Routledge
Taylor & Francis Group

Canadian Journal of African Studies / Revue canadienne des études africaines

ISSN: (Print) (Online) Journal homepage: https://www.tandfonline.com/loi/rcas20

Regional transport infrastructure programmes in Africa: what factors influence their performance?

Robert Tama Lisinge & Meine Pieter van Dijk

To cite this article: Robert Tama Lisinge & Meine Pieter van Dijk (2022) Regional transport infrastructure programmes in Africa: what factors influence their performance?, Canadian Journal of African Studies / Revue canadienne des études africaines, 56:1, 99-121, DOI: 10.1080/00083968.2021.1896369

To link to this article: https://doi.org/10.1080/00083968.2021.1896369

Published online: 30 Apr 2021.

CANADIAN JOURNAL OF AFRICAN STUDIES / REVUE CANADIENNE DES ÉTUDES AFRICAINES
2022, VOL. 56, NO. 1, 99–121
https://doi.org/10.1080/00083968.2021.1896369

Routledge
Taylor & Francis Group

Regional transport infrastructure programmes in Africa: what factors influence their performance?

Robert Tama Lisinge[a] and Meine Pieter van Dijk[b]

[a]Private Sector Development and Finance Division, United Nations Economic Commission for Africa, Addis Ababa, Ethiopia; [b]Project Department, Maastricht School of Management, Maastricht, Netherlands

ABSTRACT

Regional transport infrastructure programmes require collaborative arrangements between countries and stakeholders. We study the performance of three African programmes, looking at factors influencing their success. The extent to which collaborative arrangements and other factors contribute to project implementation and the reasons for differences in performance of these programmes are examined. The analysis demonstrates the interactions of actors with different interests, values, power and knowledge and exposes hurdles in project preparation. It reveals ineffective institutional arrangements, inadequate and unsustainable funding, leadership challenges and weak ownership that compromise project implementation. It also reveals that availability of dedicated funds, well-defined monitoring and evaluation mechanisms, and strong political leadership contribute more to programme implementation than do equality in decision-making and clarity of roles and responsibilities. These factors and variations in the strength of the various collaborative arrangements across programmes suggest that a one-size-fits-all solution for accelerated implementation of programmes does not exist.

RÉSUMÉ

Les programmes régionaux d'infrastructures de transport nécessitent des accords de collaboration entre les pays et les parties prenantes. Nous avons examiné la performance de trois programmes africains, en examinant les facteurs qui influencent leur succès. La mesure dans laquelle les accords de collaboration et d'autres facteurs contribuent à la mise en œuvre des projets et les causes des différences de performance de ces programmes sont examinées. L'analyse démontre les interactions d'acteurs ayant des intérêts, des valeurs, un pouvoir et des connaissances différents, et met en lumière les obstacles rencontrés dans la préparation des projets. Elle révèle des accords institutionnels inefficaces, un financement inapproprié et non durable, des problèmes de leadership et une faible appropriation qui compromettent la mise en œuvre des projets. Elle démontre également que la disponibilité de fonds dédiés, des mécanismes de suivi et d'évaluation bien définis et un leadership politique fort contribuent davantage à la mise en œuvre du programme que l'égalité dans la prise de décision et la clarté des rôles et responsabilités. Ces facteurs et les variations dans la force des divers accords de collaboration d'un programme à l'autre suggèrent qu'il n'existe pas de solution unique pour accélérer la mise en œuvre des programmes.

KEYWORDS

Regional transport infrastructure; partnership; performance; management; Africa; programmes; projects

MOTS-CLÉS

Infrastructure régionale de transport; partenariat; performance; gestion; Afrique; programmes; projets

CONTACT Robert Tama Lisinge lisinge@un.org

Introduction

Africa has embraced regional integration as a strategy to overcome the disadvantages of small domestic markets (Economic Commission for Africa [ECA] 2004). Physical connectivity is an important dimension of regional integration as it helps in expanding markets and contributes to attracting private and foreign direct investment. These factors and social and political imperatives have led countries to launch a multitude of regional infrastructure programmes. Despite these programmes, Africa continues to have the least developed infrastructure in the world. Infrastructure networks of neighbouring countries remain largely unconnected, undermining the physical integration of the continent.

Working together is the key strategy to implement Africa's regional infrastructure programmes. However, collaboration has had limited success so far, as shown by the slow pace of implementation of transborder infrastructure programmes. Still, new regional initiatives such as the African continental high-speed rail project are envisaged, requiring collaboration between countries for their planning, while they need to be executed by the national authorities.

As an example we can mention the Trans-African Highways (TAH) network. It was conceived in the early 1970s to link different countries on the continent, but is still incomplete, with missing links constituting more than 20% of the 57,300 km network (African Union Commission [AUC] 2014). Similarly, only sixteen out of 103 projects (15.3%) of the New Partnership for Africa's Development (NEPAD) infrastructure short-term action plan were completed (African Development Bank [AfDB] and NEPAD 2010). Out of 409 projects of the Programme for Infrastructure Development in Africa (PIDA) launched in 2012, only 155 (37.5%) are under construction, or already operational; 14.9% are currently in the prefeasibility or feasibility study phases while 10.1% are still in the stage of project definition (AUC, African Union Development Agency [AUDA-NEPAD] and AfDB 2020).

Given the sluggish implementation of Africa's regional infrastructure programmes, stakeholders (countries, regional organisations and donors) may wonder whether it is worth participating in these programmes. It would be worthwhile if being part of a regional programme increases the chance of a project being implemented, and if the collaborative arrangement to implement the programmes is effective and adds value to the implementation process. Regional infrastructure programmes show variations in the implementation outcomes of their respective projects. In this regard, it would be useful for stakeholders to understand why some programmes appear to be more successful than others, the extent to which the success of a programme is the result of the effectiveness of the "partnership" for its implementation, and the form these arrangements have taken. Can the relevant success factors be identified and replicated across other programmes?

The objective of this article is to improve understanding of the factors influencing the effectiveness of regional infrastructure programmes in Africa, which could help to accelerate the implementation of such programmes. This, in turn, could contribute to efforts to reap the full benefits of regional development initiatives, such as the African Continental Free Trade Area (AfCFTA) whose implementation began in 2021. Specifically, we address the following question: what factors determine the effectiveness of implementing regional infrastructure programmes in Africa? This question is answered through a multiple case study involving three African regional infrastructure programmes: the Central African Transport Master Plan, the Abidjan–Lagos Highway Development Programme in West Africa, and the North–South

Corridor Programme in Eastern and Southern Africa. A perception survey involving these three programmes plus the East African Road Network Project complements the case studies.

The Central African Transport Master Plan aims to link capital cities of the sub-region with paved roads. The inter-state capital links have a total length of 14,240 km and involve Angola, Burundi, Cameroon, Central African Republic, Congo, Democratic Republic of Congo (DRC), Gabon, Equatorial Guinea and Chad. The Abidjan–Lagos Corridor covers a distance of 1028 km and connects the West African cities of Abidjan, Accra, Cotonou, Lome and Lagos. It consists of modernising and upgrading the corridor by constructing four one-stop-border posts as well as a 6-lane (2 × 3), dual-carriage highway with provision for rail and fibre optics. The North–South Corridor Programme spans eight countries (Botswana, DRC, Malawi, Mozambique, South Africa, Tanzania, Zambia and Zimbabwe) and has a total length of 10,647 km. It consists of upgrading, rehabilitating and maintaining roads on the corridor (Lisinge 2017).

The following sections discuss the performance of the projects, drawing from the literature, with a focus on identifying possible success factors. The reasons for failure of Africa's regional infrastructure projects and the role of inter-organisational partnerships are examined. The theoretical overview leads to the conceptual framework used in the analysis of the selected partnerships. Then the methodology is briefly described, before a comparative analysis of the different programmes is given and conclusions are drawn.

