ePact
Strengthening evaluation effectiveness and impact

UKaid
from the British people

UK Caribbean Infrastructure Fund: Evaluation baseline report

Johanna Polvi, Maysam Abedin, Teresa Durand, Matt Savage, James Robinson, Talar Bogosyan

27 September 2022

Oxford Policy Management

itad

e-Pact is a consortium led by Oxford Policy Management and co-managed with Itad

Acknowledgements

We would like to thank the Evaluation Reference Group, Andy Murray, Melissa Felician and Serena Rossignoli, as well as individuals working within the project implementation units, for all of their input and support in producing this baseline report.

Disclaimer

This material has been funded by UK aid from the UK government; however, the views expressed do not necessarily reflect the UK government's official policies.

This assessment is being carried out by e-Pact. The project manager is Talar Bogosyan The remaining team members are James Robinson and Johanna Polvi. For further information contact talar.bogosyan@itad.com The contact point for the client is Andy Murray.

e-Pact	Level 3, Clarendon House	Tel	+44 (0) 1865 207300
	52 Cornmarket Street	Fax	+44 (0) 1865 207301
	Oxford OX1 3HJ	Email	admin@opml.co.uk
	United Kingdom	Website	www.opml.co.uk

Executive Summary

This executive summary provides a broad overview of the baseline evaluation of the UK Caribbean Infrastructure Fund (UKCIF). The evaluation was implemented by Itad with data collection and collation carried out over Q4 of 2021. This baseline evaluation report will refer to the UKCIF programme length and budget as correct at the time of the data collection phase, when the UKCIF programme had an end date of March 2024 and a total approved budget of £330 million. It is noted that since then, the programme end date has been extended to March 2026 and the total approved budget has been increased to nearly £350 million.

The UKCIF Programme

The UKCIF is a £330 million[1] Foreign Commonwealth and Development Office (FCDO) investment in physical infrastructure, administered by the Caribbean Development Bank (CDB). The fund aims to invest in critical economic infrastructure across nine countries and territories in the Caribbean that will boost economic growth, help reduce poverty, increase climate resilience and encourage gender equality and social inclusion for marginalised groups, including people with disabilities. The countries UKCIF operates in are: Antigua and Barbuda, Belize, Dominica, Grenada, Guyana, Jamaica, Saint Lucia, Saint Vincent and the Grenadines, and the UK Overseas Territory of Montserrat. The UKCIF was launched in 2015, starting implementation in 2016 and is anticipated to reach completion in March 2024.[2]

In the active portfolio of 14 projects, there are seven focused on upgrading roads (56% of total financing), two port development projects (14% of financing), two agricultural development projects centred on irrigation, two investments in water and sanitation, and one project focused on increasing resilience for the energy sector (sharing the remaining 30%). Implementation has been delayed, which has been reflected in slow disbursement, and many UKCIF projects are behind schedule. Delays are attributed to various factors, including the impact of COVID-19.

Purpose and scope of the evaluation

The purpose of the evaluation is to contribute to learning about large-scale infrastructure programmes, and to provide an accountability function to see how well the UKCIF programme has performed. Findings from the evaluation should help guide the current and future policy development and infrastructure programming of the FCDO and the CDB, as well as helping other international development and financial institutions to be as productive, equitable and inclusive as possible, while integrating measures that respond to climate change.

The specific objectives of this baseline report are: (i) to design and implement an approach for closing gaps in the baseline data needed for the endline evaluation, and, (ii) to generate early insights and findings to improve on-going programme implementation[3]. The baseline data is based on information available in quarter four of 2021. Data was not collected for four projects that remained in TA phase during the data collation period, these are: Grenada Water Supply

[1] The original business case budget was £300 million. It was increased by £30 million in 2017 for reconstruction in the aftermath of Hurricanes Irma and Maria.
[2] The programme was launched in 2016 and is anticipated to reach completion in March 2026, following an addenda and extensions to the business case.
[3] The second baseline objective was additional to the TOR and added as part of the UKCIF inception phase

Expansion and Sewerage Improvement Project, Grenada Western Road Corridor Upgrade Project, Dominica Loubiere/Bagatelle Road, and Dominica Water Sector Strategic Plan.

There are nine head evaluation questions, as well as 21 thematic sub-questions outlined in the main report. The head questions provide a summative view of UKCIF whilst the thematic questions provide richer evidence for the three thematic areas, these are i) Socio-economic impact of roads, ii) GESI, and iii) Climate resilience.

Methodology

The evaluation is **Theory-based,** using contribution analysis**:** allowing us to test the assumptions and causal pathways in the UKCIF TOC. **The evaluation framework** is our main tool for ensuring coherence and focus. The framework maps the evaluation questions against the TOC to ensure the interrogation of areas of the project where learning and accountability are needed.

The evaluation is intended to be useful for the joint FCDO–CDB team, for the FCDO and CDB more broadly by maintaining a **Utilisation focus.** The evaluation questions incorporate summative and thematic components in an integrated manner and has been designed with a **Gender and social inclusion lens.** The methodology consists of three main modules, outlined below:

Module 1: Desk review of secondary evidence

At baseline, a review of secondary data and documents was undertaken across the whole portfolio. This will be repeated at endline, including the four projects that were not approved at the time of the baseline data gathering.

Module 2: Review of Institutional arrangements and processes (IA)

The review of institutional arrangements and processes examines the relevance and efficiency of structures and processes across the whole portfolio of projects. This module will pay particular attention to how the UKCIF ensured focus on the priority thematic areas, and operationalised them to support programmatic results. It is not an assessment of CDB or any of its implementing partners. The evaluation developed **institutional indicators** and an **assessment rubric**, based on the McKinsey 7-S framework, which informed the indicators in the evaluation framework, the questions in the stakeholder survey, and the KIIs.

Module 3: Case studies

The case studies provide additional quantitative and qualitative evidence for five selected projects, these are:

- Belize Coastal Highway
- Guyana Linden to Mabura Hill Road
- St Lucia Millennium Highway and West Coast Road
- Jamaica Southern Plains Agriculture Development
- St Vincent & the Grenadines Kingstown Port Modernisation

The case studies fill data gaps in answering the head evaluation questions. They will also provide more detailed qualitative evidence to answer the thematic evaluation questions that look at how and why outcomes have been achieved, and for whom.

Data Collection

The baseline research was conducted before the start of construction of the infrastructure. The modules apply several data collection sources and tools as summarised below:

Table 1: Data collection summary

Tool	Module 1: Portfolio-wide	Module 2: Institutional arrangements	Module 3: Selected cases	Baseline	Endline
Secondary data	✓	✓	✓	✓	✓
Surveys			✓	✓	✓
UKCIF internal stakeholder survey	✓	✓		✓	✓
Key Informant Interviews (KIIs) internal stakeholders	✓	✓		✓	✓
KIIs external stakeholders			✓		✓
Focus Group Discussions (FGDs)			✓		✓

Data analysis

The overall data analysis strategy for the evaluation is based on contribution analysis. The analysis uses data from selected indicators to assess the causal links between activities and outputs and outcomes. The TOC plays an essential role in the analytical process, with data from different sources coded according to its outputs, outcomes, and assumptions. At baseline, the focus was on providing the necessary information to answer the evaluation questions at endline, while also providing some preliminary findings for the relevance, coherence, and efficiency questions.

Where probability-based surveys were undertaken, the data underwent statistical analysis in R. Where purposeful surveys were undertaken, this data was analysed descriptively in Excel. Qualitative data was coded in MaxQDA according to the TOC, evaluation questions and, where relevant, the IA rubric. Once the analysis of all components was complete, the evaluation team undertook an internal process of comparison, triangulation, and baseline synthesis. Evaluation limitation based on data gaps and resulting plans and recommendations for addressing these are explored further in the main report.

Baseline Status

The following baseline status sections are organised by the Organisation for Economic Co-operation and Development (OECD) DAC criteria, relevance, coherence, efficiency, effectiveness/impact and sustainability. The data is summarised in relation to the DAC criteria and evaluation questions, as well as the UKCIF theory of change.

For each DAC criteria, a baseline status summary provides an overview of the key data collected. For some sections it has also been possible to draw out some initial insights, notably under the relevance, coherence and efficiency criteria. Following the summary, examples of key baseline data are provided for each of the head evaluation questions (EQs). More data was collected and is presented in the main body of the report, as well as relevant annexes.

Baseline: Relevance

This section of the executive summary provides key data points that will be used to answer EQs 1 and 3. Given the progress the UKCIF has made to date, we are also able to make some initial observations on the relevance of the design.

The relevance to country priorities is treated first, followed by a consideration of institutional factors as enablers and barriers to addressing these priorities. Then, the available baseline data on the needs of beneficiaries are presented, including from the perspective of the three cross-cutting, thematic areas: the socio-economic effects of roads, GESI, and climate resilience.

Relevance baseline status summary

At baseline, the UKCIF design documents show that the scope of the fund and individual project designs are well-aligned with the priorities and objectives of the UKCIF countries. The CDB has established processes in place to ensure the alignment of interventions with government priorities. Many of the UKCIF investments were also strategic project ideas that were lacking financing.

The UKCIF infrastructure investments, as designed, are also generally aligned with international United Nations Framework Climate Change Convention (UNFCCC) Nationally Determined Contributions (NDCs) and domestic climate change commitments and policies across the UKCIF portfolio of reviewed projects. Likewise, the road investments are aligned with national transport policies, and take on board the trade-offs between road improvement and safety. Specifically, socio-economic livelihood considerations are integrated into the selection and design of all of the selected road projects.

Both the CDB and the FCDO have relevant GESI policies and adequate consultation mechanisms to ensure the UKCIF programme design meets the needs of final beneficiaries, including more vulnerable groups. These include the CDB Environmental and Social Review Procedures (ESRP). However, there is no specific CDB policy or UKCIF programme approach to people living with disabilities (PLWD). The engagement of both youth and PLWD in consultations remains inconsistent across the portfolio. The implementation of GESI recommendations from the Environmental and Social Impact Assessments (ESIAs) and the Environmental and Social Management Plans (ESMPs), and the distribution of benefits of the projects will depend on how well these policies are implemented in practice. There are some capacity constraints, including the number of designated staff to these issues, that may influence this going forward.

EQ 1: How relevant was the scope, design, and operational model of the UKCIF programme for the beneficiary countries and to what extent did it address and adapt to the needs and interests of relevant target groups?

Relevance to countries' priorities

The UKCIF design documents show that the scope of the fund and individual project designs are well-aligned with the priorities and objectives of the UKCIF beneficiary countries. The CDB routinely develops a Country Engagement Strategy and accompanying Country Strategy Paper, and therefore provides a first filter for alignment between the CDB's policy and the country's policy. Many of the UKCIF investments were also strategic existing project ideas that were missing financing. The UKCIF infrastructure investments are also generally aligned with

international UNFCCC NDCs and domestic climate change commitments, and policies across the UKCIF portfolio of reviewed projects.

The table below provides a summary of the UKCIF portfolio against national policies and sector plans, including GESI and climate priorities. This is followed by a narrative to describe the alignment of GESI and safety within UKCIF projects. Further detail on other cross cutting areas are elaborated on in the main report and in thematic annexes D, E & F.

Table 2: Alignment of UKCIF portfolio with national policies and sector plans[4]

Sector	Project	National policy priorities	Specific sector plans	Cross-cutting plans (GESI, climate, safety)
Roads	Antigua road rehabilitation	Yes	Yes	Yes – road safety, climate, GESI
Energy	Barbuda energy	No	Yes	Yes
Roads	Belize Coastal Highway	Yes	Yes	Yes – climate No – GESI, road safety
Roads	Belize PGH	Yes	Yes	Yes – climate, safety No – GESI
Roads	Dominica Road	Not available	Not available	Not available
Water	Dominica water	Not available	Not available	Not available
Water	Grenada water	Not available	Not available	Not available
Roads	Grenada Western Corridor	Not available	Not available	Not available
Roads	Guyana Linden to Mabura Hill	Yes	Yes	Yes – climate, safety
Agriculture	Jamaica EVAD	Yes	Yes	Yes
Agriculture	Jamaica SPAD	Yes	Yes	Yes
Ports	Montserrat Port	Yes	Yes	No
Roads	St Lucia Millennium Highway	Yes	Yes	Yes – climate, safety No – GESI
Ports	SVG Port	Yes	No	Yes

With regards to gender, while it is clear that overall, the UKCIF aligns with the CDB and FCDO cross cutting theme of promoting gender equality, in some cases, the project appraisal reports do not directly refer to gender issues in the national policy context. including Belize PGH and Coastal Roads and Guyana Linden to Mabura Hill. On the other hand, even though some UKCIF countries do not have a National Gender Policy (e.g. Antigua and Barbuda), the project rationale directly provides a link to Country Gender Assessments (2014) and the National Youth Policy. In the case of St Lucia Millennium Highway, the project did not have a significant GESI component, though it does conform to CDB policies.

Safety is regarded as an important sector policy and some projects, including the St Lucia Millennium Highway and Guyana Linden – Mabura Hill, integrated safety components into the project. Road widening and road safety awareness, respectively. These projects have also included targets for fatality reduction. Other projects, such as Belize Coastal Highway, have less prominent road safety features, though may be included under other CDB road safety initiatives.

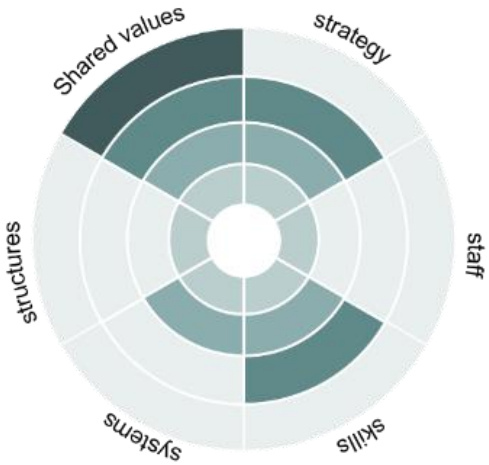
[4] Based on Project Approval Reports and on case studies supplemented by stakeholder consultations.

EQ 3: What factors contributed to the programme's ability to address the infrastructure needs of beneficiary countries and how did these affect decisions around design and implementation?

UKCIF Operational Model and Institutional factors

The UKCIF operational model was examined through the dimensions of shared values, strategy, structure, systems, staff, and skills, and how these work across the project cycle including appraisal systems, procurement and supervision, and related resources. The discussion on the methodology, evidence, and analysis underpinning the institutional factors can be found in the full report and annexes. Based on the evidence gathered, a snapshot captures how the relative strengths are viewed against the framework.

Figure 1: Snapshot of strength of the UKCIF projects against McKinsey modified 7-s framework



Based on the survey, documentation, and KIIs, the diagram to the left presents the evaluation teams' assessment of the relative strengths of UKCIF in each capacity area.

Shared values, strategy, and skills were judged as the strongest capacity dimensions of the programme. Structures, staff and systems had the weakest scores overall.

The majority of individuals working on UKCIF projects align themselves with the goals of the programme. Those engaging with CDB strategy documents on UKCIF projects consider them highly relevant and well-aligned to their contexts and to national priorities. Stakeholder testimony from KIIs and the survey mentions that this has played an important role in ensuring government buy-in, which is cited as a key enabler of the projects.

One of the main constraints identified across organisations involved with UKCIF projects relates to the availability of environmental, climate and social expertise and related staffing levels, particularly within the PIUs, through contractors, and to a lesser extent within CDB. At the level of the PIUs, the availability of environmental, climate and GESI skills is particularly limited. At the time of baseline, five projects do not have either a community liaison officer or social and gender specialist.

Climate Resilience and GESI

The UKCIF infrastructure investments are generally aligned with countries' nationally determined contributions (NDCs)[25] under the United Nations Framework Convention for Climate Change, with some projects also contributing to mitigation targets (e.g., energy projects in Antigua and Barbuda and agricultural projects in Jamaica).

Both the CDB and the UKCIF programme had relevant GESI policies, and adequate consultation mechanisms to ensure the programme design meets the needs of final beneficiaries, including more vulnerable groups. Participatory consultation of project

beneficiaries is a requirement, and is implemented across all UKCIF projects. However, the degree and quality of the consultations varied.

Baseline: Coherence

This section of the executive summary provides key data points that will be used to answer the coherence head evaluation question 2 at endline.

Baseline status summary

At baseline, while reference was made to complementary investments in some of the project documents, this was relatively limited.

Evaluation question 2: How did the UKCIF programme coordinate with other interventions in similar or complementary contexts?

At baseline, while reference was made to complementary investments in some of the project documents, this was relatively limited. The most comprehensive reporting on complementary investments is in the two agriculture projects in Jamaica, the energy project in Barbuda, the St Lucia Millennium Highway project and the Belize Philip Goldson Highway.

Baseline: Efficiency

This section of the executive summary provides an overall baseline status summary and key data highlights that will be used to answer the efficiency head evaluation questions 6 and 7. Given the progress the UKCIF has made to date, we are also able to make some initial observations on the internal barriers to UKCIF programme implementation.

Baseline status summary

UKCIF projects have already experienced substantial budget and timeline adjustments. At the time of drafting this report, four projects had not yet been approved, and there have been numerous delays in procurement processes across the portfolio. An extension request for the programme was submitted and has been accepted, that now extends the programme to 2026.

External challenges relate notably to the impacts of the COVID-19 pandemic. Internal challenges relate to the UKCIF governance structure and systems, notably delays in inputs to and appraisal and procurement processes, and the lack of horizontal linkages leading to some siloed working. Socio-economic, GESI, and climate resilience requirements were not identified as the cause of substantial delays for projects. There has been a depreciation of the pound since the beginning of the programme.

As projects move toward construction, questions remain about the potential efficiency and quality of supervision, monitoring, and reporting. These include concerns over sufficient staff resources at both the CDB and PIUs, notably on GESI and climate resilience. Issues have already been identified with the implementation of the ESMPs, notably related to reporting.

EQ 6: What were the key barriers and enablers to completing projects to international design standards within the planned time and budget, did this affect the value of projects?

Procurement and construction

FCDO and CDB staff are confident that infrastructure construction will be complete due to the recently approved extension to 2026. UKCIF projects have experienced adjustments to both budgets and timelines. At the time of drafting this report, four projects had not yet been approved and there had been delays in the appraisal and procurement processes across the portfolio. Of the five road projects in implementation phase, most are experiencing delays ranging from six months to over two years. Three of the projects, the Guyana Linden to Mabura Hill road, the St Lucia Millennium Highway, and the Montserrat port project, have reported already experiencing or foreseeing cost over-runs, notably due to currency depreciation.

Contextual barriers and enablers

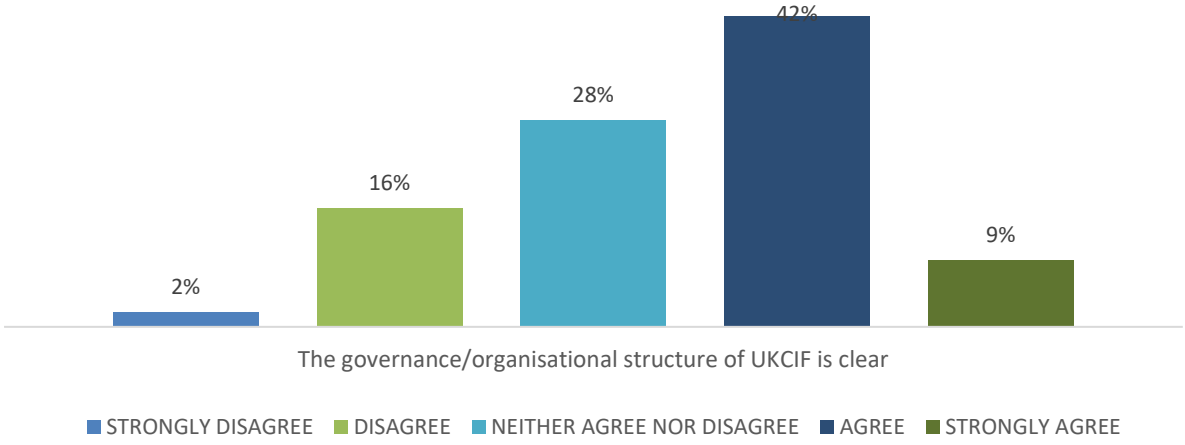
A number of contextual factors were highlighted as being existing or potential barriers and enablers to the programme realising its outcomes. The barriers broadly fell into three categories: (i) COVID-19 affecting project supply chains and relevant government's fiscal position, (ii) limited local expertise, notably on GESI and climate resilience, and (iii) on-going GESI issues, including the lack of policy protection and prevailing patriarchal culture.

A main contextual enabler highlighted was government buy-in. Interviews and responses in the IA survey note that high levels of government buy-in supported project progress, and is a result of strong alignment between the project and wider government strategies. Other key enablers related to the institutional arrangements and processes which are discussed below.

EQ 7: How efficient were the institutional arrangements supporting the execution of this programme (for example, between CDB/UKCIF and also in-country arrangements)?

The UKCIF is a unique project in that it is placed directly under the Vice President's Office of CDB. Together with concerns over respective roles and responsibilities, this structural arrangement appears to have caused some tensions but, based on the latest FCDO Annual Review, the relationship between the FCDO and CDB has improved. Governance within the UKCIF, who the stakeholders are, and where responsibility lies, is not well understood among PIUs, consultants, and contractors. Overall, only 51% of respondents in the IA survey agreed or strongly agreed that the organisational structure was clear. Some qualitative responses also highlight this as a potential area for improvement, with one individual expressing a desire to have *"greater clarity on the FCDO, CDB and beneficiary country roles and responsibilities."*

Figure 2: IA survey responses to clarity of organisational structure



Inefficiencies in decision-making was highlighted as a challenge through the IA survey and KIIs, frequently cited barrier to programme attainment. 35% of respondents in the IA survey agreed or strongly agreed that decision-making on UKCIF projects was efficient. In addition, respondents within PIUs also highlighted that they would like more decision-making power, compared to CDB respondents who felt that their own decision-making responsibilities were appropriate.

IA survey respondents' perceptions of the relevance of CDB appraisal systems was very high (95% agreeing), while the perceptions of efficiency was lower (55% agreeing). Respondents were also critical about the efficiency of the procurement systems with some of these concerns related to the burden of accompanying structures and processes.

Overall, there was agreement that communications on UKCIF projects were timely and effective. Qualitative responses and KIIs cited appreciation of both formal and informal/ad hoc avenues of communication. Though horizontal linkages between projects could be further strengthened. Multiple sources also reported that some functions are siloed within projects, for example, GESI work operating separately from project coordination.

Climate resilience and GESI

For UKCIF projects, the CDB is systematically commissioning environmental and social impact assessments, and categorising projects based on its Environmental and Social Review Procedures. There is also a CDB requirement for climate screening during appraisal. A Climate Risk Vulnerability Assessment (CRVA) has or will be undertaken for all UKCIF projects. All the UKCIF projects have adhered to CDB climate processes.

The quality of CRVAs undertaken has been variable to date. Perceptions from users of these documents reveal that ESIAs are considered to be of higher quality than CRVAs, with particular challenges identified in resourcing their mainstreaming. 57% (16/28) of the IA survey respondents did not consider climate risk and resilience mainstreaming systems as adequately resourced. CDB staff highlight the importance of having strong capacity to be able to understand and quality assure the CRVA. The capacity for understanding the CRVA process and incorporating risk recommendations at the country level can vary and could be strengthened. CDB staff report that the climate risk screening and CRVA processes themselves did not lead to additional implementation delays, once the required expertise was identified.

GESI mainstreaming was incorporated in all the UKCIF analytical, design and appraisal processes, as well as the planned implementation and monitoring arrangements although the extent to which this was done was variable.

The quality and timeliness of ESIAs continues to be a factor that affects the potential to influence the design of different components of the projects. While the ESIA informs the appraisal findings, the ESMPs are designed to accompany the project implementation process. Based on annual reviews, challenges were increasingly faced in maintaining alignment with the ESMPs, and by 2021 this applied across all projects, except the PGH, and the Guyana Linden to Mabura Hill projects, which were only approved in December 2020.

The projects were obliged to engage the Community Liaison Officers prior to commencing construction, which resulted in some implementation delays. Based on interviews and qualitative survey responses, there were also some concerns that GESI resources would be used for construction.

Baseline: Effectiveness and Impact

This section of the executive summary provides an overall baseline status of the effectiveness head EQ 4, as well as the impact head EQ 9. Due to the similarities and differences of key performance indicators in given sectors, the section is organised by sector. Indicators are grouped according to sub-components of the evaluation questions. Therefore, with separate sections for infrastructure access, time, and cost savings etc. The projects in each of the sectors are treated in turn, with more information available for the selected case studies.

Each of the sector specific sections also includes thematic sub-sections, related to evaluation sub-questions around climate resilience and GESI.

Baseline status summary

The infrastructure investments across the supported sectors are designed to result in substantial benefits to users, including more vulnerable groups, notably in the UKCIF projects that have specific livelihoods components. Planned benefits include improved access, whether to roads or utilities, as well as time and cost savings, along with improved safety. Over time, improved infrastructure is expected to contribute to greater productivity and increased employment.

We have collated and collected baseline data across the investments of key indicators related to these changes that will enable us to answer the evaluation questions at endline. Only the agriculture and port investments are expected to have an impact on market access, with the latter also influencing international trade. While we expect some contribution from the UKCIF infrastructure investments to national economic growth and poverty alleviation, these are longer-term impacts that are not likely to be directly attributable to the programme. The evaluation nevertheless collates secondary growth and employment data to contextualise the interventions, and to understand broader economic trends and constraints.

EQ 4: To what extent did the programme result in improved access, time and cost savings, livelihoods, increased resilience, and enhanced safety for primary users?

EQ 9: What are the early indications that the UKCIF Programme has contributed, or is likely to contribute, to increased and equitable productivity, employment, market access and economic activity that benefits all relevant stakeholders within its geographical scope/project areas?

Some highlights of the data collected by each sector are outlined below, for the executive summary this data is focussed on earlier-stage outcomes[5] More data is presented in the main report and annexes broken down by the evaluation question components of i) use and access, ii) time and cost savings, iii) quality and reliability, iv) safety, v) livelihoods (also early indicators of impact), and vi) impacts

Roads

Increased access and use: road traffic levels

The standard way to assess road access and use through traffic volume are annual average daily traffic (AADT) assessments. Table 3 presents UKCIF road investments traffic baseline

[5] Livelihoods and impact data is available in the main report

values, as well as the targets in each project. Values have been obtained from the available Project Appraisal Reports.[51]

Table 3: Road sector traffic[52]

Project	Mean annualised daily traffic (AADT)	
	Target/estimate	Baseline
Antigua Road Infrastructure Rehabilitation	n/a	47,745
Belize Coastal Highway	2,000 (2.3% by 2021)	63
Belize PGH	n/a	14,227
Dominica Loubiere/ Bagatelle Road	n/a	n/a
Grenada western corridor	n/a	n/a
Guyana Linden to Mabura Hill	260 (by 2024) 1,259 (by 2031)	n/a
St Lucia Millennium Highway	n/a	4,092

Reduced time: road travel time

In addition to the number of trips, the case study surveys also gathered data on trip time, speed and distance from road users. This data is summarised in Table 4 below.

Table 4: Average trip time, distance and speed[68]

	Indicator	Belize(mean)	Guyana(mean)	St Lucia(mean)
Individual	Average time per trip (mins)	36	163	40
	Average trip distance (km)	29	65	26
	Average time spent travelling road/km	48.3	23.9	39.4
Firm	Average time per trip (mins)	44	267[69]	33.5
	Average trip distance (km)	24	64	25
	Average km/h	32.8	14.4	44.6

Based on the case studies, the average number of trips is substantially more limited in Belize and Guyana than in St Lucia, due to the remote location and particularly poor condition of the existing roads, among other reasons. The time spent on the road is by far the highest in Guyana, due to the distance to the nearest urban centre. Similar patterns in road use data also emerged when enquiring from private companies through the dedicated surveys.

Reduced costs: Vehicle Operating Costs (VOC)

Vehicle operating costs (VOC) provide an international standard method for estimating vehicle operating costs. The projected estimates for the approved projects are provided in Table 5 below.

Table 5: Estimated Vehicle Operating Costs

Project	Mean vehicle operating cost savings USD millions/year	
Antigua Road Infrastructure Rehabilitation	8.5	Nil
Belize Coastal Highway	7.3	Nil
Belize PGH	12.8	Nil
Dominica Loubiere/ Bagatelle Road	n/a	Nil
Grenada western corridor	n/a	Nil
Guyana Linden to Mabura Hill	0.4 million (by 2025)	Nil
St Lucia Millennium Highway	75% reduction, 2.8 million by 2023	Nil

Quality and safety

The International Roughness Index (IRI) is the international standard for quantifying road smoothness, and the International Road Assessment Programme (IRAP) provides a star rating

for the safety of roads. While these standard indicators are either not relevant, or not collected across all of the road projects, the available data is provided below.

Table 6: Road safety and quality data points from project monitoring frameworks

Project	IRAP	Number of fatalities per year		IRI
		Target	Baseline	Baseline
Antigua Road Infrastructure Rehabilitation	Not collected	n/a	n/a	6
Belize Coastal Highway Upgrading	Not collected	12	15	Not collected
Belize Phillip S.W. Goldson Highway Upgrading Project	1	n/a	n/a	Not collected
Dominica Loubiere/Bagatelle Road	Not available	25	10	Not available
Grenada Western Road Corridor Upgrade Project	Not available	n/a	n/a	Not available
Guyana Linden to Mabura Hill Road Upgrade	1	n/a	n/a	9
St Lucia Millennium Highway and West Coast Road Upgrading	Not collected	n/a	n/a	6

Climate resilience and GESI

A key indicator of climate resilience is weather -related interruptions to road use. These and targeted results from interventions, where available are presented in the table below.

Table 7: Road service interruptions[6]

Sector	Project	Baseline interruption	Target
Roads	Antigua road rehabilitation	Not available	Not available
Roads	Belize Coastal Highway	9 days per year impassable	2 days per year impassable
Roads	Belize PGH	Not available	80% reduction compared to baseline
Roads	Dominica Road	Not available	Not available
Roads	Grenada western corridor	Not available	Not available
Roads	Guyana Linden to Mabura Hill	40 days per year impassable	0 days per year impassable
Roads	St Lucia Millennium Highway	Not available	10 culverts (1/100-year flood resilient)

At baseline, for the three selected road case studies, women and PLWD travel less than men. Women and PLWD are always more likely to be unemployed in all three cases, and have a lower income, besides parity between women and men in Belize roadside communities. This data, and additional disaggregated data, including on ethnic minorities, is available across all of the individual survey questions for the road case studies, and will be used further at endline to assess differentiated impacts for these groups.

Agriculture

Increased access and use: land and water

The total planned area for improved agricultural land for the two projects in Jamaica is 1,513 hectares (ha). For the SPAD case study, 60 hectares land is currently cultivated formally

[6] UKCIF project monitoring data, though service interruption data is not always collected in a geographically disaggregated manner (e.g., roads projects).

in the Amity Hall agro park. Sources of irrigation water are 100% river water in Amity Hall, and 100% well water in Parnassus, with a diversity of sources in Essex Valley Agricultural Development project (EVAD), including very expensive trucking of water.

Table 8: Water availability impacting farming practices[7]

Project	Site	Farmers reporting effect of water availability on crop choices	Farmers reporting effect of water availability on scale of farming
SPAD	Amity Hall	3/5	Not applicable
	Parnassus	15/15	14/15
EVAD	Essex Valley	3/5	Not collected

In the selected SPAD case study, farmers have greater access to existing infrastructure, machinery and tools in Amity Hall in comparison with Parnassus, due to the existing agro park. At baseline, the production volume and value data trends demonstrate declining production and growth made by farmers in both Amity Hall and Parnassus, both being part of the SPAD project.

Climate and GESI

Due to the nature of the location and soil type of the agriculture project sites, they are particularly vulnerable to climate change, especially severe weather, including both flooding and drought. Amity Hall especially prone to flooding and EVAD, is prone to drought.

At baseline, there are few female farmers and no youth or PLWDs currently working on the selected plots. In SPAD, most female farmers work smallholdings (1.6 hectares compared to 3.2 hectares on average for male farmers) for cash crop or subsistence production, and are principally engaged in food production for domestic consumption.

Energy

Increased access and use: connections and supply lines

The Barbuda energy resilience project focuses on energy access and post-disaster reconstruction, as well as the mitigation of climate change. It plans to reconnect to the grid the remaining clients who lost connection because of Hurricane Irma, and increase the resilience of the system through the connection of the grid and public buildings to solar PV. Table 9 provides an overview of number of the baseline and planned connections.

