Africa Transport Policies Performance Review

The Need for More Robust Transport Policies

Justin Runji

SSATP
Africa Transport Policy Program

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Africa Transport
Policy Program

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Sound policies lead to safe, reliable, and cost-effective transport, freeing people to lift themselves out of poverty and helping countries to compete internationally.

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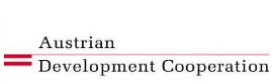

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Foreword

This policy performance review inviting African countries to develop more robust policies in the transport sector is timely. It reflects on the achievements of past transport policies as a first step toward engaging in a future in which Africa will change rapidly and its economy will grow quickly. Transport policies need to evolve alongside these changes, ensuring that transport is a strong contributor to economic development. In particular, although the focus in the past has been on reducing the infrastructure gap, a greater goal of transport policies would be to address the accessibility gap where infrastructure and services join forces to help economies grow. The impact on transport users stems from how the infrastructure is used and not from the infrastructure itself. For this, good policies are essential because they lead to both good infrastructure and good use of the infrastructure.

One important lesson emerging from this review of transport policy performance in Africa is that it should be an ongoing exercise, not only for the efficiency of the policies but more important for good governance. Road funds illustrate this lesson. The Africa Transport Policy Program – SSATP – was launched in 1987 to promote the concept of road commercialization, leading to the creation of second-generation road funds and road agencies. Twenty-seven years later, it appears that some road institutions are gradually shifting towards operating in a routine mode that resembles that of the bureaucracies they were supposed to replace. The initiative undertaken by road agencies in the member countries of the Association of Southern African National Road Agencies – ASANRA – to self-assess their performance can certainly be commended but its focus on road asset management is perhaps too limited; it might have been more beneficial to focus on governance, transparency and accountability. Similarly, the landlord port model had positive results in terms of the performance of terminals operated by the private sector but little progress has been made in sector governance and how ports contribute to the economies of their countries beyond the benefits they generate for themselves. Railway concessions have also not succeeded in transforming the transport sector. Traffic is stagnant or even lower since concessions were signed and there has been little recapitalization from private investors.

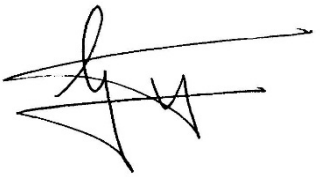
Building the capacity to formulate policies, oversee their implementation and then monitor progress is a critical requirement for taking this additional step in sector management for better performance. Little attention was paid to this in the past. Road funds and road agencies were created but because of the resultant relocation of skills and competence, ministries were left unable to provide the policy leadership. Similarly, railways were concessioned to the private sector but ministries were left with the staff of the former public railway company who were given the responsibility of regulating the concessions when their only experience was in operating a railway in a public environment. It is therefore imperative that ministries must endeavor to attract and retain transport professionals with the necessary abilities and experience in policy development.

Central to good governance is monitoring & evaluation. Leading without data is bad politics. Any commitment to change for the better is worthless without a baseline, a target and a process for monitoring the actual results. Many policies are adopted without measurable targets making it impossible to evaluate their impact. This is a major weakness in areas such as road safety and air pollution, which affect the health and life of African populations. For the road safety, the baseline is weak and for air pollution, it is mostly nonexistent. The situation is similar for other indicators in the sector that do not have a baseline and are not monitored.

This document is also important for SSATP as it turns a critical page in its history. The Program began in 1987 as the Road Maintenance Initiative. Until recently, it had focused mainly on road sector management, including rural transport, but it has now expanded its domain to other sectors such as ports and railways and importantly to the pro-poor & pro-growth aspects of transport strategies as well as the transport aspects of poverty reduction strategies. With the exception of rural transport, the review takes stock of where Africa stands in these areas. This is somewhat testimony on the contribution of the Program to policy development in the transport sector in Africa. Overall, this contribution has been positive and what remains to be done is part of the ongoing process of policy development as noted earlier.

Personally, I believe that strong policies are at the core of economic development. I embraced the principles of the Road Maintenance Initiative when I joined the World Bank in 1990, working with many countries to apply these principles and continuing with other policies recommended by the SSATP such as in the railway sector. The SSATP is now ready to strike out for new horizons in the areas of inte-

gration, connectivity & cohesion; urban mobility & accessibility or road safety. I am excited to be part of this adventure and I am looking forward to reading a similar assessment of policy performance in 2018 at the end of the SSATP Third Development Plan.



Jean-Noel Guillossou
SSATP Program Manager

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The initiative to review the performance of the transport policies in Sub-Saharan Africa was first mooted by SSATP member countries, and their desire for a candid introspection must be acknowledged. This work would not have been possible without the study carried out by the consulting firm CPCS (Canadian Pacific Consulting Services) and the initial groundwork for a more concise policy note by Marc-André Roy of CPCS. Olivier Hartmann, Senior Trade Facilitation Specialist and Henry des Longchamps, Senior Transport Specialist, both at the World Bank, provided addition insights on the modal performance. Special appreciation goes to the peer reviewers: Arturo Ardila Gomez, Lead Transport Economist, World Bank, Charles Kunaka, Senior Trade Specialist, World Bank, Veronica Ines Raffo, Senior Infrastructure Specialist, World Bank, James Markland, Senior Transport Specialist, World Bank, Stefan Atchia, Principal Transport Policy Specialist, African Development Bank, and Mike Pinard, consultant. The author would like to acknowledge the contribution of Asif Faiz, consultant, who was pivotal in shaping and enriching the initial draft. He is also grateful to Jean-Noel Guillossou, the SSATP Program Manager for his valuable reviews and inputs and to the SSATP publication officer, Monique Desthuis-Francis, who published the manuscript.

Acronyms

AICD	Africa Infrastructure Country Diagnostic
ALCO	Abdijan-Lagos Corridor Organisation
ASANRA	Association of Southern African National Road Agencies
CPCS	Canadian Pacific Consulting Services
EAC	East African Community
GDP	Gross Domestic Product
HIV/AIDS	Human immunodeficiency virus infection and acquired immune deficiency syndrome
ICT	Information & communication technology
M&E	Monitoring & evaluation
MDG	Millennium Development Goal
NFC	National Facilitation Committee
OECD	Organisation for Economic and Co-operation Development
PPP	Public-private partnership
REC	Regional Economic Community
ROADSIP	Road sector investment program
RSDP	Road sector development program
SDG	Sustainable development goal
SSA	Sub-Saharan Africa
SSATP	Africa Transport Policy Program
WATTFP	West African Transport & Transit Facilitation Project
WHO	World Health Organisation
ZRL	Zambia Railways Limited

Executive Summary

This working paper summarizes the key findings of the African Transport Policy Performance Review[1], carried out by SSATP in selected Anglophone and Francophone countries in 2013. It highlights the performance of transport policies focusing on the main transportation modes, excluding maritime and aviation, and is augmented by outcomes of related work carried out mainly by SSATP and the World Bank. The key objective is to convey the salient messages, and to point out the need for more transformational and pragmatic transport policy objectives and strategies, in an effort to enhance the efficiency and competitiveness of the sector. The paper addresses some *fundamental* policy issues, that affect transport performance in Sub-Saharan African countries and is intended for transport sector policy level decision-makers.

The review was conducted in six countries: Ethiopia, Benin, Burkina Faso, Gabon, Ghana and Zambia, all being considered, for the purpose of the study, as portraying a fair cross-section of the Sub-Saharan Africa transport sector circumstances and challenges. They comprise resource-rich and low-income non-fragile countries with a combined GDP of 12% that of Sub-Saharan Africa (excluding South Africa). Half of them are landlocked and their combined classified road network equates to 11% of the total network of SSA. With the exception of Ethiopia, they all have implemented rail reforms with varying degrees of success.

In addition to the review, the SSATP, the World Bank and other development institutions have, within the last decade, carried out useful diagnostic work on transport. The policy related aspects of such work, in particular the Africa Infrastructure Country Diagnostic[2] have been gleaned to amplify the findings of the

[1] *African Transport Policy Performance Review*, SSATP 2013 Accessible at www.ssatp.org.

[2] Africa Infrastructure Country Diagnostic (AICD), World Bank 2010, commissioned by the Infrastructure Consortium for Africa following the 2005 G-8 Summit at Gleneagles. The

review. The present paper however does not address other important policy dimensions, such as inter-modal, intra-modal, and sub-modal transport, urban transport, and transport logistics, as they were not covered in the main review.

The recorded sustained economic growth in Africa can be attributed to, inter alia, some notable transport sector policies that have been implemented in the last two decades. Such policies include road sector reforms, rail concessions, port reforms, multi-country & regional trade and transport facilitation initiatives. These reforms have had positive impact in terms of improved accessibility, improved service delivery, and reduction of public sector fiscal burden. However, coupled to these gains, some post-reform shortcomings have been identified, the effect of which, in the main, have been to impede transportation efficiency and competitiveness. As a result, transportation costs in Africa have not significantly improved.

Road network management and road maintenance funding have moved out of the generally bureaucratic public sector to more inclusive and commercially oriented regimes, the outcome being a significant improvement in the condition of inter-urban road network in many countries. Policy implementation concerns in the road sector reform include revenue stagnation[3] and misapplication of the scarce resources. While the existence and the role of government entities to manage railways, ports, and aviation has been generally acknowledged, the same cannot be said about the relatively new post-reform road sub-sector institutions. In some countries, their corporate governance structures and operational autonomy have been undermined[4].

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underlying data and models are available through a Web Portal hosted by the African Development Bank website.

[3] Road Funds were created to generate road user charges that would be re-invested into the network upkeep. The main source of the revenue has been fuel levies with tariffs set and different levels depending on the principles—the two extremes being full cost recovery (i.e. to include investment, rehabilitation and maintenance cost) or recovery of the marginal cost of using the road infrastructure. These tariffs have in general not been reviewed in line with changing road network needs.

