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Many thanks also to the several other colleagues listed in the annex who gave their time to speak with or provide information to us as input into this work.

Acronyms & Abbreviations

ADB	African Development Bank
ALES	Africa Land Use Planning and Early Warning System
AMDC	African Minerals Development Centre
AMGI	African Minerals Geoscience Initiative
AMV	Africa Mining Vision
ASI	Adam Smith International
AU	African Union
CMV	Country Mining Vision
COMIFAC	Central African Forest Commission
CSO	Civil Society Organisation
DBSA	Development Bank of Southern Africa
DFAT	Department of Foreign Affairs and Trade
DFID	Department for International Development
ECCAS	Economic Community of Central African States
EIA	Environmental Impact Assessment
EITI	Extractive Industries Transparency Initiative
ESIA	Environmental and Social Impact Assessment
EU	European Union
HIS ARA	Hydrological Information System and Amazon River Assessment
HoS	Heads of State
ICMM	International Council on Mining and Metals
IFC	International Finance Corporation
IM4DC	International Mining for Development Centre
IRC	Integrated Resource Corridors
IRCI	Integrated Resource Corridors Initiative
M&E	Monitoring and Evaluation
MoU	Memorandum of Understanding
MRGP	Mozambique Regional Gateway Programme
MRM	Monitoring and Results Measurement
NEPAD	New Partnership for Africa's Development
NGO	Non-Governmental Organisation
NLTA	Non Lending Techanical Assistance
PIDA	Programme for Infrastructure Development in Africa
PPP	Public Private Partnership
PSC	Programme Steering Committee
RC	Resource Corridor
REC	Regional Economic Communities
SADC	Southern African Development Community
SEA	Strategic Environmental Assessment
TMEA	Trade Mark East Africa
UNECA	United Nations Economic Commission for Africa
VfM	Value for Money
WEF	World Economic Forum
WWF	Worldwide Fund for Nature

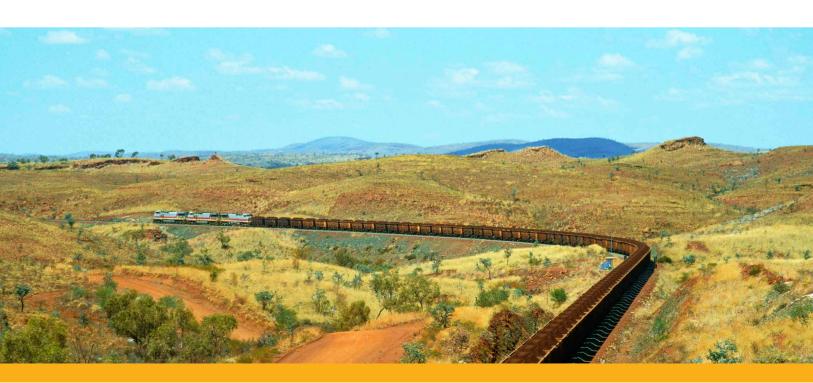
Executive Summary

Many regions of the world have identified development corridors as platforms to catalyse and deliver economic growth and development. Integrated planning, supported by sound policies will ensure an anchor investment, and in the case of the extractive industries, an anchor extractives project, can be optimised to deliver wider development outcomes, including economic diversification, regional integration, increased trade, and improved livelihoods. However, in the absence of efficient and effective planning the development opportunities will be lost. This is unfortunately proving to be true in many cases.

To address this challenge, WWF, DFID and Adam Smith International (ASI) have commenced a multi-disciplinary programme of work: the Integrated Resource Corridor Initiative (IRCI). IRCI aims to promote the need for multi-stakeholder collaboration on resource corridor planning and development, and to provide to those considering, planning and implementing resource corridors, products, services and organisation.

The initiative, initially focussed on Africa, is structured into 3 phases – scoping, development of a programme and lastly a roll out phase, to include capacity development. The programme recently completed its scoping phase, which conducted initial research on existing resource corridors, initiatives and organisations active in the resource corridor development space. The result is this Scoping Paper, outlining key recommendations and success factors, and a Business Plan.

Upon consideration of this document, the IRCI partners will reaffirm and agree their common programme objectives and their respective contributions to reaching these. Phase 2 will further interrogate the findings of this Scoping Phase and identify pilot corridor projects to work with and support.



What is the IRCI's Goal?

The overall objective for IRCI is to support an integrated, inclusive and transparent approach to the planning, design and implementation of resource corridors so that sustained economic development and poverty reduction outcomes are best achieved. This aligns closely with the Sustainable Development Goals.

This will be supported by achievement of the following outcomes:

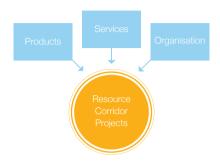
- > Sustainable economic growth and poverty reduction, diversification and improvement of livelihoods and trade during -and long after extractives activities have ceased operation, especially through unleashing the local economic potential of resource infrastructure investments.
- > Reduction of negative impacts on communities, environment, biodiversity, and mitigation of escalating climate change, especially through early consideration in resource corridor planning and decision-making processes.
- > Maintenance of eco-systems quality and integrity, so that they continue to provide the services that support life.
- > Reduced risk of social tension and conflict in relation to resource projects and resource corridor projects.
- > Increased likelihood of success of resource corridor (and related extractive anchor) projects, in economic, social and environmental terms.

Most resource projects do not include all of these outcomes in their priority objectives and decision-making. And note that these outcomes are positively interdependent, especially in the medium and long-term.



What is the IRCI?

IRCI is a platform to provide resource corridors with the means to deliver these outcomes, by providing to those considering, planning and implementing resource corridors the following products, services and support organisation:



Products:

- > A practical **methodology** from concept to implementation;
- > The 'business case' for an integrated approach to resource corridor/planning;
- > A set of **policy principles** that should underwrite all IRC planning and developments;
- > A set of practical **tools** for every step in this methodology, from concept to closure; and
- > **Training materials** to be used to increase capacity of resource corridor actors in Government, civil society and the private sector.

Services:

- > Capacity building to increase resource corridor capacity, especially in applying the IRCI products above, and ensuring ease-of-access and use;
- > Expert **technical assistance** and advice for specific corridor requirements, and to develop and improve the IRCI products; and
- > Expert **research** to develop and improve IRCI products.

Organisation:

> A multi-disciplinary **IRCI community** of resource corridor actors from Government, civil society and the private sector, established to ensure continuous progress and improvement of the methodology and tools, to incorporate IRCI practitioner experience, learning and seminars; an **IRCI partnership** of core and supporting organisations mandated to develop, oversee and steward the framework. The core partners in phase 1 are WWF, DFID and the World Bank, but new core partners will join for future phases.

With respective contributions and inputs (from core partners) leading to a successful IRCI platform as an output, the outcomes described above can be achieved, supporting the overarching IRCI goal. This proposed *Theory of Change* has been developed further by WWF (currently a separate document, available upon request), and will be interrogated and refined in the next phase.



What does the IRCI add to existing resource corridor initiatives?

There are many initiatives – referenced in this scoping paper – that have delivered useful and successful support for resource corridors. Nonetheless, our research confirms that there remain significant gaps; all of these initiatives can be recognised by a combination of some or all of the following characteristics: niche, theoretical, ill-communicated, or outdated.

More broadly, and importantly, the IRCI intends to redefine the broadly accepted meaning of resource corridor success, to include social, environmental, climate change, conservation and local economic development criteria, as well as the standard macroeconomic criteria of investment and growth.

The scoping exercise established some key findings that informed this IRCI high-level design:

- > Consensus: There are many organisations either managing or planning resource corridor development initiatives who recognise the need for, and are keen to, support the development of an initiative like IRCI;
- > **Common challenges:** Many resource corridors are facing similar problems, including in particular the lack of sufficient ex-ante consideration of environmental and community factors, insufficient Government capacity to plan in an integrated fashion, and political rationale for corridor development that is not based on sound economic grounds;
- > **Existing solutions:** There is existing knowledge and learning which can be applied to address most of the challenges faced by resource corridors; and
- > **Tools:** There are many tools in existence being used in isolation, but which could together offer an excellent toolbox for resource corridor practitioners to utilise.

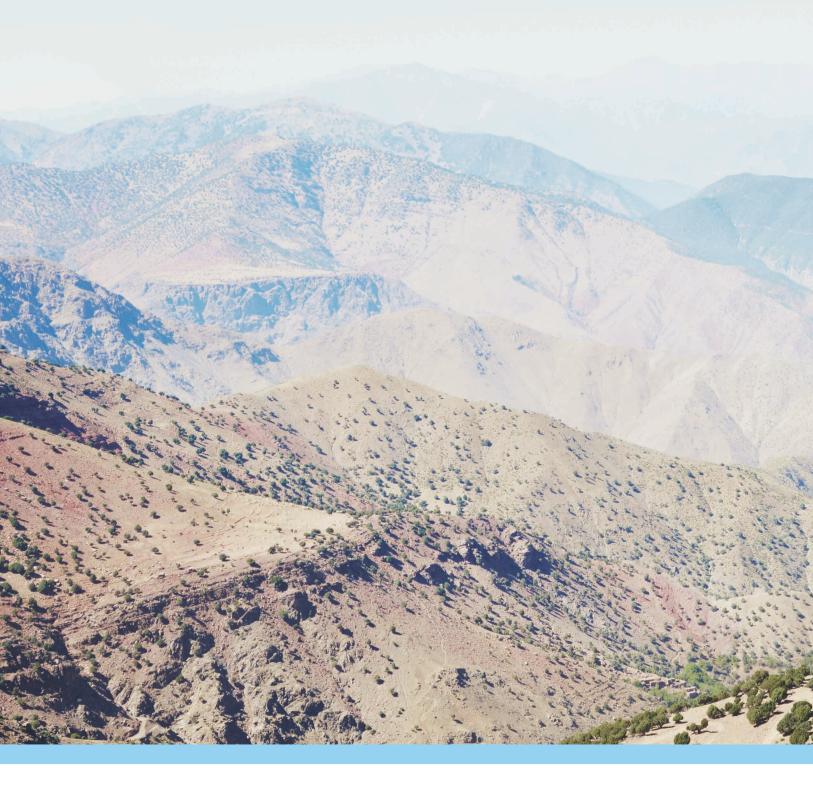


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Introduction & Methodology

Section ¹



1.1. Background & Context

Many regions of the world have identified development corridors (including those driven by transport, resources, agriculture) as potential platforms to deliver growth and development. Developing countries, in particular, have recognised the opportunities they present to meet development objectives. Africa currently has numerous significant corridors that are being promoted as vehicles to boost regional and international trade, attract inward investment and promote regional integration.

There is little wonder that corridors seem to be high on the agendas of many political leaders. If planned and developed according to sound policies, plans and programmes, resource corridors can be affective platforms for attracting investments. They could be one of the drivers of economic growth and poverty reduction and could be a means to diversify and improve livelihoods, regional integration and trade during (and long after) the primary drivers have ceased operation. However, if not planned efficiently and effectively the development opportunities they present will be lost.

Corridors can arise from several different drivers (such as the scaling up of agricultural production or communications, infrastructure development (road and rail provision or upgrades)). In most cases these do not (and certainly should not) happen in isolation, as they involve fundamental changes in resource allocation and ownership, regulations, settlement and communications patterns, etc. Rarely does the scaling up of one sector fail to present opportunities (and risks) in others.

This study will focus on extractives-led - oil, gas and mining- Integrated Resource Corridors (IRC). However, the findings from this study will certainly provide lessons that are relevant to other types of corridors and their development. The key word is 'integration' integration of sector, discipline, administration and other interests encapsulated within a holistic context of resource stewardship.

Definitions

Different disciplines and sectors attach different labels to corridors². However, some principles are generally common to all of these approaches.

The definition of a 'resource corridor' typically refers to an extractive industry objective such as a mine or oil field (anchor project) connected to a seaport through a dedicated network of roads, railways, and pipelines, supported by power and water supply networks. Others ³ view a resource corridor as an integrated planning process that provides a means to articulate and integrate a sequence of actions within the private and public sector. It may be defined as "a sequence of investments and actions to leverage a large extractive industry investment in infrastructure, goods and services, into viable economic development and diversification along a specific geographic area".

The IRCI proposes to build on this latter definition, additionally inserting the requirement that development objectives be 'sustainable' and 'inclusive', in economic, environmental and social terms.

RESOURCE CORRIDOR DEFINITION: A sequence of in-

¹ A clearly defined geographic area in which a large--scale development(s) and its (their) associated infrastructure have positive and negative impacts | ² For example, spatial development planning, landscape planning, regional planning, integrated resource corridor planning, integrated coastal zone management, watershed planning and management etc. These concepts will be developed in this Scoping Paper. | 3 Stanley & Vikram

The Status Quo

Development corridors and growth clusters are not new ideas. The corridor approach to economic development has long been recognised by spatial and development planners as a potential vehicle to transform and ensure a more equitable distribution of benefits from sector specific operations. The recent resurgence of interest in economic corridors has been driven by the economic super cycle of the last decade, which was itself underwritten, until the recent slowdown, by commodity demands led by China.

Resource corridors feature in numerous growth and poverty reduction strategies, including the New Partnership for African Development (NEPAD) and several country- and region-specific strategies. The extractives sector has also attempted to break its enclave culture in documents such as the mining policy framework developed for the United Nations by the Inter-Governmental Forum on Mining, Minerals, Metals and Sustainable Development and, more recently, the Africa Mining Vision 2050 developed for the AU by UNECA. Corridors are also very much on the agendas of regional entities such as the African Development Bank, Asian Development Bank and the East African and Southern African Development Communities.

The majority of corridor developments in Africa are driven by extractives sector investments. Numerous corridors are being developed or upgraded to link mineral extraction to gateway for export (the classic pit-to-port scenario). This is especially true of low value - high volume (bulk) commodities such as iron ore and coal requiring large investment in transport infrastructure. Once these investments materialise there is scope for other economic benefits with potential significant positive externalities to be realised, e.g. multi users/multi-purpose railway use arrangements, decongestions of the road network as minerals get to be moved by railway, ancillary investments in seaports and dry port facilities, and a medium and long term effect on induced employment creation within the catchment area of the corridor.

Policies and plans applied to infrastructure development within corridors inevitably lead to fundamental changes in regional governance, policies, economies, settlement and transport patterns, communications logistics, land rights, and access to resources. The current status is that the development of these corridors consists mainly of development of transport infrastructure within a corridor with the expectation that the full benefits of the corridor follow naturally.

For the net potential positive outcomes of these developments to be realised and maximised, effective strategic and inclusive planning of resource corridors is essential; by inclusive we mean having all stakeholders (government agencies, private sector entities and CSOs) involved in planning. This planning must also protect the integrity of ecosystems, areas of high conservation value and ensure developments are resilient to the potential climate change impacts. They require coordinated development between multiple branches of government and in conjunction with the private sector, communities and CSOs. Integrated Resource Corridors should be driven by good practices and policies. In many cases the policy principles and tools are already available but are not being used effectively. In other cases new tools may be necessary.

⁴ Hobbs. J (2013): Concept Note: Integrated Resources Corridor Planning: Developing Policy Principles and Planning Tools (unpublished WWF paper 2013)

The Challenge

The potential to develop growth corridors in ways that will maximise potential opportunities and investments by both state and non-state actors and ensure sustainable, environmentally sound development outcomes are being lost.

- > Existing routes: In the majority of the cases corridor routes already exist. The scope to change the routes or modes of transports to take into account the environment and climate change is fairly limited;
- > Stakeholder coordination: Characteristically, we find numerous agencies working in relative isolation of one another. A lack of dialogue between government agencies, donors, civil society, private sector and communities is a recipe for conflicts and inefficiencies. Opportunities exploited in one sector may cause threats to another. A lack of coordination and policy coherence between sectors duplicates effort and wastes resources. The familiar historical situation of enclave developments fails to exploit the potential opportunities that could benefit all sectors and local communities. Infrastructure often bypasses those that could benefit greatly from it 5.
- > Alignment of objectives: Private sector's objectives usually include moving goods within the corridor in the most efficient way. Governments often want to benefit from corridors by charging transit fees. To ensure broader development objectives are included in the conversation with these stakeholders, a strong business case needs to be worked out.
- > Costs and benefits approach: Linked to the previous challenge, the net benefit of an integrated approach to corridor development has to be quantifiable, valued

and significant. This is not easy especially when the discount rates are different across stakeholders.

> Inadequate assessment of social and environmental impacts: Corridors are often planned without adequate assessment of potential social and environmental consequences they may give rise to, including demographic shifts and the resulting demands for services and infrastructure. They fail to consider the dynamics of climate change and therefore do not consider mitigation or build in adaptation or resilience considerations. They often fail to acknowledge high conservation value areas and the necessary migration corridors between them. This further exacerbates the risk of conflict and negative impacts. Livelihoods, communities and ecosystems are compromised, for example, the degradation of sustained supply and quality of water and other ecosystem services, particularly when considering the competing demands from extractive industries and human settlements that follow. This ultimately undermines development prospects - particularly for the poor and vulnerable 6. Where they exist, assessments are typically limited to site specific EIAs of individual projects and therefore miss the opportunity to integrate environmental and social considerations into key strategic decision-- making. Consequently they fail to consider the accumulative impacts of numerous ad hoc developments or the synergies that could be created between them, particularly with regard to upstream planning processes. Resource efficiencies resulting from economies of scale are being lost. The tools and methods do exist in several disciplines to improve this situation 7 yet are rarely used effectively 8.

> Lack of government knowledge and coordination: Government agencies do not have the requisite expertise to apply an integrated approach to planning in corridors. Coordination amongst government agencies is very difficult and might require reforms of mandates which are normally very difficult and painful;



⁵ Hobbs. J (2013): Concept Note: Integrated Resources Corridor Planning: Developing Policy Principles and Planning Tools (unpublished WWF paper 2013) | 6 Hobbs. J (2013): Concept Note: Integrated Resources Corridor Planning: Developing Policy Principles and Planning Tools (unpublished WWF paper 2013) | 7 Strategic environmental/sustainability assessment, scenario planning, pro-poor participatory analysis ecosystem valuation, cost-benefit analysis, governance assessments, policy impact assessment, risk (including climate) analysis etc) | 8 Hobbs. J (2013): Concept Note: Integrated Resources Corridor Planning: Developing Policy Principles and Planning Tools (unpublished WWF paper 2013)

Planned and managed wisely, Integrated Resource Corridors could:

- Catalyse the responsible development of sectors such as agriculture, mining and forestry within the constraints posed by environmental considerations (e.g. water stress).
- Ensure multiple uses of the infrastructure developments to supply rapidly growing African, (and Asian and Latin American) cities with locally sourced food, energy and construction materials etc.
- Encourage economic diversification.
- Encourage trans-boundary and multi-disciplinary problem
- Ensure the protection of critical ecosystems and their ability to supply sustainable services-including carbon sinks.
- Protect areas of high conservation value and associated biodversity in perpetuity.
- Contribute to improved food, energy and water security.

- Reduce the risk of conflict between authorities communities and private sector etc.
- Reduce duplication of effort by different agencies.
- Increase the opportunities for social mobilisation and inclusion.
- Increase opportunities for regional integration.
- Build more rigorous plans that ensure resilience to climate change impacts.
- Ensure better informed, more transparent and inclusive decsion-making 9
- Help develop scenarios and goals that consider the more sustainable development paths.
- ⁹ Hobbs. J (2013): Concept Note: Integrated Resources Corridor Planning: Developing Policy Principles and Planning Tools (unpublished WWF paper 2013)

The Response

WWF, DFID and Adam Smith International have commenced an initiative that intends to address this challenge through the Integrated Resource Corridor Initiative (IRCI). The initiative aims to promote awareness of the need for integrated planning and to review and produce tools and offer policy guidance and good practice recommendations, based on practical experiences in existing corridors. This will be achieved through dialogue and collaboration with other stakeholders, including governments, private sector, regional economic communities (RECs), African Union (AU), donors and financiers.

This work programme is intended to demonstrate the merits of an integrated approach to corridor planning by providing a platform for greater coordination between the various initiatives that are currently planned or being implemented around growth corridors, in order to seek out synergies and avoid duplication of efforts. It will be initially focused on Africa.

The overall objective for IRCI is to support an integrated, inclusive and transparent approach to the planning, design and implementation of resource corridors so that sustained economic development and poverty reduction outcomes are best achieved. The action to achieve this overall goal is to

improve the planning of resource corridors through an integrated approach, in order to maximise their impact on sustainable, inclusive economic development. This integrated approach to planning will be guided by climate change, environmental and social considerations. This aligns closely with the overall goal of the Sustainable Development Goals.

The initiative will be structured into 3 phases - scoping, development of a programme and lastly a roll out phase. The programme is currently in its scoping phase, which is conducting research to produce this Scoping Paper and Business Plan. Upon consideration of this document, the IRCI partners will reaffirm and agree their common programme objectives and their respective contributions to reaching these. The development phase will include the design of an influencing strategy, the development of a planning "tool" for IRC and a "testing" component. If the testing of the approach gets traction from most stakeholders, we hope that more resources will be mobilised and the approach be rolled out.

Further information on the programme is presented in the Business Plan in this document, including outputs, plans, costs and objectives.

1.2. Methodology

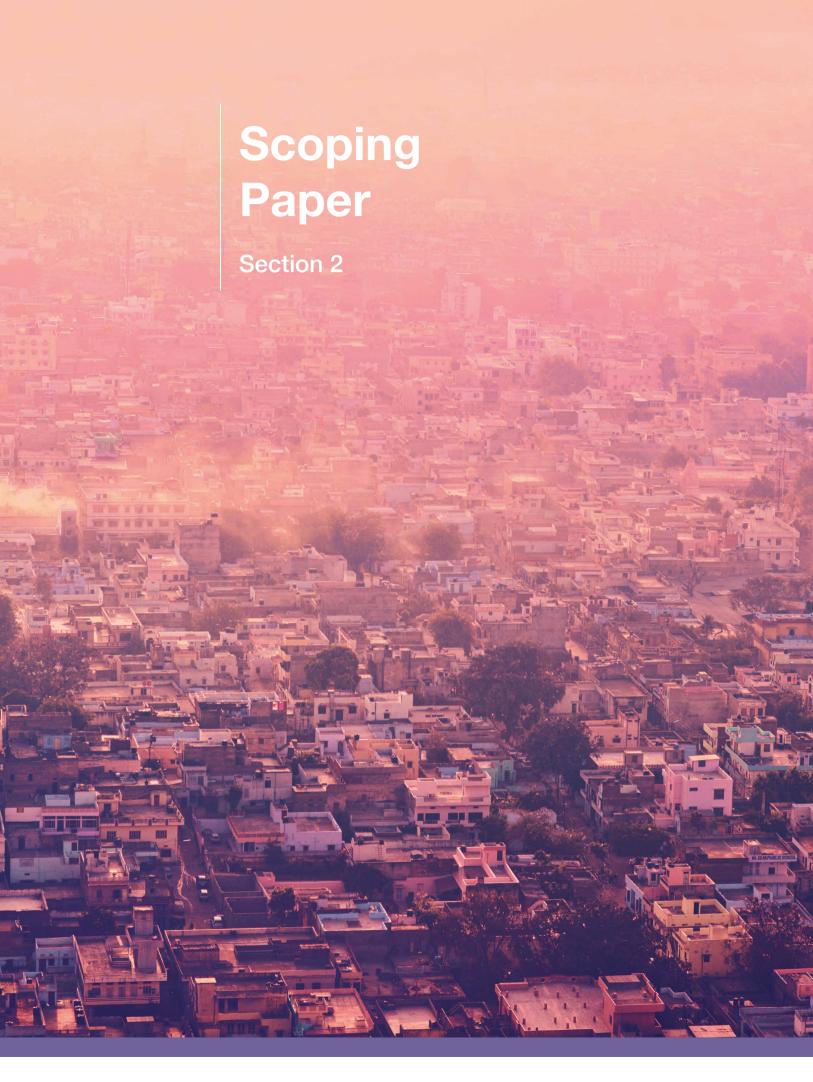
This section presents a summary of the methodology adopted to produce this Scoping Paper and Business Plan; next steps for delivery of the IRCI programme in phases 2 and 3 are contained in the Business Plan.

The following process was adopted for scoping (phase 1):

- 1. Review of current work that reinforces the development of the goal of well managed integrated resources corridors.
 - a. Literature review (see the Annex for a full list)
 - b. Interviews with relevant stakeholders (see the Annex for a full list of interviewees)
- 2. Collation and analysis of findings from this research to produce the Scoping Paper. This will also lean heavily on WWF's initial concept note.
- 3. Workshops and brainstorming to support the development of a draft Business Plan, based on findings from the scoping activities, and expertise of the core partners for phase 1 - WWF, DFID and ASI.
- 4. Development of criteria that would objectively identify priority corridors to work on in Africa. This would importantly include corridors where WWF and/or their partners have a strong physical presence and relationship with relevant local stakeholders and governments.
- 5. A Roundtable workshop was held in July 2015 to review the Business Plan and the budget required. The Roundtable brought together key stakeholders and partners. The aim of the workshop was to:
 - a. Review Scoping Paper findings and recommendations and agree on next steps and ways forward.
 - b. Obtain expressions of interest and understand willingness to support IRCI.
- 6. Refinement of Scoping Paper and Business Plan based on Roundtable feedback.

