



Independent
Science and
Partnership
Council



Corridors, Clusters, and Spatial Development Initiatives in African Agriculture

Workshop Report (Durban, 30 November 2015)

Summary

ISPC, NEPAD and ECDPM stimulated discussion between agricultural researchers and corridor stakeholders on their contributions to inclusive and sustainable development. Spatial development initiatives (SDI), including corridors, aim to coordinate and concentrate investment on transport infrastructure (typically building new roads or upgrading existing ones, often related to access for exploiting mineral resources – and accompanying logistic infrastructure (transport services, storage capacity, agricultural extension services – i.e. soft infrastructure. The cooperation among institutions required to coordinate such efforts involves the national governments of the countries concerned, the private sector, international donors, development institutions and researchers. Corridors are becoming priorities in developing countries, as governments and aid agencies are investing heavily in them to try and facilitate dynamism in rural areas. FAO has recently carried out a comparative analysis to establish a corridor typology, to identify the main drivers and components of corridors and to develop policy decision support tools and checklists. A large part of this cross-comparison focuses on the agricultural component of corridor interventions, identifying the most recurrent activities under this component, the financial resources involved, the most often selected subsectors or value chains and target markets, the interface between infrastructure and agro-industrial development and the positive or negative impacts of corridor interventions on the agricultural sector. Growth corridor initiatives like the SAGCOT in Tanzania sometimes spur heated debate. On the one hand, corridors can attract and direct public and private investment towards a sustainable increase in production and income; on the other, corridors are accused of imposing a model that encourages land grabbing, mono-cropping and exclusion of small scale farmers and entrepreneurs. Which one of these visions reflects reality most accurately, remains unclear. The debate is not helped by a lack of undisputed evidence¹. The workshop brought together some of the key institutions and researchers that are active on this topic both from within and outside the CGIAR², with the objectives of understanding the current state of thinking in research and policy circles, and to help define how best the ISPC might contribute through its strategic study on corridors and spatial development initiatives in African Agriculture.

¹ [Link ECDPM Blog](#)

² List of participants in Annex 1.

African spatial development initiatives and challenges to research

At the [Global forum for innovations in agriculture in Durban](#) on the 30th of November, the Independent Science and Partnership Council (ISPC) of the CGIAR together with the New Partnership for Development in Africa (NEPAD) and the European Centre for Development Policy Management (ECDPM) organized a workshop on the role of *Clusters, Corridors and Spatial Development Initiatives in African Agriculture*. It was an opportunity for international agricultural researchers of CGIAR centres from all over the world to meet representatives of major corridor projects. In his introductory remarks ISPC Member Prof Sayer underscored that there has been a remarkable growth in African agriculture over the past ten years. Corridors and SDIs might give agriculture in Africa a new impulse. These and other unknown changes make it difficult to foresee what the African agricultural landscape will look like in twenty years' time. He also pointed at the challenges implied in tailoring agricultural research to the new sustainable development agenda, particularly with regards to the needs of smallholders.

During the **introductory session**, the African policy and research perspectives were laid out by *Augustin Yamdjeu* of NEPAD's Comprehensive Africa Agricultural Development Programme (CAADP) and *Aggrey Agumya* of the Forum for Agricultural Research in Africa (FARA). *Yamdjeu* sketched the context for agricultural development in Africa: rapid and poorly coordinated urbanization; a young population demanding economic opportunities, globalization and its discontents and climate change. Within this context the Malabo Declaration of Heads of State and NEPAD's "Transforming Africa" agenda emphasize agricultural transformation, engaging with the private sector and the need to upgrade agriculture in national agendas to make it attractive to young people. *Agumya* underlined agricultural productivity was a first priority, complemented with research on markets and trade, value addition through industrialization and natural resource management. He also emphasized the policy dimension, the need for sound policy as a key instrument for corridor development and FARA's work on decision-support, developing a platform for sharing research results with policy makers and getting their feedback. Finally, *Bruce Byiers* presented the ECDPM background paper commissioned by the ISPC, on agricultural growth corridors, their scope, objectives and governance and the impact and implications these corridors have for agricultural research.