Table 9: Utility connections[113]

Sector	Project	Cost/standard unit (KWh) (2021)	Pre-hurricane connections (Baseline, prior to Hurricane Irma)	Connected households (Baseline 2019)
Energy	Barbuda energy	$0.40 per unit (kWh) up to 300 kWh $0.38 per unit (kWh) over 300 kWh	1,099	444 connected (of which 108 are temporary connections)

Both the Barbuda and Jamaica EVAD projects have a component related to the provision of renewable electricity. This is included in the baseline where relevant, but is not the focus of this sector discussion. Table 10 presents the baseline situation of electricity provision for target areas in Barbuda and Jamaica.

[7] UKCIF project data and farmer surveys.

Table 10: Energy capacity installed[112]

Project	Renewable power capacity (baseline)	Power capacity installed (target)	Number of public facilities with renewable back-up generation (baseline)	Number of public facilities with renewable back-up generation (target)
Barbuda energy	0 kW 0 MWh	100kW 219 MWh	0	11
EVAD	0 MWh	3.1 MWh	Not applicable	Not applicable

Climate and GESI

The Barbuda energy project will also install renewable back-up generation of 219 MWh and 11 hybrid solar systems for a total of 100kW to key public buildings in Barbuda. There are concerns that most of the restored grid will remain in overhead lines, rather than underground, though slightly more climate resilient poles will be used.

Decisions on who will be entitled to connections will prioritise the most vulnerable households – those with Board of Guardians social protection status, with single females as heads, and those with high dependency ratios with PLWD, children, youth and older people. However, there is no sex disaggregated data available for the connections currently.

Ports

Increased access and use: throughput and turnaround time

At baseline, St Vincent and the Grenadines (SVG) operates two separate ports in Kingstown and Campden Park, with limited port access as demonstrated by the number of vessel calls, both by cargo ships (353 calls in 2017), and passenger liners (3,376 calls in 2017), and low throughput capacity. The Montserrat port operates on substantially lower volumes than SVG, but is critical for basic access to the island and connecting the island to basic supplies. The project also aims to increase tourism arrivals and trade opportunities, with an impact on overall economic development.

Table 11: Port performance, productivity and accessibility[8]

Project	Capacity (TEUs)	Average annual throughput (tonnes)	Annual throughput (TEUs)	Throughput (TEUs/hr)	Average turnaround time	PLWD access
Montserrat Port	Not available	1,049 (2016)	NA	NA	NA	No
SVG Port	Kingstown: 200 Campden Park: 850	460,744 (2018)	19,818 TEUs (2018)	10 TEUs/hr	48 hours	Yes

Annual SVG port throughput is expected to double from 15,561 twenty-foot equivalent units (TEU) in 2010, to 32,310 TEU in 2030. The port investments in Montserrat and SVG are expected to generate economy-wide impacts in areas such as trade, growth and poverty reduction.

Climate and GESI

In 2016, the Montserrat Port Authority (MPA) recorded that vessels were unable to berth 58 times out of a total of 475 calls due to rough seas, resulting in food shortages on the island

[8] UKCIF project monitoring data, SVG Port Authority Statistics.

(Montserrat Board Paper). The SVG port will include specific provisions to facilitate better access for PLWDs; this is not evidenced in the Montserrat port.

Baseline: Sustainability

This section of the executive summary provides key data highlights that will be used to answer the sustainability head EQ 8 at endline.

Baseline status summary

Sustainability has been planned into UKCIF investments through government co-funding, as well as their operation and maintenance plans for the built assets. Recipient governments are also expected to continue reporting for seven years after the project has ended.

There are some concerns about O&M capacity, including related budgets of the responsible agencies, though mitigation measures have been undertaken by making the O&M plan and annual reporting an obligation at project end. At baseline, basic climate risk assessment capacity is in place at the CDB and PIUs. However, the importance of O&M in keeping infrastructure climate resilience is crucial going forward. The five empowerment level projects appear by design to be the most likely to sustain social and economic benefits, including to women, youth, indigenous groups, PAPs, PLWD, and other vulnerable populations.

EQ 8: To what extent are provisions made to sustain the benefits of the programme after the grant has ended, and what are the key risks to, and opportunities for, these benefits being sustained over the longer term?

Provisions were made at the UKCIF design stage, to ensure that the benefits of the infrastructure are sustained for as long as possible after construction is completed. With expectation placed on the recipient governments to operate and maintain the assets, as well as related reporting for seven years after the project has ended.

However, there remain questions about the O&M capacity of the responsible agencies and the financing of maintenance plans, especially with increasing financial pressures (including COVID-19). The realisation of these plans and the implementation of the requisite reporting, including the enforcement of these requirements, will be assessed at endline as far as possible.

Climate and GESI

Climate risk assessment typically has a forward-looking time horizon, with typical CRVA projections dates ranging from 2030, 2050 up to 2100. Designs incorporate climate projection data to ensure that climate thresholds are not crossed in terms of maintaining operational resilience (based on expected return periods for given climate thresholds). Some stakeholders affirmed that good quality workmanship and regular maintenance is essential for the climate-resilient aspect of a project to remain effective long-term. Highlighting the importance of O&M budgets moving forward.

Based on the review of documents, surveys and interviews at baseline, the five empowerment level projects by design, appear the most likely to deliver social and economic benefits, including to women, youth, indigenous groups, PAPs, PLWD and other vulnerable populations, in areas such as road safety, better housing under resettlement, and new employment opportunities due to training, among others.

Conclusions and recommendations

This final section of the executive summary draws together overall conclusions, it also summarises remaining gaps in data and information, concluding with our recommendations.

Conclusions

The UKCIF investments are designed to align well with countries' priorities, including environmental and climate commitments. Policies and processes are in place for these investments to align with climate change commitments and meet the needs of target populations, including more vulnerable groups.

The UKCIF design documents and investments are well-aligned with the priorities and objectives of the UKCIF countries, CDB and FCDO. Established CDB processes are in place to ensure this alignment with country priorities. The investment designs are also relevant to national **climate resilience** and **GESI priorities.**

UKCIF has experienced delays in appraisal and procurement. The delays were a result of several internal and external barriers, not least the COVID-19 pandemic.

At the inception of UKCIF, there was an ambitious timeline to complete the project in four years. This meant that project selection happened quickly, but progress has since slowed with structural and staffing issues contributing to these delays. External challenges relate notably to the COVID-19 pandemic, as well as global supply chain challenges.

The infrastructure investments across the supported sectors are designed to result in substantial benefits to users, including more vulnerable groups.

This includes improved access, whether to roads or utilities, as well as time and cost savings, along with improved safety from improved roads and ports. Relevant baseline data is provided, sector-by-sector across the portfolio, in the main body of the baseline report.

Sustainability has been planned into UKCIF investments through government co-funding, as well as their operation and maintenance plans for the built assets.

Provisions have been made for sustainability in the project design stages to ensure the benefits of the infrastructure are sustained long after construction. There are expectations on the recipient governments to operate and maintain the assets, as well as related reporting for seven years after the project has ended. O&M will be crucial to ensuring long term benefits.

Data limitations at baseline

The baseline has collated and collected a large amount of primary data, and project monitoring and secondary data which will enable assessment of the UKCIF at endline. However, some gaps remain in current monitoring plans and data. The limitations are in the following areas:

- Inconsistent use of indicators, concept definitions, and data collection methods and sources, in line with international standards.
- Missing administrative data from government agencies to feed into the indicators of the UKCIF programme and project logframes.

- A lack of disaggregation of data collected by the responsible national authorities and UKCIF projects by geography, age, sex, PLWD status and indigenous groups in UKCIF logframes, despite plans for this to be available.

- Irregular review of the UKCIF theory of change, especially its underlying assumptions and risks.

- Limited evidence of awareness and coordination with other, similar or complementary government initiatives, whether with government, donor or private sector financing.

Further details on these data gaps are provided in the main report.

Recommendations

Based on the conclusions above and information provided in the main report we have set out some recommendations below, please note that in the main body of the report we have split these by operational and data recommendations but have not provided this level of detail here:

To ensure that the projects remain aligned with the UKCIF ToC and aligned with country priorities we recommend the following actions:

- Ensure that key ESRP and principles continue to be implemented in practice to ensure that projects remain relevant to the population, including vulnerable groups.

- Vulnerable groups, particularly PLWDs and indigenous groups should continue to be appropriately and effectively engaged, during project design (e.g. in future design of programming), and at regular, appropriate times throughout the project cycle.

- Regular monitoring and reporting (e.g. grievances), and proactive risk management can be further strengthened for efficient project implementation.

- CDB should continue to work on improving internal collaboration and teamwork across engineering, environmental, and social aspects of the projects. CDB should also continue to work with PIUs to improve the whole team's understanding of the wider socio-economic benefits and objectives of the projects.

- GESI monitoring can be further strengthened across the portfolio with the allocation and protection of related resources, including strengthening of GESI expertise on teams.

Increase capacity at the country-level to administer large infrastructure contracts and related government procedures, notably also to facilitate rapid decision-making. Specific actions include:

- Prioritise the recruitment of PIU positions, including environmental and social expertise.

- Quality supervision, results-monitoring, cross-communication and learning on UKCIF projects are areas that will continue to require resources and attention.

- CDB should continue to work with project teams to improve the frequency and quality of reporting. With clear designation of the overall responsibility (e.g. with the project coordinator).

Ensure O&M plans are designed at an optimum time. Specific actions include:

- Project teams to continue close monitoring of the political commitment by the recipient governments to the projects, also to the operation and maintenance of the assets.
- Ensure statutory O&M Plans are developed at the optimum time that is appropriate for both the sector, ownership structure of each project.
- Include sustainability, climate change and GESI issues as a part of regular monitoring and reporting at all levels; also on the agenda of the Steering Committee.

Prioritise addressing data limitations. Specific actions are outlined in full in the main body of the report but include:

- The responsible FCDO and CDB staff to increase the coherence of the UKCIF logframes and measurement methods.
- The PIUs to liaise with responsible government agencies on the existing metrics and feasibility for their adjustment to meet international standards.
- Relevant FCDO and CDB staff, together with the PIUs, to assess the feasibility of further disaggregation of data, and promote understanding of the need and value in collecting and analysing disaggregated data by the responsible government agencies.

Next steps for the UKCIF evaluation

The endline data collection has been planned for the end of the construction phase in 2026. In the main body of the report, we have identified a number of areas we will focus on that will help to fill data limitations discovered during the baseline phase. The endline phase has also been designed to have a stronger qualitative component.

Contents

List of tables, figures

Acronyms and abbreviations

AADT	Annual average daily traffic
AIC	Agro-Investment Corporation
APUA	Antigua Public Utilities Authority
BMC	Borrowing member country
CALC	Climate Action Line of Credit
CAPI	Computer-assisted in-person interview
CATI	Computer-assisted telephone interview
CDB	Caribbean Development Bank
CLO	Community Liaison Officer
CRVA	Climate risk vulnerability assessment
DAC	Development Assistance Committee
ERG	Evaluation reference group
ESIA	Environmental and Social Impact Assessment
ESMP	Environmental and Social Management Plans
EVAD	Essex Valley Agricultural Development project
FCDO	Foreign, Commonwealth and Development Office
FGD	Focus group discussions
GAP	Good agricultural practices
GBV	Gender-based violence
GDPR	General Data Protection Regulations
GESI	Gender equality and social inclusion
IRAP	International Road Assessment Programme
IRI	International Roughness Index
JICA	Japan International Cooperation Agency
JMD	Jamaican Dollar
KII	Key informant interviews
MHWCR	Millennium Highway and West Coast Road Upgrade project
NDC	Nationally Determined Contribution
NIC	National Irrigation Commission (Jamaica)
O&M	Operational and maintenance
ODA	Official Development Assistance
PAPs	Project-affected persons
PGH	Philip Goldson Highway
PIU	Project implementation unit
PLWD	Persons living with disabilities
SPAD	Southern Plains Agricultural Development
SVG	St Vincent and the Grenadines
SVGPA	St Vincent and the Grenadines Port Authority
TA	Technical Assistance
TEU	Twenty-foot equivalent units
TOC	Theory of change
ToR	Terms of reference

UKCIF	United Kingdom Caribbean Infrastructure Fund
VOC	Vehicle operating costs

1 Introduction

1.1 Introduction to the UKCIF programme

This section provides a brief overview of the United Kingdom Caribbean Infrastructure Fund (UKCIF). This baseline evaluation report will refer to the UKCIF programme length and budget as correct at the time of the data collection phase, when the UKCIF programme had an end date of March 2024 and a total approved budget of £330 million. It is noted that since then, the programme end date has been extended to March 2026 and the total approved budget has been increased to nearly £350 million. This section also includes the evaluation coverage of projects at baseline, as well as the status of implementation. It provides a brief summary of the UKCIF theory of change (TOC), covered in greater detail in annex B.

1.1.1 About UKCIF

The UKCIF is a £330 million Foreign Commonwealth and Development Office (FCDO) investment in economic infrastructure administered in partnership with the Caribbean Development Bank (CDB). The fund aims to invest in critical economic infrastructure across nine countries and territories in the Caribbean that will boost economic growth, help reduce poverty and encourage gender equality and social inclusion (GESI) for marginalised groups, including people with disabilities. The UKCIF is meant to serve as a model in the region for developing climate and disaster-resilient infrastructure.

The UKCIF programme was set up in response to the region's major infrastructure investment gap and a UK government commitment, made in 2015, to spend £300 million on infrastructure in the Caribbean to support economic growth[9]. In 2017, £30 million was added to that figure, to be spent on reconstruction in the aftermath of Hurricanes Irma and Maria. The programme was launched in 2015, starting implementation in 2016 and is anticipated to reach completion in March 2024. This commitment has made the UK one of the largest bilateral donors to the region.

The eight Official Development Assistance (ODA) eligible countries at the onset of the UKCIF programme, and one ODA-eligible UK Overseas Territory covered are: Antigua and Barbuda (since graduated from ODA), Belize, Dominica, Grenada, Guyana, Jamaica, Saint Lucia, St Vincent and the Grenadines, and the UK Overseas Territory of Montserrat. The projects

In the active portfolio of 14 projects, there are seven projects focused on upgrading roads, two agricultural development projects centred on irrigation, two port development projects, two investments in water and sanitation, and one project focused on increasing resilience for the renewable energy sector. Projects in the same sector have slightly different priorities and objectives, which is reflected in the way they are being monitored and the nature of the data being collected. Overall, the programme aims to increase national and local resilience, improve gender and social inclusion locally, and reduce poverty through growth of economic opportunity. Selected projects have the potential to impact on vulnerable, disadvantaged

[9] UKCIF business case

and/or marginalised populations which – depending on the project and location – include women, youth, persons with disabilities and indigenous populations.

The objectives and specific populations targeted by each project is available in Annex C. Table 1: below illustrates the portfolio of projects, location and value.

Table 1: Table of projects, sectors, and values, rounded to nearest £0.01 million

Country	Project	Sector	Value (£M)	
Antigua	Road Infrastructure Rehabilitation	Roads	TA	0.19
			Capital	13.64
Barbuda	Barbuda Energy Resilience Project	Energy	Capital	2.89
Belize	Coastal Highway Upgrading	Roads	TA	0.99
			Capital	25.05
	Phillip S.W. Goldson Highway Upgrading Project	Roads	TA	1.76
			Capital	14.29
Dominica	Loubiere/Bagatelle Road	Roads	TA	1.27
			Capital	24.57
	Water Sector Strategic Plan	Water	TA	2
			Capital	21.9
Grenada	Water Supply Expansion and Sewerage Improvement Project	Water	TA	0.71
			Capital	11.48
	Western Road Corridor Upgrade Project	Roads	TA	0.93
			Capital	9.87
Guyana	Linden to Mabura Hill Road Upgrade	Roads	TA	2.13
			Capital	49.95
	Guyana Coastal and River Rehabilitation[10]	Roads, climate defence	TA	0.6
Jamaica	Essex Valley Agricultural Development Project (EVAD)	Agriculture	Capital	35.53
	Southern Plains Agricultural Development Project (SPAD)	Agriculture	TA	0.97
			Capital	16.38
Montserrat	Montserrat Port Development Project	Ports	Capital	14.46
Saint Lucia	Millennium Highway and West Coast Road Upgrading Project	Roads	TA	0.98
			Capital	27.49
St Vincent and the Grenadines	Port Development Project	Ports	TA	2.42
			Capital	25.28

[10] The Guyana Coastal and River Rehabilitation capital phase is being financed outside of UKCIF.

1.1.1.1 Current status of portfolio

At December 2021, the UKCIF has a budget of £330 million, inclusive of CDB and FCDO management costs, and consisting of 100% grant financing. Of this financing, 56% is in the roads sector and 14% is directed to the two port projects, with the remainder (30%) spread between agriculture, energy and water.

At the time of baseline, of the 15 projects provided with technical assistance for feasibility and design, one is seeking alternative sources of funding for development,[11] four are in the TA phase and 10 are in the capital phase. The design phase was expected to be complete by the end of 2021 but has experienced some delays ranging from 6 months in some projects to multiple years for others. As a result, this report focuses on the 10 projects that completed their TA phases by December 2021. It will be updated at endline to include the project data for the remaining four projects. These four projects are:

- Grenada Water Supply Expansion and Sewerage Improvement Project (capital approval was initially expected in Q4, 2019, then was revised to December 2021)
- Grenada Western Road Corridor Upgrade Project (capital approval was initially expected in Q4, 2019, then was revised to September 2021)
- Dominica Loubiere/Bagatelle Road (capital approval was expected in Q2, 2019, and then revised to December 2021)
- Dominica Water Sector Strategic Plan (capital approval was initially expected in Q2, 2020, then was revised to December 2021)[12]

The CDB is responsible for administering the UKCIF. In general, implementation has been delayed which has been reflected in slow disbursement and many UKCIF projects are behind schedule. The UKCIF annual review mentions that the COVID-19 pandemic made these delays more acute, and states that “the expected disbursement for 2020 was adjusted down by 52% in July due to the COVID-19 pandemic”. Despite this, only 55% of the adjusted figure was disbursed between January to December 2020”[13].

1.1.1.2 Theory of change

The UKCIF TOC was reviewed as part of the inception phase of the evaluation, with the accompanying TOC diagram and narrative available in Annex B.

The UKCIF theory is that the fund provides infrastructure, finance, and technical assistance to deliver inclusive and resilient infrastructure, with climate resilience and GESI considerations mainstreamed. This will lead to better quality infrastructure that reduces time and cost for maintenance, improved usage for individuals and businesses, and greater capacity of government agencies to design and maintain complex infrastructure projects. The time and cost savings and improved usage: (i) increases the reliability, safety and resilience of the infrastructure and its users, (ii) increases employment and business productivity, and (iii) leads to improved viability, contributing to economic growth, quality of

[11] While the Guyana River and Coastal Infrastructure Project was designed using UKCIF Technical Assistance, the Government of Guyana will seek alternative (non UKCIF) funding for the capital phase.
[12] UKCIF project briefs from 2019 and 2021
[13] UKCIF fifth annual review, March 2021

life improvements, and additional investment. In turn this results in inclusive, sustainable development and poverty reduction.

1.2 Purpose and objectives of the evaluation

This section summarises the purpose and objectives of the evaluation, the specific objectives, scope and utility of the baseline, the adjustments made to the original terms of reference (ToR), as well as the proposed design, including adjustments to the sampling strategy.

1.2.1 Purpose

The purpose of this evaluation is to contribute to learning on large-scale infrastructure programmes in the region, and provide accountability for how the UKCIF programme has performed. There is also an interest in exploring whether the UKCIF management arrangements and processes worked well in identifying, procuring and implementing the UKCIF projects, including mainstreaming of the UKCIF priorities in GESI and climate resilience considerations.

The evaluation purpose is also to generate learning that will support **evidence-based decision-making** within the CDB, the FCDO, and similar large-scale infrastructure investment programmes. Findings from the evaluation should help **guide the current and future policy development and infrastructure programming** of the FCDO and the CDB, as well as other development finance institutions and partner country governments, to be as productive, equitable and inclusive as possible, while integrating measures to respond to current and future climate change conditions. Table 2 provides a summary of how the report will be used.

Table 2: Utilisation of the baseline study report

Stakeholder	Purpose
FCDO and CDB	Key lessons that inform policy and practice Evidence of the efficiency of project processes
Government agencies responsible for implementing infrastructure projects	Key lessons that inform policy and practice Effectiveness of coordination mechanisms and the state government response
Beneficiaries and intervention communities	Updated project information and evidence of expected outcomes
Other donors and DFIs working on large-scale infrastructure projects	Lesson learning on implementing programmes, especially for incorporating GESI and climate resilience

The specific objectives of the evaluation are as follows:

Baseline phase: To establish appropriate baselines for the indicators underpinning each evaluation question, whilst designing and implementing an approach for closing gaps in the baseline data needed for the endline evaluation, as well as ensuring alignment with project monitoring indicators/systems and other surveys which may be ongoing. In addition to the

TOR objectives, the evaluation team will also generate early insights and findings for immediate benefits for programme implementation.

Endline evaluation: To answer the evaluation questions and include a selected sample of UKCIF projects related to each of the three themes; socio-economic benefits of road access, climate resilience and social inclusion in infrastructure provision. To generate learning on what the barriers and enablers are in adopting and implementing strategies, and in manifesting outcomes in the thematic areas. Further, to examine the efficiency of the programme implementation, focussing on how the thematic areas were operationalised.

These objectives inform the revised set of evaluation questions as outlined in the evaluation framework in Annex K. The questions interrogate the UKCIF contribution to the outputs and outcomes, as well as early indications of impact, outlined in the UKCIF TOC (see Annex B).

1.2.2 Scope and objectives of the baseline study

This baseline study sets out to establish the metrics that will allow the evaluation team to answer the evaluation questions at endline. Where possible, the study will draw on data to provide early insights on components of the programme that have already made progress. At baseline this is especially relevant for questions related to efficiency, relevance and coherence.

This baseline study collates data from the ten projects at capital phase being implemented through the UKCIF, with the remaining four still in TA phase. It also provides primary data for five of the projects.

1.2.3 Revisiting the terms of reference

The main parameters – the evaluation purpose, objectives, audience, scope/sample, the summative and thematic components, as well as the general sequencing of the baseline and endline – remain as originally defined in the TORs. The objectives for the baseline phase were expanded from designing and implementing a strategy to close data gaps to include generating early insights and findings on project implementation.

During the inception phase, some adjustments were made to the proposed approach in the following areas:

- Prioritisation and recalibration of the evaluation criteria and questions;
- Introduction of the transformational change concept;
- Emphasising the importance of collating, harmonising and analysing project data and other secondary sources, in order to address data gaps and inconsistencies at baseline.

Over the course of the baseline it has been necessary to adapt to the context, and in some instances deviate from the plan laid out during the inception phase. These changes are outlined in the baseline context, section 1.2.4.

Prioritisation of the Development Assistance Committee (DAC) criteria

In collaboration with the Evaluation Reference Group (ERG) for the evaluation,[14] the initial set of evaluation questions was reviewed, adjusted, and prioritised according to FCDO and CDB priorities in the context of UKCIF. Therefore, the evaluation questions should now represent the CDB and FCDO priorities for this evaluation. This particularly relates to the UKCIF design and UKCIF management arrangements, in addition to the original emphasis on effectiveness and understanding of UKCIF outcomes and the role of the prioritised themes.

Calibration of transformational change

The concept of transformational change was not a criterion for the selection of UKCIF projects. However, cognisant of UKCIF's potential to transform the market, climate change and social inclusion, the concept has been calibrated to focus on the design of transformational infrastructure, including through a focus on climate resilience and social inclusion in design and construction, as well as on the role of institutional capacity in contributing to the systemic change required for transformation to take place at scale.

Use of project and secondary data

In line with the expectations from the original ToR, the evaluation design will focus on identifying and filling data gaps. During the inception phase, data gaps were analysed, also in relation to the UKCIF TOC. While administrative data on the infrastructure is available at the output and early outcome level, it is not always available and aligned across all relevant projects (e.g., across all the road projects) and harmonised with international measurement standards. At times, different project sources also provide different values for the same indicator and disaggregated data is not available, whether by age, geography, sex or other relevant criteria. Data is also not always collected from all stakeholder groups of interest (e.g., businesses). The primary data collection is designed with this in mind to fill these gaps where possible so the evaluation team can build the UKCIF contribution story. The secondary data used at baseline is primarily from the project design documents (e.g., feasibility study data) and project management (i.e., monitoring and evaluation).

1.2.4 Baseline context and influence on the design and sample

The initial design of the baseline evaluation was influenced by the context, and continued to adapt as context and programme understanding evolved over the course of data collection. One of the biggest influencers was the COVID-19 pandemic which is described in more detail below.

The focus of the baseline is to collect and collate project level information for key indicators against the UKCIF ToC. However, as the processes behind UKCIF projects have been running for a while, it has been possible to look at ongoing institutional arrangements and processes (section 2.5.2). In particular, providing insights on the approach to the selection, design, and procurement of the projects. At endline, the focus will shift towards construction, health, safety, environment and security (HSES), and outcomes of the projects.

[14] The evaluation reference group are a committee who provide evaluation oversight and consists of individuals from FCDO and CDB.

Baseline sampling

The main adjustments to the sample from the inception phase are described below:

1. Projects in Grenada and Dominica have not yet completed their design phases and were not included in the baseline, these will require revisiting at endline and updating with project monitoring data.

2. The population statistics for two areas targeted for survey work, Belize and Guyana, were out of date; as a result some of the population sampling frames had to be amended in the field. This is discussed further in section 2.5 on data limitations.

3. Baseline data collection has not been planned for the Jamaica Southern Plains Agricultural Development project, as the target population had not yet been clearly identified. However, ongoing farmer engagement with the project team and the availability of up-to-date contact details provided the opportunity to collect data with minimal additional resources. The evaluation team completed a short survey on the current status of farming in the area that provided additional data and triangulation to the project data. However, it is worth noting that not all of the farmers involved in data collection will become beneficiaries of the project.

Baseline data collection

The main adjustments to data collection from the inception phase are:

1. During the inception phase the ongoing COVID-19 pandemic contributed in part to the decision to maintain the entirely remote approach to data collection at baseline. However, when the specific target populations for data collection were identified and as the COVID-19 situation alleviated, it became clear that the best course of action was to shift to in-person activities for some surveys. This is discussed further in section 2.5.3.

2. COVID-19 and the in-person data collection mode resulted in higher data collection costs than initially quoted for the household surveys by delivery partner, GeoPoll. This was offset by delivering two of the firm-level surveys within the evaluation team through phone and in-person surveys. This had the added benefit of enabling the identification of additional potential survey respondents through snowball sampling.

3. Complete and up-to-date contact details were not readily available for the port user survey which resulted in changes and delays to how this survey was delivered – moving from phone to a hybrid of phone and online survey.

1.3 Evaluation questions and framework

The evaluation is structured around the DAC evaluation criteria with nine evaluation questions that are fed into by a series of sub-questions that are thematically focused. This section lays out the evaluation questions, which are the focus of the main report, and describes the criteria that drives them. A summary of the evaluation framework maps the evaluation questions and thematic sub-questions to the evaluation approach, methods and data collection efforts, which is provided in annex K.

Evaluation questions:

Table 3: Evaluation Questions

Relevance
Head Questions:
1. How relevant was the scope, design and operational model of the UKCIF programme for the beneficiary countries, and to what extent did it address and adapt to the needs and interests of relevant target groups?
3. What factors contributed (positively and negatively) to the programme's ability to address the infrastructure needs of beneficiary countries, and how did these affect decisions around design and implementation?
Thematic Questions:
Roads:
1a. How were social, economic, and livelihoods considerations integrated into the selection, design and implementation of the road projects, and to what extent were the strategies complementary and integrated with existing and planned infrastructure and policy developments, and adapted to the needs and interests of the beneficiary countries?
Climate Resilience:
1b. How did the UKCIF projects align with and address the climate resilience priorities of the BMCs in which they were implemented? (E.g., politically and/or from a risk and vulnerability prioritisation perspective)?
3a. How did the choice or profile of projects have to adapt from a resilience perspective to meet country needs?
GESI:
1c. To what extent were GESI considerations needs identified and then adequately integrated into the selection, design and implementation of the programme, and strategies adapted to cultural contexts and the needs and interests of the beneficiary countries and project affected persons, (including the differential needs of women/girls, men/boys, persons with disabilities, youth, indigenous people and any other vulnerable populations?
3b. How did the programme promote and support GESI considerations across the portfolio? Were the benefits and risks to particular target groups, particularly more vulnerable groups adequately explored, monitored, communicated and managed?
Coherence
2. How did the UKCIF programme coordinate with other interventions in similar or complementary contexts?
2a. How did the UKCIF programme coordinate or align with other climate or wider economic resilience processes on road or transport infrastructure development in BMCs or at a regional level?
Efficiency
6. What were the key barriers and enablers to completing projects to international design standards within the planned time and budget, did this affect the overall value of projects?
6a. How did the incorporation of social, economic and livelihoods considerations impact overall project and/or construction timelines/budget?
6b. How were climate resilience considerations incorporated into UKCIF project selection, design and delivery processes, and did this influence project timing or budgets?
6c. How did the incorporation of GESI considerations impact overall project and/or construction timelines/budget?

7. How efficient were the institutional arrangements supporting the execution of this programme (for example, between CDB/UKCIF and also in-country arrangements)?

Effectiveness & Impact

4. To what extent did the programme result in improved access, time and cost savings, livelihoods, increased resilience, and enhanced safety for primary users?

4a. Across the roads projects, which strategies were most effective in supporting/contributing to employment creation, livelihood opportunities, and economic activity for primary users during and after construction?

4b. How did UKCIF road projects incorporate resilience approaches or measures that (are likely to) result in or contribute to improved resilience against, and/or faster recovery from climate-related events?

4c. To what extent were identified GESI needs adequately financed and provided with effective institutional support for implementation?

5. Were there planned and unintended (negative and positive) environmental and social consequences of the projects, and if so, how were they managed? (Endline only).

5a. Were there planned and unintended consequences (negative and positive) of the road projects, and how were they managed? (Endline only).

5b. Were there planned and unintended consequences (negative and positive) of gender and social inclusion considerations managed? (Endline only).

9. What are the early indications that the UKCIF programme has contributed, or is likely to contribute, to increased and equitable productivity, employment, market access, and economic activity that benefits all relevant stakeholders within its geographical scope/project areas?

9a. What are the early indications that improvements in critical road infrastructure have resulted in, or are likely to result in, improved access to employment markets in its geographical scope/project areas?

9b. Is there evidence of wider economic or other co-benefits of increased resilience mainstreaming in infrastructure planning and investment in BMCs?

9c. How did UKCIF help to influence or improve institutional capacity for the integration of GESI in infrastructure planning, construction and use, such as in the roads sector?

Sustainability

8. To what extent are provisions made to sustain the benefits of the programme after the grant has ended, and what are the key risks to, and opportunities for, these benefits being sustained over the longer term?

8a. To what extent are provisions made to sustain the benefits of the roads projects after the grant has ended, and what are the key risks to, and opportunities for, these benefits being sustained over the longer term?

8b. To what extent are provisions made to sustain the potential climate resilience benefits of the roads projects after the grant has ended? What are the key risks to, and opportunities for, these benefits being sustained over the longer term?

8c. How did UKCIF help to influence or improve institutional capacity for resilient infrastructure planning or helped scale resilience investment in the region (e.g., within CDB or the BMCs)? – e.g., into resilient road development

8d. To what extent are provisions made to sustain the potential GESI benefits of the projects after the grant has ended? What are the key risks to, and opportunities for, these benefits being sustained over the longer term?

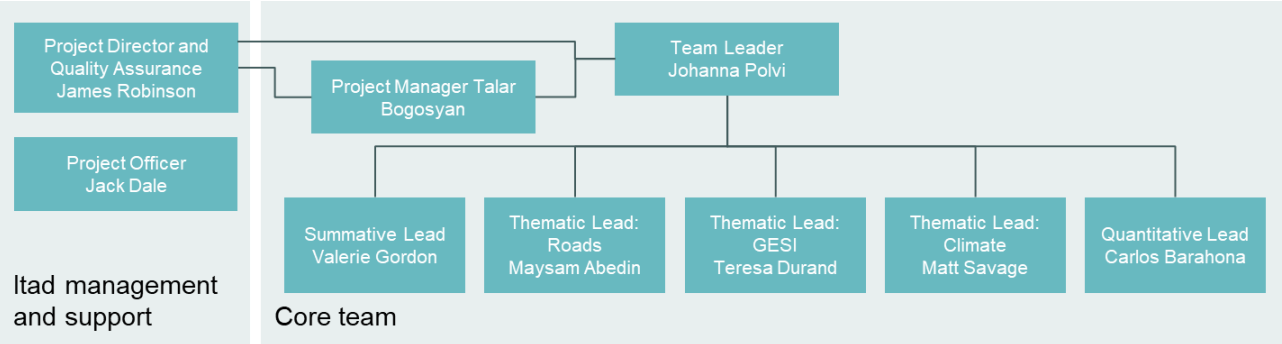
The evaluation will examine the **relevance** of UKCIF projects and how these fit in with existing development objectives and plans of the beneficiary countries and territories, the private sector and residents, including the poorest and most vulnerable, across the countries. **Effectiveness** is at the core of the evaluation, with efforts focused particularly on equitable and inclusive access and affordable use for all citizens, contributing to a growth in productivity, economic activity and jobs as well as poverty reduction. The CDB was selected as the implementing partner and the **efficiency** of UKCIF-related CDB processes, as well as of the project implementation units (PIUs) from appraisal, through procurement, to implementation are a core evaluation question. The most recent DAC criteria of **'coherence'** is also included. The evaluation also seeks to understand the **sustainability** of UKCIF results, which relates to the systemic and institutional changes required for transformation to take place. **Impact** has been given less prominence, but will be addressed through early signals, due to the timing of the completion of interventions and final evaluation report.

