

Sustainability of AAAP Results in Kenya

**ARCAN MEL Unit Midline
Evaluation Phase 2 Case Study**

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1.0 Executive Summary

This case study examines how the Africa Adaptation Acceleration Programme (AAAP), implemented by the Global Center on Adaptation (GCA), is contributing to the sustainability of results through a partnership with the University of Nairobi (UoN) in Kenya. It explores the effectiveness of nationally led delivery approaches, and the enabling conditions for embedding climate-risk management in policy, planning and financing systems. While this delivery model represents one component of AAAP's broader portfolio, it provides valuable lessons for country-led implementation and the transition from analysis to investment. The study forms part of the midline evaluation of FCDO's Africa Regional Climate and Nature (ARCAN) programme and explores how GCA's learning-by-doing approach has supported national institutions, what factors enable or constrain sustainability, and what lessons can inform the next phase of AAAP (AAAP 2.0).

1.1 Purpose

Kenya was selected as a case study to examine how GCA's country-level approach under the AAAP promotes sustainability through systemic partnerships with national institutions. The partnership with the UoN offered an example of how adaptation was being embedded at multiple levels – academic, governmental, and financial – and how capacity building and other mechanisms contribute to sustained outcomes.

Building on early evidence from interviews with GCA of strong institutional engagement in the Kenya country window of AAAP, the evaluation team conducted in-country data collection in September 2025 to identify how GCA's learning-by-doing approach had been operationalised and whether it had led to durable outcomes, particularly institutional change. Triangulated evidence, from interview and documentary data, suggests that the GCA-UoN collaboration produced tangible results, including the Kenya Infrastructure Resilience Roadmap¹, strengthened national capacity, and enhanced collaboration among agencies such as the Kenya National Highways Authority (KeNHA), Kenya Railways Corporation (KRC), and Kenya Meteorological Department (KMD) while linking to AAAP's broader work on infrastructure and climate finance.

1.2 Key Findings

The evidence shows that GCA's emphasis on learning by doing and participatory engagement has enabled national institutions to take greater ownership of adaptation work, strengthened local technical capacity, and generated credible signals of institutional sustainability. The partnership with UoN demonstrates that national academic institutions can lead complex analytical and training activities when predictable support and structured collaboration frameworks are in place.

Progress, however, remains partial: many gains are project-based, reliant on external funding, and sustained by individual champions. Embedding these results within government systems and securing financial continuity will be essential for long-term impact.

Together, these findings highlight both the progress achieved and the areas where further institutional embedding and financing continuity are needed. The main findings are summarised below.

- **Locally led delivery works:** In practice, the partnership was effective because UoN shaped agenda-setting, brought locally grounded legitimacy to stakeholder engagement, and navigated institutional dynamics that external actors could not easily access. Early technical collaboration with the Oxford Infrastructure Analytics (OIA) team complemented UoN's leadership of the

¹ The roadmap aims to provide a structured framework for integrating climate resilience into national infrastructure planning, emphasizing risk-informed investments, capacity-building, multi-stakeholder collaboration, and data-driven decision-making (UoN, 2025).

climate risk analytics, while UoN's professional networks and staff continuity supported data sharing and active co-production with agencies across government. This allowed adaptation approaches to be embedded within existing planning processes and strengthened capabilities that can outlast the two-year project window, although sustained progress will depend on longer-term financing and institutional incentives. The experience reflects wider evidence from ODI, IIED and OECD that locally led models are most successful when domestic institutions direct the process, broker relationships and drive iterative learning².

- **Early signals of sustainability are evident:** Beyond strengthened technical capability, early signals of genuine impact are emerging. UoN-supported expertise has contributed to the development of new climate-resilient investment proposals (including inputs into an Equity Bank climate resilience finance project concept) and is informing innovation-oriented adaptation investments (including digital climate-risk monitoring tools for bridge condition and resilience, developed through a climate risk innovation prize and subsequently contracted by the Kenya Rural Roads Authority). National agencies such as KeNHA, KRC and KMD have begun to apply GCA-UoN tools in their own planning processes and have requested continued technical engagement. These examples suggest that skills and practices cultivated under AAAP are now shaping real investment decisions and sectoral processes.
- **Sustainability remains partial:** Results to date are still project-based, funding-dependent, and champion-driven, underscoring the need for deeper institutional embedding and financial continuity. Champions help sustain momentum through cross-departmental engagement, informal peer networks and active use of platforms such as WhatsApp and LinkedIn to maintain communication with sectoral peers between events; participation in learning exchanges has also broadened their buy-in. However, their influence is ultimately constrained by mandates and budget allocations. Long-term durability will depend on financing and on whether domestic systems and future investment (e.g., Roadmap projects moving to implementation) create sustained demand for the skills and approaches developed.
- **Participatory design strengthened trust and data exchange:** Participatory design was possible not only because UoN is a domestic institution, but because it brought a combination of established professional networks, technical credibility, and continuity of staff that government agencies trusted. Earlier analytical and capacity-building support from OIA helped create the conditions for UoN-ICCA to assume this role credibly and adapt tools to the Kenyan context. UoN's familiarity with institutional processes, its reputation across relevant agencies, and its institutional interest in co-producing knowledge and getting research into practice meant it was well-placed to enable stakeholders to help shape training priorities and analytical methods. These factors increased ownership and led agencies to share data that would not typically be accessible to external actors, thereby improving the quality of the UoN-led analysis.

Partnerships generated relational efficiency³ and coherence: The GCA-UoN partnership drew on prior technical collaboration with the OIA team including on earlier Roadmap work in Ghana and Bangladesh. Together, the partnership combined complementary technical expertise with UoN's national networks and contextual understanding, supporting early trust-building, smoother data exchange and more coherent cross-sector engagement than would likely have been achieved through an internationally led model alone. The ability of UoN to convene agencies as peers, together with GCA and OIA's methodological stewardship, created a more connected operating environment for adaptation planning. This reflects wider evidence that locally led delivery can generate relational efficiencies by improving coordination and reducing transaction costs⁴.

² For example evidence reviewed from the following key publications: ODI, 2025; IIED, 2021; OECD, 2024.

³ The term relational efficiency is used here to describe process-level efficiency gains that arise from trust-based, locally anchored collaboration. It refers to improvements in coordination, communication, and decision-making that reduce transaction costs and delays, complementing the OECD DAC definition of efficiency as the extent to which resources (funds, expertise, time) are converted into results (see OECD/DAC (2019), Glossary of Key Terms in Evaluation and Results-Based Management). Similar concepts are discussed in Booth and Unsworth (2014), Politically Smart, Locally Led Development. ODI. and; OECD (2023), Applying a Systems Approach to Development Cooperation

⁴ OECD DAC (2023); ODI (2021); GCA (2021)

Following the key findings listed above, the **main recommendations** from this case study are:

1. Domestic institutions can lead effectively, but need sustained support;
2. Support the move from investment priority setting to implementation;
3. Participatory design should remain a core feature of AAAP;
4. Efficiency gains of the locally-led model are plausible but need verification;
5. Learning by doing should be coupled with systemic embedding of learning;
6. Partnership management needs clearer frameworks;
7. Governance engagement could be broader and better evidenced;
8. Financial institutions show promise for longer-term impact through adaptation lending.

Across these recommendations, three cross-cutting priorities emerge for AAAP 2.0 and FCDO's future programming:

1. Consolidate domestic leadership by resourcing universities and national partners that can sustain knowledge and skills beyond project cycles.
2. Facilitate the move from analysis to policy and financing integration, ensuring that investment Roadmap outputs and similar studies inform national investment planning.
3. Track and learn systematically from different delivery models to strengthen efficiency, value for money, and the sustainability of results across AAAP countries.

1.3 Implications for GCA and FCDO

The Kenya experience demonstrates that GCA's learning-by-doing partnerships can accelerate adaptation capacity when anchored in domestic systems and linked to national planning. The UoN collaboration demonstrated how local institutions can sustain training, analysis, and coordination beyond external funding. For GCA, and their AAAP 2.0 strategy, this suggests the value of formalising such institutional roles within programme design and aligning Roadmap outputs with concrete investment pipelines. For FCDO and other funders, the priority could be to scale these domestic delivery models, support regional peer exchange across universities and government agencies, and invest in tracking how early signs of institutional change evolve into long-term resilience outcomes.

2.0 Introduction

2.1 Purpose and Scope of the Case Study

Kenya was selected as a case study to examine how GCA's country-level approach under the AAAP promotes sustainability through systemic partnerships with national institutions. The case study forms part of the mid-term evaluation of the ARCAN programme, commissioned by the UK's FCDO. The evaluation assesses progress across ARCAN's five thematic pillars and generates actionable learning on how the programme can deliver sustainable and scalable outcomes in a changing funding landscape.

The study examines the sustainability of results achieved under the AAAP implemented by the GCA within ARCAN's Climate Finance Pillar. Kenya was selected as a case study because of early signs of sustained outcomes and evidence that GCA's learning-by-doing approach was contributing to institutional change.

The case focuses on GCA's partnership with the UoN, which provides a valuable learning opportunity for FCDO under ARCAN. Although this partnership is wholly funded by Norad, it offers insights highly relevant to ARCAN's priorities. The 2025 ARCAN Annual Review called for greater African ownership, stronger national systems, and more sustainable outcomes beyond donor funding. By analysing how – and to what extent – this partnership has embedded adaptation capacity within national institutions, the case study contributes directly to this agenda and to the evaluation's objective of identifying how UK investments can strengthen resilient, country-led systems for climate and nature action across Africa.

The GCA-UoN partnership, as confirmed through the 'Collaboration Agreement on Enhancing and Scaling Up Climate Adaptation for Resilient Infrastructure in Kenya and the East African Region between the Global Center on Adaptation and the University of Nairobi', had an execution period from July 2022 until December 2024 with a three-month no-cost extension to March 2025. The partnership consisted of a subgrant from GCA to the UoN, for the amount of 1,200,000 EUR, to be spent on direct and indirect costs related to the execution of the project.

The GCA and UoN partnership was organised under four project components: 1) National Infrastructure Risk and Resilience Assessment; 2) Infrastructure Asset Resilience Accelerator; 3) Masterclass on Climate Resilient Infrastructure PPPs; 4) Disruptive technology for climate resilient infrastructure:

- **Component 1, National Infrastructure Risk and Resilience Assessment**, set out to ensure that resilient assets translated into resilient services through taking a systems approach in analyzing climate impacts. Led by the UoN's Institute for Climate Change and Adaptation (ICCA), this involved using high-resolution spatial data to **identify national-level adaptation needs, across four sectors, to inform downstream investments from the government and development partners**. It was underpinned by three main elements: 1) mainstream resilience and develop a roadmap with a pipeline of infrastructure investments in Kenya; 2) mobilize investments for climate adaptation in Kenya and 3) leverage Kenyan expertise to establish networks of innovation on resilience infrastructure. Findings informed the critical infrastructure assets selected for Component 2.
- The purpose of **Component 2, Infrastructure Asset Resilience Accelerator**, was to **support the MDBs to incorporate physical risk data into investment decisions for infrastructure projects in Kenya and the East Africa region**. A team of UoN ICCA post-doctoral researchers deepened the climate risk analysis conducted under Component 1 to narrow down on a few select critical infrastructure assets particularly vulnerable to climate hazards. These were selected in collaboration with key institutional actors based on the findings of Component 1 including a critical road (Nairobi-Mombassa Highway) and a critical railway project (SGR Phase 1 Nairobi-Naivasha line and subsequently Phase 2b Naivasha-Kisumu line). The work under the GCA-UoN partnership's Component 2 is thus most in line with the majority of AAAP's work under its Infrastructure and Nature-based Solutions Pillar, i.e. focused on upstream influencing of infrastructure investments, of which the downstream (resilience) effects will only be established upon their actual implementation⁵. The role of the UoN was to provide expert support on climate risk modelling and engineering threshold analysis, facilitating national and local engagement, including on data collection where required, and supporting climate risk dialogues.
- **Component 3 - Masterclass on Climate Resilient Infrastructure PPPs** adapted GCA's global Masterclass for the Kenyan context. Delivered jointly by UoN, GCA and the PPP Directorate in the National Treasury, it provided a four-day, nine-module programme including an experiential learning excursion. Toward the end of the project, the partners also drafted an institutionalization strategy to guide how the Masterclass could be sustained within UoN.

⁵ The fact that the downstream effects of AAAP's work can only be established upon the actual implementation of the investments AAAP targets through its upstream influencing is confirmed its own results reporting also: 'GCA achieves its intended outcomes and impacts when these investments are implemented with GCA's adaptation solutions' (the Africa Adaptation Acceleration Program Upstream Financing Facility 2025 Semi-Annual Results Report, p. 91).

- **Component 4, Disruptive Technology for Climate Resilient Infrastructure**, set out to leverage existing innovation prizes facilitated in the UoN system (i.e., its Communication for Development Network, 'C4D Challenge') to strengthen the role of asset management and maintenance in the resilience of transport systems.