Review of literature and theoretical considerations

Shortcomings of regional infrastructure programmes in Africa

Several studies have been undertaken on Africa's regional infrastructure programmes. Coulibaly et al. (2010) highlight the following challenges: ensuring awareness of stakeholders, building political consensus and getting high-level buy-in to move projects forward; building trust – especially when countries have diverse interests, are fearful of conceding their national sovereignty and perceive that some countries stand to benefit more than others; investing in credible information; and taking regional perspectives into consideration when developing national policy. Ondiege, Moyo, and Verdier-Chouachane (2013) emphasise inadequate capacity and skills at the level of governments and Regional Economic Communities (RECs) to negotiate and deliver projects, and underscore the challenge of deploying a holistic and inclusive programme implementation.

For Hagerman (2012), the challenges to working regionally include coordinating not only countries that are under pressure to prioritise issues on the national agenda but also relevant departments within countries and in different countries. She also emphasised the disconnect between political declarations and concrete action, through failure to empower and capacitate bureaucrats to implement the mandates articulated in protocols/treaties, to reflect the objectives and outcomes of regional agreements in national legislation, and to attract political champions for regional projects. Jouanjean, Gachassin, and te Velde (2015) discuss the political economy of regional infrastructure and note that the motivation and promotion of regional infrastructure is complex and involves multiple opposing interests. Regional infrastructure may lead to greater benefits or greater costs for some countries than for others, for some modes of transport than for others, and for large formal traders than for small informal ones. They point out the limits of regions as

drivers of change, noting that RECs may develop frameworks for regional integration and negotiation with external partners (such as development banks and bilateral donors), but that there are varying interests and limitations in terms of capacity, legitimacy, and costs and benefits in driving the full process. They also point out that ambition in regionalism often leads to missed deadlines and a lack of confidence in the process. For Ikome and Lisinge (2016), it is the interplay of diverse economic, institutional and political factors and interests that determine the successful implementation of regional infrastructure projects.

According to Wentworth (n.d.), coordinating and setting priorities for regional projects are especially difficult, given the significant differences across countries and sectors in governance and regulatory environment, varying levels of private-sector involvement, intensity of economic activity, and conditions of peace and stability, as well as the demand for and acceptance of projects.

Studies done in other regions of the world also provide useful insights into the challenges of cross-border infrastructure development. For instance, Savacool (2010) undertook a comparative study of two Asian energy pipelines and found that various actors and institutions have different visions and views of each project. Not surprisingly, his findings suggest that projects progress rapidly when the vision and interest of stakeholders are aligned, but face challenges when they diverge. He identified the following elements driving project success: the notion of a unified enemy or competitor; a connection between the project and the vision of the country on economic development; interest and pressure from development partners; and focussed and harmonised "corporate" leadership at the highest level from foreign and national actors.

Broader policy and project implementation issues

Several other strands of research are relevant to improving understanding of the hurdles to implementation of Africa's regional infrastructure programmes. Research on the role of international organisations in the implementation of policies at the national level falls in this category. Joachim and Verbeck (2004) raise several pertinent issues in this regard, including the following: international organisations may assist states in the implementation of policies or be in charge of implementation; the only weapons international organisations may possess to ensure policy implementation are monitoring and subsequent shaming; international organisations are agents of states in the implementation process, and implementation is contingent on domestic institutions and groups.

Studies on domestic implementation of international regimes (agreements, in this case referring to the implementation of cross-border infrastructure programmes) also provide insights into the implementation of regional transport infrastructure programmes in Africa. According to Ferraro (2010), such studies have explicitly acknowledged the relevance of domestic implementation for the effectiveness of international regimes, recognised that the primary causes of weak implementation of regimes are at the level of states, and highlighted the participation of civil society and state capacity as important state-level explanatory factors in analysing the domestic implementation of regimes. Most development studies attribute poor implementation of international regimes at the national level to scarcity of resources and policy characteristics.

The broader literature on policy change and implementation is also relevant in unpacking the failure of many African regional infrastructure programmes. A multitude of factors that

explain implementation have emerged from policy studies. According to these studies, implementation depends on the national ability to reform, which is determined by national politics and capacity as well as policy design and implementation behaviour (Ferraro 2010). The literature distinguishes top-down and bottom-up approaches to policy implementation. Policy designers are central actors in top-down approaches, and they seek to develop generalised policy advice. A criticism of this approach is that it considers implementation an administrative process and ignores political aspects. The bottom-up approach emphasises target groups and service deliverers, arguing that policy is made at the local level and underscores the importance of contextual factors within the implementation environment. A criticism of this approach is that it overemphasises the level of local autonomy.

The principal–agency theory, which focuses on how principals delegate implementation to agents, is preoccupied with monitoring of agents by principals in order to reduce drift in implementation, third parties, administrative procedures and the situation of multiple principals. This theory raises questions such as who the principal is that monitors the actions of the agents, and how agents are selected (Cerna 2013). This is particularly relevant in Africa's regional transport infrastructure programmes where the definition of principals and agents may not necessarily be clear, there may be multiple principals and the principal may not have authority over the agent.

Policy failure – in this case delays or failure to implement Africa's regional infrastructure projects – could also be explained by overly optimistic expectations, implementation in situations where dispersed governance structures exist, inadequate collaborative policymaking, or the vagaries of the political cycle (Hudson, Hunter, and Peckham 2019). The interdisciplinary and multi-professional nature of infrastructure projects also poses a challenge to their implementation (Nilsen 2015). This is relevant for Africa's regional infrastructure programmes that have numerous projects and actors, including member states, RECs, other regional organisations and development partners.

Flyvbjerg (2017) addresses the issue of overly optimistic expectations and associates this with cost and time overruns in megaprojects. He posits that nine out of ten megaprojects have cost overruns of up to 50% in real terms and that overruns of over 50% of the budget are not uncommon. Overruns are a problem in both public and private sector projects, and geography does not seem to matter as all countries for which data are available suffer from overruns. According to Flyvbjerg (2017), benefit shortfalls of up to 50% are also common, and those above 50% are not uncommon. In addition, delays are a separate problem with megaprojects, with delays on dam construction being on average 45% of the estimated necessary time. Researchers have developed or adapted several other theories to enhance understanding and explain aspects of implementation, including theories such as implementation climate, absorptive capacity and organisational readiness (Nilsen 2015).

The literature review revealed multiple factors that could influence the performance of Africa's regional infrastructure programmes. While partnership is a key strategy for implementing these programmes, their failings have not been adequately analysed with a partnership lens. This paper seeks to close this gap by focusing also on the effectiveness of regional infrastructure partnerships. It uses factors identified from previous studies to develop a framework to analyse the performance of programmes from a partnership perspective. The paper demonstrates the complications of partnerships in

delivering the required infrastructure by focusing on their process rather than their outcomes.

The theory of inter-organisational collaboration

According to Takahashi (2008), the notion of partnerships (one type of inter-organisational collaboration) has been used since the 1970s in the aid sector. It expresses an ideological aspiration of international solidarity in the development cause and covers all sorts of relationships between all sorts of actors. He stressed that partnerships imply mutual support for mutual benefit. Barnes and Brown (2011) situate the rise of the idea of partnership within the historical context of the Cold War era. They maintain that partnerships have an instrumental value in that they offer a new conceptual response to traditional problems in development policy and can also capture new policy intuitions regarding how development policy ought to be formulated.

A partnership is a form of cooperation between parties with similar objectives but different (complementary) qualities, in which each contributes resources and shares in the investment risk (van Dijk 2012). The formation of a partnership is generally driven by a desire to achieve a shared common goal through mutual cooperation and responsibility, with the expectation of a net benefit for each party involved. Partnerships are partly driven by economic considerations and viewed as a vehicle for accessing additional resources, specialised skills and funding. It also allows stakeholders with vested interest to participate in the management process, underscoring its importance as a tool to make multidimensional/multisectoral programmes and projects (Laing et al. 2009).