This paper has made every effort to consult as widely as possible. Our engagement thus far has not yet included government and this will be an important aspect of subsequent phases.





2.1. Situation Analysis

This section seeks to establish the current status of corridor planning in Africa. It will begin by examining the work of the different international actors in the resource corridor space, focusing on the tools they have developed and the implications of their work for the IRCI. It will then move to look at the status of a selection of corridors, mostly extractive led, but including some with other drivers. Finally, this section will conclude with a review of common issues.

The table below provides an overview of the different actors looked at in this section.

Actor	Type of Institution	Geographic Focus	Corridor Related Programmes, Tools & Instruments	Interviewed for this study
WWF	NGO	Global with national and regional offices in Africa	> Integrated Conservation and Development Projects (ICDP's) > African Ecological Futures: Infra-structure Corridors Sector Paper. > Water Stewardship: Lower Kafue Sub Basin- Zambia: Water in the Economy. > Capacity building of government officials in SEA application to extractives sector (in conjunction with SIDA) > Pilot advocacy SEA Tana – Lamu region (LAPSSET) > Kenya Sensitivity Atlas > The Water Risk Filter > Africa Land Use and Early Warning Systems (ALES) > Hydrological Information System and Amazon River Assessment (HIS-ARA). > Naivasha Payment for Ecosystem Service programme.	Interviewed
DFID	Finance/development	Global with regional offices in Africa	> Mozambique Regional Gateway Programme (MRGP) > MRGP SEA climate resilience guidelines.	Interviewed
AU	Political/Policy	Africa	Programme for Infrastructure Development in Africa Africa Mining Vision Africa Minerals Development Centre African Minerals Geoscience Initiative	Pending

Actor	Type of Institution	Geographic Focus	Corridor Related Programmes, Tools & Instruments	Interviewed for this study
NEPAD	Political/Policy	Africa	Programme for Infrastructure Development in Africa (PIDA) Infrastructure Summit African Strategic Infrastructure Initiative	Contacted
AfDB	Finance/development	Africa	> Programme for Infrastructure Development in Africa (PIDA) > Policy, Private and Public Based Lending	Pending
World Bank	Finance/develop- ment	Global with regional offices in Africa	Mineral Resource Tenders and Mining Infrastructure Projects Guiding Principles African Minerals Geoscience Initiative Strategic Environmental & Social Assessments	Interviewed
DFAT	Finance/develop- ment	Global with regional offices in Africa	> Infrastructure Skills for Development > African Resource Negotiators' Network > Support to Programme for Infrastructure Development in Africa > Negotiations Support Portal (through CCSI) > Legislation for shared infrastructure use (through CCSI)	Interviewed
UNECA	Political/Policy	Africa	> Africa Mining Vision > Country Mining Visions	Interviewed
WEF	NGO/Foundation	Global	> Best Practice Framework (Africa Strategic Infrastructure Initiative) > The WEF's Network of Global Agenda Councils > Business Working Group on Infrastructure in Africa > Global Strategic Infrastructure Initiative	Interviewed

2.1.1. Core Partners

2.1.1.1. Worldwide Fund for Nature (WWF)

Areas of Focus

- > Protection of high conservation value areas, and the necessary migration corridors between them.
- > Maintenance of the integrity of ecosystems.
- > Environmental up-streaming in to strategic decision making. (Strategic Environmental Assessment).
- > Accumulative impact Assessment
- > Natural capital valuation and payment for ecosystem services (green
- > Resource corridors' negative impact on forest ecosystems and biodiversity
- > Identification of potential positive synergies for positive environmental outcomes.
- > Sustainable, environmentally sound development processes

Current/Recent Corridor-Related Activities:

Priority corridors are LAPSSET, SAGCOT, Mtwara, Nacala and TRIDOM.

- > SAGCOT WWF Coastal East Africa engagement/Tanzania Office is engaged in oversight role.
- > TRIDOM WWF offices in Gabon and Cameroon. Conducting ongoing environmental assessment of the Ngoyla Mintom forest block; extensive HCV and wildlife inventories of the TRIDOM and Campo Ma'an landscapes; and ongoing support to the government for the development of an integrated land use plan.
- > Ruvuma (Mtwara) Supported a Ruvuma Landscape Scenarios exercise; strategy towards integrated planning to secure a future for the rapidly changing Ruvuma landscape.
- > Zambezi/Kafue WWF Zambia office with support of WWF International focused on water stewardship.
- > LAPSSET WWF Kenya is supporting local level engagement in LAPSSET discussions and is working with Kenya government on SEA Guidance implementation.
- > Marine corridor work in its infancy. Led by WWF International but with strong support from WWF Madagascar (that has also been engaged in some terrestrial corridor work on the island).

Planned Corridor- Related Activities:

The first five years of Coastal East Africa Initiative, aimed at protecting important habitats along the coast line, came to an end at the end of June 2015. During the second phase resource corridors will play an important role as the initiative will extend further West. Phase 2 will consider LAPSSET, SAGCOT and Mtwara.

Perspectives & Approach

The Worldwide Fund for Nature (WFF) is the world's leading conservation organisation. It works in 100 countries and is supported by over 6 million members globally.

WWF has entered into the IRC partnership (and relevant MOUs with key partners) because it wishes to ensure that environmental factors are better considered alongside economic and socio-political considerations in regional/corridor land use policies and plans. If this is the case, not only will critical ecosystems and high conservation value areas stand a greater chance of receiving better protection but also the prospects for development outcomes to be sustainable will be improved.

Concerns persist that corridors are currently being promoted as vehicles to attract investments 'at all costs' and relegate environmental considerations to too late in the decision making process long after the opportunity to effect meaningful influence over decisions has passed. This reduces civil society, communities and environmental NGO's engagement in the process to a reactive role, one commenting on decisions that are frequently a fait accompli. Review of Environmental Impact Assessments of individual projects are often touted as the vehicle for environmental engagement but this is late in the process when mitigation of negative impacts is the only feasible option remaining because of the extent of investments that have already been made.

Of direct concern to WWF, in terms of its mandate, is the fact that new and upgraded corridors frequently venture into relatively pristine and undisturbed areas. This opens opportunities for illicit trade in protected resources - such as timber, ivory, bush meat etc. The intention of corridors to improve access can be at odds with the conservation goal of limiting disturbance and protecting areas from illicit encroachment and resource exploitation.

This is not to suggest that NGOs will always adopt a 'Luddite' perspective on new developments. Environmental quality is threatened by underdevelopment, poverty and poor governance (conflict, corruption and civil strife) i.e. factors that are often characteristics of poor planning of corridors – so it is in the interest of environmental NGOs to encourage appropriate new developments, based on well-informed decision-making, to include consideration of all relevant factorsenvironmental implications included.

Better planning of corridors will include proactive, inclusive and transparent engagement of CSO's and environmental and social NGOs in strategic decision-making through processes such as strategic environmental assessment (SEA). This will enable the consideration of the full range of options (including low carbon futures). It will also address needs such as climate change resilience and adaptation and the identification of the most sustainable development path forward that maximises positive impacts and avoids or minimises negative impacts.

Furthermore, limiting environmental assessment to ad hoc individual projects is the failure to assess the incremental and accumulative impacts of numerous projects. Projects may have little significant impact on an individual basis, but when considered in their totality with a series of other projects could be catastrophic. Limiting assessment to individual projects also tends to fail to identify potential positive synergies between projects (e.g. industrial symbiosis).

Interest in the eventual results and recommendations of the IRC programme exists across the global WWF network and its conservation partners. The political priority being given to economic corridors in Africa, often (but not exclusively) driven by the infrastructure needs of oil, gas and mining investments, have determined that initial studies should focus on the continent. This is reinforced by several priority conservation areas of Africa being under increasing threat from such developments.

The ecological challenges facing Africa have been recognised in a recent WWF Regional Office for Africa scenario planning exercise entitled African Ecological Futures. One element of this work, informed by the initial concept work on the IRC and DFID's work on the Maputo corridor, has reinforced the belief that 'the concept of infrastructure corridors provides a distinct spatial and procedural approach to thinking about, and coordinating, infrastructure delivery on the continent'. Corridors provide a convenient platform for integrating vested interests, stakeholders, thematic work and breaking down the all too frequent 'silo' mentality etc. An inclusive and multi-disciplinary approach is essential and 'integration' is the key word to success in the IRC programme.

As with most organisations internal coordination is a challenge to WWF. The IRC programme provides an opportunity to bring many strands of WWF work together - ecosystem valuation and payment for ecosystem services, baseline information systems and analysis, water stewardship, marine, infrastructure, environmental standards, SEA etc. It also presents the opportunity for greater dialogue and cross pollination of ideas across a network of offices that are situated in many varied geographies.

WWF recognises that the policy principles and the tool box that are intended to be key products of the IRC programme of work will have great benefit for other regions of the world beyond Africa. Many of WWFs priority terrestrial and marine regions are grappling with similar challenges of corridor development - e.g. the Amazon, Terrai Arc (Nepal/India Himalayas), the Mekong and, not least, China's ambitious 'one belt - one road' new 'silk road' programme. This is set to traverse half the globe. In the same vein, WWF personnel working in other regions of the world are gaining experiences in various fundamental aspects of effective regional planning. These will be used to inform the IRC programme in turn.

Importantly, WWF believes that the generic guidance that will result from the IRC project must be rooted in the practical experiences of those engaged on the ground in specific corridors. WWF's network of locally based staff includes several located in (or in close proximity to) the most significant economic corridors (such as TRIDOM in west central Africa, LAPSSET in Kenya, Nacala in Mozambique and SAGCOT and the Mtwara corridors in Tanzania.

Similarly important synergies exist in thematic work being led by WWF International on the marine environment, infrastructure and freshwater. Many economic corridors are also river basins. Work on water stewardship is well advanced in the lower Kafue in Zambia for example - with talk of extending this to the Zambian Copperbelt.

One of the failings of current economic corridors planning is the paucity of baseline information upon which to develop land use plans. With support from WWF Norway and WWF UK, WWF International has initiated the Africa Land Use Planning and Early Warning System (ALES) -(recently renamed the "Integrated Land-use and Early Warning systems' spatial mapping and planning tool for extractives and infrastructure development') a project that seeks to integrate environmental and development data into a common mapping platform in order to produce an overview of major development activities, their investments and their related impacts in WWF priority eco regions and other environmental sensitive areas in Africa. The IRC programme links closely with this initiative as an important baseline information resource.

10 Questions need to be raised here as to the ownership. of such projects within WWF and whether hosting under an IRCI umbrella is possible; alternatively, they could be more of an autonomous arm of an IBCL



2.1.1.2. The UK's Department for International Development (DFID)

Areas of Focus	All stages of corridor development including transport infrastructure development Climate change and Environment – developed Strategic Environmental Impact Assessment in Southern Africa transport corridors and climate resilient guidelines for transport infrastructure.
Current/Recent Corridor-Relat- ed Activities:	The Mozambique Regional Gateway Programme (MRGP) is the only purely corridor programme at DFID. Its approach is: > Diagnostic work within the regional corridors in this catchment area (Beira, Nacala and Maputo regional corridors) to understand and identify transport bottlenecks > Translate bottlenecks into projects – usually transport infrastructure projects (not so much focused on trade facilitation) > Prepare the transport infrastructure projects and make them ready for transaction. > Fundamental consideration about projects: all projects and approaches to rehabilitation and upgrade need to implement the climate resilient guidelines developed by the MRGP from the start and its strategic environmental impact assessment for all Southern African eastern corridors. > The MRGP also has a mandate to bring financiers into the projects to ensure financing in doing so it encouraged the use of the climate resilient guidelines for transport infrastructure. > The MRGP has been involved in four major transport infrastructure projects in the Beira, Nacala and Maputo corridors linking the landlocked countries of Zambia, Zimbabwe and Malawi to the seaports of Mozambique.
Planned Corridor- Related Activities:	DFID Southern Africa will continue to support the southern Africa transport corridors of Beira, Nacala and Maputo corridor. Support to upcoming phases of this Integrated Resource Corridors initiative. This support should be on a general basis, and also potentially corridor-specific (see below)
Recommended Corridor Relat- ed Activities	There is interest from DFID East Africa / Kenya in assisting LAPSSET to optimise local economic benefits, though acknowledging this support would only be feasible once the political decision to implement the pipeline (and development corridor) has been made. There is also interest in applying a feasibility assessment (and tool) to development around Mtwara, amongst other aspects assisting in the decision on whether development should be focused on a Growth Pole or Resource Corridor.

Perspectives & Approach

This programme fits very well with DFID's priorities over the coming 5 years, as development corridors are part of DFID's economic development approach. Within the Africa Directorate, corridors development has been highlighted as an important work stream, and resources will be allocated as per the countries and regional inclusive growth diagnostics.

This initiative needs to provide a tool that enables better, inclusive, sustainable corridor planning and implementation that is focused on wider developmental impact. It should have the following characteristics:

- > Enable African governments to develop resource corridor plans prior to engagement and negotiation with extractive companies, i.e. a tool to empower governments to be in control of the investment and development process from geological discovery to corridor development and operation.
- > A kind of feasibility tool that can be used to ensure that, ex ante, environmental, social and local economic development criteria are considered alongside macroeconomic and large-scale commercial criteria.
- > This can be used also as an influencing tool to overcome political challenges to optimal corridor development.
- > Engagement upfront with corridors themselves, critically including the private sector operators.
- > Although some tools could be generic, because corridors are so different it will be important to recognise that some key outputs of the programme should be corridor-specific. This could be viewed as being a toolbox, in which tools should be tailored, e.g. in LAPSSET the outputs should be tools that are focused on maximising the benefits and minimising the risks to local communities, as opposed to getting involved at the political level, which at this stage would be difficult if not impossible and counterproductive.
- > Assessments (environmental / social) are typically carried out ex post, not ex ante the decision on how to take product to port. Moving from ex post to ex ante is crucial. Social, environmental and climate change considerations need to be taken into account, in balance with commercial viability.



2.1.2. Financing and development institutions

2.1.2.1. African Development Bank (AfDB)

Areas of Focus	> Regional integration, stimulate intra-regional and global trade and foster market integration > Transformation of transport corridors into economic corridors, through both: > Support/participation in hard/physical infrastructure developments on selected corridors; > Support/participation in Soft infrastructure.
Current/Recent Corridor- Related Activities:	> Infrastructure development was a priority of the Medium Term Strategy 2008-2012 and from 2009 – 2011, 51 infrastructure projects were completed at a value of USD 3 billion. > Programme for Infrastructure Development in Africa (PIDA): This programme was developed by the AU in partnership with UNECA, AfDB and NEPAD. PIDA is aimed at providing an African owned solution. It builds on Regional Economic Community master plans and priorities providing a list of 51 short/medium/long-term infrastructure priorities, which can be found in the Priority Action Plan 2020 (PAP). > WEF's Business Working Group on Infrastructure in Africa. Created in 2012 by WEF in partnership with the AfDB, the African Union Commission and NEPAD, this group is aimed at developing business voices and helping to accelerate the Programme for Infrastructure Development in Africa (PIDA). > The AfDB is also a member of the Infrastructure Consortium of Africa, whose role is to help improve the lives and economic well-being of Africa's people through encouraging, supporting and promoting increased investment in infrastructure in Africa, from both public and private sources ¹¹ .
Planned Corridor- Related Activities:	> Africa Strategic Infrastructure Initiative (ASII): A partnership between the AfDB and WEF, along with NEPAD and the African Union Commission (AUC), this initiative has prioritised three corridors for acceleration during 2015/2016. These corridors are the Central Corridor in East Africa, the Beira-Nacala Corridor in Southern Africa and the Abidjan-Lagos Corridor in West Africa > AfDB's support to accelerate implementation of PIDA Priority Action Plan 2020: This is a capacity building program for AUC, NEPAD and RECs to enhance the implementation efforts; strengthen project preparation around PIDA PAP through support provided by project preparation facilities like NE-PAD IPPF or AWF; assist in unbundling, prioritizing and sequencing of PIDA PAP projects into pipeline of bankable sub-projects; facilitate private sector engagement and address issues of enabling environment in collaboration with wef; facilitation of financing / resource mobilization in collaboration with ICA; dissemination of sector knowledge and communication.

¹¹ http://www.icafrica.org/en/about-ica/

Planned	> More generally, key corridor support includes: Northern Corridor: 1)
Corridor-	Mombasa to great lakes region through Nairobi & Kampala; 2) Mombasa –
Related	Nairobi - Addis (MNA) Corridor; 3) Lamu Corridor: New Lamu Port to Juba,
Activities:	Eastern DRC and to Addis; 4) Central Corridor: Dar-es-Salaam to the great
	lakes region; 5) Kenya – Tanzania Highway; 6) North – South Corridor: port of
	Durban to Copperbelt in DR Congo and Zambia; 7) Abidjan-Lagos Corridor;
	8) Abidjan-Ouagadougou/Bamako Corridor
Tools and	> Policy Based Lending - reform of policies, harmonization of customs laws/
Instruments	regulations and procedures, trade & transit facilitation, policy formulation and
	dissemination, institutional capacity building (country and REC level)
	> Public Sector Lending - concessional and non-concessional loans/grants
	through the ADB & ADF windows to projects and programs
	> Private Sector Lending - loans to private sector sponsored infrastructure
	projects, e.g.: Djibouti Doraleh Port Container Terminal (\$80 million), Dakar
	Port Container Terminal (€47.5 million)
	> AfDB has a number of financing instruments such as the Private Sector
	Window; Africa50; Africa Growing Together Fund (AGTF), a joint fund with
	China; as well as risk mitigation instruments such as Partial Risk Guarantees
	(PRGs)

Perspectives and Approach

IRCI is in line with the principles of the AfDB's Regional Integration Strategy. The AfDB's approach to regional corridors covers both the hard and the soft infrastructure components of development.

The AfDB acknowledges that most transport routes cannot be transformed into economic corridors by strict adherence to any one set of steps, unless they are new constructions. Success lies in strategic planning and strategic visioning, which IRCI seeks to promote. Strategic planning tools are essential to this process, as is close cooperation among the countries concerned, which must harmonise their policies and their social and economic strategies and address other common issues.

AfDB is an essential stakeholder for IRCI. All five core operational priorities of AfDB (as above, strategy 2013-2022) are relevant to IRCI. Stimulation of intra-regional and global trade and fostering of market integration drives a focus on infrastructure development. The development of transport corridors is therefore often the starting point; transforming these into economic corridors is the next step. Such a step approach by the AfDB needs to be considered in light of the IRCI approach for strategic planning that takes into consideration socio-economic and environmental factors, as well as the protection of critically important areas of high conservation value in situ. The Bank has identified key corridors to support, as well as priority corridors for 2015/2016.

Given the vast expertise of the AfDB and its central role in regional integration, trade, private sector participation and poverty reduction in Africa, it is fundamental that the Bank takes part in transforming Africa's transport corridors into economic corridors.



2.1.2.2. World Bank

Areas of Focus	> The World Bank has two flagship projects in this area: the Afghanistan Resource Corridor and the Odisha Resource Corridor.
Current/Recent Corridor- Related Activities:	> The Bank is engaged in project preparation for the Afghanistan Resource Corridor and Odisha Resource Corridor projects. > In Africa the World Bank has recently held an Integrated Resource Corridor convention with the EAC 12
Planned Corridor- Related Activities:	> The Bank is providing non-lending technical assistance (NLTA) to the Odisha Resource Corridor. The Odisha NLTA provides a road map for an integrated planning approach. The resource corridor pilot begins with baseline data showing the current status of various activities upon the landscape (communities, alternative uses of land, forest areas). In order to provide for integration of cross-sectoral data, the System will consist of geo-information (GIS) and decision support sub-systems (DSS) that will be fed by several interoperable geo-databases, allowing the planning of dynamic time-based scenarios thus, leading to several options for socio-economic decisions, integrated spatial landscape planning and ecological and environmental conservation. > The Afghanistan Resource Corridor project (P145443) is currently in the pipeline > In Guinea the Mineral Governance Support Project (P122916) is active, aimed at strengthening the capacity and governance systems institutions for managing the minerals sector. One component of this project is focused on sustainable investment and will focus on at least one growth corridor. > The World Bank is the coordinator of the African Minerals Geoscience Initiative, a pan-African initiative under the leadership of the Africa Union Commission for the collection, consolidation, interpretation and effective dissemination of national and regional geological data through a geo-portal, thereby increasing accurate and updated geo-scientific data available. The African Minerals Geoscience Initiative is an ambitious program with a long time frame until the completion of work in Africa, in approximately 10 – 12 years. The work of the current program (Preparatory) will last 4 years. The AMGI should enable: (i) improved licensing processes and procedures that efficiently leverage the natural resource wealth of countries; (ii) improved spatial planning, infrastructure development, forest and wildlife conservation through the use of regional resource corridors; and (iii) sustainable development p

¹³ http://www.worldbank.org/en/news/press-release/2015/06/08/the-east-africa-community-the-world-bank-and-partners-discuss-integrated-solutions-to-the-development-of-key-trading-corridors

Tools and Instruments

- > Mineral Resource Tenders and Mining Infrastructure Projects Guiding **Principles.** This includes a section on designing a PPP structured around mining¹³. This provides a framework for government responsibilities for mine related PPPs and ideas around how to structure these arrangements, the role of the public sector and some of the pitfalls.
- > The AMGI, as and when developed, will be an immensely useful tool. It is aimed at developing a comprehensive knowledge of Africa's mineral endowment and the expected result is to develop and obtain improved geological and mineral information systems to underpin investment in exploration and mining development. One part of this is the Billion Dollar Map, which will provide consolidated mineral geodata, which will help with spatial planning.

Perspectives and Approach

IRCI is aligned with the World Bank's priorities in supporting the development of resource corridors and promoting trade and investment. Their current work on Integrated Spatial Planning is focused on designing a road map that leads to sustainable development leveraged from the infrastructure associated to resource corridors. This involves: integrated planning, capacity building at state level, private sector development, environmental and social dimensions through ESIAs, livelihoods programs, community development agreements, etc.



¹³ Mineral Resource Tenders and Mining Infrastructure Projects Guiding Principles, World Bank, Extractive Industries for D elopment Series #22, September 2011 (M. Stanley, E. Mikhaylova)

2.1.2.3. Australian Aid (DFAT)

Areas of Focus Current/Recent Corridor- Related Activities:	> Implementation - building Government officials' planning capacity > Infrastructure - support to infrastructure projects with NEPAD and PIDA > Governance - support to development of a legal framework for infrastructure shared use, and an information portal to support negotiations capacity > Implementation - building Government officials' planning capacity > Infrastructure - support to infrastructure projects via NEPAD and PIDA > Governance - support to development of a legal framework for infrastructure shared use, and an information portal to support negotiations capacity
Planned Corridor- Related Activities:	DFAT has partnered with NEPAD's Planning and Coordination Agency (NPCA) to develop an Infrastructure Skills for Development (IS4D) program to build public sector capacity to plan and oversee the delivery of priority PIDA infrastructure projects. Responsibility for PIDA oversight is vested in the NPCA and DFAT will partner with NPCA for implementation of the IS4D program. IS4D is focused on specific projects, not necessarily corridors. The three stated objectives of IS4D are below, and further details are contained in the annex: 1. Improved design and packaging of priority regional public infrastructure projects in partner countries via improvements in key project management skills and capacities among selected public sector professionals; 2. Agencies working on PIDA Priority Action Plan (PAP) program delivery implement cross-border infrastructure projects more effectively through peer to peer practitioner networks that foster institutional learning; 3. Generate and document learning on the relevance, efficiency and effectiveness of the IS4D program model (including the action-learning pedagogy) in order to draw lessons that will improve future program delivery. DFAT has found this to be highly useful, and in high demand. DFAT has been supporting CCSI to pull together a negotiations roadmap. DFAT has also funded CCSI to put together a legal framework for shared infrastructure use. DFAT also funds the African Resource Negotiators Network.
Planned Corridor- Related Activities:	IS4D Phase 2 will run from November 2015 and engage an additional 25-30 participants. The programme could run for at least another 40 participants if scaled up slightly, therefore additional funding would definitely enable thematic, geographic and/or participant expansion. IS4D is in the process of arranging visits to other corridors (Namibia, Ghana, South Africa) to exchange information and learning.

Tools and Instruments

- > Australia's Standard level Vocational Project Management curriculum (see appendices for more details):
- > Action Learning staff development methodology applied to infrastructure skills
- > An IS4D Learning Agreement comprised of 3 components: (a) an individualised Work Based Project (WBP), (b) individualised Work-Based Learning goals (WBL) and (c) enrolment in 0 to 2 online learning modules drawn from Australia's Standard level vocational Project Management curriculum

Perspectives and Approach

Australia's Department of Foreign Affairs & Trade (DFAT) is supportive of IRCI and what it is trying to achieve, recognising the potential for interventions to increase the developmental impact of resource extraction. This is evidenced by Australian Aid's support for resource corridors in Africa for 7 years. DFAT's funding for African work is reducing under the current Government, however resource corridors is one of the few areas in which it will remain involved. and it is keen to also play a role in supporting and/or facilitating IRCI.