[4] *Progress on Commercialized Road Management*, SSATP Working Paper No. 92, Michael Ian Pinard, January 2012, available at www.ssatp.org.

Road safety remains a major challenge and the probability of a road crash fatality is highest in Africa. Road fatality per 100,000 population stands at 24.1—the highest in the world, and the projections by WHO are that fatalities would increase by 112% to more than half a million by 2030[5].

Most of the railways in SSA have undergone some form or restructuring that typically involved the introduction of private sector management and operations, through long-term concessions or management contracts. The reforms, however imperfect, have in most cases succeeded in reducing or eliminating the fiscal burden of inefficient operations on public finances. Moreover, railways in countries that have undergone reforms and introduced private sector operation continue to operate. In countries that have not undergone similar reforms, railway operations have been on a steady decline, or ceased to operate. It has been noted that mainly due to overoptimistic pre-concession performance projections, the private sector continues to grapple with low profitability, while public officials' discomfort in the lack of recapitalization by the private sector has led, in the extreme of cases, to unilateral discontinuation of concessions.

In the ports, the main points of entry of regional corridors, concessioned terminals may have in general improved their operations efficiency but overall, market forces have not succeeded in significantly improving cargo dwell time and costs remain high[6]. In addition, regional transit corridor efficiency is still hampered to a large extent, by non-infrastructure related barriers and poor logistics.

Sub-Saharan Africa countries have embraced the need for developmental partnerships with the private sector through public-private partnerships (PPP). Transport modes such as railways and ports have been entry points mainly for service provision. The need for substantial capital outlays for transport infrastructure development, coupled with marginal traffic volumes have been notable disincentives for the private sector participation particularly in road development. The need for more robust policy and institutional framework to safeguard the interests of parties, and the capacity within the public sector to manage the processes will be critical to the success of the process going forward.

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[5] *Global Status Report on Road Safety 2013*, World Health Organization, Geneva.

[6] *Why Does Cargo Spend Weeks in Sub-Saharan Africa Ports, Lessons from Six Countries*, Gael Raballand et al, World Bank, 2012.

Other policy implementation challenges include emerging realities such as climate change, rapid urbanization, and the role of Information and communication technology (ICT), in addition to the already existing topical issues such as gender equity, HIV/AIDS, employment creation and safety. At the same time, internal inadequacies such as poor monitoring & evaluation (M&E), lack of skills, and state capture act as subtle policy drags to transport authorities.

In view of the above and against the backdrop that Africa's transportation prices are still the highest in the world[7], there is an urgent need for a deep introspection by Africa's transport policy-makers, first to address the internal administrative weaknesses, second to hone the ongoing reforms, and third to introduce more transformational policy objectives. This review suggests some specific steps in relation to these aspects as well as a performance-monitoring framework.

The common thread running through the messages in the document is that plugging the transport infrastructure gaps—a primary focus of most transport strategies, will in itself not significantly improve the continent's competitiveness. Corresponding continuous efforts are required at country, regional and continental levels to address the softer policy aspects of transport. Most of the needed policy reforms do not imply significant fiscal burden and yet they are preconditions to fully unleashing the benefits of the investments in the sector. Only these efforts will address the accessibility gap in a sustainable manner necessary to support the growing economies in Africa.

Some of the sector-wide policy recommendations that are considered as having the potential to make positive impact are the following:

(i) To improve overall policy performance, sector ministries and departments should have strong internal capacity for policy development, policy oversight, and performance monitoring & evaluation, as a minimum.

(ii) To ensure success in policy performance monitoring, local realities and capacity constraints faced by transport institutions have to be factored into the M&E systems. Specifically, transport policy objectives and related indicators should be simplified and limited to a set of commonly used

[7] Ibid

and understood key transport indicators that are known to contribute to intended outcomes.

(iii) To ensure effectiveness, transport sector policies and strategies aligned to the post-2015 Sustainable Development Goals (SDG) are required. Within the global development objective of ending extreme poverty and promoting shared prosperity, transport sector is regarded as essential to development efforts. For this purpose, transport related targets have been proposed. They focus on its contribution in seven areas: agriculture & food security, health, energy, infrastructure, cities & human settlements, consumption & production, and finally climate change.

(iv) To underpin reforms, strategies are required to safeguard operational autonomy and corporate governance in the sector. Such strategies would promote management effectiveness within sector ministries, departments and agencies and ensure better institutionalization of policy reforms.

At sector-specific and modal level, some of the key policy recommendations are:

(i) To better leverage private sector resources, comprehensive PPP strategy as well as sound institutional capacity (in addition to the national PPP framework) are needed. Such framework should include clarity on the management of risks and contingent liabilities.

(ii) Transport sector contribution towards cross-border transport efficiency, albeit limited by the multiplicity of stakeholders, should be addressed through a policy decision on specifically dedicated capacity and resources towards the management of corridor transit traffic.

(iii) Road development accounts for substantial proportion of the sector investments and there is a need to support the investment choices by sound prioritization framework, institutional strengthening and better information management and performance monitoring. For sustainability and optimization of road transportation benefits, road safety has to be managed professionally.

(iv) Reforms in railways need to generally advance to the next level, taking into account some foundational principles: a) The need to unlock railways' latent potential and make them emerge as attractive transportation alternatives for Africa in some specific markets; b) Railways have to be recognized as a business and not a public service; c) An enabling environment is necessary, including support to affordable investment and fair competi-

tion among modes, and d) The need to recognize railways' low carbon performance in reducing the impact of transport on climate change.

(v) Ports require policies, which ensure affordability at the national economy level, beyond the terminal and port levels while at the same time providing competitive and viable services. Regional Economic Communities will also have a critical role to play in providing a regional vision to promote competition among corridors, which will mitigate the risk of rent-seeking situations and high costs in captive markets.

I. Transport Policies to Sustain Development Objectives

After several years of notable economic growth, policy-makers in Africa face the challenge of sustaining this momentum by continuously adapting policies to a changing environment. Recent GDP growth in Africa has been over 5% per annum. The continent has shown resilience during the 2009 economic downturn with 4.5% GDP growth in 2010 and more than 5% growth in 2011. New partners are adding to the optimistic outlook for the continent, in terms of trade and development finance. Universally recognized prospects for Africa's continued economic growth have bolstered the continent's trade positioning and enhanced strategic status among global partners. This, in turn, has fostered the institutional build-up for policy harmonization, economic integration and decision-making at the continental level[8].

This good economic performance has benefited from policy reforms in the transport sector over the last 20 years. Notable among such reforms were the introduction of dedicated road agencies and road funds managed by road fund boards or secretariats, the restructuring of railways and ports, and the introduction of private sector management in their operations. Multi-country corridor agencies have also emerged to promote multimodal transport and improve performance along key transit corridors. These reforms have generally resulted in improved infrastructure, connectivity and accessibility, which in turn have contributed towards economic growth.

While transport has made its contribution towards African growth, the overall intermediate outcomes at sector level, in comparison to the rest of the world, remain characterized by high costs and sub-optimal services. With international transport costs estimated at 12.6% of the delivered value of exports, African coun-

[8] African Economic Outlook, OECD 2010.

tries pay more than twice the world average of 6.1%[9]. Key factors that contribute to higher transport costs include low productivity of the trucking industry mainly due to infrastructure constraints, low competition between service providers, and weak logistics infrastructure.

Furthermore, transport sector development prospects are beset by a number of emerging realities such as accelerating urbanization and climate change. Economic growth has resulted in a rapid increase in vehicular traffic, which in turn has brought about crippling urban congestion. These negative spin-offs are a reflection of the inadequacy of policy frameworks, and a weak capacity to manage the environmental, social and safety risks of motorization. Climate change characterized by extreme weather events has disrupted transport operations in Africa. At the same time, rapid urbanization and growing motorization rates will increase Africa's contribution to greenhouse gas emissions.

Transport is important as an enabler of development. Within the global development objective of ending extreme poverty and promoting shared prosperity, the transport sector is regarded as essential to development efforts. The sustainable development goals, established under the leadership of the United Nations to guide the post-2015 development agenda, recognize this role of the transport sector and targets are proposed to monitor its contribution to the achievement of the SDGs in seven areas: agriculture & food security, health, energy, infrastructure, cities & human settlements, consumption & production, and climate change.

It is within this context that the SSATP has initiated the review of past transport policy performance. Its objective is to inform future transport policies, guide institutions and programs in their transport policy processes and provide policy-makers with a better understanding of the requirements for successful policy development and implementation. There is considerable research and literature on the state and performance of the transport sector in Sub-Saharan Africa, but with no comprehensive multi-country, multi-modal review of the performance of transport policies in Africa. Policy development was assessed by reviewing how policies are informed, the process to design policies, and the arrangements put in place to monitor and evaluate achievements of objectives. Policy performance was

[9] *Africa's Transport Infrastructure, Mainstreaming Maintenance and Management*, Kenneth Gwilliam, The World Bank, 2011.

assessed by comparing results to the initial policy objectives in the road, rail and port sectors. The review is based on surveys and information collected in six countries selected equitably from Francophone and Anglophone Africa (Benin, Burkina Faso, Gabon; and Ethiopia, Ghana, Zambia). While the separate report on the findings exists, this document is intended as a concise summary of findings and its messages are augmented with the results of other relevant transport sector work.

The selected countries, with a combined land area and population of about 11% and 18% of the SSA totals respectively, are considered reasonable representation of the Sub-Saharan Africa transport sector environment and challenges. For study purposes, the countries fall under two typological categories: Gabon, Zambia and Ghana are resource-rich while Benin, Burkina Faso, and Ethiopia are considered low-income non-fragile countries[10]. Three of them (Ethiopia, Burkina Faso and Zambia) are landlocked, while the rest depend on others for international freight movement. Road transportation is the predominant mode in Africa; these six countries' classified road network equates to 11% (or 14% excluding South Africa) of the Sub-Saharan Africa total and about 8% of the vehicle population (or 11% excluding South Africa). All the six countries have a rail sub-sector and, except Ethiopia, they have had rail reforms with varying degrees of success.

