Nadya Maslova Tel: 010 698 15 59 Nadezda.maslova @swedishepa.se Case number: NV-08586-17

Final Report for a programme: "Strengthened Institutions for a sustainable climate".

Implementation period: 2019-2024

STRENGTHENED INSTITUTIONS FOR A SUSTAINABLE CLIMATE



















Table of content:

List o	f Abbreviations	3
1. Pro	gramme summary	4
1.1.	Overview	4
1.2.	Introduction and background	6
1.2	.1. Programme description and initial process	6
1.2	.2. Selection of countries and projects	7
1.3.	Management of the programme	9
2. Ch	ange projects	10
3. Cri	tical events and management adjustments	11
4. Rea	ached results	12
4.1.	Zimbabwe	15
4.2.	Uganda	16
4.3.	Kenya (CSUDP)	20
4.4.	Kenya (Migori)	21
4.5.	Moçambique	23
4.6.	Rwanda	25
4.7.	Ethiopia	27
5. Ho	w SISC affected the countries we worked with	28
6. Sus	stainability and long term effects	33
7. Cro	oss-cutting issues	34
8. Les	ssons learned	36
8.1.	Swedish Authorities and SISC management	36
8.2.	Partners	37
8.3.	Effectiveness in connection to five principles for capacity development	39
9. Co	nclusions	41
Append	ix 1: Projects overview over the years	43
Append	ix 2: Specific examples on outcome-level.	49
Append	ix 3: SISC programme outcome matrix	55

List of Abbreviations

SISC	Strengthened Institutions for a Sustainable Climate
IPPC	Intergovernmental Panel on Climate Change
UNEP	United Nations Environment Programme
WMO	World Meteorological Organization
WHO	World Health Organisation
NDC	Nationally Determined Contributions
SwEPA	The Swedish Environmental Protection Agency
SCB	Statistics Sweden
STEM	The Swedish Energy Agency
SMHI	The Swedish Meteorological and Hydrological Institute
SLU	The Swedish University of Agricultural Sciences
Boverket	The National Board of Housing, Building and Planning
UNFCCC	United Nations Framework Convention on Climate Change
BTH	Blekinge Institute of Technology
GHG	Greenhouse gases
CCD	Climate Change Department at The Ministry of Water and
	Environment of Uganda
LULUCF	Land Use, Land-Use Change and Forestry
CMA	Conference of the Parties serving as the meeting of the Parties to the
	Paris Agreement
QA/QC	Quality assurance and Quality control
UEM	University Eduardo Mondlane
MRV	Monitoring, Reporting and Verification system
AFOLU	Agriculture, Forestry and Other Land Use
IPPU	Industrial Processes and Product Use
REMA	Rwanda Environment Management Authority
MoU	Memorandum of Understanding
ТоТ	Training of Trainers

1. Programme summary

1.1. Overview

Title	Strengthened Institutions for a Sustainable Climate (SISC)
Case number	NV-08586-17
Involved Swedish authorities	Swedish Environmental Protection Agency (SwEPA), Swedish University of Agricultural Sciences (SLU), Swedish Meteorological and Hydrological Institute (SMHI), Statistics Sweden (SCB), Swedish Energy Agency (STEM), National Board of Housing, Building and Planning (Boverket), Blekinge Institute of Technology (BTH).
Parter countries	Kenya, Rwanda, Uganda, Zimbabwe, Moçambique, Ethiopia
Overall objective (ultimate outcome)	Improved implementation of Nationally Determined Contributions (NDCs) in partner countries by enhancement of effective governance and transparency frameworks that integrate climate efforts made at national, subnational and local levels.
Programme objective (programme outcome)	Programme partner organisations have contributed to further implemented and developed national processes in NDC implementation through enhanced use of climate related data for mitigation, adaptation, urban planning and governance measures.
Medium -term objectives (intermediate outcomes)	 Enhanced production and analysis of reliable data by partner organisations to inform further strengthened national/subnational/local climate action. Improved transparency practices and promotion by partner organisations to make data available and accessible. Better coordinated and integrated approaches established by partner organisations to ensure effective use of climate related data to operationalize climate actions in respective country.
Main target group	Partner organisations in selected countries (Ethiopia, Kenya, Moçambique, Rwanda, Uganda and Zimbabwe)
Programme start	January 2019
Programme finalisation	September 2024
Budget	35 100 000 SEK

Deliveries

Out of 18 project applications, several was initiated, 8 projects reached its goals end and 6 reached the end of SISC programme in September 2024.

According to the programme evaluation and learnings from the programme partners the results of the delivered projects are considered to be sustainable.

Key success factor: strong ownership of the project from the local partners and good connections to ongoing national processes.

Examples:

Zimbabwe: The project delivered draft climate-friendly urban design guidelines and critical empirical data on Harare's urban form and traffic, engaging key government stakeholders. It generated unexpected benefits, including increased student enrolment in transport studies and the city's decision to pursue an urban mobility policy. The project facilitated air quality data sharing and emphasized compact, mixed-use development in urban planning.

Anticipated long-term effect – Zimbabwe will have access to urban design guidelines and will have increased capacity to reduce green house gas emissions from motorized transport. Replication of urban guidelines to other cities and towns is expected.

Kenya, Migori: Migori County successfully developed a climate adaptation plan, trained local trainers, and established climate planning committees in all 40 wards, demonstrating proactive climate action. The project's success stemmed from its focused approach on a willing county, effective training methods, and strong local engagement. The project also empowered women and spurred neighbouring counties to seek similar climate change training.

Anticipated long-term effect - mainstreaming of climate change adaptation and mitigation actions in county planning and budgeting process; progressive adoption of climate smart strategies and adoption of Training of Trainers approach in other project implementation in the county departments.

Rwanda: This project significantly enhanced Rwanda's greenhouse gas inventory (GHGI) capacity by training REMA staff to independently compile and calculate emissions, reducing reliance on consultants. It strengthened REMA's ability to conduct quality assurance and control, develop national GHG inventory procedures, and improve cross-sectoral collaboration.