1.3.1 The baseline study team

The baseline study was undertaken by Itad, with input from the ERG and other CDB and FCDO representatives, as well as individuals within project implementation units. The organogram below gives an overview of the baseline team. The summative and thematic components of the evaluation are managed by separate experts, with the Team Leader, Johanna Polvi, having oversight and responsibility for ensuring consistency across thematic areas.

On the client side, the ERG, which consists of individuals from CDB and FCDO, has oversight of and provides quality control and inputs into the evaluation. There is also a wider advisory committee who are consulted on evaluation matters.

Figure 1: Organogram



1.3.2 Evaluation timing

In most cases, the baseline research has been conducted in advance of the start of construction of the infrastructure with a few cases in advance of completion of the construction of the infrastructure. Primary data collection occurred between August and December 2021. Delays to construction may have an impact on the timing of the endline. The evaluation team will work with the ERG to assess whether this would require delays to the delivery of the endline report.

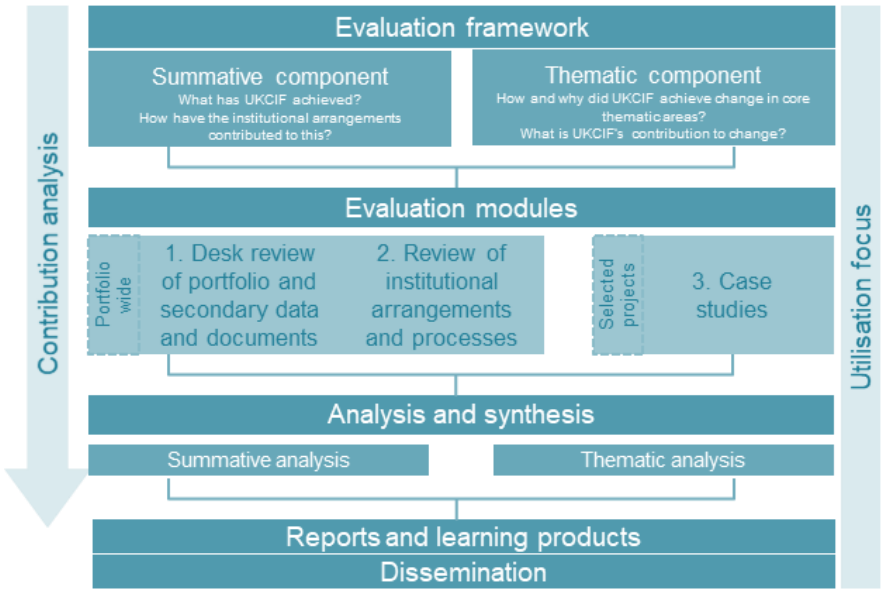
2 Methodology summary

2.1 Overall approach

This section summarises the overall approach to the evaluation. It is unchanged from the inception report and is illustrated in figure 2. The specific modules and approach to analysis are also similar, with some changes to implementation described in the following section. A brief overview of the key features is provided below:

1. **Theory-based, contribution analysis:** Allowing us to test the assumptions and causal pathways in the UKCIF TOC (annex A).
2. **The evaluation framework** will be our main tool in ensuring coherence and focus. The framework maps the evaluation questions against the TOC to ensure we are interrogating areas of the project where learning and accountability are needed (annex k).
3. **Utilisation focused:** The evaluation is intended to be useful for the joint FCDO–CDB team, for the FCDO and CDB more broadly, and for other development banks and infrastructure investors, including partner country governments.
4. **Summative and thematic components:** The evaluation questions incorporate summative and thematic components in an integrated manner to deliver value for money across the evaluation.
5. **Gender and social inclusion lens:** The evaluation will use a GESI lens in its design, implementation and analysis.

Figure 2: Evaluation approach diagram



The evaluation takes a generative, rather than a counterfactual approach to causality. Using a counterfactual approach implies comparing the treatment to an untreated control group, which is a challenge in major infrastructure investments where the beneficiary population can be the whole country. A generative approach seeks to identify how the outcome pattern emerges, including reference to contextual factors.

2.2 Methods

This section summarises the main evaluation methods. Further details relevant to specific thematic areas are available in the thematic annexes D, E, F. As well as the IA module annex G, and in the inception report.

2.2.1 Overview of evaluation methods

The evaluation consists of three modules that use **mixed methods**. This includes analysing quantitative and qualitative data from surveys, key informant interviews (KIIs), focus group discussions (FGDs) and project log frames. Together these three modules will utilise existing data as fully as possible, ensuring data collection efforts are focussed on providing useful points of triangulation to programme data and generating additional evidence to inform outcomes further along in the programme theory of change. This will support the contribution story of the UKCIF projects to answer questions on effectiveness and impact at endline. As illustrated by the evaluation framework (annex K), the evaluation questions will be informed by multiple data sources from across the modules.

The inception report (annex Q) provides more details of the methodology but an overview of the three modules, their objectives and how they are implemented is provided below.

Module 1: Desk review of secondary reports and data

At baseline, the evaluation team collated secondary data between the start of the UKCIF programme to November 2021 across the whole portfolio, which will be repeated and analysed at endline. This module contributes to the thematic evaluation questions by providing an overview of documented achievements and processes that will be built on by the other modules.

At endline, this review will assess, harmonise, collect, collate and analyse programme/ project monitoring data. This data is supplemented with authority data, as well as national and international statistics. Given the importance of GESI in UKCIF, special attention is given to sourcing disaggregated data, where available, at least along gender lines but also youth and PLWD where possible. This module also uses international and national sources of data to understand the broader context and changes at the national level.

Module 2: Review of Institutional arrangements and processes

The review of institutional arrangements and processes will provide evidence for both the thematic and summative components. It examines processes across the whole portfolio. Evidence from this module will be most relevant for answering relevance and efficiency questions that examine the efficiency, adequacy and contribution of institutional arrangements and processes. This module uses information around perceived importance of issues and alignment with strategies from internal project stakeholders which, along with the document reviews, provide additional data points in answering those questions.

Attention will be given to how the UKCIF ensured focus on the priority thematic areas and operationalised them to realise results. The assessment focuses on the efficiency and effectiveness of the implementation of UKCIF projects and is not an assessment of CDB or any of its implementing partners.

The baseline developed institutional indicators and an assessment rubric, based on a modified McKinsey 7-S framework. The evaluation team designed topic guides for internal stakeholders KIIs, which were carried out between October and December 2021, and questions for the internal stakeholder survey, which was carried out between September and November 2021. The full methodology of how this was developed and implemented in available in annex G.

Module 3: Case studies

The case studies provide additional evidence against evaluation questions for the summative and thematic components. Five projects were chosen for case studies using criteria-based selection in consultation with the CDB and FCDO. The selected cases are:

- Belize Coastal Highway
- Guyana Linden to Mabura Hill Road
- St Lucia Millennium Highway
- Jamaica Southern Plains Agriculture Development
- St Vincent & the Grenadines Kingstown Port Modernisation

The case studies will fill quantitative data gaps to answer the evaluation questions at endline and provide additional disaggregated data by priority group. They will also provide more detailed qualitative evidence at endline to answer the thematic evaluation questions that look at how and why outcomes have been achieved and for whom. The case studies develop a stronger understanding of the UKCIF contribution to observed outcomes.

GESI and climate resilience are cross-cutting themes across all case studies, while the road projects will also focus on the socio-economic benefits of access. Three case studies utilise a mix of remote and in-person data collection tools, and two case studies (St Lucia Millennium Highway and St Vincent Kingstown Port Modernisation) are conducted remotely.

2.2.2 Data collection

Throughout the modules, we use a number of data collection tools. Table 4 provides an overview of the range of each tool, whether applied portfolio wide or only in selected cases and whether implemented at baseline, endline or both. Data collection was carried out by the evaluation team and our data collection partner, GeoPoll.

Table 4: Application of data collection tools

Tool	Portfolio-wide	Selected cases	Baseline	Endline
Secondary data	✓		✓	✓
Surveys		✓	✓	✓
UKCIF internal stakeholder survey	✓		✓	✓
KIIs internal stakeholders	✓		✓	✓
KIIs external stakeholders		✓		✓
FGDs		✓		✓

Baseline survey implementation

Eight surveys were carried out for the case study projects between September and December 2021. Four surveys were implemented by our survey partner, GeoPoll, working closely with the evaluation teams Quantitative Lead to develop the survey instruments for each project. GeoPoll has pre-existing arrangements with mobile network operators and a global network of enumerators to implement computer-assisted telephone interview (CATI) and computer-assisted in-person interview (CAPI) surveys in all the UKCIF beneficiary countries.

CATI surveys were administered through GeoPoll call centre with interviewers based locally. The surveys utilised GeoPoll enumerator software that allows immediate access to survey results and interviewer metrics, and enables consistent scripts, data collection and quality assurance. When each survey was completed, data was automatically stored within the tool for analysis and quality assurance review. The surveys were piloted with a small number of respondents before being rolled out to the whole target population.

Four surveys were carried out by the evaluation team, these were in Jamaica, St Vincent and the Grenadines, Belize and Guyana. Data collection was primarily carried out over telephone with a supplementary online survey for St Vincent and the Grenadines and supplementary in-person surveys in Belize which were overseen by the evaluation team remotely to ensure consistency. The team utilised snowball sampling to reach a higher number of respondents through this process. The team reviewed the first respondents of each survey for quality, this resulted in an amendment to the firm survey in Guyana which prompted for time taken to travel during rainy and dry seasons.

Baseline sampling

Data collection tools implemented at baseline will provide an assessment against:

- The effectiveness of UKCIF in improving access, time and cost savings, livelihoods, increased resilience and enhanced safety for primary infrastructure users, during and after construction, notably across road projects (EQ 4, 4a).
- The early signs of UKCIF contribution to an impact on increased and equitable productivity, employment, market access and economic activity that benefits all relevant stakeholders within its geographical scope/project areas, notably across road projects (EQ 9, 9a).
- Planned[15] (negative and positive) environmental and social consequences of the projects, and their management (EQ 5).

For each case we adapted the sampling approach that would provide the best evidence. This is outlined in Table 5 below.

Whilst there are other populations who may be affected by the projects beyond those outlined below (e.g., wider populations beyond the road-side communities and businesses), the selected groups were chosen to survey as they: i) were able to be identified and targeted as infrastructure users and ii) provided the best opportunity to disaggregate outcomes at endline. Additional stakeholder groups will be targeted through KIIs at endline.

[15] Unplanned consequences will be explored through qualitative data collection at endline

Table 5: Data collection implementation at baseline

Project	Tool	Population and rationale	Sampling approach	Sample size	Implementation	Limitations and endline considerations
St Lucia Millennium Highway and West Coast Road Upgrading Project	Individual survey	Road users among the entire population of St Lucia. Due to prominence of the road (up to 90% of residents in St Lucia are expected users), the team was able to use the national population as the target population for the survey	Probability based: Representative of national population using simple random sampling. Qualifying questions: Respondent is affected by the road Respondent is 18+ Respondent gives consent to be interviewed Disaggregated by gender and disability status. Sampling frame obtained from telephone companies: all national phone numbers belonging to individuals (not companies).	The minimum sample size identified in St Lucia was 400. The survey collected 620 responses.	CATI survey implemented by GeoPoll: St Lucia has 101.68 cell phone subscriptions per 100 people; therefore, the study and the targeted population can be considered basically the same and no biases would be introduced when using phone interviews	Implemented as expected; no anticipated changes for endline
	Firm survey	St Lucia businesses, particularly in agriculture and tourism sectors which are expected to benefit most from the upgrade	Non-probability based: Purposeful sampling using contact lists generated by desk research with qualifying questions: Business is affected by the road Business gives consent to be interviewed	The total number of businesses is unknown, 82 businesses surveyed	CATI survey implemented by GeoPoll	Implemented as expected; no anticipated changes for endline
Belize Coastal Highway	Individual survey	Community residents along the Coastal Highway in La Democracia, Gales Point, Mullins River and Hope Creek. The proportion of the national population using the highway was too low to merit a national-level survey. These communities were subsequently	Probability based: The overall sample size was split into the communities along the highway using PPS (proportional to population size) to determine sample size in each of the four communities. Population figures used were 11 years old, from 2010, so adjustments were made during data collection when the current population was found to be very different	Finite population corrections were needed as the number of households in Belize were estimated to be approximately 500-700. The minimum sample size was	CAPI: Communities were split into multiple areas with randomly generated start points, Enumerators used random walk patterns and skipped every other house	It was not possible to derive a sample for a telephone survey resulting in a change to in-person implementation by GeoPoll. At endline will repeat this as an in-person survey to maintain consistency in approach.

Project	Tool	Population and rationale	Sampling approach	Sample size	Implementation	Limitations and endline considerations
		identified for surveying as they were likely to be the most immediately affected by the upgrade and with the potential for greatest impact, as well as maintaining the ability to generate disaggregated results.	from the one used at the sampling design stage. Qualifying questions: Respondent is 18+ Respondent gives consent to be interviewed. Disaggregated by gender and disability status	determined to be 250. The survey collected 308 responses		
	Firm survey	Businesses located along the highway and in communities along the highway	Non-probability based: Purposeful and snowball sampling using contact lists generated by desk research. Qualifying questions: Business is affected by the road Business gives consent to be interviewed	The total number of businesses is unknown, 13 businesses surveyed	Telephone interviews carried out by the evaluation team, Valerie Gordon and Talar Bogosyan	The overall number is low due to overall low numbers of businesses identified. We will mitigate this at endline by ensuring more lead in time to reach businesses with the survey and qualitative KIIs that can verify observed changes and project contribution.
Guyana Linden to Mabura Hill Road	Individual survey	Community residents along the Highway in Mabura Hill, Great Falls/Mile 58, and Mile 47. As the highway would not be used by a high enough proportion of the national population. This population was identified as the most immediately affected by the upgrade and with the potential for greatest impact, as well as ability to generate disaggregated results.	Probability based: The overall sample size was split into the communities along the highway using PPS (Proportional to Population Size). Population figures used were 11 years old, from 2010, so adjustments were made during data collection when the current population was found to be very different from the one used at the sampling design stage. Qualifying questions: Respondent is 18+ Respondent gives consent to be interviewed Disaggregated by gender and disability status	Finite population corrections were needed as the number of households in Guyana were estimated to be approximately 300–400. The minimum sample size was determined to be 200. The survey collected 320 responses.	CAPI: Communities were split into multiple areas with randomly generated start points, Enumerators used random walk patterns and skipped every other house	It was not possible to derive a sample for a telephone survey resulting in a change to in-person implementation by GeoPoll. At endline will repeat this as an in-person survey to maintain consistency in approach.
	Firm survey	Businesses located along the highway and	Non-probability based: Purposeful and snowball	The total number of	Telephone and in-person interviews	Due to lower response rates, a hybrid approach was applied, with half the

Project	Tool	Population and rationale	Sampling approach	Sample size	Implementation	Limitations and endline considerations
		in communities along the highway	sampling using contact lists generated by desk research. Qualifying questions: Business is affected by the road Business gives consent to be interviewed	businesses is unknown 17 businesses surveyed	carried out by the evaluation team, Valerie Gordon and Talar Bogosyan	surveys collected using telephone surveying and half through in-person interviews via a consultant based in the region managed remotely by Valerie Gordon. The overall number remains low due to overall low numbers of businesses identified. We will mitigate this at endline by ensuring more lead in time to identify and reach businesses with the survey and through qualitative KIIs that can verify observed changes and project contribution.
Jamaica Southern Plains Agricultural Development (SPAD)	Farmer survey	Existing farmers in project locations, Amity Hall and Parnassus. Farmers have not yet been identified to participate in the project and while not all these farmers may become project beneficiaries, the survey provides additional information about baseline conditions in the project area	Non-probability based: Purposeful and snowball sampling using contact lists generated by desk research, Qualifying questions of: Respondent is 18+ Respondent gives consent to be interviewed	Total number of farmers identified as 62, 20 were surveyed	Telephone interviews for Amity Hall farmers carried out by Valerie Gordon. In-person interviews for farmers in Parnassus carried out by the PIU with support from Johanna Polvi	We anticipated using remote telephone interviews but implemented a hybrid approach for the farmer survey, taking advantage of existing meetings with farmers in Parnassus to collect data through the PIU. We then supplemented this with additional telephone interviews with Amity Hall farmers. At endline we are not targeting the same group but will survey those engaged by the programme and compare how farming conditions in the area has changed.
St Vincent and the Grenadines Kingstown Port Modernisation project	Port user survey	All port-users were considered part of the sample. Of 74 port-users identified, 56 had at least a phone number or email address. Of these only 10 were able to be reached for survey	Non-probability based: Purposeful and snowball sampling using contact lists generated by desk research. Qualifying questions of: Respondent gives consent to be interviewed	10 surveyed port-users	Online survey hosted through Survey Monkey and telephone interviews	Planned to implement a telephone survey but consultations with the PIU suggested a hybrid approach of phone calls and an online survey would improve response rates. Response rates remained low due to low numbers of contact details. At endline, the survey will be supplemented with KIIs with port users to strengthen evidence of the port projects contribution to observed changes

Project	Tool	Population and rationale	Sampling approach	Sample size	Implementation	Limitations and endline considerations
Portfolio	UKCIF internal stakeholder survey	Individuals working on UKCIF projects across PIUs, FCDO and CDB	Census sampling, all individuals working on UKCIF projects were targeted	49	Online survey hosted through Survey Monkey	Contractors working on UKCIF projects were underrepresented in the sample. At endline we will increase focus on collecting evidence from this group of stakeholders.
Portfolio	UKCIF internal stakeholder KIIs	Individuals working on UKCIF projects across PIUs, FCDO and CDB	Purposeful sampling, selected individuals working across thematic areas and within case study PIUs	17	Interviews carried out across team	Contractors working on UKCIF projects were underrepresented in the sample. At endline we will increase focus on collecting evidence from this group of stakeholders.

Table 6: Overview of plans for endline data collection, including populations to be targeted, focus areas for inquiry, and tools to be used

Project	Population	Focus areas, including indicators of interest	Data collection tools
MHWCR	1. Road users from residents of St Lucia as a whole	Access, use, time and cost savings, safety, access to services, access to markets, assets, employment and income	Administrative/project monitoring data
			Repeat survey
			FGDs
	2. St Lucia businesses, especially in tourism and agriculture	Productivity, revenue, employment, climate disruptions, road safety	Administrative/project monitoring data
			Repeat survey
			KIIs
	3. Residents along the road in districts of Castries, Anse La Raye, and Soufriere	Access, use, safety, security, access to services, access to markets	FGDs
	4. Resettled project-affected persons (PAPs) population (15 companies, 32 individuals)	Relocation satisfaction, employment, access to work and public services, security, rates of gender-based violence, training and satisfaction with training	Project monitoring data
			FGDs
	5. Beneficiaries of road safety component (e.g., schools/school children)	Road safety	Project monitoring data
			KIIs and FGDs
	6. Implementing agency stakeholders	Relevance, coherence, capacity building	KIIs
GLMH	1. Communities along the road, including other individual road users for qualitative data collection	Access, use, time savings, safety, access to services and access to markets, assets, employment and income, unintended outcomes	Administrative/project monitoring data
			Repeat survey
			FGDs
	2. Firms along and using the road. Including firms at either end for qualitative data collection	Productivity, revenue, employment, market access, climate disruptions	Administrative/project monitoring data
			Repeat survey
			KIIs
	3. Population at Linden	Access, use, time savings, safety, access to services. access to markets, unintended outcomes	Administrative/Project monitoring data
			FGDs
	4. Beneficiaries of capacity development support	Capacity development benefits, training and satisfaction with training	Project monitoring data
			FGDs
	5. Beneficiaries of road safety programme	Road safety, training and satisfaction with training	Project monitoring data
			FGDs
	6. Beneficiaries of social resilience programme	Satisfaction with training and changes as a result	Project monitoring data
			FGDs
	7. Road users	Use, vehicle operating costs, time savings, climate disruptions	Administrative/project monitoring data
BCH	1. Communities along the road, La Democracia, Gales Point, Mullins River and Hope Creek. Including other individual road users for qualitative data collection.	Access, use, time savings, safety, access to services. access to markets, assets, employment and income, unintended outcomes.	Administrative/project monitoring data
			Repeat survey
			FGDs and KIIs

Project	Population	Focus areas, including indicators of interest	Data collection tools
	2. Firms along the road, including orchard farmers, fishers and tourism. Including firms at either end of the road for qualitative data collection.	Access, use, time and cost savings (including weather-related losses), access to markets, investment and productivity.	Administrative/project monitoring data,
			Repeat survey
			KIIs
	3. Beneficiaries of capacity development activities	Application of capacity development, improved knowledge, attitudes and practices	Project monitoring data
			FGDs
	4. Other road users	Use, vehicle operating costs, time savings, climate disruptions	Administrative/project monitoring data
	5. Government stakeholders	Relevance, coherence, efficiency, sustainability	KIIs
SPAD	1. Farmers (estimated 700) engaged by programme by endline	Income, employment, market access, participation in a cooperative, access to inputs/services, access to land, water usage, experience of climate-related losses, experience of extreme events	Survey of farmers
			KIIs & FGDs
	2. Cooperatives	Farmer experience, relevance of project	KIIs
	3. Local communities around agro park Amity Hall: McCooks Pen (1,005 individuals), Hartlands (503 individuals) Parnassus: York Town (2,267 individuals)	Income, employment, perceptions of farming as an occupation, water access and usage, perception of in-migration, experience of climate events	FGDs
	4. Training participants	Number of stakeholders trained, training quality	Project monitoring data
			FGDs
	5. Government stakeholders	Relevance of project, coherence, efficiency, sustainability	KIIs
SVG PDP	1. Residents of and visitors to St Vincent and the Grenadines; including associations representing different groups (e.g., businesses, women, PLWD, youth etc.)	Planned and unplanned outcomes, positive and negative impacts of the port development	National statistics
			KIIs
	2. Local businesses affected by the port; e.g., tourism	Productivity, tourism arrivals, employment, revenue	KIIs
	3. Port users	Physical attributes of the port, operational attributes of the port, organisation of services, climate-related interruptions, resilience of the hinterland road network	Port Authority data
			Repeat survey
			KIIs
	4. PAPs: Vendors and individuals	Relocation experience, compensation, income, employment, access to work and public services, security, gender-based violence (GBV), training and satisfaction with training	Project monitoring data
			FGDs at endline
	5. Government stakeholders	Relevance, coherence, efficiency, sustainability	KIIs
Portfolio	1. Internal UKCIF stakeholders, particularly contractors	Efficiency of UKCIF structures and processes against IA rubric	Repeat survey
			KIIs

2.3 Data protection, ethics and safeguarding

2.3.1 Data storage

All data sets are anonymised with codes assigned to individual respondents for the individual surveys. Any personal data, including names, contact numbers, email addresses etc, kept by the evaluation team will be stored in accordance with General Data Protection Regulations (GDPR) procedures. Analysis of raw data will be stored in a format which can easily be accessed by FCDO and CDB.

2.3.2 Data collection ethics

The design of the CATI surveys was prepared in line with the **Principles for Digital Development**.[16] All data were collected under the guarantee of confidentiality and interviewees were informed accordingly. Interview transcripts do not contain identifiers, but were coded, with any identifiers stored separately and securely. The data collection tools referred to these provisions.

Itad's ethical standards and norms are in line with those in the **FCDO's Ethical Guidance for Research, Evaluation and Monitoring Activities** and adopts the 'do no harm' principle. Itad adheres closely to FCDO's commitment to human rights-based approaches while also considering issues of equity and gender, particularly in relation to the inclusion of stakeholders and participants. The evaluation team worked with the ERG and the PIUs to ensure data collection tools were contextually relevant and sensitive. This will be repeated at endline. Tools developed for the evaluation collected data that could be disaggregated by sex, age and ethnicity. Stakeholders at baseline and endline were/will be informed of why data is being collected and how the data will be used. They were/will be offered the opportunity to withdraw from the process at any time. The contact details of the project manager were provided to all participants for any follow up questions or comments and provisions to feedback to groups participating in the evaluation are made in the use and influence plan, see annex N. The evaluation risk matrix was also updated and will continue to be updated, as any risks evolve or new risks appear, see annex O.

2.4 Baseline data cleaning, analysis, triangulation and synthesis

This section summarises the baseline data processing and analysis process, including the triangulation with different sources.

[16] FCDO Digital Strategy 2018 to 2020: Doing Development in a Digital World.

The team used a shared database for recording and reviewing qualitative and quantitative information related to the indicators set out in the evaluation framework and employed various analytical software suitable for mixed methods research.

2.4.1 Cleaning and analysis

The surveys will provide a before and after comparison at endline. The probability-based individual surveys will undergo statistical analysis and the purposeful surveys will undergo descriptive analysis. For all surveys, outcomes will be triangulated with qualitative FGD and KII evidence at endline to support contribution analysis.

At baseline:

- **Individual surveys:** Clean data sets were provided by GeoPoll, who carried out the data collection. Variables were re-coded and labelled prior to descriptive analysis which was conducted in 'R'. All data sets will be deleted from the server once finalised, and final data sets have been anonymised. Simple descriptive statistics, using proportions, means and medians were calculated, and estimates calculated using pre-defined variables and disaggregation as per the data analysis plan, including for gender, ethnicity, age and disability. Results are available in annex L summarised into tabular form, and both numerators and percentages (in brackets) are presented, where relevant.
- **Firm surveys:** Clean data sets from the St Lucia firm survey were provided by GeoPoll and combined with the cleaned St Lucia data set collected by the evaluation team. The complete data set then underwent descriptive analysis conducted in Stata. Data sets were anonymised with respondent codes saved separately to allow the evaluation team to revisit firms at endline where they have indicated their consent to do so. Results in the report are not attributed to specific respondents. The data sets are safely stored on an internal document storage system that is compliant with GDPR. Results are available in annex L.
- **Port user and farmer surveys:** Data sets were cleaned and underwent descriptive analysis conducted in excel. Data sets are not anonymised to allow the evaluation team to revisit the respondent where relevant and where consent is indicated but results in the report are not attributed to specific respondents. Results are available in annex L.
- **IA survey:** The quantitative survey data was analysed descriptively, and the qualitative survey data was coded in MaxQDA use the modified McKinsey 7-s area (shared values, structure, systems etc.) as the primary coding framework. Each code was additionally mapped to the evaluation questions. The evaluation team co-developed an analysis rubric with the ERG that was used to assess the evidence in each area and to determine relative areas of strength and weakness.
- **KIIs:** KII testimony was coded in MaxQDA to either the modified McKinsey 7-s area of interest or to the relevant part of the UKCIF theory of change as the primary coding framework. Both were also mapped to the evaluation questions

- **Document review:** As with prior qualitative evidence, the documents were coded in MaxQDA. The primary code was either related to the modified McKinsey 7-s area or the relevant part of the UKCIF theory of change.

2.4.2 Triangulation and synthesis

The evaluation framework (annex K) illustrates how each evaluation question is informed by both multiple data collection methods as well as data sources. Data is also triangulated across the sample of countries, themes and respondents.

Once the analysis of each qualitative and quantitative data source was complete, the evaluation team undertook an analysis workshop where the team compared data, and triangulated findings for the baseline synthesis. As mentioned in the previous section, all qualitative data was able to be mapped into the relevant evaluation questions to give the evaluation team an overview of the strength of evidence in each.

At endline, the analysis will be used to answer the evaluation questions, at baseline the focus is on providing the necessary information to do this. Initial findings for relevance and efficiency questions that take into account progress to date will be provided.

2.5 Data limitations

The following sections outline some of the main limitations in the evaluation. Data collection tools at endline will be designed to address remaining gaps in evidencing the UKCIF TOC and to triangulate sources of evidence. Data gaps and plans for addressing these are further explored in the following findings chapters for each DAC criteria.

The design phase of projects in Grenada and Dominica was not completed in time to have data included in the baseline report. Draft documents have been provided and reviewed to give the evaluation team an understanding of the entire portfolio, but the baseline will require updating at endline when the design, and therefore accompanying studies and monitoring frameworks, for these projects have been approved.

2.5.1 Case studies

Robust household listings were not available in Guyana and Belize and so the method followed to obtain the sample was the random walk: a starting point was chosen and then an individual in every other household was interviewed (the sample size was approximately half the overall estimated number of households). Therefore, for each village the sampling process involved biases in walk patterns of enumerators that are not possible to assess. On top of this, if nobody opened the door when an interviewer knocked, this household was skipped. Again, this introduces biases as those individuals not at home during standard working hours could be travelling, working or studying away from home.

The size and nature of the consequent biases are not easy to estimate. For Belize and Guyana, users of the estimates should be aware that the margin of errors reported might be smaller than they should be, and that the estimates might be off-target. The main caveat for the endline that follows from these considerations is that small impacts cannot be safely assumed to be informative. Large impacts or changes are more likely to reflect changes that occurred on the ground.

In the firm-level surveys, the evaluation team and GeoPoll dialled through contact lists of businesses that were (i) local to the road in Belize and Guyana, or (ii) nationwide with a focus on tourism and agriculture in St Lucia. The complete population of firms in all cases was unknown and sampling was based on who could be contacted by the evaluation team and GeoPoll as well as snowball sampling, which produced a non-random sample.

While the surveys were carried out by different teams, the nature of the survey, being closed questions, was such that it is not expected that potential different interpretations will impact the results or quality of the data. However, in many cases some indicators are less well evidenced than others because of respondents not having reliable information, especially around turnover and employment. No compensation was given for participants in data collection activities.

2.5.2 Review of Institutional arrangements and processes

2.5.2.1 Primary data

Project consultants and contractors are underrepresented in data collection for the IA module at baseline. As a result, their views may not be represented in the analysis. At endline we will focus efforts to achieve a higher response rate from this stakeholder category.

The port user survey had lower than anticipated numbers of respondents. We will give longer lead in time and work closely with the port authority to increase the responses rate at endline, including a small number of retrospective questions to strengthen the baseline findings

2.5.2.2 Project documents and secondary sources

Reviewing the project log frames, the evaluation team found that data was not consistent across projects of the same sector, e.g., roads reporting against climate resilience differently, reporting on IRI or IRAP. In addition, there was variable levels of data in the same e.g., more data in St Vincent and the Grenadines port than the Montserrat port. In some cases, the Environmental and Social Impact Assessment (ESIA) was using population data that was over 10 years old which led to data collection adaptations during implementation.

Secondary, national level data was not always consistently available or up to date, however will be reported on where available and relevant.

3 Baseline: Relevance

The following sections will provide baseline data organised by DAC criteria, starting with relevance.

Relevance questions ask how well the intervention aligns with the needs and priorities of stakeholders. This section provides **key data points** that will be used to answer the relevance evaluation questions at endline. More data has been collected and collated than is presented here, and is available in Annex L; this annex will also be used to support findings at endline. Given the progress the UKCIF has made to date, we are also able to make some initial observations on the relevance of the design work to date, and provide recommendations to the programme to support evidence generation.

This section opens with a **summary of the baseline status** of the relevance DAC criteria. In line with the discussion above, this provides both a summary of findings and also some initial insights.

There are **two evaluation questions** under the relevance criteria, these are:

- **Evaluation question 1:** How relevant was the scope, design and operational model of the UKCIF programme for the beneficiary countries, and to what extent did it address and adapt to the needs and interests of relevant target groups?

- **Evaluation question 3:** What factors contributed (positively and negatively) to the programme's ability to address the infrastructure needs of beneficiary countries, and how did these affect decisions around design and implementation?

Following the summary, this section then provides a review of the baseline data for each of these evaluation questions. Within this, the questions are broken down into sub-components to make it clear how this data responds to the question, and how it will be brought together to provide an evaluative response at endline.

In addition, there are **five thematic sub-questions** that support each evaluation question; these are discussed in the summary thematic sections that follow the evaluation questions (socio-economic impacts of roads, climate resilience and GESI). Whilst some data and details are provided in this report, these questions are dealt with more thoroughly in the relevant annexes: (Socio-economic impacts of roads: Annex D, GESI: Annex E, climate: Annex F).

