Policy Brief

Future Agricultures

Investment in drylands: widening the benefits for food security and development

Summary

After decades of comparative neglect, the drylands of the Horn of Africa are experiencing an unprecedented surge of investment. Large-scale infrastructure projects now dominate national development plans. They represent a welcome renewal of interest by states in drylands and an opportunity to reduce long-standing inequalities in the provision of public goods and services. Uneven investment has been a barrier to formal private sector engagement; it has also left pastoralists more vulnerable to shocks and ill-equipped to take advantage of processes of economic transformation. Of all types of investment, state-driven investment should provide for the greater public good. Careful planning and management will be required if it is to contribute to inclusive growth rather than deepen inequality.

Infrastructure investment and the goals of the New Alliance

The New Alliance for Food Security and Nutrition, a partnership of G8 nations, African governments and private investors in support of agricultural development in Africa, aims to improve food and nutrition security and promote more inclusive agricultural sector growth. It hopes to raise 50m people out of poverty by 2022, 2.9m of these in Ethiopia and 6.7m in Tanzania (its two current members in the Horn and East Africa).

The New Alliance Cooperation Frameworks currently give little attention to pastoralism, despite the fact that pastoralists represent a significant proportion of national population, experience high levels of human insecurity, and yet still demonstrate innovation and entrepreneurship at the local level, contributing significantly to GDP (Table 1). Much of this economic activity is informal, unregulated and fluid and thus less visible to formally organised government or private sector institutions. The formal private sector also has a more limited presence in rangelands than in crop-producing or urban areas, largely due to the lack of public goods and services (particularly infrastructure, security and the rule of law) and perceptions of high risk.[1] This presents a paradox for the New Alliance in that some of the most food insecure areas are those where potential partners may be fewer.

However, this situation is now changing. After decades of comparative neglect, the drylands of the Horn and East Africa are on the receiving end of an unprecedented surge of investment.

Table 1: Data on drylands and pastoralism

Sector	Ethiopia	Kenya
Proportion of land that is arid or semi-arid (%)[8]	61	89
Pastoralists as a proportion of the national population (%)[9]	12	10
Contribution of livestock to GDP (%) in 2009	9.1	13
Poverty rate (%)	29.6	45.9
Stunting in children under five (%)[10]	44.0	35.3

This is often justified in terms of 'opening up' areas for trade and development;[2] in Kenya, for example, there is an appreciation that national development has hitherto been concentrated in too limited an area.[3] These nationally driven investments are complemented by improvements in productive assets through public works, such as the 39,000km of community roads in Ethiopia constructed under the Productive Safety Net Programme (PSNP) since 2007, and the further 83,000km of community roads maintained.[4] Similar asset creation programmes are underway in Kenya, though on a smaller scale.[5] An adequate foundation of infrastructure and services is a pre-condition for many other outcomes, including job creation, economic diversification and the reduction of both poverty and vulnerability.[6] Moreover, in regions with a history of exclusion and injustice, such as that which prevailed in Kenya's pastoral areas for many years,[7] the positive presence of the state can have a stabilising effect.

A thumbnail sketch of investments in drylands of the region

Much of the current investment in drylands is state-driven: large-scale infrastructure projects now dominate national development plans. Ethiopia has a longer track record in this than Kenya; its Road Sector Development Programme more than doubled the length of the road network between 1997 and 2010 and increased the proportion of roads in good and serviceable condition by two-and-a-half times.[11] The Growth and Transformation Plan anticipated US$73bn of investment in transport, energy and water supply between 2010/11 and 2014/15.[12] Ethiopia's infrastructure spending as a percentage of GDP is now the highest in Africa,[13] while the country is also the continent's largest non-oil exporting economy.[14] Kenya has been making similarly sizable investments, particularly since the start of Kenya Vision 2030 in 2007: nearly 27 percent of the national budget has been allocated to infrastructure development in the transport, energy, water and environmental sectors over the past five years.[15] The Second Medium Term Plan (2013-17) for Kenya Vision 2030 continues the trend, with further large-scale investments planned in road, rail and air links, energy, ICT and water.