According to the Collaboration Agreement, the UoN was selected to lead the partnership due to it being a 'pioneer institution of university education in Kenya and the region'⁶, with its Institute for Climate Change and Adaptation (ICCA) having been established to conduct research and provide policy advice on climate change and adaptation, stimulate knowledge exchange on these themes and offer professional short courses for public and private climate change and adaptation actors. In addition, the Agreement mentions the project to build on the expertise of the UoN's Computing for Development (C4D) Lab, set up to produce and facilitate innovative technological solutions for societal issues, and Faculty of Engineering, of which infrastructure development is a key research area, also.

The Agreement confirms GCA's and UoN's 'shared priorities on adaptation'⁷, based upon which they jointly seek to scale up adaptation in Kenya and the East African region more widely. In addition, the Agreement mentions the partnership being able to leverage the expertise from three additional institutions associated with the UoN as well, i.e. i) the Kenya Meteorological Department (KMD), providing weather and climate information for protection, conservation and development purposes within Kenya; ii) the IGAD Climate Prediction and Applications Centre (ICPAC), providing climate services to 11 East African countries and iii) the Oxford Programme for Sustainable Infrastructure Systems (OPSIS). Arguably, however, the connection with OPSIS (and particularly, the OPSIS-formed OIA) in this regard has been established by GCA rather than the UoN, amongst others in the context of the work GCA and OPSIS/OIA did in Ghana and Bangladesh together previously.

Apart from the above rationale, the Collaboration Agreement, nor any other project or programme documentation reviewed in the context of this case study contains specific information on the process of or reasons for selection of the UoN as the lead partner of the GCA-UoN partnership. If and how capacity and interest for this type of work were assessed within the UoN, and within the Kenyan context more widely (e.g. with the GoK) is unclear, nor is it known whether and to what extent the capabilities of the UoN have been compared with those of e.g. other Kenyan universities who might have been well-positioned to lead on this partnership also. As such, whereas the GCA-produced Collaboration Agreement describes the UoN's suitability as lead partner from a technical and institutional perspective, their relative suitability for this role vis-à-vis other potential partners and/or whether the partnership followed an explicit needs- and interest identification process cannot be established based on the available evidence.

In addition to the GCA-UoN partnership, the case study also drew on limited but complementary data from other AAAP projects to enrich and triangulate the analysis. These included:

- Enhancing Direct Access to GCF funding for Equity Group to Scale MSMEs Adoption of Climate Technologies in East Africa – implemented under AAAP Pillar 5 (Climate Finance and Policy)
- Kenya–South Sudan Link Road Upgrading (AfDB) – implemented under AAAP Pillar 2 (Infrastructure and Nature-Based Solutions)
- PPP Kenya Nairobi–Mombasa Expressway Project (KeNHA)– implemented under AAAP Pillar 2 (Infrastructure and Nature-Based Solutions)
- Ghana Resilient Infrastructure Roadmap (National Infrastructure Risk and Resilience Assessment) – implemented under AAAP Pillar 2 (Infrastructure and Nature-Based Solutions)

Insights from these complementary projects, together with interviews with national and regional champions conducted during the evaluation, helped to contextualise the findings on the GCA-UoN

⁶ Collaboration Agreement on Enhancing and Scaling Up Climate Adaptation for Resilient Infrastructure in Kenya and the East African Region between the Global Center on Adaptation and the University of Nairobi, 07 July 2022.

⁷ Ibid.

partnership and reinforce emerging evidence on how national institutional leadership and system partnerships contribute to the sustainability of adaptation outcomes⁸.

Generally, it is worth noting that relatively less evidence has been collected on the asset-level initiatives listed above than on the GCA-UoN partnership overall, particularly in the context of the in-country interviews. Whereas the case study team has reviewed the GCA-produced documentation in support of these asset-level initiatives and they have formed part of the interviews with GCA informants, Kenyan stakeholders interviewed were generally less familiar with these initiatives than with the overarching GCA-UoN partnership, and its Roadmap and Masterclasses components in particular. This seems to suggest there might have been a stronger emphasis on these elements of the partnership than on its asset-level components throughout implementation, however, individual familiarity with these various (sub)components related to the specific position an interviewee holds within the organisation concerned, might also play a role.

In sum, the GCA-UoN partnership has formed the main focus of the Kenya case study due to the opportunity it provides to research GCA's country-led, learning-by-doing approach in practice, with the majority of evidence collected focusing on its particular effects in the context of the partnership's Roadmap and Masterclasses components.

2.2 Evidence Gap and Learning Focus

The case study offers a targeted contribution to the evidence gap identified in Phase 1 of the ARCAN Midline Evaluation on the sustainability of AAAP outcomes. By exploring the GCA-UoN partnership in Kenya (an intervention type with strong assumptions on long-term impact) it provides illustrative evidence on mechanisms that underpin more sustainable results. It explores this question through the lens of GCA's Infrastructure and Nature-Based Solutions pillar, using Kenya as an opportunity to test a hypothesis first articulated in the Ghana Roadmap Project; namely, that climate adaptation outcomes are more likely to endure when implemented through domestic institutions. The study therefore examines how AAAP activities in Kenya have strengthened national systems and adaptive capacity, focusing on three objectives:

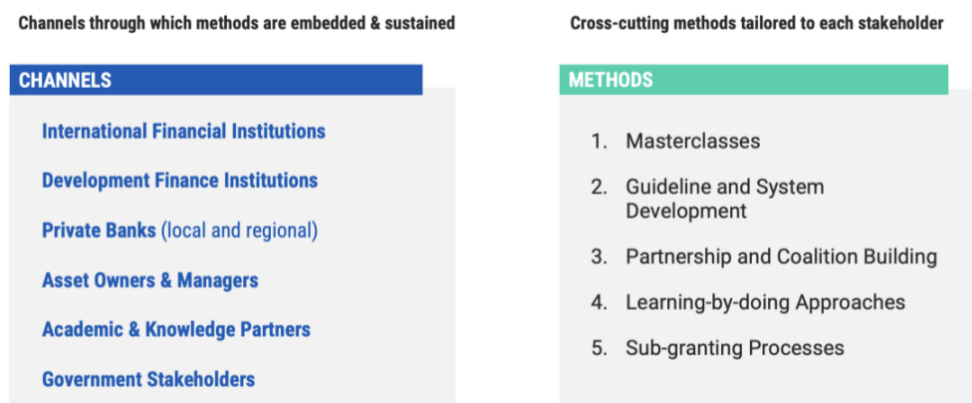
1. To assess how AAAP interventions contribute to sustainability within national institutions;
2. To analyse how capacity-building, training, and academic partnerships are taken up and applied in practice; and
3. To identify the factors that enable or constrain lasting and transformational impact, with lessons to inform the design and delivery of AAAP Phase 2 (AAAP 2.0).

Focusing on the GCA-UoN partnership as a particular example to illustrate the likelihood of sustainability of AAAP outcomes, the case study is well-aligned to and provides relevant evidence in the context of GCA's overall sustainability strategy. GCA's strategy 'departs from the understanding that sustainability lies in tailoring methods to stakeholders and anchoring learning in operational systems', through five primary methods directed at six main channels through which these are to be embedded and sustained. The below figure summarises the above through a visual representation of GCA's 'Sustainability and Capacity Building Strategy'⁹:

⁸ The term systemic partnerships is used here to describe collaborative arrangements that engage multiple, interconnected institutions within a system (e.g., government ministries, universities, development banks, and private actors) to jointly plan, implement, and sustain adaptation action. This usage draws conceptually on systems approaches to institutional strengthening and whole-of-government collaboration in climate and development programming (see OECD DAC (2023) Applying a Systems Approach to Development Cooperation; UNDP (2022) Institutional and Context Analysis Guidance Note; and GCA (2021), State and Trends in Adaptation Report: Africa 2021).

⁹ The Africa Adaptation Acceleration Program Upstream Financing Facility 2025 Semi-Annual Results Report, p. 5-6.

Figure 1: GCA's Sustainability and Capacity Building Strategy



In that context, the GCA-UoN partnership provides a particularly insightful example, as a multi-institutional partnership enabled by a sub-granting process, based on a learning-by-doing approach that envisages to contribute to guideline and systems development, the provision and replication of masterclasses and further partnership and coalition building among IFIs, DFIs, private banks, asset owners and managers and government stakeholders – all facilitated by a local academic partner¹⁰. As such, the GCA-UoN partnership provides an example that covers the majority of both the methods and channels that constitute GCA's overall sustainability strategy, thus generating evidence relevant to the assumptions underlying the strategy more widely.

The case study is informed by the principles of Locally Led Adaptation (LLA), which GCA has endorsed as a guiding framework for strengthening ownership, participation, and institutional capacity in adaptation planning and delivery¹¹.

2.3 Analytical Framework and Methodology

The analysis used an Evaluation Matrix as its guiding frame (see Annex 5). This reflected the Midline Evaluation Questions (EQs), OECD DAC evaluation criteria, and ICF KPI 15 methodology on transformational change, which was adapted for the case study through a Signals of Transformational Change Framework developed for AAAP. A light-touch outcome-harvesting approach was used to identify illustrative examples of change, clustered under four sustainability mechanisms - capacity and capabilities, innovation and incentives, replicability and scalability, and sustainability – aligned with the transformational change criteria set out in the Framework.

3.0 Findings

The case study provides evidence of how AAAP's upstream model can contribute to durable outcomes in practice. The analysis highlights the role of strengthened domestic leadership in improving the contextual relevance, ownership, and use of the Infrastructure Resilience Roadmap outputs, building on earlier capacity-building support. Findings were reviewed against GCA's emerging organisation-wide impact pathways to support learning under the AAAP 2.0 strategy. This points to strong contributions

¹⁰ The centrality of locally-led delivery to the sustainability of AAAP results is confirmed by the external evaluation of the AAAP UFF conducted by the Boston Consulting Group in August 2025, which states that 'AAAP's intentional integration of local stakeholders in project delivery helps drive sustainability beyond the UFF's support...The consistent use of training modules, masterclasses, and partnerships with local institutions – including universities and national agencies – has enhanced ownership and continuity' (p. 16).

¹¹ Global Commission on Adaptation (2021) Principles for Locally Led Adaptation Action: Statement for Endorsement.

in areas such as decision-making, project design, capacity-building and financial prioritisation, alongside weaker or less mature effects related to policy influence, institutional practices and sequencing over time. The outcome stories below illustrate these patterns and provide concrete evidence of the sustainability of results under the AAAP Kenya window.

3.1 Relevance (Midline EQ3; Case Study EQ3)

AAAP's activities in Kenya were highly relevant to national adaptation priorities. The programme directly supported the Government of Kenya's goal of mainstreaming climate resilience into infrastructure development, as set out in the National Climate Change Action Plan (NCCAP 2018–2022), the Vision 2030 infrastructure pillar, and the Fourth Medium-Term Plan. Documentary evidence confirmed that these frameworks all emphasise the need for data-driven risk analysis and climate-proofing of critical infrastructure. Furthermore, the GCA-UoN partnership strengthened technical and institutional capacity for climate-risk assessment, which was an explicit need identified in the National Adaptation Plan (NAP 2015–2030). By developing the Kenya National Roadmap for Enhancing and Scaling Up Climate Adaptation for Resilient Infrastructure the collaboration helped operationalise national commitments to climate-proof critical infrastructure and provided tools for evidence-based investment planning.

Documentary review of GCA's AAAP Strategic Framework (2021-2025) and FCDO's ARCAN Business Case also confirmed strong alignment with donor priorities to strengthen national systems, promote country ownership, and enable systemic partnerships that connect domestic institutions with multilateral and academic expertise.

Implementing institutions such as the Kenya Railways Corporation (KRC) and the Kenya National Highways Authority (KeNHA) were encouraged by UoN to define their adaptation priorities and technical needs. This participatory approach, led by a domestic institution familiar with the national planning environment and operating within a wider systemic partnership involving GCA and international experts, helped ensure that project activities (particularly the masterclasses and technical trainings) were grounded in real institutional realities and national systems.

Interviewees described the project as distinct from externally driven initiatives, noting that its participatory design made engagement more meaningful. Consequently, the domestic-led model enhanced ownership and motivation among participants.

The Kenya case demonstrates how locally anchored delivery can improve both immediate relevance and long-term sustainability of results. The approach provides preliminary evidence consistent with the hypothesis first proposed in the Ghana Roadmap Project, suggesting that delivery through national institutions can strengthen the prospects for sustained outcomes. However, further comparative analysis would be required to assess the relative influence of this factor across different country contexts.

Outcome story 5.1a: Masterclasses and training events

AAAP's masterclasses and technical trainings in Kenya were well aligned with national priorities for building climate-risk management and investment planning capabilities. Representatives from KRC, KeNHA, KMD and other institutions emphasised that the content directly addressed operational needs (particularly climate-resilient infrastructure design, PPP structuring and cost-benefit analysis of adaptation options). Participants consistently described these masterclasses as more responsive and contextually relevant than other trainings they had attended, largely due to their participatory design.