"At up to \$50 billion per year, Africa's annual infrastructure financing gap is cutting gross domestic product growth by about 2.2 per cent." This is quoted by the Infrastructure Skills for Development Programme, and forms part of Australia's rationale for engaging in this area.

Since engagement in Africa extractives began in 2008/9, it became clear that infrastructure planning (including related capacity) was a significant issue, and Australian Aid engaged in Mozambique around planning issues, e.g. how Ministers are working together (or not), how implementing agencies and subnational governments are coordinating or planning.

DFAT recommends and supports the following areas of activity:

- > Focusing on tools that are of actual practical use to Government officers faced with the task of planning resource corridor development and providing real-time support to these Government officers
- > Addressing the skills challenge and providing scholarships and exchanges
- > Providing negotiations skills support, which DFAT has found to be highly useful, and in high demand.
- > Practical step by step support to help overcome barriers

2.1.2.4. TradeMark East Africa (TMEA)

Areas of Focus	> TMEA's focus that relates to resource corridor development is regional trade facilitation via development corridors.
Current/Recent	> SAGCOT support involving a range of interventions to reduce cross border
Corridor-	transport costs 14
Related	> Support to the Transport Observatory Project on the Northern Corridor, intended
Activities:	to monitor performance along corridor to establish an evidence based platform for
	regional policy makers ¹⁵ .

Perspectives and Approach

TMEA views IRCI as an interesting initiative that could fit within its extractives and trade strategic objectives. Further discussions will determine if and how TMEA can support the initiative. It is aligned with the EAC's focus on regional trade integration, already supporting development of non-extractives economic corridors.

TMEA has experience in corridor development on agriculture driven corridors. There are lessons that could be extrapolated from and similarly TMEA's potential engagement with IRCl could provide lessons or guidance of use to their agriculture focused corridor development work.

¹⁴ http://www.sagcot.com/uploads/media/Appendix_VI-Investment_Matrix_04.pdf | 15 https://www.trademarkea.com/press-releases/ online-database-launched-to-improve-performance-on-the-northern-corridor/

2.1.3. Political and Policy Institutions

This section looks at different regional actors in this space. There is generally political will and consensus from these institutions that resource corridors are important for development particularly from a regional integration and trade facilitation perspective. Regional integration is an important aspect of corridor development and the regional cooperation required in implementing resource corridors can provide an opportunity to have good practice locked into the planning process.

This regional focus on trade and infrastructure makes sense, however it is important that it is coupled with an understanding of and approach to environmental and community considerations. The understandable desire of regional bodies to fast track corridor development shows commitment to resource corridors; however this too must be coupled with requisite planning. The mandate to fast track corridor development might be a potential entry point for IRCI to work with these institutions on piloting tools.

2.1.3.1. African Union (AU)

Areas of Focus	> Economic and social development
	> Infrastructure and Energy
	> Trade and industry
Current/Recent	As part of the AU's Agenda 2063 (50 year vision and action plan) the AU has included
Corridor-	the fast tracking of the implementation of the Africa Mining Vision (AMV), of which
Related	resource corridors are an integral part and the African Minerals Development Centre,
Activities:	which seeks to address the skills challenge.
	AU Programme for Infrastructural Development in Africa (PIDA) aims at accelerating the regional integration by improving access to integrated regional and continental infrastructure networks
	The AU implements the Action Plan for Boosting Intra Africa Trade , in which corridor initiatives are linked to trade, from the perspective of trade facilitation and trade related infrastructure. The AU looks to expedite movement of goods across existing trade corridors through the reduction of road blocks; simplifying administration (customs, regulations); establish and operationalise one stop border posts; and integrated border management
	The AU leads the African Minerals Geoscience Initiative, for the collection, consolidation, interpretation and effective dissemination of national and regional geological data through a geo-portal.
Planned Corridor- Related Activities:	Agenda 2063 is ongoing and will include the AMV, which covers resource corridors. The AU Commission is also to work with NEPAD Secretariat and RECs to accelerate the establishment of "major integrated corridors for the development and optimal exploitation of the continent's natural resources" (AU Heads of State and Government, Agenda 2063)

Tools and Instruments

- > AU Programme for Infrastructural Development in Africa
- > Africa Mining Vision, which is aimed at improving how Africa integrates mining into development policies at local, national and regional levels. It includes a framework that supports resource corridors and methods of identifying where support is needed.

Perspectives and Approach

An area of AU focus is intra-African trade; with the view that trade facilitation (unlike other barriers to trade) can be addressed relatively quickly and with low cost, if there is the political will. Resource corridors are one aspect of achieving this. Effective implementation of different corridor initiatives in Africa are also seen as contributing significantly towards redressing Africa's infrastructural deficiencies, which will also improve trade.

The AU's work demonstrates there is political will for integrated resource corridors at a senior level. The AU is developing consensus at Head of State level, which is crucial to the success of transboundary resource corridors. The AU's work with different regional actors shows there is opportunity for further regional cooperation on this issue

However there is an emphasis on expediting corridor work in this area and this brings with it a concern that desire to expedite the work might causes issues with planning.



2.1.3.2. The New Partnership for Africa's Development (NEPAD)

Areas of Focus	> Infrastructure
	> Regional Integration
Current/Recent Corridor- Related Activities:	> NEPAD run PIDA for AU > NEPAD's Infrastructure Programme (2010-2015) includes project work on different corridors > NEPAD are working with DFAT on the Infrastructure Skills for Development programme (IS4D) > WEF/NEPAD/AfDB Infrastructure Summit African Strategic Infrastructure Initiative. > NEPAD Spatial Development Programme
Tools and Instruments	> PIDA > Infrastructure Summit African Strategic Infrastructure Initiative > NEPAD have a comprehensive database of infrastructure projects in Africa, which could be useful as a learning tool to understand infrastructure land- scape; also useful to avoid replication of projects and to coordinate infrastruc- ture development.

Perspectives and Approach

NEPAD works heavily on infrastructure with the aim of promoting regional economic integration by bridging 'infrastructure gaps'. Their work on infrastructure is their entry point to resource corridors, as a means to fill these gaps. NEPAD's key work in this area is the Programme for Infrastructure Development in Africa, which they have been running since 2010. They are currently focused on 44 corridors and are looking at strategic programmes for integration, prioritising seven corridors. NEPAD have advanced work on the Central corridor and are now working on acceleration of the other 6 priority corridors, looking to take an holistic approach to optimise corridor development, including spatial development work.

NEPAD's approach to regional integration,

involves working closely with member states to ensure the programme is owned at national level, whilst strategic decisions happen at continental level. One aspect of this is ensuring national governments are sensitised to regional priorities, working with RECs. NEPAD also arrange for Heads of State to meet at the AU summit to discuss priorities in this area.

NEPAD's work links a lot of different regional and international actors. NEPAD could be the regional driver for corridor related infrastructure work in Africa.

2.1.3.3. East African Community (EAC)

Areas of Focus Current/Recent Corridor- Related Activities:	> Regional economic integration > Trade and investment > The EAC Secretariat is implementing the 2014 Intermodal Strategy to improve quality and reduce cost of transport through developing better links between the different modes of transport along the key trading corridors of EAC. > The EAC held an Integrated Corridor Development convention with the World Bank in June 2016, aimed at discussing ways to facilitate funding of corridor development in land-locked countries
Planned Corridor Related Activities:	> Continued implementation of Intermodal Strategy. > Plans to accelerate implementation of development corridor projects such as the Lake Victoria and the Lake Tanganyika transport programs. This will require investment of US\$1.8bn, of which the World Bank has committed US\$850 million to date

Perspectives and Approach

The EAC see corridors as one method to spur regional integration, which is their key priority. As recently as June 2015, the EAC held a convention with the World Bank aimed at discussing ways to facilitate funding of corridor development in land-locked countries.

One conceptual focus for the EAC is the Japanese Road Side Station concept for East African transport corridors: "it is aligned to the goal of having efficient but safe transport services in the region". The Road Side Stations (RSS) will provide four clusters of services: rest space for drivers and passengers alike (hotels, restaurants, recreation); information space (ICT services, banking, money transfer, etc.); specialized services (medical, wellness, counselling, training, safety education, etc.); and linkages into local economies (to support small business development).

2.1.3.4. Economic Community of Central African States (ECCAS)

Current/Recent
Corridor-Relat-
ed Activities:

> ECCAS are involved in trade facilitation along the Lagos Mombassa corridor and the North South corridor.

Perspectives and Approach

ECCAS has protocols between member states in several sectors, including transport and natural resources. The Commission des forêts d'Afrique centrale (COMIFAC), part of the ECCAS is also the main body charged with the conservation and sustainable management of forest and savannah ecosystems of the Congo basin.

ECCAS and COMIFAC could play an important regional coordination role for the TRIDOM area. There is no international agreement yet between the countries regarding the mining and resource corridor issues.

ECCAS should play an integration role in the regional development of transport corridors, including extractive ones.

2.1.3.5. United Nations Economic Commission for Africa (UNECA)

Current/Recent Corridor-Related Activities:

> UNECA implements the Africa Mining Vision, agreed by AU Heads of State, 2009. The AMV is aimed at improving how mining is integrated into regional, national and local policy, so that mining contributes to local development. AMV sees corridors as a way of realising huge resource potential of Africa through integrated multi-state Development Corridors

Current/Recent Corridor-Related Activities:

- > In 2014 there was a move toward **Country Mining Visions** (CMV), launched in recognition of the issue of inter-ministerial and inter-institutional coordination, to bring together different interest groups in discussions on the mining sector to align differences of perception of understanding. The purpose is to help member States domesticate the AMV at the country level through a multi-stakeholder consultative process to formulate shared vision on how mineral resources can promote development and transformation > UNECA is also supporting African Minerals Development Centre (AMDC). AMDC is envisaged as having central and strategic coordinating capacity for the implementation of the AMV and its Action Plan. The AMDC is further aimed at supporting domestication of AMV through the design of CMVs. It is currently supporting CMV design in Mozambique, Lesotho, Tanzania and Ghana. The AMDC is also engaged in developing a CMV guidebook.
- > UNECA is promoting the blue economy concept, aimed at sustainable growth of coastal and island states by maximising access to and use of marine resources through sustainable management of ocean ecosystems. As coastal states are connected to landlocked states this has broader significance for regional trade, transport and infrastructure

Tools and Instruments

- > Country Mining Vision Guidebook: step-by-step guide for strategic assessment; identification of instruments for policy dialogue; and mechanisms for conducting stakeholder consultation; steps for policy design; and for the formulation of a CMV implementation, monitoring and evaluation tool.
- > AMDC support: advocating for enhanced use of geological and geospatial information to manage development outcomes; advocating for well governed sector that is socially and environmentally accountable. A second aim is to build skills of people within sector.

Perspectives and Approach

IRCI is considered to be very relevant to UNECA, who sees issues of planning and coordination as a key concern. The main problem of IRCs is coordination between Ministries and institutions, as well as capacity issues within implementing bodies.

UNECA sees implementation of Country Mining Visions as a key part of resource corridor management. The IRCI should focus on identifying gaps in support and guidance and producing tools which can fill these gaps.

2.1.4. Other Organisations

2.1.4.1. Columbia Centre for Sustainable Investment

Current/Recent Corridor- Related Activities:	CCSI has undertaken work comparing 4 corridors: Lamu, Nacala, Simandou and Cameroon, but of those only the Maputo corridor is running. A challenge of work in this area is there is not much to compare with and no particular measure of success and failure.
	CCSI published a series of policy papers , that look at the potential of leveraging the infrastructure associated to extractive anchor projects. In this regard they study the rail and ports, power, water and telecommunications. Each sector is examined from a political economy point of view looking at the incentive systems, the coherence and effectiveness of the various regulatory and governance systems. The case studies examined are from Africa. The findings are referenced later in this study.
Planned Corridor-Related Activities	> Pending World Bank/CCSI report

Perspectives and Approach

CCSI is producing interesting work in this area and has noted some of the conceptual shortcomings in trying to study IRCs, for instance the difficulties in measuring success or failure of IRCs. CCSI advocates for phrasing IRCl as a toolkit, with a practical focus and use for governments.

2.1.4.2. World Economic Forum (WEF)

Areas of Focus	> Infrastructure: partner on Africa Strategic Infrastructure Initiative > Linkages between infrastructure and economic development (economic corridors) > Financing of infrastructure
Current/Recent Corridor- Related Activities:	> WEF's Business Working Group on Infrastructure in Africa. Created in 2012 by WEF in partnership with the AfDB, the African Union Commission and the NEPAD Planning and Coordinating Agency, it serves to put forward the business voice and to help accelerate the Programme for Infrastructure Development in Africa (PIDA) > African Strategic Infrastructure Initiative (ASII): The initiative has given guidance and support by establishing a best practice framework for improved infrastructure delivery in Africa. It also enables governments to benefit from objective, transparent and informed inputs from the private sector (below reports). This framework is now being used by WEF to support raising investment for projects.
	 Managing Transnational Infrastructure Programmes in Africa: Presents a framework of best practices for overcoming the financial, technical, regulatory and even interpersonal challenges of managing transnational infrastructure programmes, as well as best practices for guiding programmes towards realization (Bosting Consulting Group). Strategic Infrastructure in Africa: Paper introduces a methodology to identify projects for private sector acceleration and gives an overview of potential new ways to finance infrastructure project acceleration (Boston Consulting Group). Strategic Infrastructure Steps to Prepare and Accelerate Public-Private Partnerships: outlines government best practices for overcoming the challenges of PPP preparation. Four best-practice areas come under scrutiny: managing a rigorous project-preparation process, conducting a
	bankable feasibility study, structuring balanced risk allocation and regulation; and creating a conducive enabling environment > Global Strategic Infrastructure Initiative (GSII): The project spans over the different aspects of economic corridors' definition, planning, implementation and maintenance in the context of industry sectors such as mining, processing industries and power & generation to name only a few. To close the infrastructure gap, the initiative aims to facilitate continuous dialogue and collaboration between governments, multilateral development banks, investors, and engineering and construction companies. It will also make recommendations for policy-makers in critical fields such as planning, project preparation, financing and capacity building

Current/Recent Corridor-Relat- ed Activities:	> The WEF annual forum which provides a platform for over 50 initiatives that are currently being led by the Forum, with the aim of contributing positive, transformative change to the global agenda, as well as those of industry, business and the world's regions
Planned Corridor-Related Activities	> Pending report with World Bank/CCSI
Tools	> Best Practice Framework (Africa Strategic Infrastructure Initiative): to guide policy-makers, sponsors and managers and to facilitate the delivery of transnational programmes on schedule, at cost and at the right quality. > The WEF's Network of Global Agenda Councils: world's foremost interdisciplinary knowledge network dedicated to promoting innovative thinking on critical global issues, regions and industries. The Nature Conservancy is working with the Future of Mining and Metals Council to raise the profile of cumulative impacts of mining, looking at better ways to address them than environmental impact process. As their work and our work develops there could be potential for coordination

Perspectives and Approach

Lack of economic corridors is one of the most important economic challenges, as well as a global opportunity. Economic corridors require vertical and sector wide investment and it is this action that enables economies to grow. Attempts to involve the private sector need to be framed as a risk management piece.

WEF can support financing initiatives. WEF is planning to undertake work shortlisting infrastructure projects of strategic importance and accelerating finance on said projects. Another area of strength is WEF's multi-stakeholder convening power 16, which is important in building consensus around these issues.

WEF sees IRCl in playing an important role in establishing the perspective of different institutions on the corridor concept; the scoping would be most useful to do a gap analysis in this regard.

¹⁶ The World Economic Forum's Network of Global Agenda Councils convenes the most relevant and knowledgeable thought leaders from academia, government, business and civil society to challenge conventional thinking, develop new insights and create innovative solutions for key global challenges

2.1.4.3 Private Sector Organisations

Areas of Focus	A number of private sector companies were consulted as part of this study; however they will not be directly quoted for reasons of confidence.
Current/Recent Corridor-Relat- ed Activities:	Globally there are many private sector initiatives around resource corridors, in particular many around corridors that are the covered in this scoping study.
Tools	This report will not look at specific private sector tools. However taking a broad look the private sector has developed guidance, tools and policies around community consultation, social investment to name a couple.

Perspectives and Approach

There is significant value for the private sector in engaging with communities and civil society in constructive way to maintain social licence to operate. Where projects are at risk, corridors or such initiatives can push the needle on that risk. Many of the companies we consulted with see the initiative as an inherent opportunity for all players involved. The role of the anchor partner should not be underrepresented. As such, one can think of corridors as a conglomerate of core activities and a number of activities outside that core.

There was a distinct call for an 'enlightened initiative' to convene 'enlightened players'. The initiative should seek to reduce the complexity of the corridor planning and implementation process, potentially recommending simple frameworks to begin with. There is also a concern that the private sector is expected to replace the role of government or simply act as a cash contributor (or brings more cash to the project than other stakeholders). Whilst the government and private sector must work together, the private sector cannot and should not replace the government's role. The role of the private sector should be equally strategic, given they provide the core anchor investment that allows a corridor to be constructed around them.

There is a need for regional planning and clear roles for national government and subnational government and a need for institutional and political conditions like good governance, capacity, and policies to maximise for corridor development to succeed. In the next phase of the study, identification of cases where regional planning and development has been done well, the principles applied and the enabling conditions would be insightful.

Often it is the case that there are too many players involved in corridor development, but none large enough to make it happen.

There must be a separation of (at least) two levels of governance - the institutional and the technical. At the institutional level, large corridors need multi-stakeholder champions, via a formal Steering Committee with

representatives from government, donors and the private sector. The technical level ought to retain a high degree of independence and, in the view of some private sector representatives engaged with; it should be a professional management unit without

2.2. Good Practice Considerations

The below diagram shows the areas of good practice we consider:



2.2.1 Initial Learnings and Implications

Building on the issues identified in the previous section, this section considers various themes associated with resource corridor development, looking at the critical success factors for each area and the implications these have for the IRCI to establish good practice. This is not exhaustive; however it lays the foundation for development of the toolkit in phase 2.

At the end of this section we consider the methodological notes that stem from these areas of good

The below table provides a summary of findings, and the appendices contain further detail of critical success factors.



Strategy & Implementation

- Political will to drive strategy and its implementation at a Head of State level that cascades down to Ministry level and then to government officials. This is particularly critical in transboundary corridors.
- Good governance and the effectiveness of the project management; the overall approach of the corridor needs to be programmatic rather than project based.
- Proper legal agreements between the countries and a third party management unit.

- Environmental and social performance standards and safeguards
- Early engagement with government stakeholders is key, which allows for more constructive relationships.
- A tool to support government analysis of different transport/source of transport options, factoring in environmental, social, local economic as well as macroeconomic and large-scale commercial criteria.



Infrastructure

- Companies and host governments look at infrastructure from different perspectives. Whilst a company is seeking to maximise cost savings, a government will be seeking to maximise welfare gains. Provided the regulatory environment is right, both can be met.
- Extractive led infrastructure development is generally incentivised by the needs of the site and as such it can sometimes be hard to incentivise companies to construct infrastructure assets with greater capacity than is needed for their site. Leveraging associated extractive infrastructure for economic

development is not automatic or a given. A strong regulatory environment with high capacity for economic policy formulation is needed to expand on the vision for corridor development.

• Ensuring shared use where appropriate, through creating incentives for doing so, or creating structural barriers to monopolistic behaviour and legal provisions mandating shared use. The WEF Infrastructure paper provides recommendations and learnings on how to plan and implement transnational infrastructure programmes and should be drawn upon in corridor planning work, both from an infrastructure perspective and a broader perspective of effective coordinated planning and the issues that arise from corridor development.

• Extractive companies require a social license to operate and are often willing to invest in infrastructure, if it is part of their business model and initial design, with added capacity if and when this will allow them to operate.



Environment

- In the course of the next few decades, Africa will increasingly assert its role as a global economic player, while simultaneously lifting millions of citizens out of poverty; however, this has the potential to dramatically alter Africa's own ecological character. As expanding economic activity converges with sensitive ecosystems, we are likely to witness the emergence of several ecological frontiers areas where the ecological foundation of Africa's growth could be chipped away or destroyed altogether by this development.
- Preventing this scenario will require several responses from key stakeholders in the African context:
- > Strategic Planning Capabilities which enable more effective and judicious use of finite ecological resources, including ecological resources;
- > Investment Safeguards and Frameworks which can limit and change the nature of investment in ecologically damaging projects;
- > New Partnership Models the management of ecologically sensitive areas and assets in Africa is often a problem of collective action, and safeguarding Africa's ecological future will require new

- models of partnership to emerge which reconfigure the relationship between the state, business and civil society;
- > Clear Institutional Mandates the coherence and competence of African governance will play a major role in determining how natural resources are managed, regardless of the future scenario Africa encounters;
- > Support Tools for Ecological Assessment the ability to articulate the benefits of natural resources and ecosystems is a crucial pre-requisite for effective strategic planning at all levels;
- > Some other concerns around environment and climate issues are the level at which EIAs occur. There is also the risk that the 'polluter pays' principal is not always applicable, or if applicable not plausible, with the separation of firms into different entities hard to enforce, especially in transboundary corridors;
- > Transboundary corridors represent an opportunity to embed reforms and policy at a regional level, which can then be translated to a national level and could be a way to secure better environmental policies in certain countries



Climate Change

- Climate resilience is 'the ability of a system and its component parts to anticipate, absorb, accommodate, or recover from the effects of a hazardous event in a timely and efficient manner, including through ensuring the preservation, restoration, or improvement of its essential basic structures and functions' (IPCC, 2012). This can be achieved through adaptation, which is 'the process of adjustment to actual or expected climate and its effects, in order to moderate harm or exploit beneficial opportunities' (IPCC, 2012).
- As derived from global good practice (such as UK Government

- guidelines), five principles of good climate adaptation practice 17 should be considered when assessing the feasibility of all potential adaptation options.
- Effective climate adaptation need not incur significant costs. A World Bank study has found that the net cost of adapting infrastructure to climate change conditions will amount to 1-2 percent of the total cost of providing that infrastructure (Hughes et al. 2009). Importantly, the cost of adaptation is likely to be exceeded by the cost of repairing/rebuilding infrastructure that is not or is

poorly adapted following an extreme weather event.

Adaptation can involve a range of approaches including reduc-

ing exposure and vulnerability, increasing resilience as well as preparing, responding and recovering.

17 (1) Any adaptation needs to be sustainable. This means that our responses should not add to climate change, or limit the ability of other parts of the natural environment, society or business to carry out adaptation elsewhere. Our responses must avoid any detrimental impacts on other parts of society, the economy or the natural environment (2) Actions should be flexible. Although there is still uncertainty over the future climate, we should consider options now and make decisions that maximise future flexibility - in many cases it is failure to take decisions that locks us into inflexible pathways. (3) Action needs to be evidence-based - making full use of the latest research, data and practical experience so that decision-making is well-supported and informed. (4) Our response to climate impacts should be prioritised – for example, by focusing more attention on policies, programmes and activities that are most affected by the weather and climate, those which have long-term lifetimes or implications, where significant investment is involved or high values are at stake, or where support for critical national infrastructure is involved. (5) Adaptation measures need to be effective (reducing the risks from climate change without introducing perverse effects), efficient (the long-term benefits of adaptation actions should outweigh the costs), and equitable (the effects of the activity on different groups and where the costs should fall should be taken into account). (HM Government, 2010).



Biodiversity/Conservation

- Africa is host to some particularly high value and/or unique terrestrial and aquatic habitats, some of which are home to endangered species and the ecosystems that support them. Some biomes support rich diversities of species, while others support the species that make Africa's protected areas a magnet for international resource based tourism. However, the trend is generally a reduction in biodiversity across the continent.
- The recent growth in extractives exploration poses significant threats to some of these areas. Rising commodity prices have made it commercially feasible to venture greater distances from facilities located at river or coastal ports and so fragile areas situated far in land are being opened up. These remote areas may be home to marginalised and vulnerable communities as well as biodiversity hotspots.
- Corridors can have direct and indirect impacts on biodiversity.
- > Directly, by opening up access to areas, previously remote, to illegal trade in natural resources -such as ivory, bushmeat and indigenous timber. Construction activity and waste disposal etc. may also introduce alien invasive species altering the ecological balance in an area. The Pemba corridor is recognised as being one of the biggest export routes of rhinos, ivory, rosewood, ironwood etc. Criminal activity brings with it associated issues of violence and corruption.
- > Indirectly by creating barriers to the movement and migration of animals or by bisecting contiguous areas of areas of conservation

- importance. This latter issue has been addressed in sections of new road construction in northern India by elevating roads in appropriate places to allow for elephant movement – also for traffic safety reasons as well as conservation.
- In addition to terrestrial environments marine mining and offshore oil and gas exploration are also of attraction to investors not least because of the perceived avoidance of costly community conflicts that can affect land based projects. Marine corridors pose risks to many areas of importance in the marine environment. This is especially concerning because knowledge about the oceans is still relatively limited and there is a lack of confidence in predicting the potential impacts of developments on marine systems.
- The availability of accurate, high quality data and their spatial expression around biodiversity is key. If areas of high conservation value are not identified and their importance explained they will not be protected in the face of development pressures. Tailoring the provision of data to the audience is fundamental as many people involved in corridor work will be required to consider biodiversity and conservation, however this may not be at the core of their thinking (see WWF's work with the Tanzania Chamber of Mines and Energy in producing environmental guidance for inward investing mining companies in that country)
- These is need for a rigorous methodology that guides identification of critical resource corridor zones as there is not yet a sufficient attention to protection of conservation areas in the analysis of impacts in the resource corridor areas. Whilst there are a few

exceptions, it seems likely that the erosion of high conservation areas will continue without the inclusion in planning processes. There is need for a rigorous methodology that should guide the identification of critical resource corridor zones.