Socio-economic impact of roads:

1a. How were social, economic and livelihoods considerations integrated into the selection, design, and implementation of the road projects; and to what extent were the strategies complementary and integrated with existing and planned infrastructure and policy developments, and adapted to the needs and interests of the beneficiary countries?

Climate resilience:

1b. How did the UKCIF projects align with and address the climate resilience priorities of the BMCs in which they were implemented? (e.g., politically and/or from a risk and vulnerability prioritisation perspective)?

3a. How did the choice or profile of projects have to adapt from a resilience perspective to meet country needs?

GESI:

1c. To what extent were GESI considerations identified and then adequately integrated into the selection, design, and implementation of the programme, and strategies adapted to cultural contexts and the needs and interests of the beneficiary countries and project affected persons? (Including the differential needs of women/girls, men/boys, persons with disabilities, youth, indigenous people and any other vulnerable populations).

3b. How did the programme promote and support GESI considerations across the portfolio, and were the benefits and risks to particular target groups (particularly more vulnerable groups) adequately explored, monitored, communicated and managed?

At the end of each section, a **summary of remaining gaps and recommended actions** are provided in order to ensure rigorous findings at endline.

3.1 Baseline status

At baseline, the UKCIF design documents show that the scope of the fund and individual project designs are well-aligned with the priorities and objectives of the UKCIF countries. The CDB has established processes in place to ensure the alignment of interventions with government priorities. Many of the UKCIF investments were also strategic project ideas that were lacking financing.

The UKCIF infrastructure investments, as designed, are also generally aligned with international United Nations Framework Climate Change Convention (UNFCCC) Nationally Determined Contributions (NDCs) and domestic climate change commitments and policies across the UKCIF portfolio of reviewed projects. Likewise, the road investments are aligned with national transport policies, and take on board the trade-offs between road improvement and safety. Specifically, socio-economic livelihood considerations are integrated into the selection and design of all of the selected road projects.

Both the CDB and the FCDO have relevant GESI policies and adequate consultation mechanisms to ensure the UKCIF programme design meets the needs of final beneficiaries, including more vulnerable groups. These include the CDB Environmental and Social Review Procedures (ESRP), However, there is no specific CDB policy or

UKCIF programme approach to people living with disabilities (PLWD). The engagement of both youth and PLWD in consultations remains inconsistent across the portfolio. The implementation of GESI recommendations from the Environmental and Social Impact Assessments (ESIAs) and the Environmental and Social Management Plans (ESMPs), and the distribution of benefits of the projects will depend on how well these policies are implemented in practice. There are some capacity constraints, including the number of designated staff to these issues, that may influence this going forward.

3.2 Evaluation Questions

This section will present the baseline data against relevance evaluation questions; these questions are informed by a combination of unique and shared indicators which will all be used to provide a comprehensive response at endline.

To reduce repetition of indicators across the report, the data is presented as follows:

- **For evaluation question 1:** The section will focus mainly on the relevance of the overall scope and design of the set of projects to beneficiary country priorities.
- **For evaluation question 3:** The section will focus mainly on the operational model of UKCIF. This also informs evaluation question 1 in terms of the relevance of the operational model.
- How the programme addressed and adapted to the needs and interests of relevant target groups will be explored in more detail under the GESI section, section 3.5.
- Other factors, e.g., contextual factors, that contributed to the programme's ability to address the infrastructure needs are presented in the efficiency section, in particular section 5 which deals with the question: "what were the key barriers and enablers to completing projects to international design standards within the planned time and budget; did this affect the overall value of projects?"

As previously mentioned, this report is presenting a selection of **key data points** that respond to the evaluation questions. Additional data is available in Annex L.

3.2.1 EQ 1. How relevant was the scope, design, and operational model of the UKCIF programme for the beneficiary countries and to what extent did it address and adapt to the needs and interests of relevant target groups?

3.2.1.1 Relevance of UKCIF scope and design to beneficiary countries

The UKCIF objectives of supporting economic growth, climate resilience, poverty reduction and gender equality are consistent with the FCDO commitment to supporting sustainable development, and CDB's strategic objectives of fostering the economic growth of its

member countries, reducing poverty and fostering inclusive social development. Furthermore, the CDB develops country engagement strategies and accompanying country strategy papers (however these are not always regularly updated), and this provides a mechanism for alignment between CDB and CDB member country policies.

Across the portfolio, the UKCIF project documents align well with national objectives and development plans. In addition, they align with specific policies and master plans (e.g., roads and energy master plans, policies for addressing gender, youth and persons living with disability: SVG port, EVAD, SPAD) and with more concrete government initiatives to promote local livelihoods (e.g., the Belize Coastal Highway and the SVG port project), and youth skills development and empowerment of people living with disabilities (PLWD) (the SVG port project). Table 7 summarises the evaluation team judgement of the alignment of the UKCIF portfolio with national policies and sector plans, as well as alignment with cross-cutting themes of GESI, climate and safety. The table and following narrative are based on a review of appraisal reports and KIIs with internal project stakeholders.

Table 7: Alignment of UKCIF portfolio with national policies and sector plans[17]

Project	Alignment: national policy priorities	Alignment: specific sector plans	Alignment: cross-cutting plans (GESI, PLWD, climate, safety)
Antigua road rehabilitation	Yes	Yes	Yes – road safety, climate, GESI
Barbuda energy	No	Yes	Yes
Belize Coastal Highway	Yes	Yes	Yes – climate
Belize PGH	Yes	Yes	Yes – climate, road safety
Dominica Road	Not available	Not available	Not available
Dominica water	Not available	Not available	Not available
EVAD	Yes	Yes	Yes
Grenada water	Not available	Not available	Not available
Grenada Western Corridor	Not available	Not available	Not available
Guyana Linden to Mabura Hill	Yes	Yes	Yes – climate, road safety
Montserrat Port	Yes	Yes	No
SPAD	Yes	Yes	Yes
St Lucia Millennium Highway	Yes	Yes	Yes – climate, road safety
SVG Port	Yes	No	Yes

With regards to gender, while it is clear that overall the UKCIF aligns with the CDB and FCDO cross-cutting theme of promoting gender equality, in some cases, the project appraisal reports do not directly refer to gender issues in the national policy context (e.g. Belize PGH and Coastal Roads, Guyana Linden to Mabura Hill). Although some UKCIF countries do not have a National Gender Policy (e.g. Antigua and Barbuda), the project rationale directly provides a link to Country Gender Assessments (2014) and the National

[17] Based on Project Approval Reports and on case studies supplemented by stakeholder consultations.

Youth Policy. In the case of the St Lucia Millennium Highway the project did not have a significant GESI component.

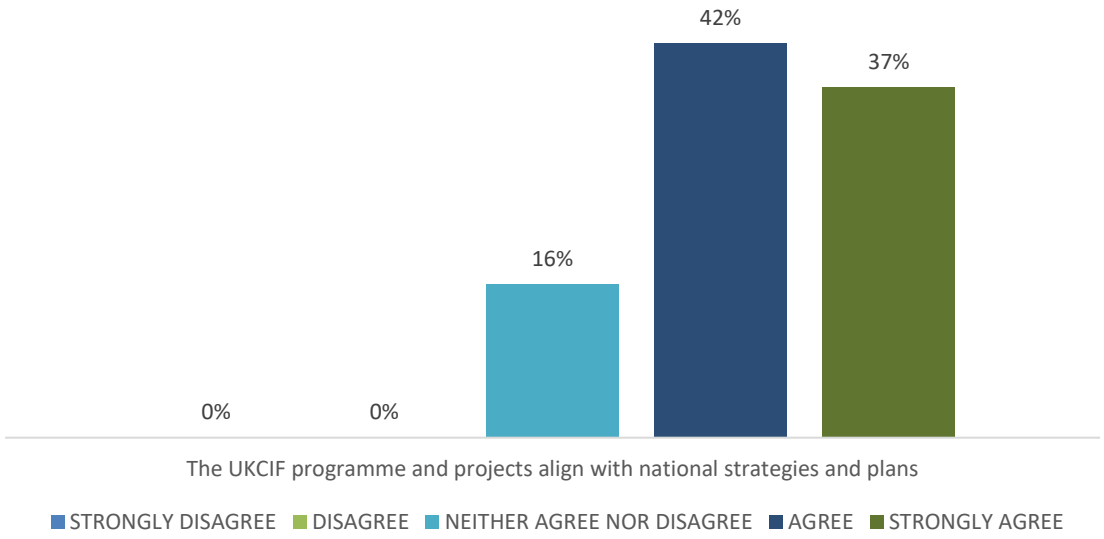
Based on information from interviews, many of the UKCIF projects are ones that governments have been trying to develop for years, but lacked the skills and capital to do so. In fact, in many instances road projects have previously been selected for intervention with accompanying feasibility studies, but lacked funding. For example, a feasibility study was carried out in the Belize PGH and Coastal Road in 2000 and determined a positive case for intervention. However, a lack of funding meant that the project remained dormant until UKCIF became involved. According to one senior interviewee, major investments such as the Guyana Linden to Maburu Hill project and the SVG port were extremely complex to design and implement, and had the potential for promoting transformational impacts.

With regards to other cross-cutting plans such as gender, PLWD, and safety, the alignment is perhaps a little less consistent. Safety is regarded as an important sector policy, and while some projects, such as the St Lucia Millennium Highway and Guyana Linden – Mabura Hill, integrated safety components into the project (e.g., road widening and road safety awareness respectively), and included targets for fatality reduction, other projects, such as the Belize Coastal Highway have less prominent road safety features, though may be included under other CDB road safety initiatives.

Social inclusion is considered an important issue. There is a particular risk that large strategic highway projects may benefit road users who may not reside in the project area rather than local residents along the highway. In projects, such as the Belize Coastal Highway and the Guyana Linden to Mabura Hill, these issues have been considered, and features have been integrated to maximise the benefits and mitigate the potential disbenefits. Specifically, the Belize Coastal Highway project includes income generation and livelihoods components and the St Lucia Millennium Highway includes training for local vendors and training for road sector professionals in inclusive approaches to planning.

The IA survey score also shows a high level of perceived alignment with national strategies and plans among individuals working on UKCIF projects. Figure 3 below shows that 79% of respondents agree or strongly agree that the projects align with national strategies and priorities. This was also confirmed through KIIs with CDB and PIU representatives. According to the KIIs, many of the high priority, potentially transformational infrastructure investments had not been previous implemented due to a lack of financing and/or technical skills to implement them (e.g., Belize Philip Goldson Highway and Coastal Road, Guyana Linden to Mabura Hill road, and the Montserrat and SVG port projects). The UKCIF was a key enabler to help overcome the barriers for the development of these projects. At endline, we will revisit this and review whether the projects remain relevant as priorities evolve over time, and are implemented according to the country and thematic strategies.

Figure 3: Alignment of UKCIF projects with national strategies and plans[18]



3.2.2 EQ 3 What factors contributed to the programme's ability to address the infrastructure needs of beneficiary countries and how did these affect decisions around design and implementation?

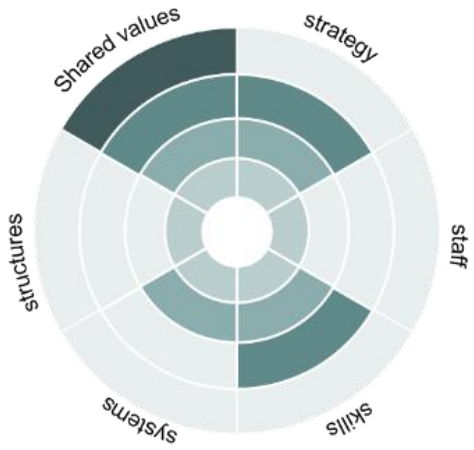
3.2.2.1 UKCIF operational model and institutional factors

The IA module looks at the UKCIF operational model across the project-cycle through six dimensions from the McKinsey 7-S framework: shared values, strategy, structures, systems, staff, and skills. This included systems for analysis and appraisal, procurement, and supervision, and available resources, including time and budget. More on the methodology, evidence and analysis underpinning this module can be found in the inception report (Annex Q) and the IA summary, (Annex G). Based on this evidence, we have produced a snapshot below that captures how we view the relative strengths against the framework.

For the relevance evaluation question, we will be looking at shared values, strategies and staff, and skills. The findings for structure and systems will be presented under the efficiency evaluation questions in section 5.

[18] Remaining percentage from respondents answering 'don't know' in the survey

Figure 4: Snapshot of strength of the UKCIF projects against McKinsey 7-S framework



Based on the survey, document review of processes and KIIs, the diagram to the left presents the relative strengths of UKCIF across each capacity area.

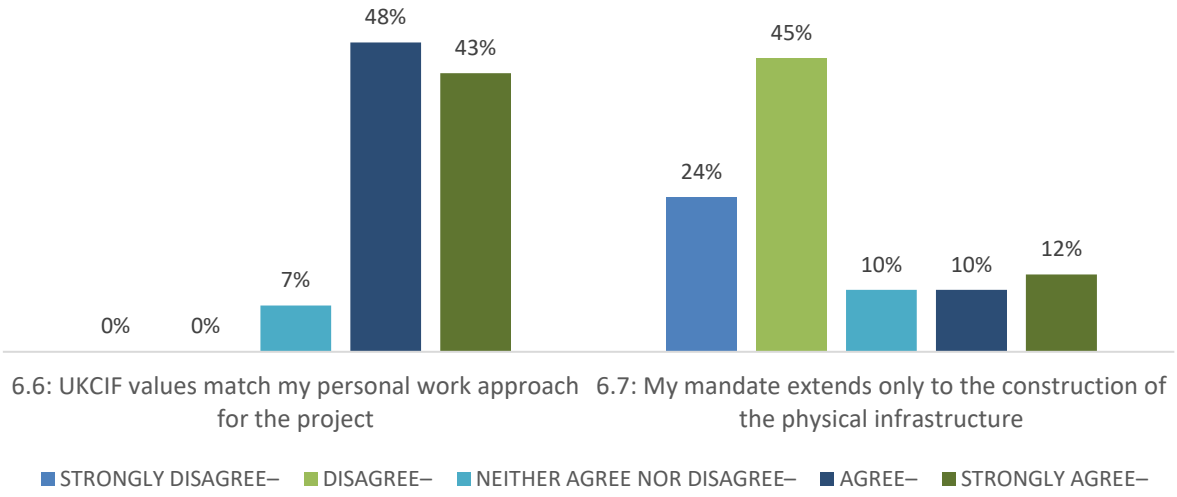
Shared values, strategy and skills were judged as the strongest capacity dimensions of the programme in relation to the other capacity dimensions. Structures, systems, and staff had the weakest scores overall.

Shared values

The majority of individuals working on UKCIF projects align themselves with the goals of the programme (including climate, GESI, and the socio-economic goals) and recognise their role in achieving these. In later sections we will discuss UKCIF documentation and strategies and how these support the priority areas of the projects.

The vast majority of staff indicated that they believed their mandate extended beyond the physical construction of the infrastructure; this was framed in previous questions by a focus on climate change and GESI values. A minority of individuals expressed a narrower outlook, including several project coordinators, supervision consultants, and community liaison officers (CLOs).

Figure 5: IA survey responses against UKCIF priorities and values[19]



[19] These and following graphs may display less than 100% in total where 'don't know' and 'not applicable' results are excluded.

Strategy

We asked individuals working on UKCIF projects about their use of, and their perceptions of, the strategies used on UKCIF projects. The specific strategies reviewed and discussed during the survey and the KIIs were:

- TOC Theory of Change
- CDB Climate Resilience Strategy
- CDB Gender Equality Action Plan
- CDB Gender Equality Policy and Operational Strategy
- CDB Environmental and Social Review Procedures
- UKCIF Social and Gender Development Framework

There are clear strategies that guide the UKCIF programme, some of which are periodically updated, such as the UKCIF TOC and the UKCIF social and gender development framework. In addition, those engaging with CDB strategy documents on UKCIF projects consider them highly relevant, and well aligned to their contexts and to national priorities. Stakeholder testimony from KIIs and the survey mentions that this has played an important role in ensuring government buy-in, which is cited as a key enabler in the projects. However, these findings are contradicted by the quantitative survey findings, where almost 50% of the individuals working on UKCIF report that they have either: (i) not seen the specific strategy documents that underpin UKCIF projects, (ii) do not consider them relevant, or (iii) rarely consult them. Tables 8 and 9 below show the spread of roles and their self-reported use of the CDB Gender Equality Policy and Operational Strategy, and the CDB Climate Resilience Strategy.

Table 8: IA survey responses: Use of CDB Gender Equality Policy and Operational Strategy[20]

Use of CDB Gender Equality Policy and Operational Strategy			
Role	Not relevant / never	Rarely / sometimes	Always / usually
Community Liaison Officer	1	2	1
Contractor		1	
Economist		1	
Engineer	2	1	2
Environmental/Climate Change Specialist	1		
Operations Officer / procurement specialist / Portfolio Manager/Senior Operations Officer	3	2	2
Project Coordinator/ Project Manager	5	7	1
Social Analyst / Social and Gender Specialist / Gender Specialist		2	3
Supervision Consultant / Monitoring and Evaluation Specialist		2	1
Other (please specify)	2	1	
Total	14	19	10

[20] Some roles are grouped due to low response rates among those groups.

Table 9: IA survey responses: Use of CDB Climate Resilience Strategy

Use of CDB Climate Resilience Strategy			
Role	Not relevant / never	Rarely / sometimes	Usually / always
Community Liaison Officer	2		2
Contractor		1	
Economist		1	
Engineer		3	2
Environmental/Climate Change Specialist			1
Operations Officer / procurement specialist / Portfolio Manager/Senior Operations Officer	2	2	3
Project Coordinator/ Project Manager	6	5	2
Social Analyst / Social and Gender Specialist / Gender Specialist	1	4	
Supervision Consultant / Monitoring and Evaluation Specialist		3	
Other (please specify)	3		
Total	14	17	10

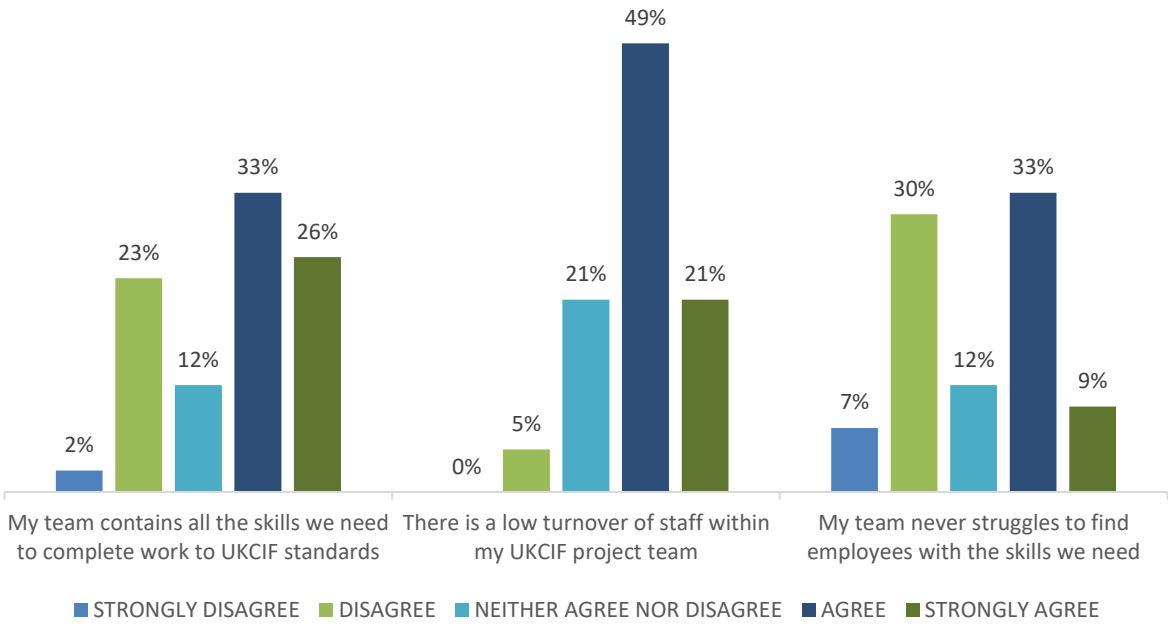
Staff and skills

Generally, survey respondents felt that the main issue is to do with staffing gaps in teams, rather than the insufficient qualification of staff. Over a quarter of survey respondents indicated that their teams contain skill gaps. Of those reporting skills gaps, 63% agree or strongly agree that this has an impact on delivering projects on time and to budget (less than 10% disagree, with some stating that they don't know). When asked why their teams contained skills gaps, respondents to the IA survey highlight that these roles had not been resourced at the design stage and while some went on to add that this was in the process of being remedied, and evidence from KIIs has also supported this, it is not the case for all projects. Therefore, simply filling posts appears to be a greater challenge than skills alone.

One of the main constraints identified across organisations involved with UKCIF projects relates to staffing levels, particularly within the PIUs and to a lesser extent within CDB. The graphs presented below show that a significant percentage of IA survey respondents considered recruiting employees with relevant skills to be an issue. However, qualitative responses revealed that, bar very few exceptions, staff in place are considered to be competent in their role. Qualitative survey responses and KIIs made reference to the commitment and technical strength of the staff involved and collaboration of individuals working on UKCIF projects as key enablers on UKCIF projects. Moreover, many individuals report low turnover of staff.

Skills are nevertheless seen as an issue among design consultants, with the most challenging examples including the failure to deliver quality outputs in technical assistance contracts and implementation.

Figure 6: IA survey responses to questions on staff and skills



Implementing complex projects in a small island developing states (SIDS) context provided a challenge in terms of identifying qualified individuals to fill specific roles, especially in terms of climate resilience and GESI. Teams have reported struggling to recruit individuals with the necessary skills to fulfil these roles. While survey respondents and KII testimony acknowledge that individuals are *"capable and committed"*, there is testimony from CDB and the PIUs that there is a general lack of capacity. One responded stated that *"there are not enough bodies, so people are overloaded",* a sentiment which is mirrored at both the CDB and PIU level. Frequent overwork is a problem that has been cited across the programme. Others note the difficulty of finding cover for leave, or finding opportunities to develop on the job when so much is expected of them. KII testimony from project coordinators also recognised that in cases where there was continuity in the team from appraisal to supervision, project implementation proceeded more fluidly.

Within the FCDO UKCIF team there has been a transition in staffing, with a new team leader starting in October 2020. There were also delays in recruitment for the senior programme manager position, which was filled in July 2021.

At the CDB, the project supervision team is composed of supervising engineers, with input from environmental, social and gender specialists. Based on the IA survey, turnover at the CDB is not perceived to be high. However, there were gaps in GESI expertise when two gender specialists left in 2019, with these posts remaining vacant until August 2020. Additionally, another social analyst who was working on UKCIF projects (on a non-exclusive basis) left in late 2020 and has not yet been replaced. The third gender specialist also retired in late 2021 and there were delays in filling this position. Staff shortages therefore appear to have affected the availability of GESI skills in particular.

At the level of the PIUs, GESI staff are also more limited. At the time of baseline, seven projects have a dedicated community liaison officer or social and gender specialist. In the case of the two Jamaican agricultural projects there is only one individual with this expertise shared between the two projects. The level of GESI capacity led to an observation that project staff are not confident that there is enough resourcing to fully implement planned strategies. This is discussed in more detail in section 3.5,

3.3 Thematic questions: socio-economic impact of roads

3.3.1 EQ 1a. How were social, economic and livelihoods considerations integrated into the selection, design and implementation of the road projects, and to what extent were the strategies complementary and integrated with existing and planned infrastructure and policy developments and adapted to the needs and interests of the beneficiary countries?

The assessment showed that all the UKCIF projects were consistently and highly relevant to national policies for growth and transport sector policies for the beneficiary countries. All roads' projects systematically considered livelihood impacts in the selection and design process. More information on this is available in the socio-economic impact of roads section in Annex D. Climate change has been successfully and holistically integrated into the project design, and is considered a nascent and critical national issue for beneficiary countries. Furthermore, the CDB routinely develops a Country Engagement Strategy, and accompanying Country Strategy Paper, and therefore this provides a first filter for alignment between the CDB's policy and the beneficiary country's policy. It is commonly agreed that road safety can both improve (due to improved road conditions) and worsen (due to high traffic and opportunity for faster speeds), and that this duality of impacts has been acknowledged and additional safety features have been integrated where appropriate to minimise the disadvantages. Based on stakeholder consultations and beneficiary country Strategy Reports, perhaps the GESI component was the least relevant UKCIF component given that gender is not a specific policy priority for any of the countries.

With respect to organisational set-up, it was unanimously agreed that the UKCIF projects have been established as efficiently as possible and with no evidence of them presenting actual or potential bottle-necks. However, other areas have provided challenges to efficiency, an issue which is explored more in section 5.

3.4 Thematic questions: Climate resilience

3.4.1 EQ 1b. How did the UKCIF projects align with and address the climate resilience priorities of the BMCs in which they were implemented? (e.g., politically and/or from a risk and vulnerability prioritisation perspective)?

The UKCIF infrastructure investments are generally aligned with countries' nationally determined contributions (NDCs)[21] under the United Nations Framework Convention for Climate Change (UNFCCC), with some projects also contributing to mitigation targets. The most notable example is the resilient energy project in Antigua and Barbuda, which will contribute to the country's NDC through the installation of back-up renewable capacity and solar panels on public buildings. This includes a conditional commitment to achieve by 2030, an energy matrix with 50MW of electricity from renewable sources both on and off-grid in the public and private sectors.[22] Positive impacts of the project are expected to include avoided CO2 emissions of 107 tonnes per year. The two agricultural projects in Jamaica are also aligned with the government's NDC to reduce greenhouse gas emissions by 7.8% by 2030, however no mention was made of their contribution to CO2 mitigation targets.

3.4.2 EQ 3a. How did the choice or profile of projects have to adapt from a resilience perspective to meet country needs?

All of the countries with UKCIF projects have developed climate adaptation strategies and are mainstreaming resilience into sector development as part of their overall climate change planning. Climate adaptation strategies normally include a commitment to ensuring social and economic infrastructures are resilient enough to cope with extreme events and natural disasters. Guyana, for example, has incorporated 'green agenda' principles in its Green State Development Strategy: Vision 2040, and highlights the need for resilient infrastructure. This in turn underpins wider government economic resilience and prosperity objectives. Resilience often sits within the sustainable development units of the ministries of economic planning or finance, and so is well integrated into the infrastructure development process.

The selection of UKCIF projects is primarily driven by government priorities, economic growth and prosperity considerations, with climate change being a pre-condition for the long-term sustainability of these benefits. The UKCIF portfolio and pipeline therefore does not necessarily map directly onto government adaptation priorities. Regardless, staff perception of the relevance of the climate objectives is high, with 77% of respondents to

[21] NDCs represent each participating country's efforts to reduce national emissions and adapt to the impacts of climate change https://unfccc.int/process-and-meetings/the-paris-agreement/nationally-determined-contributions-ndcs/nationally-determined-contributions-ndcs
[22] Antigua and Barbuda Energy Resilience Project Board Paper.

the IA survey agreeing or strongly agreeing that the climate objectives were relevant to the context.

3.5 Thematic questions: GESI

3.5.1 EQ1c. To what extent were GESI considerations needs identified and then adequately integrated into the selection, design and implementation of the programme, and strategies adapted to cultural contexts and the needs and interests of the beneficiary countries and project affected persons (including the differential needs of women/girls, men/boys, persons with disabilities, youth, indigenous people and any other vulnerable populations)?

3.5.1.1 Consultations

Table 7 section maps the GESI alignment against the projects. Building on that, this section builds provides more detail about the consultations and how they occurred. Whilst consultation was carried out across the UKCIF portfolio, the inclusivity of different groups and resources committed to these activities varied between projects.

The participatory consultation of project beneficiaries is a requirement, and is implemented across all UKCIF projects. Project documents show that all the projects met with community-based groups, NGOs, and/or representative groups of women or PLWD. The format and methodological approach of this engagement tends to be similar across the UKCIF projects, however the extent and quality of the consultations varied. The reviewed ESIAs include information on the consultations held, the number of participants, and summarised the main views of the communities affected by the infrastructure investments, whether during construction, or as final beneficiaries. Table 10 summarises the extent of the consultation across the portfolio based on this desk review.

From reviewing the ESIAs, the consultations in the SVG port project are identified as being particularly inclusive. Here, the UKCIF Strategic TA fund supported a consultancy on livelihoods for project-affected persons (PAPs) which included some consultations, in total there were at least 18 sessions held from May 2018 – October 2019. Beyond the community consultations, there is also a project committee on which a representative of the displaced Rose Place community sits. This individual is male and the ESIA highlights the risk that *"local development plans could potentially be made without the voice of women",* and that *"care must be taken to avoid minimal engagement of women resulting in no or nominal engagement in the project processes leading to frustration and disenchantment."*

All the UKCIF projects reviewed present activities or plans for stakeholder consultations and participation. The format and methodological approach of this engagement tends to be similar across the UKCIF projects. However, the degree and quality of the consultations varied. The reviewed ESIAs include information on the consultations held, the number of

participants and summarised some of the main views of the communities affected by the infrastructure investments, whether during construction, or as final beneficiaries.

- The preparation and appraisal of this project involved consultation with a wide range of stakeholders. Meetings were held with the Caribbean Community Climate Change Centre, the Women's Affairs Bureau, the Belize Association of People with Diverse Abilities, NGOs working in areas of gender-based violence (GBV) and human trafficking, and PAPs. Primary stakeholders/beneficiaries were engaged using a range of differential participatory methodologies including individual and focus group meetings with men and women, transect and community walks, community mapping and public consultations. Such engagement provided opportunities for stakeholders' opinions and concerns to be expressed and to be considered in the design of the Project (Belize Phillip S.W. Goldson Highway Upgrading Project).

- The preparation and appraisal of the project involved consultation with a wide range of stakeholders including residents and farmers from Essex Valley Farmers' Benevolent Society (EVFBS), and New Forest/Duff House. The discussions provided the opportunity for stakeholders to share their experiences and knowledge as it relates to crop production practices and challenges, weather-related changes and the impact on cropping practices/output, organisational capacity of farmers' groups, the roles and challenges faced by women, men, PWDs and youth, and perceptions of the intended project (Jamaica Essex Valley Agricultural Development Project (EVAD)).

- The preparation and appraisal of this project involved consultation with a wide range of stakeholders PWDs, and NGOs, civil society and community representatives including National Society for PWDs, and PAPs. Primary stakeholders/beneficiaries were engaged using a range of participatory methodologies including individual and focus group meetings with men and women, transect and community walks, community mapping and public consultations. Such engagement provided opportunities for stakeholders' opinions and concerns to be expressed and to be considered in the design of the project (St Vincent and the Grenadines Kingstown Port Development Project).[23]

- The preparation and appraisal of this project involved consultation with a wide range of stakeholders including representatives of various government ministries and departments; gender-relevant institutions and women and men; community leaders and youth representatives in project-affected communities. The ESIA that was undertaken during the feasibility study utilised differential participation techniques to hear the voices of stakeholders and communities that would be directly affected by the intervention. Overall, the discussions provided opportunities for feedback as stakeholders' opinions and concerns were expressed and as necessary, are being incorporated into the project design (St Lucia Millennium Highway and West Coast Road Upgrading Project (MHWCR)).

[23] St. Vincent and the Grenadines Kingstown Port Development Project Appraisal Report

Table 10: Assessment of the degree of consultation across the portfolio[24]

Project	Consultation mechanism implemented	Adequate quality of consultation process[25]	Engagement Plan
Antigua Road Infrastructure Rehabilitation	Yes	Yes	No
Barbuda Energy Resilience Capital	Yes	Yes	Yes
Belize Coastal Highway Upgrading	Yes	Yes – includes a budget line	No
Belize PGH Upgrading	Yes	Yes	Yes
Dominica Loubiere/Bagatelle Road	Yes	Yes – includes a budget line for workshops and consultations	No
Dominica Water Sector Strategic Plan	Yes	Yes	No
EVAD	Yes	Yes – explicit reference to PLWD	No
Grenada Water Supply Expansion and Sewerage Improvement	Yes	Yes	No
Grenada Western Road Corridor Upgrade	Yes	Yes	No
Guyana Linden to Mabura Hill Road	Yes	Yes -PLWDs consulted separately	No
Montserrat Port Development	Yes	Yes	Yes
Saint Lucia Millennium Highway and West Coast Road Upgrading	Yes	Yes – includes a budget line for stakeholder workshops	Yes
SPAD	Yes	Yes – explicit budget line	No
St Vincent and the Grenadines Kingstown Port Development	Yes	Yes -includes a Resettlement Action Plan	No

3.5.1.2 Project-affected persons

The PAPs subject to formal resettlement were limited to SVG and, to a lesser extent, St Lucia. In St Lucia, formal relocation affected 35 individuals and 15 vendors. The formal relocation efforts of the SVG port project focused on the Rose Place community, and 60 vendors in Little Tokyo. The vendors have already been relocated with compensation. By the end of 2021 the resettlement process of individuals had not yet been completed, however a RAP was under implementation, including an identified resettlement site and the ongoing construction of homes. Part of the resettlement for individuals includes re-training initiatives, however, this has been delayed due to the pandemic (UKCIF Annual Review 2021). Details of the project-affected groups are provided in Table 11 below.