Anticipated long-term effect – increased accuracy and transparency in reporting of greenhouse gases and NDC implementation.

1.2. Introduction and background

1.2.1. Programme description and initial process

Scientific evidence as well as reports of IPCC, UNEP, WMO, WHO and World Bank shows that climate change impacts (such as more frequent and intense heatwaves, rising sea levels, more extreme weather events, change in food production, increased health risks and biodiversity loss) disproportionately affect vulnerable groups like the poor, elderly, and those in developing countries with fewer resources to adapt. The idea of long-term SISC capacity-building programme is to tackle these challenges via climate mitigation and adaptation in developing countries.

The programme aims to strengthen government institutions' ability to implement climate mitigation and adaptation actions. To address the climate change the countries should be improving coordination between key organisation; strengthening systems for tracking climate actions and reporting progress (transparency); and promoting good governance in climate-related decision-making. Therefore, it was decided that **the long-term goal of the programme**: improved implementation of Nationally Determined Contributions (NDCs), since they embody efforts by each country to reduce national emissions and adapt to the impacts of climate change. To achieve this goal SISC programme strived for enhancement of effective governance and transparency frameworks that integrate climate efforts made at national, subnational and local levels. Hence, the programme will contribute to the implementation of the Paris agreement as well as Agenda 2030 especially goal 13 on climate but also goal 16 on inclusive societies and institutions.

The Swedish Environmental Protection Agency (SwEPA), Statistics Sweden (SCB), The Swedish Energy Agency (STEM), The Swedish Meteorological and Hydrological Institute (SMHI), and The Swedish University of Agricultural Sciences (SLU), were the 5 original Swedish authorities that developed SISC programme, that was funded by Sida and connected to the Strategy for capacity development, partnership and methods that support the 2030 Agenda for sustainable development (2018-2022). All the Swedish authorities represented a broad competence in the programme area, cover major building-blocks of importance when implementing a transparency system and played crucial role in Sweden's climate effort and contribute to Swedish work on Paris agreement and NDC. The agencies all had long experience of working in developing countries and they committed to engage their own experts in a long-term partnership for collaboration with selected countries.

During the preparation of the programme, the programme team had conducted meetings with the potential partner countries: Ethiopia, Kenya, Uganda, Zambia and Zimbabwe. All countries have expressed a need and interest for capacity building activities for strengthening institutional arrangements for improvement of their national systems for transparency but also on sustainable urbanisation. Inception phase of the programme

conducted more in-depth country analysis that showed that there are massive sustainability challenges regarding urbanisation, not least regarding environment and climate issues, due to the high level of urbanisation in the coming years. Activity data and statistics, especially data collection on a continuous basis, were missing in all countries. There were difficulties in collecting new data and the cooperation and dissemination of existing data was generally weak and needed to be strengthened.

After the analysis during the inception phase, it was concluded that the programme will address the challenge of climate change for both mitigation and adaptation, supporting the development of a robust transparency framework under the Paris Agreement as well as processes for sustainable urban planning with a climate and an ecosystem service perspective. That is why during the entire period of the programme 2 parallel tracks are clearly visible: climate and urban sustainability.

The main **target group for climate track** were officials and experts in a position to initiate and implement changes at environmental, meteorological, climatological, water, land planning, agriculture, disaster management, energy, statistic and gender administrations and other relevant sectors, preferably at the central level but also from district/regional level. Another target group was the group with the designated responsibility for the national reporting under UNFCCC.

Primary target groups for the urban sustainability track were administrations on central level in participating countries. Academia educating and training urban/city and/or regional/rural planners was also a primary target group while administrations on local and regional level was a secondary target group.

The set-up of the programme activities was decided to be in three simultaneous lines of action:

- regional workshops for exchange of experience, group discussions and lectures on themes relevant to the participating countries' ongoing processes and coaching of projects;
- coaching on distance through e.g. webinars, web/phone meetings and e-mail contact:
- coaching in specific processes/projects.

These three tracks turned to be very viable approach since it helped the programme to stay afloat during COVID-19 pandemic.

Activities in the programme were with lectures, group exercises where the participants were given opportunities for reflections of the themes of the lectures, coaching and exchange of experiences of project implementation, meetings with experts and officials and other relevant actors, dissemination of experience from the partner countries and from Sweden. This was also promoting networking among participants.

1.2.2. Selection of countries and projects

The countries that have been selected to participate in the programme have been selected from number of criteria:

• They are supported by the Swedish government,

- They have expressed a need and interest in collaboration on Transparency system/NDC,
- They have ratified the Paris agreement or it is underway,
- They have submitted a NDC,
- The programme should be possible to implement due to political situation and security,
- The official language is English.

Capacity development is a big challenge which involves much more than enhancing the knowledge and skills of individuals. It also depends on the capacity of the organisations in which they work and the enabling conditions for the organisations. It is about governance and how to manage the administration in an effective way. In order to contribute to change, this programme was addressing three administrative levels: 1) the individual, 2) the organisational, and 3) the enabling environment (the mandate). Through support to the individual participants and their organisations, the programme was contributing to capacity development of the organisations and to the mandate and enabling environment as well. The change projects (later on "projects") were developed and implemented during the programme and were supported by coaching and exchange of experiences facilitated by the Swedish project team.

The identification and formulation of change projects was done by each participating country in dialogue with the Swedish programme partners. The change projects were developed based on the following criteria:

- The change project must face some sort of challenge, or problem, that the country is facing.
- The change project should have a connection to the issue of inclusive planning processes.
- The change project should have a connection to some sort of environmental/climate issue.
- The change project should involve central governmental level organisations (ministries, central agencies or similar).