To supplement the findings of the review, it was necessary to consult other relevant material on some of its aspects. The Africa Infrastructure Country Diagnostic (AICD)[11] in particular deals comprehensively with transport infrastructure diagnostics carried out in 48 SSA countries. Aspects such as reforms in railways, ports and roads sub-sectors are well addressed in recent publications. Again, this paper does not address other important policy dimensions, such as inter-modal, intra-modal, sub-modal transport, urban transport, and transport logistics, as they were not covered in the main study. Nonetheless, the modal issues addressed here are generally common and fundamental, making them relevant for policy-makers.

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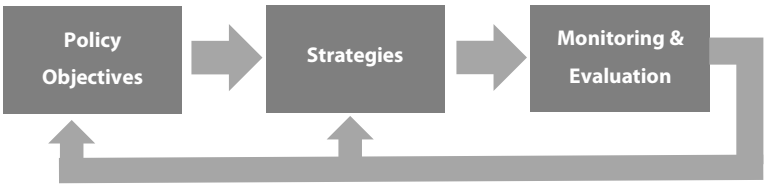
[10] Kenneth Gwilliam, op.cit.

[11] *Africa's Infrastructure, A Time for Transformation*, Editors Vivien Foster and Cecilia Briceño-Garmendia, Copublication of the Agence française de développement and the World Bank, 2010.

II. Policy Development – Objectives to Outcomes

Policy development generally involves research, analysis, consultation and synthesis of information to produce or define policy objectives. It also includes the establishment of strategies to guide implementation. The complete cycle, illustrated in Figure 1, requires the support of a robust monitoring & evaluation system to complete the cycle and feed into the definition of the policy objectives.

Figure 1: Key Elements of an Effective Transport Policy Process



Source: African Transport Policy Performance Review, CPCS, 2013

Policy performance along these three steps is assessed following considerations:

Policy objectives: An effective transport policy should be guided by clear objectives—to provide direction and help gauge performance.

Strategies: The effective design of strategies and initiatives requires the establishment of clear linkages with the intended policy objectives, as well as appropriate levers that will drive performance during implementation towards these objectives. To be effective, strategies must also be designed in line with available capacities to implement them.

Monitoring & Evaluation: Tracking outcomes against intended objectives is critical to understanding the performance of policies and strategies. This also provides an important feedback loop that can inform future policies and strategies.

Policy objectives implicitly linked to poverty reduction and growth

Most African countries have clearly established overarching transport policy objectives. In most cases, these are documented in a formal guiding national transport policy document. They are regularly updated in some countries, but not in others. Recognizing that sufficient time is needed for policies to have an impact, and appreciating the cyclical nature of political changes, it is reasonable to expect that transport policy documents are updated around every 10 years.

Transport policy objectives are largely consistent with broader national policy objectives. In most countries, overarching transport policy objectives are relatively similar in seeking to provide reliable, efficient, safe and affordable multi-modal transportation infrastructure and services. These objectives are well-recognized by both academics and policy-makers.

Box 1 Formal policies exist

All countries included in the Review had established formal transport policy documents, with the exception of Ethiopia, which was in the process of developing its first national transport policy document. In some cases, national transport policy or strategy documents were adopted relatively recently (Benin 2007, Burkina Faso 2011, Ghana 2008); in other cases, transport policy documents were adopted over a decade ago and have not been updated since (Gabon 1998, 2002).

However, for the most part, policy objectives are only implicitly linked to supranational commitments such as the Millennium Development Goals (MDG) or Regional Economic Community (REC) agreements. In fact, most transport policy documents do not make explicit reference to such supranational commitments. Some policy documents predate these commitments, underscoring the need for more frequent updating of national transport policies. Similarly, there are no explicit pro-poor, pro-growth objectives embedded in transport policy although this does not imply that the objectives in themselves are not pro-poor. Pro-poor, pro-growth objectives are generally implicitly rather than explicitly reflected in transport policies and policy objectives. For instance, cross-cutting issues like HIV/AIDS, gender equity or the environment are largely not addressed in transport policies.

In most countries, transport policy objectives are qualitative and general in nature (sometimes very vague) and not tied to specific targets. There is an implicit assumption that more and better transport infrastructure and services will lead to better policy outcomes, but there is no clear articulation of actions and decisions required to achieve these outcomes.

Strategies: Beset by implementation challenges

Transport sector strategies are generally well aligned with overarching transport policy objectives. In some countries, transport sector strategies (as may be articulated in a medium-term sector development plan) make explicit reference to the transport policy objectives that they are seeking to advance.

Poverty reduction and cross-cutting themes like HIV/AIDS and gender equity are addressed largely through what appear to be ad hoc programs and initiatives rather than formal strategies. As a general observation, there appears to be a more systematic effort to address these themes in the road sector. Examples include the use of labor-intensive road construction approaches (pro-poor implication), and HIV/AIDS awareness for contractors and transport department staff. These programs are often funded by development partners but are not mainstreamed for inclusion in government-funded initiatives. As such, they are not core aspects of government strategies but can be more considered as advocacy and capacity building initiatives to support the next cycle of policy development.

Consistent with the priority given to infrastructure development as a policy objective, the bulk of strategies focus on infrastructure development plans, usually with explicit emphasis on road network expansion. This reflects the challenge of developing policies and strategies, which are much more inclusive and comprehensive than preparing an infrastructure development plan. As it is often the case, consultants are entrusted with the development of strategies, which weakens the policy-making process and the results due to a lack of ownership.

Beyond the weaknesses in developing transport sector strategies, it is at the implementation level that transport sector strategies typically fail or underperform. The most significant and common barriers to the successful implementation of transport sector strategies include:

Inadequate human resources capacity: In most countries, there are too few qualified technical resources. This is generally the case across all transport sector departments but is most acute within road sector departments. One reason for this is the relatively low public sector wages compared to the private sector. Another is the lack of proper human resource management including the staff recruitment and selection process, career development and provision of training for government staff. Also compounding the human resources challenge is the high mobility potential for skilled government workers and managers with technical back-

grounds especially following the road sector reforms and the creation of new road sector agencies that were better positioned as employers. Even for those who remain within government, mobility from one agency to another reduces corporate memory, leading to inconsistency in ownership and in application of policies that have a longer-term time horizon (cyclical highway maintenance, for example).

Box 2. Ongoing initiatives face challenges

Initiatives to improve the availability and value of transport sector data in SSA include the SSATP Transport Indicator Initiative[12], the Africa Infrastructure Knowledge Program (AIKP)[13], led by the African Development Bank, and the piloting of Transport Sector Data Management Systems (TSDMS)[14] with the support of SSATP. These initiatives have all had challenges and the extent to which these will be useful in informing transport policy remains unclear. In most cases, the challenge stems from institutional capacity limitations associated with the collection and management of data.

Affordability of transport strategies: Transport sector strategies for the most part are either underfunded or not financially sustainable. The cost of addressing African transport infrastructure development, operation and maintenance needs has been estimated at about US$20 billion annually, representing about 3% of its GDP. If ODA from OECD countries is excluded, the total annual spending amounts to about US$14 billion or 2.1 percent of GDP[15]. In almost all cases, external funding from donors is necessary to support transport sector spending. Among countries included in the review, the share of external funding support as a share of all transport sector spending ranged from 30% to 80%. Notably, the share of external funding support among the countries included in the review is significantly greater in Francophone countries than Anglophone ones. External support notwithstanding, countries included in the review indicated that funding was inadequate or insufficient to effectively implement transport policy objectives.

[12] www.ssatp.org/en/publication/ssatp-transport-indicator-initiative-concept-note.

[13] www.infrastructureafrica.org.

[14] *In Search of Evidence to Define Transport Policies, Transport sector data management system, Policy Note & Guidelines*, SSATP Working Paper 104, January 2014. Available at www.ssatp.org.

[15] *Africa's Transport Infrastructure, Mainstreaming Maintenance and Management*, Kenneth Gwilliam, The World Bank, 2011.

Information and information systems: All countries included in the review lack the necessary data and information systems to appropriately support their policy development processes. In most cases, the basic information available about the road network, for example, is not appropriate for policy formulation. This is likely the result of limited institutional capacity with respect to data collection, processing and management. It is also symptomatic of weak governance and overall lack of accountability when information is unavailable to measure the results of policies and government commitments.

Inadequate prioritization framework: Institutional and policy deficiencies continue to hamper the effectiveness of investments. Most countries do not have a well-established investment prioritization framework. Often, the process for prioritizing transport sector investments (in the road sector in particular) appears to be somewhat politically or donor-driven, rather than anchored in national objectives and priorities. The absence of such instruments creates substantial discretion in planning and funding decisions thus influencing the distribution of resources.

Monitoring & evaluation: Weak link in the transport policy process

Transport sector policy performance monitoring and evaluation (M&E) is generally poor or non-existent in SSA. Rarely are M&E results used for a systematic approach to reviewing performance. This finding is consistent across all countries included in the Review. At best, M&E is done in an ad hoc manner, for example by consultants in a specific study, and is often related to external project funding conditions. Some countries are at the early stages of developing M&E processes, but these are for the most part not yet established or formalized. When M&E exists, it is also largely focused on outputs (e.g. kilometers of road constructed) rather than on performance and outcomes and even less on impacts.

Countries do not have an established process for monitoring and evaluating transport policy performance with respect to poverty-reduction, economic growth, and most cross-cutting themes including HIV/AIDS, gender equality and environment (tracking road safety statistics is a notable exception although serious weaknesses are also found in that area). This is a weakness of the transport sector compared to other sectors such as education and health, which are better equipped to monitor their impact. There does not appear to be significant interest in the transport sector for M&E of these aspects at the country level. It must be recognized though that monitoring of these transport externalities would be difficult,

for a host of reasons, not least of which is the difficulty of establishing causal linkages between transport and these outcomes, and the limited institutional capacity to develop and track yet more indicators.