The cases of the Maputo Corridor and the Walvis Bay Corridor

During the **first panel session** the scene was set by *Barbara Mommen*, of the Maputo Corridor connecting Mozambique and South Africa and *Johnny Smith and Gilbert Boois* of the Association of Corridor Management Associations and the Walvis Bay corridor in Namibia. Both stressed the lead role of the private sector and their pressing need as managers for a better understanding of past and future social, economic and ecological impact of spatial initiatives; considered vital to improving the corridors' contribution to sustainable and inclusive development. *Mommen* emphasized that for a corridor to develop successfully, scale is essential as well as supply chain predictability and competitiveness. Her experience in the Maputo corridor had convinced her of the need of larger-scale farming to achieve agricultural transformation, creating the backbone for small farmers in demand for inputs, services and access to markets. She mentioned research pointing at a considerable improvement in rural women's health within 30-40 km of the Maputo Corridor.

Box 1: Spatial Development Initiatives (SDIs)

SDIs are large external investments in infrastructure, both by government and private sector players. Corridors are usually based on existing infrastructure that has historical roots. They can be built to connect rich hinterlands to poorer ports or poorer hinterlands to wealthier ports. They can connect different agro-ecological zones, linking surplus regions to ports or deficit regions. Often the incentive for such large investments in infrastructure has been the interest from the extractive sector. However, corridors do often take a more programmatic approach. Transport corridors that connect different countries for example may aim to shorten the time and reduce the costs for cargo crossing the borders along the corridor. They can also identify agricultural growth poles along the corridor and stimulate development initiatives in these communities; leading to additional product flows along the corridor. Already, in these and other corridor initiatives the drive to stimulate investments in agricultural development has gained momentum. This includes investments to stimulate large commercial farming. Both the Maputo Corridor and the Walvis Bay corridor are moving from being a transport corridor to becoming a corridor with more developmental ambitions. These corridor organizations offer trade facilitation and targeted investment and development around the corridor with the aim to achieve socio-economic benefits, for example for smallholder farmers or SMEs. Yet they often lack the evidence to monitor and understand the impact of public and private investments on ecological and social developments. Much more research is necessary to design, plan and implement interventions that aim to improve the ecological, economic and social development impact of corridors.

Smith and *Boois* explained how the Walvis Bay Corridor had evolved from a transport corridor into a development oriented economic growth corridor as part of Namibia's "Growth At Home Strategy". The corridor was able to coordinate investment and infrastructural investments, but also prioritized anchor projects directed at particular industries such as, for example, agricultural growth poles along the route. *Philip Kiriro* of the East African Farmers Association, emphasized growth corridors were a good vehicle to attract investments, which is much needed because investment in agriculture is by far not enough yet, closer to 3-4% instead of 10% of government spending, as intended in the Malabo Declaration. Also, that farmers didn't forever want to remain the weakest link in the value chain, they want to start adding value to their products. Farmers need to be involved much more actively in the design, planning and implementation of agricultural growth corridors if they want to be able to truly contribute to inclusive development. Finally, *William Benjamin* of USAID indicated corridors are central to the "Feed the Future" strategy and stressed the importance of partnerships with more advanced agricultural countries such as India, Brazil and South Africa who successfully engage with their private sector, their leverage, skills and finances. He also highlighted the importance of predictability to the private sector and the need to include smallholders, particularly women, in corridor development. The discussion focused on the viability of corridors to benefit smallholder farmers. Maputo Corridor reported huge growth in the movement of agricultural products, while the Walvis Bay corridor underscored the 'Green Scheme' the Namibian Government recently established in the North of the county, allowing producers to market their produce jointly through the corridor. Other successful examples of the inclusion of smallholders to achieve scale were given, such as an out grower scheme in Mozambique that combines marketing and technical assistance to producers. An important role for farmer cooperatives in reaching scale was highlighted. The importance of the government actively facilitating and supporting smallholders in achieving quality and scale was underlined.