• The greater the uniqueness or vulnerability of biodiversity or ecosystems, the more the need exists for emphasis on proactive avoidance or minimisation of negative impacts. Conservationists use the framework of a 'Mitigation hierarchy' that describes a continuum of approaches from describing no go areas through to allowing for a process of off-sets that allow for equivalent areas to be set aside in return for the irreversible change to an area. The calculation of 'equivalence' is an imperfect science at present and an area of research the IRC work programme could progress.

A resource corridor conservation work package could be outlined

as follows

- 1. Conservation data collection, analysis and mapping.
- 2. Communication of sensitivities in appropriate formats, such as maps
- 3. Assessment of Institutional management capacities for monitoring and auditing effective protection
- 4. Tri- sector partnering to monitor trends and develop biodiversity action plans
- 5. Monitoring system and e-warning mechanism. Tools experimentations: Biodiversity action plans, Public-Private partnership, Offsetting scenarios along corridors



Natural capital

- The contribution that natural capital makes to economic prosperity and human health and wellbeing - and the economic and social costs associated with erosion of natural capital are being increasingly recognised in countries across the world. Yet the value of natural capital is still rarely factored into economic and policy decision-making, and is often effectively priced at zero. This means that natural capital is over-exploited, depleted and degraded, often beyond a sustainable level, such that the ecosystems services are no longer delivered. This can impose significant costs for both business and the wider population. The explicit consideration, assessment and valuation of natural capital, and particularly of the ecosystem services it delivers in a certain location, can help to highlight the risks and costs from its depletion, and permits consideration of the implications of different patterns of development for future ecosystem service delivery.
- In the resource corridor context, scenario analysis can be undertaken to analyse how different possible future patterns of development (i.e. alternative decisions about where new infrastructure and industrial development is located) will affect ecosystem service delivery, in order to identify otherwise perhaps unforeseen risks to the overall plan associated with natural capital depletion.
- In resource corridor planning, it can also be helpful to think about the aggregate impacts of multiple new developments that are often envisaged as part of a resource corridor. A natural capital

- impact assessment can highlight the costs that a new business upstream which results in pollution of that water source, might generate for downstream users including other businesses.
- · Natural capital assessments can facilitate the development of policies or collaborative solutions that can help to pay for improvements in natural capital that will generate wider economic benefits. For example, downstream water users might share the costs of installing a water treatment plant by an upstream business. Such schemes are rare in Africa but more common in other parts of the world such as China.
- Water-related natural capital issues are just one example, but others key in the context of IRCI would be impacts on soil quality (affecting agricultural productivity), fish stocks, potential revenues from tourism, water regulation determining hydropower generation, carbon emissions, disaster risks associated with destruction of mangroves, health costs from air pollution etc.
- There are many existing tools which can be utilised to facilitate natural capital and ecosystem service valuation, such as the Toolkit for Ecosystem Service Site-based Assessment (TESSA) developed by the Cambridge Conservation Initiative for example.
- · Several initiatives already exist to support natural capital accounting and ecosystem services valuation in developing coun-

tries, including the World Bank's WAVES project, and UNEP's VANTAGE programme and ProEcoServ project, so there may be scope to link with these existing programmes of work and draw on associated capacity, in exploring the application of this approach in the context of the IRCI. Natural capital accounting - an assessment of the stock of natural capital often done at the national level – is one approach that a number of countries are pursuing, but in the context of IRCI, more geographically-focused ecosystem services valuation exercises (which assess the flows of ecosystem services rather than the stock of natural capital they derive from) would be more applicable.

A resource corridor natural capital valuation work package could be outlined as follows:

- 1. Pull together appropriate tools to guide the implementation of natural capital assessment, including participative approaches to valuation, and develop guidance that signposts users to good sources of information and assistance.
- 2. Undertake broad, qualitative natural capital / ecosystem services assessments across each of the corridors to identify areas

- of highest potential value from an ecosystem services point of view, and specific risks arising from corridor development, which can then be prioritised for more in-depth analysis and valuation as necessary.
- 3. Undertake scenario analysis to highlight the possible implications of alternative development patterns for ecosystem services delivery.
- 4. Engage with policymakers, stakeholders and businesses in high risk locations to discuss risks and potential solutions.
- 5. Incorporate these assessments into other parts of the process including development planning, land use planning, and link with biodiversity impact assessments etc.
- 6. Undertake political economy analysis alongside natural capital assessments to better understand likely outcomes and inform influencing strategies.



Local Economic Development

- Corridors are 'engines of regional development' not just 'conduits' to growth and regional integration; whilst the blue growth concept may too have implications for landlocked countries who can export via coastal states.
- Projects around Local Content and the development of local SMEs around anchor projects and along Resource Corridors are necessary. These projects can be the significant drivers of local economic development through job creation, capacity building and skills development contributing to buy-in from local communities, social stability and economic growth. However lack of skills/capacity will be an issue in deriving full benefits of economic development. Poor rural communities are often overlooked in this regard. Most of the DC anchor projects would be large-scale, which would require deliberate action to create opportunities for Small Micro and Medium Sized Entrepreneurs (SMMEs) as has happened on the South African side of the Maputo Development Corridor (MDC).
- Land access, economic opportunities and migration implications must be assessed, with a clear strategy on how to address those issues. At community level, corridor planning does not tend to take into account existing social or economic modalities, with the local economic benefits considered ex post.
- A value-chain approach is essential and linkages should be explored along the corridor. We should not try and force economic development along the whole corridor: some corridors will go through vast expanses of very low population density areas and they should not be disproportionately targeted.
- Agricultural developments around the IRC should not be overlooked.



Spatial Planning

- Spatial planning systems are the methods used (usually by the public sector) to influence the distribution of people and activities in spaces of various scales. It is about the management of space and development processes in a planned framework and in order to create places that respond to the needs of society, the economy and the environment in an efficient, equitable and sustainable way.
- Spatial planning takes place at local, regional, national and international levels. As it applies to corridor planning, spatial planning is generally at the regional scale.
- Professional disciplines that are involved in spatial planning include land use, urban, regional, rural, landscape, transport, and environmental planning as well as geographers. Those engaged in water catchment area planning, agricultural development, infrastructure planning etc. have an integral role within spatial planning. One objective of the IRC initiative is to ensure that 'green' infrastructure (ecosystems and the services they provide) are given equal attention to manufactured infrastructure in spatial planning to ensure that these systems underwrite the sustainability of development processes.

- A spatial plan will be based on overlaying sensitivity and suitability criteria and maps to help identify areas of potential compatibility and conflicts. Spatial planning is, therefore, at the core of the IRC initiative. A spatial plan should be the manifestation of multi-disciplinary approach and is an important tool of good governance.
- One important tool is this area is WWF's tool ALES\now known as ILES. It is an early-stage mapping and GIS system that combines different information 'layers' (including environmental, agricultural, biodiversity, mineral concession, infrastructure, political) to support better planning decisions. The tool though is not yet used for scenario analysis but perhaps could be developed into this.
- · Aim is to first develop risk analysis, particularly in relation to biodiversity and then potentially start layering for scenario planning.
- · The tool is focused on East Africa Kenya, Tanzania, and Mozambique but with ambitions to grow beyond.
- Outputs such as maps and analysis will be shared with government and aim is also to share with companies and investors - who have increasing interest in this time of risk planning.



Water

- Water remains a critical element not only for enabling extractive industries, but broader development in IRCs. Much of Africa already faces critical water scarcity, and in many cases, water quality is also challenged. Understanding how such water risk affects IRCs, as well as future investments in extractive assets is critical. Furthermore, freshwater ecosystems are amongst the most threatened, despite an increasing recognition of the considerable economic value of the ecosystem services that derive from areas like wetlands.
- Recent work by WWF has illustrated the extent to which water affects various sectors of African economies, such as those in Zambia (Kafue Flats) and Kenya (Lake Naivasha). More comprehensive basin-focused approaches to re-think how water is allocated within the landscape to optimise economic, social and

environmental benefits will be critical to ensure continued wellbeing for both communities and nature.

• Experience has also highlighted the importance of taking such basin-focused approaches for private sector efforts as well. While efficiency measures may provide some short-term relief, ultimately water risks derive from both corporate actions as well as basin context. Thus while a specific project may generate lower costs and consume less water, overall availability may not change (or even decrease) due to other users consuming the "saved" water, or through increased growth. To mitigate the full range of water risks, and begin to address scarcity and pollution challenges shared within the basin, water stewardship efforts that go beyond internal efficiency efforts on to collective action and governance engagement have proven necessary to ensure longer term sustainability.



Political Economy

- Political economy factors are a key consideration in corridor planning and implementation, particularly with regard to inter-state cooperation, changing political landscapes, risk of land grabbing, corruption and protectionism.
- With regional organisations driving much of the corridor discussion, there is a potential gap between regional commitments and implementation, which needs to be considered in planning of transboundary corridors. There is acknowledgement around PIDA, that its success to a large extent will be dependent on ownership by participating states. This ownership issue is perhaps an area where
- the Country Mining Vision process may be helpful. Arguably success of Maputo Corridor can be attributed in part to alignment of national and cross border interests, whereas in the North-South corridor. Zambia was more focused on rural roads projects within Zambia to build support from rural constituencies.
- Political economy factors should also be considered in where to focus in country work. For instance, in North Kivu (DRC), there are large mines operating but there are also heritage sites and environmental issues being considered, which presents a political moment to work with a country whilst there is political mandate for planning.



Governance

- Corridor projects take place over a long time frame across changing political settlements, which might impact upon the status and priority of certain corridors. Within the context of LAPSSET in Kenya, the devolution process has changed the administrative channels relevant for implementation, however the design and process behind projects appears to assume they can be implemented through the pre-devolution channels. This is encountering resistance at county government and at community level.
- Significant policy changes required at industry level (deregulation, etc) to significantly decrease the prices of transport and lead to wide economic benefits. One study on transport corridors

- demonstrated that although costs along transport corridors are low, prices were among the highest in the world due to market regulation and rent seeking activities.
- Governance mechanisms must be clear and well defined. There must be political and financial power behind it with strong management and consultative processes.
- Private sector as a driver, but also private sector companies a pressure to take on a lot of state roles and there is a fear of replacing the state. Strong governance should also make roles clear in this regard.



Communities and Social Development

- Community considerations are notable by their absence in much of the literature, particularly at a local level. The logic behind this appears to be that the benefits derived from corridors should benefit all communities and thus override their concerns at a micro level. In parallel to this, much of the dialogue and decision making around corridors takes place at a regional level, where community level concerns may be too granular and specific to be discussed in such forums or where regional bodies may not feel they have the mandate to discuss community issues
- Social dependencies and social conflicts can have an inherently negative effect on business. This angle is important in involving the private sectors and those concerned with accelerating programmes. In the long term it may lead to a greater cost than addressing upfront during planning.
- Community concerns may override national priorities. The devolution process in Kenva could make County Government more reactive to local level issues, and could also make communities feel like they do not owe central government cooperation. Thus,

the lack of engagement with and analsis of community issues in planning of LAPSSET may prove to be a real issue. Understanding of local political economic context and how project will interact with that is key. The impact on community and risk to project should be seen as two sides of the same coin. Community considerations should be included from an intra-generational rights based perspective.

- The implications going forward are two-pronged:
 - · At regional/high level, make case to include community issues (beyond the general derived benefits of economic development), potentially through emphasising the negative effects that ignoring these issues can have on development of corridors.
 - · At planning and coordinating level, guidance and tools developed need to give clear sequencing of assessments and consultations, so community concerns are raised at the right point and not when it is too late. Further, these guidance and tools need to be based on universally acceptable rights, to avoid scenario where community concerns are only addressed in corridors where the political incentive structures make it so, like LAPSSET.

2.2.2. Methodological Notes

The Business Plan that is laid out in the next section of this document presents a phased approach to the development and delivery of the IRCI programme. A key product that will be made available to all partners IRCI is the methodology; an implementation framework for resource corridors that is generically based on best practice and continuously updated based on practical learning from project implementations, and can be adapted to each specific corridor context.

And whereas the detailed methodology will be developed in the IRCI Phase 2, there are some clear recommended aspects which are already emerging. These are noted below as steps that should be considered for inclusion in an overarching methodology, not necessarily in order:

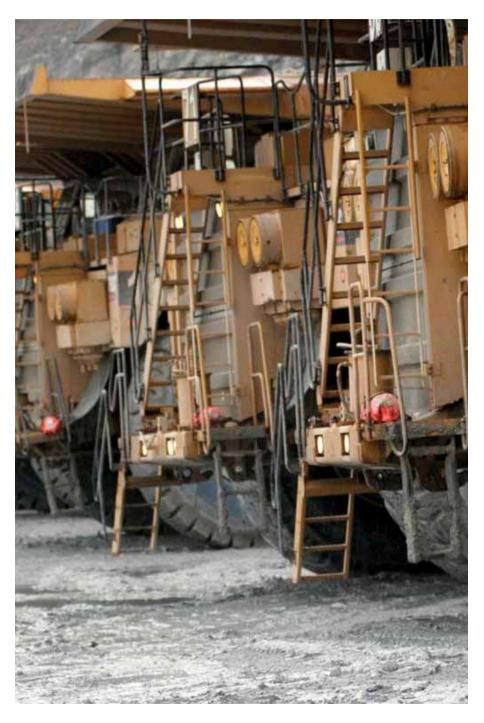
- 1. Influencing Ensuring there is political will to support resource corridor development is a critical success factor, especially when the corridor is international. IRCI must address the need to engage very early in the process – almost as a prerequisite - to garner political and executive support for resource corridor best practice recommendations.
 - · An influencing tool that can affect decisions at political level, especially where international collaboration is required
- 2. Pre-feasibility Resource corridor projects are inherently complex, and require assessment of many different factors over a significant period of time to ensure decision-making is well informed. IRCl should advocate that Governments should resist the temptation to jump into economic feasibility modelling at the outset, and instead recognise the need for an iterative process to include, prior discussions and consider-

ations on a number of fronts prior to pulling numbers together.

- · Governments should have a strategic plan to develop resource corridors prior to engagement and negotiation with extractive companies, thus IRCI needs to provide a tool to help Governments be totally in control of the extractives value chain from geological discovery to corridor development and operation.
 - · Engage interested, affected and representative actors early - NGOs, CSOs, communities, private sector - to ensure their views are taken into account and to give them time to add value to the process.
 - · A crucial first step is 'scanning', to answer the questions - if this resource project happens, what is the economic, social and environmental potential, e.g. what other minerals might come into play at lower cost to port, can beneficiation take place to increase value and change economic model, backhaul of other commodities (e.g. imported fuel). This produces an indicative IRR - if higher than a certain threshold (e.g. 10%) could go the auction route; if lower, would need public investment (including national Government and regional / international development finance institutions) and investor promotion.
 - · This is a useful stage to think beyond tools: tools useful for understanding data, which is needed - but not yet the ways in which policymakers make decisions.
- 3. Feasibility assessment this is a natural step, and IRCI will promote the inclusion of political and social and environmental as well as economic criteria.

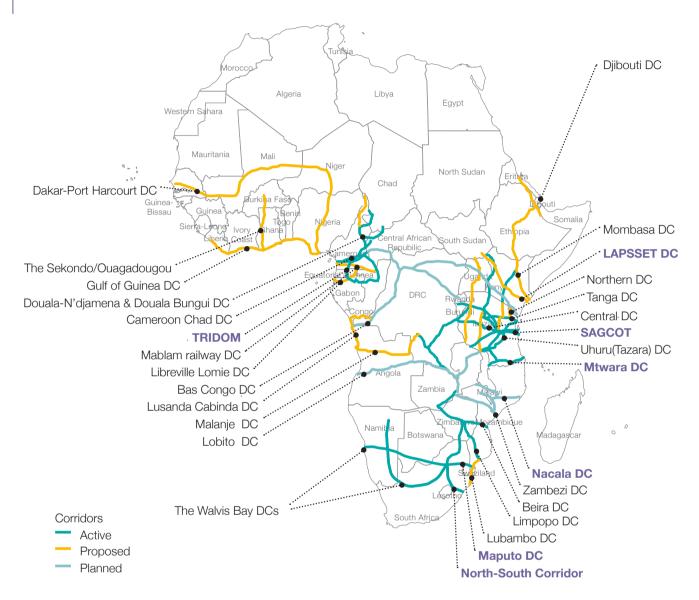
- · A key economic factor is cost per tonne to port, vis-à-vis FOB price at port, with analysis of sensitivity to commodity price fluctuations.
- · Political scenario analysis also needs to be taken into account at this stage, e.g. LAPSSET which has seen several changes in Government.
- · Need to include maritime corridors in assessments, e.g. Lubito better than Durban, but the maritime corridor to China/India increases cost, pollution, etc.





- 4. Public sector capacity building Install host Government capacity to implement resource corridors as a firm prerequisite for resource corridor projects.
 - · IRCI will play a role in assessing and meeting this requirement.
- 5. Community consultation This will take place during pre-feasibility, and also needs to be an ongoing process in the methodology, through all phases.
- 6. Data collection & monitoring Technology and know-how in relation to data collection have increased significantly in recent years, and IRCI needs to leverage these facilities to ensure a very results-focused RC methodology.
 - · Consistency of data formats and wide data accessibility are critical
 - · Should be used environment / conservation / climate change / biodiversity objectives, as well as economic and social.
 - · Working with existing and relevant initiatives, including the African Ecological Futures study, the African Land Use Early Warning System (ALES) and employing tools and research developed by mature mining economies, including Australia and Canada.
 - · New methods of crowd-sourcing data will be considered.

2.3. A Review of Selected Corridors



ASI has adapted this map to show different corridors in Africa. The highlighted corridors have been considered in this section. A map showing further layers of information on minerals facilities can be found in the annex, along with further detail on the selected corridors.

The original map can be accessed here: http://minerals.usgs.gov/minerals/

Lessons for IRCI

Some overarching lessons from this corridor research are can be found in the table below, and in the annex, and this will be expanded upon in depth for selected corridors in Phase 2. . This Phase 1 review of corridors has enabled us to identify criteria and direction for Phase 2 of IRCI, during which we will identify pilot corridors to work with to practically apply and refine the IRCI methodology and toolkit. The pilot corridor work will cover Nacala, Odisha, TRIDOM, SAGCOT, Southern Guinea Growth Corridor. The phasing and identification of these corridors is expanded on in the Section 3.2.2 of the Business Plan

2.3.1. Findings and Implications



Strategy & Implementation

- > Nacala: need for greater coordination of different initiatives.
- > Beira corridor: as very long regional corridor (from Southern DRC to the port of Beira). The corridor is in need to proper planning and development.
- > Lobito corridor: early stage of development significant scope for IRCI.
- > Mtwara: Developed corridor, debate over its continued functionality and whether it is in fact a growth pole. IRCl could support work around feasibility
- > Mtwara: Transboundary Forum between Regional Governments of Ruvuma and Mtwara (Tanzania) and Provincial Government of Cabo Delgado and Niassa (Mozambique) is currently inactive. IRCI should support forums and regional cooperation like this to help maintain political will and commitment to responsible corridor planning and lock in positive reforms across a region.
- > Maputo DC: considered a successful corridor in many respects and thus may present a useful case study for identifying success factors in transport infrastructure and trade facilitation planning. However there have been issues around the environmental considerations that need to be addressed.
- > North South: A lot of development work occurring around this corridor. Important to ensure IRCI complements and does not duplicate existing efforts.

- > Walvis Bay: Regional support to ensure harmonisation of standards, allowing for the smooth flow of trade between borders is ensured through the establishment of regional committees and partnerships with regional bodies.
- > New corridors in East/Central and Southern Africa with relevance to IRCI:
- a. Pemba and Palmas (Cabo Delgago, Mozambique): a corridor will be developed following the investment in the off shore gas field and related huge on-shore infrastructure
- b. Copper corridor DRC/Zambia: a new corridor is being developed to evacuate copper from DRC and Zambia.
- c. Botswana/Namibia/South Africa: activities are underway to develop a corridor to link Botswana to seaports in Namibia and South Africa. Decision has not been made yet on the appropriate route.
- > Mekong River Commission: Reinforces need for legitimate regional cooperation. Highlights importance of governance mechanisms such as MRC in enforcing consultation process. Demonstrates that unilateral action by one member state can call into question the effectiveness of governance mechanisms for corridor development, whilst also reinforcing need for such mechanisms.
- > New Silk Road Initiative: Donor interest alone not enough, must be coupled with political will. Highlights that political will and incentive structures drive corridor development.



Infrastructure

TRIDOM: Cumulative impacts on biodiversity and an ecosystem is currently not taken into account in the environmental impact assessments of individual mining and infrastructural development projects.



Environment

- > LAPSSET: Planning for environmental issues needs to be concern at outset, rather than playing 'catch up'. IRCI needs to strengthen the tools and methods by which to do this, whilst also stressing both the need and the business case to do so to ensure said tools are used
- > LAPSSET: conducting EIAs is not in itself enough, the quality of EIAs needs to be good and IRCI can support this process.
- > TRIDOM: clear scope of work for WWF here, working with Central Africa Economic Commission and the COMIFAC for feeding the RS policy work that could lead to a regional advocacy paper and guideline that should guide RS development.
- > TRIDOM: Mbalam-Nabeba project (Cameroon) has announced that

its project will follow the Equator Principles. Camiron will be a principal partner for WWF in setting up pilot project, using a PPP. Within the TRI-DOM landscape WWF has already a working presence and investment that could be taken as a basis for developing a landscape integrated environment baseline.

- > TRIDOM: Ongoing Strategic Environmental Assessment of the Ngoyla Mintom forest block by WWF.
- > SAGCOT: Green Growth Strategy good case study for understanding effective methods of incorporating environmental and social issues, with learning transferable to other corridors. Opportunity to explore linkages between agricultural corridors and extractives led corridors and extrapolate cross sectional lessons from each.



Biodiversity/Conservation

- > Mtwara: need to understand impacts of further development along this corridor, particularly in the Ruvuma region. WWF work on scenario planning in Ruvuma demonstrates usefulness of such tool in early stage in identifying gaps in planning and coordination and showcasing potential outcomes. IRCl could plan future interventions in the area of the back of this.
- > TRIDOM: Potential for disastrous impact on biodiversity from multiple planned developments. These projects are in planning stage so there is potential to influence the projects to be less impactful, applying the mitigation hierarchy (avoid, mitigate, restore, compensate impacts) and developing

measures at landscape scale to reduce cumulative impacts. The potential scale of cumulative impact on biodiversity not currently mainstreamed in most of the mining and infrastructural development projects.

> TRIDOM: Ongoing multi-stakeholder investments in wildlife consultation can only last if sensitivity mapping is done. This is an area for IRCI involvement.



Local Economic Development

- > Maputo DC: Growth stemming from MDC provides opportunity to make case for poverty reduction from corridors. Successfully implemented corridors can lead to growth and tools and guidance can help with this.
- > Mekong River Commission: Highlights continued risk of commercial interest overriding environmental interests and livelihoods.

> **SACGOT:** Green investment guidelines



Political Economy & Governance

- > Maputo DC: Successful cross border cooperation highlights importance of political will and political economy factors (discussed further in next section.)
- > Maputo DC: Guidance needed around frameworks for PPP contracts
- > Walvis Bay: A PPP, thus able to lean on the public sector for advice and action on issues such as customs, transport regulation and infrastructure development, while the private sector can focus

on business development such as marketing and making practical operational proposals and logistics solutions.

- > TRIDOM: there is growing political will from the Government and other development partners to consider conservation and environmental related aspects in development projects. This provides an opportunity for IRCI to be more involved.
- > New Silk Road Initiative: Demonstrates need for legitimate governance mechanism to drive development. Further exemplifies need to build regional consensus at high level.