This relevance reflected the complementary roles played by UoN and GCA. UoN brought domestic legitimacy, professional networks and practical insight into how Kenyan agencies work, enabling it to shape agendas, tailor discussions and convene peers as trusted interlocutors. GCA and OIA provided methodological stewardship and ensured technical rigor. UoN also saw the programme as contributing to several of its institutional objectives including its key results areas and/or agendas on research and community service, sustainability, African leadership development and green jobs,

which strengthened its incentive to deliver a programme that responded closely to national needs¹. Together, this configuration created a training model that stakeholders perceived to be both internationally credible and domestically grounded, bridging gaps between academia and the public and private sectors.

While the masterclasses successfully raised awareness and built short-term capacity, their longer-term relevance will depend on how far the knowledge becomes embedded within institutional processes. This will require follow-on, sector-specific and more bespoke trainings (now in demand among participating agencies including the sectoral agencies for road and rail) as well as the development of national guidelines to mandate the application of this knowledge and good practice, including in the structuring of PPPs to mainstream climate resilience into infrastructure planning and delivery. In response, UoN, GCA and the PPP Directorate (of the National Treasury) co-developed an Institutionalisation Strategy in late 2024, proposing to embed the programme within UoN's ICCA and deliver it commercially through the UoN's commercial arm (UNES Ltd), with potential IFI endorsement to support sustainability¹.

Outcome story 5.1b: Participant-led project design

The participant-led design of activities under the GCA-UoN partnership created strong incentives for engagement and ownership, as participants felt directly responsible for the results achieved. Interviewees consistently highlighted this participatory element as a key differentiator that enhanced both the credibility and perceived value of their engagement in project activities.

In collaboration with the Government of Kenya and key national stakeholders, the UoN developed and applied advanced geospatial tools to assess climate risks across four infrastructure sectors (transport, energy, water, and information and communications technology) and produced an evidence-based portfolio of adaptation solutions to strengthen systemic resilience. This analytical work included climate stress-testing of national infrastructure networks to quantify potential consequences of physical climate risks, such as direct damages and indirect service disruptions, and to identify priority adaptation investments.

The National Roadmap for Enhancing and Scaling Up Climate Adaptation for Resilient Infrastructure was developed through this multi-sectoral process, which engaged over 50 participants from 21 ministries, agencies, and organisations. Stakeholders interviewed for this case study noted that the participatory and demand-driven approach increased their confidence in the analytical outputs and the relevance of proposed adaptation actions. The process also motivated sectoral agencies to share critical datasets with UoN - an essential factor enabling cross-sectoral climate-risk analysis and ensuring that the resulting priorities aligned with national strategies, including Kenya Vision 2030 and the NAP. The prioritised adaptation investments were subsequently incorporated into the Roadmap, with the intention of informing the investment pipelines of financial institutions and other financing partners.

Summary: The GCA-UoN partnership achieved a high degree of relevance by aligning activities with national adaptation priorities, embedding delivery within a trusted domestic institution, and empowering local stakeholders to shape implementation. The Kenya experience shows that locally led, participatory approaches enhance the contextual fit, ownership and perceived usefulness of programme results. However, the evaluation identified a continued need to embed training and analytical approaches within national systems to ensure sustained application. Relevance could be further strengthened by institutionalising training content within national systems and by leveraging UoN's policy networks to promote the formal uptake of project outputs across ministries, agencies and training institutions.

A good entry point would be to build on the one-day stakeholder dissemination workshop for the National Roadmap for Climate Resilient Infrastructure (March 2025) to¹²:

- Disseminate the Roadmap's findings and strategic priorities for integrating climate adaptation into infrastructure development to all relevant stakeholders;
- Foster dialogue on sector-specific adaptation challenges and solutions, to ensure that climate resilience is mainstreamed in infrastructure planning;
- Strengthen national ownership and policy alignment of identified adaptation strategies; and
- Identify pathways to embed and mainstream priority adaptation solutions into infrastructure planning and development.

Stakeholders noted that while UoN is well placed to lead domestic convening and follow-on dialogue, GCA will continue to play a role such as informing the timing and strategic framing of these engagements, given its higher-level relationships with government counterparts, IFIs and investors.

3.2 Efficiency (Midline EQ8; Case Study EQ5)

The replication of an existing project model from Ghana and Bangladesh to Kenya represents an adaptive and resource efficient approach. By placing the UoN in the lead role (supported by the OIA team during the initial phase), the project worked towards reducing dependency on fully international delivery and began embedding technical expertise within a domestic institution. This systemic partnership enabled knowledge transfer and increased the likelihood of capacity retention in Kenya beyond the project timeframe, creating the foundations for UoN to replicate similar analyses independently across East Africa.

Quantitative cost data available are limited, i.e. the total value of the GCA-UoN partnership is 1,200,000 EUR with 1,121,495 EUR of those being direct costs and 78,505 EUR being indirect costs in the form of a 7% management fee for UoN¹³. Whereas these do stipulate e.g. personnel costs for the period overall, what these translate into in terms of days/hours worked is not included, so that day rates for the respective positions are unclear. Nevertheless, interview evidence suggested process efficiencies; including faster stakeholder engagement, smoother data sharing, and greater institutional ownership, stemming from UoN's legitimacy and established networks. These relational efficiencies indicate that any future cost-effectiveness gains are more likely to derive from sustained institutional capacity and reduced need for external support than from immediate reductions in delivery costs.

Partnership management provided mixed lessons for efficiency. During the early stages of implementation, GCA's initial confidence in managing the Roadmap project with UoN alone delayed the involvement of OIA-University of Oxford, creating short-term inefficiencies. This stemmed from OIA being brought into the process only after the project had already started, even though OIA's technical support was essential to achieve the required analytical depth (capacity that UoN was still developing at the time). Once collaboration was re-established, the partnership proved productive, blending international expertise with domestic leadership.

While specific contracting details were not available for the evaluative case study, stakeholders interviewed described the arrangement as an effective example of system partnership, where complementary roles were gradually clarified to balance technical quality with national ownership. This experience underlines the importance of clear partnership protocols, communication, and early role definition to maximise efficiency and sustain constructive relationships with technical partners whose expertise may be needed again in future phases.

¹² Enhancing and scaling up climate adaptation for resilient infrastructure: National Road Map Dissemination Workshop. March 2025.

¹³ Collaboration Agreement on Enhancing and Scaling Up Climate Adaptation for Resilient Infrastructure in Kenya and the East African Region between the Global Center on Adaptation and the University of Nairobi, 07 July 2022.

In contrast, AAAP's work under the Finance Pillar, supporting Equity Bank's accreditation to the GCF necessarily relied on international consultants with highly specialised expertise that is not typically available within commercial banks. This approach was therefore appropriate and efficient for its purpose. While capacity building was not an explicit objective of this component, staff at Equity Bank nonetheless developed a stronger understanding of GCF processes and climate finance mechanisms through their cooperation with the consultants. There may have been scope for more direct capacity-building; however, the banks noted that they do not plan to lead this type of work in future. Any further support in this area would therefore need to be demand-led and assessed on a case-by-case basis. This illustrates that international technical assistance can contribute to efficiency and sustainability when it builds institutional knowledge and positions national actors to engage directly in global climate finance processes.

Outcome story 5.2a: Replication of the UoN model (Efficiency lens)

Replicating the OIA model drawing on lessons from Ghana and Bangladesh, GCA's decision to adopt a nationally led approach in Kenya was based on the assumption that this model would produce both more effective and efficient outcomes over time. Replicating with the UoN as the lead partner enabled the production of comparable technical outputs while simultaneously strengthening national capacity. Stakeholders noted that this arrangement improved contextual relevance, accelerated problem-solving, and positioned Kenyan academics to deliver future trainings independently.

Although no cost verification has yet been undertaken, qualitative evidence indicates that the model offers theoretical efficiency gains by combining immediate delivery of analytical outputs with the creation of in-country expertise that can reduce the need for outsourced consultancies in future. Training and analytical work e.g., spatial climate risk analytics previously undertaken by international experts are now increasingly led by UoN researchers, embedding skills and institutional knowledge within Kenya's systems. This shift suggests that efficiency and sustainability can be mutually reinforcing when local institutions are empowered to lead – though actual cost savings will depend on the extent to which UoN independently applies and replicates this model further.

A further indication of efficiency through resource mobilisation was seen after the completion of the GCA funding, when UoN continued to invest its own resources to retain two post-doctoral researchers in honorary positions. Although unpaid, these roles enable UoN to maintain in-country capacity and readiness to capitalise on future commercial or research opportunities. This demonstrates that efficiencies generated through capacity-building can translate into continued institutional investment, even beyond the project's formal financing period.

Outcome story 5.2b: Reliance on international consultants

In some specialised areas, particularly under AAAP's Finance Pillar, international expertise remained necessary. The component supporting Equity Bank Group's accreditation to the GCF relied on international consultants experienced in the GCF process - experience that was not readily available within the bank. While the evaluation could not verify whether similar skills might have been sourced from Kenyan or regional providers, this approach was assessed as appropriate given the high technical standards required for GCF accreditation and concept note development.

Although capacity building was not an explicit objective of the assignment, in interview, Equity Bank staff reported gaining a stronger understanding of GCF processes and climate finance mechanisms through collaboration with the consultants. This demonstrates that international technical assistance can contribute to efficiency and sustainability when it transfers knowledge and builds procedural capacity, positioning domestic actors to engage more directly in global climate finance processes over time.

Summary: Efficiency in the Kenya case was enhanced in theory through a domestic-led delivery model that combined global technical input with national leadership. This approach used resources strategically, developed national capacity, and created the potential to reduce dependence on external support in future. However, most evidence reflects perceived or prospective efficiency gains rather than verified cost reductions, as these outcomes will depend on the extent to which strengthened capabilities can outlast the two-year project window. UoN and its partners will need to continue to apply and replicate the model independently whilst sustained progress will depend on longer-term financing and institutional incentives.

Where international consultants remained involved, their involvement added value by maintaining technical quality and facilitating skills transfer with national institutions. Overall, the case suggests that locally led, system-anchored delivery can promote relational and process efficiency, balancing short-term and operational trade-offs with longer-term gains in institutional capacity, ownership, and value for money.

3.3 Effectiveness (Midline EQ2; Case Study EQ2 & EQ4)

AAAP has made notable progress in strengthening the effectiveness of Kenya’s institutions to mainstream adaptation into operations. Documentary evidence and stakeholder interviews confirm tangible shifts in institutional capability and confidence. The UoN transitioned from reliance on international partners to taking on a leadership role; KeNHA began applying climate risk analytics in infrastructure planning; and Equity Bank advanced its accreditation process with GCF. The KMD also enhanced its profile and credibility as a provider of climate data, with implementing agencies beginning to recognise the value of such data for planning and maintenance. These developments illustrate the effectiveness of AAAP’s interventions, reflecting tangible shifts in institutional behaviour and awareness.

Effectiveness has been driven largely by GCA’s learning-by-doing model, which positioned UoN at the centre of a systemic partnership linking government, academia, and international experts. The model created incentives for collaboration through shared problem-solving, co-delivery of technical trainings, and joint development of analytical tools, translating upstream learning into early operational uptake. Effectiveness remains partial, however: climate resilience and adaptation solutions are still at concept stage, and some government agencies involved in the masterclasses have yet to embed new approaches into internal systems. This reflects the project’s upstream focus and short implementation horizon rather than weaknesses in its design.

Outcome story 5.3a: UoN post-doctoral researchers assuming leadership

A key outcome of the Kenya project was the progressive handover of technical leadership from OIA-University of Oxford to UoN post-doctoral researchers. By the end of the GCA-UoN project in early 2025, these researchers said they felt confident to deliver trainings independently and expressed (in interviews for this case study) readiness to extend support to other East African universities, creating the basis for a “train-the-trainer” model. This is encouraging for the practical implementation of the university’s Institutionalisation Strategy (mentioned earlier) which seeks to scale up and commercialise the expertise, generating revenue to sustain ongoing research. While this confidence signals growing autonomy, independent verification of technical quality was not feasible during the case study; however, corroborating interviews with implementing agencies such as KeNHA and KMD validated the relevance and quality of UoN’s work. This represents an early but credible example of how locally led implementation can convert technical assistance into autonomous institutional capacity. This outcome also reflects how OIA’s earlier support enabled UoN to transition into a leadership role, illustrating the conditions under which a domestic institution can credibly drive locally led delivery.

Outcome story 5.3b: KeNHA uptake of climate-risk analytics

Staff from KeNHA interviewed for this evaluation confirmed that they began to apply climate risk analytics in infrastructure planning, demonstrating initial behavioural change within a key public agency. Through the GCA-UoN partnership, several staff members from different KeNHA departments participated in masterclasses, peer-learning exchanges, and cost–benefit workshops that deepened their understanding of vulnerabilities and mitigation options across road networks. These activities helped shift mindsets from reactive maintenance to preventive, climate-informed design, and encouraged engineers to consider both traditional grey and nature-based solutions as viable adaptation options. For example, KeNHA engineers reported that, following the GCA-UoN training, they amended sections of their technical checklists to incorporate climate-resilient design metrics and used the GCA-UoN analysis to justify climate-resilient structural design choices to AfDB reviewers on the Lesseru–Kitale corridor. This illustrates how the training and analytical work have begun to inform real project decisions, even as broader institutionalisation (within national agencies) remains a longer-term process.