The countries and projects were selected based on an application process. Application forms to the programme were developed along with criteria for the projects:

- 1. The project must have a clear link to the aim of the programme.
- 2. The project must be endorsed by the implementing organisation and should be a part of the ongoing/planned operations.
- 3. The project must bear its own costs and have enough resources for its implementation.
- 4. The project manager must have mandate and relevant experience in the area.
- 5. The project should involve relevant agencies and/or organisations.

Criteria for participants:

1. Participants must have a tertiary level of education in field(s) relevant to the programme.

- 2. Participants must have relevant working experience in the project area.
- 3. Participants must be nominated by the implementing organisation and/or relevant Ministry.
- 4. Participants should be employed by the nomination organisation.
- 5. Participants must possess working skills in English, which is the programme's language of instruction.

All participants expected to bring a project endorsed by their organisations, to be developed and implemented during the programme. Although funding for implementation from participating organizations was a prerequisite from the start and although SISC focus was to build strong project plans, and capacity for implementation, the issue of financing activities was emerging continuously.

A strategy for involving new projects was supposed to be developed. One challenge is the nature of the support needed when project implementation is not financed beyond capacity development. SISC programme intention was that with strong, clear and well-established project plans, the possibility of external financing/funding would complement existing SISC resources.

Through dialogue and criteria, project ideas, related to the expected programme outcomes, were selected in Zimbabwe, Uganda, Kenya, Mozambique, Rwanda and Ethiopia.



1.3. Management of the programme

The Swedish EPA had the overall management and administrative responsibility and the responsibility for the implementation of the programme and thus responsible towards

Sida for reporting, budgeting, year planning etc. The programme was run in close cooperation with:

- Statistics Sweden, SCB,
- The Swedish Energy Agency, STEM (left the programme in 2023),
- The Swedish Meteorological and Hydrological Institute, SMHI,
- The Swedish University of Agricultural Sciences, SLU,
- The National Board of Housing, Building and Planning, Boverket,
- Blekinge Institute of Technology, BTH (joined the programme in 2020).

All the agencies had inter-governmental agreements with SwEPA on their contribution to the SISC programme. A steering group consisting of representatives from all agencies was established. All participating Swedish agencies mentioned above contributed with their competence regarding transparency systems, with experiences on how to implement good governance within their areas of expertise and with experience and competence on how a transparency system can be put into practice and how it was implemented from their specific areas and mandates.

2. Change projects

After the last date for applications to the programme (<u>1 September 2018</u>), 16 applications had been received. Since some of the applicants had collaborated on the development of the change projects within the same country, in December 2018 there were in total 12 change projects applications: 2 from Zimbabwe, 9 from Uganda,1 from Kenya.

During the preparation of the SISC programme, SISC team had visits to potential partner countries. After the second visit to Kenya during the 27-28 of September 2018, SISC team had been contacted by the Ministry of Environment and Natural Resourses of Kenya that informed that they hadn't been able to disseminate the application forms in June (as it was planned) but it was done in October. Therefore, SISC team decided to re-set a last application date to 2nd of January 2019.

More countries and projects were added <u>in 2019</u>, after the end of the Inception Phase. This addition was connected to the fact that SISC team had continues dialog with some countries and their applications came later and was considered suitable for the programme. Therefore, the total of 18 projects applications were included in the programme in 2019, distributed among 5 countries:

- Zimbabwe (2)
- Ethiopia (4)
- Kenya (3)
- Moçambique (1)
- Uganda (8)

At the beginning of 2020, the programme already consisted of projects in 6 countries (compared to 5 in 2019) and 13 change projects (compared to 18 in 2019). Rwanda had been added to the programme, while at the same time some of the originally applied project didn't manage to deliver a project plan or were unable to provide resources for implementation. 13 projects distributed themselves in the following way:

- Zimbabwe (2)
- Ethiopia (2)
- Kenya (3)
- Moçambique (1)
- Uganda (4)
- Rwanda (1, new)

Due to various challenges during the early years, only 8 projects were implemented throughout the programme's lifetime. This report will be focusing on these projects. The full list of projects that submitted their applications to the programme, along with their statuses over the years, can be found in Appendix 1.

3. Critical events and management adjustments

Information on all activities in the projects mentioned below can be found in the SISC yearly reports. Here we will focus on critical events that affected the programme and required some adjustment from the management.

In 2020 the programme experienced the COVID-19 pandemic, which presented significant challenges to project implementation, particularly in terms of communication and collaboration. Physical meetings became impossible, and each country coped with the inability to go to the office in the best possible way. However, the conditions of each of SISC's partner-countries were different and virtual communication was not always easy or possible. With some partners we already had a well-established relationship within the SISC programme and virtual communication could continue in a smooth way, in some other cases it became impossible. Inability to communicate in a desired scale led to some of the projects being terminated or not initiated. One effect of non-physical meetings was that the planned activities such as workshops, joint training and more complex regional activities have suffered. Something that was appreciated before COVID-19 was that partners could meet and exchange experiences from their respective projects. It was also possible to link the two tracks more easily. With only digital cooperation, this became difficult, resulting in bilateral contacts being prioritised over working more inclusive.

The transition to remote work necessitated a shift in our approach, requiring increased reliance on virtual tools and platforms. While these tools proved valuable, they could not fully replicate the benefits of in-person interactions. Despite these difficulties, the team demonstrated adaptability and resilience by exploring innovative solutions and prioritizing critical tasks. We successfully implemented actively ongoing projects and led them to the finalization of the programme, showcasing commitment to delivering results even under challenging circumstances. The coaching approach of the programme has been helpful in this case since it was possible to provide it virtually.

By the end of the 2020 the programme was extended with one more Swedish partner – Blekinge Institute of Technology (BTH). This was a positive change and allowed our partner universities in Africa to receive a strong coach that could share the curriculum and experience, especially in sustainable urban planning.

<u>In 2023</u>, the SISC programme experienced a substantial budget reduction. This required a substantial reorganization of the programme and its activities, necessitating a shift in the coaches' focus from implementation to additional planning.