There are also major projects underway which will deepen integration between the countries of the region. The most ambitious of these is the Lamu Port-South Sudan-Ethiopia Transport Corridor (LAPSSET) linking Kenya with its neighbours to the north. Table 2 illustrates the scale and diversity of these investments with a selection of projects, many of which reflect a growing interest in the natural resource base.

Implications for pastoralism

This upsurge of public investment represents a welcome renewal of interest by states in drylands and an opportunity to remove historical biases in the distribution of public goods and services. However, the prospects of these investments delivering broad-based benefits for dryland peoples will depend on the extent to which they take account of three critical issues: the impact of inequality, rights to land and other natural resources and the manner of their planning and implementation.

Inequality

Many of these investments are being overlaid on a situation of chronic inequality, both within drylands and between drylands and other areas, suggesting that their benefits are also likely to be unevenly distributed. There is already evidence of widening differentiation within pastoral areas: for example, data from Somali region suggest that over both the short and long term, the livestock assets of wealthy and middle-wealth groups have increased while those of the poorest have remained constant or declined.[16]

Table 2: A selection of infrastructure investments in drylands

Sector	Project	Budget (US$)	Status
Transport	LAPSSET Corridor, a regional infrastructure programme whose components include roads, a new port facility at Lamu on Kenya's coast, a standard gauge railway linking Lamu with Juba and Addis Ababa, oil pipelines, terminal and refinery, three international airports and three resort cities in Kenya.	23bn	182km of roads completed in Kenya. Reconstruction of Moyale-Addis road started. Port construction started.
Energy	Lake Turkana Wind Power Project, Marsabit County, which will provide 300MW power to the national grid. It is the largest single private investment in Kenya's history and will be the largest single wind farm in sub-Saharan Africa.	805m	Financing signed March 2014. Completion date 2016.
	Ashegoda wind farm, Tigray, has 84 turbines and a capacity of 120MW. It is billed as the largest in sub-Saharan Africa that is already completed.	290m	Launched in October 2013.
Water	High Grand Falls dam on the Tana River in Kitui County, for electricity generation, irrigation and regional development.	1.7bn	Feasibility stage complete. Financing sought.
	Grand Ethiopia Renaissance Dam on the Nile River near the border with Sudan, for electricity generation.	4.8bn	Under construction; expected completion in 2017.
Hydro-carbons	Oil prospecting in Ogaden region of Ethiopia by British and Canadian firms.		Discovery of oil and gas at Elkuran in February 2014.
	Oil exploration in Turkana by Tullow Oil. Plans to join Tullow's Kenya and Uganda oil finds into one pipeline.		Tullow's blocks in northern Kenya may hold more than 1bn barrels of oil.
Commercial agriculture	1m ha of land has been allocated to private investors in Ethiopia so far, all for commercial purposes including biofuels, roses and horticulture.		

Similarly, in north-east Kenya the very poor and poor wealth groups as a proportion of the population increased from 45-50 percent in 2002 to 50-60 percent in 2007.[17] Wealthier herders use their position to increase their assets, leaving poorer herders even further behind – although this trend may be mitigated to some extent in areas where customary institutions are still functioning, since these facilitate a degree of wealth redistribution from rich to poor.

Most drylands fare poorly against basic indicators of human development.[18] Figures 1 and 2 illustrate this with reference to the education sector. In an assessment of learning outcomes in 2011, the highest and lowest performing districts in Kenya were separated by as much as 56 percentage points (the lowest being in Turkana).[19] Low educational achievement makes further training or employment more remote, while the large land size, poor communications and high poverty levels of many pastoral areas make networking and citizen organisation more challenging. As a result, pastoralists may be poorly equipped to engage with externally driven processes of change and investment and turn these to their advantage.

In recent country strategy papers the African Development Bank has reinforced the New Alliance's concern for inclusive growth, noting that the principal challenge facing both Ethiopia and Kenya is to ensure that public investments create economic opportunities that are more broad-based.[20] Both governments regard commercialised agriculture as a significant engine of growth. The Constitutions of both countries also contain provisions with regard to food security, more powerfully expressed in the Kenyan document as the right to food and to freedom from hunger.[21] However, the goals of growth and food security may conflict if the particular models of investment fail to take account of the realities of pastoral livelihoods. For example, measures which excise high-value parts of the rangeland undermine the integrity of the pastoral system as a whole, particularly for poorer livestock-keepers who are unable to pay to access private grazing or water.