The Rural Access Indicator, measuring the rural population living within 2 kilomers of an all-season passable road as a portion of total population, provides a case in point. This measure is considered a proxy for assessing the poverty impact of road investments. It is also one of the transport indicators under the MDGs. Yet, Ethiopia is the only country systematically measuring and tracking this indicator, not only among the countries subject of the present review but also in Africa. The point has also been made that the indicator may lead to unaffordable and unsustainable rural road investment strategies.[16]

The usefulness of transport and poverty studies in informing transport policies and strategies as well as in planning investments has been limited. In some limited instances, transport and poverty studies have been undertaken – largely by consultants – with the aim of monitoring poverty impacts of road investments and development impact of road infrastructure. Results are largely anecdotal insomuch as a variety of methodologies are used, interpretation of results to establish the causality between the investment and the results is subject to caution, and with so many exogenous parameters entering into account, it is difficult to systematize the results. The recent review by SSATP[17] of M&E experiences and methodologies in rural transport is a step towards harmonization and systemization in this area.

Challenges in making M&E a full component of the policy development process are many and include:

- Perennial data limitations including lack of data, poor data quality, and inadequacy of systems to effectively manage data
- Human resource and systems capacity constraints to collecting, managing and analyzing data

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[16] *Rural road investment efficiency, Lessons from Burkina Faso, Cameroon and Uganda*, Gael Raballand, Patricia Macci and Carly Petracco, 2010, World Bank. Available on the World Bank website.

[17] *Good Policies and Practices on Rural Transport in Africa: Monitoring & Evaluation*, Anthony Airey, SSATP Working Paper No 99, May 2014, available at www.ssatp.org.

- Lack of an established and systematic performance M&E framework with processes and associated indicators. This is somewhat complicated by the multiple and often differing donor-driven demands for reporting
- With respect to M&E of transport-related poverty, growth and cross cutting indicators, there is difficulty in establishing measurable and causal linkages between transport sector performance and poverty, economic and cross cutting theme outcomes.[18] Once this causality is statistically established, the challenge will remain to develop a model, which can be used for policy decisions as well as planning investments.

[18] *Poverty and Transport*, Gannon, C., Liu, Z., World Bank (TWU-30), September 1997.

III. Road Sector Policy Performance

Policy development

From a modal standpoint, transport sector policies mostly focus on roads. This is invariably linked to the importance of road transport in the sector, which usually represents some 80 to 90 percent of the freight and passenger traffic in countries even where other modes are relevant. The road sector also draws the greatest share of transport sector funding in SSA countries. Of the countries included in the review, the road sector funding comprises between 75% to 95% or more of all transport sector public expenditures.[19]

The review found that most SSA countries have sought to increase the financial sustainability of road maintenance funding and the robustness of roads agencies. Road management policies in many countries have been informed or influenced by the concept of commercialized road management developed by the SSATP and the World Bank[20], where road users contribute to road funding through a user fee where roads are managed in a business-like manner under an independent Road Fund administration and through an autonomous road agency, with a Board of Directors representing key stakeholders. Policies based on this concept are articulated around four blocks:

Responsibility: Pertains to the need to create a coherent organizational structure responsible for managing different parts of the network. This also requires that all relevant institutions have clearly assigned roles and responsibilities.

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[19] To some degree, this also likely reflects the fact that in most countries, railway and port operations have been reformed to involve greater private sector management. This has reduced financial dependence of these sectors on government funding.

[20] *Commercializing Africa's Roads: Transforming the Role of the Public Sector*, Ian Heggie, SSATP, 1994. *Management and Financing of Roads: An Agenda for Reform*, Ian Heggie, World Bank Technical Paper 275, 1995.

Ownership: Pertains to the need to represent differing constituencies of road users within road oversight boards, particularly since each constituency has a vested interest in the **sound** management of the road network.

Sound business **practices**: Pertains to the establishment of commercially oriented management practices in order to derive Value for Money (VfM) from road spending.

Stable and secure financing: Pertains to the need to establish an adequate and stable flow of funds through the creation of an independent road fund.

This finding was confirmed in a second review carried out by SSATP specific to the road sector in Southern Africa.[21]

The adoption by most countries of a Road Sector Development Plan (RSDP) or its equivalent is in itself a policy statement in terms of defining the approach to adopt. Such a plan articulates the road sector objectives and funding requirements, among other aspects. They emphasize in particular coordination among development partners, when funding and supporting its implementation.

Still, a Road Sector Development Plan has limited policy objectives, and road sector policies in Sub-Saharan Africa are primarily focused on the expansion and maintenance of national networks. Within such a policy framework, objectives and related targets are mostly focused on the physical construction and upgrading of roads. This orientation, however, is not that irrational given that Africa has the lowest endowment of all-weather roads of any region and ranks the lowest in relation to connectivity and quality of roads. Just as the United States focused on road expansion in the early part of the 20th century to get the farmer 'out of the mud,' and China and India a century later focused on connecting most of their towns and villages with all-weather paved roads, Sub-Saharan Africa needed to embark on a similar expansion of its networks to meet the connectivity and mobility needs of its growing population and economic production in the 21st century[22].

[21] Michael Ian Pinard, op. cit.

[22] *The Promise of Rural Roads, Review of the Role of Low-Volume Roads in Rural Connectivity, Poverty Reduction, Crisis Management, and Livability*, Asif Faiz., Transportation Re-

Box 3. Employment creation as a strategy

Burkina Faso prioritizes labor-intensive approaches to road development to encourage poverty reduction. The Zambian ROADSIP is more explicit in its objective of creating employment opportunities in the road sector–alleviating poverty through the creation of 30,000 new jobs in road maintenance.

Pro-poor, pro-growth objectives are generally not explicit in road sector policies, but given the low connectivity, most road investment in Africa lends support to these objectives. Most road sector development program documents implicitly recognize the importance of roads and road access as an enabler to growth and poverty reduction.

Explicit pro-poor strategies, where these are in place, are rather focused on employment of low-skilled labor for road construction projects[23].

With the exception of safety, other cross cutting themes, including HIV/AIDS, gender equity, and the environment are generally not addressed in road sector policy objectives. Where these are addressed, it is typically through what appear to be ad hoc programs and initiatives, rather than overarching strategies. Most donor-supported project lending for roads, however, does address the above-mentioned cross-cutting themes, which become part of the active donor dialog with the beneficiary countries. Such programs include HIV/AIDS awareness education for road agency staff, contractors, and road transporters.

Policy outcomes

This section provides a quick overview of typical policy outcomes in the road sector in SSA. The performance of road sector policy in most SSA countries is largely measured in terms of a) the length of new roads constructed and b) the condition of existing roads, this reflecting the priority given to infrastructure in sector policy development. In most countries, physical condition of the inter-urban road network can be characterized as fair to good, and the overall condition of main roads, except in conflict-affected countries, has improved over the last two decades,

search Circular Number E-C 167, Transportation Research Board, September 2012, Washington DC. Available on the Transport Research Board website.

[23] *Road Rehabilitation and Maintenance Project in support of the First Phase of the ROADSIP II Program*, The World Bank. 2004. Available on the World Bank website.

compared to the dismal status reported in the World Bank policy study on road deterioration in developing countries in 1988[24]. With respect to cross-cutting themes, safety is generally the only area of performance tracked in SSA countries.

In urban areas, road congestion, pavement conditions and level of services have deteriorated mainly due to rapid urbanization. Road user perceptions, especially those of urban users, often focused on service standards could include expectations that are not economically affordable or justified. Their concerns mostly reflect poor management and utilization of infrastructure (e.g. congestion and safety) rather than physical condition per se. Nonetheless, these are important inputs and reflect policy failure in relation to stakeholder participation in policy formulation, design and implementation.

Safety performance can be characterized as generally poor in most SSA countries. Africa, the home of only 12% of the world population accounts for only 2% of the world's vehicle population, yet the road crash fatality rate, estimated at 24.1 per 100,000 of population, is the highest. In absolute terms, fatalities nearly doubled between 1990 and 2010, rising from 125,198 to 230,140. The projections by WHO estimate that in SSA, fatalities would increase by 112%, from 243,000 in 2015 to 514,000 in 2030.

There is little evidence, beyond anecdotes that vehicle operating costs and freight rates have declined. In these two areas, with respect to truck transportation, users often rated road sector performance as poor. This perception is strongly influenced by trucking regulations and controls (especially frequent police checks, time delays and illegal payments) more than by road conditions. With respect to passenger transportation, travel times have often been reduced on main interurban roads, thanks to road condition improvements.

[24] *Road deterioration in developing countries, causes and remedies*, A World Bank Policy Study, June 1988.

Policy considerations

The review pointed to weaknesses in implementation of road sector reforms, and identified inadequate funding of maintenance as a common policy implementation challenge. Many SSA countries have adopted a second-generation road fund to ensure stable funding for road maintenance, but few have fully implemented one. The Francophone countries have lagged behind their Anglophone counterparts, particularly in terms of the way the road fund revenues are generated. Whereas the Anglophone countries are primarily reliant on road user charges, the Francophone countries appear to generate a significant proportion of their revenues from sources such as earmarked public funding, government grants, supplementary taxes on income (in Gabon, for instance), and donor funding. To some extent, this absence of financial autonomy is due to a lack of representation of road users in decisions pertaining to financing and managing the road network. Being less involved in decision-making, the broader constituency of road users in Francophone countries appears to have been less inclined to support reforms aimed at enhancing revenue mobilization capabilities.