Despite the budgetary constraints, the team adapted by prioritizing core activities and optimizing resource allocation. While the reduced budget impacted the scope and timeline of certain initiatives, as well as contributed to the cessation of one of the change projects, the team remained committed to delivering meaningful outcomes within the available resources.

In the same year, the Swedish Energy Agency (STEM) left the programme. This happened because none of the applied projects managed to include creation of energy statistics in the project plan. The energy statistics was connected to article 6 of Paris agreement and at that moment STEM was not yet ready with article 6 negotiations. STEM gave one very good webinar on article 6 and participated in the workshop in Victoria Falls where the agency provided information on implementation of article 6 and clean energy. However, since there was no energy component in the projects – STEM left the programme.

Through the entire timeframe of the programme, it encountered significant staff turnover, impacting mostly SwEPA programme managers, but also Sida contact persons and some of the coaches. These changes hindered the programme's optimal implementation. As an example, this, in combination COVID-19 and other issues, resulted in the programme struggling to fully implement its established Planning, Monitoring, Evaluation, and Learning (PMEL) routine.

To mitigate the impact of staff turnover, all new managers received comprehensive programme handovers. The SwEPA maintained detailed documentation of programme implementation, ensuring easy access to historical information. The handover process was conducted as smoothly as possible given the circumstances. Important to note that despite these challenges, the local cooperation partners most probably didn't notice the challenge since their communication was primarily with the Swedish coaches and their composition was rather consistent.

4. Reached results

Despite one unite programme, SISC was visibly following 2 tracks: climate and urban. In the table below it is visible how the 8 implemented projects were distributed between those two tracks.

The climate projects primarily focused on enhancing national capacity for greenhouse gas (GHG) inventory management and reporting.

The urban projects primarily focused on building urban resilience and promoting sustainable urban development.

	Country	Swedish organisation	Partner in Africa
Climate	Kenya	SMHI (The Swedish University of Agricultural Sciences; and The Swedish Meteorological and Hydrological Institute)	Migori county, Migori Department of Environment (MDE)

	Rwanda	SwEPA and SCB (The Swedish Environmental Protection Agency; and Statistics Sweden)	Rwanda Environment Management Authority (REMA)
	SLU and SwEPA (The Swedish University of Agricultural Sciences; and The Swedish Meteorological and Hydrological Institute)		University Eduardo Mondlane (UEM) in joint cooperation with the Department of Climate Change- National Directorate of Environment at the Ministry of Land Environment and Rural Development (MITADER)
	Uganda	SwEPA and SCB (The Swedish Environmental Protection Agency; and Statistics Sweden)	Climate Change Department (CCD) at The Ministry of Water and Environment
	Ethiopia	SMHI (The Swedish University of Agricultural Sciences; and The Swedish Meteorological and Hydrological Institute)	National Meteorological Agency Ethiopia
anisation	Uganda	Boverket and BTH (The National Board of Housing, Building and Planning; and Blekinge Institute of Technology)	Makerere University
Sustainable Urbanisation		ВТН	
	Zimbabwe	(Blekinge Institute of Technology)	University of Zimbabwe, Harare
Susta	Kenya	Boverket and BTH (The National Board of Housing, Building and Planning; and Blekinge Institute of Technology)	Civil Society Urban Development Platform (CSUDP)

Main results of the projects that were included in SISC programme can be summarised in the following:

- The projects that participated in the SISC programme successfully met or partially met most of the established project goals, indicating a positive overall impact and reaching programme objective Programme partner organisations have contributed to further implemented and developed national processes in NDC implementation through enhanced use of climate related data for mitigation, adaptation, urban planning and governance measures.
- The projects demonstrated a strong focus on capacity building. This includes training individuals on specific skills, such as GHG inventory calculations, traffic data analysis, and social planning techniques. By empowering local experts, these projects have built sustainable capacity within partner organizations.

• Another strength is the emphasis on data-driven decision-making. Many projects involved collecting and analyzing data, whether it's air pollution data, climate vulnerability assessments, or traffic patterns. This data has been used to inform policy decisions, identify priority areas for intervention, and monitor progress.

Overall, the SISC programme have made significant contributions to climate action in the respective countries by:

- Building local capacity via empowering local experts to address climate challenges.
- Generating and analyzing data via providing evidence-based insights for decision-making.
- Developing and implementing climate action plans via setting the stage for long-term climate resilience.
- Improving institutional arrangements via strengthening governance and coordination for climate action.
- Raising awareness and promoting knowledge sharing via fostering a culture of climate action.

By focusing on these areas, these projects have laid the groundwork for more sustainable and resilient future.

Immediate project results and achievements have been reported earlier in yearly programme's report. This final report will focus on the mid-term programme goals/outcomes and how each country/project contributed to them and the programme objective.

In addition to the information collected continuously during programme implementation and reported in annual progress reports, the SISC programme team gathered the change project participants that remained in the programme until 2024 to collect information on higher-level results achieved during the programme – this workshop took place in September 2024. The participants were asked to present general results, first within the presentation of their projects and later by filling in the outcome-matrix that the programme was based on. The full outcome matrix can be found in the Appendix 2. We have been focusing on the intermediate outcomes.

All projects that were carried out during the programme didn't have the goal to meet all three of the programme's outcomes. The description of the projects including the tables below is a summary of the results exercise that programme participants were requested to do during the final workshop.

The colour in the table below shows that:

Green – the goal of activity connected to the programme outcome/sub-goal of the project is **achieved**

Yellow – the goal of activity connected to the programme outcome/sub-goal of the project is **partially achieved**, and

Red – the goal of activity connected to the programme outcome/sub-goal of the project is **not achieved**.

Some additional results description on the outcome-level in a more concise form can be found in the Appendix 2 and can be used for external communication.