[24] Sources: FCDO internal reviews (2019, 2020) of UKCIF Enhanced Social and Gender Development Approach, document reviews.
[25] Defined as broad representation of vulnerable groups and/or intention to engage with marginalised people.

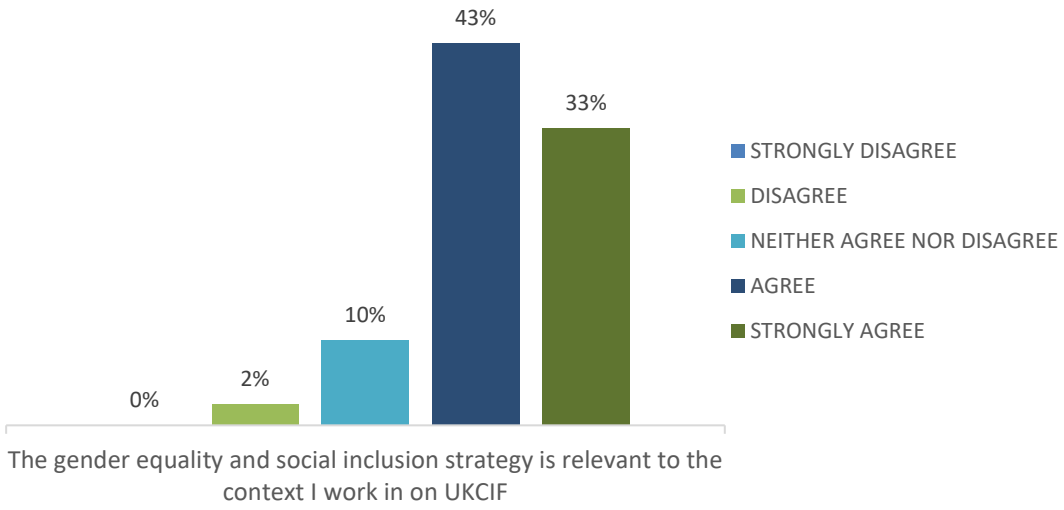
Table 11: Relocation of PAPs[26]

	Number of PAPs: individuals	Number of PAPs: vendors	Number of PAPs: Individual relocated	Number of PAPs: vendors relocated	Number of PAPs compensated with land title
St Lucia	35	15	0	0	0
SVG	176: Rose Place	60: Little Tokyo	0	60	0

3.5.1.3 Perception of GESI issues from individuals working on UKCIF projects

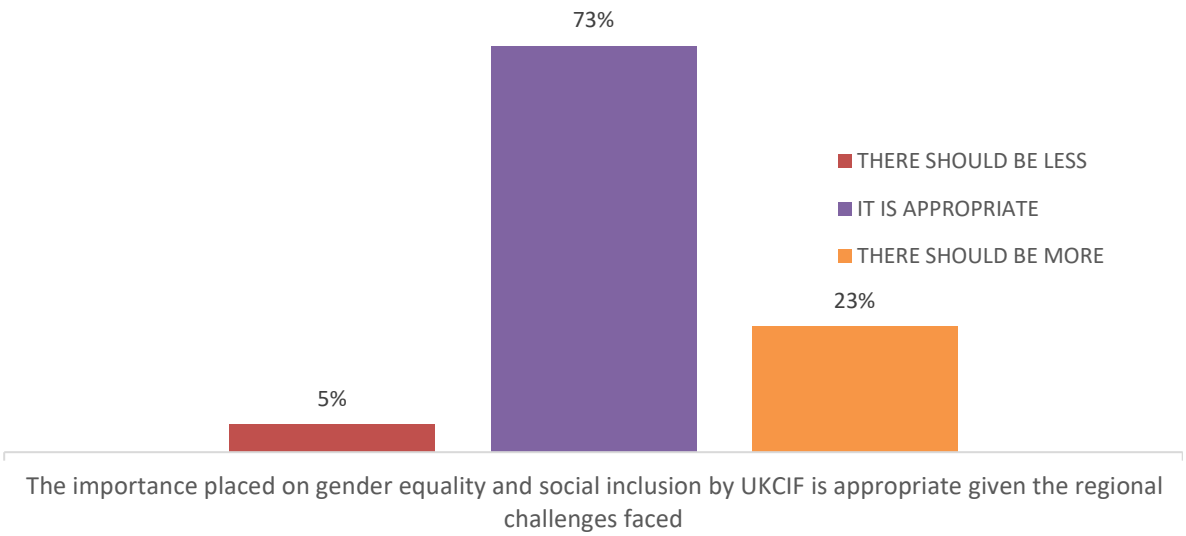
As the graphs below demonstrate, 76% felt that the GESI strategies employed in UKCIF projects were relevant to their context. Further, 73% felt that this focus and engagement was at the right level.

Figure 7: IA survey responses on perception of alignment of UKCIF gender strategies to country needs and priorities



26 PAPs endline survey

Figure 8: IA survey responses on perceptions working on UKCIF on appropriateness of the level of importance placed on GESI by UKCIF given the challenges faced in the region



3.5.2 EQ 3b. How did the programme promote and support GESI considerations across the portfolio and were the benefits and risks to particular target groups, particularly more vulnerable groups adequately explored, monitored, communicated and managed?

3.5.2.1 GESI processes in design of UKCIF projects

The UKCIF Enhanced Social and Gender Development Approach within the UKCIF Social and Gender Development Framework, as well as the Social and Gender Action Plan (2021), aims to establish the social and gender ambitions and expectations for UKCIF projects. The CDB appraisal process, particularly the ESIA, identified key project stakeholders, including beneficiaries from marginalised and vulnerable groups.

The UKCIF Social and Gender Development Framework clearly identifies the level of ambition regarding social and gender objectives within the UKCIF. All UKCIF projects should meet at least *minimum compliance*[27] with five projects aiming for a higher *empowerment*[28] level. Table 12 below outlines the current level of ambition by project with '1' denoting minimum compliance and '2' denoting empowerment level.

Table 12 UKCIF project GESI level of ambition

[27] *Minimum compliance*: Projects meet basic needs, focussing on gender-differentiated needs and the needs of youth, people with disabilities and indigenous people. Projects do no harm and provide a minimum level of employment and other economic and social benefits for the community and disadvantaged groups.
[28] *Empowerment*: Projects build assets, capabilities and opportunities for marginalised and disadvantaged groups, focussing on women, youth, PLWD and indigenous people. Some wider economic and social benefits are generated from the project and some foundations built for employment beyond the implementation period.

Project	GESI level of ambition
Antigua Road Infrastructure Rehabilitation	1
Barbuda Energy Resilience Capital	1
Belize Coastal Highway Upgrading	2
Belize Phillip S.W. Goldson Highway Upgrading	2
Dominica Loubiere/Bagatelle Road	1
Dominica Water Sector Strategic Plan	1
Grenada Water Supply Expansion and Sewerage Improvement	1
Grenada Western Road Corridor Upgrade	1
Guyana Linden–Mabura Hill Road Upgrade	2
Jamaica Essex Valley Agricultural Development	1
Jamaica Southern Plains Agricultural Development	2
Monserrat Port Development	1
St Lucia Millennium Highway and West Coast Road Upgrading	1
St Vincent and the Grenadines Kingstown Port Development	2

The CDB adopted a Gender Equality and Operational Strategy (GEPOS, 2008)[29] to address gender equality issues in both external and internal procedures. As part of this, all projects have a gender marker score, offering a comparative framework to monitor gender mainstreaming across CDB projects. The score is graded on four dimensions during the project appraisal stage: analysis, design, implementation, and monitoring and evaluation. A point is awarded to each dimension for a maximum possible score of '4'. The scoring code is gender specific (GS): 3.75-4 points; gender mainstreamed (GM): 3-3.5 points; marginally mainstreamed (MM): 1.5-2.75 points; or NO: if projects score zero or 1. All UKCIF projects score 2.75 (MM) or above, three scored 4 (gender specific) and nine scored between 3 and 3-5 (gender mainstreamed). An overview of these scores are available in the GESI Annex E.

3.5.2.2 CDB youth policy

The CDB has adopted a Youth Policy and Operational Strategy (2020), to engage and empower youth, safeguard and protect their rights, support youth through programming and to strengthen the enabling environment. Specifically, the policy referred to integrating youth considerations into infrastructure interventions to expand access to the formal labour market and services. The policy also prescribed the disaggregation of infrastructure beneficiaries by age. So far, this has not been the case in individual UKCIF project results frameworks but there is a requirement in the UKCIF log-frame for contractors to report on employment by age. The disaggregation was applied to the data from the individual

[29] The GEPOS has since been updated and was approved in 2019, and is currently under implementation.

surveys conducted for the selected case studies in this evaluation, with youth representing 10-20% of the respondents across the cases.

3.5.2.3 CDB policy on persons living with disabilities (PLWD)

There is no formal CDB policy framework for dealing with PLWD. This group has been prioritised in regular annual reviews (e.g., in 2019 and 2020). The recently approved UKCIF Social and Gender Action Plan (July 2021) proposes to strengthen disability inclusion within the portfolio, with the following expected results: (i) enhanced delivery and monitoring of disability accessibility provisions in the UKCIF portfolio; and (ii) improved engagement of PLWD in UKCIF projects. At the point of baseline it is too early to see how this plan has been incorporated into the project design.

References to PLWD in UKCIF project documents include; alignment with PLWD legislation (e.g., Guyana, Jamaica), universal access (e.g., accommodations in road and port projects), employment opportunities (e.g., Belize PGH, Jamaica agriculture projects) and the disaggregation of data (e.g., Jamaica agriculture projects). There was particular focus on PLWD in the SVG port project but no mention of specific design features at the Montserrat port project. Some road safety components accommodated universal access specifically looking at PLWD (e.g., Belize PGH, Guyana, St Lucia). Energy access in Barbuda was directed at households with a high dependency ratio, including PLWD. The number of PLWD in the agriculture projects was more limited. According to one informant in the Jamaica SPAD project, there were limited numbers of PLWD in the immediate project areas (no respondent identified as having a disability in the baseline survey), leading PIUs to extend access to training to broader areas.

3.6 Addressing relevance data gaps

To answer the relevance evaluation question at endline and to improve monitoring of progress in UKCIF the evaluation team made the suggestions below.

To address the rapidly evolving context, the UKCIF programme and projects should:

- In monitoring and reporting, include information on the context and management of related risks in areas such as understanding the implications of the effects of COVID-19 and the war in Ukraine on the global economy, supply chains, inflation, the fiscal constraints of recipient governments and price increases in construction inputs, among many other contextual risks that are yet to emerge, not least relating to the annual hurricane season;

To improve the targeting of final beneficiaries, especially those most vulnerable, the UKCIF programme should:

- Assess the feasibility of further disaggregation of data and promote understanding for the need and value in collecting and analysing disaggregated data, including by

sex, age and PLWD; Sector specific recommendations are included in the effectiveness section.

- Develop a shared understanding of the standard definition of PLWD and youth for the projects, which would also be valuable for interpreting results.

To improve the representation of the views from benefiting countries, including those of the most vulnerable, the endline evaluation will:

- Collect additional qualitative evidence through FGDs and KIIs from key stakeholders, including government stakeholders and infrastructure beneficiaries, to understand how the UKCIF projects have been relevant and adapted to their needs; especially the needs of vulnerable groups.

4 Baseline: Coherence

For countries to realise economic and social benefits requires infrastructure investments alongside a range of other initiatives. It is therefore important to consider the coherence and complementarity of UKCIF with other projects and initiatives.

> As with the previous section, this report will first present an overall baseline status for coherence before going into more depth in the evaluation questions. There is **one evaluation question** under the coherence criteria:
>
> **Evaluation question 2:** How did the UKCIF programme coordinate with other interventions in similar or complementary contexts?

For this baseline report, the focus is on how the project designs and progress to date are coherent with the infrastructure and wider development aspirations of the country and on a few cases where projects have reported complementary investments. This will be repeated at endline supplemented by KIIs with project staff on selected case study projects to understand if and where there have been purposeful actions taken to work with other projects/investments.

In addition, there **is one thematic question** which follows the evaluation question discussion. These are:

> Socio-economic impact of road access
>
> 2a. How did the UKCIF programme coordinate or align with other climate or wider economic resilience processes on road or transport infrastructure development in BMCs or at a regional level?

As with the relevance questions, data that informs the thematic questions will also be used to fully address the evaluation question at endline. More information on the thematic questions can be found in the thematic summaries.

4.1 Coherence baseline status

At baseline, while reference was made to complementary investments in some of the project documents, this was relatively limited. The most comprehensive reporting on complementary investments is in the two agriculture projects in Jamaica, the energy project in Barbuda, the St Lucia Millennium Highway project and the Belize Philip Goldson Highway. This best practice was not applied across the portfolio.

Projects also follow and respond to individual countries' norms and standards on climate resilience, complemented by international best practices where these are considered appropriate and affordable.

4.2 Evaluation question

4.2.1 Evaluation question 2: How did the UKCIF programme coordinate with other interventions in similar or complementary contexts?

Based on the desk review, although reference was made to complementary investments in some of the project documents, this was relatively limited. The most comprehensive reporting is on complementary investments in the two agriculture projects in Jamaica, the energy project in Barbuda, the St Lucia Millennium Highway project, and the Belize PGH; however, this best practice was not applied across the portfolio. The UKCIF Annual Review 2021 recommended increasing coherence and coordination, especially for Jamaica, due to the complementarity of the two projects and on-the-ground presence of the British High Commission. Based on documentation and interviews conducted, the FCDO and CDB participate in donor coordination working groups when they are held in the Caribbean region, together with other major players such as Canada, the European Union, and the World Bank and so there are opportunities to build the external coherence of the UKCIF funded investments with other financing by development partners.

4.3 Thematic question: roads and climate resilience

4.3.1 2a. How did the UKCIF programme coordinate or align with other climate or wider economic resilience processes on road or transport infrastructure development in BMCs or at a regional level?

Socio-economic impact of roads:

The St Lucia Millennium Highway complements other recent initiatives that the government is undertaking by creating intermodal connections; these initiatives include the redevelopment of the seaport, airport, and the Castries City redevelopment. (UKCIF Annual Review 2021) A KII reported that a complementary bridge investment funded by Japan International Cooperation Agency (JICA) is also reliant on the upgrade of the connecting road segments.

For the Belize PGH, funding was also secured for the procurement in 2021 of three fixed weighbridges to be located on the Hummingbird Highway, George Price Highway and PGH. However, the supporting legislative changes remain outstanding. (UKCIF Annual Review 2021) The Belize Coastal Highway project was complemented by another CDB investment in road safety. The Compete Caribbean Partnership Facility can also help lay groundwork for further transformation (UKCIF Annual Review 2021). The upgrade of the Coastal Road will make the redevelopment of one of the deep ports of Belize at Commerce Bight Dangriga feasible, as an alternative port to Belize City and Big Creek. (UKCIF Annual Review 2021)

Through the promotion of intermodal connections, the road investment in Linden to Mabura Hill will complement any potential future development of a deep-water port, the

planned construction of a bridge at Kurupukari and upgrade the remainder of the road corridor. Besides the port, there are no other major infrastructure investments foreseen in Kingstown (SVG ESIA).

Climate resilience:

With regard to improving coherence on climate resilience, CDB projects are implemented based on engineering-led design considerations and best practices. Projects follow and respond to individual countries' norms and standards on climate resilience, complemented by international best practices where these are considered appropriate and affordable. For example, the SVG port project was compliant with the local building code which was adapted from the Caribbean Uniform Building Code (CUBiC). The project also complied with other internationally acceptable building standards in the design of climate-resilient infrastructure.

The two agricultural projects in Jamaica complemented each other, by addressing similar, climate-related irrigation issues (e.g., unreliable access to water or expensive access to water) in distinct geographic regions. The projects are also complemented by a number of other government and donor-funded initiatives. The Barbuda energy project was reinforced by a separate, but parallel investment by the Abu Dhabi Fund for Development, and the Government of New Zealand, to implement a new power source comprising two 330kW diesel units, 719kWp Solar PV (Photovoltaic) and 862kWh Battery Energy Storage System on the island.

4.4 Addressing coherence data gaps

To understand the complementary nature of investments and to promote transformation at scale, the evaluation team has made the recommendations below.

In order to improve the external coherence and coordination of the UKCIF projects with other interventions and with the private sector, and to promote understanding of complementary investments, relevant government ministries and project steering committees should:

- Systematically identify and report to the CDB on complementary public and private infrastructure, socio-economic and climate resilience investments in the project locations. Finding opportunities to link them can increase the transformational potential of investments.

- Seek opportunities to contribute to systemic change in government regulation around infrastructure, for example, supporting the adoption of enhanced climate resilience measures in other infrastructure development.

The endline evaluation will:

- Gather additional qualitative data on complementary interventions and on the establishment and use of relevant coordination mechanisms; and

Review remaining project documents for evidence of complementarity, including the four unconfirmed projects at baseline.

Baseline: Efficiency

The efficiency criteria deals with questions that assess the extent to which the intervention delivers results in an economic and timely way. The UKCIF operational model and the programme context provided both key enablers and barriers to addressing the infrastructure needs of UKCIF countries and infrastructure users.

After a summary of the baseline status, this section will present evidence to answer the **two evaluation efficiency questions**:

- **Evaluation question 6:** What were the key barriers and enablers to completing projects to international design standards within the planned time and budget, did this affect the value of projects?

- **Evaluation question 7:** How efficient were the institutional arrangements supporting the execution of this programme (for example, between CDB/UKCIF and also in-country arrangements)?

This section will begin by looking at the contextual factors highlighted during the baseline that have affected programme efficiency before going into operational factors. Given the progress the UKCIF has made, initial findings can be made on the work to date, including for the design process, approvals and the institutional efficiency.

Following this, the question will look at three thematic efficiency sub-questions:

Socio-economic impact of roads

6a. How did the incorporation of social, economic and livelihoods considerations impact overall project and/or construction timelines/budget?

Climate resilience

6b. How were climate resilience considerations incorporated into UKCIF project selection, design and delivery processes, and did this influence project timing or budgets?

GESI

6c. How did the incorporation of GESI considerations impact overall project and/or construction timelines/budget?

As with the previous sections, the data underpinning the thematic evaluation questions are also critical to fully answering the evaluation questions at endline. Additional data is available in the thematic annexes and in annex L.

4.5 Baseline status

UKCIF projects have already experienced substantial budget and timeline adjustments. At the time of drafting this report, four projects had not yet been approved, and there have been numerous delays in procurement processes across the portfolio. An extension request for the programme was submitted and has been accepted, that now extends the programme to 2026.

External challenges relate notably to the impacts of the COVID-19 pandemic. Internal challenges relate to the UKCIF governance structure and systems, notably delays in appraisal and procurement processes, and the lack of horizontal linkages leading to some siloed working. Socio-economic, GESI, and climate resilience requirements were not identified as the cause of substantial delays for projects. There has been a depreciation of the pound since the beginning of the programme.

As projects move toward construction, questions remain about the potential efficiency and quality of supervision, monitoring, and reporting. These include concerns over sufficient staff resources at both the CDB and PIUs, notably on GESI and climate resilience. Issues have already been identified with the implementation of the ESMPs, notably related to reporting

4.6 Evaluation questions

This section will present the baseline data against relevance evaluation questions. As with the relevance section, these questions are informed by a combination of unique and shared indicators which will all be used to provide a comprehensive response at endline.

To reduce repetition of indicators across the report, the data is presented as follows:

- **For evaluation question 6:** The section will begin by reviewing the status of project implementation including delays and cost overruns, and the reasons given for these from project monitoring documents. It will then outline contextual enablers and barriers identified by project staff from the IA survey. As previously discussed, these contextual factors may also be important to support findings under the relevance question 1. The project institutional arrangements may also provide barriers and enablers but to reduce repetition these data points are currently presented under EQ7.

- **For evaluation question 7:** The section will look at the systems and organisational structures underpinning the UKCIF projects, it is mainly informed by the IA survey and internal project stakeholder KIIs.

As previously mentioned, this report is presenting a selection of **key data points** that respond to the evaluation questions. Additional data is available in annex L.

4.6.1 EQ 6. What were the key barriers and enablers to completing projects to international design standards within the planned time and budget, did this affect the overall value of projects?

4.6.1.1 Current delivery status

There are delays across the portfolio of UKCIF projects. Of the five road projects in implementation phase, most are experiencing delays, ranging from six months to over two years. Three of the projects, Guyana Linden to Mabura Hill road, St Lucia Millennium Highway and Montserrat port, have already reported experiencing or foreseeing cost over-runs.

UKCIF annual reviews and interviews with the PIUs highlight a range of causes for delays. Many cite ongoing effects as a result of Covid-19, in addition to this common challenges are procurement delays, quality of contractor performance and capacity of the responsible ministries.

Table 13: Timeline of key dates across UKCIF projects[30]

Project	Date of capital approval	Completion date: planned	Completion date: expected
Antigua road rehabilitation	Dec-16	Dec-18	Mar-21
Barbuda energy	Dec-19	Dec-20	Jun-21
Belize Coastal Highway	Dec-18	Jun-23	Jun-23
Belize PGH	Aug-20	Jun-23	Jun-23
Dominica Road	NA	NA	NA
Dominica water	NA	NA	NA
EVAD	Mar-17	Aug-22	Jun-23
Grenada water	NA	NA	NA
Grenada Western Corridor	NA	NA	NA
Guyana Linden to Mabura Hill	Dec-20	Oct-24	Oct-24
Montserrat Port	Nov-17	Jun-21	Mar-23
SPAD	Dec-18	Jun-23	Jun-23
St Lucia Millennium Highway	Feb-20	Dec-22	Mar-23
SVG Port	Dec-19	Jun-23	Apr-24

[30] UKCIF Progress Report #10 Reporting Period: July 1 to December 31, 2020, published February 2021.

4.6.1.2 Contextual barriers and enablers

There were a number of contextual factors highlighted as existing and potential barriers and enablers to the programme realising its outcomes. At endline we will assess to what extent these impacted the overall delivery and outcomes of the project.

The barriers broadly fall into three categories:

- COVID-19: KIIs, the IA survey and UKCIF annual reviews all cite the ongoing pandemic as a cause of delays across the project-cycle; also affecting project supply chains, delivering economic shock and creating additional burdens on governments.

- Limited local expertise: Particularly highlighted in the IA survey, this has contributed to delays in resourcing posts and completing work to the necessary standard, especially for GESI and climate resilience. This was most prevalent in small island contexts, but was also raised as a barrier in Guyana.

- Ongoing GESI issues: Prevailing 'patriarchal' contexts are cited by the project staff as a consistent barrier for women. A lack of legislated protection for youth, LGBTQ and indigenous rights are core potential barriers to these groups realising benefits. Whilst this is likely to have an impact on the effectiveness of the interventions, it also has an influence on the efficiency of delivery. As the selection of countries lack these legislative provisions, methods for circumventing these potential barriers forms part of the programme design. Whilst the evaluation does not suggest that this should prevent the selection of these countries, it does raise a query for the evaluation at endline to explore if and how the provisions put in place by UKCIF projects are able to overcome these barriers. This is represented in the TOC assumptions and will be further interrogated at endline.

A main contextual enabler highlighted was government buy-in. KIIs and responses in the IA survey note that high levels of government buy-ins supported project progress, and is a result of strong alignment between the project and wider government strategies. Other key enablers related to the institutional arrangements and processes and are discussed in more detail in section 5.2.2.

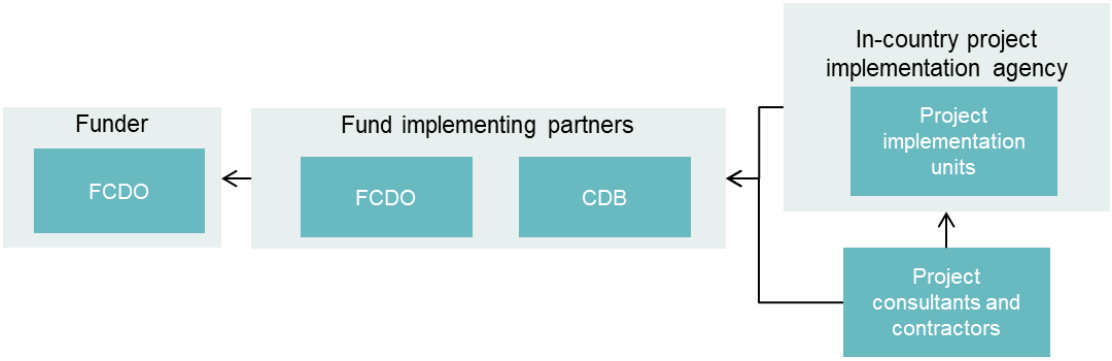
4.6.2 EQ 7: How efficient were the institutional arrangements supporting the execution of this *programme (for example, between CDB/UKCIF and also in-country arrangements)?*

Following on from relevance question 3. the data presented here will speak to the remaining institutional areas of structure and systems

4.6.2.1 UKCIF Structures

The organogram below represents the institutional structure of UKCIF projects. The projects are funded by FCDO, and implemented in partnership between the CDB and FCDO. The PIUs report to the implementing partners and are responsible for the project consultants and contractors who also have reporting requirements to the implementing partners.

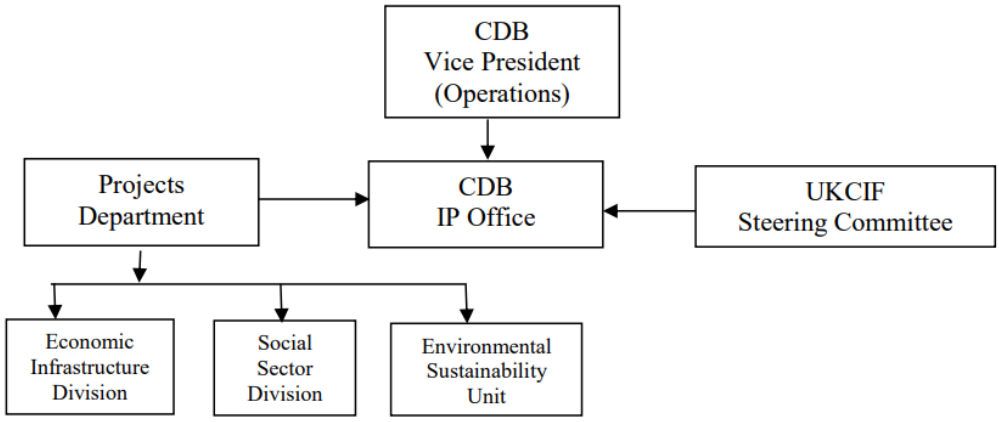
Figure 9: UKCIF governance structure



The UKCIF has a singular relationship with the CDB, being placed directly under the Office of the Vice President (Operations).

The UKCIF ratification document outlines that "The Head, IP Office will be responsible for the day-to-day operations of UKCIF, including coordinating with DFID, Country Channels and the Project Coordinators assigned to each project." Figure 10 shows how this fits within the CDB organisational structure.[31]

Figure 10: Governance structure of UKCIF projects within CDB



According to one interviewee at CDB, this is meant to increase the prominence of UKCIF within the broader CDB portfolio. The work is nevertheless conducted by the regular project appraisal and supervision teams within the projects department, in line with

[31] https://www.caribank.org/sites/default/files/publication-resources/UKCIFBD27_16.pdf

standard CDB processes. Together with concerns over respective roles and responsibilities, these structural arrangements appear to have caused some tensions between the FCDO and CDB, but based on the latest FCDO Annual Review, the relationship between the FCDO and CDB has improved *"in part due to changes in the working arrangements (under COVID-19), transitions in staff, and other factors, there has been an increase in collaboration between CDB-FCDO."*[32]

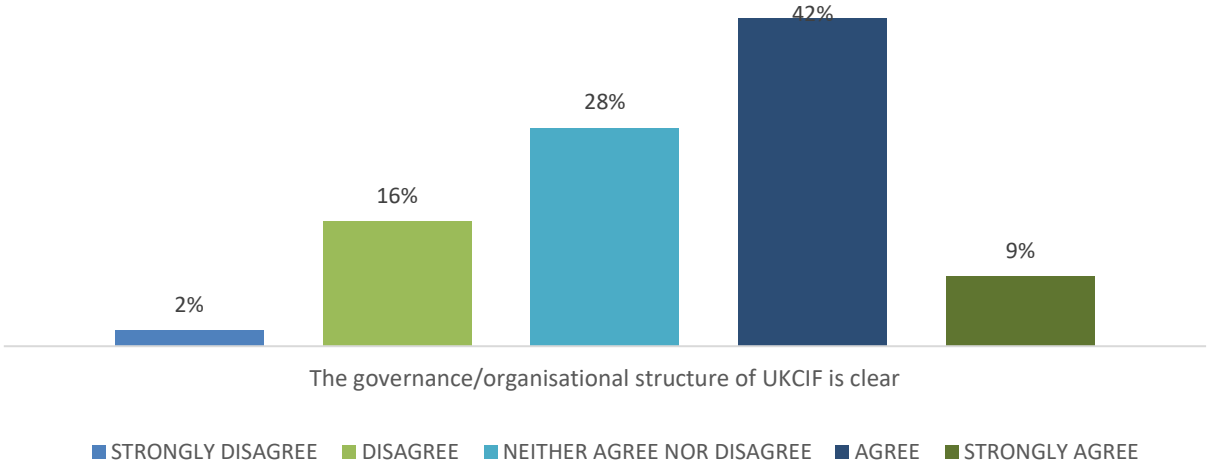
Governance within the UKCIF, who the stakeholders are, and where responsibility lies, is not well understood among PIUs, consultants and contractors. Overall, 51% of respondents in the IA survey agreed or strongly agreed that the organisational structure was clear, with some qualitative responses also highlighting this as a potential programme improvement. One individual expressed a desire to have *"greater clarity on the FCDO, CDB and beneficiary country roles and responsibilities."*

The institutional arrangements between CDB and FCDO are evaluated positively in terms of a common GESI vision and strategy. The strong UK GESI stance and commitment is considered a welcome influence on the overall work of the CDB. KIIs nevertheless indicate that an even more palpable commitment from the CDB leadership to GESI issues would further its implementation in practice on UKCIF projects.

Inefficiencies in decision-making were highlighted as a challenge through the IA survey, where it is the most frequently cited barrier to programme attainment. This was also a consistent theme in interviews. Fewer than 35% of respondents in the IA survey agreed or strongly agreed that decision-making on UKCIF projects was efficient. In addition, several individuals within PIUs highlighted the desire to increase their decision-making power, while CDB respondents felt that their own decision-making responsibilities were appropriate. Regarding the institutional set-up between the CDB and the in-country PIUs, the IA survey and interviews show mixed views; some claim that this supervision is too strict and not supportive enough, and others confirm that they receive good advice, technical support, and responsive interaction.

[32] UKCIF Annual Review, March 2021.

Figure 11: IA survey: experiences of structures around UKCIF projects, does not show 'Don't know' and 'not relevant to me' responses



4.6.2.2 Systems

The systems explored in the survey were communications, procurement processes, appraisal processes, supervision, and monitoring systems. These aspects received mixed results in the IA survey.

The survey found that the relevance of the appraisal processes is rated very highly, while there are more concerns over efficiency. Qualitative survey responses and KIIs suggest that the CDB systems produce relevant and high quality outputs, but the processes are onerous, and in some cases there is the perception that they are disproportionate to the project. KIIs and qualitative survey responses also highlighted that there could be better systems in place to encourage communication, sharing, and learning between different project functions and different project teams.

Appraisal systems: Based on the IA survey, the perceived relevance of the CDB appraisal systems was very high (95% agreed, 24% did not know or it was not relevant to them), but efficiency was considered lower (55% agreed, 11% did not know or it was not relevant to them.). From reviewing project documents, the UKCIF project management objectives align closely with CDB's own processes for project identification and implementation, and appraisal processes and requirements are well aligned with the standards and requirements of other multilateral development banks.