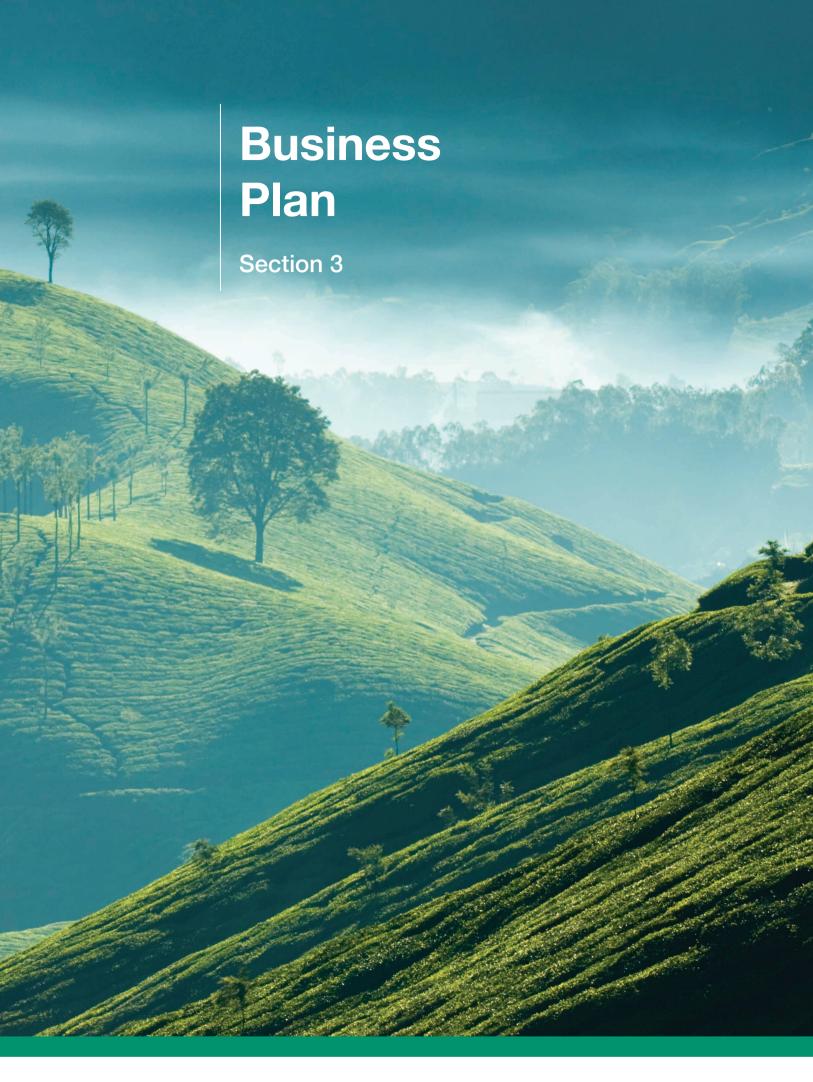


Communities & Social Development

- > Maputo DC: Successful cross border cooperation highlights importance of political will and political economy factors (discussed further in next section.)
- > Maputo DC: Guidance needed around frameworks for PPP contracts
- > TRIDOM: there is growing political will from the Government and

other development partners to consider conservation and environmental related aspects in development projects. This provides an opportunity for IRCI to be more involved.

> New Silk Road Initiative: Demonstrates need for legitimate governance mechanism to drive development. Further exemplifies need to build regional consensus at high level.



3.1. Objectives & **Business Case**

What is the IRCI's Goal?

The overall objective for IRCI is to support an integrated, inclusive and transparent approach to the planning, design and implementation of resource corridors so that sustained economic development and poverty reduction outcomes are best achieved. This aligns closely with the Sustainable Development Goals.

This will be supported by achievement of the following outcomes:

- > Sustainable economic growth and poverty reduction, diversification and improvement of livelihoods and trade during -and long after - extractives activities have ceased operation, especially through liberating resource infrastructure investments' additional local economic potential.
- > Reduction of negative impacts on social, environment, biodiversity and climate change, especially through early consideration of resource corridor planning and decision-making processes.
- > Maintenance of eco-systems, their integrity and the quality and the services they provide to ensure they continue to underwrite development processes in perpetuity.
- > Reduced risk of social tension and conflict in relation to resource projects and resource corridor projects.
- > Increased likelihood of success of resource corridor (and related extractive anchor) projects, in economic, social and environmental terms.

Most resource projects do not include all of these outcomes in their priority objectives and decision-making. And note that these outcomes are mutually positively interdependent, especially in the medium and long term.

With respective contributions and inputs (from core partners) leading to a successful IRCI platform as an output, the outcomes described above can be achieved, supporting the overarching IRCI goal. This proposed Theory of Change has been developed further by WWF (currently a separate document, available upon request), and will be interrogated and refined in the next phase.



What is the IRCI?

IRCI is a platform to provide resource corridors with the means to deliver these outcomes, by providing to those considering, planning and implementing resource corridor products, services and organisation as follows:



Products:

- > A practical **methodology** from concept to implementation for the integrated development of resource corridors, focused on delivering the outcomes above;
- > The 'business case' for an integrated approach to resource corridor/planning;
- > A set of **policy principles** that should underwrite all IRC planning and developments. These will be evidence-based and frequently updated to represent broadly considered best practice:
- > A set of practical **tools** for every step in this methodology, from concept to closure. The methodology and tools will be generic, but designed to be easily adaptable to specific corridor context (as will the policy principles); and
- > Training materials to be used to increase capacity of resource corridor actors in Government, civil society and the private sector.

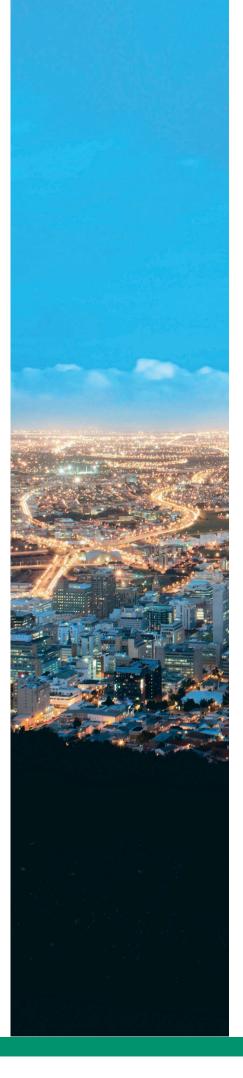
Services:

- > Capacity building to increase resource corridor capacity, especially in applying the IRCI products above, and ensuring ease-of-access and use;
- > Expert technical assistance and advice for specific corridor requirements, and to develop and improve the IRCI products; and
- > Expert **research** to develop and improve IRCI products.

Organisation:

> A multi-disciplinary **IRCI community** of resource corridor actors from Government, civil society and the private sector, established to ensure continuous progress and improvement of the methodology and tools, to incorporate IRCI practitioner experience, learning and seminars: and

An IRCI partnership of core and supporting organisations mandated to develop, oversee and steward the framework. The core partners in phase 1 are WWF, DFID and ASI, but new core partners will join for future phases.



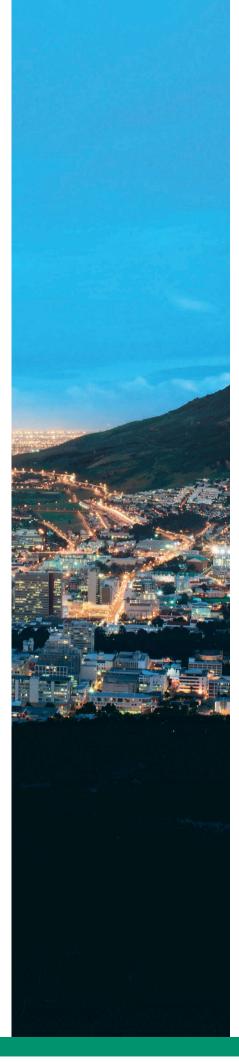
Whats does the IRCI add to existing resource corridor initiatives?

There are many initiatives - referenced in this scoping paper - that have delivered useful and successful support for resource corridors. Nonetheless, our research confirms that there remain significant gaps; all of these initiatives can be recognised by a combination of some or all of the following characteristics: niche, theoretical, ill-communicated, complex or outdated.

More broadly, and importantly, the IRCI should go where other initiatives have not and redefine the broadly accepted meaning of resource corridor success, to include social, environmental, climate change, conservation and local economic development criteria, as well as the standard macroeconomic criteria of investment and growth.

The scoping exercise established some key findings that informed this IRCI high-level design:

- > Consensus: There are many organisations either managing or planning resource corridor development initiatives who recognise the need for, and are keen to, support the development of an initiative like IRCI;
- > Common challenges: Many resource corridors are facing similar problems, including in particular the lack of sufficient ex-ante consideration of environmental and community factors, insufficient Government capacity to plan in an integrated fashion, and political rationale for corridor development that is not based on sound economic grounds;
- > Existing solutions: There is existing knowledge and learning which can be applied to address most of the challenges faced by resource corridors; and
- > Tools: There are many tools in existence being used in isolation, but which could together offer an excellent toolbox for resource corridor practitioners to utilise.



3.2 Indicative IRCI Framework

The previous subsection in-**IRCI** Partnership **IRCI** Community troduced the concept of IRCI comprising 3 components -Core & supporting Participating & Partners - political implementing Partners ganisation. This proposed development, financial Host Government's, framework is explained in institutions, companies Companies, NGOs, further detail below, with furand INGOs **Practitioners** ther information on resources and organisations provided further below in the resources Services **Products** subsection. Training, Technical Methodology, Toolkit & Assistance & Research, in Policy Guidance, in the the following areas; following areas; Political economy analysis RC programme management Strategy & implementation Institutional framework Infrastructure Communications Communities & social development Advocacy Governance Investment promotion Local economic development Community engagement Environment / climate change Spatial planning water & marine Feasibility & modelling Transport Financing Biodiversity / conservation Procurement LAPSSET **TRIDOM** Mtwara Nacala RC Project A RC Project B RC Project C RC Project E RC Project F RC Project G Outcomes: • Sustainable economic growth and poverty reduction • Reduction of social, environmental, biodiversity and climate change negative impact, Reduced risk of social tension and conflict · Increased likelihood of success of resource corridor projects

3.2.1. Products

We anticipate from initial research that there is a strong requirement for an IRC set of policy principles and implementation methodology, toolkit, and training materials in the following categories and subcategories. It will be determined in the next phase the extent and depth to which the different products and services should be developed, e.g. it is suggested that the Financing aspects should not fall within the remit of this programme.

- 1. Resource corridor programme management
 - a. Programme governance arrangements, including objective-setting, programme steering, project management, consultation and advisory bodies
 - b. Project planning, including activity breakdown, work package definition, phasing, resource allocation
 - c. Risk management, including tolerance levels, owners and prioritisation according to pre-agreed criteria
 - d. Budget management
 - e. Quality management
 - f. Monitoring & evaluation against preagreed objectives, results and indicators
- 2) Institutional framework
 - a. Best-fit institutional arrangements / options for oversight, assessment and development of resource corridor projects
 - b. Terms of reference for organisations and key individuals
- 3. Communications
 - a. Strategic communications to national and international public, including balance across media channels and types
 - b. Investment promotion, ensuring great-

- er choice of investment options available to host Governments
- c. Advocacy / influencing to ensure broad support within Governments, across Governments, and in private sector
- 4. Community engagement
 - a. Engagement and sensitisation of affected communities
 - b. Consideration of communities not directly affected by resource corridors
 - c. Resettlement planning and consideration
- 5. Spatial planning
 - a. Mapping and analysis of political, population, economic, natural resource and conservation layers as crucial input to ensure accurate and optimal feasibility assessment and to identify hotspots for special attention
- 6. Feasibility & modelling
 - a. Strategic Environmental Assessments (SEA)/Sustainability Appraisal (SA) for resource corridor policies, plans and pro-
 - b. Investment modelling to assess public and private investment models and rates of return, as well as compatibility with sustainability goals. This provides support to the decision to tender projects to commercial entities, or seek development financing
 - c. Socio-Economic modelling, taking into account economic, social and environmental factors
 - i. Identification of all potential additional benefits and impacts in neighbouring regions, industries and sectors

- ii. Feeder routes, densification options
- iii. Conservation areas, water and sanitation impact,
- iv. Consideration of public good models with focus on long-term socio-economic rates of return
- 7. Financing
 - a. Public good investment models
 - b. Public private partnerships
 - c. Contract negotiations

Many excellent tools already exist in these categories, e.g. the African Land Use Early Warning System (ALES), strategic environmental assessment (SEA), SDI economic models - See the situation analysis section of the scoping paper for a list of tools already discovered. In the next phase IRCI proposes to further identify and assess existing tools and collate these tools to form a toolkit with guidance as to which should be used, how and when. Additional tools will also be proposed for development.

IRCI products also include policy guidance on most of the above areas, and in addition to most of the technical service areas listed in the next subsection. An important aspect of IRCI is that it will not propose a one-sizefits-all model, and this applies in particular in relation to policy guidance where IRCI will instead provide policy options in different areas, along with advice on pros and cons of different options and their suitability to different stages of development, political, environmental and social contexts.

3.2.2. Services

There is strong evidence from our initial research that the capacity gap in host Governments (and civil society) is one of the highest barriers to successful resource corridor implementation. IRCl is proposed as a mechanism to provide resource corridor projects training in the following areas to build capacity, and also technical assistance and research for specific expert requirements.

- 1. Political economy analysis
- 2. Strategy & implementation
- 3. Infrastructure
- 4. Communities & social development
- 5. Governance
- 6. Local economic development
 - a. Development of other sectors, e.g. agriculture
 - b. Value addition
- c. Local content & skills development
- 7. Spatial planning
- 8. Strategic Environment Assessment/Sustainability Appraisal
- 9. Climate change
- 10. Water Stewardship
- 11. Marine applications (e.g. oil spill contingency planning)
- 12. Transport planning
- 13. Biodiversity / conservation planning and management
- 14. Law
- 15. Multi-stakeholder and interdisciplinary team building

A prerequisite, of course, to all of the above is that training will be required to support national practitioners in application of the IRCI methodology, toolkit and policy guidance. In addition, there will need to be expert development of the tools initially, and regular revision based on feedback from practitioners. It is intended that this will in time become the remit of the IRCI community, run for and by host Governments.

3.3. How it will achieve goals

3.3.1. Scope & Phasing

As already discussed, the challenges facing the development of resource corridors globally are significant and broad, thus for IRCI to be successful it is important to establish a scope that is pragmatic and not at risk of slipping. The following principles are recommended for phases 2 and 3:

- > A focus in phases 1-2 on supporting resource corridors in Africa only, but a recognition that there are other corridors that can be learned from, e.g. agricultural development corridors, corridors on other continents. Notwithstanding this limitation for phases 1-2 of IRCI, the intention is for the framework to subsequently be utilised globally, and this will be factored into its development. This scope expansion could be considered for phase 3.
- > Phase 2 must be limited to a maximum of 5 pilot corridors; the number of corridors which can be supported in phase 3 will depend on scalability and on available financial resources.

The initiative will be structured into 3 phases - scoping, development & pilot and implementation - with major, inclusive 'gate reviews' at each transition, and objectives per phase as follows. See the implementation plan in the next subsection for more details on each phase.

Phase 1: Scoping Obtain broad understanding & support for IRCI initiative

Phase 2a: Development Produce a set of best practice tools

Phase 2b: Pilot Prove practical applications & improve toolkit

Phase 3: Implementation Roll our toolkit & support to other corridors

3.3.2. Approach

Phase 2 will develop a detailed implementation plan for the initiative. The table below provides an overview at a level of detail which is required for partners to assess the following for each phase of the programme:

- Timing anticipated year and duration of each phase
- Approach key activities in each phase. This represents a high-level methodology for the initiative, and once agreed it will form the foundation for the detailed implementation plan that will be required to manage the initiative going forward. Note that each phase ends with a steering group or roundtable meeting to review key outputs from that phase and approve the commencement of the next phase.
- Outputs what outputs we can expect each phase to deliver. The format and content of these will be defined in further detail in the next phase.
- Core & Supporting Partners the July roundtable will establish which partners are to play an active, decision-making role in taking this initiative forward, and which will offer support.

Phase 1: Scoping

Through the development of the Scoping Study and Business Plan and the Roundtable workshop in July, this phase established the current work being undertaken and tools available in the resource corridors space and chart the next steps for the project to take with agreed input from core and supporting partners.

Objective	Timing	Methodology	Outputs	Objective
Obtain broad un-	2015	1. Initial desk research – literature	Scoping Paper providing overview of	Core:
derstanding and		review and interviews with key	African RC initiatives & learnings	WWF, DFID
support for the		actors	IRCI Business Plan for future phases	Supporting:
IRCI initiative.		2. Scoping & business plan	Core and supporting partners identified	WB, DFAT
		3. Roundtable to obtain feedback	Support and financial resources agreed	Implementing:
		4. Partners reaffirm objectives and	Pilot and learning corridors agreed	ASI
		contributions		

Phase 2a: Development

This phase, through further research and engagement with partners will produce best practice tools and methodology and agree pilot corridors for further engagement. It will also establish governance mechanisms and programme management processes to support the development of the IRCI.

Objective	Timing	Methodology	Outputs	Objective
Produce a set	2015-	1. Establish steering & advisory bodies	Regional political actors	Core:
of best practice	2016	2. Agree funding mechanisms	engaged	WWF, DFID
tools & method-		3. Further engagement with key	Pilot corridors engaged	Supporting:
ology that can		political actors, private sector, pilot	Pilot RC project IRCl require-	WB, DFAT
be applied to		corridors, development partners and	ments	Implementing:
significantly in-		NGOs	International and national	ASI
crease success		4. Develop detailed project proposal	resources & experts identified	
rate of RCs.		5. Conduct field research of selected	Detailed project plan ¹⁶ &	
		RCs	commenced	
		6. Finalise desk research	In-depth study of learning	
		7. Full assessment of existing tools	corridors	
		8. Develop first version of IRCI products	IRCI Products 1st draft –	
		9. Steering group reviews pilot imple-	toolkit, methodology, policy	
		mentation plans	principles, training	
			Presentation at key events,	
			e.g. IGF, Indaba	
			Detailed pilot implementation	
			plans	
			Approved of pilot RC projects	

¹⁶ The project plan will be comprehensive, including all critical aspects: including marketing, advocacy, monitoring & evaluation, financial, risk, methodology, governance, reporting.

Phase 2b: Pilot

This phase will continue the work of the previous phase, with practical application of the toolkit and conducting pilot resource corridor projects aimed at conducting research and delivering training and support, whilst gathering feedback to refine IRCI methodology and toolkit.

Objective	Timing	Methodology	Outputs	Objective
Produce a set of	2016-	1. For each pilot RC project:	Training of pilot RC project	Core:
best practice tools	2017	a. Conduct in-depth pilot RC project	officers	WWF, DFID
& methodology		research, in conjunction with host Gov-	Technical support to pilot	Supporting:
that can be applied		ernments	RC projects	WB, DFAT
to significantly		b. Deliver IRCI training & support	Revised IRC products &	Implementing:
increase success		c. Provide technical support in requested	methodology	ASI
rate of RCs.		focus areas	Other corridors and key	
		d. Obtain structured feedback on IRCI	actors engaged	
		support and framework	Approved phase 3 imple-	
		2 .Engage wider resource corridor	mentation plan, including se-	
		projects	lection of additional corridors	
		3. Refine IRCI products and framework	Approved revised products	
		4. Revise Phase 3 implementation plan		
		5. Steering group reviews implementa-		
		tion plan and revised products		

Phase 3: Implementation

This phase will maximise the reach and impact of previous phases by expanding the work to cover each resource corridor and developing a sustainability plan to ensure the continuation of IRCI.

Objective	Timing	Methodology	Outputs	Objective
Increase devel-	2018-	For each resource corridor:	Implementation Develop-	Core:
opment impact of	2019	1. Conduct in-depth RC project re-	ment Impact Assessment	WWF, DFID,
selected RCs		search, in conjunction with host Govern-	Government Capacity	Others TBC
		ments	Improvements	Supporting:
		2. Deliver IRCI training	Improved RC Planning &	TBC
		3. Provide technical support in focus	Risk Mitigation	Implementing:
		areas	Revised IRC Toolkit & Meth-	TBC
		4. Obtain feedback on IRCI	odology	
		5. Refine IRCI products and framework	Indaba Events	
		6. Develop sustainability plan for IRCI		
		7. Checkpoint: Steering group reviews		
		sustainability plan and revised products		

This phased approach results in the indicative implementation plan below. In addition to phasing activities, we adopt the best practice project and resource management approach of grouping activities that require similar skill sets and mandates, and referred to as workstreams:

- > Programme Oversight
- > Programme Management
- > Product Development
- > Technical Assistance
- > Research & Methodology
- > Training

Partners and individuals of similar skills will form these workstreams to ensure consistent and focused collaboration and development of IRCI.

Activity	Lead Workstream	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Y3	Y4
Establish steering & advisory bodies	Programme Oversight										
2. Agree funding mechanisms, MoUs and contracts	Programme Oversight										
3. Further engagement with key political actors, private sector, pilot corridors, development partners and NGOs	Advocacy & Engagement										
4. Consult & develop detailed project proposal & administer / manage project	Programme Management										
5. Conduct field research of selected learning RC pilot projects	Research & Methodology										
6. Finalise desk research	Research & Methodology										
7. Full assessment of existing tools	Research & Methodology										
8. Develop first version of IRCI products	Technical Assistance										
9. Checkpoint: Steering group reviews pilot implementation plans and selects pilot projects	Programme Oversight										
1. For each selected pilot RC project:											
a. Conduct in-depth pilot RC project research, in conjunction with host Governments	Research & Methodology										
b. Deliver IRCI training & support	Training										
c. Provide technical support in requested focus areas	Technical Assistance										
d. Obtain structured feedback on IRCI support and framework	Technical Assistance										

Activity	Lead Workstream	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Y3	Y4
3. Engage wider resource corridor projects	Advocacy & Engagement										
4. Refine IRCI products and framework	Technical Assistance										
5. Revise Phase 3 implementation plan	Programme Management										
6. Checkpoint: Steering group reviews implementation plan and revised products	Programme Oversight										
For each selected RC project:	Programme Oversight										
Conduct in-depth RC project research, in conjunction with host Governments	Programme Oversight										
2. Deliver IRCI training	Advocacy & Engagement										
3. Provide technical support in focus areas	Programme Management										
4. Obtain feedback on IRCI	Research & Methodology										
5. Refine IRCI products and framework	Research & Methodology										
6. Develop sustainability plan for IRCI	Research & Methodology										
7. Checkpoint: Steering group reviews sustainability plan and revised products	Technical Assistance										

3.3.3. Selection of corridor projects

Practical engagement on the ground with resource corridor projects is crucial to the development, usefulness and therefore the success of IRCI. Previous sections have established that there are 3 types of corridor that IRCI needs to select:

- 1. Learning RC projects which warrant further research in order to learn and input into the development of IRCI products.
- 2. Pilot RC projects which will receive technical support from IRCI in phase 2b, and will also be used as proving grounds to improve and finalise the first version of the IRCI products, services and organisation.
- 3. Implementation RC projects which will be the first full adopters of the IRCI framework, including applying the products, receiving services and operating the IRCI community.

Note these groups are not mutually exclusive; in fact it is quite possible for some corridors that IRCI will learn from them, pilot with them, and select them for full implementation.

3.3.3.1. Learning Corridors

We propose the following criteria for selecting pilot corridors for further in-depth study:

- > Relevance to the objectives and mandate of IRCI partners expand
- > Current engagement/relationships/influence
- > Corridors that provide examples of success (e.g. successful cases where regional land use planning has been undertaken).
- > Corridors that provide important learning areas

According to these criteria, this paper recommends further in-depth study in the Development Phase 2a of the following corridor projects:

- > Ncala, which has several large infrastructure and strong private sector investment.
- > Odisha, which is concerned an example of a successful corridor.
- > TRIDOM, which is an active corridor where WWF are already engaged
- > SAGCOT, which several IRCI partners are engaged with, and which has achieved some successes
- > The Southern Guinea Growth Corridor (SGGC), which has large infrastructure and strong anchor partners

The learning from non-extractive driven corridors like SAGCOT will be useful in developing the IRCI methodology and similarly, learning gleaned from extractive led resource corridors will have wider implications for other corridors that must be shared.

3.3.3.2.Pilot Corridors

We propose the following criteria for selecting pilot corridors for further in-depth study:

- > Relevance to the objectives and mandate of IRCI partners
- > Current engagement/relationships/influence
- > Varying stages of development
- > Political will to improve implementation
- > Located in Africa, though with regional diversity

According to these criteria, this paper recommends pilot work in the Pilot Phase 2b of the following corridor projects:

- > Nacala, which has had investment and development work but might require assistance around environmental and conservation issues and where DFID have been involved.
- > LAPSSET, which is currently in development and has interest from partners.
- > Mtwara, which has been developed and has interest from partners.
- > TRIDOM, which several IRCI partners are engaged with, and which has achieved some successes
- > The Southern Guinea Growth Corridor (SGGC), which has had scoping work, strong political will, and is at the first stage of development.