The main criticism of development partnerships is that relations between partners are, at times, characterised by asymmetries in material and symbolic power. For example, at the symbolic level, there is a perception that higher status is sometimes accorded to the views and knowledge of international organisations/donors than to those of marginalised communities/partners. This, in essence, could undermine community/partner-led responses to local problems. Asymmetries in material power also exist between developed and developing countries (Aveling 2010). Hence there is a huge disparity between the reality of partnership management and its connotation. Takahashi (2008) notes that instead of equality of access to resources and the sharing of decisions oriented towards the achievement of common goals, as implied by the concept of development partnership, it is actually characterised by asymmetric power relations attributable to resources, status, nationality and networking. He cautioned that rather than harmony, this is likely to result in friction between partners caused by differences in the structures and culture of each organisation.

Another criticism of development partnerships is that they are sometimes associated with "conditionalities," defined as "a mutual arrangement by which a government takes, or promises to take, certain actions, in support of which an international financial institution or other agency will provide specified amounts of financial assistance" (Killick 1998, 6). Thus, conditionality is viewed as an attempt by donors to use aid as an incentive for developing countries to reform their policies and institutions (Zimelis 2011). The above critical remarks of partnerships cannot be generalised but raise pertinent issues with implications for the implementation of regional infrastructure projects in Africa.

To what extent do partnerships meet their objectives? Van Tulder (2008) observed that most partnerships go through largely similar stages, which allows for a comparable analysis of various dimensions of the process, namely inputs (goals, motives and resources of individual partners); throughputs (partnership characteristics, dynamisms and design); outputs (partnership objectives, sustainability and deliverables); and outcome (impact: direct and indirect contribution of partnership).

The Organisation for Economic Co-operation and Development (OECD 2006) notes that partnership evaluations conducted so far have identified a range of success factors, some of which are related to good project management (clear objectives, detailed plans, good leadership, sufficient resources and accountability), while others are linked with the dynamics of partnerships (understanding the needs of different partners, shared ownership and flexibility). van Dijk (2012) identified several success factors, and some of these are retained in the analytical model in this article. In particular:

(i) The institutional arrangements for implementation,
(ii) Leadership,
(iii) Equality in decision-making,
(iv) Available finance, and
(v) Monitoring and evaluation.

The conceptual model

This paper is based on the conceptual model presented in Figure 1, used in a broader study on partnerships and performance of Africa's regional infrastructure programmes (Lisinge 2017). The model is derived from the literature review and comprises partnership effectiveness variables and partnership outcomes or added value – the changes brought about by partnership. Effective partnerships bring about changes that facilitate the implementation of regional projects. These changes include access to knowledge, specialised skills and technology, and access to funding. Together with moderating variables such as project characteristics, political economy, characteristics of regional organisations and development partners (donors), these factors are used to explain the differences and similarities among Africa's regional infrastructure programmes, as well as variations in their performance, measured through the implementation outcomes of the respective projects.

Project performance is considered to have three dimensions, namely (i) progress in the project development cycle, measured by shifts across stages in the cycle; (ii) achievements (project management success), measured using indicators related to project delivery, such as the length of road constructed as well as the time, cost and quality of construction work; and (iii) effectiveness (project success), measured in terms of the extent to which overall project objectives are met. These objectives usually include increase in trade, and deepening of regional integration, among other things.

This article focuses on investigating progress made in attaining the different stages of the project development cycle, and does not include an assessment of project success criteria such as cost and quality of projects, which are more appropriate criteria for completed projects. In the same vein, it does not include assessments of the impact of completed projects or the extent to which they contribute to regional integration and

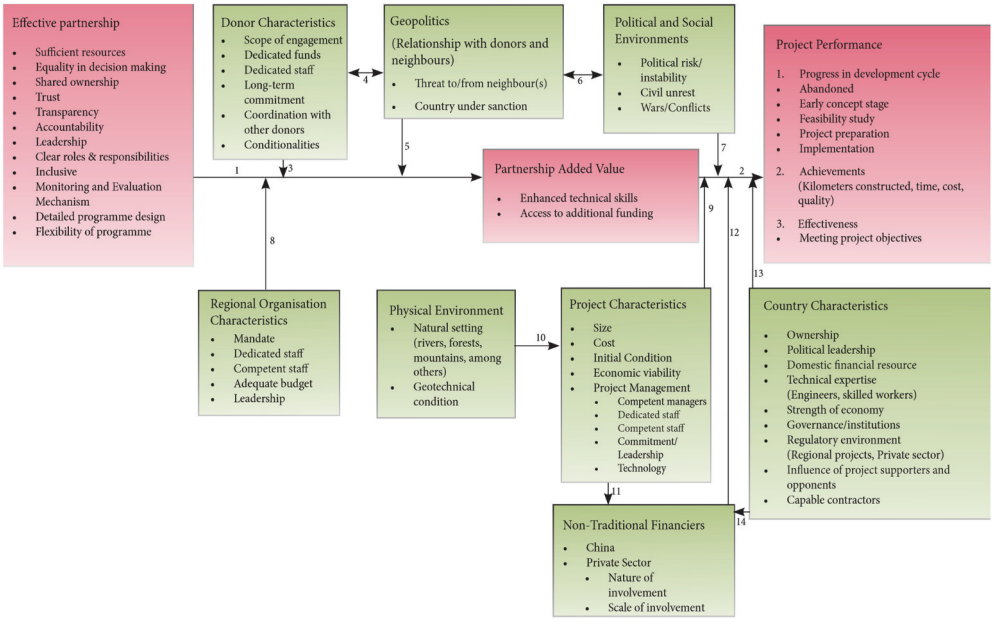

Figure 1. Conceptual model: regional infrastructure partnerships and project performance (author's construct) (Lisinge 2017).

other objectives of regional programmes. This is because very few projects in Africa's regional infrastructure programmes have been completed and can be assessed in terms of the achievement of these direct objectives.

The proposition of this article is that the positive effect of partnerships will be stronger for programmes with national ownership, where member states act as the principals and regional organisations play a supporting role, coordinating and providing technical support in programme development, resource mobilisation, monitoring and evaluation. The effect will also be stronger for programmes with dedicated project implementation units as well as seed funds with financial contribution from member states – complemented, but not replaced, by financial resources and technical assistance from development partners.

Methodology

A mixed-methods approach was used, where qualitative and quantitative data were collected concurrently to provide a comprehensive analysis of the research problem. The case study method was the dominant research strategy approach, for the following reasons:

- The number of examples that could be studied to answer the research question was small (regional transport infrastructure programmes);
- A contemporary set of events (ongoing programmes) was being studied;

- There were many variables related to the research question; and
- An in-depth analysis was needed to fully understand the issues.

The research was designed as a multiple-case study involving three cases, and replicative logic was used to select the cases. Each case was selected with the expectation that it would either (i) predict similar results (a literal replication) or (ii) predict contrasting results for anticipated reasons (a theoretical replication) (Yin 2009).

For instance, the North–South Corridor Programme was selected as one of the cases on the premise that its projects would be implemented as planned. That was because the North–South Corridor Programme was launched in a high-profile event in Lusaka in 2009, attended by heads of state of some of the concerned countries, and pledges to fund the projects of the programme were made by development partners. The programme was launched as a pilot Aid for Trade programme, and therefore appeared to enjoy the support of the international community as part of the World Trade Organization (WTO) agenda to build the productive capacity of African countries to access global markets.

The selection of the Abidjan–Lagos Corridor Highway Development Programme was also premised on the assumption that it would be successfully implemented. The Abidjan–Lagos Corridor Highway Development Programme enjoyed great visibility when heads of state of the concerned countries signed a treaty for its implementation in 2014 at a summit of the Economic Community of West African States (ECOWAS) in Yamoussoukro. The treaty provided for the creation of a corridor management authority and a seed fund for the implementation of the programme. The Central African Transport Master Plan, in contrast, is located in a region that has the worst infrastructure network and is the least integrated on the continent. Its selection was therefore based on the assumption that it would be less successful and its projects would experience more implementation delays compared to the other two programmes.