With respect to the adequacy of funding, countries reported that road sector revenues were inadequate to address network needs. This is particularly the case for road maintenance. In some countries, for example, actual maintenance needs are three times greater than budgeted. In others, the maintenance budget was diverted to road upgrading projects, to respond to political considerations. In a few, there appears to be discrepancies between official budget allocations and the actual availability or release of funds.

In addition, the ongoing road development works, largely financed by donor assistance (including borrowing from new development partners), continue to expand the magnitude of the stock of roads with associated expanding maintenance needs. The inability of road funds to meet their respective mandates suggests that in their present form, the institutional and financial arrangements for road infrastructure management may not be sustainable on account of the following factors:

- Failure or inability to generate revenues to meet mandated requirements—a revenue challenge.
- Misallocation of revenues amongst mandated priorities—a governance challenge.

Other important aspects of policy implementation pertain to prioritization of sector investments and related capacity constraints. Most road sector development programs do not explain how road sector investments are prioritized (e.g. highways versus rural roads) and the extent to which priorities are anchored to specific development goals (e.g. poverty alleviation). Moreover, the extent to which actual spending on these programs is aligned to the budget allocations is generally poor[25] (actual spending is significantly below budget). The reason for this gap varies, but can include delays in procuring large works projects, delays in budget approvals and releases, or scope of programs being set higher than the budget ceilings.

The inadequate capacity of the local contractor base was also cited as a challenge, particularly for undertaking medium- to large-scale projects. This was the case in several countries such as Benin and Zambia. Country representatives in Ethiopia noted in particular the shortage of qualified civil engineers. To address this, the Ethiopia Roads Authority, for example, has begun financing the training of 3,000 civil engineers in the nation's universities and training centers.

[25] The SSATP Annual Report 2011 notes that, on average, SSATP member states execute less than 50% of the yearly budgeted programs.

IV. Rail Sector Policy Performance

Policy development

Most of the railways in Sub-Saharan Africa have undergone some form or restructuring over the last twenty years. This typically involved the introduction of private sector management and operations, through long-term concessions or management contracts.

The objectives of most rail sector reforms generally included:

- reducing the financial burden of railway operations on the national treasury
- increasing the efficiency and competitiveness of the railway sector and promoting modal shift from road to rail
- rehabilitating what had largely become moribund railways

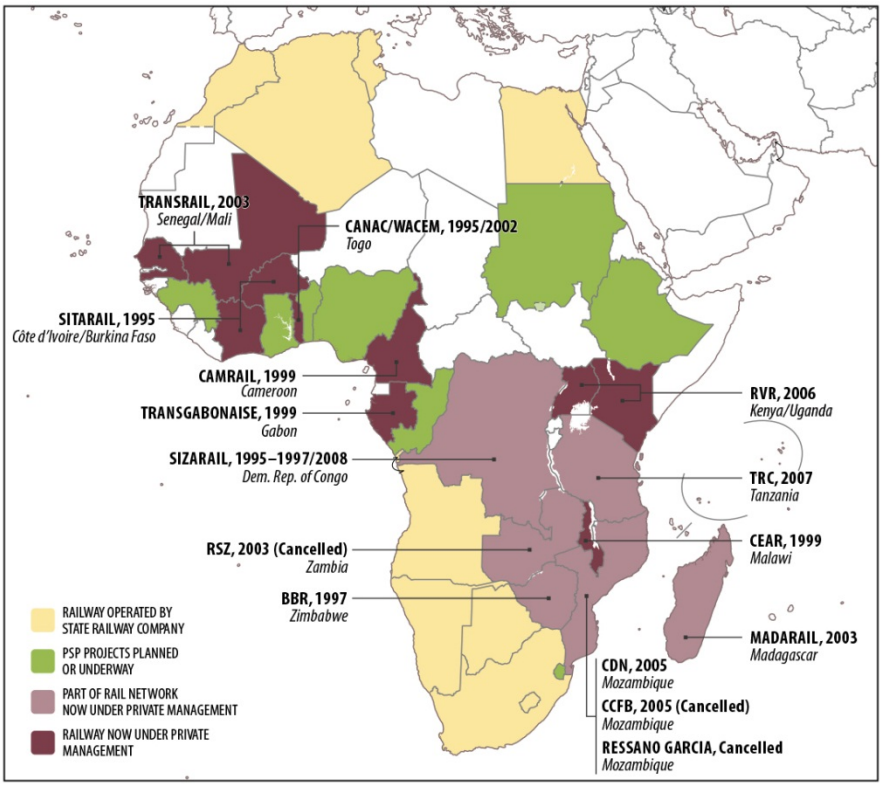
In most cases, the reforms were not explicitly designed to be pro-poor or pro-growth nor did they explicitly address cross-cutting themes including HIV/AIDS, gender equity, environmental performance, and safety. In fact, most rail sector reforms were driven by structural adjustment policies of the mid-1990s seeking to reduce the fiscal burden, rather than specific transport objectives.

Policy outcomes

In most cases, rail reforms succeeded in reducing or eliminating the fiscal burden of inefficient operations on public finances. In some cases, States continue to contribute to infrastructure and passenger services, though this is arguably less than it was under the previous government-operating model.

Beyond this fiscal outcome – which was often the main objective of reforms, other outcomes are questionable[26]. Certainly, there is not much evidence that rail sector reforms have succeeded in diverting freight traffic from road to rail. In many cases, total freight tonnage has declined (although in some of these same cases, ton-km have increased, owing to the more profitable nature of long haul traffic for private operators). Passenger traffic has in most cases declined or been terminated altogether—as private operators focus on more profitable freight business.

Figure 2. Private sector involvement in railways



[26] *Rail Transport, A Framework for Improving Railway Sector Performance in Sub-Saharan Africa,* Vasile Nicolae Olievschi, SSATP Working Paper 94, March 2013, and *Rail infrastructure in Africa: Financing Policy Options,* ALG, African Development Bank, May 2014.

There is also little evidence that reforms have led to significant new investment in railway assets, operations and services levels continue to be poor as reported by freight shippers. This has resulted in increased pressure on road networks.

Box 4. Opposition to concern

In Zambia, vested interests had a negative impact before, during and after the concession. While the government policy was clearly articulated and the government had also approved the privatization of ZRL[27], consultations revealed that little efforts were made to overcome bureaucratic methods which delayed the concessioning process. Even within the ZRL not all were equally keen to expedite the concessioning process– SSATP TPPR 2013.

Similarly, there is no clear indication that railway reforms have contributed to poverty alleviation, broader economic growth, or improvements with respect to the MDGs. It is noted though that in most cases, reform objectives were not explicitly stated. Further, the analytical foundation is missing to establish a causal link between railway reform, performance and downstream impacts.

Ultimately, the review found that railway reforms, however imperfect, have been less expensive to the public authorities than continued operation by them. Moreover, railways in countries that have undergone reforms and introduced private sector operation continue to operate. In countries that did not, operations have continued to steadily decline, or cease to operate (e.g. Nigeria, Sierra Leone, Ethiopia, Ghana, Sudan), at significant continued cost to government.

Policy considerations

Notable considerations with respect to the underachievement of rail sector reforms include the following:

- In some instances, the actual commitment of governments to the reforms was weak or railway concessions as public-private partnerships were misunderstood by governments. Private sector management of formerly government-controlled railway operations led to conflict, where authorities sought to reinterpret or even change terms of the concession.

[27] Zambia Railways Limited

- This was the case for passenger rail public service obligations, which have generally been problematic. Such services seldom have the potential to be cost-recovering and are viewed by private operators as a "burden", while governments view such a service as a social (and political) necessity.
- Another source of conflict was staff employment and redundancies where again the business approach of operators was in opposition to the social/political approach of governments.
- Concessions failed to bring additional resources for rehabilitation of railway tracks and renewal of rolling stock. Without an apparent improvement in the quality of services, railways were unable to attract a larger share of the transport market.
- There has been limited monitoring of performance with respect to other objectives. This is rendered more difficult due to the limited disclosure of operating and financial information by concessionaires, frequently due to differing views of obligations under the concession agreement.
- At the same time, governments did not build their capacity for proper oversight of concessions. With government staff in charge of overseeing the railway concessions coming often from the former government-managed railway company, the conditions were not in place for a constructive partnership but rather for dialogue fraught with conflicts.

V. Port & Maritime Sector Policy Performance

Policy development

As in the rail sector, many countries in SSA have reformed their port sectors and introduced private sector management and operations. In most cases, port reforms followed the landlord port model and involved the partitioning of the port sector into (a) a government-owned port authority; and (b) a private sector operator (generally recruited through a concessioning process).

The objectives of these reforms have varied but have generally included:

- reducing the financial burden of port operations on the national treasury
- increasing the productivity and efficiency of port operations
- improving port services, including reducing dwell times and reducing the cost of port operations and transit logistics

Box 5. Private sector involvement in ports sub-sector – Sub-Saharan footprint

APM Terminal Monrovia, Abidjan, Tema, Cotonou, Lagos, Onne, Douala, Pointe Noire, Luanda, Namibe

Bolloré Africa Logistics Conakry, Freetown, Abidjan, Tema, Lomé, Cotonou, Lagos, Douala, Libreville, Pointe Noire, Moroni. Other terminals and inland ports: Nouakchott, Dakar, Matadi, Bangui

DP World Dakar, Maputo, Djibouti

Other terminal operators with limited presence include MSC in San Pedro and Lomé, and CMHI in Lomé and Lagos

As with rail sector reforms, port sector reforms were not explicitly designed to be pro-poor or pro-growth nor did they explicitly address MDGs. Rather, as with rail reforms, they were in line with structural adjustment programs of the 1990s and related policies at that time to privatize government assets and operations that could be run on a commercial basis.

The wave of concessions for container terminals reached Africa much later than the rest of the world, and attracted a far more limited range of international terminal operators: less than a handful of them are now controlling separately or jointly most of the container terminals on the Africa coastline. The main terminal operators and their involvement in port operations, mostly on the Atlantic coast, are listed in Box 5.