Relevance and implications of SDIs for existing CRPs

Already many CGIAR centres and CRPs do research relevant to agricultural corridors. CIAT Regional Director *Robin Buruchara* signaled that the value chains of green beans and groundnut overlap with the SAGCOT corridor and the CGIAR is working with smallholders on how to take advantage of the infrastructural and other elements of corridor initiatives. *Paul Kiepe* indicated that AfricaRice works closely with stakeholders in dynamic rice sector development hubs, two of which are in the SAGCOT corridor. Research includes the impact on access to markets for smallholders. *Evan Girvetz* elaborated on SAGCOT green growth strategy and argued that climate-smart growth corridors are the future of agricultural development in Africa. Also the climate change programme (CCAFS) in collaboration with the Sokoine University has conducted a CSA Rapid Appraisal of the SAGCOT corridor. He highlighted the importance of demand-driven research for development, involving policy engagement and strengthening local institutions. *Jordan Chamberlin*, of CIMMYT, sees SDIs as part of working towards sustainable intensification of agriculture. SDIs drive change but also react to change, so the demand for foresight is increasing. And while geographical targeting is already happening for some time, our thinking on how this may (be managed to) enhance multi-sectorial development has not progressed much.

Jawoo Koo of IFPRI, also underscored the importance of foresight research for SDIs, besides several other research areas such as, spatial targeting, value chains, farm gate price and transport modeling, technology adaptation, national policy and border regulations, social protection and gender. In particular he called attention for Climate Smart Corridor development strategies: current corridors are not yet connecting new areas that may surge as surplus or deficit areas due to climate change. *Jenni Baron*, IWMI/Water, underscored that part of the work of the Land and Ecosystems CRP is in corridor areas, which gives it a chance to look at how agricultural landscapes are changing and how resources can be better managed for the future. She highlighted the relevance of investigating spatial development impact on natural resources particularly the contested resource water. *Flemming Nielsen*, IITA/Humid Tropics CRP, stressed the importance of learning from the experiences of the corridors, particularly with regard to the role of large farmers. Existing infrastructure is a constraining factor we can do more with the experiences already gained. He also calls attention to possible trade-offs at national/regional level: Corridors may draw away resources from other areas. The CGIAR works to a large extent in poor regions with poor farmers, and it is these regions that may see less government resources due to corridors. Finally, *Alastair Orr*, representative of ICRISAT/Dryland cereals, underlined the importance of small farmers being subsistence farmers and commercial ones with regard to their surpluses at the same time. All farmers are involved in markets in one way or the other, but on what terms? Understanding their terms and how we can guarantee continuity of supply in value chains is crucial for creating opportunities for smallholders through corridors.

Box 2. Working groups - Possible implications for agricultural research and partnerships

The questions addressed by the working groups were: What agricultural growth corridors may mean for agricultural research and development outputs and activities, and how synergies between CGIAR Research Programs, SDIs and official African policy processes may be enhanced. In line with the NEPAD policy “Transforming Africa” agricultural corridors were understood as a special development initiative that combines investment, infrastructural and socio-economic development of the areas served by it.

Relevant ongoing CGIAR research

Immediately it became clear that CGIAR Research Programs are already involved in many research and development activities directly related to or, relevant to corridors. These include: stakeholder engagement in spatial development planning; socio-economic contexts to identify agricultural development opportunities; research into water, energy and natural resources management, identifying opportunities for and threats to their development; ex ante agricultural fore-sighting and yield-gap analysis; supplier development, organizing and linking stakeholders to markets and consumer preferences; the prioritization of value chains for particular areas or countries and, crop modeling, breeding and the identification of recommendation domains (areas, regions) where particular technologies can be applied to improve productivity and agricultural value added.

Corridor interests

The corridor representatives on their part emphasized a number of recurrent issues that hamper their efforts to achieve sustainable and inclusive agricultural transformation in particular with respect to smallholder agriculture. In the first place these include market failures: small holders lack access to information, finance and inputs to be able to respond to economic opportunities provided by corridors. Another issue is the difficulty of organizing smallholders for scale. The corridor developers themselves often lack information on potential areas for agricultural intensification and growth, particularly with regard to smallholder farmers and, lack understanding of spatial issues regarding agricultural adaptation and competitiveness. Besides they signal a frequent lack of coordination between trade and sector policies and the often unpredictable nature of government policy and bureaucracy.