3.3.3. Implementation Corridors

For the implementation phase, we propose to adopt similar criteria as those applied for pilot corridors, with one important exception – that phase 3 should be opened up to corridors outside of Africa:

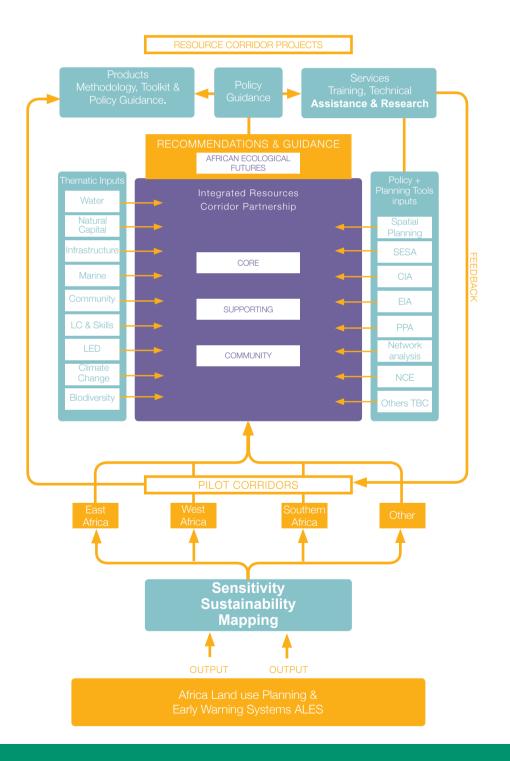
- > Current engagement/relationships/influence
- > Regional diversity of corridors
- > Corridors at varying levels of development
- > Political will to improve implementation
- > Open to RC projects outside of Africa

During phase 2, IRCI partners will engage with additional corridors around the world to gauge interest and suitability for IRCI application and support. This will be conducted via various means as laid out in the engagement strategy, including conference attendance and existing networks and relationships. During phase 2b, these corridors will be prioritised for selection for full implementation support in phase 3.

During phase 3, institutional options for IRCI will be considered to ensure its sustainability beyond start-up project funding period. It will be the responsibility of that future institution to consider which corridors to support beyond phase 3.

3.3.3. IRCI Organisation

The IRCI products will be developed, implemented and continuously improved by the IRCI partnership and community. The services IRCI offers - training, technical assistance and research - will be delivered by those partners and advanced community members who can offer sufficient technical expertise. These roles are explained in further detail in this section, beginning with the diagram below which depicts the roles and their interrelationships.



The table below describes how these roles might be organised, including their function, membership and possible constitution.

Role	Function	Members	Possible Constitu- tion
Supporting Partners	 Provide expertise in areas of specialism Form majority of Advisory Group Leverage existing networks and relationships Actively engage others to garner support for IRCI Provide in-kind resources Provide some financial resources 	Several organisations have expressed an interest in participating in IRCI as it moves forward It is important that there is a broad range of representation from development, Government and international political institutions, as well as from the private sector and civil society.	Advisory Group
Core Partners	Perform supporting partner functions, and in addition: • Drive and make key decisions in IRCI's development • Form majority of IRCI steering group • Provide majority of financial resources	In phase 1, the core partners have been WWF and DFID, and others have expressed interest in being included in this group for future phases. It is important that there is a broad range of representation from development, Government and international political institutions, as well as from the private sector and civil society.	Steering Group
Implementation Partners	 Develop and improve IRCI framework of products and organisation Design, manage and monitor IRCI, and its pilot and implementation projects Deliver IRCI services to RC projects Develop proposal for sustainability of IRCI beyond phase 3 Participate in IRCI Community 	Project management specialists. Implementation practitioners with expertise in thematic areas. Research and academic organisations.	Project Manage- ment Unit
Resource Cor- ridor Projects	 Request, receive and implement IRCI products and services Provide feedback on IRCI Adopt active and possibly central role in IRCI sustainability 	Participants in resource corridor projects: Host Governments, extractive companies, affected communities, NGOs.	IRCI Com- munity

3.3.4. Programme Management

Robust programme management tools and techniques must be adopted to manage this broad initiative, which could all too easily become unwieldy, and fail to meet its objectives and deliver results. Adam Smith International recommends approaches to the following areas of programme management which are described in further detail in subsections below:

- > Programme Management and Governance Methodology
- > Financial Control & Risk Management
- > Programme Planning
- > Quality Management
- > Flexibility & Responsiveness
- > Progress & Performance Tracking
- > Risk Management
- > Communication and Coordination
- > Monitoring & Evaluation

3.3.4.1 Programme Management and Governance

Programme management and governance structures should include nominated beneficiary representatives, the development partner / funding organisation(s) and the implementing partner(s) as outlined below. Core programme stakeholders form the key governance tool for the programme, the Programme Steering Committee (PSC).

The Group has the following mandate:

- > Ensuring expectations are aligned;
- > Checking and agreeing quality and progress;
- > Creating the flexibility to ensure relevance and effectiveness of resources in fluid contexts;
- > Agreement on any changes in order to exceed targets;
- > Shared ownership of risks and agreement of transfer / mitigation strategies.

The core pillars of this programme management methodology are outlined in the figure below:



3.3.4.2 Financial Control & Risk Management

Underpinning programme delivery are financial management controls. These will remain important tools to ensure the project's ability to deliver economy and efficiency, through ensuring economy of inputs and maximum value from the inputs. Adam Smith International has a robust financial management system supported by a team of finance professionals who underpin the systems deployed for managing programmes like IRCI.

The mitigation of fiduciary risk requires establishing and maintaining robust programme planning and control systems - covering both activities and expenditure. Potential financial and fiduciary risk events will be identified and their impact on achieving and exceeding the programme outputs will be analysed. Following this identification of potential risk and potential impact, the risk will be categorised according to the following: Outcome Risk, Output Risk, Workplan Risk, VfM Risk. Having been categorised the risk will be rated according to timing, impact, proximity and probability, facilitating a prioritisation of the risks in terms of immediate, medium or lower priority.

As a result of this methodology a risk register is developed as part of the implementation procedure, to identify and rate the timing, impact, proximity and probability of individual risks on which mitigation or transfer actions can be taken. Effective risk management requires considerable knowledge and understanding of the political economy as well as connections to key individuals.

3.3.4.3 Programme Planning

A number of tools have been developed in order to facilitate programme planning at the commencement and at key intervals throughout the life of a programme.

Programme Theory of Change

The Phase 2a Development period will interrogate the programme theory of change presented in this study. Through a detailed understanding of the baseline situation and political economy the indicators measuring the programme will be developed and 'workshopped' with the key stakeholders.

Having validated the programme's logical framework, the Phase 2a Development period will divide up the work programme by outputs. In order to avoid potential conflicts activity sheets will be completed for each individual activity, to include approach, deliverable, key document, counterpart, timing and resourcing. Alignment and buy in is assured through consultation on the activities and components and the signing of the activity sheets by the key counterparts. These sheets are included in the Inception report of the programme.

3.3.4.4 Quality Management

Adam Smith International, in partnership with donors, has developed mechanisms to provide quantitative metrics in order to allow beneficiaries to grade the impact and achievement of the programme and provide a feedback mechanism to ensure continuous improvement, efficiency, effectiveness and economy. These M&E systems will form a key backbone to programme governance. Full details are provided in the technical tender.

On a quarterly basis the programme steering committee will analyse progress against the log frame and the programme will analyse changes to ways of working, adjustments to the work plan and how to best redistribute resource in order to achieve and exceed the output, thereby ensuring continuous improvement to the programme.

3.3.4.5 Flexibility & Responsiveness

In order to ensure the flexibility to meet changing priorities, fluid situations on the ground and to ensure continuous improvement to the programme, change authorisation structures will be built into the programme governance structures with justification and authorisation of resource and workplan changes being provided by the PSC.

3.3.4.6 Progress & Performance Tracking

In order to ensure adequate communication of progress against the logframe and workplan Monthly, Quarterly and Annual Reports will be developed and distributed to the Project Steering Committee and all other stakeholders connected with the programme. The core elements of this reporting are reflected below:

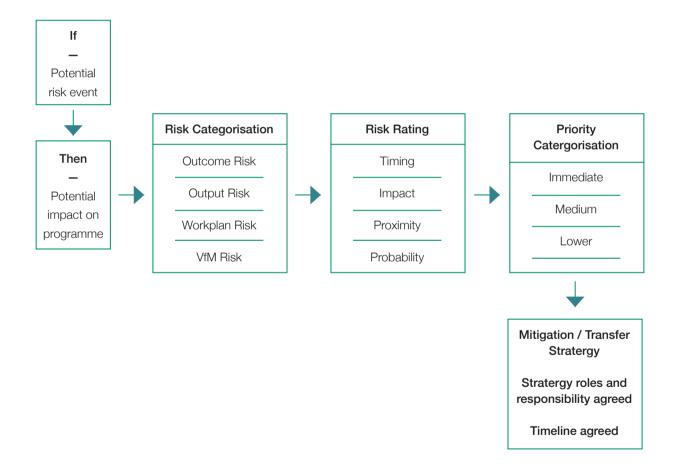
- Core Achievements
- Progress against workplan
- Risk Register and Mitigation
- Progress against logframe
- Proposed workplan and logframe revisions
- Resources Utilised

Key Performance Indicators will be identified for all outputs and outcomes.

3.3.4.7 Risk Management

Adam Smith International takes a robust approach to risk management, with the below diagram outlining the approach to risk identification and management.

The table below details risks and mitigation measures we have identified so far for IRCI. One part of programme management will be the development of a risk register to identify and rate the timing, impact, proximity and probability of individual risks on which mitigation or transfer actions can be taken.



Risk	Mitigation	Opportunity
Duplication of programme efforts with other IRC related initiatives	Before embarking on programme development and implementation, full due diligence from the consulting team in this regard. Desk research and interviews have been carried out, however these findings need to be triple checked with active and potential support partners. Where it has not been possible to contact particular interview targets, then this will be clearly noted in any relevant part of the programme.	Coordination and collaboration between initiatives will bring added value and higher impact
Lack of political will for such a programme	High level strategic partners at pan-African and regional levelq	Opportunity to engage with more actors and partners to develop will in this area.
Insufficient availability of key programme partners	Programme management structure design important	
Insufficient funding to ensure effective programme management	Stepped approach to the programme – designing programme in such a way that clear outcomes are achieved at the end of each Phase, that stand alone in terms of sustainable impact	
Lack of coordinating structures in corridors we engage with.	Support in establishment of coordinating and corridor governing bodies.	
Lack of will/incentive at corridor management level to adopt best practice and implement management tools	Make strong business case for implementing toolkit effectively. Provide training so that it is fully understood and easier to implement. Link implementation and job responsibilities closely so project staff are incentivised. Close monitoring of implementation of IRCI toolkit	

3.3.4.8 Communication and Coordination

In order to ensure alignment of expectations between stakeholders Adam Smith International will develop programme fact sheets which are socialised amongst all programme stakeholders, providing consistent programme messaging, coordination as well as the leveraging of other activities.

3.3.4.9 Monitoring and Evaluation Programme/Key Performance Indicators

Objectives	Mitigation	Key Performance Indicators	Sta- tus	Done	Oversight Body Com- ment
Objective 1: Commit- ment from key active and supporting partners for engagement and resourc- es to develop and deliver on IRCI	 > Produce scoping study through desk research > Produce IRCI Business plan > Gain feedback and identify partners through Roundtable > Agree pilot and learning corridors > Agree support and financial resources 	> Number of interviews completed > Scoping study and Business plan accepted by partners > Proposed pilot and learning corridors agreed.			
Objective 2: Improve IRC toolkit and prove practical application.	> Engagement with regional political actors and pilot corridors > Pilot RC project IRCI requirements must be established, with project and implementation plans > Learning corridors studied	> Number of officials engaged with > Number of experts contacted > Number of presentations conducted > Established steering & adviso- ry bodies > Project plan produced > First draft of IRCI products completed > Learning report on learning corridors > Project reports on pilot cor- ridors			

Objectives	Mitigation	Key Performance Indicators	Sta- tus	Done	Oversight Body Com- ment
Objective 3: Improve IRC toolkit and prove practical application.	> IRCI training and support > In depth pilot corridor project research > Technical support in requested focus areas > Feedback on IRCI support and frame- work > Refine IRCI products and framework > Revise Phase 3 implementation plan > Steering group reviews implementation plan and revised products	> Training of pilot RC project officers > Number of technical support projects to pilot RC > Revised IRC products & methodology > Number of corridors and key actors engaged > Products are revised and approved. > Approved phase 3 implementation plan, including selection of additional corridors			
Objective 4: Increase development impact of selected RCs	> Conduct in-depth RC project research, in conjunction with host Governments > Deliver IRCI training > Provide technical support in focus areas > Obtain feedback on IRCI and refine IRCI products and framework > Develop sustainability plan for IRCI, to be reviewed by PSC	> Number of Government of- ficers having undergone training > Number of technical support requests > Revised IRC Toolkit & Meth- odology approved by PSC > Meeting and events organised and attended at Indaba > Sustainability plan produced			

M&E strategy

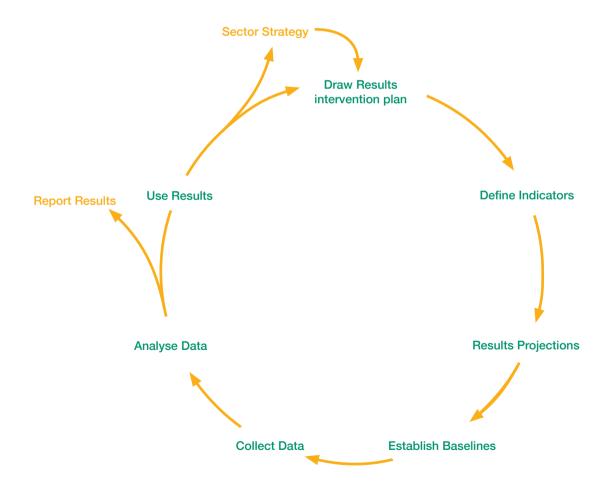
A strong Monitoring & Results Measurement (MRM) system is vital for delivering IRCI successfully programme. This is why we will have an M&E Manager who will work closely with the project teams and more specifically with the pilot leads and the technology lead to ensure that the appropriate KPIs and OVIs are put in place and monitored.

If the system is not methodologically robust, the programme will not be able to make credible claims regarding its achievements or impact. If the system does not support management decision-making then interventions will be poorly designed and scarce resources will not be allocated optimally: interventions that are not working will continue to be funded without modification, while interventions that are working well will not be given sufficient resources or scaled up on time. This will reduce the overall level of impact and deliver poor VfM for DFID.

Our approach is to build MRM systems that are capable of robustly capturing and reporting impact (proving impact) and that support improved decision making by management (improving impact). This requires not just excellent technical skills, but also creating the right culture and management style within the programme. We believe that M&E is not a one-off event, to be performed at the start and end of the programme, but must be continuous and on-going and fully integrated into programme decision making. Programmes that leave M&E to "the M&E expert" or external consultants are very unlikely to achieve their objectives or deliver VfM. Monitoring and evaluation tools will be used by the Team Leader, Project Manager, and Project Director to ensure the project delivers to a high standard. ASI has developed a simple MRM process designed to support our twin objectives of proving and improving impact, which is used effectively across our project portfolio.

The process is designed as a cycle to ensure that learning is built-in to the M&E process: data from the MRM system is used not just to report results, but is used to update our understanding of the sector and to revise and improve on sector and intervention strategies. This is represented in ASI's MRM diagram below:

> Monitoring and evaluation criteria will be developed during the project inception phase, and agreed with the Project Governance Committee. This will feed in to the design of the project workplans, which will form the basis for ongoing measurement and verification of project outputs and activities to ensure impact.



3.4. Financing IRCI

Indicative Budget

Several partners have already indicated interest in supporting IRCI, and in response this business plan includes an indicative budget, including a breakdown that provides partners with potential 'entry points' for them to consider.

The costed activity plan below – which is linked directly to the implementation plan above – provides an overview of estimated required investment as well as the timing of the investments.

Phase / Project	Estimated Cost
Phase 2A – Development	\$ 803,880
Phase 2B - Average RC Cost	\$ 386,070
Phase 2B - Other Costs (Engagement, Product Development)	\$ 174,135
Phase 3 - Average RC Project Cost	\$ 483,000

Notable assumptions that were used to generate these early estimates are as follows:

- > 25% of required IRCI expert and project management input days will be provided as in-kind investment by core and supporting part-
- > Core and supporting partners will additionally take an active role (to varying degrees) in overseeing and guiding IRCI, amounting to 370 days of effort across all organisation and a 4-year duration
- > Daily technical expert and project management fees are on average respectively \$1,000 and \$800
- > Average expenses per day of effort are \$449, including travel, accommodation and subsistence (derived from a similar programme)

The accuracy of these assumptions will be tested and revised for phase 2.

In addition to the estimate caveat and assumption, there are a few key points to take into account when considering these figures:

- > Obviously, different pilot and implementation RC projects will have different requirements, and consequently their IRCI investment requirements are likely to vary quite considerably. Averages are presented here for initial review only.
- > A minimum threshold number of pilot and implementation projects need to be included for IRCI to achieve the economies of scale required to represent a satisfactory return on investment of scarce development financing. It is not clear what these numbers would be, though if one makes a reasonable assumption of 3 pilot projects and 10 implementation projects, then the overall cost would be almost \$7m.

A full breakdown of this budget is provided in the annex.

Sources of Financing & Modalities

It is anticipated that required funding will be secured through several different sources. The scoping research and the roundtable event in South Africa in July 2015 indicate already that several partners are interested investing in the initiative at the 'global' level, and at time of writing (August 2015) there are several discussions ongoing to consider and establish funding interest.

Further, it is likely once project-specific activities commence, that further interest at a national level will be triggered. In fact, some partners which are active globally will most likely use this scoping and business plan to support fundraising with colleagues operating at the national level.

There are some funded development projects and initiatives in existence that could provide funding for IRCl at a national level. These include those focused on corridor development projects, as well as on related outcomes such as local content, skills development, infrastructure, climate change mitigation, conservation and extractive industries governance.

Despite existing potential sources, it is likely that they will not be sufficient to fund the full intended programme and part of the engagement and advocacy strategy will be to continue to seek funding from existing and new partners. Additionally, although it is likely and natural that funding for all phases and projects will not be secured up front, with some potential funding partners awaiting the outcome of the pilot projects, start-up funding is required for phase 2 to be successful.



4.1. Interviewees

Tim Geer, WWF International

Christine Tam, WWF East Africa

Stu Orr, WWF International

Faith Waruguru, WWF Kenya

Richard Perkins, WWF UK

Simon Walmsley, WWF

Marc Languy, WWF Cameroon

Durrel Nzene Halleson, WWF Cameroon

Maxime Nzita Nganga Di Mavambu, WWF Cameroon

Michael Stanley, World Bank

Kirsten Hund, World Bank

Sam Burke, Columbia Centre

Ian Satchwell, IM4DC

Hudson Mtegha, CSMI

Paseka Leeuw, CSMI

Inga Peterson, WEF

Dr Paul Jourdan

Estelle Levin, Estelle Levin Ltd

Dr Marie Parramon-Guerney, IUCN

Pippa Howard, Flora Fauna Int.

Antonio Pedro, UNECA

Kristine Schantz, University Michigan

Sylvia Marin, WWF US

Susanne Scmidt, WWF UK

Radio Save, DFID Kenya / Tanzania

Tony Andrews, Centre for Responsible Mineral Development, Ontario

Paolo Tibaldeschi, WWF

Paolo Craviolatti, DFID Southern Africa

Stephen Holness, Summerstrand Campus South

Andrew Edge, DFAT

Mads Frilander, DDG

Bruce McKenny, Nature Conservancy

Johny M. Smith, Walvis Bay Corridor Group

Nellie Mutumeri, University of the Witwatersrand

Nyambe Nyambe, WWF Zambia

Ross Hamilton, ICMM

Peter Tarr, SAIEA

4.2. Documents Reviewed

Africa Mining Vision (2009)

AfDB (2015) East African transport corridors to adopt the Japanese Michi-no-Eki (Road Side Stations) concept, Press Release [http://www.afdb.org/en/news-and-events/article/east-african-transport-corridors-to-adopt-the-japanese-michi-no-eki-road-side-stations-concept-14214/]

AMDC/UNECA (2013) African Mineral Skills Initiative Business Plan (Draft for feedback)

AU: Action Plan for Boosting Intra-Africa trade

Australian Aid, Australian Department of Foreign Affairs and Trade, NEPAD, (2015) Infrastructure Skills for Development Program (IS4D) Factsheet

Brooks, K. and Hobbs, J.: Integrating Environment into Investment Decisions: Introductory Guidance for Tanzania's Mining Sector. (Updated 2014 Ashley Elliot, Emmanuel Nyamajeje, Christine Tam) WWF and Tanzania Chamber of Mines and Energy, 2012

Busia, K. (2015) Africa Mining Vision and Country Mining Visions: Mainstreaming Mineral Resources for Development [presentation at High Level Expert Group Meeting: Towards the Post 2015 Development Agenda and the African Union Agenda 2063: Enhancing the management of Africa's Extractive industries to promote inclusive and sustainable industrial development, structural economic transformation and inclusive and resilient economic growth]

Byiers, B., Vanheukelom, J. (2014) What drives regional economic integration? Lessons from the Maputo Development Corridor and the North-South Corridor, Political Economy of Regional Integration in Southern Africa, European Centre for Development Policy Management, No. 157

DFID UK (2012): Strategic Environmental Assessment and Climate Change Resilience Guidelines -Mozambique Regional Gateway Programme. FINAL REPORT

Fedorenko, V. (2013) The New Silk Road Initiatives in Central Asia, Rethink Initiative Paper 10

FGV Projetos, Nacala Corridor Fund [http://www.oecd.org/forum/issues/NACALA%20CORRI-DOR%20FUND-FGV%20Projetos.pdf]

Government of Tanzania, (2012) Southern Agricultural Growth Corridor of Tanzania (SAGCOT) Strategic Regional Environmental and Social Assessment: Interim Report

Hatfield-Dodds, Nelson and Cook (CSIRO): Adaptive governance: An introduction, and implications for public policy. Paper presented at the 51st Annual conference of the Australian Agricultural and Resource Economics Society, Queenstown NZ, 13-16 February 2007.

Hobbs. J and Riley A. (2013): Up-streaming Environment into Investment Decision Making -

Tanzania. WWF/Africa Practice (unpublished paper presented at conference "China -Africa: Cooperation for Sustainability" Beijing, 9 March 2012.)

Hobbs. J (2013): Concept Note: Integrated Resources Corridor Planning: Developing Policy Principles and Planning Tools (unpublished WWF paper 2013)

Hobbs. J: Briefing Note for a Proposed study on Integrated Resources corridor Planning in Africa. (unpublished WWF paper) (Rev 05-01-14)

Jourdan, P. (2014) Development Corridors (Spatial Development Initiatives) Using the SDIs to unlock latent economic potential, DFID Presentation, Maputo, Mozambique

Kasuku, S. LAPSSET Corridor Development Authority [presentation]

Mekong River Commission (2011) Integrated Water Resources Management-based Basin Development Strategy 2011-2015

Ministry of Mines (2011) Sustainable Development Framework (SDF) for Indian Mining

Mulenga, G. (2013) Developing Economic Corridors In Africa: Rationale for the Participation of the African Development Bank, AfDB Regional Integration Brief

Murphree, M., Mwanjela, G., Anstey. S., Zolho. R (2014) The Ruvuma Landscape Scenarios: Strategy Towards Integrated Planning to Secure a Future for the Rapidly Changing Ruvuma Landscape, WWF Coastal East Africa Initiative

NEPAD (2011) Revision of the AU/NEPAD AFRICAN ACTION PLAN 2010-2015: Advancing Regional and Continental Integration Together through Shared Values Abridged Report 2010-2012 Acknowledgement

Ngasuru A (January 2014): Development Corridors in Africa: Where and Why are they Developed? WWF Conservation Performance Manager – Africa (PowerPoint presentation to WWF workshop)

Perkins, D., Robbins, G. (2011) The contribution to local enterprise development of infrastructure for commodity extraction projects: Tanzania's central corridor and Mozambique's Zambezi Valley, MMCP Discussion Paper No 9, University of Cape Town and Open University,

Pedro, A. Promoting Linkages Between the Minerals and Other Sectors, [presentation in Rwanda] Raw Materials Group (2010) The Case for an Afghanistan Development Corridor

Sachs, L., Toledano, P., Maples, S. (2011) Resource-Based Sustainable Development in the Lower Zambezi Basin, Columbia Centre on Sustainable Investment

School of Mining Engineering and Centre for Sustainability in Mining and Industry (CSMI), University of the Witwatersrand. (2012) Resource corridors: Experiences, Economics, and Engagement: A typology of sub Saharan African corridors.

