank (BSTDB)	Black Sea Region (Location: Greece)
Caisse de Dépôt et de Gestion (CDG)	Morocco
Central American Bank for Economic Integration (BCIE/CABEI)	Central America Region (Location: Honduras)
China Development Bank (CDB)	China
Cooperación Andina de Fomento (CAF)	Central and Latin America Region (Location: Venezuela)
Croatian Bank for Reconstruction and Development (HBOR)	Croatia
Development Bank of Southern Africa (DBSA)	South Africa
Indonesia Exim Bank	Indonesia
Industrial Development Bank of Turkey (TSKB)	Turkey
Japan International Cooperation Agency (JICA)	Japan
KfW Bankengruppe	Germany
Korea Finance Corporation (KoFC)	South Korea
Nacional Financiera (NAFIN)	Mexico
Small Industries Development Bank of India (SIDBI)	India
Vnesheconombank (VEB)	Russia

Source: [http://www.kfW.de/KfW/de/KfW-](http://www.kfW.de/KfW/de/KfW-Konzern/Medien/Aktuelles/Pressearchiv/PDF/2011/082_IDFC_members_-_short_version.pdf)

[Konzern/Medien/Aktuelles/Pressearchiv/PDF/2011/082_IDFC_members_-_short_version.pdf](http://www.kfW.de/KfW/de/KfW-Konzern/Medien/Aktuelles/Pressearchiv/PDF/2011/082_IDFC_members_-_short_version.pdf)