Opportunities for research

The discussion focused on the needs for research on the part of agricultural corridors. One principal question both corridor representatives and researchers would like to be able to answer is whether corridors indeed drive agricultural transformation and how. Also, they would like to know much more about agricultural, ecological and socio-economic impacts, both negative and positive, in order to be able to adjust their strategies in line with national and pan-African policy objectives. Comparative research between corridors is mentioned as an interesting possibility. Areas mentioned as particularly interesting for impact research include in the first place environmental impact, such as the effects on ecological services provided by the areas affected by corridor development, the trade-offs between sustainability, productivity and inclusivity and, the possibilities for sustainable intensification. This type of research is considered extremely important to inform corridor decision-makers. A second area of research concerns the institutions that are involved in corridor design, planning, implementation and management. How to improve the enabling environment for those entrepreneurs, including smallholder farmers, who need to transform their businesses to grasp the opportunities provided by corridor development? How to solve cross border trade issues? How to settle land ownership in the areas affected by the corridors, avoiding speculative land acquisitions? How to optimize policies along the corridor so as to favor sustainable and inclusive development, including for example, land policy, technology transfer and skills development, storage and services development, seed certification, price policies?

Partnerships

The groups discussed how to optimize multi-stakeholder arrangements, so smallholders can participate fully in these arrangements. What may be the possible consequences for research partnerships? Clearly, on corridor development the private sector is in the lead, but they need strong partnerships with government, farmers’ organizations and NGOs, for example through innovation platforms. Organized farmers, through for example cooperatives or out grower schemes, need to take an active part, in order to develop an adequate and timely supply of agricultural products and build up the required flow of

goods along the corridor, for which more often than not a minimum scale needs to be respected. As a consequence, the 'viability' of farmers to participate in these schemes is seen as not so much related to their individual farm-size, but to their entrepreneurial spirit and their ability to organize and scale up the delivery of the required produce. In order to allow multi-stakeholder partnerships to organize themselves and to develop their contribution to the value chain, corridor managers need to create space in their programs. This can be done for example through smaller-scale area intensification programs, besides the customary large-scale economic generator and infrastructural programs, as in the case of Walvis Bay Corridor. The cost of participatory processes, both in time and resources, has been marked as problematic. Clearly also a number of questions arise with regard to agro-logistics, reduction of post-harvest losses, distribution and quality management need to be addressed.

Outlook: two possible areas of opportunity for future research

The implications of corridors and spatial development initiatives for agricultural research can be huge. Corridors can be designed and managed to serve different purposes: for profit only or, for sustainable and inclusive development as well. The challenge for research may be to contribute elements and choices that enable spatial development initiatives to become more sustainable and inclusive. The Durban workshop was a fruitful first step in bringing these two worlds together. It is up to the CGIAR research programmes to respond to it.

As the conditions and (potential) impact of corridors are highly context-specific, during the workshop CRP representatives paid much attention to specifying or deepening research questions within a particular context. This cannot be reflected in this report. However, CRP representatives agreed that research questions relevant to corridors and spatial development initiatives in general might be grouped in two different research areas; the two of which will require collaborative work across different CGIAR research programs.

The first area concerns demand-driven research producing policy options in response to the needs of corridor policy makers, designers, developers and managers, and other stakeholders who seek to benefit from corridor development. It would include for example, working directly with smallholders and local authorities and support their efforts to turn their areas into sustainable agricultural growth hubs, connected with the corridors. It would involve understanding the economic, technical, social and environmental constraints and opportunities arising from corridors and, support for innovation towards sustainable production and marketing systems. Such research would respond directly to the existing policy demands on the part of African authorities to make corridors more development effective, inclusive and sustainable. It may touch upon existing and newly growing areas of CGIAR expertise, such as spatial analysis, territorial development, agricultural foresight, value chain facilitation and innovation, and how to sustainably increase productivity and profitability of farming systems, how to involve multiple stakeholders in the planning of these spatial type of interventions or how to best link smallholders to better access to inputs, services and markets.