Sequeira, S., Hartmann, O., Kunaka, C. (2014) Reviving Trade Routes: Evidence from the Maputo Corridor, SSTAP

Stanley, M. (2011) Resource Corridor Development in Afghanistan [presentation]

Toledano, P., Roorda, C. (2014) Leveraging Mining Investments in Water Infrastructure for Broad Economic Development: Models, Opportunities and Challenges, Columbia Centre on Sustainable Investment Policy Paper

TradeMark Southern Africa (2012) North South Corridor: Delivering an integrated and sustainable transport network, Regional Transport Roundtable DBSA [presentation]

UNAC, GRAIN (2015) The Land Grabbers of the Nacala Corridor: A new era of struggle against colonial plantations in Northern Mozambique

UNECA, (2014) Harnessing the Blue Economy for Eastern Africa's Development, Harnessing the Blue Economy for Eastern Africa's Development, Draft Aide-Memoir 19th Meeting of the Intergovernmental Committee of Experts (ICE)

Wong, A., Rodrigues de Almeida, P., Kanza, E. (2013) Strategic Infrastructure in Africa: A business approach to project acceleration, WEF Paper, prepared in collaboration with Boston Consulting Group

Wong, A., Rodrigues de Almeida, P., Kanza, E. (2014) African Strategic Infrastructure Initiative: Managing Transnational Infrastructure Programmes in Africa - Challenges and Best Practices, WEF Paper, prepared in collaboration with Boston Consulting Group

World Bank (2015) The East Africa Community, The World Bank and Partners Discuss Integrated Solutions to the Development of Key Trading Corridors, Press Release [http://www.worldbank.org/en/ news/press-release/2015/06/08/the-east-africa-community-the-world-bank-and-partners-discussintegrated-solutions-to-the-development-of-key-trading-corridors]

World Bank, Australina Aid, Isalmic Republic of Afghanistan Ministry of Mines (2012) Afghanistan: Resource Corridor Technical Summary [presentation]

WWF (2014) Cross-cutting Approaches for CEA Strategy FY15+, Concept Note

WWF (2014) Initiating Basin-Level Water Stewardship, Factsheet 2: Zambezi

WWF (2014) Inception Report: Africa Land Use Planning and Early Warning System (ALES).

WWF Meeting Report (January 2014): Report on WWF Internal meeting on Integrated Resources Corridor Planning- The Way Forward, Nairobi, Kenya (WWF internal report)

WWF-AfDB (2015) Africa Ecological Futures Report: Infrastructure Corridors Sector Paper (Unpublished Report, Pegasys, Cape Town)

WWF (2015) Kafue Flats, Zambia Importance to Business, Policy Brief

4.3. List of their status and development strategies

Southern Africa:

> Nacala corridor (Zambia/Malawi/Mozambique)

Status of Corridor Stakeholders involved	> Active corridor – development of railway connecting the coal mining areas of Moatize to the Nacala Port set to be open in August > 900km railway with a planned capacity of 20 coal trains a day (if you consider total capacity, which includes also general cargo) amounting to 18 million tones of coal a year > Nacala Road Corridor Project (NRCP) covers about 1,033 km of roads in Zambia, Malawi and Mozambique, aimed at fostering regional integration and trade. AfDB approved > Nacala Corridor Fund Public-Private fund focused on agricultural investments for both large agribusiness projects (private funds) and small-scale farmers (donor funds) > Government of Mozambique > Government of Malawi > Vale
	> Nacala Corridor Fund
Strategic oversight/coordination body	> Lacks overall coordination body, projects are primarily driven by the African Development Fund, various donor organisations and Vale
Findings (non-exhaustive)	> Not known if the Nacala corridor environmentally friendly or neutral, or climate resilient – if the Govt had considered the options earlier > Project is expected to cost 4.4 billion US dollars. > The coal terminal at Nacala-a-Velha, built on the opposite side of Nacala Bay from the existing port of Nacala, will be able to export 18 million tones of coal a year. > The railway runs for over 900 kilometres, and CLN's projections are for about 14 coal trains a day when the railway reaches full capacity (20 trains a day if you consider total capacity, which includes also general cargo). This will require a fleet of 93 (100 locomotives only if considering general cargo) locomotives and 2,700 wagons. 12 ships a month are expected to call at the coal terminal. > Nacal Road Corridor Project funded by African Development Fund (African Development Bank branch), developing 1,033 of roads between Malawi, Mozambique and Zambia (not involved in the rail corridor). > The infrastructure development projects along the corridor are widely perceived as providing opportunities for the agricultural sector in the region.
Implications for IRCI	> Potential for greater overall coordination of various initiatives along corridor, where IRCI could provide best practice models and provide experienced advisers > Potential for greater civil society consultations on various projects

>Maputo Development Corridor (SA/Mozambique)

Status of Corridor	> Active corridor unlocking landlocked regions of the Mpumalanga, Gauteng, and Limpopo Provinces and comprising road, rail, border posts, port and terminal facilities
Stakeholders involved	> Maputo Development Corridor launched at Investor's Conference in 1996. The Framework Agreement for the establishment of the MDC was then signed by Mozambican and South African governments > In 2004 Maputo Corridor Logistics Initiative was launched, registered as a multilateral, multilateral, multi-stakeholder membership organisation to engage with the public sector. MCLI has a Board of Directors constituted of 9 Key Funding Members (public and private) and 9 representatives from organised business, drawn from both Mozambique and South Africa. The 12 foundation members act as Executive Directors
Strategic oversight/coordination body	> Lacks overall coordination body, projects are primarily driven by the African Development Fund, various donor organisations and Vale
Findings (non-exhaustive)	> Considered a successful corridor:
Implications for IRCI	 Considered successful and thus a useful case study for identifying critical success factors. Successful cross border cooperation highlights importance of political will and political economy factors that will be discussed later in this study. Regional cooperation and integration is the entry point for many of the stakeholders discussed in the previous section. Guidance needed around frameworks for PPP contracts Growth stemming from MDC provides opportunity to make case for poverty reduction from corridors. Successfully implemented corridors can lead to growth and tools and guidance can help with this. Helpful areas of support to MDC: Support required around road concessions; cross border rail incompatibilities; improved border functioning

> Mtwara: (Tanzania/ Mozambique/Malawi/Zambia)

Status of Corridor	> Active corridor
Stakeholders involved	> Governments of Tanzania and Mozambique primary stakeholders, keen to develop the extractive industry in the area. > WWF engaged developing scenario planning
Strategic oversight/coordination body	> Lacks overall coordination body, projects are primarily driven by the African Development Fund, various donor organisations and Vale
Findings (non-exhaustive)	> Concern corridor will compromise sustainable development of Ruvuma region and threaten livelihoods if these developments are not planned. WWF scenario planning tool was used in the area to showcase the different outcomes. > Concerns Mtwara Development Corridor will be unable to leverage mining resources for infrastructure development – limited private sector involvement, mining treated with caution. > NEPAD carried out feasibility study for investment in the rehabilitation of the 175km Mueda–Negomano Road in north-eastern Mozambique, which included recommendations for trade facilitation measures and activities across the border with Tanzania. > Some argue Mtwara not a corridor but growth pole. If the corridor is viable, Mtwara can benefit from / implement a cross-border workforce and services that could incorporate labour specialisation between 2 countries. > Aurecon undertook work on this corridor identifying suitable projects appropriate for private sector investment; conducting full appraisals of these projects to determine economic and financial viability; and approaching the private sector for potential financing and investment.
Implications for IRCI	> IRCl could support further work around feasibility of corridor. > WWF's work in Ruvuma on scenario planning demonstrates usefulness of tools such as this at early stage in identifying gaps in planning and coordination and showcasing potential outcomes. > IRCl could plan future interventions in the area of the back of this > IRCl should support regional forums to help maintain political will and commitment to drive the corridor in a responsible way.

> LAPSSET (Kenya/South Sudan/Ethiopia/Uganda)

Status of Corridor	> LAPSSET is under development phase having launched in March 2012. Physical infrastructure is being built: Road section to Port and Launch area; Lamu Port Building advanced construction 2013; Lamu Port Police Station advanced construction; 220KV transition line pylons under construction. > Tender for Contractor and Tender for Supervision Consultants completed and won by
	Ms China Communication Construction Company with a tender amount of Kshs 41 Billion.
Stakeholders involved	> LAPSSET Community Forum: coalition of Kenya CSOs based in areas that are or will be affected by LAPSSET. > Natural Justice: supporting LAPSSET Community Forum to develop community protocols to identify concerns and priorities > Danish Demining Group: conducting conflict risk management project > Kenya Land Alliance looking at land issues around LAPSSET > WWF: working with NEMA and other Kenyan Government agencies
Strategic oversight/coordination body	LAPSSET Corridor Development Authority: established through Presidential Order Kenya. Domiciled in the Presidency in accordance with the Constitution of Kenya 2010. Mandate is: Be the policy, implementation, operational coordination and technical oversight organ for the LAPSSET Corridor Project. Have the inter-ministerial coordination committees comprised of relevant ministries. Tasked with establishing an integrated implementation plan and oversee the implementation of projects.
Findings (non-exhaustive)	 Work around environmental issues appears to be a matter of 'catching up' rather than planning ahead Community issues have not been planned for and this is leading to a risk of conflict, with the potential for this to spread along the corridor and derail the project. Lack of information and consultation around planning of Lamu Port and coal plant LAPSSET Community Forum, a civil society group, has been launched in response to this, bringing civil society together along the corridor. Developed Community Protocols to give clarity to government and private sector on who they should be consulting with. The devolution process in Kenya has changed the power structures and administrative channels that this project will be implemented through, however planning and implementation does not seem to have taken this on board. Stakeholders that will be affected by LAPSSET have organised to raise their issues – County Governors information sharing network, LAPSSET Community Forum.
Implications for IRCI	> Planning for environmental issues need to be concern at outset. IRCl needs to strengthen the tools and methods by which to do this, whilst also stressing both the need and the business case to do so to ensure said tools are used. > IRCl could work with civil society stakeholders on LAPSSET to establish guidance for effective CSO platforms that could be transferrable to other corridors, for instance working to adapt Community Protocols to other contexts. > Helpful areas of support to the LAPSSET Corridor Development Authority:

Central /Southern Africa

> TRIDOM (Gabon/Cameroon/Republic of Congo)

Status of Corridor	> Active corridor. There are a number of 16 iron ore deposits along a more or less ENE – WSW direction, starting at Mbalam and Nabeba. This deposit will be linked through a 510 km railway and road to a deep sea port near Kribi, on the coast of Cameroon. The intention is to have a number of branches that will connect the various other deposits to the trunk line. The area presents high biodiversity risks and raises significant conservation concerns.
Stakeholders involved	> Governments of Cameroon, Gabon, Republic of Congo > Sundance ressources (Camiron), IMIC, Equatorial Ressources, Jindal Steel, Sinisteel Cam SA.
Strategic oversight/coordination body	> There is a "Comite de pilotage" but so far not an effective coordination unit. > CEEAC seen as potential driver of integration
Findings (non-exhaustive)	> The Camlron/Sundace Australian-Mballam project is under its exploration stage. This initial work was accompanied by EIA study for proposed operations area, and it component of infrastructure (Railway from Mbalam up to Krip deep sea port). In order to mitigate the negative impact on biodiversity of its operation, Camlron negotiated the gazettement of its conservation concession. > The new mining projects include the construction of a 510 km railway from TRIDOM (Mbalam) to the Kribi deep sea port may have a severe impact on wildlife and their habitat. The Southern Cameroon Resource Corridor is considered, within the Government's economic development model as provided in the Growth and Employment Strategic Paper, as a catalyst to boost the country's economic development. The Kribi deep seaport which will serve as a terminal for the export of minerals exploited in TRIDOM and along the resource corridor especially in and around the Campo Ma'an National Park is located in the Campo Ma'an Technical Operations Unit, another biodiversity sensitive zone. > This Southern Cameroon Resource Corridor unfortunately is developing without appropriate planning with stand-alone projects posing a serious cumulative threat to the integrity of the rich ecosystems of the TRIDOM and Campo Ma'an landscapes as well as to the different services they provide – particularly to the local communities and the indigenous Baka and Bagyeli communities who are largely dependent on forests. > The main direct threats as a result of the development of the resource include; wildlife poaching for bush meat as well as elephant poaching for ivory, increasing commercial agriculture especially within the peripheries of the Campo Ma'an National Park, infrastructure developments (rail, roads and port) with the fragmentation of wildlife habitat and increasing human presence, unsustainable timber extraction and illegal logging and increased attribution of mining permits in both TRIDOM and Campo – Kribi area.

Implications for IRCI

- There is a clear scope of work for IRCI here. The key justification for WWF to undertake this work on this particular resource corridor is based on the following criteria;
- WWF could work with the Central Africa Economic Commission and the COMIFAC for feeding the RS policy work that could lead to a regional advocacy paper and guideline that should guide the RS development in the re
- The corridor overlaps with WWF priority landscapes (TRIDOM and Campo Ma'an or Kudu Zombo)
- The ongoing multi-stakeholder investments in the wildlife conservation can only last if a holistic mapping on sensitiveness along the corridor resource is done.
- The potentially disastrous impact on biodiversity from the multiple planned developments, but also the potential - as many projects are still at the planning stage - to influence the projects towards significantly less impact (applying the mitigation hierarchy (avoid, mitigate, restore, compensate impacts) and developing measures at landscape scale to reduce cumulative impacts).
- The potential scale of cumulative impact on biodiversity not currently mainstreamed in most of the mining and infrastructural development projects.
- A growing political will of the Government (ongoing process for a national LUP, ongoing reforms of the forestry, mining and land tenure laws) and other development partners to consider conservation and environmental related aspects in development projects (examples of evidence based commitments)

Some significant work already underway:

- Ongoing Strategic Environmental Assessment of the Ngoyla Mintom forest block by WWF, the extensive HCV and wildlife inventories of the TRIDOM and Campo Ma'an landscapes and
- WWF's ongoing support to the government for the development of an integrated land use plan;
- Cumulative impacts on biodiversity and an ecosystem is currently not taken into account in the environmental impact assessments of individual mining and infrastructural development projects.
- The absence of an appropriate planning and management system to help in creating potential synergies, mitigate negative impacts and ensure resource efficiency through economies of scale may be a lost opportunity. If planned and developed according to sound policies and good governance (using available tools) extractive and infrastructures-led integrated resource corridors could reduce the risk of conflicts and increase the opportunities for social mobilization, food and energy security and enterprise development, protect the integrity of ecosystems critically important for human development and areas of conservation value and lay the foundations for diversified development that could endure long after extractive activities have ceased operation.
- This project seeks to set up wildlife protection mechanisms with the private sector operating in the corridor and complete wildlife inventories and other HCV values within the two priority landscapes to allow planning at landscape level for aggregated biodiversity /ecosystem impact mitigation measures within the resource corridor. The project also aims to monitor this large scale mitigation approach as an innovative PPP tool that should guide the policy development on the corporate role in the wildlife conservation as already done in the Republic of Congo.
- Sundance's Mbalam-Nabeba project (Cameroon) has announced that its project will follow the Equator Principles, thus Cameroon will be a pricipal partner for WWF in setting up a pilot project.

> North South corridor:

Status of Corridor	Links the port of Durban to the Copperbelt in DR Congo and Zambia and has spurs linking the port of Dar es Salaam and the Copperbelt and Durban to Malawi. The on-going program looks to improve transport segments and increase the power generation and trade potential of the Southern Power Pool
Stakeholders involved	> Governments of - Botswana, Democratic Republic of Congo, Malawi, Mozambique, South Africa, Tanzania, Zambia and Zimbabwe > Donors: DFID, AfDB, WB, DBSA, EIB.
Strategic oversight/coordination body	Tripartite Task Force
Findings (non-exhaustive)	Corridor making progress implementing projects, however there are operational challenges. Donor and financier coordination is one such issue with multiple actors using different funding mechanisms Tripartite Trust Account and Friends of the Tripartite established to improve donor coordination and cooperation. Tripartite is forum of donors and international cooperating partners, who will meet regularly, led by DFID Pipeline of priority projects developed and resources allocated to accelerate project preparation. Tripartite has established a Project Preparation and Implementation Unit to oversee work.
Implications for IRCI	Reinforces need for cooperation and coordination between different donors and regional actors. Tripartite could be good case study for understanding effective corridor financing coordination, with learning transferable to other corridors. IRCI could potentially have role in supporting coordination mechanism Important to ensure IRCI complements and does not duplicate existing efforts.

Other Corridors

> SAGCOT - Tanzania's Southern Agricultural Growth Corridor

Status of Corridor	> SAGCOT was initiated at the World Economic Forum (WEF) Africa summit 2010 with the support of founding partners including farmers, agri-business, the Government of Tanzania and companies from across the private sector > Objective is to foster inclusive, commercially successful agribusiness
Stakeholders involved	> Government of Tanzania > Development Partners = USAID, DFID, WB, EU, RNE, UNDP > TMEA: Trade Mark East Africa (TMEA) Tanzania programme planned to support a range of interventions to reduce cross-border transport costs. This includes work with the Tanzanian Port Authority to improve the operational efficiency of the Port of Dar es Salaam and funding for new One Stop Border Posts at Tunduma and Kabanga (2011) > Trade Mark East Africa is supporting Tanzania Port Authority on the transition to landlord status and to complete the upgrade plan for Berths 1-7 (2012-2015) > Private Sector (incl. Unilever, SAB Miller, Nestle); CSO's, Foundations, Research Organisations. More information needed on this > WWF: Coastal East Africa involvement. > Apex and Farmer Organisations
Strategic oversight/coordination body	> The SAGCOT Centre Ltd. functions as an honest non-partisan broker to support the SAGCOT partners to achieve the objectives in the Corridor > Annual workplan requires USD 15 million of funding which is provided by the Government of Tanzania, Development Partners and fees paid by its partners > Risk-sharing model of a public-private partnership (PPP) approach; First PPP of such a scale in Tanzania's agricultural history
Findings (non-exhaustive)	> SAGCOT was initiated at the WEF Africa summit 2010 > SAGCOT benefits from big political will > Challenge for SAGCOT has been implementation, even where there is political. Issues have included lack of planning and short notice for actions. > Another challenge has been corruption and a disconnect between national policies and corridor needs. > Sustainability and Inclusion Strategy for Growth Corridors in Africa (SUSTAIN) have been working with SAGCOT for one year. > SAGCOT's Green Growth Strategy includes a number of key components that will safeguard key ecosystem services and natural capital for agriculture and rural communities (e.g., irrigation water supplies) and support climate-smart agriculture to capture carbon in soils and vegetation, improve yields and resilience to droughts and floods as well as protect water quality and biodiversity > First 5 year phase ended in June 2015. Second phase may link up with resource corridors like LAPSSET and Mtwara Corridor.
Implications for IRCI	> Green Growth Strategy good case study for understanding effective methods of incorporating environmental and social issues. with learning transferable to other corridors. > Green investment guidelines > Opportunity to explore linkages between agricultural corridors and extractives led corridors and extrapolate cross sectional lessons from each.

> Mekong River Commission (MRC)

Status of Corridor	> MRC is currently running. Mekong Committee founded 50 years ago and there has been development interest in river since. Mekong River Commission established in 1995 with Mekong Agreement, putting future of River in hands of the participating countries rather than UN. > Currently implementing Basin Development Strategy 2011 - 2015 setting out how MRC countries will share, utilise, manage and conserve water and related resources of Mekong. > 1995 Agreement said to shift focus from large scale development to sustainable development and natural resource management.
Stakeholders involved	> Participating countries: Cambodia, Laos, Thailand, Vietnam > Dialogue partners: Governments of China and Myanmar. Although not members, involved due to their regional position. > Donor countries, plus World Bank and EU fund the MRC: pursuing sustainable development as well as stability in the region. > Partner organisations listed: Asian Development Bank; ASEAN; International Union for Conservation of Nature; UNDP, UNESCAP; WWF. Support from partners includes financing, technical advice, advocacy support.
Strategic oversight/coordination body	> Mekong River Commission is the oversight body. Inter-government agency working with the governments of Cambodia, Lao PDR, Thailand and Vietnam on their common on joint management of shared water resources and sustainable development of the Mekong River. > Water and Environment Ministers from participating countries meet yearly to discuss issues affecting Mekong River, senior officials from each country then take the decision made in these discussions forward. MRC Secretariat handles technical and administrative functions.
Findings (non-exhaustive)	 > Focused on joint management of shared water resources and sustainable development of the Mekong River. > MRC has clear governance structure and formalised consultation processes. > Mekong Basin Development Strategy launched due to rapid, large scale development of river already taking place with hydropower dams on Lancang River in China already affecting flow of Mekong. > Recent risks of infrastructure overriding conservation and wildlife concerns, exemplified in Laos' decision to proceed with Don Sahong dam against wishes of other MRC members, who were concerned about risk it would block only channel available for dry season fish migrations, putting inland fishery at risk. > As an MRC partner organisation, WWF was active in stating opposition to this and calling for an emergency meeting of MRC.
Implications for IRCI	 Reinforces need for legitimate regional cooperation. Highlights importance of governance mechanisms such as MRC in enforcing consultation process Demonstrates that unilateral action by one member state can call into question the effectiveness of governance mechanisms for corridor development, whilst also reinforcing need for such mechanisms. Highlights continued risk of commercial interest overriding environmental interests and livelihoods. Demonstrates important role organisations like WWF can play as supporting partner and watchdog

> New Silk Road Initiative

Status of Corridor	> Conceptualised in 2011 by the US government to integrate Afghanistan into the central Asian region through supporting trade and infrastructure. It is currently up and running with some projects having received financing from the USA and others. The projects are grouped into four areas: regional energy markets; trade and transport; customs and border operations; and support to businesses and people through trade delegations and education.
Stakeholders involved	> US Government: regional stability through regional cooperation and trade. Their involvement has been through financing and promoting the initiative > World Bank and Asian Development Bank have committed to supporting New Silk Road projects > Asian Development Bank-led Central Asia Regional Economic Cooperation program, or CAREC. > Regional governments: involved in projects, however the extent of their support of the concept is debated, with some regional governments not seeing Afghanistan as part of the region. > Other ongoing international initiatives and projects launched in parallel by Turkey, China, Kazakhstan, and Turkmenistan, plus initiatives from Customs Union, TRACECA, CAREC, SPECA, and INOGATE.
Strategic oversight/coordination body	> US government is the lead on this initiative
Findings (non-exhaustive)	 Conceptualised in 2011 by US government to integrate Afghanistan into the central Asia region through supporting trade and infrastructure. Projects receiving financing between US and others. There are competing views on this initiative, with some viewing it as attempts from US to keep Afghanistan away from Russia and China One issue is other regional governments and stakeholders wanting to maintain the status quo and therefore some political authorities are not interested in opening up trade. However the region is landlocked so regional cooperation is important for trade, which should incentivise cooperation. Other initiatives have been launched in parallel by other countries in region and regional bodies. Afghanistan not viewed as part of the region by some stakeholders
Implications for IRCI	Demonstrates need for legitimate governance mechanism to drive development. Further exemplifies need to build regional consensus at high level. Donor interest alone not enough, must be coupled with political will. Highlights that political will and incentive structures drive corridor development.