Project appraisal is undertaken by a multi-disciplinary team, including economists, engineers, and environmental and social (including gender) specialists. Some concerns were raised by the thematic specialists themselves, that they were frequently consulted too late in the process to influence project design. Whilst it is not clear if this is a system failure or down to individual interaction, thematic specialists expressed that they are keen to be involved in these processes. On some projects, individuals raised that a challenge of fulfilling projects to time and budget stemmed from incomplete scoping during the design

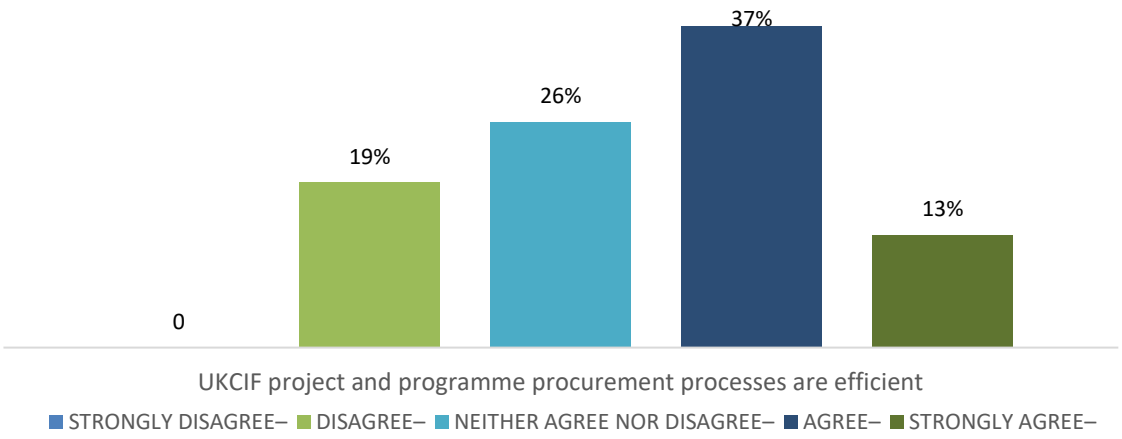
phases, and adjustments needing to be made to what is being delivered during implementation, including the retrofitting of GESI and climate resilience objectives.

The efficiency of the appraisal processes was also raised during KIIs, with one interviewee stating that whilst CDB is *"already well versed in managing processes of this nature"* that *"the volume did result in an overstretching of CDB capacity"* leading to a longer timeframe.

12**Procurement systems**: As noted in the introduction there have been delays in procurement and disbursement due to delays in implementation. According to the IA survey, qualitative responses and KIIs, respondents were more critical of the efficiency of procurement systems, reporting substantial delays with this process. One respondent highlighted that procurement felt overly extended with a lot of bureaucracy; another highlighted overlaps in different procurement processes (e.g., between national governments and CDB) that caused inefficiencies. Some of these concerns related to the efficiency and proportionality of the related structures and decision-making processes (see section 4.6.2.1 above).

Whilst overall, 45% of survey respondents said that use of local suppliers was encouraged on UKCIF projects, a common theme identified by various respondents was around the limitations placed on local contractors. In part, respondents felt that this was due to stringent requirements which resulted in them being locked out of procurement processes. There have been attempts at facilitating this access, for example in St Lucia the road has been broken into a higher number of lots, to make it more feasible for local contractors to bid for these projects. On the other hand, bringing in international expertise has facilitated knowledge-sharing on project management and training on the application of technical processes (e.g., HDM4 methodologies). KIIs also highlighted the transfer of knowledge from CDB to in-country teams.

Figure 12: IA survey responses to questions on UKCIF procurement processes

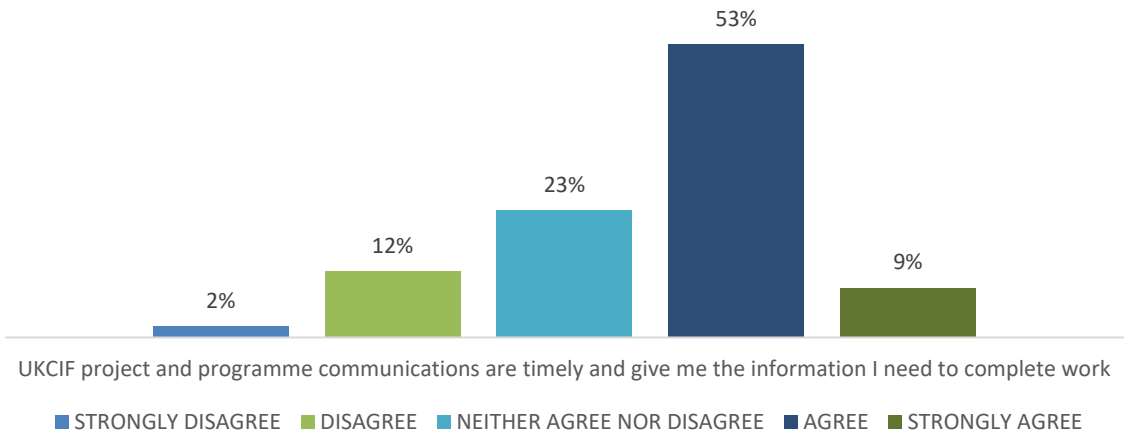


Monitoring and reporting systems: UKCIF-related monitoring and reporting procedures, requirements and templates are well established, and related training is already being conducted, notably with the PIUs. Monitoring is further reinforced by a dedicated, embedded staff member at the CDB. Survey responses revealed that those who applied the monitoring systems to their work considered them useful, but not everyone was using

them at this stage of the project cycle or otherwise regarded them as not relevant to their work. This may be in part due to projects not yet being in the implementation phase, and this will be revisited at endline. There are concerns about the quality of reporting in some projects, particularly on environmental and social issues.[33] Our analysis of the data that has been and will be collected through monitoring is available in the effectiveness Section 5. The proportionality of the monitoring requirements will be explored at endline.

Communication systems: KIIs and qualitative survey responses expressed the appreciation of both formal and informal/ad hoc avenues of communication. However, UKCIF projects are missing horizontal linkages. Multiple sources reported that some functions are siloed within projects, for example, GESI work operating separately from project coordination. In one illustrative example, a KII respondent noted that social and gender reports are not shared directly with supervising consultants, and quarterly reports are not shared in return. In addition, while there are many individual successes and best practices, there is little evidence of formalised sharing between projects beyond those happening within the same country. While the UKCIF annual review notes that a Community of Practice between UKCIF CLOs and Social and Gender Specialists has been established, this was not mentioned during the interviews.

Figure 13: IA survey responses to questions on communication



4.7 Thematic questions: Roads

4.7.1 EQ 6a. How did the incorporation of social, economic and livelihoods considerations impact overall project and/or construction timelines/budget?

Although there are significant delays on the case study roads, the delays are mainly due to design issues (leading to price escalations), procurement-related delays and internal contractor deficiencies. The social, economic and livelihoods considerations of UKCIF do

[33] UKCIF Annual Review, March 2021.

not appear to have affected the Belize Coastal Highway, may have had a very minor (non-tangible) impact with respect to delays in Guyana as stakeholders adjusted to new technical issues, and a noticeable but not significant impact on costs on the St Lucia Highway.

Table 14: Road projects and efficiency assessment[34]

Project	Time delay	Overbudget	Due to social, economic and livelihoods considerations of UKCIF designs
Belize Coastal Road	3–4 months delay (PE)	Not overbudget	No
Guyana Linden–Mabura Hill	4 months delay (PC)	Overbudget due to price escalation. Impact is that the Kurupukari River Crossing omitted	Possible in terms of time as there was a learning curve for new issues but other issues more responsible
St Lucia MHWCR	12 months delay (consultant, PC) 6–9 months delay	Too early to confirm but probable physical escalation	Price escalation in concrete will affect projects with climate resilience more, however, not the main reason for budget increase

4.8 Thematic questions: Climate resilience

4.8.1 EQ 6b. How were climate resilience considerations incorporated into UKCIF project selection, design and delivery processes, and did this influence project timing or budgets?

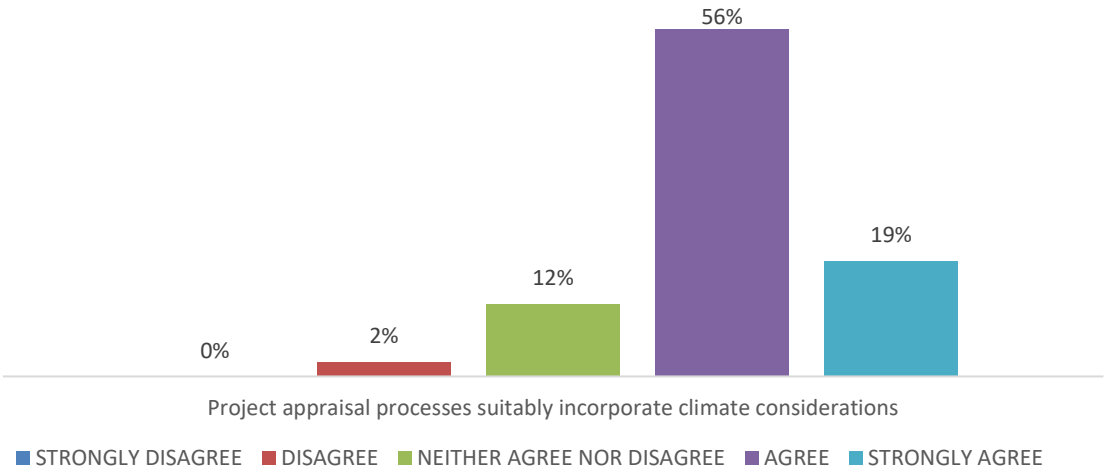
For UKCIF projects, the CDB is systematically commissioning environmental and social impact assessments and categorising projects based on its Environmental and Social Review Procedures. There is also a CDB requirement for climate screening during appraisal, with related tools. A Climate Risk Vulnerability Assessment (CRVA) has or will be undertaken for all UKCIF projects. All the UKCIF projects have adhered to CDB climate processes, have been climate screened, and specific adaptation measures were introduced which ensured that climate resilience has been considered during the design process.

These processes pre-dated UKCIF-funded projects and are now standard in CDB-funded projects. There are no separate climate resilience processes or standards that apply specifically to the UKCIF portfolio (see annex F for further details on the selected case study projects). Of the IA survey, 84% (32/38) of respondents agreed or strongly agreed that appraisal processes on UKCIF projects sufficiently incorporated climate considerations. This is supported by strong documentation at baseline that climate resilience is well considered in design across UKCIF projects. Multiple sources at CDB and within PIUs highlighted that without the implementation of the UKCIF projects through FCDO, and the technical capabilities of the CDB, processes like the CRVAs may not have occurred, or would not have occurred at the high level at which they have been delivered. Where the CRVA provides recommendations on additional design parameters which have

[34] based on project monitoring documents and KIIs

infrastructure cost or service implications, there follows a process of negotiation between the recipient government, PIU and CDB on the level of ambition that the project will adopt, with all parties having to sign off on final project design.

Figure 14: IA survey responses to whether appraisal processes incorporated climate considerations



There have been challenges in addressing this priority. The quality of CRVAs undertaken has been variable to date. Perceptions from users of these documents reveal that ESIAs are considered to be of higher quality than CRVAs. 57% (16/28) of the IA survey respondents did not consider climate risk and resilience mainstreaming systems to be adequately resourced. CDB staff highlight the importance of having strong capacity to understand and to quality assure the CRVA (particularly among CDB engineers, Environmental Sustainability Unit, and social division staff). Whereas some guidance was prepared under the Climate Action Line of Credit (CALC) project, additional tools or checklists would be useful from a quality assurance perspective, as understanding the robustness and quality of underlying data can be challenging.

In addition, the capacity for understanding the CRVA process and incorporating risk recommendations at country level can vary and could be strengthened. Between the countries, there was varying understanding of the importance of the CRVA process. In some cases, the CDB had to educate the government on the process, and push for quality improvements in the CRVA itself. One barrier to this is missing capacity and technical skills within UKCIF countries and territories, which the CDB has planned to address through hiring related expertise. There was an obligation to engage the social and environmental experts prior to commencing the civil works phase, which resulted in some delays as was the case in Belize.

4.8.1.1 Climate resilience in relation to time and cost over-runs

CDB staff report that the climate risk screening and CRVA processes themselves did not lead to additional implementation delays, once the expertise was identified. The processes are conducted at the initial design stage and in parallel with other due diligence processes.

On some occasions they were not available at the time of the approval of the capital project, were conducted later (e.g., Jamaica SPAD), or experience delays due to weaker consultancy inputs and related revisions.

In terms of budget, recommendations given through the CRVA will normally have cost implications for UKCIF projects. However, the expectation that infrastructure will be resilient will now be 'business as usual' for the CDB. This was fully in line with UKCIF climate resilience objectives. As a result, KIIs revealed that these costs are not regarded as additional to project budgets. Consultants are asked to identify the additional costs of resilience measures as part of the CRVA (e.g., in Belize), but this is not done consistently. Occasionally, there are trade-offs (e.g., in Dominica) and cost benefit considerations will mean that different approaches are taken (e.g., in the Belize Coastal Highway, road flooding is being retained in two locations).

4.8.2 Thematic questions: GESI

4.8.2 EQ 6c. How did the incorporation of GESI considerations impact overall project and/or construction timelines/budget?

Overall, GESI mainstreaming was incorporated in the UKCIF analytical, design and appraisal process, as well as the planned implementation and monitoring arrangements. Table 15 presents outlines how this happened across projects based on a review from the evaluation team of project documents and FCDO internal reviews. The final column presents the project gender marker score which is awarded based on these categories.

The CDB policy is to mainstream social, gender and inclusion issues in UKCIF projects from the design stage. One way this occurs is by carrying out an ESIA, which is a mandatory part of the appraisal process.

Table 15 Level of GESI mainstreaming in UKCIF projects[35]

Project	GESI in analysis	GESI in design/ appraisal	GESI in implementation arrangements design	GESI in M&E arrangement design	Gender marker score
Antigua Road Infrastructure Rehabilitation	Yes – partial	Yes – partial	Yes – partial	Yes – partial	2.75
Barbuda Energy Resilience	Yes	Yes – partial	Yes	Yes	3.5
Belize Coastal Highway	Yes	Yes	Yes	Yes – partial	3.5
Belize PGH	Yes – partial	Yes	Yes	Yes	3

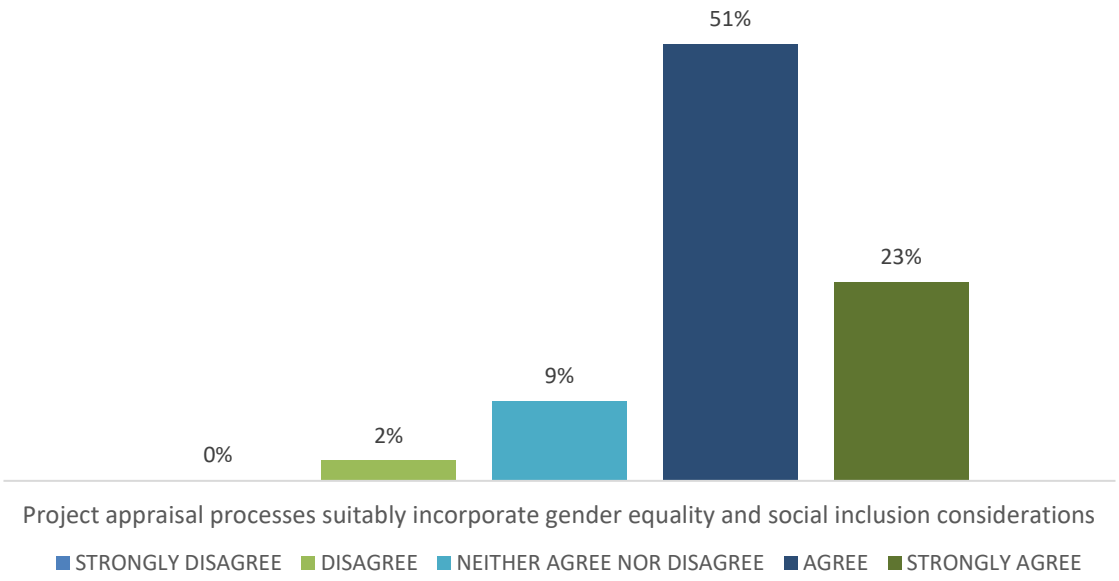
[35] Sources: Gender Marker analysis, FCDO internal reviews (2019, 2020) of UKCIF Enhanced Social and Gender Development Approach, document reviews.

Project	GESI in analysis	GESI in design/ appraisal	GESI in implementation arrangements design	GESI in M&E arrangement design	Gender marker score
Dominica Loubiere/ Bagatelle Road	Yes – partial	Yes – partial	Yes – partial	Yes – partial	2.75
Dominica Water Sector Strategic Plan	Yes	Yes	Yes	Yes	3
Grenada Western Road Corridor Upgrade	Yes – partial	Yes – partial	Yes – partial	Yes – partial	3
Grenada Water Supply Expansion and Sewerage Improvement	Yes – partial	Yes – partial	Yes – partial	Yes – partial	3
Guyana Linden to Mabura Hill Road Upgrade	Yes	Yes	Yes	Yes	4
Jamaica EVAD	Yes – partial	Yes – partial	Yes – partial	Yes – partial	3.25
Jamaica SPAD	Yes	Yes	Yes	Yes	4
Monserrat Port Development	Yes – partial	Yes – partial	Yes – partial	Yes – partial	3
St Lucia MHWCR	Yes	Yes – partial	Yes	Yes – partial	3
St Vincent and the Grenadines Kingstown Port Development	Yes	Yes	Yes	Yes	4

Figure 15, below, shows results of the IA survey that over 70% of the respondents agreed or strongly agreed that the appraisal processes of the CDB suitably incorporate GESI considerations. However, the quality and timeliness of ESIAs continue to be a factor that affects the potential to influence design of different components of the projects. Issues were identified in the preparation of the ESIA for the Montserrat Port Development Project and the Linden to Mabura Hill Road Upgrade in Guyana, both relating to the capacity of the respective consultant.[36] Based on KIIs, the CDB Social/Gender Specialists also tend to receive the project appraisal documents at a later stage, once the process of identification of risks, impact, outcomes and benefits have already been developed and concluded. There are even greater concerns about the extent that these GESI aspects will be incorporated through implementation and project monitoring processes, and this will be a key aspect we will assess during the endline.

[36] UKCIF Annual Review 2021.

Figure 15: IA survey responses to question on incorporation of GESI into appraisals



The Environmental and Social Management Plans (ESMPs) are designed to accompany the project implementation process. Based on annual reviews, challenges were increasingly faced in maintaining alignment with the ESMPs, and by 2021 this applied across all projects except the PGH and Guyana Linden to Mabura Hill projects, which were only approved in December 2020. These plans are not always comprehensive and are not always fully implemented.[37]

UKCIF has all the tools in place for monitoring and reporting, but some countries are still remiss in submitting timely monthly reports and in providing complete reports on social, gender and environmental issues for the projects. Based on the qualitative responses in the survey, there are also good practices related to improving and monitoring GESI outcomes during the project design and construction. While some concerns were raised about the lack of horizontal learning between projects on GESI issues, a Community of Practice for social and gender specialists and CLOs has been established.

4.8.2.1 GESI in relation to time and cost over-runs

The obligation by projects to engage the CLOs prior to commencing construction resulted in some implementation delays. In one country, concerns were expressed about the grievance management requirement by the contractor, as it may encourage the beneficiaries to raise 'too many' grievances which could delay construction plans and therefore increase delays and economic costs. Based on interviews and qualitative survey responses, there were some concerns that GESI resources would be used for construction, with one of the responses suggesting that *"the social, safety, and environmental components should have their own budget … that budget should not be*

[37] UKCIF Annual Reviews 2018, 2020, 2021.

cannibalised or used for any other shortfalls within the project." This is in line with the annual review findings that ESMPs are not always fully implemented.

4.8.3 Addressing Efficiency data gaps

To answer efficiency questions at endline, the evaluation will look more closely at implementation and whether plans and strategies have been implemented as designed, and what the enablers and barriers are to this happening. In order to accelerate procurement and the implementation of construction, and for the evaluation to understand overall programme and project processes and to plan for the endline, the UKCIF programme should:

- Document timing and stages of processes and provide clarity on decision-making procedures within the UKCIF programme, notably sharing more widely the organogram and the roles and responsibilities between different actors, to those involved in projects.

In order to improve monitoring of inclusiveness, the UKCIF programmes should:

- Ensure monitoring of ESMPs is fed up to investment level to support implementation.

- Implement stronger GESI monitoring, defining this in the job descriptions of social and gender specialists and community liaison officers.

In order to increase representation of different views in the IA survey at endline, the evaluation will:

- Reach out to relevant ministry staff, project consultants and contractors who were less represented in data collection at baseline; and

- Collect further qualitative evidence on document negotiation and decision making around climate and GESI adaptations, through KIIs with project implementers.

5 Baseline: Effectiveness and Impact

Effectiveness questions look at the extent to which an intervention achieves its objectives with impact questions assessing higher-level effects. The following section will look at the data for these across UKCIF projects.

Beginning with a summary, this section is then organised by sectors, presenting data per sector on effectiveness and impact. This is to reduce repetition across the report as longer term outcomes of the programme also serve as early indications of impacts. Some of the macro-impact data, e.g. employment rates, are at the country level and in these cases some data will be repeated across sectors.

There are two effectiveness evaluation questions, these are:

- **Evaluation question 4:** To what extent did the programme result in improved access, time and cost savings, livelihoods, increased resilience, and enhanced safety for primary users?

- **Evaluation question 5:** "Were there planned and unintended (negative and positive) environmental and social consequences of the projects, and if so, how were they managed?"

Evaluation question 5 will only be answered at endline. In addition to the evaluation questions, there are three **effectiveness thematic sub-questions**. Whilst the data presented under the evaluation questions tackles some indicators related to the thematic areas, these sub-questions will be addressed additionally at endline as they relate to the quality of implementation and resulting outcomes. Early responses based on the baseline position are explored in more detail within the thematic annexes

Socio-economic impact of road access

4a. Across the road's projects, which strategies were most effective in supporting/contributing to employment creation, livelihood opportunities and economic activity for primary users during and after construction?

Climate resilience

4b. How did UKCIF road projects incorporate resilience approaches or measures that (are likely to) result in or contribute to improved resilience against, and/or faster recovery from climate-related events?

GESI

4c. To what extent were identified GESI needs adequately financed and provided with effective institutional support for implementation?

As previously stated, in addition to the effectiveness questions, this section will also include data on impacts to address the **one impact evaluation question**:

- **Evaluation question 9:** What are the early indications that the UKCIF Programme has contributed, or is likely to contribute, to increased and equitable productivity, employment, market access and economic activity that benefits all relevant stakeholders within its geographical scope/project areas?

As with the effectiveness question, there are three thematic impact sub-questions. Similarly, these sub-questions will be addressed at endline as they explore outcomes that i) are directly represented in the evaluation question data (socio-economic impact of roads addressed under question 7) or ii) relate to impacts of implementation within institutions (GESI and climate resilience). As with the effectiveness questions, early responses based on the baseline position are explored in more detail within the thematic annexes

Socio-economic impact of roads

9a. What are the early indications that improvements in critical road infrastructure have resulted in, or are likely to result in, improved access to employment or markets in its geographical scope/project areas?

Climate resilience

9b. Is there evidence of wider economic or other co-benefits of increased resilience mainstreaming in infrastructure planning and investment in BMCs?

GESI

9c. How did UKCIF help to influence or improve institutional capacity for the integration of GESI in infrastructure planning, construction and use, such as in the roads sector?

5.1 Baseline status

The infrastructure investments across the supported sectors are designed to result in substantial benefits to users, including more vulnerable groups, notably in the UKCIF projects that have specific livelihoods components. Planned benefits include improved access, whether to roads or utilities, as well as time and cost savings, along with improved safety. Over time, improved infrastructure is expected to contribute to greater productivity and increased employment.

We have collated and collected baseline data across the investments of key indicators related to these changes that will enable us to answer the evaluation questions at endline. Only the agriculture and port investments are expected to have an impact on market access, with the latter also influencing international trade. While we expect some contribution from the UKCIF infrastructure investments to national economic growth and poverty alleviation, these are longer-term impacts that are not likely to be directly attributable to the programme. The evaluation nevertheless collates secondary growth and employment data to contextualise the interventions, and to understand broader economic trends and constraints.

the interventions and to understand broader economic trends and constraints.

Relevant baseline data is provided, sector-by-sector across the portfolio, with a greater depth of data on the selected case studies in order to be able to answer the evaluation questions at endline.

Climate resilience data is available on technical adaptations made to infrastructure, road and port access, access to climate resilient agricultural inputs, and impact of severe weather on farming investments. Disaggregated data is available for the individual surveys conducted for the road case studies. Increased disaggregation of programme monitoring data would improve the endline assessment.

5.2 Evaluation questions

This section will present the baseline data against relevance evaluation questions, presenting the data sector by sector.

Each sector will address the following effectiveness and impact questions in turn::

- **Evaluation question 4:** For each sector, the data will be presented by the different components of this evaluation question (where data is relevant and available). These components are:
    - Access and use
    - Time savings
    - Quality
    - Safety
    - Livelihoods: Income and employment

  Each sector also contains separate sections on GESI and climate resilience which digs more into results for different populations and specific climate resilience data.

- **Evaluation question 9:** Early indications of impacts are linked to the income and employment outcomes that form part of the effectiveness evaluation question. In addition, impact metrics will be presented on macro level indicators related to change at the national level. Whilst it is not anticipated that within the timeline of this evaluation that the infrastructure will have realised impact at this level, this data still provides useful data in which to understand the context of the projects.

As previously mentioned, this report is presenting a selection of **key data points** that respond to the evaluation questions. Additional data is available in annex L.

EQ4: To what extent did the programme result in improved access, time and cost savings, livelihoods, increased resilience, and enhanced safety for primary users?

EQ 9: What are the early indications that the UKCIF Programme has contributed, or is likely to contribute, to increased and equitable productivity, employment, market access and economic activity that benefits all relevant stakeholders within its geographical scope/project areas?

5.2.1 Roads baseline data

Increased use: road traffic levels

The most standard way to assess traffic volume is through annual average daily traffic (AADT) assessments, which is in line with international best practice.

Table 16 presents UKCIF road investments traffic baseline values, as well as the targets in each project. Values have been obtained from the available Project Appraisal Reports.[38] Key points to note related to the roads selected as case studies:

The Belize Coastal Highway project currently has the lowest baseline value for traffic with an AADT of 63. The economic appraisal estimated an AADT of 2,000 –an increase of approximately 3,175%. As well as new traffic, the increase is based on diverted traffic from the George Price Highway and Hummingbird Highway.

- St Lucia Millennium highway has high levels of daily traffic, here the road is a critical connection and the upgrade will provide a safer and better-quality road for users.

- Based on the Appraisal Report, we do not have baseline AADT values for the Guyana Linden to Mabura Hill Road Upgrade Project, however, the economic feasibility estimates that AADT is expected to rise to 260 by 2024.

Table 16: Road sector traffic[39]

Project	Mean annualised daily traffic (AADT)	
	Target/estimate	Baseline
Antigua Road Infrastructure Rehabilitation	n/a	47,745
Belize Coastal Highway	2,000 (2.3% by 2021)	63
Belize PGH	n/a	n/a
Dominica Loubiere/ Bagatelle Road	n/a	n/a
Grenada western corridor	n/a	n/a
Guyana Linden to Mabura Hill	260 (by 2024) 1,259 (by 2031)	n/a
St Lucia Millennium Highway	n/a	4,092

Increased use: primary users

Road use was further explored in the three selected road sector case studies. The average road use for the three case study roads is presented in Table 17:[40]

[38] Reports are not yet available for the Dominica Loubiere/Bagatelle Road and Grenada Western Road projects.
[39] Data obtained from project appraisal/approval reports. AADT values are based on weighted average values by length of separate section.
[40] One should note that the journey times and distances are 'door to door', and not exclusively the highway section of the trip.

- The average number of trips is similar for Belize (1.3 trips per person per week) and Guyana (1.5 trips per person per week)..
- Trip rates are much higher in St Lucia (4.2 trips per person per week), where the rehabilitation was on one of the main arteries in the national road network and where personal income levels are higher.[41]
- Similar patterns in road use data also apply to private companies. Talking with firms also raised the prospect of additional benefits, beyond time and cost savings. One firm in Belize highlighted that car rental companies do not currently allow renters to drive on the Coastal Highway, which is a huge barrier both for themselves – and others living along the road – and a barrier for tourists arriving in Belize and renting cars.

Table 17: Average number of trips[42]

Indicator	Belize		Guyana		St Lucia	
	mean	Mean	[n]	[n]	mean	[n]
Mean number of trips using highway per person per week	1.3	1.5	320	308	4.2	620
Mean number of trips using the highway per firm per week	2.9[43]	4.5			17.8	

Increased use: vehicle ownership

Vehicle ownership is a resulting impact of access to roads and often of improved conditions of the road, as well as being indicative of other impacts including additional income.

Table 18: Proportion of Households with at Least One vehicle Type (owned or leased)[44]

Households with any vehicle (%)	Belize	Guyana	St. Lucia
Any kind of vehicle	46.1%	39.4%	67.3%
Motorised (4 or more wheels)	38.7%	32.6%	66.6%
Motorised (motorcycles)	11.8%	18.6%	4.8%
Non-Motorised (bicycles and carts)	19.1%	6.1%	9.8%

[41] It is important to emphasise that the trip rates reported above are (i) the average number of trips across the entire community, (ii) one-way trips (not return trips, i.e. journeys), and (iii) includes only trips using the highway infrastructure (not the overall number of trips, i.e. mobility of the community).
[42] Data from individual and firm level CAPI and CATI surveys.
[43] Average journeys per week for Belize was calculated by asking for average monthly usage and dividing by four.
[44] Individual CAPI and CATI surveys.

Improved access: markets and services

The patterns in the purpose for travel are similar between the different roads. Table 19 below shows the purpose of each trip. Using the project road for the purposes of education is relatively low (5% or less in all case studies), mainly due to the sampling methodology where only those over 18 years of age were surveyed.

At endline, the purpose of the trips may be disaggregated to understand a range of changes, for example:

- Change in trip time by trip purpose;
- Change in overall use patterns (e.g., does improved access to education/health services cause community members to use the road more); and
- Triangulate qualitative evidence to assess change in availability of services within closer proximity (e.g., are community members travelling less for work/shopping as these are now available in closer range).

Further disaggregated data on travel purpose is available in annex H.

Table 19: Purpose of trips[45]

	Belize	Guyana	St Lucia
	%	%	%
Work	51.3	54.5	58.8
Social	12.8	18.1	14.1
Shopping	26.0	15.2	13.4
Education	2.4	5.0	1.1
Health	4.1	3.4	6.6
Other	3.4	3.8	6.1

Improved access: Public transport

A higher proportion of women use public transport compared to men in all case studies. As such, a reduction in cost and increase in availability and quality of public transport services will particularly benefit women. Perceptions of service are presented in this section, whilst public transport costs are presented in the following section on time and cost savings.

Table 20: No of trips by mode (disaggregated by gender and disability)

No of trips (by mode)	Belize %	Guyana %	St Lucia %
Private motorised transport	**52.4**	**43**	**47.2**
(female)	36.6	37.4	25
(male)	66.9	54.2	48
Private non-motorised transport	**24.2**	**18.3**	**18.9**

[45] Individual CAPI and CATI surveys.

(female)	39	20.6	9.1
(male)	15.4	20.8	24.6
Public transport	**18.9**	**27.5**	**23.3**
(female)	19.7	30.5	40.9
(male)	11.8	11.7	18.2
Other	**4.4**	**11.3**	**10.7**
(female)	4.7	11.5	25
(male)	5.9	13.3	9.2

. Respondents were asked to provide a rating on a five-point scale. For example, expectations for public transport service levels may be higher in the case of St Lucia (with more public transport provision and higher levels of income) compared with Belize and Guyana.

Table 21: Public transport ratings[46]

Public transport ratings	Belize	Guyana	St Lucia
Safety	3.68	2.98	3.10
Accessibility	3.52	2.80	3.37
Cleanliness	3.73	2.95	3.39
Comfort	3.61	2.55	3.11
Security	3.64	3.04	3.05

Road quality and safety

We looked at two key measures under road quality and safety which are presented in Table 22 below.

- The International Road Assessment Programme (IRAP): this provides a star rating for the safety of roads based on an objective measure of the likelihood and severity of accidents occurring.[47] 1-star roads are considered the least safe and 5-star roads are considered the safest. The Independent Fund for Global Health has established the Three Star Coalition to build a group of organisations to advocate for the design and construction of safer roads, specifically for roads to be built to a minimum 3-star standard for all road users. Many countries are establishing minimum requirements for 3-, 4- or 5-star standards for new and upgraded roads.[48]

- The International Roughness Index (IRI) is the international standard for quantifying road smoothness. Improving the smoothness of roads leads to

[46] Individual CAPI and CATI surveys. 1=Poor, 2=Less than satisfactory, 3=Satisfactory, 4=Good, 5=Excellent
[47] https://irap.org/

improved safety and reduced vehicle costs.[49] The table below shows how the ride quality at different speeds changes based on the IRI rating.