Rights to land and other natural resources

Developments around the Lamu Port are already generating discontent among the area's indigenous communities;[24] similar concerns have arisen in Turkana and in Ethiopia's Ogaden region around sites of oil exploration.[25] Groups such as pastoralists who hold land under customary tenure are vulnerable not just to direct expropriation but to the distortions created by commercialisation; the area surrounding Isiolo's new airport and resort city has seen a surge in land values in recent years.[26]

Investment may also overlook the value of pastoral production in the belief that other uses must be more productive.[27] This is despite research which shows that pastoralism can more than hold its own against irrigated production.[28] The African Union's Policy Framework for Pastoralism in Africa notes that appropriation of pastoral land for private commercial ventures 'is [in part] influenced by misperceptions of pastoral rangeland as non-productive or even vacant'.[29]

Planning and implementation

The manner in which investments are planned and implemented requires attention. First, the aggregate impact of infrastructure investments is not being evaluated. Environmental and Social Impact Assessments (ESIAs) may be done but usually only for individual projects; the future impacts of the LAPSSET corridor in its totality, for example, are not assessed. Moreover, the

Figure 1: Female literacy (%)[22]

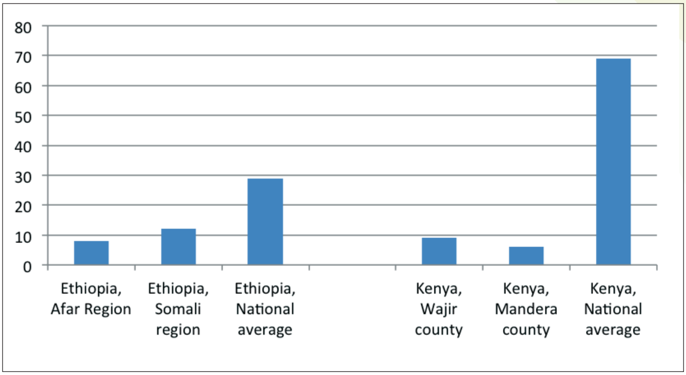
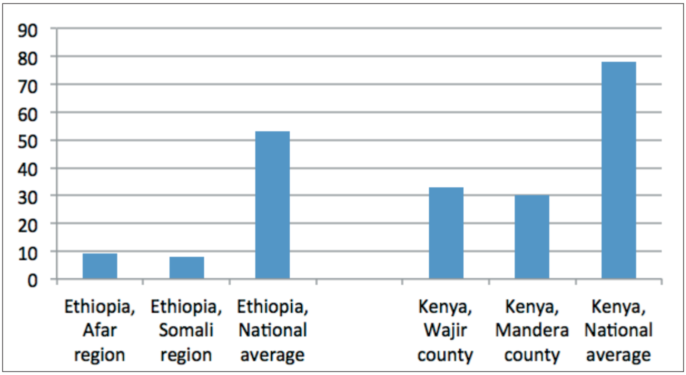


Figure 2: Girls' primary net enrolment (%)[23]



ESIA process has weaknesses.[30] Assessments are usually commissioned too late in the decision-making process when the only option available is mitigation; the reports are not easy to obtain, particularly for the more high-profile investments; and the methodologies used may be insufficiently sensitive to dryland contexts.[31] As a result, they may fail to identify issues that will have a negative impact on pastoral livelihoods.

Second, there is insufficient attention given to climate-proofing, which is clearly critical for drylands where unpredictability looks certain to increase. Government planners are starting to model climate impacts, using tools such as T21, and are working within broader green economy goals, but detailed technical specifications and guidance for integrating climate-proofing in project design are not yet developed.

Third, investments tend to be designed on a project-by-project basis, overlooking the potential synergies between them. Complementary agricultural investments are being explored along the LAPSSET Corridor (Box 1), while the recent design of the Nginyang-Lokori-Lokichar road has integrated ICT infrastructure, social investments and water points, but these are still isolated examples. On the whole, the sectoral silos within which projects are designed and planned make it difficult to build synergy between investments, a situation which is further complicated by devolution.