During interviews conducted for this case study, KeNHA officials highlighted that the UoN's leadership lent credibility and practical value to the process. As one participant noted:

“Anchoring the work in the university but linking it with industry meant the Roadmap became something implementable – not just an academic paper”.

Training larger groups across departments has helped spread awareness, yet mainstreaming remains at an early stage and is currently champion-driven. Although GCA-UoN purposefully invited a diverse group of several individuals (representing different gender and departments, for example) to participate in project activities – to mitigate the risk of staff turnover affecting sustainability of results – there remains a reliance on individual advocates. This continues to present a risk to sustained adoption underscoring the importance of embedding these practices within formal standards and budgets.

Outcome story 5.3c: Uptake of climate-resilient and adaptation solutions

Technical assessments under Component 2 of the GCA-UoN partnership generated evidence on the feasibility of integrating a range of climate-resilient and adaptation solutions (including nature-based and hybrid approaches) into infrastructure projects. These assessments informed the Kenya Infrastructure Resilience Roadmap, which reviewed existing policy, regulatory, and institutional frameworks supporting climate-resilient infrastructure. Documentary analysis of the Roadmap confirmed alignment with national frameworks (Vision 2030, NAP 2015-2030) but identified limited institutional procedures to operationalise them. Case study interviews with national agencies supported this finding: enabling frameworks exist, but structured institutional mechanisms are still emerging.

At the stakeholder dissemination workshop (March 2025), UoN leadership reiterated the importance of national ownership and policy alignment. The absence of dedicated budgetary commitments from ministries suggests that external facilitation will still be required in the short term, raising valid questions about sustainability and value for money. Continued engagement from UoN and GCA in convening actors and supporting policy translation will therefore be critical to embed Roadmap recommendations in practice.

The project also demonstrated early evidence of innovation uptake through the UoN's Communication for Development (C4D) Challenge, implemented under Component 4 (Disruptive Technology for Climate-Resilient Infrastructure). This innovation prize supported three youth-led digital solutions linking technology and infrastructure resilience, one of which has since secured a commercial contract with a Kenyan implementing agency (Kenya Rural Roads Authority) to deploy a digital climate-risk monitoring tool for bridge condition and resilience, enabling more proactive bridge maintenance. This outcome illustrates how AAAP's locally led, innovation-driven model can extend its influence into the private sector and stimulate domestic investment in adaptation solutions.

Outcome story 5.3d: Equity Bank Group engagement

Equity Bank staff benefited from AAAP masterclasses on PPPs and received direct technical support through E.Co on GCF accreditation and concept note development. As a result, the bank reported (during interviews) improved knowledge of GCF processes and climate finance more broadly, and successfully advanced and submitted its accreditation package and first concept note to the GCF. Although capacity building was not an explicit objective, staff reported greater confidence in navigating GCF requirements. Effectiveness will depend on how GCF accreditation enables additional climate finance to flow to Equity Bank Group as a climate finance recipient, and the extent to which this upstream capacity translates into climate-resilient financial products and services in future.

Outcome Story 5.3e: Kenya Meteorological Department's strengthened profile

KMD supplied climate data for physical-risk analytics, raising its profile and demonstrating the value of climate information for infrastructure planning and maintenance. Collaboration through the GCA-UoN partnership improved KMD's understanding of sector-specific data needs and highlighted where further capacity, such as validation of downscaled scenarios, is still required. Kenyan technical expertise, rather than northern partners alone, played an important role in conveying trust among agencies. Yet data collaboration remains project-specific: agencies still regard datasets as strategic assets linked to institutional status, limiting openness.

The Kenya experience shows that systemic partnerships can temporarily overcome such barriers but that formal data-sharing incentives and governance mechanisms will be needed to sustain progress.

Summary: AAAP's interventions in Kenya have delivered credible, intermediate outcomes reflected in stronger institutional capability, greater inter-agency collaboration, and growing confidence among domestic actors. The GCA-UoN model has proven effective in converting technical assistance into locally owned practice. Effectiveness now depends on institutionalising these practices – embedding them within policies, budgets, and data systems – to ensure that emerging results evolve into sustained institutional change. However, additional domestic financing and policy commitment will likely be required to achieve this.

3.3.1 Gender and Social Inclusion

Gender and inclusion considerations were incorporated into the Roadmap and project briefs; including informing assessments which considered different user groups of infrastructure types and the associated services. Presentations of assessment findings highlighted to audience groups the disproportionate impact of climate shocks on women and flagged opportunities to improve access to essential services and participation across project lifecycles. GESI themes were also addressed in training; the University team received training to integrate gender, climate, and infrastructure considerations (which was a new area to them) and the UoN integrated gender into the broader trainings delivered by the project, such as on PPPs.

Whilst gender is integrated into the Roadmap both quantitatively and qualitatively, GCA believe the work could go further by incorporating more concrete tools and data. Also, as delivery becomes increasingly locally led, partners such as UoN are well placed to identify context-specific social impacts, but continued attention to GESI in both analytical work and capacity-building will be important to ensure these dimensions are consistently addressed. Gender mainstreaming is seen as important for long-term sustainability and impact of the work.

3.4 Coherence (Midline EQ6; Case Study EQ3)

The Kenya case suggests a strong degree of coherence between the GCA-UoN partnership and Kenya's national adaptation priorities. Work under AAAP's Infrastructure and Nature-Based Solutions business line aligns with the National Climate Change Action Plan (NCCAP) and Vision 2030. Stakeholders described the Roadmap process as complementary to existing government strategies. UoN's leadership helped ensure the work was relevant, credible, and well-fitted to Kenya's institutional context.

3.4.1 Internal and operational coherence

Coherence within the partnership improved over time. GCA brought convening power, UoN provided local legitimacy, and OIA added technical depth. Early coordination challenges were resolved through clearer roles and more regular communication. The hybrid arrangement proved effective for complex adaptation analytics, which require both scientific rigour and understanding of local systems.

Links between AAAP's infrastructure and finance work also strengthened. For example, Equity Bank staff invited to attend masterclasses led by the GCA-UoN partnership informed dialogue within Equity Bank on future improvements to (climate-aligned) lending. This shows good internal coherence across GCA's portfolio, with activities under different pillars reinforcing each other.

3.4.2 External and policy coherence

Externally, coherence was strengthened by UoN's ability to act as a neutral broker between government, academia, and the private sector. Locating technical assistance in a trusted national institution ensured alignment with government priorities, while maintaining enough independence to engage a wide range of actors.

Cross-sector collaboration between the Kenya National Highways Authority (KeNHA), the Kenya Railways Corporation (KRC), and the Kenya Meteorological Department (KMD) during the Roadmap process illustrated how coherence can work in practice. Engineers and climate scientists jointly considered how climate data could support road and rail infrastructure design. These partnerships have continued since project completion. KeNHA later requested KMD's support in updating its road construction manual, while KETRACO, the Kenya Electricity Transmission Company, approached KMD for ongoing data services to support network planning.

KMD reported a noticeable increase in the volume and type of data requests it now receives from infrastructure agencies. Some of these demands, such as hourly rainfall data for location-specific risk alerts, exceed KMD's current capacity highlighting the need for investment in national data systems to sustain this progress. The Roadmap placed KMD in the spotlight and increased awareness among users of data sources that were already available but underused. These developments also align with ongoing WISER Africa support (delivered by the UK Met Office also under ARCAN) to strengthen KMD's forecasting and data service capabilities, which will be increasingly important as infrastructure agencies seek more specific and timely climate information.

At the same time, KMD cautioned that replicating this model elsewhere may be challenging. Kenya's relatively strong meteorological data systems provide a solid foundation that other countries may lack. Replication may therefore require baseline assessments of data readiness or the use of satellite datasets in contexts with weaker observation networks.

3.4.3 Gaps and opportunities

Key challenges include maintaining coordination across agencies and embedding shared learning in formal systems. Some agencies remain cautious about data sharing, data quality is variable, and no permanent coordination mechanism yet exists. Even so, there are ongoing efforts to operationalise

Kenya's National Roadmap for Climate-Resilient Infrastructure and support the translation of project concepts into bankable investments ready for financing and implementation. For example, the investors consultation on mobilizing finance for climate-resilient infrastructure in Kenya convened by GCA, UoN and the PPP Directorate in December 2025 intended to strengthen collaborations (between Kenyan institutions, development finance institutions, domestic investors, and private sector partners) to link Roadmap concepts to real financing opportunities and investment planning through identification of practical pathways for financing and implementation; an important step from project-level to policy-level coherence.

Maintaining these collaborative relationships and addressing the remaining capacity gaps in data systems will be essential to sustain the results achieved and ensure that cross-sector coherence translates into lasting institutional resilience.

Summary: Overall, the Kenya case shows a coherent and well-aligned approach that bridges research, policy, and practice. The GCA-UoN partnership achieved operational coherence and alignment with Kenya's adaptation priorities, while also creating new links between government, academia, and the private sector. System-level coherence is still developing and depends on continued coordination, data-system strengthening, and financing alignment. Future initiatives could build on this foundation by formalising collaboration mechanisms and translating analytical outputs, such as the Roadmap, into nationally owned investment frameworks.

3.5 Impact and KPI15 (Midline EQ4; Case Study EQ1 & EQ4)

Framed by the AAAP Signals of Transformational Change methodology under KPI 15 (see Annex 8), the case study has identified the following progress made by AAAP with regard to the various transformational change criteria:

- Capacity and capabilities increased:** as referred to in the sections above, this is illustrated by e.g. i) UoN having developed the technical capacity to assume a leading role on the use of climate analytics for infrastructure resilience in the Kenyan context (and possibly beyond); ii) increased knowledge of climate adaptation and enhancing infrastructure resilience through the use of grey and green adaptation solutions among stakeholders representing institutions such as the KMD, KeNHA and KRC through their participation in the Masterclasses, and iii) enhanced collaboration between these institutions leading to the more widespread consideration of climate risk in infrastructure planning. These developments can be classified as an interim signal of transformational change, as stakeholders are beginning to take ownership of the knowledge and skills developed, which reflect locally defined needs and priorities, while reliance on external expertise is reduced. Structural embedding and institutionalization within the respective agencies concerned is not yet established however, which still produces uncertainty about their durable existence and application in the absence of continued coordination and funding by e.g. UoN and GCA.
- Creating incentives for others to act:** in line with the above, AAAP's work in Kenya has shown to incentivise towards enhanced i) integration of climate analytics into infrastructure investment planning by Kenyan government agencies; ii) consideration of climate-adapted lending products by financial institutions; iii) cross-sector collaboration towards integration of climate information into infrastructure design, planning and maintenance. Similarly exemplifying an interim signal of transformational change, these shifts might contribute to more systemic effects over time, however still remain dependent on individual champions and exist in the absence of formalised policy, regulatory or financial frameworks supporting these at present.
- Innovation:** the UoN's support to innovative (youth-led) businesses leveraging digital solutions to enhance infrastructure resilience, as well as GCA's promotion of Nature-based Solutions in addition to more traditional grey adaptation solutions for enhanced infrastructure resilience provide examples of innovation stimulated through AAAP's work. These developments can be seen as showing early to interim stages of progress towards transformational change, as efforts are made to spread innovative adaptation solutions further, while their actual adoption and

(independent) uptake is largely to be established still. This is also linked to GCA's primarily upstream focus, with actual uptake of adaptation solutions proposed only to be assessed upon downstream implementation (e.g. of infrastructure investments).

- **Replicability:** the Roadmap as developed under the GCA-UoN partnership has been replicated as a concept from GCA's earlier work with OIA in Ghana; GCA's global Masterclass model has been replicated in and tailored to the Kenyan context by UoN. Whereas this testifies to the replicability of the respective concepts and the ambition to further replicate these regionally exists, the approach to and financing for their continued replication has not yet been established, leading this to be classified as an early-to-interim signal of transformational change.

In sum, AAAP's work in Kenya can be categorised to exhibit early to interim signals of progress towards transformational change. Indications of its likelihood are evident across the various drivers and mechanisms, however structural embedding and institutionalisation supported by durable policy, regulatory and financial frameworks is not yet established.

Locally led, hybrid partnerships have strengthened institutional credibility, fostered cross-sector collaboration, and improved the use of evidence in financing decisions. Further progress will depend on embedding these practices into formal policy and financing structures; a process now under discussion including through an investor consultation convened by GCA, UoN and Kenya's PPP Directorate in Nairobi on 5 December 2025 to help translate the pipeline of climate-resilient infrastructure concepts into bankable investments¹⁴.

The Kenya case also underscores how domestic institutions are increasingly shaping and financing their own adaptation pathways, with universities, agencies, and entrepreneurs positioning themselves as drivers of resilience rather than recipients of externally led initiatives. Overall, the evidence supports a judgement of interim progress across most AAAP criteria: credible movement toward transformation, though not yet embedded at a systemic or self-sustaining level. These insights inform both the refinement of AAAP 2.0 and donor engagement in building sustainable, country-owned systems for climate-resilient infrastructure. Both GCA and its donors could jointly explore how to strengthen the long-term sustainability of results: for example, by helping implementing agencies integrate adaptation functions into their core mandates and budgets, allocate domestic funding for implementation, and plan to scale-up national leadership further. This would help ensure that analytical outputs, such as the Roadmap, are implemented under a stronger domestic mandate and supported by ongoing national resources.