Table 22: Speed-related IRI thresholds at different speeds[50]

Ride quality level	IRI thresholds at different speeds					
Speed (km/h)	20	40	60	80	100	120
Very good	<5.72	<2.86	<1.9	<1.43	<1.14	<0.95
Good	5.72-8.99	2.86-4.49	1.9-2.99	1.43-2.24	1.14-1.79	0.95-1.49
Fair	9-11.39	4.5-5.69	3-3.79	2.25-2.84	1.8-2.27	1.4-1.89
Mediocre	11.4-16.16	5.7-8.08	3.8-5.4	2.85-4.05	2.28-3.24	1.9-2.7
Poor	>16.16	>8.08	>5.4	>4.05	>3.24	>2.7

Table 23: Road safety and quality data points from project monitoring frameworks

Project	IRAP	Number of fatalities per year		IRI
		Target	Baseline	Baseline
Antigua Road Infrastructure Rehabilitation	Not collected	Not collected	Not collected	6
Belize Coastal Highway Upgrading	Not collected	12	15	Not collected
Belize Phillip S.W. Goldson Highway Upgrading Project	1	Not collected	Not collected	Not collected
Dominica Loubiere/Bagatelle Road	Not available	Not available	Not available	Not available
Grenada Western Road Corridor Upgrade Project	Not available	Not available	Not available	Not available
Guyana Linden to Mabura Hill Road Upgrade	1	Not collected	Not collected	9
St Lucia Millennium Highway and West Coast Road Upgrading	Not collected	Not collected	Not collected	6

[49] Islam, Shahidul & Buttlar, William. (2012). Effect of Pavement Roughness on User Costs. Transportation Research Record: Journal of the Transportation Research Board.
[50] Bridgelall, R.; Huang, Y.; Zhang, Z.; Deng, F. Precision enhancement of pavement roughness localization with connected vehicles. Meas. Sci. Technol. 2016

Time savings

The average time spent on the road for surveyed road-side communities and firms is presented below.

Table 24: Average trip time, distance and speed[51]

	Indicator	Guyana		Belize		St Lucia	
		Mean	[n]	mean	[n]	mean	[n]
Individual	Average time per trip (mins)	163	463	36	410	40	2,444
	Average trip distance (km)	65	406	29	412	26	1,154
	Average km/h	**23.9**		**48.3**		**39.4**	
Firm	Average time per trip (mins)	267[52]		44		33.5	
	Average trip distance (km)	64		24		25	
	Average km/h	**14.4**		**32.8**		**44.6**	

Box 1: case study roads safety and roughness

The Guyana Linden to Mabura hill road has an IRAP rating of 1 (lowest) and an IRI of 9 (unpaved). The star rating is given based on the potential risks to vehicle occupants, motorcyclists, bicyclers, and pedestrians. Whilst the St Lucia Millennium Highway and the Belize Coastal Highway do not have IRAP ratings, across all three roads selected as case studies there is a lack of pedestrianised access that makes them unsafe for use.

Figure 16 Image of Belize Coastal Highway, taken during data collection activities, showing uneven road surface and no pedestrian sidewalks

[51] Firm-level surveys.
[52] Average trip time for Guyana and St Lucia calculated from data on average time in good conditions and average time in bad conditions.

Cost savings

Costs are commonly estimated through a standardised methodology for assessing vehicle operating costs (VOC).

The project log frames present a target for VOC cost savings but the baseline VOC is not available from project documents.

Table 25: Vehicle operating cost savings

Project	Mean vehicle operating cost savings USD millions/year	
	Target/estimate	Baseline
Antigua Road Infrastructure Rehabilitation	8.5	Nil
Belize Coastal Highway	7.3	Nil
Belize PGH	12.8	Nil
Dominica Loubiere/ Bagatelle Road	n/a	Nil
Grenada western corridor	n/a	Nil
Guyana Linden to Mabura Hill	0.4 million (by 2025)	Nil
St Lucia Millennium Highway	25% reduction, 2.8 million by 2023	Nil

Improved livelihoods/early indicators of impact: Employment and income of individuals and firms

Both the effectiveness evaluation question and the impact evaluation question are informed by data related to livelihoods. The road projects are expected to generate productivity and additional revenues for firms, which will result in employment and income benefits, as well as direct economic benefits for firms and communities surrounding the rehabilitated roads, such as the creation of additional jobs.

The rate of employment of the individuals living in the communities proximate to the roads was 75.3% in Guyana, 51.6% in Belize, and 76.9% in St Lucia.[53] The highest unemployment is in Belize at 26%. The average monthly income is highest in St. Lucia. The communities in Belize and Guyana reported lower income, partly due to the remote nature of the communities surveyed which reflects a scarcity in higher wage-earning employment opportunities.

Table 26: Individual employment status in roads case studies[54]

Employment status (%)[55]	Belize	Guyana	St Lucia
Employed	51.6	75.3	76.9
Unemployed	26.0	6.9	14.0

[53] Employment rate for St Lucia is higher than reported elsewhere, this is likely due to the nature of the survey being conducted over phone and excluding those under the age of 18 (St Lucia Labour Force participation rate starts from age 15). This will not affect comparison at endline where the same parameters will be applied.
[54] Individual CAPI and CATI surveys.
[55] Small number of respondents in education, retired or otherwise not fitting into the employed or unemployed categories.

Table 27: Individual monthly income levels in roads case studies (local currency)[56]

Income level (all sectors)	Belize (BZ$)	Guyana (GY$)	St Lucia (EC$)
Average – overall	1,157	5,856	3,286
Adjusted to USD	*574*	*28*	*1,218*
(Female)	1,155	5,178	2,941
(Male)	1,158	6,190	3,511
(Disabled)	546	65	2,900
(Not disabled)	1,181	6,142	3,290

Table 28 presents details from the firm surveys of turnover and employees, including the total number of employees, and breakdown by disability status, gender, and seasonal workers. The majority of employees in all countries are male, and very few firms employ PLWD (only two firms in Guyana and 11 in St Lucia employed at least one PLWD).

Table 28: Firm surveys: Firm employee statistics[57]

	Mean No. of Employees	Median No. of Employees	Average No. of Seasonal	Average % PLWD	Average % Female
Belize	9	2	9	0	0
Guyana	47	8	5	1	34
Saint Lucia	41	12	3	0	40

Impacts: Increased tourist arrivals

Based on the desk review, tourism benefits are expected, particularly from the Antigua Road Rehabilitation, the St Lucia Millennium Highway, the Belize Coastal Highway, the Linden to Mabura Hill in Guyana. Table 29 summarises tourism arrivals across the UKCIF countries in 2019, prior to the effect of the COVID-19 pandemic.

Table 29: Inbound tourism arrivals (overnight stays) in UKCIF countries[58]

Country	Inbound tourism (overnight) 2019
Antigua and Barbuda	300,000
Belize	500,000
Dominica	90,000
Grenada	187,000
Guyana	320,000
St Lucia	425,000

[56] Individual CAPI and CATI surveys.
[57] Firm-level surveys.
[58] World Tourism Organisation statistics 2019.

Among the road case studies, project documentation shows that by 2024 overall tourism arrivals to Guyana are estimated to increase by over 62,000 annually, due to better connectivity between its capital and main tourist attractions in the interior, supporting the development of ecotourism and adventure tourism.[59] Key informant testimony in Belize claimed that five or six large resorts are planned to open along the Coastal Highway, also presenting employment opportunities for communities. Desk research identified a number of developments, including residential, being undertaken in the area.[60] The St Lucia PIU also highlighted that the improvement of access to viewing points along the Millennium Highway in St Lucia are expected to increase tourist visits, also benefitting local business and employees.

Impacts: Increased trade

Two of the roads projects, the Belize PGH and the Guyana Linden to Mabura Hill project, are expected to improve regional integration and trade. Table 30 summarises the baseline trade values, based on data from COMTRADE for Belize and Guyana.

Table 30: Imports, exports and re-exports[61]

Year	Country	Import (trade value USD)	Export (trade value USD)	Re-export (trade value USD)
2019	Belize	985,904,343	244,908,836	38,917,523
2019	Guyana	4,025,139,265	1,565,723,059	68,147,203

Climate resilience

Road projects across the UKCIF portfolio are vulnerable to severe weather and climate change. The table below outlines the weather-related interruptions to road use and targeted results from interventions, where available. In some cases the project log frame presents a target but without the baseline information.

Table 31: Road service interruptions[62]

Sector	Project	Baseline interruption	Target
Roads	Antigua road rehabilitation	Not available	Not available
Roads	Belize Coastal Highway	9 days per year impassable	2 days per year impassable
Roads	Belize PGH	Not available	80% reduction compared to baseline
Roads	Dominica Road	Not available	Not available
Roads	Grenada western corridor	Not available	Not available
Roads	Guyana Linden to Mabura Hill	40 days per year impassable	0 days per year impassable
Roads	St Lucia Millennium Highway	Not available	10 culverts (1/100-year flood resilient)

[59] Guyana Capital Approval report.
[60] Online research revealed property lots for hotel development for sale and residential developments for example https://coconutpointbelize.com/
[61] COMTRADE Data.
[62] UKCIF project monitoring data, though service interruption data is not always collected in a geographically disaggregated manner (e.g. roads projects).

The data from the responsible road authorities was triangulated with the three road case studies through surveys of businesses operating in the surrounding communities. Table 32 presents the findings regarding road service interruptions.

Table 32: Number of days the highway is considered 'unusable'[63]

Average no. of days highway considered unusable	Belize	Guyana	St Lucia
Highway unusable	11	45	2.1
(Due to weather-related issues)[64]	6	17	0.8

GESI

At baseline, the empowerment level projects have more provisions in place for the achievement of social impacts for more vulnerable or disadvantaged groups. Three projects, the Belize Coastal Highway Upgrading, Guyana Linden to Mabura Hill Road Upgrade, and the SVG port project also have integrated livelihoods and skills generation components.

GESI Access and use

Trip rates and times disaggregated by gender and disability, and income ratios, are presented in the charts below. At baseline, women and PLWD travelled less than men in all three road case study countries. Disaggregated data, including on ethnic minorities, is available across all survey questions and will be used at endline to provide differentiated impacts for different groups. Some examples are presented below and there is further disaggregated data available in Annex H.

[63] CATI and CAPI surveys.
[64] Other reasons cited for impassable conditions include traffic accidents, maintenance closures, In some cases in the survey data the road closure may not be attributed to weather-related events if the source of disruption is unknown to the firm.

Figure 17: Average number of trips using current road per week disaggregated by gender and disability[65]

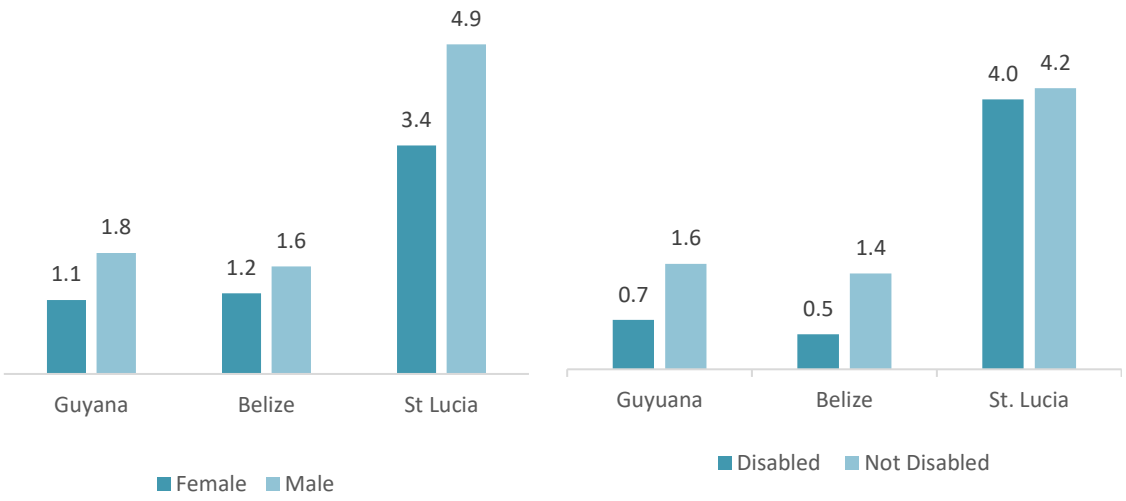
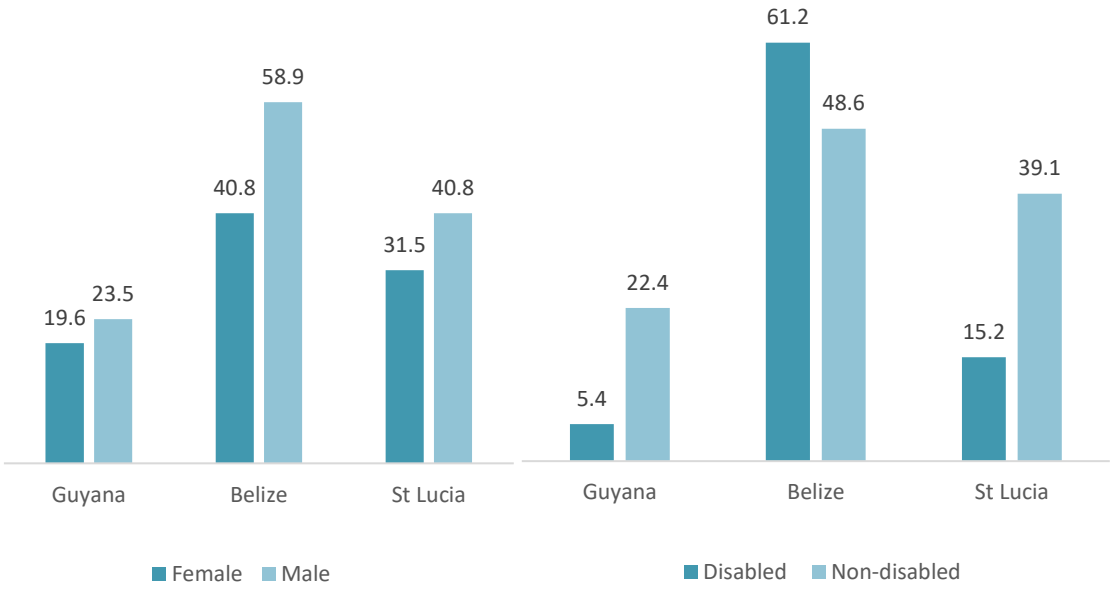


Figure 18: Average time of trips disaggregated by gender and disability in minutes



[65] CATI and CAPI surveys

GESI Livelihoods

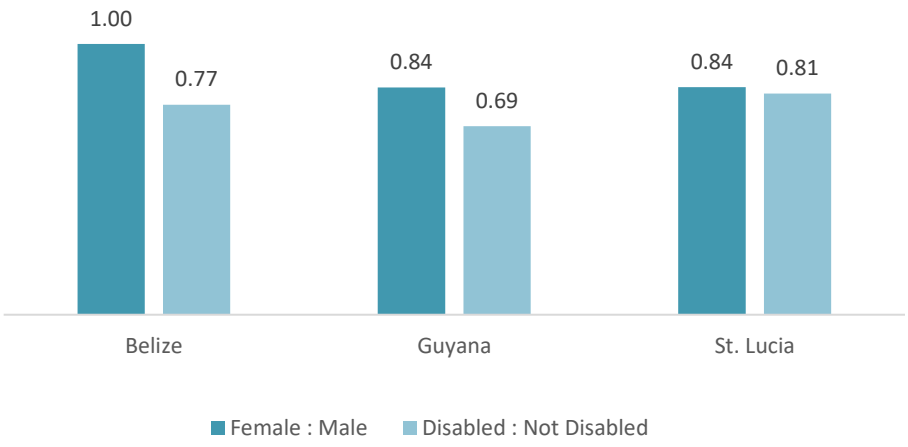
Women and those living with a disability are generally more likely to be unemployed, except in Guyana where the percentage of unemployed, living with disability is lower than those without disability.

Table 33: Individual employment status in roads case studies[66]

Employment status (%)	Belize	Guyana	St Lucia
Employed female	37.5	56.7	71.9
Employed male	75.0	90.4	81.2
Employed disabled	56.2	42.3	57.1
Employed not disabled	31.4	78.2	77.4
Unemployed female	34.4	11.2	19.2
Unemployed male	12.1	3.4	9.6
Unemployed disabled	36.0	3.8	44.4
Unemployed not disabled	25.1	7.1	13.6

Where employed, there is income parity between women and men in the Belize roadside communities. In the Guyana roadside communities and in Saint Lucia, women earn 84% of men's income and those living with disability 69%.

Figure 19: Ratio of incomes disaggregated by gender and disability status[67]



6.2.9 Roads: data quality and remaining gaps

To fill data gaps in monitoring and reporting, as well as providing comprehensive data to the end term evaluation, we recommend that:

- The CDB team should work with PIUs to align indicators in roads log-frames, a comparable data set that is aligned with international road data standards. The

[66] CATI and CAPI surveys.
[67] CATI and CAPI surveys.

UKCIF programme should clearly establish what their expectations are for road sector indicators (e.g., AADT, VOC, IRI and IRAP data, where relevant) and ensure these are represented in project log-frames. PIUs can also encourage relevant ministries and agencies to introduce these where they are not yet in place.

- A review should be conducted on the extent of planned and actual data disaggregation, notably on geography, sex, age, but also PLWDs and indigenous groups, engaging with relevant agencies to encourage data disaggregation and its reporting.

- Apply standard definitions (e.g., definition of PLWDs, definition of youth) and relevant principles, (notably "do no harm") in data collection efforts.

To ensure the accurate analysis of the individual surveys of the road case studies, notably with a view to disaggregated data (e.g., by age, PLWD), the evaluation will:

- At endline, pursue additional, qualitative data on PLWD and on travelling for the purpose of education, as well as other interests of children and youth.

5.2.2 Agriculture baseline data

There are two agricultural, irrigation and farm roads infrastructure projects supported by UKCIF that are both in Jamaica: the Essex Valley Agriculture Development Project and the SPAD Project. In agriculture sector projects, we are particularly interested in establishing the baseline for assessing farm access, irrigation, productivity (e.g., plot size, access to farming equipment) and employment, as well as any data on product access to both domestic and international markets. In addition, due to the vulnerability of the sector to extreme weather and climate change, we also want to establish the baseline on their influence on both crop choice and plot size.

Table 34 shows the outputs planned for the projects. This section looks primarily at indicators related to access to improved infrastructure and farming tools, as well as the production and economic outcomes of these.

Table 34: Farmland upgrades planned[68]

Sector	Project	Site	Total area planned to be irrigated (ha)	No. of wells planned to be rehabilitated
Agriculture	EVAD		700	5–6
Agriculture	SPAD	Amity Hall	449.9	0
		Parnassus	244	0

[68] UKCIF project data.

Access: land and water

In SPAD, existing plot sizes generally tend to be small, with some exceptions. They range from two hectares (36 in Amity Hall, 53 in Parnassus) and four hectares (15 in Amity Hall, 21 in Parnassus), up to 16 hectares (two in Amity Hall, one in Parnassus), with the large majority in the two–four hectares size category. In Amity Hall, the park is divided into two-hectare plots of land which are leased by farmers. Consultations with farmers revealed that approximately 59% of the farmers in Parnassus have an average farm size of half a hectare or less, and 41% have between 0.5 and 3.2 hectares. However, these farmers were not officially contracted to farm on the land, and they do not pay to lease them.[69]

The total planned SPAD coverage is 795 hectares. Currently, approximately 60 hectares in Amity Hall, St Catherine are partially developed for irrigated agriculture, with associated National Irrigation Commission (NIC) pump facilities along the Black River to supply nearby farmers who lease two to four hectare blocks from the Agro-Investment Corporation (AIC).

Table 35 below presents current sources of water for farmers in in the SPAD and Essex Valley projects. For the Essex Valley project, based on farmer consultations and survey results, almost all (96%) would expand farming with reliable access to water (piped vs rainwater which currently 55% of farmers rely on), and more affordable access to water (avoiding high costs associated with tank and purchased water which 36% rely on). Most would add one (24%), two (22%) or three acres (17%).[70]

Table 35: Water access and use[71]

Farm access to water and irrigation	# of farms with different sources and availability of water (piped, well, own groundwater extraction)
Amity Hall	100% river water
Parnassus	100% well water
Essex Valley	55% rainwater, 18% tank water, 18% purchased water

Access: infrastructure and farming tools

Tables 36 and 37 below show the results of a survey of SPAD farmers having access to farming infrastructure and tools. The existing assets of farmers in Amity Hall and Parnassus consisted of a small inventory of farming inputs, irrigation hoses and storage solutions, light tools and transportation.

Table 36: Access to infrastructure and tools[72]

Project	Site	Number of farm sheds	Number of motor vehicle	Harvesting equipment	Production handling building

[69] SPAD ESIA.
[70] Essex Valley feasibility study,
[71] The PMU has confirmed that water use data will be collected once the irrigation systems have been installed.
[72] SPAD surveys completed for ESIA.

SPAD	Amity Hall	3	3	0	0 (1 AIC)
	Parnassus	0	3	0 (1 RADA tractor)	0

Table 37: Access to different irrigation tools[73]

Project	Site	Water pumps	Pump house	Drip hose	Sprinkler
SPAD	Amity Hall	0 (1 AIC)	0 (1 AIC)	22	1
	Parnassus	0	0	6	0

A renewable energy source is foreseen for the irrigation system in Essex Valley (3.1 MW solar system with an 850-kWh battery storage), but not for SPAD. The renewable energy system will lower the NIC operating expenses for the electricity consumed, with calculated savings also in the form of lower electricity tariffs and lower trucked water costs for farmers. The system will also offset consumption from the national grid.

Access and quality: extension services

The Global Good Agricultural Practices (GAP) standard promotes good agricultural practices at the farm level, particularly with a view to accessing more demanding markets abroad. The implementation of the standard and the utilisation of new irrigation technology requires training, which is also critical for packaging and processing, as well as market access. Table 38 presents the number of farmer survey respondents who have indicated that they have accessed services, whether through extension services or participation in a cooperative. This training is traditionally provided by government extension services or alternatively through dedicated farmer cooperatives. However, the government has limited capacity to provide extension services. At the beginning of 2020, one extension officer served approximately 2,400 farmers across Jamaica (Ministry of Industry, Commerce, Agriculture and Fisheries, Ministerial Statement Daily Observer, 8 July 2020).

Table 38: Access to additional services[74]

Project	Site	Number with access to extension services (government, private, project provided)	Number participating in a cooperative	Number participating in Global GAP training
SPAD	Amity Hall	Not available	3	10
	Parnassus	5	3	Not applicable

Table 38 also summarises the number of individuals who have already participated in Global GAP training. So far, in Amity Hall in 2020, Global GAP training was given to ten farmers and no further training was scheduled for 2020. The training covered chemicals, fertilisers and Global GAP certification.

[73] SPAD surveys completed for ESIA.
production, the

Livelihoods/early indicators of Impact: productivity

The two sites of the SPAD project produce a variety of vegetable crops ranging from tubers (such as sweet potato) to herbs, with pumpkin being the favoured crop in Parnassus as a quick cash crop. In Amity Hall, due to water scarcity, the crop cycle has been reduced from multiple cycles to a single cycle per year (ESIA). Additionally, crop farming systems are characterised by multiple cropping and mixed intercropping. Both are practised by smallholder farmers in the Amity Hall agro park, as well as in Essex Valley (ESIA). There is no recorded livestock in either Amity Hall or Parnassus.

The production volume and value data trends from 2018 and 2019 demonstrate fluctuating farmer production in both Amity Hall and Parnassus.[75] Table 39 presents the baseline situation for the SPAD sites.

Table 39: Production volumes[76]

Project	Site	Total vol. of selected crops (kg)	Total vol. of production (kg)	Total value of production (JMD) ($)	% year-on-year change in production (2018)	% year-on-year change in production (2019)	Average farm-gate price ($)	Expected net profit margin/ha (est.) ($)
SPAD	Amity Hall	677,298	1.06 million	164.6 million	5.96	-7.53	138.50 (over 5-year period)	226,675
	Parnassus	780,356	1.09 million	141.0 million	38.48	-1.74	104.30 (over 3-year period)	

Livelihoods/ early indicators of Impact: farmer employees and income

For the agriculture case study SPAD, there were a total of 62 identified and 20 surveyed farmers at the two sites, Amity Hall and Parnassus, at baseline. This was in line with the estimates of the SPAD ESIA. Tables 40 and 41 below show results from the survey, that these farmers employed a total of 22 full-time employees, and 50 temporary employees.

Table 40: Employees of current farmers in Jamaica SPAD[77]

Project	Site	Direct jobs (baseline)	Temporary jobs baseline/ estimated
SPAD	Amity Hall	8	17
	Parnassus	14	33

[75] Despite recent reduction in production, the trend for these sites overall is towards growth.

[77] UKCIF project data and farmer survey.

Table 41: Percentage of farmers surveyed self-reporting annual income from farming within income bands, in Jamaican Dollar (JMD)[78]

Location	Total	Less than 50,000	50,000-100,000	100,000-250,000	250,000-500,000	500,000-1,000,000	More than 1,000,000
Parnassus	15	1	1	1	3	8	1
Amity Hall	5	2	0	0	0	2	1

Climate resilience

Due to the nature of the location and soil type of the project sites, the agricultural projects (both EVAD and SPAD) are particularly vulnerable to climate change, especially severe weather, including both flooding and drought. In the SPAD case study, while farmers have a fair degree of access to climate-resilient inputs, Amity Hall is particularly prone to flooding and Parnassus to drought. The table below indicates the number of survey respondents for whom water availability has affected their crop choices and/or scale of farming. Farmers are also already experiencing economic losses due to severe weather. The table also indicates the number of farmer survey respondents whom have experienced economic losses from severe weather or climate change. Based on qualitative responses obtained through the survey in Amity Hall, there is greater concern related to the effect of flooding on crops, rather than the effect of drought on crop choices.

Table 42: Water availability impacting farming practices[79]

Project	Site	Effect of water availability on crop choices (number of farmers)	Effect of water availability on scale of farming
SPAD	Amity Hall	3/5	Not applicable
	Parnassus	15/15	14/15
EVAD	Essex Valley	3/5	Not collected

Table 43: SPAD farmers experience of economic loss and protection from severe weather and climate

Site	Access to environmentally safe and climate - resilient inputs	Economic losses due to lack of water	Economic losses due to floods	Economic losses due to storms	Economic losses due to drought	Economic losses due to salination	Access to crop insurance
Amity Hall	3/5	3/5	5/5	4/5	2/5	1/5	0
Parnassus	13/15	14/15	11/15	10/15	15/15	0	0

GESI

The survey carried out on farmers in Jamaica SPAD at endline will be disaggregated to provide differentiated impacts for different groups. At baseline, there are few female

[79] UKCIF project data and farmer survey.

farmers currently working on the selected plots and no PLWD. In SPAD, most female farmers work smallholdings (1.6 hectares compared to 3.2 hectares for male farmers) for cash crop or subsistence production, and are principally engaged in food production for domestic consumption.[80]

The age ranges of farmers surveyed in Parnassus were 25–68 years, and 36–65 in Amity Hall, meaning that none were below the youth threshold age of 25 years.[81] The gender breakdown between farmers in Amity Hall and Parnassus was similar, characterised by a predominantly male environment.

Table 44: Farm ownership baseline[82]

Project	Site	Farm ownership/ investor	Farm ownership/ investor (# women)	Farm ownership/ investor (% youth)	Farm ownership/ investor (PWD)
SPAD	Amity Hall	22	5	0%	Not available
	Parnassus	36	8	0%	Not available

Below is the currently available gender disaggregated data on farm employment from Jamaica SPAD. There were more women employed permanently in the Parnassus area (29%) than in Amity Hall (25%), though this proportion was reversed for temporary jobs, where 41% of these jobs were held by women in Amity Hall and only 18% in Parnassus.

Table 45: Gender disaggregated farm employment in Jamaica SPAD[83]

Project	Site	Farm jobs: FTE	% Female	Temporary jobs	% Female
SPAD	Amity Hall	8	25%	17	41%
	Parnassus	14	29%	33	18%

5.2.2.1 Agriculture data quality and remaining gaps

To address gaps in the disaggregation of administrative data, the PIUs are encouraged to:

- Increase awareness of its value and encourage responsible agricultural agencies to collect disaggregated data, also on PLWD, using a standard international classification (such as the one applied by the evaluation).

To further benefit from the administrative data already gathered by the responsible agricultural agencies, the projects could still:

[81] Jamaica youth policy cites 'youth' as 15-24
[82] SPAD surveys completed for ESIA.
[83] Farmer surveys.

- Build these additional indicators into the respective results frameworks (e.g., disaggregated farm leases, production types, volumes and values).

The evaluation will:

- Sample the total farmer population at endline. Nevertheless, the number of women, youth and PLWD may remain so small that drawing related conclusions will still be challenging.

5.2.3 Baseline data: Energy

The Barbuda energy resilience project is the only one in the UKCIF portfolio that solely focuses on energy access and post-disaster reconstruction, as well as the mitigation of climate change. The Barbuda energy resilience project plans to reconnect to the grid the remaining clients who lost connection because of Hurricane Irma, and increase the resilience of the system, through the connection of the grid and public buildings to solar PV.

The Jamaica EVAD project also has a component related to the provision of renewable electricity. This is included in the baseline where relevant, but is not the focus of this sector discussion.

This section presents the baseline data in terms of access to electricity and cost per unit of electricity to answer the effectiveness question..

Access: energy capacity installed

Table 46 presents the baseline situation of electricity provision for target areas in Barbuda and Jamaica. Table 47 provides an overview of the number of connections.

Table 46: Energy capacity installed[84]

Project	Supply-lines (baseline)	Supply-lines installed or upgraded (km) (target)	Renewable power capacity (baseline)	Power capacity installed (target)	Number of public facilities with renewable back-up generation (baseline)	Number of public facilities with renewable back-up generation (target)
Barbuda energy	Overhead lines	Eight under ground	0 kW 0 MWh	100kW 219 MWh	0	11
EVAD	Supply-lines	Not applicable	0 MWh	3.1 MWh	Not applicable	Not applicable

Table 47: Utility connections and capacity[85]

Project	Pre-hurricane connections	Connected households (Baseline 2019)

[84] UKCIF project data.
[85] UKCIF project data;.

	(Baseline, prior to Hurricane Irma)	
Barbuda energy	1099	444 (189 of which are temporary)

Cost: cost of delivering energy

The table below outlines costs per unit of electricity.

Table 48: cost of electricity per unit[86]

Project	Cost/standard unit (KWh) (2021)
Barbuda energy	$0.40 per unit (kWh) up to 300 kWh $0.38 per unit (kWh) over 300 kWh

Climate resilience of electricity access

The Barbuda energy project will also install renewable back-up generation of 219 MWh and 11 hybrid solar systems for a total of 100kW to key public buildings in Barbuda. At the same time, there are concerns that most of the restored grid will remain in overhead lines, rather than underground, though more climate resilient poles will be used.

GESI and electricity access

The Antigua Public Utilities Authority (APUA) will connect remaining applicants and those with temporary connections to the grid. The selection criteria will prioritise the most vulnerable households with Board of Guardians social protection status, with single females as heads, and high dependency ratios with PLWD, children, youth and older people. However, there is no sex disaggregated data available in the project data for households headed by women.

5.2.3.1 Energy data quality and remaining gaps

In order to better understand the benefits of grid connection at the household level, considering GESI, the PIU could:

- Encourage APUA to improve the disaggregation of the grid connection data, to capture installed connections by the gender and PLWD dimensions; and
- Encourage APUA to gather cost data of electricity both in terms of cost of delivering the electricity by the agency and the electricity tariffs paid by the customer.

[86] UKCIF project data; APUA data on KWh costs.

5.2.4 Baseline data: Ports

Port investments are the largest single investments in the UKCIF portfolio, absorbing 14% of the entire budget. There are two UKCIF port investment projects: (i) the Kingstown Port Modernisation project in Saint Vincent and the Grenadines, and (ii) the Montserrat Port Development Project. The former is also a selected case study project, in part due to the formal resettlement requirement. The SVG ports consist of the Kingstown Port, the cruise and ferry terminal, and the Campden Park Container Terminal. The project supports the relocation of container services to the Kingstown port from Campden Park, the construction of associated roadworks to provide enhanced access and traffic flow to the new facilities, and preparatory activities for phase two construction of an inter-island ferry terminal and an intra-regional cargo terminal.

The SVG port had far more available data to collate compared to Montserrat, and was selected as a case study for the evaluation. As such, the data below will have more focus on that project.

Access: port capacity, throughput and port calls

At baseline, SVG operates two separate ports in Kingstown and Campden Park, with a limited number of vessel calls, both by cargo ships and passenger liners and low throughput capacity. The overall growth in trade trends is expected to continue, with COVID-19 and volcanic eruption caveats.

The SVG ports have limited capacity, which is expected to triple by 2040, based on the SVG board paper. Over time, the cargo throughput at SVG port increased in tonnes, while the container throughput in TEUs fluctuated. Table 49 provides the most recent data on throughput, Montserrat port operates at a much lower volume.