Data were collected from multiple sources, including interviews with key informants, informal interviews, open-ended questions in a questionnaire administered to partners of regional transport infrastructure programmes, and review of documents. The interviews with the key informants were guided by a case study protocol, which contained the research question and data collection procedures, the sites to be visited, the data collection plan and preparations to be made before the site visit. In-depth face-to-face interviews with key informants enabled facts and opinions of the interviewees on the research question to be gathered. Informal interviews were undertaken with senior officials of key stakeholders of the programmes that were studied, for example officials of the AfDB, ECOWAS, AUC, the African Union Development Agency (AUDA-NEPAD), ECA and the Islamic Development Bank.

A desk study of various secondary data sources was undertaken, including minutes of meetings with key stakeholders and infrastructure experts; progress, review and evaluation reports; terms of reference for technical studies and advisory services; and reports of technical studies of the concerned regional infrastructure programmes.

A perception survey of key stakeholders of the three main cases of regional transport infrastructure programmes, listed above, plus the East African Road Network Project, was also undertaken as part of this research. Fifty-one stakeholders responded to the survey. The respondents included experts and senior officials of member states, RECs and other

inter-governmental organisations, and AfDB. The survey was used to assess how the respondents perceived the effectiveness and value addition of the partnerships for the four programmes as well as to identify the critical success factors for the implementation of projects in these programmes. Findings from the analysis of data from the perception survey are woven into the cross-case synthesis and complement it in shedding light on the research question. It must be noted that the perception may sometimes be more positive because of low expectations of the stakeholders (for example the RECs and member states) to implement regional programmes successfully. Another reason for the relatively high ratings of the performance of the partnerships may be because they have not been made in relation to achieving the objectives of these programmes. If the level of capacity building achieved and resources mobilised as a result of the programmes is compared to the requirements for fully implementing the programmes, the perception would have been less positive. This raises the question of whether the respondents who shared their perspectives are fully aware of the technical capacity and financial requirements for implementing these programmes and the extent to which partnerships contribute to meeting these requirements. There is a high chance that they are not. A summary of the data collection techniques and instruments used in this research is provided in Table 1, while Table 2 shows the number and categories of respondents of the perception survey.

Analysis of the qualitative data was based on the theoretical propositions derived from the research question and model. In this regard, pattern-matching was used to analyse the data. Accordingly, patterns identified in the collected data were compared with predicted patterns. Content and thematic analyses were employed to identify themes and to group ideas emerging from the data. NVivo, a computer-assisted qualitative data analysis software program, was used to analyse the data. The survey data were analysed using descriptive statistics. Cross-case synthesis was used to analyse the case studies. The analysis aggregates findings across the three cases and enables cross-case conclusions to be reached, including on similarities and differences among the individual cases.

Results: cross-case analysis

Partnership effectiveness

The institutional arrangements for implementation

There are clearly defined arrangements for the implementation of all three programmes. For instance, heads of state and government established a follow-up mechanism for the Central African Transport Master Plan that includes an operational monitoring committee, consisting of the Economic Community of Central African States (ECCAS), Central African Monetary and Economic Community (CEMAC), the Development Bank of Central African States (BDEAC) and ECA's sub-regional office for Central Africa (ECA/SRO-CA). It also includes a ministerial monitoring committee consisting of the ministers responsible for transport of Gabon and DRC, as well as the ministers responsible for public works of Cameroon and the Republic of Congo. In addition, the decision-making structure for the master plan includes experts of public works of member states, the conference of central African ministers responsible for transport and public works, and the summit of ECCAS heads of state. However, it appeared that this institutional arrangement was dysfunctional and the committees do not meet regularly.

Table 1. Data collection techniques and instruments.

Techniques	Composition	Size	Tools
Key informant interviews	Senior officials and experts of Regional Economic Communities, national road agencies, intergovernmental organisations, African Development Bank, Development Bank of Southern Africa, Economic Commission for Africa, African Union Development Agency, and Presidential Infrastructure Champion Initiative	10	• Research questions • Conceptual model (partnership effectiveness factors, partnership added value; project performance) • Note taking • NVivo (for qualitative data analysis)
Informal interviews	Senior officials and experts of Regional Economic Communities, national road agencies, African Development Bank, Economic Commission for Africa, African Union Commission, and African Union Development Agency	15	• Research questions • Conceptual model (partnership effectiveness factors, partnership added value, project performance) • Note taking • NVivo (for qualitative data analysis)
Document review	Minutes of meetings; progress reports, review and evaluation reports; terms of reference for technical studies and advisory services; reports of technical studies; PowerPoint presentations; and other relevant documents from RECs	N/A	• Review of decisions and declarations of heads of state and government as well as communiques/reports of ministerial meetings • Review of intergovernmental agreements • Review of progress reports of programmes • Review of minutes of relevant committee meetings
Partners' perception survey	Senior officials and experts of Regional Economic Communities, national road agencies, intergovernmental organisations, African Development Bank, Development Bank of Southern Africa, Economic Commission for Africa, African Union Development Agency, and Presidential Infrastructure Champion Initiative	51	• Structured questionnaire • Categorical responses • Some open-ended questions in questionnaire • NVivo (for qualitative data analysis)
Projects survey	Priority projects of the North–South Corridor Programme	49	• Project matrix • Information on project characteristics (length, cost) • Time series data on progress of project

Table 2. Categories of respondents of partners' perception survey.

	Number of respondents				
Programme	Country	RECs	Development Bank	Other institutions[a]	Total
Central African Transport Master Plan	7	2	1	1	11
East African Road Network Project	5	2	1	3	11
Abidjan–Lagos Highway Development Programme	7	6	4	2	19
North–South Corridor Programme	4	1	1	4	10
Total	23	11	7	10	51

[a]Other institutions include the African Union Commission, African Union Development Agency (AUDA-NEPAD), Economic Commission for Africa and transport corridor management organisations.

Regarding the Abidjan–Lagos Corridor Highway Development Programme, heads of state have signed a treaty on the establishment of the Abidjan–Lagos Corridor. The treaty established the Abidjan–Lagos Corridor Management Authority, which has a supranational status, legal personality and financial autonomy, and shall be responsible for constructing, managing and operating the corridor. The authority is not yet operational. The treaty also established a project steering committee, made up of ministers responsible for roads, transport, highways and infrastructure/works of member states and the commissioner for infrastructure of ECOWAS. The project steering committee oversees the implementation of the Abidjan–Lagos Corridor Development Programme and is chaired by the Minister of Works of Nigeria, and ECOWAS serves as the secretariat. The committee has met several times, including during ECOWAS summits. The decision by heads of state to create a seed fund for the programme was based on the recommendation of the ministers, captured in their meeting report.

The Project Preparation and Implementation Unit (PPIU) is the central project preparation mechanism of the North–South Corridor Programme. It fits within the broader governance structure of the Common Market for Eastern and Southern Africa–East African Community–Southern African Development Community (COMESA-EAC-SADC) Tripartite, which includes the Tripartite Summit, Tripartite Council of Ministers, Tripartite Sectoral Committee of Ministers, Tripartite Committee of Senior Officials and Tripartite Task Force – of which the PPIU is part.

All three programmes studied are therefore anchored in legal texts signed at the highest political level and have clearly designed institutional architectures for their implementation. The establishment of institutional arrangements seems to have triggered the decision of development partners to support the Abidjan–Lagos Corridor Highway Development Programme. However, there is little evidence that such arrangements have made much difference in the implementation of the Central African Transport Master Plan. In the case of the North–South Corridor, the PPIU has played a significant role in the progress made in

implementing projects of the programme. The impact of legal instruments and institutional arrangements on the implementation of regional transport infrastructure programmes therefore varies across programmes. These mixed results show that other factors moderate the benefits of signing treaties, making high-level declarations, and creating committees or project implementation units, among other institutional measures. In this regard, the commitment of member states to structures that they themselves created seems to be weak, and hence the structures are often dysfunctional, as is the case for the Central Africa Transport Master Plan.