Policy outcomes

Generally, port sector reforms in SSA have succeeded in reducing or eliminating the fiscal burden of inefficient operations on public finances. Government support for port operations has significantly reduced and in most cases, ended altogether as a result of the reforms and concessioning.

In some cases, private operators have also made significant investment in infrastructure, which would otherwise have been paid for by public funds, or not undertaken at all. It was likewise found that government infrastructure investment obligations were largely in line with concessionaire expectations. This is a difference with railways showing the higher profitability and lower level of risk in the port sector compared to the railway sector.

Though detailed information on the financial performance of most port concessions are not publicly available, consultations suggest that most port terminal concessionaires have been operating profitably and, in many cases, paying a concession fee to the government.

In terms of port user outcomes, performance improvements in ports/terminals can generally be characterized as fair. In many cases, ship wait and turnaround times have improved only marginally. Elsewhere they have not improved or have increased since the reforms. Container handling charges remain high, as do container dwell times at the port. The private sector, including terminal operators and shippers, does not seem to have the interest in reducing dwell time, mainly due to low logistics skills, and cash constraints[28]. The market incentives, in most cases, are not strong enough to drive the needed changes.

There have been notable positive changes, however, including increases in terminal productivity, improvements to container tracking, storage management, and to service levels. It can be argued that these improvements were under the control of private operators while public authorities have not been able to implement port development strategies capable of absorbing the increase of traffic resulting from economic growth.

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[28] *Why does cargo spend weeks in sub-Saharan African ports? Lessons from six countries*. Gaël Raballand, Salim Refas, Monica Beuran, and Gözde Isik, 2012, World Bank. The paper is available on the World Bank website.

Certainly, there is no clear indication that port reforms have contributed to poverty alleviation, broader economic growth or improvements with respect to MDGs. As is the case with rail sector reforms, these ends were never the explicit objectives of the reforms, nor can a causal link between port reform, performance, and such downstream impacts be easily established.

Overall, port sector reforms appear to have worked modestly well and arguably better than rail sector reforms. Port reforms have reduced the fiscal burden associated with government port operations, attracted new investment in port operations, and in some cases contributed to port productivity and service level improvements, though these have been more modest.

Policy considerations

Notable considerations with respect to the performance of port sector reforms include the following:

- Where operations have been concessioned or otherwise contracted out to the private sector, the operator is in many cases a virtual monopoly. One reason is that most coastal SSA countries have one major port for international traffic. While competition exists among ports for traffic with landlocked countries, domestic traffic, which often represents more than 90 percent of the total traffic of the port, is with only a few exceptions constrained to use its national port. The second reason is that the size of the market is too small to have several concessionaires. While concessionaires were selected based on competition for the market, with long-term concessions of 30 years, competition does not become the driver of development and performance.
- Of equal concern is that many port concessions/operations involve the same investors across countries. This limits competition among ports in the same geographic areas and can have negative implications on service levels and rates. To some extent, vertical integration of port operators with maritime transport can also have a significant influence on port de-

velopment and performance through the decisions on the creation of regional hubs[29].

- A positive development is the single window concept (currently being implemented in Benin) where all information between freight forwarders, shipping lines and the port operators is managed through a single system/process. This type of system could potentially be a very meaningful source of information for tracking and monitoring port sector performance if it can be shared and used by policy makers. Its introduction in Singapore more than 20 years ago spurred the development of the port as a major regional hub, particularly for container traffic.

[29] *Multiple Ports of Call versus Hub-and-Spoke: Containerized Maritime Trade between West Africa and Europe*, Gylfi Pálsson, SSATP Working Paper 31, January 1998. The analysis concluded that a hypothetical optimal hub-and-spoke system would bring only marginal cost benefit for the region. In addition, all the cost benefit would befall the hub itself, while costs for all other ports in the area would be higher. Transit time of import and export to and from the region would also increase for most ports. The paper was complemented in May 2007 by Alan Harding, Gylfi Pálsson and Gael Raballand by the SSATP Working Paper 84, *Port and Maritime Transport Challenges in West and Central Africa*. The World Bank is also currently revisited the potential options for hub-and-spoke systems in Africa.

VI. Corridor / Transit Traffic Policy Performance

Policy development

Bi-national initiatives and Regional Economic Communities (REC) have led efforts to improve the flow of goods and people across borders in Africa. A growing number of corridor organizations have emerged as the proper institutional mechanism to facilitate transit traffic, particularly to and from land-locked countries. While early results have been encouraging, consultations undertaken as part of this review with shippers, carriers and other stakeholders involved in transit traffic, suggest that corridor management and transit traffic performance have improved only marginally, if at all.

Box 6. Corridor organizations and multi-country & REC initiatives

There is a pattern of establishing a dedicated institution to manage coordination and dialogue among the wide range of corridor stakeholders – both public and private – such as the Northern Corridor (which originated as a Governments-led initiative) or the Maputo Corridor Logistics Initiative (MCLI, established by corridor users and operators). In other regions, notably in West and Central Africa, the coordination role is assumed by the RECs, with less involvement from corridor users, and more focus on the legal and regulatory framework

Within the overarching objective of the RECs to increase regional economic integration and inter-regional trade, corridor organizations and corridor improvement initiatives generally have in common the broader objectives of increasing the efficiency of transit traffic, reducing transit times and transportation costs for the movement of goods and people. In most cases, these objectives are general in nature and often not associated with specific performance targets.

Most corridor and transit traffic improvement strategies focus on "soft" issues. Specific strategies include harmonization of regulations along corridors, reducing dwell times at ports and delays associated with control points (formal and informal), harmonizing and coordinating customs processes and other administrative requirements at border crossings. In some instances, strategies also address physical infrastructure improvements. Examples include the West African Transport & Transit Facilitation Project (WATTFP), which is seeking to improve road conditions or to provide new border infrastructure by building new border facilities.

Policy outcomes

While transit traffic and trade have generally increased in SSA over the last 10-20 years, the extent to which corridor management initiatives have been effective to improve corridor performance is not clear. Performance outcomes of corridor and transit traffic initiatives are in most cases not well documented. Reliable information on total transportation time, logistics costs and reliability from port of entry to destination and vice versa along selected corridors is not readily available.

In many cases, corridor improvement initiatives have focused (at least in the short term) on studying needs and opportunities to improve corridors and transit traffic. Donor coordination has tended to be weak, not only in undertaking assessments and various analyses of transit corridors[30], but also in devising solutions. Many countries report that there has been a multiplicity of studies undertaken over the years but very little in terms of tangible implementation successes. While efforts have been made in improving infrastructure, less has been done in improving policies although sound policies are needed to make the infrastructure efficient and reap full benefits from infrastructure projects. The recent improvements at border posts between Uganda and Kenya show the significant impact of policy measures taken at no cost[31].

Box 7. High transport prices are the result of restrictive policies and regulations.

Along corridors, Africa's transportation costs are no higher than in other developing countries, such as China. But transportation *prices* are much higher. The difference is accounted by informal payments made and profits earned by trucking companies. The economic regulation of the road freight industry in many African countries fosters these high profit margins; regulations that restrict entry of new companies, enabling incumbents to earn large profits. Rwanda—a landlocked country that deregulated its transport sector saw a dramatic drop in transport prices almost overnight.

Transport Prices and Costs in Africa: A Review of International Corridor, Supee Teravaninthorn and Gael Raballand, The World Bank, 2008

[30] Six regional studies and seven country studies were carried out in relation with the improvement of transport performance in the East African Community region in the past five years, not counting the continental study for the Program for Infrastructure Development in Africa (PIDA).

[31] *Border Crossing Monitoring along the Northern Corridor*, Mike Fitzmaurice and Olivier Hartmann, SSATP Working Paper 96, April 2013.

From an institutional perspective, dedicated corridor organizations appear to have been more effective than REC-driven corridor initiatives. This may be due to the better institutional capacity and focus of corridor organizations on transit traffic issues in fully operational and specific corridors, as compared to a range of a generic existing and potential corridors usually traversing several countries.

Policy considerations

The review has identified a number of challenges to the implementation of corridor strategies:

Jurisdictional coordination: Despite their regional character, transit and facilitation systems have continued to operate as fragmented national systems rather than integrated regional systems. It is not unusual for countries to agree on viable policies and practices at the regional level, only to have them reversed at the national level in the name of national interest and sovereignty.

Limited authority: Corridor agencies or the Regional Economic Communities do not have the authority to implement strategies and actions in member countries. In most cases, REC policies have to be transformed into and adopted as national policies to be implemented and to receive necessary funding. Countries have then the authority in terms of implementation. This is the case for policies as well as infrastructure projects for which REC or corridor authorities are not implementing agencies and funding being provided and managed at country level.

Lack of dedicated country staff: Although countries have the responsibility for implementation, often there is no full-time office or personnel dedicated to corridor initiatives within country transportation departments. For example, each participating country in the Abidjan-Lagos Corridor Organization (ALCO) has set up a National Facilitation Committee (NFC) to coordinate the implementation of the work of ALCO in the country. The NFC is made up of representatives of participating agencies. However, they have not yet a full-time personnel working at country level.

Lack of effective M&E: Few corridor initiatives have clearly established performance targets against which to monitor performance. ALCO is a notable exception, in that expected targets (e.g. port dwell times) are established and performance is measured against these targets. Beyond defining targets, most corridor

initiatives do not effectively collect data or indicators on corridor performance, for example related to total transit times, logistics costs and reliability. The Northern Corridor Transport and Transit Coordination Authority is an exception with a strong monitoring system in place. Performance indicators are inherently difficult to track (even in developed countries), but there are no doubt opportunities for better monitoring and reporting in these areas (resource limitations notwithstanding). The World Bank's Logistics Performance Index (LPI) provides some quantitative measures of logistics performance, many of which relate, directly or indirectly, to corridor performance. Specific examples of relevant LPI data include metrics relating to customs clearance processes, the ease of arranging competitively priced shipments, and the ability to track consignments.