4.1. Zimbabwe

Project: Understanding the Interplay between Mobility, Climate Change and Design in Search of Urban Resilience Solutions in Harare.

Implementing organization: University of Zimbabwe, Harare

Swedish coach: BTH

<u>Purpose:</u> To influence the formulation of a design and planning framework which reduces overdependence on motorised vehicles and subsequently reduces Greenhouse Gas (GHG) emissions.

Key achievements and insights:

The Project made available urban design guidelines that will foster a climate friendly environment. Two key stakeholders, that is, the Government Department of Spatial Planning and Development and the Harare City Council participated in the drafting of the guidelines. The guidelines are still in the draft form and have been shared with partners and the final version will be shared before the end of 2024.

The Project produced empirical data on urban form. This involved the production of a research report that characterized the existing urban form in Harare in relation to urban congestion. The empirical data was an outcome of land - use mapping and GIS (Geographic Information System) spatial analysis of vehicular mobility in relation to land use.

The Project produced vehicular traffic data for the Harare metropolitan region. This covered vehicle enumeration using cameras and Origin - Destination surveys carried out by university students, City of Harare enumerators, and University Lecturers. Both traffic inventories and analysed data have been shared with key stakeholders such as the Department of Spatial Planning and Development and the City of Harare for their use. Unanticipated results were the training of Harare City Council enumerators and the decision by the Harare City Council to develop an urban mobility policy following their experience from the Pilot Project.

Through the technical support of one of the key partners, the Environmental Management Agency, the Pilot Project shared air quality data in the greater Harare region with other Project Partners.

The Pilot Project had a number of unanticipated results. For example, as a result of student participation in the Pilot Project, there has been a six times increase in the enrolment of students into the transport systems development study programme. Urban development guidelines have brought to the fore of the planning authorities the promotion of compact development and mixed land use.

Outcome 1:	Outcome 2:	Outcome 3:
Enhanced production and	Improved transparency	Better coordinated and
analysis of reliable data by	practices and promotion by	integrated approaches
partner organisations to inform		established by partner

further strengthened national/subnational/local climate action.	partner organisations to make data available and accessible.	organisations to ensure effective use of climate related data to operationalise climate actions in respective country.
The projects produced empirical data on urban form (buildings and open space of the city): the mapping was required to understand the urban form and its correlation to the mobility. Land use mapping in Harare region was done and Department of spatial planning and City of Harare received this mapping. The process implemented in the study of Harare urban form is guided by the steps: survey, analysis and plan. The gathered information on the urban form with focus on land use, mobility, accessibility and connectivity, is then analyzed. The analysis of the gathered information aims at the development of tools and guidance to sustainable and inclusive urban development. The local government, which is part of the process is in need of such instrument to guide and the monitor the development of Harae towards more integrated, inclusive and sustainable urban development.		The project developed a draft version of the urban design guidelines for the mitigation of climate change in the greater Harare region. At this point the guidelines are still incomplete which means they have not been shared with the stakeholders. It is a joint exercise with the Department of spatial planning and development, but the University of Zimbabwe is taking the lead in the drafting. The City of Harare and the Department of spatial planning and development are making inputs to the guidelines. The purpose of the guidelines is densification of the city to promote non-motorized transport and efficient public transport to achieve less greenhouse gas emissions from transport.
Data on vehicular traffic was delivered and traffic count conducted: it was required to understand the vehicular patterns in the city and provide this data to the City of Harare's spatial planning department so they can conduct the city planning in a way that decreases air pollution. Additionally, 35 students and 18 officials now know how to carry out a traffic count.		
The project partially produced the data of air quality in the greater Harare region. Partially because the environmental management agency provided data on air quality that was not available earlier and now the datafiles are available and City of Harare and its spatial planning department can now use it for planning.		
The project unfortunately did not analyze patterns of vehicular mobility in relation to land-use and urban form in the greater Harare Region.		

4.2. Uganda

Project: Developing a Training programme in social planning for inclusive and resilient urban development

 $\underline{\underline{\text{Timeframe:}}}$ 2019-2024, the project started as three separate projects but was merged into one project.

<u>Implementing organization:</u> Ministry of Lands, Housing and Urban Development and Makerere University.

Swedish coach: Boverket

<u>Purpose</u>: to strengthen the capacity of national, city and community level urban and social planning.

Key achievements and insights:

A big key decision of the project - bringing Makerere University on board to lead the capacity building component. It made the project to take off properly, with concrete measures, such as planning and start of the data collecting phase, and formation of the training strategy.

The production of the situational analysis resulted in necessary information on the demographics, socio-economic conditions, infrastructure and utilities, urban planning, and environmental and climate risks and vulnerabilities.

The situational analysis report documents the urban resilience capacity gaps and needs that require the design and delivery of trainings in inclusive and climate resilient urban development, as well as future research areas. The information provided a clear, evidence based, picture for designing a training strategy and a training programme.

Staff at the Ministry of Lands, Housing and Urban Development are and will be educated to be trainers, which means a great capacity building at the Ministry, which also brings good opportunities to result in effective Governance.

An important part is the development of an educational strategy. The strategy describes the various goals of the educations, target groups, the educational packages with the content of the five modules, and the training delivery plan and activities.

The training programme will be adopted in the curricula and used in the training of undergraduate students offering the Bachelor of Urban and Regional Planning at Makerere University and those offering a diploma in physical planning at Institute of Surveys and Land Management.

Training of Trainers approach that was used in the project showed several positive outcomes:

- Capacity building at the Ministry
- Education of the final year urban / physical planning students, who will be exposed to and acquire knowledge and skills in inclusive and resilient urban planning in the context of climate change.
- The experiences derived from the pilot training will also work as testing the possibility of incorporating the training modules in the urban planning curricula. The piloted training curriculum modules and materials will remain in the training institutions for use in further trainings.

The developed training modules and materials will also be used to train up to 40 urban planning and urban development officials, practitioners and decision makers, as well as technical staff, municipal/urban development forums and civil society, in the two pilot cities of Kampala and Masaka.