The perception survey undertaken as part of this research suggests that the institutional arrangements and legal instruments of the different programmes clearly define the roles and responsibilities of all actors. In that regard, more than 60% of respondents rated the extent to which roles and responsibilities of stakeholders were clear as high or very high. The vision and mission of stakeholders also seem to be aligned. Sixty percent of respondents rated the extent to which the visions and missions of stakeholders were aligned as high or very high. The problem appears to be that stakeholders are not carrying out their roles. Less than 40% of experts believe that all parties are playing their roles in the implementation of regional infrastructure programmes. This points to the importance of the second variable: leadership.

Leadership

Leadership is a challenge in all the three programmes, but the specific leadership dimension that constitutes the challenge varies across the programmes. In the case of the North–South Corridor Programme, the problem is that a donor (the Department for International Development (DFID) of the United Kingdom), rather than African countries and organisations, provided leadership of the programme. In the Abidjan–Lagos Corridor, leadership seemed to be personalised, not institutionalised, which led to uncertainties when a new president was elected in Nigeria in March 2015. Implementation of the Central African Transport Master Plan, for its part, is characterised by weak leadership. The fact that a donors' roundtable conference planned for 2007 had not yet taken place in 2020 is strong evidence of weak capacity to mobilise resources and of weak leadership in general.

The RECs have the mandate to lead and coordinate all three programmes but lack the capacity, both human and financial, to do so efficiently and effectively. For instance, at the time of this research, ECCAS had only one staff member dealing with the Central African Master Plan on a day-to-day basis. The programmes require a critical mass of technical staff to lead and coordinate the implementation effectively. This calls for a significant strengthening of their existing capacity. AUC, AUDA-NEPAD and AfDB have initiated a capacity-building programme for the RECs to strengthen their infrastructure units. This is a relevant initiative but it is not ambitious enough to make a significant impact, given that the initiative is designed to fund the position of only one infrastructure expert in each of the beneficiary RECs. The main assignment of the expert is to monitor the implementation of PIDA's projects. The use of an external source of finance to fund positions at RECs also raises concerns about the sustainability of the initiative.

There is a need for RECs and member states not only to take leadership of the programmes, or to strengthen their leadership in cases where they already lead, but also to institutionalise the leadership of the programmes. Institutionalisation and sustained leadership are important in light of the amount of time necessary for the preparation and implementation of

infrastructure projects. RECs and member states rely on donors for funding of regional programmes, but the funds provided by donors do not meet the requirements for preparing and implementing these programmes. This underscores the necessity to explore other implementation strategies for the programmes. It seems logical to target donors for project preparation, where they appear to want to channel most of their support, and for member states to take responsibility for project implementation. That would lead to more ownership and better prioritisation of the projects by incorporating them in national infrastructure development plans and committing resources for their implementation.

There is a divergence in perceptions of clarity in leadership of different programmes, as seen in Table 3 where the average scores are 3.7 and 3.6 for the East African Road Network Project and Central African Transport Master Plan, respectively, and 3.4 and 2.9 for the Abidjan–Lagos Highway Development Programme and the North–South Corridor Programme. This perception gap could be explained by differences in the level of engagement of political leaders as well as in the clarity of reporting lines in the different programmes. For instance, there is a strong involvement of EAC heads of state in the East African Road Network Project. They hold regular retreats to discuss infrastructure development in the sub-region. The North–South Corridor, in contrast, appears to have unclear reporting lines. South Africa is championing the corridor in the framework of the NEPAD Presidential Infrastructure Champion Initiative (PICI). This seems, though, to be in parallel to efforts by the PPIU of the COMESA-EAC-SADC Tripartite that has spearheaded the implementation of the corridor as an Aid for Trade project since its inception in 2009.

However, there was relatively strong leadership in the North–South Corridor Programme compared to the others. The only issue with the leadership of the North–South Corridor Programme is that it was assumed by development partners, particularly DFID.

Equality in decision-making

The organisational structures of the three programmes allow for equality in decision-making among all concerned member states. In this regard, issues related to the programmes are discussed at statutory meetings of RECs. However, donors play a dominant role in the decision-making process, and the extent to which they shape decisions seems to have a positive correlation with their financial contribution to the programmes. This is seen in the strong influence DFID had on the North–South Corridor Programme and the relatively weak influence of donors in decisions on the implementation of the Central Africa Transport Master Plan where they have provided little financial contributions.

Table 3. Partnership effectiveness scores.

	Average score				
Partnership effectiveness factors	Central African Transport Master Plan	Abidjan–Lagos Highway Development Programme	North–South Corridor Programme	East African Road Network	Total average score
Institutional arrangements for implementation	3.6	3.3	3.2	3.8	3.5
Available finance	2.5	2.8	2.9	2.8	2.75
Equality in decision-making	4.0	3.3	3.0	3.4	3.425
Leadership	3.6	3.4	2.9	3.7	3.4
Monitoring and evaluation	3.0	2.7	2.5	3.4	2.9
Average	3.34	3.1	2.9	3.42	3.195

The perception survey supports the view that donor influence varies across programmes, as seen in Table 3 where the average score for equality in decision-making is 4.0 for the Central African Transport Master Plan and 3.0 for the North–South Corridor Programme on a scale ranging from 1 to 5. Donor influence therefore reduces the perception of effectiveness of partnerships, although it is associated with additional resources. The ideal scenario is to have resources contributed by all partners. This would raise the level of equality in decision-making, as each partner would insist on having a say on how its contribution is used.

Inequality in decision-making and inadequate communication between partners has fuelled a feeling of lack of trust and transparency in the programmes, though to a lesser extent in the Abidjan–Lagos Highway Development Programme than in the two other programmes. Improving communication among partners of the different programmes could enhance the level of trust in the partnerships. One way of doing this is to ensure that the various committees set up to oversee the implementation of programmes meet regularly. This will enable partners to update each other on their respective activities related to the programmes.

Available finance

All three transport infrastructure programmes studied are complex, having road sections in different conditions and projects at different phases of the project development cycle. There are considerable variations in the size – total length of road network – of the different programmes and the corresponding partnerships for their implementation in terms of the number of countries and RECs involved. There are also variations in the scale of the challenges faced in implementing the different programmes, with the Central African Transport Master Plan being more complex than the others. It has a longer road network and involves more countries than the other programmes. In addition, the natural environment is characterised by dense forest, poor soil conditions and numerous rivers, all of which raise the cost of road construction. Its realisation would therefore require more resources and coordination efforts. Yet it has never had a dedicated fund for the preparation and implementation of its projects.

The North–South Corridor is the only one of the three programmes that has had dedicated funds for its implementation. It had a seed fund as part of the Tripartite Trust Account, housed at the Development Bank of Southern Africa (DBSA). The withdrawal by the United Kingdom of its contribution (through DFID) to the seed fund and the closure of TradeMark Southern Africa, through which DFID had provided its support to the North–South Corridor Programme, stalled progress in the preparation and implementation of its projects. This underscores the importance of having sustainable funding for the implementation of programmes, particularly given the long life cycle of infrastructure projects. It also highlights the risk of depending on a single donor for the implementation of a programme. The government of the United Kingdom justified its decision to discontinue financial support to Trademark Southern Africa largely in terms of its failure to achieve a significant number of key project objectives, as well as in terms of flaws in governance and programme management. However, many believe that DFID was unhappy with the use of its resources to finance projects in Zimbabwe.

The perception survey confirmed that lack of dedicated funds was the biggest challenge faced in implementing regional programmes. Experts rated the availability of dedicated funds, on average, as 2.75 on a scale ranging from 1 to 5, which was the lowest

among the average scores for different effectiveness factors (Table 3). More than 35% of experts rated the availability of dedicated funds in their programme as either low or very low (Figure 2). This suggests the need for member states to create funds that are dedicated to the preparation and implementation of projects of regional infrastructure programmes. These programmes are likely be more sustainable if contributions from donors only complement those of member states themselves.