¹⁴ From Roadmap to Investment: Investors Consultation on Mobilizing Finance For Climate-resilient Infrastructure in Kenya was held at Kenya School of Government, Nairobi on 5 December 2025, 9:00. The University of Nairobi, Global Center on Adaptation (GCA) and PPP Directorate co-hosted the investors consultation to identify practical pathways for financing and implementing priority adaptation investments identified through the National Roadmap for Climate Resilient Infrastructure, a joint initiative launched under the Africa Adaptation Acceleration Program (AAAP)

4.0 Conclusions

This case study set out to explore how AAAP's approach is contributing to the sustainability of results in Kenya. The evidence shows that GCA's emphasis on learning by doing has enabled national institutions to take greater ownership of adaptation work, strengthened local capacity, and generated credible signals of sustainable institutional change within a relatively short period. The partnership with the UoN demonstrates how a domestic-led delivery model can translate international technical support into nationally owned processes that are relevant and trusted. Evidence on cost efficiency remains limited and should be verified through further analysis.

The GCA-UoN project has now concluded, but its results continue to evolve through follow-on initiatives. Many of the gains, such as enhanced technical capability, new professional networks, and stronger institutional confidence, have endured. However, full sustainability remains a work in progress. Several outcomes are still project-based, dependent on new funding, or linked to individual champions rather than fully embedded systems. Embedding these achievements into government policies, budgets, and coordination frameworks will be essential to secure their continuation. GCA and UoN are already pursuing this next step through planned follow-on work, such as facilitating broader dialogue involving investors alongside public institutions and other stakeholders to leverage financing and policy relationships that take the Roadmap's concepts forward into investments.

The case study demonstrates that locally led adaptation delivery, when supported by early technical capacity building and aligned with nationally articulated climate resilience priorities, can generate meaningful upstream outcomes. These include improved climate risk analytics to inform adaptation planning, strengthened institutional cooperation around resilience, and early uptake of innovative adaptation approaches. However, the two-year financing window limited the iterative, embedded change required for deeper institutionalization of adaptation practices. Downstream sustainability will depend on whether Roadmap projects attract investment within the coming year and whether domestic systems are reinforced to absorb, apply and extend the skills and practices developed.

For GCA, the Kenya experience reaffirms the value of locally led adaptation action across multiple governance levels, particularly the role of hybrid partnerships that combine global technical expertise with nationally anchored leadership to enable sub-national and sectoral actors to lead adaptation decision-making at the lowest appropriate level. It also highlights the importance of follow-through, namely converting analytical products like the Kenya Infrastructure Resilience Roadmap into investment-ready adaptation projects backed by policy mandates and financing pipelines. The collaboration further illustrates relational efficiency, whereby well-functioning partnerships and networks enhance delivery effectiveness and sustainability beyond cost considerations.

For FCDO, the case demonstrates that participatory, nationally led approaches can deliver lasting capacity gains when anchored in strong domestic institutions. Future support could prioritise country-led delivery models, enable regional peer learning among universities and technical agencies, and strengthen monitoring frameworks to track how early signals of transformational potential mature into sustained institutional change.

The key findings are that:

- Locally led delivery works:** In practice, the partnership was effective because UoN shaped agenda-setting, brought locally grounded legitimacy to stakeholder engagement, and navigated institutional dynamics that external actors could not easily access. Early technical collaboration with the Oxford Infrastructure Analytics (OIA) team complemented UoN's leadership of the climate risk analytics, while UoN's professional networks and staff continuity supported data sharing and active co-production with agencies across government. This allowed adaptation approaches to be embedded within existing planning processes and strengthened capabilities that can outlast the two-year project window, although sustained progress will depend on longer-term financing and institutional incentives. The experience reflects wider evidence from

ODI, IIED and OECD that locally led models are most successful when domestic institutions direct the process, broker relationships and drive iterative learning¹⁵.

- **Early signals of sustainability are evident:** Beyond strengthened technical capability, early signals of genuine impact are emerging. UoN-supported expertise has contributed to the development of new climate-resilient investment proposals (including inputs into an Equity Bank climate resilience finance project concept) and is informing innovation-oriented adaptation investments (including digital climate-risk monitoring tools for bridge condition and resilience, developed through a climate risk innovation prize and subsequently contracted by the Kenya Rural Roads Authority). National agencies such as KeNHA, KRC and KMD have begun to apply GCA-UoN tools in their own planning processes and have requested continued technical engagement. These examples suggest that skills and practices cultivated under AAAP are now shaping real investment decisions and sectoral processes.
- **Sustainability remains partial:** Results to date are still project-based, funding-dependent, and champion-driven, underscoring the need for deeper institutional embedding and financial continuity. Champions help sustain momentum through cross-departmental engagement, informal peer networks and active use of platforms such as WhatsApp and LinkedIn to maintain communication with sectoral peers between events; participation in learning exchanges has also broadened their buy-in. However, their influence is ultimately constrained by mandates and budget allocations. Long-term durability will depend on financing and on whether domestic systems and future investment (e.g., Roadmap projects moving to implementation) create sustained demand for the skills and approaches developed.
- **Participatory design strengthened trust and data exchange:** Participatory design was possible not only because UoN is a domestic institution, but because it brought a combination of established professional networks, technical credibility, and continuity of staff that government agencies trusted. Earlier analytical and capacity-building support from OIA helped create the conditions for UoN-ICCA to assume this role credibly and adapt tools to the Kenyan context. UoN's familiarity with institutional processes, its reputation across relevant agencies, and its institutional interest in co-producing knowledge and getting research into practice meant it was well-placed to enable stakeholders to help shape training priorities and analytical methods. These factors increased ownership and led agencies to share data that would not typically be accessible to external actors, thereby, improving the quality of the UoN-led analysis.
- **Partnerships generated relational efficiency¹⁶ and coherence:** The GCA-UoN partnership drew on prior technical collaboration with the OIA team, including on earlier Roadmap work in Ghana and Bangladesh. Together, the partnership combined complementary technical expertise with UoN's national networks and contextual understanding, supporting early trust-building, smoother data exchange and more coherent cross-sector engagement than would likely have been achieved through an internationally led model alone. The ability of UoN to convene agencies as peers, together with GCA and OIA's methodological stewardship, created a more connected operating environment for adaptation planning. This reflects wider evidence that locally led delivery can generate relational efficiencies by improving coordination and reducing transaction costs¹⁷.

Together, these findings reinforce the potential of this type of locally-led, evidence-based delivery model – which represents part of AAAP's broader portfolio – to accelerate adaptation capacity and strengthen national ownership. The Kenya experience offers both a practical demonstration and a forward-looking

¹⁵ For example evidence reviewed from the following key publications: ODI, 2025; IIED, 2021; OECD, 2024.

¹⁶ The term relational efficiency is used here to describe process-level efficiency gains that arise from trust-based, locally anchored collaboration. It refers to improvements in coordination, communication, and decision-making that reduce transaction costs and delays, complementing the OECD DAC definition of efficiency as the extent to which resources (funds, expertise, time) are converted into results (see OECD/DAC (2019), Glossary of Key Terms in Evaluation and Results-Based Management). Similar concepts are discussed in Booth and Unsworth (2014), Politically Smart, Locally Led Development. ODI. and; OECD (2023), Applying a Systems Approach to Development Cooperation

¹⁷ OECD DAC (2023); ODI (2021); GCA (2021)

learning agenda for AAAP 2.0; showing how future efforts could evolve from knowledge generation to systemic embedding, and from project-level results to sustained, country-led resilience.

5.0 Recommendations

The headline recommendations emerging from this case study are:

1. Domestic institutions can lead effectively, but need sustained support	
Finding:	The University of Nairobi (UoN) successfully assumed a leadership role, taking over from international partners and demonstrating both autonomy and regional reach.
Recommendation (GCA/ Funders):	Support UoN to consolidate this role through predictable resourcing and opportunities for regional exchange. Encourage the university to share lessons across the AAAP portfolio and develop sustainable financing models for continued training, applied research, and partnership delivery.
2. Support the move from priority setting to implementation	
Finding:	The Kenya Infrastructure Resilience Roadmap identified priority areas of investment towards enhanced climate resilience of infrastructure assets, but the pathway to implementation (through policy, financing, and monitoring) remains incomplete.
Recommendation (GCA):	Work with counterparts across government and finance sectors to leverage policy and funding networks so that stakeholders translate Roadmap priorities into investments. Support the development of simple institutional procedures and monitoring systems that connect technical analysis to budgeting, financing, and delivery.
3. Participatory design should remain a core feature of AAAP	
Finding:	GCA and UoN's participatory approach to designing and delivering masterclasses, trainings, and stakeholder dialogues in Kenya strengthened ownership, built confidence in the process and outputs, and ensured the work reflected institutional needs. By placing participating agencies at the centre of the process, this approach also motivated a two-way flow of information: data-holding institutions learned from the project while contributing their own datasets to support UoN's analysis. This symbiotic exchange created trust, improved data quality, and became a key factor in the success of the UoN-led analytical work. As implemented, this approach aligns with several of the Locally Led Adaptation principles, particularly those relating to institutional ownership, participation, and capacity strengthening.
Recommendation (GCA):	Retain, further embed, and document participatory design approaches that place beneficiary institutions at the centre of delivery. Where relevant, continue to apply the principles of Locally Led Adaptation, particularly those related to institutional ownership, participation, and capacity strengthening. Future AAAP activities could replicate this two-way model of engagement across GCA programming to build trust, improve data access, and strengthen the quality and sustainability of results.
4. Efficiency gains are plausible but need verification	
Finding:	Delivering through the UoN reduced reliance on international consultants. This is likely to offer better sustainability, and

	potentially lower costs, but this will need to be verified by analysing cost data. It also appears to have strengthened relational efficiency – drawing on existing institutional networks, trust, and collaboration to deliver results more smoothly and responsively.
Recommendation (FCDO/ ARCAN MEL):	Undertake a light value-for-money analysis (provided the required cost data is available) comparing domestic-led and consultant-led delivery models. This should review the interplay between costs, effectiveness and sustainability, relevance and efficiency findings. Use the findings to inform future AAAP design and FCDO climate-finance investments, testing whether locally led approaches achieve both cost efficiency and longer-term sustainability.
5. Learning by doing should be coupled with systemic embedding of learning	
Finding:	The Kenya experience shows that adaptive, nationally led approaches can create strong ownership and generate early signs of sustainability. Progress to date remains partial e.g., largely project-based, dependent on continued external funding, and sustained through individual champions rather than fully embedded within institutional systems. However, the project has succeeded in developing a cadre of skilled post-doctoral researchers at the University of Nairobi. These individuals now hold unique technical expertise in climate-risk analysis that does not exist elsewhere in Kenya and are capable of applying and teaching these skills nationally and regionally. Sustaining this capacity will, however, require ongoing funding or paid project opportunities to retain staff and continue delivering this work.
Recommendation (AAAP-wide/ GCA & FCDO):	Continue to apply the learning-by-doing approach across AAAP, but pair it with structured strategies for institutional embedding and financial continuity through strategic partnerships with larger organisations, as required. Each engagement could include a defined policy and institutional uptake phase to transfer project-based gains into organisational systems, budgets, and mandates. At the same time, identify mechanisms (such as funded fellowships, project pipelines, or research contracts) to sustain and utilise the skilled workforce created through national partnerships like the one with UoN.
6. Partnership management needs clearer frameworks	
Finding:	Collaboration between international and domestic academic partners was catalytic but would benefit from more formalised processes and continuity. This includes adopting a longer-term partnership approach, leveraging respective (e.g. technical, or contextual) types of expertise of different partners at the appropriate time and where relevant, in parallel. Especially in the context of LLD, acknowledging where results might be established more effectively with – transitional – technical support from international partners is key, as is the understanding that capacity building would need to be an intrinsic element of any such technical support for it to contribute to comprehensive (incl. technical) LLD in the longer term.
Recommendation (GCA):	Develop partnership management guidance across AAAP. Clarify roles, communication protocols, and recognition of contributions to ensure that collaboration remains constructive and expertise is retained over time.

7. Governance engagement could be broader and better evidenced	
Finding:	Evidence from interviews with national and regional adaptation champions triangulated with documented international experience shows that early and wide institutional engagement (at both national and county levels) is critical to sustaining adaptation results and embedding technical outputs into policy, planning, and financing systems ¹⁸ . In Kenya, engagement around the Roadmap dialogues was mainly facilitated by the Ministry of Environment, Climate Change and Forestry.
Recommendation (GCA/ UoN):	Seek opportunities to engage a wider range of actors in future, including cross-ministerial bodies, regulatory agencies, national banks, IFIs and the private sector. Consider undertaking a structured stakeholder mapping exercise to identify and engage all necessary national and county stakeholders in follow-on work, pivoting on the December 2025 stakeholder consultation in Nairobi that brought together public institutions and potential investors as a practical entry point to connect technical outputs with policy, budgetary and investment decision-making.
8. Financial institutions show promise for longer-term impact	
Finding:	Equity Bank strengthened its knowledge of climate finance and the potential of PPPs, and (under Pillar 4) progressed toward GCF accreditation, positioning itself to expand adaptation lending.
Recommendation (GCA/ FCDO):	Continue to bridge gaps between projects, and support national financial institutions beyond accreditation. Establish strategic partnerships to help national banks design and market climate-resilient financial products once GCF resources become available, and to build the financial-management capacity of MSME borrowers so that products are accessible and deliver measurable adaptation benefits.

