

Unlocking Green Investment and Creating Climate Resilience for Kenya's Secondary Municipalities

Introduction

Primary cities in Africa cannot accommodate the rapidly increasing population, as such, there is need to strengthen the role that secondary and tertiary cities play in the contribution on nationwide economic growth. This approach has not been favoured in the recent past, but its merits are beginning to show with the unapparelled potential and opportunity that they provide for eradicating poverty, fostering innovation, and including a larger number of the population in inclusive and resilient growth while recognising the uncertainty associated with climate change.

The Sustainable Urban Economic Development (SUED) Programme, funded by the UK Government and managed by Tetra Tech International Development, was established to support twelve fast-growing secondary municipalities across Kenya to attract investment for critical climate-smart value chain and infrastructure projects. Open Capital (OCA), served as an investment attraction advisor for SUED, leading development and support for a range of green investments in two municipalities, Isiolo and Malindi. Over three years, we worked closely with local municipal government, private sector companies, investors, and other experts to identify, structure, and support green investments. We focused on projects identified by local government, private sector, and community stakeholders that could accelerate climate-friendly economic growth and urban development, which included waste and circular economy, sustainable agriculture, and flood water management.

The investment attraction process proved challenging given the smaller size of local economies, making opportunities less attractive for larger operators and investors, but we were able to complete five transactions that will have significant, long-term benefits to each local community. In Isiolo and Malindi municipalities the programme will result in raising a total of ~GBP 5.3 million and creating an estimation of ~10,000 jobs (direct, induced and indirect), including significant gains in climate resiliency from improved waste systems to drought-resilient agriculture. The below case studies demonstrate three of these transactions as well as lessons learned for future sustainable urban development projects.

Case study 1: Commercialisation of sewage sludge in Malindi

Project highlights:	
Project details	Waste-to-Value (W2V) facility to process sludge from Malindi Water and Sanitation Company (MAWASCO's) upcoming Faecal Sludge Treatment Plant into briquettes
Funding	~GBP 1.8 million from the World Bank
Beneficiaries	120,000 Malindi residents
Expected jobs	~250 direct and indirect jobs
Expected impact	Over 600,000 trees saved from deforestation for fuel usage, offsetting 120,000 tonnes of carbon

Urban sanitation has been a significant and growing challenge in Malindi. When we started engaging the municipal water and sanitation provider, MAWASCO, they were under-resourced and the cost of establishing sewer lines in Malindi was prohibitive, meaning that faecal waste was typically dumped untreated in an open-air landfill site. To address this, MAWASCO was looking to establish the municipality's first faecal sludge treatment plant (FSTP).

Through SUED’s work supporting Malindi municipality, we developed a concept for a waste-to-value (W2V) facility adjacent to the FSTP to hygienically convert faecal sludge into fuel briquettes, for sale to industrial customers. SUED conducted a pre-feasibility study and due diligence on this concept, leading to the World Bank investing GBP ~1.8 million to construct the briquettes plant. Once commissioned, the new FSTP will prevent faecal sludge dumping in the environment, while the W2V facility will then safely commercialise the faecal sludge, to offset the costs of waste treatment.

Case study 2: Fruit processing in Malindi

Projects highlights:	
Projects details	Greenfield set-up of a mango drying facility by Milly Fruits Processors Ltd. and expansion of Equator Kenya Limited (EKL)’s chilli processing capacity
Funding	~GBP 1.5 million private investment by Milly Fruits, with ~GBP 500K from a SUED Seed Fund grant & ~GBP 1 million private investment by EKL, with ~GBP 250K in SUED Seed Fund grant
Expected jobs	~4,100 new jobs over three years for Milly Fruits project and ~5,600 new direct and indirect jobs for EKL project with support to ~6,300 farmers
Expected impact	Improved climate change resilience for ~15,000 new and existing farmers through use of renewable energy in production & utilisation of climate-smart technologies

Over the past three years, Malindi has experienced prolonged drought and erratic rainfall due to climate change and this has severely impacted agribusinesses and farmer livelihoods. In an attempt to address these challenges, OCA’s work supporting Malindi fruit processing projects contributed to two successful financial closes totalling ~GBP 2.5 million in private sector investment, and ~GBP 750K in SUED Seed Funding between two operators, Milly Fruit Processors (Milly) and Equator Kenya (EKL).

Milly Fruit Processors, a fruit processor located in Mtwapa, Kilifi County, was looking to set up and operate a new climate-friendly fruit drying facility. Through the SUED programme, we attracted them to set up this greenfield facility in Malindi, 100 km north of their existing plant in Mtwapa, thereby diversifying Malindi’s economy. The new facility will reduce post-harvest losses for farmers, which today reach up to 40% of harvest volumes in Kilifi County, due to lack of preservation technologies.¹ The project will utilise solar-powered dryers for parts of the production, further reducing greenhouse gas emissions.