Outcome 1:	Outcome 2:	Outcome 3:

Enhanced production and analysis of reliable data by partner organisations to inform further strengthened national/subnational/local climate action.	Improved transparency practices and promotion by partner organisations to make data available and accessible.	Better coordinated and integrated approaches established by partner organisations to ensure effective use of climate related data to operationalise climate actions in respective country.
A situational analysis has been conducted to generate data on socio-economic conditions and livelihood vulnerabilities among the urban poor communities in Kampala and Masaka cities. The analysis report provides baseline information on climate risks, vulnerabilities and resilience of the cities; now available for the use and for building inclusive and resilient urban development.	Thanks to the information from the situational analysis and training needs assessment, now a training strategy / curriculum on inclusive and resilient urban development is in place. It ensures that the design of training modules and materials on inclusive urban development will be used by partners (ministry, university and two cities) in capacity building on a continuous basis.	
Capacity / training needs assessment was carried out to identify training gaps and needs on inclusive and resilience urban development. This Situational analysis report documenting the training needs that justify designing and delivering of trainings in the field of inclusive and climate resilient urban development.	The project planned to develop training modules and materials on five modules: (i) introducing climate change and disaster risk reduction; (ii) understanding urban resilience; (iii) city resilience action planning and integration; (iv) financing climate resilient urban development; (v) gender and Social Inclusion in the context of climate change and urban resilience. However, only zero draft training modules and materials (under initial reviews) were finalized until September 2024. Final modules and materials will be finalized at the end of the year.	
	Conducting of Training of Trainers will be delivered in December 2024. This training will ensure 20 trainers at the Ministry, University and City level. With training materials and a core of trained trainers in place, the ministry, university, and cities have enhanced capacity to deliver trainings on inclusive and resilient urban development on continuous basis.* Rolling out training in two cities is to be conducted in late January 2025. This training will be delivered to 80 participants (40 participants in each city technical staff, decision makers and urban development practitioners) and they will be trained in inclusive and resilient urban development. At the end the Ministry will have enhanced capacity to roll out capacity building sessions in cities and municipalities. The university will have their own trainers who will deliver training in inclusive and urban development to urban and regional planning trainees. Kampala and Masaka city have technical with knowledge and skills to incorporate	
	urban resilience in design and implementation of physical development plans.*	

*Those two goals are marked red because on the moment of workshop where this exercise was done (September 2024) these goals were not achieved; however, they are planned and are expected to be implemented by the local partner outside of SISC activity period.

Project: Enhancement of Uganda's Greenhouse Gas (GHG) Inventory

<u>Timeframe</u>: 2019-2021. This project has been under the implementation for 3 years and only part of this project was delivered.

<u>Implementing organization</u>: Climate Change Department (CCD) at The Ministry of Water and Environment

Swedish coach: SwEPA, Statistics Sweden

<u>Purpose</u>: to enhance the management and maintenance of the National GHG Inventory and to be able to regularly produce a GHG inventory; maintain the institutional arrangements that will be set-up and by this also enhance the institutional memory.

Key achievements and insights:

The projects application has been created by Uganda with the vision that inventory and data management systems are critical for developing and regular updating of national greenhouse gas (GHG) inventories that, in turn, are foundational to national and international GHG mitigation efforts. It went on well from the start of the SISC programme and even during the beginning of the COVID-19 pandemic.

Despite these achievements the project started to have issues with the new project leader who joined the project after COVID-19 and who requested monetary compensation for himself as project leader at CCD. This setup was not possible for SISC programme and therefore the project was terminated.

The project didn't manage to have physical seminars according to the plan because of COVID-19 shut-down.

As long as the first project leader was in charge, the project was considered to be successful because CCD has undergone a significant learning process.

Outcome 1:	Outcome 2:	Outcome 3:
Enhanced production and analysis of reliable data by partner organisations to inform further strengthened national/subnational/local climate action.	Improved transparency practices and promotion by partner organisations to make data available and accessible.	Better coordinated and integrated approaches established by partner organisations to ensure effective use of climate related data to operationalise climate actions in respective country.
SISC project provided the overview of the importance of national procedures and timetables to produce a regular GHG inventory. The aim of this overview was to	SISC provided webinar series on "How to calculate GHG emissions and removals according to reporting guidelines under the climate convention and by IPCC	SISC provided webinar series on Quality Assurance/Quality Control in the national GHG-emissions and removals. These three webinars provided guidance for a

strengthen CCD:s knowledge in planning and to give incentives for their own activities. This helped the partner organization to understand what is meant by institutional arrangements in decision 18/CMA.1 part II of National inventory report of anthropogenic emissions by sources and removals by sinks.

methodology handbook". The main purpose of the webinar series was to increase the participants knowledge in IPCC methodologies and on how to calculate estimates of GHG-emissions and removals in accordance with IPCC guidelines within Uganda context and by that to support their role as CCD. SISC arranged webinars for all five sectors: Energy (stationary and mobile), Industrial Processes and Product Use (IPPU), Agriculture, LULUCF and Waste. For agriculture, CCD asked for three webinars since since this is, except for energy sector, the sector with the highest emissions in Uganda. Sida Climate lab also got involved in the agriculture sector and GHG emissions and removals.

SISC did encourage CCD to release the outcome in the Ugandan GHG inventory in a press release.

Quality Assurance/Quality Control (QA/QC)-plan in according to IPCC 2006 and 2019 refinement guidelines. QA/QC of the GHG inventory is an important part since it provides information on the robustness and accuracy of the inventory.

Unfortunately, the project failed to implement and establish the QA/QC plan.

If the implementation of CCD QA/QCplan would function in the future – this will be a delivery of the project.