4.4. Indicative Budget

Activity		Ex- pert Days	PM Days	Expert Fees at avg rate of: \$1,000	PM Fees at avg rate of:	Subtotal Fees	Total Fees	Total Fees & Expens- es	Total Fees & Expens- es	Subtotal Fees + Expenses, by Phase & Project
PHASE 2A - DEVELOPI	MENT	1						1		
Establish steering & advisory bodies	50			\$ -	\$ 800		\$ -	\$16,950	\$16,950	
2. Agree funding mechanisms, MoUs and contracts	50			\$ -	\$ -	\$ -	\$ -	\$16,950	\$16,950	
3. Further engagement with key political actors, private sector, pilot corridors, development partners and NGOs	50	20		\$20,000	\$ -	\$ -	\$15,000	\$23,730	\$38,730	
4. Consult & develop detailed project proposal & administer / manage project	50			\$ -	\$ -	\$20,000	\$132,000	\$91,530	\$223,530	
5. Conduct field research of selected learning RC projects		120	220	\$120,000	#####	\$176,000	\$90,000	\$40,680	\$130,680	
6. Finalise desk research		35		\$35,000	\$ -	\$120,000	\$26,250	\$11,865	\$ 38,115	
7. Full assessment of existing tools		35		\$35,000	\$ -	\$ 35,000	\$26,250	\$11,865	\$ 38,115	
8. Develop first version of IRCI products		250		\$250,000	\$ -	\$ 35,000	\$187,500	\$84,750	\$272,250	Phase 2a:
9. Checkpoint : Steering group reviews pilot implementation plans	20	20		\$20,000	\$ -	\$250,000	\$15,000	\$13,560	\$28,560	\$803,880

Activity	Part- ner- ship Days	Ex- pert Days	PM Days	Expert Fees at avg rate of: \$1,000	PM Fees at avg rate of:	Subtotal Fees	Total Fees	Total Fees & Expens- es	Total Fees & Expens- es	Subtotal Fees + Expens- es, by Phase & Project
PHASE 2B - PILOT							T	1	T	
For each selected pilot RC project:				\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
a. Conduct in-depth pilot RC project research, in con- junction with host Governments	20	30	15	\$30,000	\$12,000	\$42,000	\$31,500	\$22,035	\$53,535	
b. Deliver IRCI train- ing & support		60	30	\$ 60,000	\$24,000	\$84,000	\$63,000	\$30,510	\$93,510	
c. Provide technical support in requested focus areas		175	20	\$175,000	\$16,000	\$191,000	\$143,250	\$66,105	\$209,355	Per Pilot:
d. Obtain structured feedback on IRCI support and frame- work		10	20	\$10,000	\$16,000	\$26,000	\$19,500	\$10,170	\$29,670	\$ 386,070
3. Engage wider resource corridor projects	50		20	\$ -	\$16,000	\$16,000	\$12,000	\$23,730	\$35,730	
4. Refine IRCI products and framework		75	10	\$75,000	\$8,000	\$83,000	\$62,250	\$28,815	\$91,065	
5. Revise Phase 3 implementation plan			10	\$ -	\$8,000	\$8,000	\$6,000	\$3,390	\$9,390	Other Phase 2b costs:
6. Checkpoint: Steering group reviews implementation plan and revised products	20	20	10	\$20,000	\$8,000	\$28,000	\$21,000	\$16,950		\$ 37,950
PHASE 3 - IMPLEMENTATION										
For selected RC project:				\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Conduct in-depth RC project research, in conjunction with host Governments		30	15	\$30,000	\$12,000	\$42,000	\$31,500	\$15,255	\$46,755	
2. Deliver IRCI training		60	30	\$60,000	\$24,000	\$84,000	\$63,000	\$30,510	\$93,510	
3. Provide technical support in focus areas		175	20	\$175,000	\$16,000	\$191,000	\$143,250	\$66,105	\$209,355	

Activity	Part- ner- ship Days	Ex- pert Days	PM Days	Expert Fees at avg rate of: \$1,000	PM Fees at avg rate of:	Subtotal Fees	Total Fees	Total Fees & Expens- es	Total Fees & Expens- es	Subtotal Fees + Expens- es, by Phase & Project
4. Obtain feedback on IRCI		10	20	\$10,000	\$16,000	\$26,000	\$19,500	\$10,170	\$29,670	
5. Refine IRCI products and framework		20	5	\$20,000	\$4,000	\$24,000	\$18,000	\$8,475	\$26,475	
6. Develop sustainability plan for IRCI	30	25	10	\$25,000	\$8,000	\$33,000	\$24,750	\$22,035	\$46,785	Per RC:
7. Checkpoint: Steering group reviews sustainability plan and revised products	30	10	10	\$10,000	\$8,000	\$18,000	\$13,500	\$16,950	\$30,450	\$ 483,000

4.5 Infrastructure for Skills Development

Support to projects is planned as follows:

RECS	Corridors	Clusters	Possible Projects
EAC + DRC & South Sudan	Northern Multi-Modal Corridor	Rail/Road	Construction of 1,084 km of railway at standard gauge between Mombasa-Kampala-Kasese and Tororo-Pakwach (Kenya and Uganda) (T.05.5.1.1/T.05.5.1.2)
			Preparation of standard gauge Railway project in Uganda
			Preparation of LAPSSET railway connecting Kenya to South Sudan
			Rehabilitation and Upgrade of Northern Corridor Road Segments, including a PPP-enabled expressway from Kampala to Jinja plus links within or between Uganda and Rwanda, South Sudan, Kenya and DRC.
SADC/EAC	North-South Power Transmission	Power	Construction of 414 km / 400 kV Tanzania to Kenya section of the ZTK transmission interconnector (Tanzania) (E.02.1.6.1.1)
	Corridor		Construction of 700 km / 330 kV Zambia to Tanzania section of the ZTK transmission interconnector (Zambia and Tanzania) (E.02.1.6.2.1 & .3)
			Construction of 150 km / 400 kV Kenya section of the ZTK transmission interconnector (Kenya) (E.02.1.6.1.2)
			Construction of a high voltage transmission line between Zambia and Malawi.
SADC/ COMESA	Beira-Nacala Rail Corridor	Rail	Feasibility study for railway line upgrade in SENA Rail Corridor
O O IVILO/A	riai Goriaoi		Feasibility study for supplemental rail line along Limbe-Nayuchi route

IS4D adopts a partnership model with a small core group of people whose main task (in addition to project management, finance, M&E etc) is to broker partnerships with different delivery partners. IS4D have a range of different types of partnership. These include commercial arrangements (e.g. with the Australian institution delivering the project management courses via distance learning; with individual mentors); in-kind contributions from private sector partners (e.g. hosting of experiential visits; releasing staff to present at workshops and forums); and more strategic partnerships (e.g. a partnership being developed with DBSA which involves them helping run a short course and IS4D connecting them to any Australian experts coming through South Africa who can interact with their infrastructure academy).

In terms of financing I4SD:

- > The first phase (to November) will probably cost around A\$2.35 million including all pre-design and design costs (including extensive visits to meet with RECs and relevant infrastructure agencies in East, West and southern Africa) plus costs of running the program for 40 participants.
- > \$1.25 million for the next phase and with economies gained from not needing to go through the design and relationship building process again, this can be delivered for around 25 to 30 participants.

Australia's Standard level vocational Project Management curriculum, with example components below:

Manage project integration

Manage stakeholder engagement

Manage project risk

Manage project time

Manage project quality

Manage project governance

Manage project information and communication

Manage project procurement

Manage project scope

Manage project human resources



4.6 ASI Extractive Industries Governance

4.7.1 ASI Extractive Industries Governance Expertise

ASI is one of the world's leading providers of technical assistance to extractive industries governance reform, and ASI is one of the few organisations with successful experience of advising on governance of the entire extractive sector value chain.

Our global expertise covers:

- Strategy, Policy and Legislation
- Institutional Strengthening
- Fiscal Policy and Revenue Management
- · Communications and Communities
- Transparency and Accountability
- Economic Impact
- Environmental Sustainability

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4.7.2 Holistic Approach to Extractive Industries Governance

To ensure maximum benefits to all, ASI strongly recommends an holistic approach based on 8 principles of extractive industries development. Omission of any of the elements below will lead to suboptimal performance, possibly even negating gains made through interventions in specific areas.



4.7 Detailed Good Practice Considerations



Strategy & Implementation

Success Factor	Implications for IRCI
Inherent economic and commercial potential is not always immediately apparent, and often requires 'scanning' and configuration of potential investments and benefits to ensure viability. 19	IRCI Feasibility assessment tool needs to recognise the need to search for broader potential impacts of corridor development. This includes not only economic aspects but also environmental and social.
Political will and collaboration must be at Head of State level. The Maputo corridor owes a lot of success to a high level of trust and will after 1994. Subsequent corridors fail because level of trust is so low. In order to get collaboration and free flow of information, and avoid crippling inertia at mid-level bureaucracy, there needs to be agreement at HoS level that is cascaded down.	It is difficult to overstate how important these points are, and it must be stated as a prerequisite in the IRC methodology. Engagement here must come early, as it can take time to build, and progress is not possible without it. The need for a HoS level influencing tool is one reason why the toolkit requires broad acceptance by African, multilateral and Western development institutions. It is also important to note that influencing may not be required if the requisite level of political will and collaboration already exists and sometimes too much involvement at HoS level can slow the decision making process down Sample MoUs should be developed as part of the toolkit. This can also include the establishment of an inter-governmental agency to oversee implementation.
Enable and facilitate – or even require – regular international / intra- regional communication and collaboration at the bureaucrat level.	Regional corridor toolkit will need required level and format of inter-Government communication.
The participation of all economic and infrastructure ministries; focusing only on logistics works against the objective of RCs to create shared wealth and wellbeing. Those initiatives that become stuck at Ministries of Transport are thus at high risk of failure.	Institutional arrangements needed to be included as part of the toolkit / recommendations. These would need to be adapted on a country-by-country basis, depending on particular political and institutional landscapes,

¹⁹ Paul Jourdan Presentation

Success Factor	Implications for IRCI
Recognition that private and public sectors have different ROI requirements (E.g. for some companies the investment risk threshold for some countries exceeds 25%), so that for some projects in a broader RC programme, investment in public goods is required for long-term national benefits, e.g. feeder trunk routes to agricultural areas.	The toolkit needs to acknowledge that PPP models are not the only financing option available to RC developments, in fact in many cases they are likely to result in suboptimal outcomes.
Robust, thorough and sustained focus on and capacity for project management and planning.	Standard project management and planning tools and methodologies can be included or adapted for the IRC toolkit.
	This includes all standard key components such as requirements definition, work/activity breakdown, work packaging, quality control & assurance, risk/issue management, communications, roles & responsibilities, governance / steering mechanisms.
	Project management capacity is critical, and investment in training PMs and PM agencies must be an important part of the initiative.
Public sector experience / capacity in relation to complex regional projects requiring cross-border collaboration and institutional solutions.	One of the primary objectives of the IRC initiative is to address this problem. It is important to remember that provision of tools is not sufficient, but that this will need to be accompanied by associated capacity building.
Ongoing consultation with affected communities.	This needs to be a clear part of the IRC Methodology, with tools for engagement, mapping, guidelines on frequency, format, outputs, actions, counterpart types, etc.
	This also needs to be considered in influencing tools, as many Government agencies do not fully recognise the importance of community consultation, e.g. LAPSSET.
Clear and accessible packaging of projects and work packages for investors	Ensure the toolkit is amenable also to investors, and that PMs are trained to be able to relate to the investment community.
Private sector involvement	Investment packages should focus on how private sector support to RC initiatives (outside of direct project infrastructure investment) can mitigate investment risk, and improve social license to operate.
Promotion and marketing of the corridor, to affected stakeholder groups	Strategic, community and investor communications, advocacy and engagement tools are an important aspect of the toolkit.
Good governance	Transparency measures and principles need to be at the core of the IRC toolkit, in particular in feasibility assessment.

The right planning frameworks need to be used in developing corridors.

The IRC methodology needs to adopt a framework that supports planning processes, and build on existing frameworks



Infrastructure

Success Factor	Implications for IRCI
Governments need to make legal provisions around shared use, where appropriate.	Support governments to make the appropriate decision based on evidence/ good practice and international experience.
Environmental assessments need to be considered at an early stage and actions taken before investments happen	Assessment as part of the IRC planning tool.
There must be coordinated infrastructure development. Integrated GIS mapping	IRCI should support coordination mechanisms and work with initiatives like NEPAD's infrastructure database to avoid duplication.
The Africa Infrastructure Country Diagnostics (AICD: funded by WB, DFID etc.) introduced integrated mapping to show transport, energy, water resource, human settlements, environmental vulnerable areas etc. in one single interactive map.	IRCI should support the use of such methodology as part of the development of the tool.
Spatial Development Planning (SDP) methodology	IRCI could support this



Environment

Success Factor	Implications for IRCI
Provide local communities with livelihood opportunities and protect ecosystems through planned development pathways.	Long term strategic planning can enable more effective and judicious use of finite ecological resources, including ecological resources.
	Strategic planning is a core management response under multiple scenarios and at multiple scales, and spatial planning plays a central role and sets the context in which integrated land-use and infrastructure planning programs can be developed. IRCI must support strategic planning and spatial planning processes as detailed in sections 2.5.1.1 and 2.5.1.8.

Success Factor	Implications for IRCI
Limit investment in ecologically damaging projects.	Establishing appropriate investment safeguards can limit and change the nature of investment in ecologically damaging projects. Clear regulations can provide legislative recourse and create a disincentive for those transgressing codes of practice.
	In order to encourage the financial sector to evaluate and prioritise ecologically sound investments, simultaneous efforts will also be required to establish enabling frameworks that will allow ecological concerns to be integrated in traditional financial risk assessments. By developing valuation methodologies that allow investors to respond to clear market signals, the value creation opportunities inherent in preserving and creating ecological and natural capital will emerge.
Building cross-sector partnerships and involving civil society.	At an international level the creation of new Basin, Catchment or Lake Management Authorities show how new structures are emerging to tackle trans-boundary natural resource issues. New opportunities for public-private partnership are also emerging and are likely to play an increasing role under multiple ecological scenarios. Active civil society involvement will also be key and IRCI should seek to support and foster partnerships and provide a forum for dialogue where appropriate.
Ensure clear institutional mandates for management of natural resources.	IRCI could develop best practice guidelines for institutional set up for managing natural resources whilst safeguarding the environment
Risk of fact that Polluter Pays Principle doesn't apply to extraction firms in resource corridors must be mitigated.	
Decision makers have high quality information and support tools for ecological assessment.	Decision makers need practical tools that help them assess the impacts of developmental choices on the ecological system within which they operate.
Many African governments' laws in this area are progressive in terms of environmental planning requirements, so there is the opportunity to feed high quality information into that system.	The IRCI could establish a repository of information and bring together different available sources of information and signpost to others. Training for Project Managers around relevant laws could also be provided.
	There should be a move toward a programmatic approach to environmental issues. IRCI should promote use of Cumulative Impact Assessments.
	Strategic environmental assessments and ecological risks assessments, as well and other participatory approaches provide useful analytical tools.

Success Factor	Implications for IRCI
	These processes can provide an approach to develop and present scientific information so that it is relevant to decision makers. They can be used to identify vulnerable and valued ecological resources, and link human activities to their impacts on ecosystems. This provides a basis for comparing different management options, supporting decision-makers to make better informed choices.



Climate Change

Success Factor	Implications for IRCI
Transport infrastructure within the corridor is well adapted to extreme weather events which are expected to become more frequent.	Develop a programme for monitoring the impact of extreme weather events on transport infrastructure in order to identify areas requiring additional adaptation measures.
	Put in place a programme to monitor the impact of extreme weather events on transport infrastructure within each country within the corridor. Work teams should be trained to collect and collate weather data and to assess trends for information relating to: 1) Rainfall, temperature, wind speed, flood levels 2)The impact (including severity) and cost of damage and disruption infrastructure should be recorded (e.g. date, severity of the impact, remediation measures etc.) to understand vulnerabilities and trends. 3) Action taken to rebuild damaged infrastructure and any adaptation measures incorporated.
The resilience of ports and other at-risk areas	IRCl could promote and support the development of Early Warning Systems and procedures in marine ports and in parts of transport corridors at particular risk from extreme weather events.
Adaptation to climate change	IRCI can help facilitate proper institutional planning to support risk management and policy development with an aim of reducing vulnerability of communities and infrastructure to the impact of climate change through effective planning and adaptation.
	Build capacity within local authorities and government with regards the risks and vulnerability of infrastructure and communities to the impacts of climate change and encourage climate resilient policy making (e.g. specifying infrastructure design criteria for drainage systems which incorporate projected increases in extreme rainfall events).

Success Factor	Implications for IRCI
Integration of climate change knowledge into the decision-making process related to resettlement / new settlement development etc.	IRCI could support the development of an evidence base in this area by commissioning a study of potential impact of climate change on agriculture, food security and water availability to ensure decisions regarding resettlement and the development of urban settlements are effectively adapted to future climate changes.
Collection of the required information to inform the design of new infrastructure to withstand extreme weather events given climate change.	IRCI could develop the evidence base in this area by supporting a study of the impact of extreme weather on specific project areas (e.g. historic and future and return periods and flood lines, wind speed etc.) to support design of infrastructure. Understanding the level of risk within the project area will allow project developers to design infrastructure in such a way so as to account for those risks.
Determination of the extent to which transport infrastructure within the relevant part of the corridor are adapted to both current and future climate risk.	IRCl could conduct assessments of current transport infrastructure to understand the extent to which extreme weather events have been considered in their design. In order to ensure the sustainability of infrastructure within the corridor, the infrastructure needs to be designed in such as way so as to mitigate the impact of current climate conditions as well as projected climate change.
Guidelines to ensure that transport infrastructure within the corridor is adapted to expected climate change impacts, including changes in the frequency and intensity of extreme weather events.	IRCI could develop guidelines on and advocate for infrastructure upgrades to account for extreme weather events. In order to ensure the sustainability of infrastructure within the corridor the infrastructure needs to be designed in such as way so as to mitigate the impact of current climate conditions as well as projected climate change.
Enhancement of the quality of life and resilience of adjacent communities.	IRCl could develop guidelines and best practice around the design infrastructure which provides protection to local communities from extreme weather events (e.g. flood attenuation measures support a broader area than the project itself). Rural communities within Africa are among those likely to be hardest hit by climate change given that they have few resources to allow them to adapt. Consider holistic adaptation options for managing climate risks. Factor such considerations into the prioritisation process when deciding on adaptation measures.



Biodiversity/conservation

Success Factor	Implications for IRCI
Early provision of scientifically rigorous data in an understandable and visual way is fundamental to getting traction. This should also include the identification (criteria to be explored) of NO GO areas.	Incorporate this requirement into the toolkit. Provide model Biodiversity Action Plans for reference and guidance.
The potential for illegal activity to be removed	Risk analysis and spatial planning tool that can anticipate such issues. Identification of key areas for support to relevant government ministries to address problem of 'implementation deficit'.
Available accurate and tailored data on biodiversity and conservation	Undertake, collate and negotiate access to such data. Assist with understanding who the audience is in any given context. Develop series of different options for presenting data, with mapping a top priority.
Responsibility and targets for conservation etc. linked as much as possible to legislation and to job responsibilities	Policies and frameworks on organisational structures and roles taking on biodiversity responsibility.
Involvement of external experts with knowledge in offset design and implementation in the development of an offset as part of the mitigation strategy	Use the IRC programme as a platform to further the efficacy of the mitigation hierarchy in practice and the calculation of biodiversity off-sets - where appropriate (including aggregated offsets).
A more developed methodology of evaluating bio-diversity loss and compensation; build on IFC Environment Performance Standards	Support in this area by providing guidelines and developing methodology.



Local Economic Development

Success Factor	Implications for IRCI
Rural communities also benefit from the IRC development.	Include a skills development programme as part of the corridor development;
Planning must take into account communities which are not in the direct vicinity of the anchor project or of the corridor and cannot focus only on cities. Poor, rural and uneducated populations are	Ensure agricultural developments are part of IRC planning;



Success Factor	Implications for IRCI
likely to be heavily negatively impacted and special attention must be paid to this.	Put in place guidelines to measure projected impact to livelihoods especially in poor rural areas
Benefits as well as the downsides on the economic impact of IRCs should be thoroughly analysed and assessed.	Potential negative impacts to local economic development should not be neglected in the dialogue around IRCs as a driver of economic growth. Strong SWOT analysis of economic impacts should be undertaken for the different regions traversed by the corridor throughout the life cycle
Stakeholder capacity Stakeholders, especially Government and Local actors need to have the capacity to lead and implement the development of these IRCs.	Capacity building for corridor implementers (Government and others) should be part of the corridor development through technical assistance or other means funded by donors in coordination with the private sector actors
Development of economic activity requiring low skilled labour Low skilled labour (in cities and rural areas) feel the benefits of the IRC developments significantly less than middle class populations.	Skills development planning is a crucial part of the toolkit
Economic development needs to be broader than around the anchor project There are often disparities of economic impact with populations directly impacted by the anchor projects or in large cities get priority attention, thus making the economic impact of IRCs unequal which can lead to tension and population migration	Value Chain approach is essential; Agricultural and other sector development initiatives around the IRC should be addressed through the toolkit
Consultation with communities	Strategic, community and investor communications, advocacy and engagement tools are an important aspect of the toolkit.
Ensure the onus is not solely on the private sector or on the anchor project to drive economic impact The private sector (especially the extractive firms) is expected to provide many of the economic impacts even those which should be the prerogative of government.	Ensure the toolkit provides directions on how to work with the private sector but also giving clear scope to what can fall to the private sector and what should fall to Government (draft TORs)



Spatial Planning

Success Factor	Implications for IRCI
Communicating complexity of certain sites. There are practicalities for engineers and others working on these projects that mean they will not want to build on wetlands, as it increases the complexity of the work.	IRCI needs to support methods that quickly identify high risk sites to private sector.
Improve access to sources of spatial data There is currently a lack of adequate and accessible sources of spatial data available to support better regional / infrastructure planning in Africa.	IRCI must engage with and facilitate collaboration with existing initiatives such as ALES and the Africa mining Governance Institute. AMGI
GIS is an important feature of spatial planning.	The IRC initiative must recognise the importance of GIS and focus on an approach that incorporates phases by time, location, and project.
Provision of national mapping tools.	This is an area IRCI could provide guidance and assistance.
This should be driven by national governments in their strategic planning offices. However, this is a large and complex task.	



Water

Success Factor	Implications for IRCI
Cumulative impact assessment of the water usage in mining areas	Support to this area.
Capacity to facilitate bottom-up (stewardship) and top-down (integrated water resource management, IWRM) solutions.	Identify and map existing government IWRM efforts to determine gaps where stewardship efforts could be leveraged (consider use of Water Action Hub to identify potential collaborators).
Especially by neutral, trusted parties since water is often heavily contested.	Offer training in water stewardship for interested parties (e.g., AWS offers such training), most notably on collective action and responsible policy engagement.
Company awareness of how their current or future sites and supply chains are affected by water risks (physical, regulatory & reputational), and how that risk translates into shareholder value at risk.	Encourage participating companies to employ water risk mapping tools (e.g., Water Risk Filter) to understand risk exposure within their portfolio and target high-priority areas with greater water risk

Success Factor	Implications for IRCI
	mitigation efforts (via stewardship engagement). This risk should then be translated into a better understanding of how value is af- fected in terms of expenses, revenues, assets and liabilities.
Water decisions are made in the context of food and energy security decisions and an understanding of how water economically affects each of these different "nexus" issues	Generate a study to understand how water affects different elements in the economy for the area affected by the IRC. Use the results to secure engagement from relevant ministries to discuss water allocation for wellbeing optimisation (including environmental allocation (flows)
Water is one element within complex resource allocation challenges.	allocation/flows)



Success Factor	Implications for IRCI
A weak regulatory and enforcement capacity may require more stringent up-front conditionality and planning.	RC planning needs focus on assessing and increasing capacity of both legislative and institutional frameworks for regulation and enforcement.
Governance ²⁰ of extractive industries should be deemed successful only if it maximises sustainable development outcomes for the citizens who – in most jurisdictions – own the subsoil resources. And governance can only achieve this if it takes an holistic view that involves the many affected arms of Government.	IRCI's methodology needs to mandate cross-Government collaboration at Cabinet level . (See Adam Smith International's recommended holistic approach to extractive industries governance in the appendices.)
Adaptive methods will typically be more successful for resource corridor governance than the traditional centralised expert-based management approach.	Adopt an adaptive, inclusive approach to resource corridor governance, recognising the value local actors bring to understanding the variability and complexity of natural resources, including for example water, land, flora, fauna and minerals.



²⁰ Adaptive governance is a method that can be defined as "the evolution of the rules and norms that promote the satisfaction of underlying human needs and preferences given changes in understanding, objectives, and the social, economic and environmental context" (Dodds, Nelson, Cook; 2007). It opposes the standard centralised command-and-control method of resource governance, and favours the benefits devolution of responsibilities to local actors bring to addressing the inherent complexity, variability and unpredictability in natural resource systems.



Political Economy

Success Factor	Implications for IRCI
Political economy of integration Research into political economy of integration shows regional agreements and national priorities can end up at odds, thus support for regional integration does not necessarily equate with implementation. This has implications in the context of transboundary corridors.	Corridor planning will require careful analysis of historical, structural and institutional factors and how they incentivise stakeholders.
Political economy should also be considered in where to focus in country work. For instance, in North Kivu, there are large mines operating but there are also heritage sites and environmental issues being considered, which presents a political moment to work with a country whilst there is political mandate for planning.	Political economy analyses can be used a tool to prioritise and identify opportunities for interventions, which are more likely to be successful, helping to achieve most effective targeting of resources.
Stability of political economy factors and preparedness for change.	IRCI should support utilise political economy analyses in a responsive way, to include changing opportunities and threats to corridor development
Mechanisms to mitigate corrupt activity	Transparent governance processes and guidance will help in this area. IRCl could also take analyses for opportunities for corruption and elite capture along the corridor.



Communities and Social Development

Success Factor	Implications for IRCI
Early assessment of community impact Assessments are often done ex post rather than ex ante, which makes community considerations may be coming too late.	Guidance must require that social considerations need to be taken into account in the early stages of planning, in balance with commercial viability.
Early engagement with project affected people.	Develop clear guidance on consultation and map existing CSO movements to engage with.

Success Factor	Implications for IRCI
Civil society as a stakeholder For instance the LAPSETT Community forum. This can be successful: Coastal East Africa partnered with CSOs to facilitate input into constitutional implementation and policy strengthening	Work with CSOs to establish partnerships and share engagement tools, for instance community protocols to assist with consultation.
Planning must take into account existing social or economic modalities at the community level Implication of project in terms of land access, economic opportunities, migration has not been properly planned or assessed with no clear strategy on how to deal with it.	Undertake proper analysis and assessment of existing modalities at the beginning so that plans capture all eventualities. This process can be linked up with the WWF scenario planning tool. IRCI should produce guidance and good practice on how to deal with and plan for these concerns.
Community buy-in and cooperation Uncooperative communities might affect trade facilitation through road blocks etc.	Engaging with communities from the start may go some way to mitigate this concern and should be included in the toolkit. Emphasising the potential cost of ignoring community concerns may help to involve other stakeholders early
Consider gender and other dimensions that may lead to people being excluded from the community consultation processes. Consultations should make every effort to be inclusive as extractive and infrastructure projects impact men and women differently. Without inclusive consultation there is a risk of getting a limited and skewed picture of community concerns that may not adequately represent the needs and concerns of communities as a whole.	Toolkit, guidance and policies must be gender sensitive. Community protocols that are adopted must be reviewed to ensure they are adequately representing all voices.

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