Box 8. Funding of corridor organizations

The constitution of Dar es Salaam Corridor Committee provides that its operations will be financed from membership fees payable annually and from any other method the committee deems fit. In this regard, and to ensure that it is sustainably funded, members agreed at the November 2008 meeting in Blantyre, Malawi, to adopt a user-pay principle (UPP) for sustainable funding of the Secretariat. This will work through the collection of fees at border posts for intraregional traffic and at the Port of Dar es Salaam for international traffic. In addition, a levy system on all traffic except traffic that crosses borders is to be imposed.

Sustainability of funding for corridor organizations: Most corridor initiatives, programs and projects are dependent on external funding contributions from donors. This could hinder the long-term sustainability of these programs. The Dar es Salaam Corridor Committee's user-pay principle may provide a useful model for promoting the sustainability of corridor programs and initiatives elsewhere.

Competition between corridor-related and national priorities: Each country has to finance and implement within its borders the agreed corridor or regional initiatives/strategies. These initiatives in effect compete with other priorities for scarce resources at the national level.

Lack of implementation guidelines: More than enough analysis has been done over the years on the challenges facing regional transport but few solutions have been agreed to address these problems. Despite these studies and the multiplicity of gatherings in terms of meetings, workshops and symposia, implementation remains weak owing largely to lack of effective implementation guidelines. Often, recommendations are not matched by corresponding detailed and coordinated implementation guidelines. It is left to each government to decide how best to proceed, which has often resulted in limited or ineffective action.

VII. Lessons and Way Forward

Opportunity to establish a public-private sector partnership

African countries are part of the ongoing wave of leveraging private sector resources through PPP arrangements. As mentioned above, this has been the case in the port and railway sectors but the potential of public-private sector partnerships in the road sector remains largely unexploited in Africa. In the transport sector, ports, railways and civil aviation have been the point of entry especially in service provision. In the road sector, transport services are typically provided by the private sector and opportunities for a PPP lie mainly in the provision and operation of road infrastructure. Still, traffic volumes, especially in rural Africa, are low and many roads do not have the requisite break-even thresholds with the exception of urban roads, bridges and sections of major road corridors. Provision of mass transport services in urban areas is also an area that is receiving increased attention from public authorities and presents a good potential for private sector involvement, including financing. Additional options exist in addition such as annuity payment, design-build contracts and performance-based contracts, with only the latter becoming mainstreamed in the set of tools available to road asset managers. In all cases, the actual capacity of the private sector to contribute financially to investments needs to be carefully assessed as the recent experience in railways has shown that concessions perform better, where the public sector is prepared to pre-invest in the fixed assets.

The impressive growth rates coupled with the huge infrastructure gap and the willingness of the consumer to pay for improved services are regarded as some of the drivers of future public-private sector partnerships in Africa. Still more needs to be done on both the supply and the demand sides to improve attractiveness for a PPP. On the supply side, the obstacles to mobilization of private sector resources need addressing. On the demand side, public authorities need to take note of the need for clarity on the scope, expectations and requirements in packaging a PPP.

A review of three case studies[32] has shown that a framework covering the following issues that safeguards the processes and the interests of the parties to the partnership is critical to the its success: risks associated with private financing and allocation between the private and the public sectors, enabling legal frameworks, contractual issues, institutional and governance issues, capacity development, funding, lenders requirements and the need for political will and support. In particular, the four main lessons came out of the review:

PPP policy and institutional frameworks: Political commitment and leadership is required at the highest level of government to promote public-private sector partnerships in roads development. At the same time, a central PPP Unit, with strong backing by highest level political authority, will provide the concentration of expertise needed to harness resources from government and external parties, and enable efficient PPP procurement.

Legislative framework: A legal framework is required to enable an effective, transparent and efficient PPP process—a prerequisite for satisfactory results during implementation.

Private finance and risk factors: Political and currency risks need to be carefully considered in Africa where they are perceived to be particularly high. Lender concerns and requirements also include unfamiliar jurisdictions, fairness and transparency, sponsor quality (understood as the private sector consortium bidding for the concession), contract terms including termination and contract enforceability.

Tolling: Political resolve is required to support the introduction of tolling and the periodic increases in tolls built into the concession agreement. Without this, the imposition of tolls is likely to provoke opposition from residents and road users.

Furthermore, there is a need for policy framework to address contingent liabilities. These liabilities need to be examined from a macro-economic perspective to determine their affordability. Such liabilities include premature discontinuation of partnerships, and uncertainties related to debt and revenue guarantees. Countries have to decide whether to assume these liabilities and if so, determine how to value, monitor and limit them. Some of the approaches to manage contingent liabili-

[32] *Private Sector Involvement in Road Financing*, Peter Brocklebank, SSATP Working Paper 102, December 2014.

ties include: policy objectives that require contracting terms to limit them, requirement that such liabilities be quantified and regularly reviewed and published, and restricting risk-bearing to areas that the public sector has control over.

Informed policy development

Effective transport policy performance hinges on an efficient and well-articulated policy process. For that, the transport policy process needs to address a number of pervasive challenges that hinder effective policy design and implementation.

The first challenge is the lack of adequate institutional capacity to effectively implement transport sector strategies. This can be as much about actual capacity constraints – inadequate human and financial resources, poor information and information systems, and a lack of prioritization frameworks, as it can be a failure in the design of the strategies themselves – if these do not appropriately recognize local realities and related implementation capacity issues. Indeed transport policies will not perform if there is no capacity to implement them. This appears to have been a constraint for many policies and strategies in SSA and warrants greater focus if future policies are to succeed.

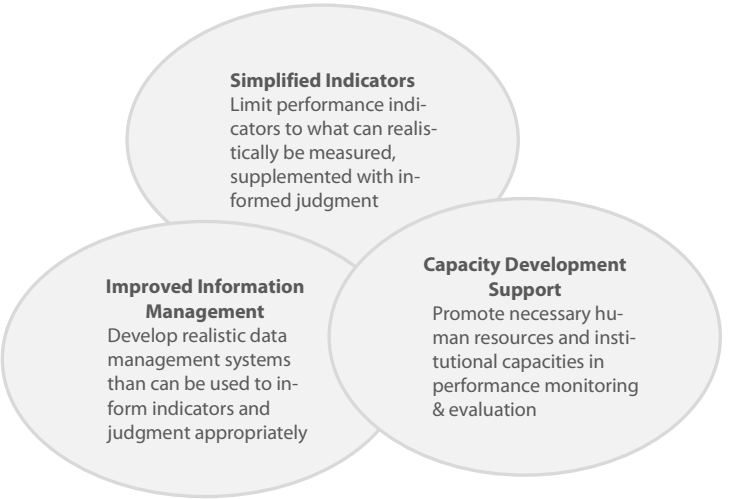
The second challenge is weak monitoring and evaluation of transport policy performance. Without appropriate data and indicators to understand past performance with respect to policy objectives, it is very difficult to develop meaningful transport policies and strategies going forward. In some respects, the lack of an effective M&E process undermines the entire transport policy cycle.

Central to the success of future solutions is the recognition of local realities and capacity constraints faced by transport policy makers. In this light, simplification is a key to improving the effectiveness of transport policies. Less may be more.

Specifically, transport policy objectives and related indicators should be simplified and limited to a set of universally used and understood key transport indicators that are known to contribute to intended outcomes. In the absence of reliable data continuously collected to measure outputs and evaluate outcomes, developing and tracking transport-related poverty indicators or other second-order impacts is not likely to produce useful results. Such indicators are simply too abstract or difficult to measure meaningfully. The limited applicability and use of the Rural Accessibility Index is a case in point.

Improvement of transport policy M&E should also be recognized as a key priority of transport departments. Where possible, a limited set of quantifiable indicators based on objective data should be developed. Until these indicators become available, policy makers should complement available data with informed judgement based on local realities. This approach is imperfect, but better than not assessing performance at all. In any case, M&E activities should be kept simple and proven cost-effective, before introducing new indicators.

Figure 3. Simplified Performance Monitoring and Evaluation Framework

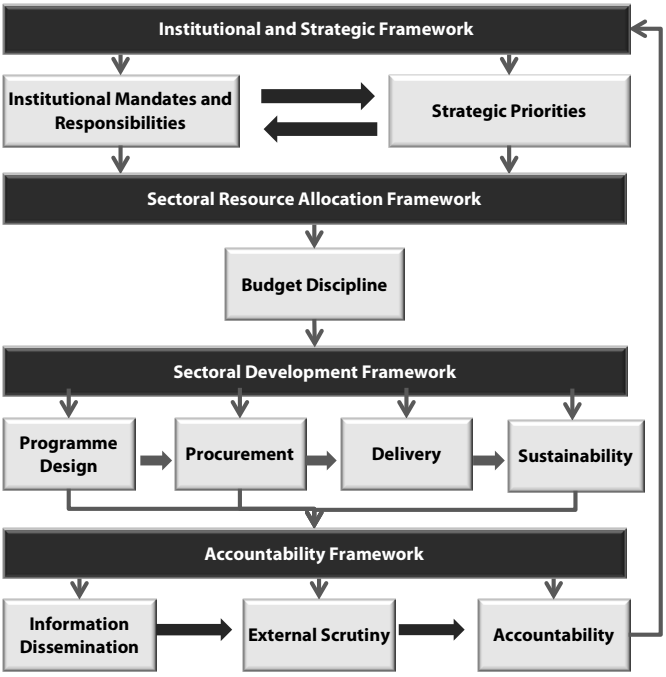


Source: Africa Transport Policy Performance Review. CPCS

To improve transport policy monitoring and evaluation in SSA, a three-pronged approach is recommended comprising simplified indicators, improved information management and capacity development support, as summarized in Figure 3. The first consideration is that of simplified indicators. In view of the capacity constraints, it is important to limit performance indicators to what can realistically be measured, supplemented with informed judgment. The second aspect is that of developing and sustaining the capacity for the M&E function. This would entail the creation of dedicated M&E units where they do not exist and enhancement of the existing human resources. Finally, realistic information and data management systems need to be established and supported by appropriate infrastructure, to inform indicators and judgments appropriately. Moving forward with this approach will require seed funding, but should in the long term provide significant value for money.