4.3. Kenya (CSUDP)

Project: Adaptive Settlement Planning for Catalytic local climate action

Timeframe: 2019-2024

Implementing organization: the Civil Society Urban Development Platform, CSUDP

Swedish coach: Boverket och BTH

<u>Purpose:</u> the project seeks to draw from pilots to improve the Adaptive Settlement Planning Model (ASPM), support the Kenyatta University curriculum on ASPM and inform the design of a potential regional programme.

Key achievements and insights:

The CSUDP, in cooperation with Kenyatta university and practitioners, has initiated the need of an integrated approach to planning in both practice and education. A partial integration of social planning approach to planning has been introduced in the educational curriculum at the Kenyatta university. Furthermore, Kenyatta university and BTH have fruitful exchange which aimed at the development of educational programmes and modules focusing on more integrated urban planning.

Knowledge and tools developed in cooperation with academics were adopted by the City of Nakuru. Based on the Adaptive Settlement Planning Model, ASPM, the social planning approach and tools adopted by the city include elements from Symbiocity planning model. The settlement planning model adopted by the city was disseminated at the annual Kenya Institute of Planners Conference.

Outcome 1:	Outcome 2:	Outcome 3:

Enhanced production and analysis of reliable data by partner organisations to inform further strengthened national/subnational/local climate action.	Improved transparency practices and promotion by partner organisations to make data available and accessible.	Better coordinated and integrated approaches established by partner organisations to ensure effective use of climate related data to operationalise climate actions in respective country.
		The project enhanced institutional and structural capacity for local adaptation of social planning culture in Kenya. It was done through the partial integration of the approach of social planning into the academic programming in Kenyatta University urban and regional planning. Draft outline of the Social Planning Curriculum presented to the Kenyatta University Curriculum Committee for the future usage.
		Improved tools for social planning are adopted by the Nakuru City as prepared by Kenya Meat Commission (KMC) informal settlement community. Plan handed over to and adopted by the Nakuru City Authority and incorporated in the Integrated Urban Development Plan – budget allocation made for 2024-2025 to address some of the priority interventions.

4.4. Kenya (Migori)

Project: Development and implementation of Migori County Climate Change Adaptation Plan

Timeframe: 2019-2024

<u>Implementing organization:</u> Migori County administration

Swedish coach: SMHI

<u>Purpose:</u> the project aims to determine county-level vulnerabilities against identified hazards to enhance long term resilience and adaptive capacity. By implementing a training-of-trainers on Climate Change Adaptation and Mitigation in Migori county, it develops and implements adaptation actions that cover the period up to 2028.

Key achievements and insights:

The County developed a climate change adaptation plan which means that now it is better prepared to respond to the challenges posed by climate change, such as extreme weather events. Conducting four 1-week training of trainer's seminars on climate change mitigation and adaptation ensured that the County is building capacity and empowering communities to take action. Migori has Established Climate Change Planning Committees in its' all 40 wards (sub-counties of Migori) and conducted multiple dissemination seminars about climate change mitigation and adaptation what ensured that these issues are prioritized and integrated into decision-making processes. Finally, by mainstreaming climate change into the County's development agendas, the County demonstrated a commitment to sustainable development and ensured that climate change considerations are taken into account in all aspects of planning and implementation.

These achievements are important for the country because they demonstrate a proactive approach to addressing the impacts of climate change.

Reasons of success:

- Migori project contrary to the other SISC projects was not aimed at national authorities but a small county far from the capital with clear willingness for international cooperation and much less bureaucratic hinders and hassles.
- The project design matched the Migori's Department of Environment objectives thus making it easier to implement.
- The county was conducting continuous virtual meetings and had a good use of Training of Trainers approach.
- SISC couches were assisted by locally procured experts and consultants (E-Cue Associate).
- Engagement of County leadership by the project leads was done successfully.
- Leveraging on County staff to cover the vast areas of the County for dissemination seminars also gave good results.

Additional achievement of the project are:

- Strengthening women's positions and status. Significant part of Climate Change Planning Committees consisted of women. Both female project leaders from Migori have been promoted in their jobs during SISC programme.
- Homa Bay County government has officially requested conduct of training on climate change mitigation and adaptation in Homa Bay County similar to the Migori project.

The project reached its logical end and has hopefully good sustainability, because officers of Migori's Department of Environment have received education to be trainers and all 40 wards of Migori established Climate Change planning Committees.

Outcome 1:	Outcome 2:	Outcome 3:
Enhanced production and analysis of reliable data by partner organisations to inform further strengthened national/subnational/local climate action.	Improved transparency practices and promotion by partner organisations to make data available and accessible.	Better coordinated and integrated approaches established by partner organisations to ensure effective use of climate related data to operationalise climate actions in respective country.

County's climate change adaptation plan
is developed and adopted. The plan
provides regulatory framework for
enhanced climate change interventions
beginning with data climate data
collection including impact, assessment,
response, mitigation and adaptation.
Migori county climate change Policy,
climate change act and climate change
fund and Guidelines for participatory
climate risk assessment are developed.
County's capacity on climate change
adaptation, mitigation and disaster risk
reduction is strengthening. All 40 wards
of Migori established Climate Change
Planning Committees. All members of
these committees (ca 600 people)
received training on climate change
adaptation and mitigation.

Climate change adaptation is integrated into Migori County development planning and budgetary processes though the acts on County climate change policy and climate change fund. Training of Trainers programme and coaching has facilitated this integration, as well as establishment of Ward Climate Change Planning Committees in all 40 wards of Migori. Stakeholder involvement in climate change adaptation and mitigation actions is enhanced.

Department of Environment drafted and completed the bills on Migori County climate change policy and climate change fund and made them to become Acts.

The concept of Training of Trainers is adopted by Migori Department of Environment.

Migori's Department of Environment and Department of Agriculture have come closer to each other with potential opportunity for more collaboration in the area of climate change adaptation, environment, disaster risk reduction, etc.

Results partially achieved regarding implementing of climate change adaptation plan since it is an ongoing process.