Policy recommendations

The following recommendations are made with a view to ensuring that investment in drylands reinforces the poverty reduction and food security goals of the New Alliance.

Broadening the benefits of public investment

Large-scale public investments should be complemented by the critical medium-sized infrastructures which are more likely to benefit those in the poorer or middle range of the wealth distribution, and which can expand pockets of development generated at the local level and link them with nationally driven investment priorities. Examples may be rural access roads, animal health delivery systems and marketing and processing facilities in smaller towns where value-added diversification and employment can be enhanced.

Evaluating the poverty impacts of investment

Public and private investment should be based on a more rigorous evaluation of the comparative economic performance of different land use systems and a more informed understanding of pastoral systems. The specific impacts of investment strategies on poorer livestock-keepers should be explicitly assessed.

Adhering to national and international standards and guidelines

Existing national provisions with regard to the process, timing and transparency of environmental and social impact assessments should be respected and applied. National bodies responsible for environmental protection should ensure that experts accredited to conduct assessments in pastoral areas have adequate understanding of pastoral systems.

International guidelines are often voluntary, making them more challenging to enforce, but they are a useful benchmark of best practice and of the measures necessary to protect the rights of more marginalised groups (such as women and pastoralists). The New Alliance Cooperation Framework for Ethiopia already includes a commitment to take account of the Voluntary Guidelines on the Responsible Governance of Tenure of Land, Fisheries and Forests in the Context of National Food Security, as well as the Principles of Responsible Agricultural Investment. In Kenya, similar levels of protection over land and natural resources

Box 1: Business opportunities along the LAPSSET corridor

In 2012 the Ministry of Agriculture presented a business case for a 500 percent expansion of the scheme operated by Ol Pejeta Conservancy which fattens cattle bought from pastoralists north of Isiolo and sells them on through the value chain. The investment opportunity was consciously marketed as an offshoot of the LAPSSET corridor development. While the project would undoubtedly benefit those pastoralists from whom cattle were purchased, particularly since Ol Pejeta is generally able to offer prices that are approximately 30 percent higher than typical market rates, it is probable that only a well-resourced and well-connected organisation such as Ol Pejeta would have attracted the attention of the Ministry of Agriculture and been able to put together a convincing business case.

would be ensured through adherence to constitutional provisions regarding land rights and environmental management.

Climate-proofing investment

The concept of climate-proofing should be fully integrated into project design and implementation, given the cost, significance and anticipated life-span of many of these investments. A number of factors need attention, including engineering specifications, planning methodologies, operation and maintenance requirements, environmental protection and economic viability, so that current and future climate risks are, as far as possible, addressed.

Common programming in drylands

Efforts to build synergies and efficiencies between investments should be stepped up. This arguably matters more in drylands than in other areas where the cost of doing business is often higher. Poor coordination can also be damaging: a badly sited water point or capital investment can disrupt pastoral systems or destabilise inter-communal relations.

Work is underway in Kenya to harmonise and align investments by the national government, county governments, development partners and private sector around a shared strategy for dryland development. In Ethiopia there are also moves to join up efforts across sectors, in particular through the articulation of the next-generation Growth and Transformation Plan due in 2015.

End Notes

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[21]Article 90.1 of the Constitution of the FDRE, 1995, and Article 43(1)(c) of the Constitution of Kenya, 2010. This rights-based approach is followed through in the *National Food and Nutrition Security Policy* (Sessional Paper No. 1 of 2012) and associated *National Nutrition Action Plan, 2012-17*. The Constitution of Tanzania, 1997, is silent on this.

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[31]For example, the ESIA of the proposed re-routing of sections of the access road to the Turkana Wind Project noted that since the route of the road did not have human settlement or a sensitive ecosystem, there was no need to conduct public meetings or administer questionnaires; some stakeholders were, however, interviewed.

[32]National Drought Management Authority, a state corporation whose mandate is to coordinate drought management and efforts to end drought emergencies in Kenya

[33] Institute of Development Studies, Brighton, UK

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