In this regard, SSATP has developed a first sub-set of indicators on transport sector governance for monitoring and identifying areas where policy action is needed. The ten indicators comprehensively cover the fundamental phases (strategy, resource allocation, implementation, and accountability processes) of a governance cycle framework[33] (Figure 4). The use of these indicators by countries would enable them to assess their sector performance and enable peer comparison of performance between countries.

Figure 4. Governance phases in the management of the transport sector



[33] *Transport Governance Indicators for sub-Saharan Africa*. Angela Christie, Don Smith, Kate Conroy, SSATP Working Paper No. 95, 2013.

The ten indicators have been identified with specific attention to the capacity to monitor and include them in the policy development process. For that reason, the proposed ones are actionable, credible, relevant, sensitive to changes, understandable, available, reliable and usable. They are provided in the following table:

Governance area	Indicator
Mandates	Clarity and distinction of mandates and responsibilities
Strategic priorities	Coherence of transport sector policy
Budget discipline	Budget allocation based on reliable financial forecast and aligned to priorities
Program Design	Quality and use of key performance and Value for Money indicators
Procurement	Key procurement information made available
Delivery	Comprehensive reports on progress of work disclosed to the public
Sustainability	Transport Sector Agency has established benchmarks for maintenance of assets and allocates budget accordingly
Information dissemination	Transparency and timeliness of annual budget and expenditure disclosure
External Scrutiny	Rules over membership and appointment to key transport sector governance boards
Accountability	Percentage of recommendations from independent technical and financial auditor reports implemented within one year

Sectoral policy performance

Road sector

Road sector development policies and plans in SSA would benefit from a more robust prioritization framework, institutional strengthening and better information management and performance M&E. While the need to give priority to maintenance has already been emphasized since the Road Maintenance Initiative[34] started in the late 80s, in a changing period for Africa, sustainable development of its road network in support of continuous economic growth requires careful consideration of the funding proportions between investment and maintenance ensuring that resources for the latter are made available and increasing in proportion of the efforts made for the former.

[34] Various SSATP documents available at www.ssatp.org can be consulted on the concept of commercialized road management, including the creation of road maintenance funds and road agencies, promoted by the Road Maintenance Initiative.

Road sector reforms, including the introduction of road agencies and road funds, seem to have been more effective than under the previous status quo—management by line departments of ministries. The overall improvement of the road network shows that maintenance efforts have accompanied the investments, which was not the case thirty years ago. However, funding remains a continuous challenge for road maintenance. Current fuel levies are insufficient on their own to cover needs. This may require countries to look at new sources of road funding, and in particular private financing which has been so far largely unused in Africa.

A policy review of the reform is especially needed to improve road user revenue and its utilization. While some countries have still to implement the concept of road commercialization, the performance of those which already implemented the concept seems to have stalled. Road funds had a positive impact in terms of giving greater priority to road maintenance and using resources more efficiently, this being somewhat equivalent to receiving more resources. This is no longer adequate, in a changing world where more is needed and where the infrastructure gap in Africa remains huge and, if unaddressed, will become an obstacle to continuous economic growth; where methods of government are changing and more transparency and accountability is required from governments; where the road sector cannot stay in its technical ivory tower and has to demonstrate that as other sectors it contributes to ending extreme poverty and promoting shared prosperity.

Authorities in charge of roads, road funds and road agencies face the challenge of putting in place new management methods which use modern technologies, new operational methods such as performance-based contracts and public-private sector partnerships, more affordable strategies using local resources to reach a greater share of the populations along with safer strategies to protect the most vulnerable. This will require proper M&E systems to provide the indicators to underpin and evaluate policy decisions and performance in a transparent manner.

Critical to the sustainability of the road sector, road safety needs to be managed professionally. The safe systems approach is now recognized as the basis upon which good road safety management practice rests. Within a safe systems approach, effective management practice addresses road safety as a production process with three interrelated elements: institutional management functions to produce interventions that in turn produce results. The framework within which countries can most effectively tackle their road safety challenges, therefore require the existence of a well mandated road safety lead institution as a prerequisite for successful interventions and results.

Rail sector

Similarly to the road sector reforms, reforms in the railway sector are an unfinished business. Past reforms have stopped the drain on the economies caused by inefficient and bankrupt railway companies and "stopped the decline that threatened the disappearance of many lines"[35]. Still the potential of railways is largely unfulfilled. A new vision is needed to express this potential and for railways to "emerge as an attractive transportation alternative for Africa in some specific markets"[23]. This vision requires for railways to be accepted as a business and not considered as a public service, a concept which has brought railway companies to financial bankruptcy; for governments to continue playing a role in providing the enabling environment which includes support to affordable investment[36] and at the same time unbiased land transport policies for fair competition among modes. Those key principles can be the foundation of long-term development plans where railways can bring benefits to the countries and the global economy beyond their transport role, in particular through their low carbon performance reducing the impact of transport on climate change.

Port sector

Port sector reforms have largely been more effective than continued government operations due to a more business-like approach, closer interaction with the rest of the world, leading consequently to a better knowledge of good practices. The port business is also less risky as most of its market is captive which, on the other side does reduce the incentive to perform and can generate undue costs to the economy. There are no doubt opportunities to improve port reform models, but increased private sector operation of port terminals, guided by appropriate policy and regulation, will remain a key pillar of the reforms in the future. Like railways, the challenge will be to put in place policies ensuring affordability at the higher level of the country and not only at the level of the port, while providing competitive and viable services. Regional Economic Communities will also have a critical role to play in providing a regional vision promoting the competition among cor-

[35] Ibid.

[36] In this respect, in the current debate on the various standards for the railway gauge, it will be important to acknowledge that the gauge is not an objective in itself and should not be a political decision. The objective is not to provide a gauge but to provide a service, which is competitive, affordable and viable from the both public and private points of view.

ridors, which will mitigate the risk of rent-seeking situations and high costs in captive markets.

Corridor transit traffic

The extent to which corridor management initiatives have been effective is not clear. There has been more than enough analysis done over the years on the challenges facing transit traffic. Solutions are known but few are implemented to address the problems. The main challenge remains the conflict between the short-term vested interest of countries and the broader long-term benefit for the region.

The institutional framework for regional integration is one of the keys to better performance of regional corridors. It reflects this unresolved conflict as Regional Economic Communities and corridor management authorities do not have the authority to implement their decisions. Political commitment of countries is definitely a requirement for improved corridor performance but is not enough for sustaining this improvement as it is often volatile. A proper institutional framework is required to consolidate and sustain this progress. However, this goes beyond the transport sector's capability of reform and the transport sector will have to partner with other sectors such as trade, agriculture and industry to move the institutional reform agenda.

The benefit of this coordinated approach will also be to make more apparent the contribution from the transport sector to broader development objectives beyond transport. The approach could take place within the concept of integrated economic development along corridors. Africa has started to develop this concept along a few corridors but the approach remains fragmented and at the early stages of implementation. More time is needed to provide the evidence of success.

Still a first step essential to support reforms is to set up corridor performance monitoring systems as this is generally not well done (with some notable exceptions). Poor governance is at the crux of poor corridor performance. An M&E system will bring more transparency as well as accountability and will strengthen political commitments by bringing the proof of success.

Transport and the global development agenda

To become part of a globalized world, the transport sector in Africa will need to take up the challenge of achieving the transport targets of the sustainable development goals (SDG)[37]. Transport was ignored in the Millennium Development Goals with significant consequences in terms of sector development and funding but also in terms of overall economic development. Africa brought it back by promoting the Rural Access Index but then failed in implementing the vision of improved rural accessibility. With the SDGs, another opportunity opens to develop transport policies to respond to the more ambitious development agenda of Africa. The transport sector must not repeat the past mistake of ignoring the MDGs and needs to embrace the sustainable development goals as the broad development framework that guides its policies.

This focus on the SDGs will address the findings of the Review which suggest that higher level pro-poor pro-growth objectives for the transport sector would have greater impact if: (a) the causal link between transport and these high level outcomes is properly established; (b) performance of the transport sector against pro-poor, pro-growth and cross-cutting theme objectives is proactively measured; (c) efforts to track performance against such objectives would not place further strains on the already capacity-constrained monitoring and evaluation processes (e.g. by having pragmatic and less onerous indicators). This would appropriately demonstrate that the transportation sector plays an important but indirect and implicit role in economic growth and poverty alleviation and measure the transport contribution to these higher-level objectives.

Still more research on the poverty and growth impacts of transport and the role of transport in HIV/AIDS, gender equity, the environment, among other cross-cutting themes would be a worthwhile pursuit. As acknowledged in the SSATP Guidelines and Framework for a Pro-Growth, Pro-poor Transport Strategy[38,39],

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[37] Outcome Document - Open Working Group on Sustainable Development Goals. United Nations. July 2014. http://sustainabledevelopment.un.org/focussdgs.html

[38] *SSATP Review of National Transport and Poverty Reduction Strategies – Guidelines*, Mary Braithwaite, SSATP Working Paper 77, December 2003.

[39] *A Framework for a Pro-growth, Pro-poor Transport Strategy*, Tesfamichael Nahusenay Mitiku, SSATP Working Paper 89, October 2009.

more research likely needs to be undertaken to identify the types of transport policies and best practices that can have the greatest impact on these higher-level objectives. This could then inform future transport policy and investment prioritization frameworks at the country level. The SSATP or academic institutions would be well placed to lead such research and then disseminate it to policy makers in the Africa region.

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