The Montserrat port operates on lower volumes of traffic (475 total port calls in 2016) but is critical for connecting the island to basic supplies, and there are ambitions to increase tourism arrivals through the investment (Montserrat Board Paper). Currently 21% of cruise and ferry vessels and 10% of cargo vessels are not able to dock due to poor jetty facilities. The project aims to halve this number (Montserrat Port Results Framework).

Table 49: Port productivity[87]

Sector	Project	Capacity (TEUs)	Average annual throughput (tonnes)	Annual throughput (TEUs)
Ports	Montserrat Port	Not available	1,049 tonnes of annual throughput capacity (2016)	Not available
Ports	SVG Port	Kingstown: 200 Campden Park 850	460,745 tonnes (actual total imports and exports 2017)	19,818 TEUs (2018)

Table 50 SVG port performance over time[88]

[87] UKCIF project monitoring data, SVG Port Authority Statistics.
[88] SVG Port Authority Statistics 2017, 2018, 2019.

	2014	2015	2016	2017	2018
Cargo throughput (TEUs)	Not available	Not available	19,941	19,191	19,818
Cargo throughput (tonnes)	397,657	431,771	434,524	453,137	460,745

Table 51: SVG port calls[89]

Vessel type	2018
Container	225
Reefers	47
RoRo	25
Barge	3
Bulk	3
Tanker	124
Tugs	7
Cruise ships	103
Total	**858**

Time savings: turnaround time

Table 52 shows port efficiency data in terms of throughput in TEUs/hr and average turnaround time. Data was not available for the Montserrat port.

The SVG ports have limited capacity, which is expected to triple by 2040, based on the SVG board paper. Over time, the cargo throughput at SVG port increased in tonnes, while the container throughput in TEUs fluctuated. The Montserrat port operates at a much lower volume.

Table 52: Port performance, productivity and accessibility[90]

Sector	Project	Throughput (TEUs/hr)	Average turnaround time
Ports	Montserrat Port	Not available	Not available
Ports	SVG Port	10 TEUs/hr	48 hrs

Quality: port services

While port productivity and port equipment are close to the regional average, the quality of the infrastructure, independence of the port authority, and labour productivity, are a greater concern, based on the desk review and survey. The two ports have limited and ageing equipment. Table 53 outlines the equipment availability in the SVG port.

Table 53: Equipment used in Kingstown and Campden Park ports[91]

Kingstown	Campden Park

[89] SVGPA data 2012, 2017 and 2018.
[90] UKCIF project monitoring data, SVG Port Authority Statistics.
[91] UKCIF project monitoring data.

1 reach stacker	2 reach stackers
1 old top pick as back-up	1,100 tonne mobile harbour crane
7 forklifts	9 forklifts

The SVGPA uses Unitrack[92] in both the Port of Kingstown and the Campden Park Container Port. At both ports, the ASYCUDA system is employed by the customs department. However, the SVGPA and customs IT systems have not been integrated.

Quality: business satisfaction with port

The evaluation carried out a survey of St Vincent and the Grenadines port users, the findings are discussed in the following sections. We have presented these results together but different questions respond to different components of the evaluation questions (e.g. access, use, time and cost etc.). We have done this as, overall, these respond to criteria of quality and value as perceived by users of the port.

Generally, port users are satisfied with the physical attributes of the port, the berthing availability, and depth. However, they are not satisfied with the availability of land for the port, the quality of the yard surface, and its capacity to absorb growth in traffic. There is also dissatisfaction with the frequency of maintenance (see Table 54).

Table 54: Satisfaction with physical port attributes[93]

Physical attributes of the port	Level of satisfaction (5 – Excellent, 1 – Poor)
Accessibility for users, e.g., disabled users	2.5
Availability and location of berths/terminals (e.g., two separate cargo ports/berths)	3.43
Availability of land for the port	1.25
Average turnaround time	2.9
Capacity to absorb traffic growth (congestion)	1.11
Connecting infrastructure, including port access road	2.13
Frequency of maintenance works	1.57
Port access from the sea, physical location or depth of waters	4
Quality of yard surface	1
Sufficient and up-to-date equipment	2.33

There is greater satisfaction with port operations, with the control and monitoring of the quality of port services considered the weakest aspect.

Table 55: Satisfaction with operational aspects of the port[94]

Operational attributes of the port	Level of satisfaction

[92] Unitrack is a port management software designed to support efficient shipping of containers.
[93] Port user survey.
[94] Ibid.

Accessibility of information services (e.g., single window for information)	2
Adequacy and skills of port staff	2.8
Availability of IT infrastructure (connection, bandwidth, hardware)	2.63
Control and monitoring of the quality of port services provided within port area	1.78
Coordination of different departments/services of the port	2.75
Port Authority procedures to deal with natural or man-made incidents	2
Synchronisation of information systems with other ports	2.6
Transparency of charges	3.13
Use of relevant and up-to-date software (e.g., ASYCUDA, UNITRACKS)	2.13
Value for money of port charges (e.g., fixed stevedore compensation)	2.88
Accessibility of information services (e.g., single window for information)	2

There are lower satisfaction scores when asked about the quality of the environmental services provided, waste disposal and value for money.

Table 56: Satisfaction with environmental services in the port[95]

Environmental services	Level of satisfaction
Clear information about waste disposal process (including sewage), recycling and end-of-life fishing gear	2.17
Quality of environmental services (in terms of availability, reliability, speed, safety, sustainability)	1
Satisfaction with the value for money of environmental services	2.29

Users are more satisfied with cargo services, including both efficiency and cost. Only storage availability scored lower. Cargo storage reliability and security are a greater concern than cargo handling, with price being less of an issue.

Table 57: Satisfaction with attributes of cargo handling in the port[96]

Cargo attributes	Level of satisfaction
Availability of cargo storage	1.88
Cargo processing efficiency	3.14
Container stripping efficiency	3
Price of cargo handling services	3.14
Price of cargo storage services	2.75
Reliability of cargo storage	2.25
Security of cargo storage	2.29

[95] Ibid.
[96] Port user survey.

Livelihoods/early indicators of impact: employment and incomes

The project data and survey data also collected livelihoods and economic outcomes for the St Vincent and the Grenadines port project, which is provided below.

Direct jobs

There are currently somewhere between 256-277[97] full-time employees in SVG ports, according to the SVG Port Authority. The capital approval report states that 144 of the 277 positions are held by men and 133 by women. The ESIA states that of the 256 jobs *"with the reduction in operations from both ports to Port Kingstown only, this number is expected to be reduced. Three transit sheds are expected to be reduced to either two or one, and the number of required forklift and cranes (and hence operators) will also be reduced."*

Indirect jobs and business revenue

For the SVG port case study, based on the port users survey, the average annual revenue of the companies was 135,000 ECD, however this is based on a very small sample as only three companies reported their turnover in the survey. At endline, the evaluation team will include questions to report on previous years turnover, to improve the reliability of the data.

On average, port users surveyed had 3.5 employees, of these, fewer than 30% (equivalent of less than one person per respondent) are seasonal or part-time. 43% of these positions were held by women.

Impacts on trade

Based on the desk review, the port investments in Montserrat and SVG are expected to generate economy-wide impacts in areas such as trade, growth and poverty alleviation. The SVG port is expected to increase agricultural product shipments to the UK and its role in trans-shipment with other Organisation of Eastern Caribbean States countries, the wider Caribbean region and Latin America.

Table 58 summarises the baseline trade data, based on trade data from COMTRADE for SVG.

Table 58: Imports, exports and re-exports[98]

Year	Country	Import (trade value USD)	Export (trade value USD)	Re-export (trade value USD)
2019	St Vincent and the Grenadines	335,230,895	38,157,024	Not available

[97] Discrepancy between St Vincent and the Grenadines port development project ESIA and capital approval report.
[98] COMTRADE Data.

Impacts on tourism arrivals

Both port projects are expected to impact tourism arrivals. Table 59 summarises tourism arrivals in the two countries, prior to the COVID-19 pandemic.

Table 59: Inbound tourism arrivals (overnight stays) in UKCIF countries[99]

Country	Inbound tourism (overnight) 2019
Montserrat	10,300
St Vincent	73,000

Climate resilience

In 2016, the Montserrat Port Authority (MPA) recorded that vessels were unable to berth 58 times out of a total of 475 calls due to rough seas, resulting in food shortages on the island (Montserrat Board Paper).

GESI

The SVG port will include specific provisions to facilitate better access for PLWDs; this is not evidenced in the Montserrat port.

6.3.1 Port data quality and remaining gaps

In order to have comparable data on the two port projects at endline, the Montserrat port project should:

- Align its results framework with the SVG port project, including the use of port indicators that are aligned with international standards; and
- Liaise with the local port authority to ensure that data is also regularly collected and shared with the PIU.

In order to improve data quality and to have comparable data over time, the SVGPA should:

- Regularly collect and share original data sets on standard port statistics (e.g., operational data on berth moves);
- Maintain records of the number of full-time and part-time employees at the port, disaggregated by age, sex and PLWD; and
- Develop an adequate list of the full population of port users.

For the data resulting from the port-user survey, the small sample size limits the strength of these findings. In order to increase the port user sample size, the evaluation team will

[99] World Tourism Organisation statistics 2019.

give a longer lead-in time, to reach port users and work more closely with the port authority to establish correct contact details.

6 Baseline: Sustainability

The sustainability criteria assesses the extent to which the outcomes of the implementation will continue. At the baseline stage, to understand the sustainability of the investments made through UKCIF, this section explores the extent to which this is already visible in the projects. Plans to sustain benefits and their implementation will be assessed at endline.

Following a summary of the baseline status, this section will provide data against **one sustainability evaluation question**:

- **Evaluation question 8:** To what extent are provisions made to sustain the benefits of the programme after the grant has ended, and what are the key risks to, and opportunities for, these benefits being sustained over the longer term?

In addition to the evaluation question, there are four thematic sustainability sub questions, these are:

Socio-economic impact of roads

- 8a. To what extent are provisions made to sustain the benefits of the roads projects after the grant has ended, and what are the key risks to, and opportunities for, these benefits being sustained over the longer term?

Climate resilience

- 8b. To what extent are provisions made to sustain the potential climate resilience benefits of the roads projects after the grant has ended? What are the key risks to, and opportunities for, these benefits being sustained over the longer term?

- 8c. How did UKCIF help to influence or improve institutional capacity for resilient infrastructure planning or helped scale resilience investment in the region (e.g. within CDB or the BMCs)? – e.g. into resilient road development

GESI

- 8d. To what extent are provisions made to sustain the potential GESI benefits of the projects after the grant has ended? What are the key risks to, and opportunities for, these benefits being sustained over the longer term?

As with all previous sections, baseline responses to the thematic sub-questions are available in the relevant annexes. For the sub questions, we have presented only brief summaries from the thematic annexes as i) sub-questions 8a, 8b and 8d are directly related to the sustainability evaluation question and ii) for questions 8c it is too soon to provide any valuable findings under this criteria.

At endline these questions will be dealt with both individually and incorporated into the response for the evaluation question.

6.1 Baseline status

Sustainability has been planned into UKCIF investments through government co-funding, climate resilience designs, as well as their operation and maintenance plans for the built assets. However, the rapidly evolving global economy may further challenge the financial sustainability of the projects and the capacity of responsible agencies to sustain their operation.

At baseline, government commitment to the UKCIF projects is through their political prioritisation and co-funding commitments, both essential for their sustainability. However, increasing project costs due to the War in Ukraine, ongoing disruptions in global supply chains and the fiscal weakening of countries in the aftermath of the COVID-19 pandemic, will have substantial implications for the financial sustainability of the projects. Including the ability of the public treasury to continue to invest in the required operations and maintenance. Concerns remain about the O&M capacity, including related budget of the responsible agencies.

6.2 Evaluation Questions

To answer the question of sustainability at endline, we have collected evidence against four dimensions:

- Political will: how well the UKCIF projects align with a country's wider development plans;
- Government co-financing commitment: how much investment the government is making into the project relative to the project value. We recognise that this can also lead to increased debt for a country but is an industry standard measure;
- UKCIF maintenance requirements: the obligations in place as part of receiving UKCIF financing to maintain the infrastructure; and
- Countries maintenance capacity: country plans and budgets to ensure maintenance of infrastructure.

At endline, the projects will be expected to have maintenance plans in place and they will be assessed at this stage, alongside government expenditure on similar projects, where feasible.

6.2.1 EQ 8. To what extent are provisions made to sustain the benefits of the programme after the grant has ended, and what are the key risks to, and opportunities for, these benefits being sustained over the longer term?

6.2.1.1 Political will

Section 3 on relevance already provided an overview of the relevance of projects through an assessment of the alignment of projects with the political priorities, policies and strategies of the countries. As noted, the UKCIF projects are all well aligned with national plans and objectives at baseline which indicates that there will be strong political will to maintain them.

6.2.1.2 Government co-financing commitment

Whilst it is recognised that project need and scope will have had an impact on the level of counterpart funding, the commitment of funding by a government is an indication of the importance of the project, and is often used as a proxy to show likelihood of sustainability. Table 60 shows the counterpart funding against the CDB committed value.

It is worth noting that, in the aftermath of COVID-19 and the tightening fiscal situation of governments, the disbursement of counterpart commitments is at risk. The UKCIF Annual Review 2021 also stated that related provisions need to be formally agreed.

Table 60: Financing Commitment Across UKCIF Projects

Sector	Project	CDB committed (£ million)	Non-bank financing committed (USD million)	% non-bank financing committed[100]
Roads	Antigua road rehabilitation	TA: 0.19 Capital: 13.64	9.07	32.3%
Energy	Barbuda energy	Capital: 2.89	0.29	6.8%
Roads	Belize Coastal Highway	TA: 0.99 Capital: 25.05	1.33	3.6%
Roads	Belize PGH	TA: 1.76 Capital: 14.29	n/a	n/a
Roads	Dominica Road	TA: 1.27 Capital: 24.57	n/a	n/a
Water	Dominica water	TA: 2 Capital: 21.9	n/a	n/a
Agriculture	EVAD	Capital: 35.53	0	0
Roads	Grenada Western Corridor	TA: 0.93 Capital: 9.87	n/a	n/a

[100] Calculated using average GBP to USD exchange rate for 2021 at 1.3757 USD to 1 GBP.

Sector	Project	CDB committed (£ million)	Non-bank financing committed (USD million)	% non-bank financing committed[100]
Water	Grenada water	TA: 0.71 Capital: 11.48	n/a	n/a
Roads	Guyana Linden to Mabura Hill	TA: 2.13 Capital: 49.95	7.34	9.3%
Roads	St Lucia Millennium Highway	TA: 0.98 Capital: 27.49	4.80	10.9%
Ports	Montserrat Port	Capital: 14.46	7.1	26.3%
Agriculture	SPAD	TA: 0.97 Capital: 16.38	0	0
Ports	SVG Port	TA: 2.42 Capital: 25.28	27.9	42.3%

6.2.1.3 UKCIF maintenance requirements

A review of the available contracts showed that maintenance is a part of the standard conditions of CDB grants, for the full portfolio of projects. Based on the standard provisions in the reviewed project documents:

"The Beneficiary and the Executing Agency shall keep the infrastructure financed from the Grant, or cause the same to be kept, in good repair and condition and shall provide the financial and other resources required to adequately maintain the infrastructure financed from the Grant."

The projects are also obliged to produce a maintenance programme condition assessment report for seven years after completion. As most of the projects are only just beginning, related plans have not yet been drafted, so the baseline value for all approved projects in 2021 is *"no project maintenance plan in place."*

6.2.1.4 Countries' maintenance capacity

There is an overall concern about supported countries' capacities to identify, appraise, procure, supervise, operate, and maintain large scale infrastructure with complex climate and GESI goals, across the UKCIF portfolio. This is discussed in more depth in the efficiency section of the report. Maintenance capacity is considered weak across the countries, based on a review of the available appraisal documentation. Despite the contractor's contractual obligation to develop a maintenance plan for the infrastructure upon completion, it is the responsibility of the Executing Agency to implement the maintenance regime, and without adequate systems and funding in place, there is no guarantee that this will be satisfactorily executed. Table 61 below summarises the status of the selected case study countries' maintenance plans and budgets, based on our review of documentation and interviews.

Table 61: Countries' maintenance plans

Project	National Sector Maintenance Plan in Place	Adequate Maintenance Budget (at least 0.2%, but preferably greater than 1% of GDP)
Belize Coastal Highway	No	No
Guyana Linden to Mabura Hill	Yes	Yes
SPAD	Not available	Not available
SVG Port	Yes	Not available
St Lucia Millennium Highway	Yes	Yes

6.3 Thematic questions: climate resilience

6.3.1 EQ 8b. To what extent are provisions made to sustain the potential climate resilience benefits of the roads projects after the grant has ended? What are the key risks to, and opportunities for, these benefits being sustained over the longer term?

Climate risk assessment typically has a forward-looking time horizon, at least equal to the lifespan of the infrastructure in question (specific to the type of infrastructure). Typical ranges of climate projections within the CRVA that inform design standards are 2030, 2050 and 2100. Designs incorporate climate projection data to ensure that climate thresholds are not crossed in terms of maintaining operational resilience (based on expected return periods for given climate thresholds). Whilst projects have been designed to do this through the processes outlined previously, some stakeholders affirmed that good quality workmanship is essential for the climate-resilient aspect of the project to remain effective long-term. At endline, we will revisit this in light of receiving project maintenance plans.

There are limited climate resilience-related interventions conducted during operations and maintenance. In the event of a significant impact (e.g., a hurricane), countries will typically revisit infrastructure interventions to assess their robustness and make adjustments during the build back phase.

6.3.2 8c. How did UKCIF help to influence or improve institutional capacity for resilient infrastructure planning or helped scale resilience investment in the region (e.g., within CDB or the BMCs)? e.g. into resilient road development?

CDB processes are considered robust, and the team has good capacity as a result of the earlier European Investment Bank-funded CALC project, which was developed prior to UKCIF. CALC helped develop CDB climate risk screening processes and identified the basis for CRVA best practices and the development of the ToR. UKCIF continues to contribute to the strengthening of country-level climate risk and vulnerability capacity. This

is in part through the management of the CRVA process, with the PIUs (and additional environmental and climate specialist support provided to PIUs that was funded through the UKCIF) involved in commissioning studies, preparing the ToR, reviewing and responding to consultant outputs. Capacity could be further improved within PIUs on the management and quality assurance of CRVAs.

6.4 Thematic questions: GESI

6.4.1 8d. To what extent are provisions made to sustain the potential GESI benefits of the projects after the grant has ended? What are the key risks to, and opportunities for, these benefits being sustained over the longer term?

By design, the five empowerment level projects are the most likely to deliver and sustain social and economic benefits to women, youth, indigenous groups, PAPs, PLWD and other vulnerable populations. This includes areas such as road safety, better housing under resettlement and new employment opportunities due to training, among others. Details of these design features were provided in the relevance section of the report.

6.5 Sustainability data quality and remaining gaps

In order to understand climate resilience and GESI results beyond the systems and processes in place to promote them:

- Projects should encourage responsible agencies and utilities to collect information on operational disruptions and maintenance needs (e.g., adverse weather) during operation.
- The PIUs should continue to work with responsible agencies and utilities to ensure relevant data is disaggregated, and that this information is analysed and reported at the project and programme levels.
- Endline data collection by the evaluation should aim to expand qualitative data collection through interviews and KIIs, with representatives from additional groups of beneficiaries.

In order to improve the understanding of the capacity of the government to identify, appraise, procure, supervise, operate and maintain the infrastructure, at endline, the evaluation will:

- Gather information from government representatives regarding influence that the management of the UKCIF project has had on their other operations, including O&M.

7 Conclusions and initial recommendations

This final section of the baseline report draws together the baseline status summaries, as well as the identified data quality issues and any remaining gaps in information. It concludes with some preliminary recommendations on areas where the relevance, coherence and efficiency of the UKCIF could still be improved, especially for the projects still in the appraisal process.

7.1 Main conclusions

In the main body of the report, summary statements under each of the DAC criteria provided headline findings. This section pulls them together and provides headline conclusions for the programme.

The UKCIF investments are designed to align well with countries' priorities, including environmental and climate commitments. Policies and processes are in place for these investments to align with climate change commitments and meet the needs of target populations, including more vulnerable groups.

The UKCIF design documents are well-aligned with the priorities and objectives of the UKCIF countries, CDB and FCDO. Established CDB processes are in place to ensure this alignment with country priorities. Based on interviews, many of the identified UKCIF investments were also pre-identified and highly strategic.

Relevance to climate resilience priorities: The UKCIF infrastructure investments, also align with international United Nations Framework Climate Change Convention (UNFCCC) Nationally Determined Contributions (NDCs) and domestic climate change commitments and policies. The energy project and the two agricultural projects also contribute to the NDC and the related mitigation targets.

Relevance to GESI priorities: Both CDB and UKCIF had relevant GESI policy documents, specifically on gender and youth. Project documents and interviews described adequate consultation mechanisms to ensure that project design meets the needs of final beneficiaries, including more vulnerable groups. Nevertheless, there have been challenges in engaging vulnerable groups beyond women, including youth and PLWD across the portfolio, exacerbated by the COVID-19 pandemic. The actual implementation and impact of UKCIF GESI efforts will depend on how well these policies and consultation processes are implemented over time, in practice.

UKCIF has experienced delays in appraisal and procurement. The delays were a result of several internal and external barriers, not least the COVID-19 pandemic.

At the inception of UKCIF, there was an ambitious timeline to complete the project in four years. This meant that project selection happened quickly, but progress has since slowed with structural and staffing issues contributing to these delays. While there is continued confidence among CDB and FCDO staff about the completion of construction due to the extended UKCIF programme now lasting until 2026, UKCIF projects have already

experienced budget and timeline adjustments. Four projects, Dominica Road, Grenada Western Corridor as well as Dominica and Grenada water were not approved at the time of baseline data collection and there have been delays in procurement processes across the portfolio.

External challenges relate notably to the COVID-19 pandemic, as well as further global supply chain challenges, and now currency depreciation and rising global inflation resulting from the war in Ukraine. These challenges, along with the inherently challenging nature of major infrastructure investments, have resulted in procurement and construction delays. Internal challenges relate to slow appraisal and procurement processes. While GESI and climate resilience requirements were not identified as major causes of delays in the surveys, there are some more minor cases of delay detailed in the main report. Concerns have also been raised about the implementation of the ESMPs across the portfolio.

The infrastructure investments across the supported sectors are designed to result in substantial benefits to users, including more vulnerable groups.

This includes improved access, whether to roads or utilities, as well as time and cost savings, along with improved safety from improved roads and ports. Over time, improved infrastructure is expected to contribute to greater productivity and increased employment, such as in the case of the supported agro-parks. Only the agriculture and port investments are expected to improve market access, with the latter also influencing international trade. Relevant baseline data is provided, sector-by-sector across the portfolio, in the main body of the baseline report, with a greater depth of data on the selected case studies.

Sustainability has been planned into UKCIF investments through government co-funding, as well as their operation and maintenance plans for the built assets.

At baseline, government commitment to the UKCIF projects is through their political prioritisation and preliminary co-funding commitments, both of which are essential for their sustainability. However, the rapidly evolving global economy may further challenge the financial sustainability of the projects and the capacity of responsible agencies to sustain their operation. Increasing project costs due to the War in Ukraine, ongoing disruptions in global supply chains and the fiscal weakening of countries in the aftermath of the COVID-19 pandemic will have substantial implications for the financial sustainability of the projects, including the increasing price of energy and construction inputs, as well as ability of the public treasury to cover the operation and maintenance costs. Provisions have already been made at baseline, (i.e., at the project design stages), to ensure that the benefits of the infrastructure are sustained long after construction is completed. These relate to the expectation placed on the recipient governments to operate and maintain the assets, as well as related reporting for seven years after the project has ended. Concerns remain about the O&M capacity, including the related budgets of the responsible agencies.

Data limitations at baseline

While the baseline has collated and collected a large amount of primary data, and project monitoring and secondary data which will enable assessment of the UKCIF at endline and monitoring plans generally align with international best practice, some gaps remain.

The limitations are in the following areas:

- Inconsistent use of indicators, concept definitions, and data collection methods and sources, in line with international standards
- Missing administrative data from government agencies to feed into the indicators of the UKCIF programme and project logframes.
- A lack of disaggregation of data collected by the responsible national authorities and UKCIF projects by geography, age, sex, PLWD status and indigenous groups in UKCIF logframes, despite plans for this to be available.
- Irregular review and reporting of UKCIF programme and project level risks, as well as the review of the UKCIF theory of change, especially its underlying assumptions.
- Limited evidence of awareness and coordination with other, similar or complementary government initiatives, whether with government, donor or private sector financing.

The biggest data gaps relate to the four projects that were still in the appraisal process during the conclusion of data collection for the evaluation baseline. Many of these will be filled with the finalisation of relevant documentation and the subsequent approval of the projects, though related recommendations for harmonising indicators and learning from data collection efforts in similar UKCIF projects should be factored into this process. Additional data gaps can be filled by the UKCIF programme or individual projects, or by encouraging responsible government agencies to collect and share relevant data, including in a disaggregated form, with the programme. The evaluation also identified some data gaps and data quality issues that will be addressed during endline data collection. Related recommendations are summarised below.

7.2 Recommendations

Based on the conclusions above and information provided we have set out some recommendations below, please note that we have split these by operational and data recommendations. We recognise there are existing activities and plans in some of these areas.

7.2.1 Operational recommendations:

To ensure that the projects remain aligned with the UKCIF ToC and aligned with country priorities we recommend the following actions:

- Ensure that key Environmental and Social Review Procedures (ESRP) and principles around inclusiveness continue to be implemented in practice to ensure that projects remain relevant to the population, including vulnerable groups.

- Vulnerable groups, particularly PLWDs and indigenous groups should continue to be appropriately and effectively engaged, during project design (e.g. in future design of programming), and at regular, appropriate times throughout the project cycle.

- Regular monitoring and reporting (e.g. grievances), and proactive risk management are required for efficient project implementation, and to avoid, minimise or mitigate environmental, social and climate-related risks/and/or impacts.

- CDB should continue to work on improving internal collaboration and teamwork across engineering, environmental, and social aspects of the projects. CDB should also continue to work with PIUs to improve the whole team's understanding of the wider socio-economic benefits and objectives of the projects.

- GESI monitoring can be strengthened across the portfolio with the allocation and protection of related resources, including strengthening of GESI expertise on teams.

Increase capacity at the country-level to administer large infrastructure contracts and related government procedures, notably also to facilitate rapid decision-making. Specific actions include:

- Prioritise the recruitment of PIU positions, including environmental and social expertise.

- Quality supervision, results-monitoring, cross-communication and learning on UKCIF projects are areas that will continue to require resources and attention throughout project implementation.

- CDB should continue to work with project teams to improve the frequency and quality of reporting. With clear designation of the overall responsibility (e.g. with the project coordinator).

Ensure O&M plans are designed at an optimum time. Specific actions include:

- Project teams to continue close monitoring of the political commitment by the recipient governments to the projects, also to the operation and maintenance of the assets.

- Ensure statutory O&M Plans are developed at the optimum time that is appropriate for both the sector, ownership structure of each project.

- Include sustainability, climate change and GESI issues as a part of regular monitoring and reporting at all levels; also on the agenda of the Steering Committee.

Prioritise addressing data limitations. Specific actions are outlined in the next section.

7.2.2 Recommendations for closing the data gaps:

For UKCIF programme and projects

In order to harmonise indicators and data collection methods with international standards across the UKCIF programme and project logframes, we recommend:

- The responsible FCDO and CDB staff to increase the coherence of the UKCIF logframes and measurement methods, especially across projects in a given sector, including the use of indicators, concept definitions, and data collection methods and sources, in line with international standards (e.g., across the road projects and the two port investments). Detailed recommendations are in the sector specific summaries in the effectiveness section.

- The responsible FCDO and CDB staff to factor in lessons on aligning with international standards in indicator development, including indicators relating to GESI and climate resilience. Detailed recommendations are in the sector specific summaries in the effectiveness section.

In order for the responsible government agencies to identify, collect and report on relevant data, in line with these standards, we recommend:

- The PIUs to liaise with responsible government agencies on the existing metrics and feasibility for their adjustment to meet international standards.

- The PIUs, together with the agencies, to promote the inclusion of relevant and valuable indicators already collected in UKCIF project logframes (e.g., agriculture projects), and relevant CDB and FCDO staff to take these onboard.

With a view to improving the targeting of final beneficiaries, especially those most vulnerable, we recommend:

- Relevant FCDO and CDB staff, together with the PIUs, to assess the relevance and feasibility of further disaggregation of data, and promote understanding of the need and value in collecting and analysing disaggregated data by the responsible government agencies, including by geography, sex, age, and disability status, and disability status.

- The PIUs to regularly monitor the collection and reporting of disaggregated data, in line with expectations established by the UKCIF programme.

- If feasible it may be useful for FCDO and CDB staff to develop a shared understanding of the standard definition of PLWD and youth for the projects, to improve comparability across the portfolio.

In order for the evaluation to understand overall programme and project processes, different roles and responsibilities and to support good project management, we recommend:

- Relevant FCDO and CDB staff to continue the regular monitoring of work plans and spending targets, along with sharing this time-linear information with the evaluation at endline.

- Document timing and stages of processes, and provide clarity on decision-making procedures within the UKCIF programme, notably on any evolutions in the organogram and roles and responsibilities between different actors.

In order to monitor the evolving context, including coherence with other initiatives, there is a need for:

- Responsible CDB and FCDO staff, along with the PIUs to systematically identify and report on complementary public and private infrastructure, socio-economic, and climate resilience investments in the project locations.

- The PIUs to liaise with the responsible agencies to obtain data on government commitments and the national budget dedicated to infrastructure maintenance and any specific maintenance budgets, such as road maintenance budgets.

- Relevant FCDO, CDB and PIU staff to continue monitoring the evolving context. Also to conduct the regular review of UKCIF programme and project level risks, including also revisiting UKCIF theory of change assumptions.

In order to undertake the quality supervision, we outline as necessary in the operational recommendations, we recommend the following data is consistently collected, recognising there are plans in place to undertake some of these actions:

- Relevant CDB and FCDO staff to support and monitor implementation capacity at programme and country level, through ensuring data collection and monitoring are in relevant staff job descriptions, and a part of performance reviews.

- Relevant CDB and FCDO staff to further strengthen processes for closely monitoring progress during the implementation phase, notably on the implementation of the ESMPs.

- Relevant CDB and FCDO staff to continue fostering a results-oriented (rather than a process and activity-oriented) culture among responsible government agencies, CDB project supervision and PIU teams.

- Relevant CDB and FCDO staff to ensure the sufficient allocation (e.g., of staff) and protection of related resources (e.g., budget and time), including the strengthening of GESI expertise in country teams, and ensuring that CLOs and/or SGSs are available for all projects. CDB gender and social advisors should be engaged earlier in the appraisal process. Peer sharing and learning should be encouraged generally, but specifically on GESI, to aid learning and adopting of best practices.

Next steps for the UKCIF evaluation

The evaluation has been designed in a way that will ensure that we can address some of the data gaps at endline. In addition to the existing plans for the endline the we will undertake the following at endline:

To address the remaining data gaps on UKCIF projects approved after Q4 2021, the endline evaluation will:

- Review key appraisal documentation, including also the ESIAs and CRVAs.
- Expand the scope of the summative methods to include these projects at endline

In order to improve understanding of the external coherence and coordination of UKCIF, the endline evaluation will:

- Gather additional qualitative data on the establishment and use of relevant coordination mechanisms also from government representatives and other donors.
- Gather additional qualitative data on complementary interventions, including from government representatives and other donors.

To improve the representation of the views from benefiting countries, including those of the most vulnerable, the endline evaluation will:

- Collect additional qualitative evidence through FGDs and KIIs from key stakeholders, including government stakeholders and infrastructure beneficiaries, to understand how the UKCIF projects have been relevant and adapted to their needs, and especially the needs of vulnerable groups. This will include areas like the use of roads for the purpose of education and other youth activities.
- Collect further qualitative evidence on UKCIF document negotiation and decision making around climate and GESI adaptations through KIIs with project implementers.
- Gather evidence of unexpected or even negative effects from these key stakeholders.

In order to accurately analyse data at endline the evaluation team will:

- Continue to collect disaggregated data across surveys and KIIs.
- Pursue additional, qualitative data on currently under-represented groups (e.g., PLWD, indigenous groups, and youth and government representatives).
- Pursue multiple entry points to increase survey responses on primary data collection (e.g., firms using roads, contractors in IA survey).

- Plan longer lead in times and use of local consultants to promote higher response rates for private sector road users and port users.

- Gather additional qualitative data on road use, and how the projects have impacted use for the purpose of education and any other youth interests.