Monitoring and evaluation

Monitoring and evaluation mechanisms were built into the design of the three programmes. However, these mechanisms are largely dysfunctional, except in the North–South Corridor Programme where member states have designated focal points and where regular updates on the corridor's roads, including progress in projects, were documented in a quarterly report. These updates were publicly available online. Tracking progress in the implementation of the Central African Transport Master Plan is difficult, as some member states have not created national monitoring committees or designated focal points. The Abidjan–Lagos Corridor is being monitored by the Abidjan–Lagos Corridor Organisation (ALCO), but there is a need for better coordination with ECOWAS and its project preparation and development unit.

Up to 40% of the respondents of the perception survey rated the availability of a functional monitoring and evaluation mechanism for their programme as either low or very low (Figure 2). Respondents rated the extent to which functional monitoring and evaluation mechanisms existed in their programmes as 2.9, on average, on a scale ranging from 1 to 5; the only lower average score on effectiveness was that for the availability of dedicated funds (Table 3).

Partnership added value: changes brought about

The partnerships for the implementation of all three programmes have enhanced the capacity of RECs and (to a lesser extent) the member states to prepare projects. The partnerships have also mobilised funds for the programmes, which have been used mostly for project preparation. The capacity enhancement and funds mobilised to execute the construction phase of projects have been very limited. RECs seem to

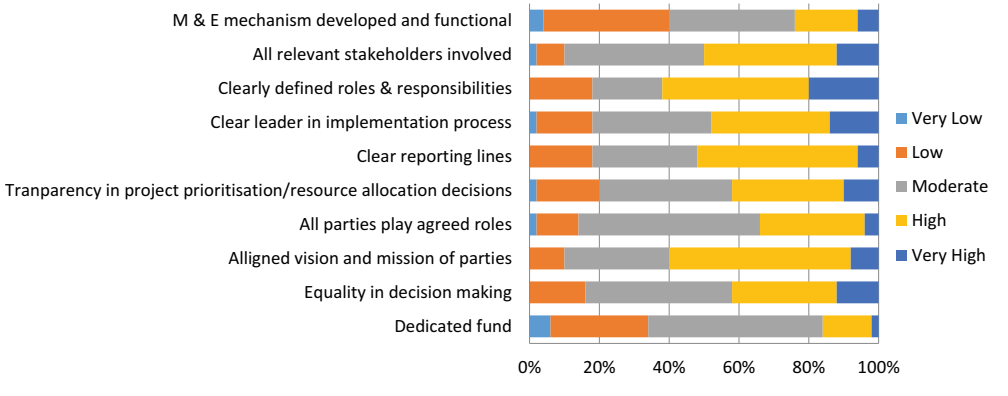

Figure 2. Perceptions of partnership effectiveness factors.

overestimate their capacity enhancement from infrastructure partnerships in the light of limited progress in the implementation of these projects.

Up to 63% of the perception survey respondents rated the project preparation capacity enhancement of their organisations, as a result of being part of a regional transport infrastructure partnership, as either modest or significant (Figure 3). Yet few projects have been completed as a result of being part of any of the programmes. For instance, only 32% of priority projects of the North–South Corridor Programme were in the implementation phase in 2014 – six years after it was launched. Specifically, 4% of projects managed by the COMESA-EAC-SADC Tripartite PPIU and 28% of partner projects were in the implementation phase. Moreover, construction had been completed for only four projects (Lisinge 2017). The Abidjan–Lagos Highway Development Programme has not entered the construction phase although its treaty was adopted in 2014. It is therefore surprising that close to 40% of respondents considered the effectiveness of their partnership to be moderate. More than 40% of respondents actually rated it as high or very high, even though only 2% considered progress in the implementation of programmes to be fast, while none of the respondents thought that progress was very fast (Figure 4).

The value addition of infrastructure partnerships seems to be in the preparation of projects, specifically in undertaking studies. Infrastructure partnerships should therefore build on their comparative advantage in this area. Delays are common in infrastructure projects, particularly mega projects, irrespective of whether they are located in developing or developed countries. As mentioned in the literature review of this article, delays on dam construction are 45% on average.

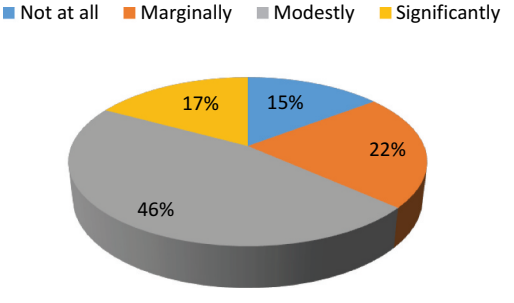

Figure 3. Perceptions of enhancement of project preparation capacity.

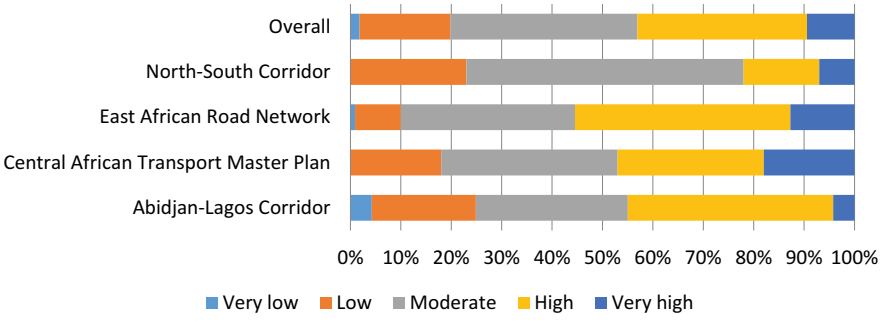

Figure 4. Partnership effectiveness.

According to the World Bank, it takes anywhere from one to ten years to complete and close a project (World Bank 2020). The AfDB estimates that implementation time ranges from two to five years, but this depends on the type and the nature of the project (AfDB 2020). The time taken to complete regional infrastructure projects in Africa is on the higher end of the range mentioned above. The report of the mid-term review of PIDA indicates that it takes a least five years to move a project from concept paper to implementation (AUC and NTU International 2019).

Discussion

This section provides a discussion of the key findings of the cross-case analysis undertaken. It links the empirical findings to the theoretical framework of the article and focuses on three success factors that are deemed critical to the performance of regional infrastructure programmes in Africa, namely institutional arrangements for implementation, equality in decision-making, and available finance. The discussion unpacks how these factors affect the performance of these programmes, and leads to policy recommendations from our findings that will be presented in the next section.

The institutional arrangements for implementation

A myriad of structures have been created, sometimes by heads of state, as part of the institutional arrangements for Africa's regional infrastructure programmes. These structures have varying membership, functions and operational modalities and include focal points, operational/technical committees, ministerial committees, project steering committees, technical working groups, corridor management authorities, and project preparation and implementation units, among other bodies. Their functions include provision of oversight; project preparation; and construction, management and operating responsibilities. A common characteristic of most of these structures is that they are dysfunctional, do not meet regularly or are not operational. Their ineffectiveness has fuelled the widespread belief that different stakeholders are not playing their roles and shouldering their responsibilities in the implementation of Africa's regional transport infrastructure programmes. Paradoxically, the visions and missions of the stakeholders appear to be aligned and their roles and responsibilities are clear, as revealed in this research. The inability of stakeholders to play their roles and achieve their vision demonstrates the ineffectiveness of regional organisations and governments and could be attributed to a lack of leadership, accountability, transparency, inclusiveness and equality in decision-making, as well as weak institutional and technical capacity and a lack of finance.