Secondly, EKL, a chili processor based in Malindi since 2010, was looking to expand their processing capacity to support chilli farmers with climate resilience and drive financial sustainability. OCA supported in structuring the project and applying to the SUED Seed Fund, leading to the funding commitment highlighted above. The Seed Fund will allow EKL to integrate more climate-smart technology and lower their carbon footprint at their facility through the installation of solar photovoltaic (PV) system and energy efficient technologies as well as increase the climate resilience of ~11,000 local farmers.

Case study 3: Sustainable Urban Drainage Systems (SUDS) in Isiolo

Project highlights:	
Project details	Construction of Storm Water Drainage System in Isiolo
Funding raised	~GBP 1 million from World Bank’s Horn of Africa Gateway Development Project (HoAGDP)
Beneficiaries	80,000+ Isiolo residents
Expected jobs	~90 jobs during construction
Expected impact	Improved climate resilience to recurrent seasonal floods

¹ Kilifi County, *County Integrated Development Plan 2018 -2022*, p21, [Link](#); Fruit post-harvest losses generate up to 0.5 MTCO2e/metric ton of emissions. (40% PHLs rate * 270,000 MT of Kilifi annual fruit produce * 0.5 MTCO2e/metric ton)

Seasonal floods in Isiolo municipality contribute to the frequent destruction of property with recurrent floods destroying property worth over KES 800 million in 2015 alone, due to the municipality's location in a basin which receives water runoff from the hills around Mount Kenya.² For this reason, floodwater management was identified as a priority project by the municipality.

Under the SUED programme, OCA and our engineering subcontractor drafted a concept note, preliminary engineering designs, and a high-level environmental analysis, and submitted the proposal to the World Bank's Horn of Africa Gateway Development project, (HoAGDP), through its implementation agency, the Kenya National Highways Authority (KeNHA). After over a year of follow-up support, the project was included in the HoAGDP budget, with a preliminary figure of ~GBP 1 million. Once construction is completed (in 2024-2025), the stormwater drainage improvements are expected to improve the climate resilience for the town's 80,000+ residents by reducing the damage caused by floods to trade premises and residential properties.

Lessons learned

From OCA's three years supporting project structuring, investment attraction, and financial close for these transactions, some of the key learnings include:

- **Engage the public sector early and closely**, helping to build their capacity around how to attract private sector players through PPP frameworks.
- **Cast a wide net for private operators and potential sectors of focus.** Considering the challenging circumstances of operating in smaller municipalities, it is important to consider a wider pool of potential projects to increase chances of attracting private sector operators with the necessary skills and expertise to operate effectively.
- **Expect that the investment attraction process will be lengthy and often require blended finance.** The project structuring process to match funder requirements and expectations particularly for climate resilient projects in intermediary cities takes time. In the fruit processing sector, projects took about 2 years from operator identification to financial close, including a lengthy familiarisation process among many stakeholders prior to drafting project documentation. Different forms of blended finance were critical to successfully attract commercial operators and investors to these smaller municipalities, where risks are often larger than in major cities.
- **Plan for significant technical assistance to municipalities to package projects, particularly for innovative approaches.** Whereas it is important for the prioritisation and push for such public infrastructure projects to come from the municipality itself, public entities especially at smaller municipal level will still require technical support including legal, environmental, and engineering expertise to ensure project conceptualisation is done in a feasible manner and to develop detailed project budgets and impact projections in order to secure funding.
- **Create preliminary project structures and concept notes with the target funder's requirements in mind.** Funder requirements differ with private sector funders often assessing a project based on financial return and innovativeness, while public sector funders look at community and political support and minimizing negative externalities. Determining the target funder(s) at the start can help design a project to meet their needs.

Conclusion

The SUED Programme demonstrated the critical need for sustainable, climate-resilient urban development at the municipal level in Africa. The investment attraction work OCA was able to lead as part of SUED will result in a total of ~GBP 5.3 million raised and an estimation of ~10,000 jobs created, in addition to significant climate gains. It also resulted in many important learnings that can improve future investments in similar areas in Kenya and across Africa. There is a growing need for these interventions as climate change threatens Africa and especially large population inflows strain urban infrastructure. We believe development partners and governments have an opportunity to achieve important outcomes and leverage substantial commercial capital if blended finance programmes such as SUED are leveraged in future.

² The Standard. Isiolo's Sh800m project damaged by floods, 2015. [Link](#)