Across these recommendations, three cross-cutting priorities emerge for AAAP 2.0 and FCDO's future programming:

1. Consolidate domestic leadership by resourcing universities and national partners that can sustain knowledge and skills beyond project cycles.
2. Facilitate the move from analysis to policy and financing integration, ensuring that Roadmap outputs and similar studies inform national investment planning.
3. Track and learn systematically from different delivery models to strengthen efficiency, value for money, and the sustainability of results across AAAP countries.

¹⁸ For example, see ODI (2023) Institutional Pathways for Climate-Resilient Infrastructure; IISD (2022) Embedding Climate Adaptation in National Systems; and World Resources Institute (2021) From Plans to Action: Strengthening Institutional Ownership for Adaptation.

Annex 1: Context

1. The Challenge

Africa's infrastructure systems are vital for sustainable development but increasingly disrupted by climate hazards such as flooding, drought, and heat stress. These shocks cause widespread service interruptions and economic losses that disproportionately affect the poorest communities. Rapid urbanisation compounds the challenge: by 2050, the African continent's urban population will have grown from 704 million to 1.4 billion, and 2 out of 3 Africans will live in an urban area, many highly exposed to climate risks¹⁹. Strengthening resilience requires nationally led approaches that combine public services, nature-based solutions, and climate-resilient infrastructure.

2. GCA and the Africa Adaptation Acceleration Programme (AAAP)

Through the AAAP, the Global Center on Adaptation (GCA) works with African governments and development partners to integrate climate resilience into infrastructure planning, design, and management. Under its Infrastructure and Nature-Based Solutions business line, GCA supports new investments and upgrades that safeguard critical systems against climate hazards. This involves high-resolution climate-risk analytics and the identification of both grey and green adaptation options, combining engineering solutions with co-benefits for communities and ecosystems.

3. Kenya Case Study

Kenya provides a practical test of how AAAP's approach can generate sustainable results. The partnership between GCA and the University of Nairobi (UoN) applied a learning-by-doing model to embed climate-risk analysis in infrastructure planning. The work produced the National Roadmap for Climate-Resilient Infrastructure, strengthened national capacity, and fostered collaboration among agencies such as the Kenya National Highways Authority, Kenya Railways Corporation, and Kenya Meteorological Department. Since project completion, there are ongoing efforts to operationalise the Roadmap and support the translation of project concepts into bankable investments ready for financing and implementation, including a GCA-University of Nairobi-PPP Directorate-convened investor consultation held in Nairobi in December 2025.

4. Relevance to ARCAN and FCDO

Although financed through GCA's Norad-supported business line, the Kenya partnership directly addresses FCDO and ARCAN priorities: strengthening national systems, promoting African ownership, and achieving the sustainability of results beyond donor funding. The lessons from Kenya therefore inform AAAP implementation more broadly and contribute to the ARCAN Midline Evaluation's focus on whether and how adaptive, nationally led delivery models can achieve transformational change.

¹⁹ OECD et al. (2025), *Africa's Urbanisation Dynamics 2025: Planning for Urban Expansion*, West African Studies, OECD Publishing, Paris, <https://doi.org/10.1787/2a47845c-en>

Annex 2: Approach and Methodology

This section outlines how the approach and methodology was applied in practice.

1. Outcome Harvesting Approach

A light-touch outcome harvesting approach was used to identify and analyse how AAAP activities in Kenya have contributed to sustainability outcomes. Outcome harvesting begins from observable changes in behaviour, practice, or policy (“outcomes”) and works backwards to assess plausible contributions by AAAP.

Given the midline scope and available resources, the approach was deliberately streamlined. Outcomes were identified through a combination of documentary review and key informant interviews, then clustered into sustainability mechanisms rather than fully substantiated through independent verification. This pragmatic design allowed for meaningful analysis within the midline timeframe while maintaining methodological rigour.

2. Conceptual Framework

The conceptual framework used in this case study groups outcomes under four mechanisms - capacity and capabilities, innovation and incentives, replicability and scalability, and sustainability - providing an organising structure consistent with the KPI 15 methodology on transformational change.

Outcome stories are treated as evidence points along impact pathways, illustrating both positive and negative signals of change. This approach allows the analysis to explore how AAAP activities contribute to institutional, behavioural, and systemic change, rather than only documenting outputs.

3. Data Collection and Analysis

The case study has been conducted by the independent Monitoring, Evaluation and Learning Unit of the Africa Regional Climate and Nature Programme (ARCAN MEL Unit), funded by the FCDO. The case study research was led by ARCAN MEL Monitoring Lead and Climate Expert Sarah Johansen and supported by Kenyan Climate Expert Elijah Otieno Odundo and ARCAN MEL Climate Finance and Policy Pillar Lead Analyst Marleen Verhagen. The Kenya case study was selected as the GCA-UoN partnership provided a concrete and developed example through which to analyse GCA's locally-led delivery approach, including the implications of its learning-by-doing model for the sustainability of intended outcomes. Data collection combined targeted document review, semi-structured interviews (including in-country interviews in September 2025) and iterative analysis. Sampling prioritised individuals directly engaged in or knowledgeable about the activities delivered under the AAAP in Kenya, particularly under Pillars 2 and 4. This enabled the evaluators to consult with stakeholders directly and indirectly linked to the GCA-UoN partnership including representatives from the GCA, OIA-University of Oxford, and UoN, whilst snowball sampling facilitated further interviews with relevant regional, national and sectoral champions and institutions.

Data analysis followed a structured coding process that aligned emerging outcomes with the four sustainability mechanisms and DAC criteria. Triangulation across sources was used to test plausibility and ensure balanced interpretation of findings.

4. Validation

The case study team has presented the early findings of the research work to the GCA team, and the draft case study report was shared with GCA for their feedback. Subsequently, the case study team presented the final version of the case study findings to the GCA team in an online session on 24 February 2026.

5. Limitations

The light-touch outcome-harvesting approach has several limitations:

- Outcomes were captured selectively rather than exhaustively, reflecting the availability of interviewees and documents.
- The analysis prioritises plausible contribution over independent verification, so causal claims remain indicative.
- The study does not construct a counterfactual or compare Kenya directly with Ghana.
- A supplementary assessment of value for money was planned, but limited cost data prevented full analysis (beyond the findings presented on relational efficiency).

These limitations are consistent with the agreed midline scope and timeframe set out in the Case Study Concept Note (Annex 3). Importantly, the approach remains fit for purpose: it provides structured and credible insights into sustainability mechanisms, highlights both achievements and missed opportunities, and interprets Kenya's results using the Signals of Transformational Change Framework developed in alignment with the KPI 15 Methodology Note for ARCAN MEL.

Annex 3: Original ToR: Midline Phase 2 Case Study Concept Note: AAAP (Sustainability – Kenya)

Midline Evaluation (Phase 2) – Concept Note for the Case Study on AAAP: ‘Unpacking the mechanisms for achieving sustainability of results in Kenya’

1. Background, scope and case study objectives

At the quarterly Pillar meeting on 3 April 2025, the ARCAN MEL Unit (led by Ecorys) and FCDO identified key evidence gaps from Phase 1 of the Midline Evaluation. One of the priorities was to explore whether and how the results of technical assistance (TA) and knowledge products delivered under AAAP can be sustained over time. Further collaborative discussions between ARCAN MEL, FCDO and GCA on 14 May, 11 June and 25 June helped to refine the framing for this case study.

The case study will focus on understanding the mechanisms for achieving sustainability of results under AAAP. One of several important mechanisms is GCA's capacity building approach. This case study will unpack GCA's capacity building work as well as other important mechanisms to strengthen understanding of factors contributing to the sustainability of results. This will help assess how adaptation results delivered through AAAP are likely to endure, replicate, or scale beyond the life of the initial support provided.

Following discussions with AAAP, we have selected Kenya as the focus for this case study examining how GCA's activities contribute to the sustainability of AAAP results. The rationale for selecting Kenya is underpinned by early evidence of sustainability outcomes and a perception that GCA's "learning by doing" model is contributing to such outcomes (amongst other contributing factors). There is a need for further evidence about how these change pathways play out in practice, and this case study is ideally placed to fill these identified evidence gaps to assess the relevant contribution stories. A primary focus will be on GCA's partnership with the University of Nairobi (UoN), offering insights into how this collaboration builds institutional capacity over time.

The evaluative case study will include qualitative data collection including documentary review and semi-structured interviews with a sample group of key informants. The group of key informants will be identified using a snowball sampling method, informed initially via consultation with GCA to identify the most relevant partnerships which have contributed to, or been influenced by outcomes linked to the AAAP work. This initial data collection will help identify the range of potential sustainability outcomes materialising from the AAAP work – and unpack the key contribution stories including if/how they are context-specific or reflect broader trends across local partner types.

While the case study centres on a single geography, we will ask some targeted sub-questions on GCA's experience in other countries and will seek an interview with the University of Oxford to understand its perspective as a global academic partner. These steps will help surface a richer picture of how GCA-supported sustainability outcomes emerge across settings, while preserving the narrow

focus needed for in-depth analysis. Additional evidence may be reviewed from other AAAP countries (e.g., Ghana, Senegal, Mozambique), though the primary analysis will be grounded in Kenya.

The objectives of the proposed case study are to:

- ▶ Assess how GCA's work in Kenya contributes to the sustainability of AAAP results, especially in domestic institutions²⁰
- ▶ Understand how climate risk analytics, training (e.g. Masterclasses), and academic partnerships are taken up and used in practice (and how this supports long-term institutional change).
- ▶ Identify factors that enable or constrain sustained impact, including differences in uptake or application across contexts.
- ▶ Inform the development of a clearer GCA strategy on capacity building as part of AAAP 2.0.
- ▶ Contribute to learning on value for money e.g., strengthening understanding about the cost effectiveness of some of the relevant activities/ mechanisms identified.

2. Case study methodology

Overall approach:

- ▶ The case study will use a light-touch outcome harvesting approach to identify, document, and analyse a small number of illustrative examples of how GCA's work under AAAP has contributed to the sustainability of adaptation results in Kenya. Such examples – e.g., capacity building – will be treated not as the outcome itself, but as a mechanism through which sustainable change (the outcome) is pursued.
- ▶ Given the rapid implementation timeline and modest number of key informant interviews (KIIs) (approximately 10), this is a streamlined version of outcome harvesting. It prioritises learning over verification and focuses on drawing out plausible outcome stories from GCA and partners, supported by documentary review and key informant interviews.

The case study process will follow the three-step approach agreed with GCA:

- ▶ **Step 1: Framework-setting with GCA (late June – early July)**
 - Through internal desk review and interviews with GCA staff, the MEL Unit will lightly map out how GCA currently identifies, designs, contracts, and disseminates activities in ways that aim to support the lasting sustainability of their outcomes under AAAP.
 - This step will establish a working framework of sustainability with a focus on capacity building and other approaches, objectives, and delivery pathways across different institutional settings.
 - A working definition of 'sustainability of results' will be co-developed to guide the outcome harvesting process.
- ▶ **Step 2: Data collection and analysis (July – mid-September)**
 - Using the framework developed in Step 1, the MEL Unit will conduct remote and in-person key informant interviews with stakeholders involved in GCA's Kenya-based work programme. A primary focus will be the partnership with the UoN, examining sustainability outcomes that have

²⁰ Also identifying findings relevant to MDB partnership models, where evidence exists

emerged from this collaboration and how the model was informed by GCA's earlier experience with the University of Oxford in Ghana. This will allow the case study to trace how GCA's partnerships evolve across contexts and explore the important 'sustainability of results' and localisation dimensions of different approaches.

- To ensure a broader understanding of how different dimensions of sustainability outcomes are generated and supported under AAAP, additional interviews will be sought with other types of Kenyan institutions engaged by GCA. These may include national project partners (e.g. Kenya Roads Authority, KeNHA), a Direct Access Entity (e.g. Equity Group Foundation), and an MDB (e.g. AfDB), depending on relevance and availability.
- These interviews will help test whether the dynamics observed through some interventions in Kenya reflect wider patterns and challenges in bringing about sustainability of results outcomes across different actor types and the contributions to sustainability. We will seek GCA's guidance in identifying suitable informants.
- We will document short outcome stories that describe the changes that have happened as a result of GCA's work in Kenya. These will focus on what changed, who was involved, and how GCA contributed. Each story will be based on interviews and project documents. We'll also be clear about any limitations; for example, where findings may be specific to Kenya, and highlight what the learning could mean for GCA's future work in other countries.