This research has revealed the very weak, or nonexistent, interface between regional and national strategies and the governance structures of Africa's cross-border infrastructure programmes. The loose interface between the management of programmes on the one hand and that of their specific projects on the other constitutes a major missing link in the institutional architecture for implementing regional programmes on the continent. The governing bodies at the regional level, for instance steering committees and their secretariats, are more active than those at the national level. This explains the low rate of implementation of projects which, ultimately, is the responsibility of member states. It also reveals the limited contributions of regional organisations such as RECs, AUC and AUDA-NEPAD in the implementation phase of regional projects.

In this regard, these organisations and the governance structures at the regional level are more equipped to lead the planning process at the early stages of programme development and to prepare projects for implementation than to lead or even be involved in their actual implementation. In essence, the implementation model seems to be fundamentally flawed, with stakeholders assigned roles and responsibilities that are not aligned with their comparative advantage. As highlighted by Joachim and Verbeck (2004), international organisations such as RECs may assist states in the implementation of policies or be in charge of implementation, but the only weapon they may possess to ensure policy implementation is monitoring and subsequent shaming. They are generally agents of states, while implementation is contingent on domestic institutions and groups. There appears to be a reversal of roles in the case of Africa's regional programmes, where implementation seems to be dependent on international organisations, although they are not well equipped for this, with member states appearing to be their agents in the process.

The absence of project management structures or units at the national level, with advisory boards and project managers (which is an effective way of assigning people and physical resources needed for successful implementation of a project), also explains why regional projects are stalled at the implementation stage. There are several other reasons why states comply (or not) with international commitments, such as the implementation of regional transport infrastructure projects. Compliance theories argue that countries tend to comply with their commitments due to enforcement mechanisms such as sanctions, or procedural mechanisms of system management. Other factors that influence compliance with commitments are outlined by Lim (2014) and include making the right strategic choices, dealing with administrative constraints, and building national technical and institutional capacity.

In terms of enforcement mechanisms, Africa's regional transport infrastructure projects are generally part of inter-governmental agreements, but the extent to which these agreements are legally binding and the sanctions that could be imposed against countries that flout their obligation are unclear. Furthermore, it takes a long time for the agreements to enter into full force because of delays in their signing or ratification by member states. For instance, the inter-governmental agreement on the Trans-African Highways was adopted by African heads of state in June 2014, but the ratification process has not even been initiated yet.

With regard to strategic choices, there are too many competing infrastructure initiatives at the sub-regional and regional levels, and countries need to prioritise the implementation of their commitments. This is particularly the case for countries that belong to several RECs. This research has shown, for example, that Angola seems to focus more on improving its transport links with Southern Africa than with Central Africa because of closer trade ties with countries in Southern Africa, particularly South Africa. Burundi and Rwanda, also for reasons related to trade in addition to closer political integration, pay more attention to links with Eastern Africa than Central Africa. Security concerns, which require continuous and careful attention, also shape the actions of governments and may influence their decision to comply with their commitments or not.

Available finance

Existing regional and sub-regional infrastructure programmes constitute a viable platform for African countries and organisations to engage with their partners in infrastructure

development. Irrespective of the source of finance for Africa's regional infrastructure programmes, it is worthwhile to consider concerns about a new wave of African debt and to ensure that the infrastructure delivered is resilient to climate change and natural disasters. It is equally important for the implementation of these programmes to result in the transfer of technology and contribute to job creation for the local population.

Overall, programmes with available finance, such as the North–South Corridor Programme (which had a seed fund), performed better than those without dedicated funds, such as the Central African Transport Master Plan. However, this finding is limited to the progress made in the preparatory stages of project development, including project inception and preparatory studies. This research does not provide sufficient evidence to conclude that the partnerships have led to a higher rate of completion of projects in some programmes. Actual implementation of projects was poor across the different programmes studied.

Equality in decision-making

The process of developing regional programmes may be a contributing factor to the lack of attention to these projects at the national level. In this regard, the development of the programmes is led by regional bureaucrats – mostly transport infrastructure experts in regional organisations – with experts of all concerned countries not necessarily participating actively. Underrepresentation or inadequate representation of countries in the development of programmes means that they have no voice in deliberations and decisions that affect them.

This mirrors a top-down approach where regional bureaucrats who design policies and seek to develop generalised policy advice are central actors. As noted in the literature, they often consider implementation an administrative process and ignore political dynamics (Cerna 2013). Moreover, policymaking is driven by the preferred solutions of the regional bureaucrats, with these solutions not necessarily emanating from political decisions. They dominate the process and set the boundaries of processes (consultations and deliberations) and programmes (the specific instruments that would be used to realise the policy aims) and politics takes the back seat. In essence, policymaking by bureaucrats dominates over political policy formulation (Howett, McConnell, and Perl 2014).

This means member states are not actively involved in the decision-making process of regional programmes, notably in selecting regional projects. Hence, there is a lack of ownership of these programmes. This is particularly the case as the selected projects may not result from government initiatives; and their choice may not be based on balanced consideration and analysis of options, as well as a calculation of the costs and benefits, from the perspective of member states. Weak ownership is reflected by the fact that several African countries do not consider regional projects national priorities and therefore do not incorporate them in their national development plans. This in turn results in a lack of interest by governments to mobilise stakeholders, commit to projects and allocate resources for their implementation. The importance of national ownership of regional programmes is well documented and cannot be overemphasised, as their implementation is contingent on domestic institutions and interest groups, and depends on circumstances at the national level such as national politics and capacity/human and financial resources (Ferraro 2010). Efforts are being made to address the problem of weak

national ownership of regional programmes. For instance, the process of selecting priority projects for the second phase of PIDA, to be implemented from 2021 to 2030, includes policy dialogues and intensive consultations with member states.

Conclusions and recommendations

This article has provided insights into the mechanisms of collaboration between regional organisations, donors and countries to achieve the goal of transboundary infrastructure in Africa. It has shed light on the factors that determine the effectiveness of collaboration to achieve this goal. The partnerships set up have generally been more active at the early stages of a programme and during project preparation than at the implementation stage. They have enhanced the capacity of RECs and member states (to a lesser extent) to prepare projects and mobilise funds for programmes, which have been used mostly for project preparation. The capacity enhancement and funds mobilised for the actual implementation (i.e. the construction phase) of projects have been very limited.

We demonstrated that the institutional arrangements of regional infrastructure programmes in Africa are fundamentally flawed. In particular, the interface between management structures at the regional and national levels is weak, and there is a disconnect between actors at the two levels. This contributes to the incomplete development cycle of projects in the programmes, with the projects rarely progressing beyond the preparatory stages to the implementation stage. Instead of being agents of member states, regional organisations and development partners dominate and act as principals in regional programmes while member states are generally considered agents to whom implementation is delegated – in what appears to be a reversal of roles. This is problematic as regional organisations have little leverage over member states, this consisting mainly of monitoring and evaluation and subsequent shaming, and therefore a limited ability to reduce drift in implementation.

This article has shown that a combination of factors account for the effectiveness of the partnerships to implement projects, and that some factors may be more important than others. Availability of finance, for example, seems to be more critical to the successful implementation of projects than clarity of roles and responsibilities. These findings suggest the need to customise efforts to enhance the effectiveness of Africa's regional infrastructure programmes, since the importance of various factors varies across programmes. Based on our analysis, we recommend the following actions to address the shortcomings of regional infrastructure partnerships in Africa: strengthening the institutional arrangements for implementing regional programmes; creating sustainable and innovative financing mechanisms for these programmes; and promoting inclusive strategic planning and programme management involving all stakeholders, particularly member states.

Acknowledgments

The authors express their gratitude to Dr Francis Ikome, Chief of the Regional Integration Section of the United Nations Economic Commission for Africa (ECA), for his insightful suggestions and comments on various drafts of this article, which helped to enrich it. However, all the views expressed here are those of the authors and do not in any way represent the position of the ECA.

Disclosure statement

No potential conflict of interest was reported by the authors.