The second area might focus more on independent research regarding the impact of spatial development initiatives and corridors in particular, on their social and natural environment, both negatively and positively, looking at the impact on poverty, ecological services and natural resource management for example. This stream of research might also look at the impact of corridors on the people living in the areas affected by it, close to the corridor as well as in the hinterland, such as the effects of large scale commercial farming stimulated by corridors on the food and nutrition security of local smallholder farmers and small entrepreneurs.

Closing session remarks

The participants recognized the value of bringing so many different perspectives together, leading to many questions and rich discussions on what is known, done and what can be done with regard to turning transport corridors into agricultural growth corridors. Clearly, the CGIAR is already engaged in much research and policy work related to corridor initiatives in Africa. And it has a lot to offer to corridor policymakers, architects and stakeholders, in terms of for example, understanding social, economic and ecological constraints and opportunities of corridor development as well as in terms of policy support, (spatial) assessment tools, climate-smart agricultural business models, M&E indicators and support to local and regional agricultural and market innovation. Lots of landscape, integrated water management and value chain work can be helpful to address the implications of SDIs for agricultural growth, employment, biodiversity and the availability of natural resources. Particularly where corridors go into places with vulnerable ecologies and weakly developed infrastructures and institutions, the CGIAR can help develop ways to make agriculture and corridor landscapes more diverse, and more sustainable.

At the same time, teaming up with public and private sector actors in order to turn corridors into opportunities for sustainable smallholder-led agricultural development is seen as a huge opportunity for research too. Corridors are long term development plans that specify what investments are going to be made, where and in what. Still much is unclear about whether corridors indeed drive agricultural development? Corridor architects and managers are interested in research on whether corridors deliver what they promise and, on what makes them work for development. A challenge is how to open up new areas of research to support smallholders in connecting with and benefitting from these investments; and to support governments and private companies in designing and implementing adequate programs to support effective smallholder engagement and organization for scale.

List of Participants

1. Augustin Wambo Yamdjeu NEPAD South Africa
2. Martin Bwalya CAADP South Africa
3. Barbara Mommen Maputo Corridor, South Africa
4. Johny Smith ACMA- Walvis Bay Corridor Group, Namibia
5. Gilbert Boois ACMA- Walvis Bay Corridor Group, Namibia
6. Aggrey Agumya Forum for Agricultural Research in Africa (FARA), Ghana
7. William Benjamin USAID, Feed the Future (South Africa)
8. Ihedioha, D. Onyema African Development Bank, Ivory Coast
9. Philip Kiriro President Eastern Africa Farmers Federation (EAFF)
10. Gorette Kamau East African Farmers Federation (EAFF)
1. Michael Hailu Director CTA (Technical Centre for Agricultural and Rural Cooperation)
2. Jawoo Koo PIM/IFPRI Delegate
3. Kiepe, Paul Africa Rice - GRiSP
4. Buruchara, Robin CIAT-Kenya
5. Girvetz, Evan CCAFS/CIAT, Kenya
6. Jordan Chamberlin MAIZE & WHEAT (CIMMYT) Kenya
7. Barron, Jennie IWMI/ WLE, Sri Lanka
8. Orr, Alastair DCLAS/ICRISAT, ICRISAT-Kenya
9. Nielsen, Flemming IITA/Humidtropics, DR Congo
10. Dieudonne Harahagazwe RTB/CIP, Kenya
11. Castro Camarada FAO-Mozambique
12. Bruce Byiers ECDPM, Belgium
13. Paul Engel ECDPM (Consultant), Belgium
14. Paulina Bizzotto Molina ECDPM, Belgium
15. Jeff Sayer ISPC Council, Australia
16. Rachid Serraj ISPC Secretariat, Rome Italy
17. James Stevenson ISPC Secretariat, Rome Italy
18. Katlego Nkgudi Nkgudi & Tshangela Dev. Consulting South Africa [Observer]
19. Kabishanga R. Emmanuel New Horizons Women's Education Centre, Uganda [Observer]
20. Sandile Thwala World Food Program [Observer]
21. Braam Cronje CISP (NGO), South Africa [Observer]