► **Step 3: Case study drafting and validation (mid-July – end October)**

- A draft case study will be prepared by the MEL Unit and shared with FCDO by 30 September.
- The case study will synthesise the outcomes identified, with reflections on the implications for GCA's evolving approach under AAAP 2.0.
- If appropriate, the case study scope may be expanded in October to include additional countries or institutions, with a final version submitted at a later date, depending on scope.

Sampling and data collection:

- Sampling method:
 - Purposeful snowball sampling, starting with a preliminary list developed in consultation with GCA.
- Selection criteria:
 - Informants will be chosen based on their direct knowledge of or contribution to GCA-supported outcomes in Kenya.
- Diversity and triangulation:
 - The sample will include a range of perspectives across institutional types to support triangulation and test generalisability: 1–2 key informants from the UoN and University of Oxford (academic partner); representatives from non-academic partners, such as Equity Group (DAE), KeNHA, Kenya Roads Authority, and AfDB; GCA staff involved in programme design and implementation.
- Step 1 interviews:

- Approx. 5 remote KIs with GCA staff to inform the case study focus and simple outcome harvesting framework.
 - ▶ Step 2 interviews:
- Approx. 5-10 in-person KIs with Kenyan stakeholders.
 - ▶ Desk review:
- Ongoing review of relevant AAAP strategy and programme documentation will inform interview sampling, support analysis, and help verify outcome stories.

Deliverables:

- ▶ A concise case study report (max. 20 pages) with a 3-page summary and annexes.
- ▶ A validation meeting with GCA.
- ▶ A short presentation of findings and lessons to FCDO and GCA.

3. Proposed next steps and timing

We set out below the necessary steps to proceed with this case study:

Timeline	Activity
w/c 23 June	Finalise sustainability framework and confirm case study scope with key GCA focal point(s)
w/c 1 July – w/c 15 July	Case study tools development; document review
w/c 15 July	Conduct remote interviews with GCA staff
w/c 18 August – w/c 1 September	Conduct remote interviews with external partners (e.g. University of Oxford); additional document review and initial data analysis
w/c 15 September	Conduct in-person interviews in Kenya (e.g. University of Nairobi, KenHA, PPP Directorate)
w/c 22 September	Data analysis and triangulation; case study report drafting
30 September / TBC	Share draft report with FCDO for review; with GCA for inputs.
October	Option to broaden scope to include 1–2 other countries (e.g., Ghana, Senegal).
31 October / TBC	Address comments. Submit final version by 31 October (or at a later date, TBC, depending on scope).

Annex 4: ARCAN Evaluation Framework

Evaluation Questions and OECD-DAC Criteria	Criteria and supporting questions	Evaluation Activity/ MEL Product/Data Source	Analysis – WIP column for ET
Relevance To what extent are ARCAN programmes' delivery country-led (i.e., responding to local community and national priorities) and strengthening national or community leadership, capacity, and commitment (in what ways, for whom – with specific focus on the most vulnerable including women/girls and other excluded groups - and in what contexts)? [EQ3]	ARCAN delivery is informed by and responds to local community and national needs, policies and priorities; including those specific to gender and social inclusion of the most vulnerable groups Programme delivery/design is sensitive and responsive to context, including: - ARCAN delivered in ways that is informed by and responds to (local and national) gendered needs and priorities, recognising differential starting points - ARCAN implementation builds and strengthens national/ community leadership, capacity and commitment - ARCAN adapts to changing needs and contexts - ARCAN implemented in ways that reflect needs of different social groups (most vulnerable including women/girls and other excluded groups), recognising different starting points on the basis of, inter alia, age, disability, indigeneity	Evaluation Midline/ Endline: Phase 1 - Document analysis building on programme documents, annual reports etc, external evaluations; context-specific literature - Select KIs with FCDO (remote) Phase 2 - Continued document analysis - Select KIs and FGDs (remote and in-country) - Interviews with FCDO/ IPs (process evaluation style questions) - Interviews with key external stakeholders [NB relevance refers to beneficiary and stakeholder needs, relevance to context, relevance to UK govt priorities]	Thematic Analysis Context Analysis Contribution Analysis
Efficiency 1. Are the ARCAN portfolio and programmes using resources efficiently and effectively to achieve their goals? [New overarching] <i>Key questions to help answer this EQ:</i> What are the opportunities to enhance efficiency and cost effectiveness across the ARCAN portfolio? (midline) [EQ8] What key lessons (positive and negative) have been learned from ARCAN's experience with regards to VfM that can inform the design and implementation of future portfolio programmes? (endline) [EQ10]	- How do the returns on investment compare to the ones proposed in the Business Case (ARCAN)? For programmes: design/ economic appraisal? - To what extent, and how, have resources been efficiently allocated between work streams? - How do the different cost effectiveness data from different pillars/ programmes compare? - What are the processes of compiling VfM data in the pillars/ programmes? - Are there adaptive management examples that drive VfM in programmes? - For those IPs with existing VfM framework/ reporting: how does VfM fit in the wider delivery frameworks (s)? - What kind of mechanisms exist in programmes to control costs and/ or maximise benefits? To what extent is there commitment to consideration	Evaluation Midline/Endline: - Financial reporting from IPs - KIs: Interviews with IPs, FCDO (remote and in-country) Evaluation: Portfolio VFM Deep Dive (Y2) Monitoring: Programme specific VFM case study; Building on Results Framework/ ARCAN VfM framework/ AR	Cost effectiveness data analysis (VfM indicators, results, other CE study findings from pillars, etc) Analysis of VfM case study findings Cost efficiency analysis Qualitative assessment on lessons learned

	of equity goals alongside effectiveness and equity, and what trade-offs are made? - Resource allocation processes/ mechanisms, including the extent to which equity is represented - Cost effectiveness indicators from ARCAN VfM Framework		
Effectiveness 2. How and to what extent does ARCAN contribute to strengthening people's resilience, improving management of natural resources, and increasing access to renewable energy, for the most vulnerable to climate change? For whom – with specific focus on the most vulnerable including women/girls and other excluded groups -and in what contexts? [EQ2] <i>Key questions to help answer this EQ, plus potential deep dive focus (ii-iv)– selecting three deep dives.</i> i. How effective was the ARCAN portfolio at mobilising additional and or more effective climate- and nature-related investment, for whom, and in what contexts? (All IPs except FFF) ii. How, and to what extent, has the ARCAN portfolio contributed to the improved management of natural resources (particularly sustainable land management), for whom, and in what contexts? (CAFI, FFF) iii. How, and to what extent, has the ARCAN portfolio contributed to strengthened resilience of populations to climate shocks, for whom and in what contexts? (WISER, CIWA, FFF, AAP) iv. How, and to what extent, has the ARCAN portfolio facilitated greater access to clean energy, for whom, and in what contexts? (SRMI, SEFA)	Delivery of programmes under thematic pillars – relevant outcomes and pProgramme ICF KPI results: - Number of people supported to better adapt to the effects of climate change (ICF KPI 1) - Number of people with improved access to clean energy (ICF KPI 2) - Number of people (disaggregated by key GESI groups) whose resilience has been improved (ICF KPI 4) - Volume of emissions reductions avoided/supported by ICF TA (ICF TA KPI 5) - Finance mobilised (£) for climate change purposes (ICF KPI 11 & 12) - Area under sustainable land management practices (ICF KPI 17) Evidence for pathways to outcomes in the theory of change: - Design and implementation of national and subnational plans, policies and strategies supported; - Increase in no. of countries with regional, national, subnational (local) plans, policies, strategies, sectoral plans (energy, integration of climate, NRM etc) - Innovation approaches embraced [eg ARCAN contribution to greater availability of innovative approaches and technologies to deliver positive impacts on poverty and the environment in sectors such as energy, natural resource management, agriculture, and environmental degradation] - Capacity to access new and existing climate finance strengthened - New investment mobilised for Climate (amount and extent, influence of ARCAN on new and existing funding) - Improved natural resource management and protection including transboundary water - Increased sustainable land management	Evaluation Midline/Endline (sub-Q 3i): Phase 1 - Document analysis building on programme documents, annual reports etc, external evaluations; context-specific literature - Select KIIs with FCDO (remote) Phase 2 - Continued document analysis - Select KIIs and FGDs (remote and in-country case studies) - Interviews with FCDO/ IPs (process evaluation style questions) - Interviews with key external stakeholders Evaluation Deep Dives in order to confidently demonstrate what FCDO/ARCAN has achieved in relation to OUTCOME 1 in the theory of change. Are the pathways to desired changing working or not? How, for whom and in what context? (sub-Q 3ii-iv) Focus on socio-economic outcomes and impact: Who is expected to benefit? Has this been achieved? If so, how? If not, why not? What has been the contribution of ARCAN? Contribute to the global evidence base on what works and what doesn't work in building adaptation and resilience to CC. Suggested Deep Dives: 1) Energy; 2) Resilience; 3) Sustainable land management. Document analysis: programme documents, annual reports etc, external evaluations; context-specific literature In-country and remote data collection, primary and secondary data: KIIs and FGDs (in-country and remote) a) Interviews with FCDO/ IPs	Case Study approaches to focus on evidence gaps in the ToC through deep dives (thematic and contribution analysis) Analysis of Monitoring data Analysis of independent evaluations of ARCAN programmes Meta-analysis and Synthesis (endline)

	- Improved availability and (capacity to) access and use of climate information - Use of climate data to inform investment decisions, programme focus etc - Improved resilience capacities (including climate adaptation) - Improved availability and access to clean energy <i>For all areas: Effectiveness-related outcomes reflect gender equality and social inclusion</i> <i>Unintended results and alternative pathways</i> <i>Enablers and barriers ('mechanisms' of change), including: Political economy factors (incentives, interests, beliefs, power of partners and external actors); contextual factors (economic, social, political will and commitment; funding; conflict risk etc)</i> <i>'For whom?': ARCAN portfolio contributes to gender equality and social inclusion</i>	b) Interviews with key external stakeholders (at all institutional levels) Review and synthesis of upcoming IP independent evaluations: (2023: CAFI, WISER, 2024: SEFA – assume available for midline. 2024: CIWA – assume available for endline. Annual: AAAP) Endline Synthesis across deep dives and other primary and secondary data sources/evidence Building on Monitoring data. The monitoring overarching question is 'to what extent are IPs delivering against programme outputs and outcomes'. This contributes towards answering a foundational evaluative question: are the conditions in place for activities to lead to desired/intended outcomes for those expected to benefit? - IP Monitoring Data/ Results Framework outcome data - Monitoring visits reports: progress report of project level implementation against IP ToC and project specific stories of change on IP progress (co-developed with IPs) - Programme-specific GESI and VfM case studies (in collaboration with IP)	
Impact 3. How, and to what extent have the ARCAN portfolio and programmes catalysed transformational change (for whom – with specific focus on the most vulnerable including women/girls and other excluded groups - and in what contexts)? (endline) <i>Key questions to help answer this EQ:</i> i. How and to what extent are ARCAN projects achieving (or where results not yet evident due to timeframes) likely to achieve transformational change? [KPI15] ii. Sustainability: How effectively do ARCAN programmes support sustainability of outcomes and impacts?	4.i KPI15 Scorecard: likelihood of transformational change. Drivers, Mechanisms, Barriers/Enablers: - Political will and local ownership: need for the change is agreed locally and the process is locally owned and inclusive. - Capacity and capability can be equitably increased: countries and communities have the capacities and capabilities necessary to bring about the change; - Innovation: innovative technologies are equitably piloted, with the potential to demonstrate new ways of doing things, which could lead to wider and sustained change; - Evidence of effectiveness is shared: approaches which have proved successful in one location are made widely available and lessons on their usefulness are credible and shared widely - Gender Equality and Social Inclusion: ARCAN programmes actively contribute to GESI by identifying and tackling barriers to gender inequality and social exclusion in formal institutions (e.g. policy) and	Evaluation Midline/Endline: Phase 1 - Document analysis building on programme documents, annual reports etc, external evaluations; context-specific literature - Select KIIs with FCDO (remote) Phase 2 - Continued document analysis - Select KIIs and FGDs (remote and in-country) - Interviews with FCDO/ IPs (process evaluation style questions) - Interviews with key external stakeholders Building on and validating Monitoring Data: M team working with IPs to track progress against key indicators including KPI15, and develop	KPI15 scorecard analysis Thematic analysis of evaluation data Contribution Analysis Synthesis/ meta-analysis

	informal institutions (practices), and working to transform power relations positively and support collective action by marginalised people where appropriate. • Leverage / create incentives for others to act: the costs of climate action are reduced to the point that acting on climate is a sensible decision for commercial firms, private individuals and governments. These cost reductions may need to be steep enough to overcome behavioural inertia; • Replicable: good ideas piloted by the ICF are replicated by others in the same country and more widely; • At scale: interventions (such as national, sectoral or regional programmes) that have sufficient reach to achieve institutional and policy reform, or drive down costs of technology deployment; ARCAN is tackling different levels of scale in concert. Equitable; recognising the reality of gender inequality and social exclusion, and ensuring that use of the approach is equitable and contributes to gender equality and social inclusion • Sustainable: change is likely to be sustained once ICF support ends. 4.ii ARCAN programmes' contribution to fostering (inclusive and equitable) enabling environment including: i) Capacities ii) Ownership iii) Political Will iv) Resources/ budgetary commitments of relevant stakeholders	project-specific stories of change on IP progress (co-developed with IPs)	
Coherence 4. How and to what extent are ARCAN programmes contributing to complementarities, synergies, knowledge sharing and learning between within and beyond ARCAN, including through benefits from being more than the sum of their parts in the ARCAN portfolio? For whom – with specific focus on the most vulnerable including women/girls and other excluded groups – and in what contexts? [EQ6]	• Increased regional, national and local collaboration and partnerships due to ARCAN • Key stakeholders draw from evidence and learning generated by the programme to support improvements in programming; examples of adaptive management based on programme-level learning. Learning shared formally and informally within and across IPs and outside of ARCAN. Drawing on learning from other programmes/the knowledge and experience of stakeholders at all levels • Complementarities: ARCAN Activities, projects, or policy efforts build on the strengths and account for the limitations of each other.	Evaluation Midline/Endline: Phase 1 1. Document analysis building on programme documents, annual reports etc, external evaluations; context-specific literature 2. Select KIIs with FCDO (remote) Phase 2 3. Continued document analysis 4. Select KIIs and FGDs (remote and in-country) i) Interviews with FCDO/ IPs (process evaluation style questions)	Thematic Analysis Contribution Analysis