Notes on contributors

Robert Tama Lisinge is the Chief of the Energy, Infrastructure and Services Section of the Private Sector Development and Finance Division of the United Nations Economic Commission for Africa (ECA), based in Addis Ababa, Ethiopia. He holds a BSc degree in civil engineering and an MSc degree in transportation engineering, as well as a doctorate in business administration from the Maastricht School of Management (MSM) in the Netherlands. Prior to his current position, he was the Chief of the Operational Quality Section of the Strategic Planning and Operational Quality Division of ECA. He has over 15 years of experience in undertaking research and advising African countries and organisations on infrastructure policy issues, and delivers courses on transport infrastructure development at the African Institute for Economic Development and Planning in Dakar, Senegal.

Meine Pieter van Dijk is an economist, emeritus professor of Water Services Management at UNESCO-IHE Institute for Water Education, visiting professor at the Beijing University for Civil Engineering and Architecture, and emeritus professor of Urban Management at the Institute of Social Studies (ISS) and the Institute of Housing and Urban Development Studies (IHS) of Erasmus University, and currently works at the Maastricht School of Management (dijkm@msm.nl). He has published 50 books and 300 professional articles, participates in the graduate schools of TU Delft and Erasmus University, is a member of the research schools CERES and SENSE, and worked on and in developing countries since 1973 as a consultant for NGOs, the Asian Development Bank, the Inter-American Development Bank, the World Bank, and various bilateral donors and UN agencies.

References

AfDB. 2020. "Implementation." Accessed 22 January 2020. https//www.afdb.org/en/projects-and-operations/project-cycle/implementation .

AfDB and NEPAD. 2010. *Project Implementation and Review of the NEPAD Infrastructure Short Term Action Plan (STAP): Draft Final Report, 3rd Review*. Midrand: NEPAD.

AUC. 2014. *Intergovernmental Agreement on the Trans-African Highway Network*. Addis Ababa: AUC.

AUC and NTU International. 2019. *PIDA Priority Action Plan Mid-term Review: Final Report*. Addis Ababa: AUC.

AUC, AUDA-NEPAD and AfDB. 2020. *Programme for Infrastructure Development in Africa*. Virtual PIDA Information Centre. https://www.au-pida.org/pida-projects/ .

Aveling, E. L. 2010. "The Impact of Aids Chains: Relations of Dependence or Supportive Partnerships for Community-Led Responses to HIV/AIDS?" *AIDS Care* 22 (sup2): 1588–1597. doi:10.1080/09540121.2010.507954.

Barnes, A., and G. W. Brown. 2011. "The Idea of Partnership within the Millennium Development Goals: Context, Instrumentality and the Normative Demands of Partnership." *Third World Quarterly* 32 (1): 165–180. doi:10.1080/01436597.2011.543821.

Cerna, L. 2013. *The Nature of Policy Change and Implementation: A Review of Different Theoretical Approaches*. Paris: OECD.

Coulibaly, S., A. Roberts, V. Forster, and U. Deichmann. 2010. "Deepening Regional Integration." In *Africa's Infrastructure: A Time for Transformation*, edited by V. Forster and C. Briceno-Garmendia, 143–161. Washington DC: World Bank.

ECA. 2004. *Assessing Regional Integration in Africa*. Addis Ababa: ECA.

Ferraro, G. 2010. *Domestic Implementation of International Regimes in Developing Countries: The Case of Marine Fisheries in China*. Leuven: Katholieke Universiteit.

Flyvbjerg, B. 2017. "Introduction: The Iron Law of Megaproject Management." Chap. 1 in *The Oxford Handbook of Megaproject Management*, edited by B. Flyvbjerg, 1–18. Oxford: Oxford University Press. URL for Print Version. http://bit.ly/2bctWZt .

Hagerman, E. 2012. *Challenges of Regional Infrastructure Development*. Midrand: Development Bank of Southern Africa.

Howett, M., A. McConnell, and A. Perl. 2014. "Streams and Stages: Reconciling Kingdon and Policy Process Theory." *European Journal of Political Research* 54 (3): 419–434. doi:10.111/1475-6765.12064.

Hudson, B., D. Hunter, and S. Peckham. 2019. "Policy Failure and the Policy-Implementation Gap: Can Policy Support Programs Help?" *Policy Design and Practice* 2 (1): 1–14. doi:10.1080/25741292.2018.1540378.

Ikome, F. N., and R. T. Lisinge. 2016. "The Political Economy of Infrastructure Development in Africa: An Assessment of the NEPAD Presidential Infrastructure Champion Initiative (PICI)." *Canadian Journal of African Studies*. doi:10.1080/00083968.2016.1221768.

Joachim, J., and B. Verbeck. 2004. "International Organisations and Policy Implementation: Pieces of the Puzzle." Paper presented to the workshop on "Policy implementation by international organisations". Joint Sessions of Workshop of the European Consortium of Political Research, Uppsala, Sweden, April 13–18.

Jouanjean, M., M. Gachassin, and D. W. te Velde. 2015. *Regional Infrastructure for Trade Facilitation: Impact on Growth and Poverty Reduction*. London: DFID.

Killick, T. 1998. *Aid and the Political Economy of Policy Change*. London: Overseas Development Institute.

Laing, J. H., D. Lee, S. A. Moore, A. Wegner, and B. Weiler. 2009. "Advancing Conceptual Understanding of Partnerships between Protected Area Agencies and the Tourism Industry: A Postdisciplinary and Multi-Theoretical Approach." *Journal of Sustainable Tourism* 17 (2): 207–229. doi:10.1080/09669580802495766.

Lim, S. 2014. "Compliance with International Norms: Implementing OECD DAC Principles in South Korea." *Globalisation* 11 (6): 859–874. doi:10.1080/14747731.2014.904158.

Lisinge, R. T. 2017. *Managing Africa's Regional Transport Infrastructure Programmes: Partnerships and Performance*. Maastricht: Maastricht School of Management.

Nilsen, P. 2015. "Making Sense of Implementation Theories, Models and Frameworks." *Implementation Science* 10 (53). doi:10.1186/s13012-015-0242-0.

OECD. 2006. *Evaluating the Effectiveness and Efficiency of Partnerships. ENV/EPOC(2006)15*. Paris: OECD.

Ondiege, P., J. M. Moyo, and A. Verdier-Chouachane. 2013. "Developing Africa's Infrastructure for Enhanced Competitiveness." In *The African Competitiveness Report 2013*, edited by World Bank, 69–106. Washington DC: World Bank.

Savacool, B. K. 2010. "Exploring the Conditions for Cooperative Energy Governance: A Comparative Study of Two Asian Pipelines." *Asian Studies Review* 34 (4): 489–511. doi:10.1080/10357823.2010.527918.

Takahashi, C. 2008. "Comparative Learning in Partnerships: Control, Competition or Collaboration?" *British Association for International and Comparative Education: Compare* 38: 5–22. doi:10.1080/03057920701420817.

van Dijk, M. P. 2012. "Using Partnerships to Achieve Sustainable Development of the Palm Oil Value Chain in Malaysia." In *Global Value Chains*, edited by M. P. van Dijk and J. Trienekens, 137-163. Amsterdam: Amsterdam University Press.

van Tulder, R. 2008. *Partnerships for Development: Position Paper*. Rotterdam: Rotterdam School of Management, Erasmus University.

Wentworth, L. n.d. *Political Economy of Regional Integration in Southern Africa: The Complexities of Regional Infrastructure Planning*. Johannesburg: South African IIA.

World Bank. 2020. "World Bank Project Cycle." Accessed 22 January 2020. https://projects.worldbank.org/en/projects-operations/products-and-services/brief/projectcycle .

Yin, R. K. 2009. *Case Study Research: Design and Methods*. 4th ed. Los Angeles: SAGE.

Zimelis, A. 2011. "Conditionalty and EU-ACP Partnership: A Misguided Approach to Development?" *Australian Journal of Political Science* 46 (3): 389–406. doi:10.1080/10361146.2011.595698.