	• Synergy: The interaction of two or more ARCAN programmes such that the overall result is greater than the sum of its parts. Examples that programmes deliver more outcomes and impacts than working in isolation including : e.g. reaching more people; mobilising more finance than targeted, or delivery greater analysis than planned (e.g WISER adding value to CIWA)	ii) Interviews with key external stakeholders	
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Annex 5: Case Study Evaluation Questions

Evaluation Question	Sub-Questions	OECD DAC Criteria	Relevant Interviewee(s)	Key Sources for Document Review	Data Analysis Considerations	Relevant TC Drivers
1. How and to what extent have GCAs interventions contributed to the sustainability of AAAP results in Kenya? (Overarching AAAP evaluation question). Links to ARCAN Impact EQ 4ii ²¹	What sustainability outcomes are emerging? What assumptions or mechanisms are at play? To what extent are results likely to be sustained without further external support?	Sustainability, Impact	GCA Project Lead, Partner, Stakeholder	Project design documents, country strategy papers, outcome reports, case study drafts	Use outcome harvesting to identify evidence of institutional uptake, policy change, or behavioural shifts; triangulate across stakeholders	All drivers potentially relevant; focus on drivers 1, 2, 3 depending on project
2. How have GCAs interventions influenced enabling environments for climate adaptation and resilience? Links to ARCAN Effectiveness EQs 3i and 3iii	What policies, partnerships, tools or capacities have been used or adopted by national actors? To what extent have GCA interventions contributed to increased inclusion of vulnerable groups in decision-making or planning?	Effectiveness, Impact, Equity	GCA Project Lead, GCA MEL, Partner	Policy briefs, project reports, MEL frameworks, gender analyses	Map to ARCANs drivers of change and GESI outcomes; confirm through stakeholder perspectives	Drivers 1, 2, 3, 4
3. How relevant and catalytic were the partnerships formed (e.g. with UoN, AfDB, KeNHA) in supporting sustainability of results? Links to ARCAN Impact EQ4	Were these partnerships embedded and aligned with local systems? Did they enhance inclusion of women, youth, or marginalised actors?	Relevance, Coherence, Equity	GCA Project Lead, Partner, Stakeholder	MoUs, training materials, feedback forms, partnership evaluations	Look for embedded ownership, policy continuity, or replication by partners; explore inclusive participation	Driver 1
4. What capacities were built across the projects, and how are these capacities being applied and sustained? Links to ARCAN Effectiveness EQ3 and Impact EQ4	Who is now using the tools or knowledge? What evidence is there that capacity has been institutionalised (e.g. training of trainers, embedded tools)? How inclusive were the capacity building efforts?	Effectiveness, Sustainability, Equity	GCA Project Lead, GCA MEL, Partner	Training materials, evaluation reports, institutional uptake evidence, open-source information e.g., newsletters, media/socials	Trace institutional behaviour change or system-level uptake; categorise capacity building type (individual, organisational, systemic)	Drivers 1, 2, 3, 5
5. What project mechanisms or delivery models were more or less cost-effective at contributing to sustained outcomes? Links to ARCAN Efficiency EQ2	What were the relative costs of different modalities (e.g. masterclasses, technical assistance)? Were national delivery models more cost-effective or equitable?	Efficiency, Equity	Documentary focus; GCA MEL	Detailed budgets, expenditure data, KPI reports, consultant cost breakdowns	Derive an activity based cost model, compare unit costs if possible and relevant, day rates, localisation of delivery; assess potential trade-offs between cost and quality or equity	Driver 2 (indirectly, via cost-efficiency of scaling)

²¹ The revised ARCAN midline evaluation questions as numbered in Table 2 of the Midline Evaluation Design report.

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Annex 7: List of Interviewees

Organisation	Number of interviewees
E Co.	2
External Experts	8
Global Center on Adaptation (GCA)	7
Kenya Meteorological Department (KMD)	1
Kenya National Highways Authority (KeNHA)	3
Kenya Railways Corporation (KRC)	1
Oxford Infrastructure Analytics (OIA)	1
University of Nairobi (UoN)	4
Total	27

Annex 8: Signals of Transformational Change Framework

AAAP definition of transformational change:

AAAP seeks to accelerate climate change adaptation across Africa through i) **influencing investments** to ensure infrastructure assets and services are resilient to climate change; ii) **unlock access to adaptation finance** through designing innovative public and private financial solutions, influencing investments for the financial sector and monetisation of adaptation benefits. This will be the result of i) increased capacity and capabilities to identify the need for, manage and oversee the implementation of adaptation initiatives; ii) promoting the uptake and mainstreaming of innovative adaptation solutions; iii) creating incentives for other to act towards enhanced adaptation; iv) scaling and replicating of effective adaptation solutions and v) establishing mechanisms that support the continued presence of the required resources, capacity and commitment and enabling environment to support adaptation action without relying on programme funding.

TC Level	Criteria	Indicator	Signal	Definition	Timeline	
Driver	Capacity and capabilities increased	Extent to which stakeholders independently design, manage, implement, and (access) finance (for) adaptation initiatives.	No Signal	Capacity-building efforts exist but are ad hoc / one-off, externally driven (e.g., by donor), and do not equip stakeholders with lasting skills and the ability to further adaptation initiatives independently.	N/A	Example [Advanced Signal]: National Roads Authority has the capacity to independently identify the (regular) need for and commission an analysis of the climate vulnerability of the existing road network and prioritise investment into its enhanced resilience accordingly.
			Early Signal	Training and capacity-building efforts are structured to ensure skills transfer in an appropriately contextualised manner, with initial steps toward local ownership of knowledge and its continued implementation being visible.	0 – 1 year	
			Interim Signal	Stakeholders begin taking ownership of the knowledge and skills developed, as well as of what is required to – continue to – implement these effectively. Reliance on external expertise and resources is reduced , and follows needs identified by the stakeholders concerned (i.e. not defined by donors/external service providers).	1 – 2 years	
			Advanced Signal	Local, national, or regional institutions demonstrate the ability to design, manage, implement and (access) finance (for) adaptation initiatives autonomously , showing sustained ownership of the knowledge and skills required for this at present as well as a vision and institutional leadership on what capacity and capabilities are required to continue to do this effectively in the future .	3 – 5 years	

Driver	Increased innovations	Extent to which innovative adaptation solutions are adopted and mainstreamed	No Signal	Pilots or activities exist but remain experimental , externally driven or confined to small-scale (e.g. project-based) applications with no pathway for actual implementation and/or wider adoption .	N/A	Example [Advanced Signal]: It is standard practice for the Ministry of
			Early Signal	Innovative adaptation solutions (e.g. Nature-based Solutions, innovative adaptation finance mechanisms) are explored in combination with efforts to further their actual adoption by and further spread throughout the relevant institutions.	0 – 1 year	Transport to liaise with the Ministry of Agriculture during the planning and design phase of a new railway project to explore the resilience benefits that may be
			Interim Signal	Early adoption occurs as proven innovations gain traction, with increasing uptake by key actors – combined with a sense of ownership of and ability to use and further develop these solutions independently .	1 – 2 years	achieved through integrating Nature-based Solutions into its design.
			Advanced Signal	Proven innovations are fully mainstreamed or institutionalised within local, national, or regional networks and systems, becoming part of formal policies, planning and guidelines or being embedded as common/standard practice within relevant institutions.	3 – 5 years	
Mechanism	Create incentives for others to act	Effectiveness of incentives in catalysing increased action towards enhanced adaptation	No Signal	Incentive mechanisms exist but are ineffective due to a mismatch with stakeholders' interests and needs, inadequate reach and visibility or failure to stimulate action beyond a small number of actors.	N/A	Example [Advanced Signal]: National law stipulates adaptation requirements needing to be considered for any infrastructure initiative to be implemented in order to be granted formal approval by the relevant Ministry; National
			Early Signal	Incentives align with stakeholders interests and needs , effectively convey the urgency or expected benefits of action and are clear in terms of what is required or feasible in terms of next steps, i.e. what they incentivise towards.	0 – 1 years	Roads Agency has integrated adaptation considerations as a standard component of its O&M manuals.
			Interim Signal	Incentives are effectively spread and implemented , reaching an increasing number of different actors (e.g. government bodies, financial institutions, academia etc.) who in turn leverage these towards a more widespread joint commitment to the type of action required.	1 – 5 years	
			Advanced Signal	Long-term incentives are embedded in regulatory, policy or financial frameworks and lead to widespread uptake and sustained commitment from various – and increasingly varied – stakeholders.	5 – 8 years	

Mechanism	Replicability	Extent to which adaptation models and solutions are replicated within or beyond their original context	No Signal	Projects or interventions exist as a one-off initiative , without any consideration of or prospect towards their replication within or beyond their original context.	N/A	Example [Advanced Signal]: a National Infrastructure Risk and Resilience Assessment (National Roadmap) is developed in several African countries, following the model developed under AAAP - guiding the respective countries' climate resilient infrastructure investment planning.
			Early Signal	Models and solutions are developed with the potential for and ambition towards replication , which is being prepared for from a capacity development, financial resources as well as outreach perspective. Early interest in and ability to replicate these is identified.	1 – 2 years	
			Interim Signal	Models and solutions are successfully replicated in or beyond their original context, either by stakeholders involved from the outset replicating the same model (e.g. with a different focus or target group) in its original setting or by other stakeholders adopting and replicating it in their respective contexts.	3 – 5 years	
			Advanced Signal	Models are successfully and structurally replicated, influencing systemic changes beyond the original scope of the programme.	5 – 10 years	
Mechanism	Scalability	Extent to which adaptation initiatives expand in scope, reach or impact	No Signal	Initiatives are implemented without any vision on or efforts towards exploring their scaling potential .	N/A	Example [Advanced Signal]: Adaptation is mainstreamed into entire national economic and financial systems (beyond the policy-specific level) as a result of AAAP's work with the IMF's RSF.
			Early Signal	Scaling is being considered and initiatives are designed with their scaling potential in mind. Early-stage scaling plans are being developed and outreach to relevant stakeholders is being conducted. Efforts are made to secure resources to test initiatives' scaling feasibility.	1 – 3 years	
			Interim Signal	Early signs of scaling are visible. Initiatives are being expanded in scope and/or adapted to increase reach or impact. Efforts are being made for the required resources/financing to be scaled up accordingly.	3 – 5 years	
			Advanced Signal	Scaling is fully underway, supported by a sustained stream of investments . Expansion of initiatives is no longer project-dependent, but supported by durable mechanisms embedded within relevant institutions or systems.	5 – 8 years	
			No Signal	Interventions rely heavily on programme funding and/or external initiative . No clear strategy or commitment to sustaining results beyond the programme period.	N/A	Example [Advanced Signal]: Ministry of Transport has structurally allocated a
			Early Signal	Sustainability is considered from the outset of an initiative, conscious efforts are being made to support	0 – 2 years	

Enabler	Sustainability	The adaptation activities and changes delivered by AAAP are likely to be sustained beyond the duration of the project or programme.		sustainability of activities delivered and results achieved – without any concrete guarantees being visible yet.		percentage of its annual investment budget for adaptation of new or existing infrastructure assets and periodically liaises with national (academic) partners that are leading in the field on how this can be applied most effectively.
			Interim Signal	Concrete measures are being taken to support results sustainably, including e.g. financial, institutional or policy arrangements. Commitment and capacity to sustain results are present.	1 – 3 years	
			Advanced Signal	Results are sustained durably through robust mechanisms guaranteeing the continued presence of the required resources, capacity and enabling environment to support these without relying on continued programme funding. Ownership of results as well as the commitment to sustain and further develop these is evident among relevant stakeholders.	5 – 8 years	