4.5. Moçambique

Project: Strengthening technical capacity of local institutions for tracking progress of mitigation and adaptation actions in Moçambique NDC.

Timeframe: 2019-2024

Implementing organization: University Eduardo Mondlane, faculty of Agronomy and

Forestry engineering

Swedish coach: SLU and SwEPA

<u>Purpose:</u> to improve communication on the need for NDC implementation with and between sector stakeholders; improve institutional arrangements and Quality Assurance/Quality Control on data for mitigation and adaptation; enhance implementation of the existing Monitoring, Reporting and Verification (MRV) system at different levels of implementation of NDC; improve capacity and institutional arrangement for establishing a Centre of Excellence in Climate Change at University Eduardo Mondlane (UEM).

Key achievements and insights:

A fundamental basis for a successful prioritising and implementation of policies and measures is to have control and access to reliable data. This project, in order to meet and reduce climate change is focusing on improving the partner countries transparency system (Monitoring, Reporting and Verification, MRV) that highly relevant for developing countries and also for contributing to the implementation of Agenda 2030 and the Paris agreement.

Success of the reported achievements was possible because the project leader and the close working group were aware of the existing gaps/limitation and had good skills to communicate with relevant stakeholders, this helped to adapt the planned activities.

Both Moçambiquean and Swedish partners were very flexible and had the skills to adapt during the project implementation to meet specific circumstances to implement the activities.

The project activities strengthened capacity in selected areas. However, significant results were achieved by creating awareness in existing gaps/limitations in coordination and analysis and proposed some remediation. Participants achieved a better understanding on the need of putting in place measures for improving quality of the NDC related activities

The project objectives, constitution of working group (participating institutions) and approach to strengthen capacity in many of the existing gaps were relevant and well planned. However, the financial model used by SISC, that did not pay per diems and costs for activities such as data collection or planting trees, restricted the successfulness of project.

This does not mean that the model used by SISC is wrong but the acceptance of the model by some Moçambiquean institution was not sufficient. A typical good example that the model does work is the project in Rwanda with REMA

Outcome 1:	Outcome 2:	Outcome 3:
Enhanced production and analysis of reliable data by partner organisations to inform further strengthened national/subnational/local climate action.	Improved transparency practices and promotion by partner organisations to make data available and accessible.	Better coordinated and integrated approaches established by partner organisations to ensure effective use of climate related data to operationalise climate actions in respective country.
The project improved institutional arrangements and Quality Assurance/Quality Control on data for mitigation and adaptation. Specifically, it provided technical support to the data management unit responsible for Greenhouse Gas inventory – this knowledge was used during the preparation of Moçambique an GHG inventory 2019-2021.	The project enhanced implementation of the existing Monitoring, Reporting and Verification (MRV) system (including measurement) at different levels of implementation of NDC in Moçambique - the existing MRV systems was assessed and disseminated at the central level. 30 participants representing different NDC sectors jointly discussed and provided inputs to improved Moçambiquean MRV and Institutional arrangement.	Improved communication, awareness and understanding with and between sector stakeholders on the need for implementation of NDC was created and resulted in process of updating the MoU between the University Eduardo Mondlane (UEM) and Ministry of Land and Environment (MTA) to incorporate new adaptation collaboration needs.
		The collaboration between the Government and Academia has increased: government has endorsed the process of creation of the Center of Excellent in Climate Change and also closely collaborating during the implementation activities of the Center. One project was submitted to UNIDO, after the design training for bankable projects provided by SISC, and it was funded to implement adaptation action for subnational level.

4.6. Rwanda

Project: Strengthening Rwanda Environment Management Authority (REMA) capacity in reporting the Greenhouse gas inventory and emissions reduction from mitigation actions.

Timeframe: 2020-2024

Implementing organization: Rwanda Environment Management Authority

Swedish coach: SLU and SwEPA

<u>Purpose:</u> To increase national capacity to implement and report on NDC, including monitoring and evaluation of the progress of NDC implementation, Greenhouse Gas inventory, mainstreaming of NDC priorities in planning and budgeting frameworks and mobilizing resources for NDC implementation.

Key achievements and insights:

Regular and accurate data on national greenhouse emissions are essential for taking action to reduce emissions. Rwanda Environment Management Authority (REMA) is responsible for the production of Rwanda's greenhouse gas inventory (GHGI). However, the actual calculations are currently performed by short-term consultants contracted by REMA.

During the project planning phase, REMA emphasized the need for training, to independently compile and calculate the GHG inventory across all IPCC sectors, reducing dependence on consultants in the future. Furthermore, even with consultants currently performing the inventory work, REMA would benefit from improved knowledge in setting the requirements for the consultants and conducting quality control and assurance on the delivered material.

The requested trainings on compilation and calculation of GHG were delivered to REMA under the programme implementation. During the final stage of the project period, REMA sued their local consultants because they didn't deliver on time, which delayed some of the project activities. This situation highlighted the importance of timely deliveries and with the support from SISC reinforced REMA's role as the responsible authority, which is ultimately accountable for delays, even when caused by consultants. This situation strengthens REMA's capacity as the responsible authority for the GHG inventory, as well as its role as the contracting authority for procuring consultants.

During the implementation of the project, the Swedish coaches worked together with REMA to enhance the quality of the GHG inventory by supporting the development of an effective quality assurance and quality control system (QA/QC) for the inventory. The project further enhanced REMA's understanding of the IPCC methodology guidelines as well as the reporting guidelines under the Paris Agreement. As a result, the REMA team gained a better understanding of how to estimate GHG emissions for all the sectors and how to perform an effective quality assurance and quality control of the consultant's work. Thus, after the SISC project, REMA is better equipped to both perform QA/QC on the consultants' work, as well as independently commence producing the GHG inventory in the future.

Moreover, the SISC project supported REMA in developing national templates and procedures for GHG inventory quality control. This was critical for Rwanda because under the national arrangement, as referred to in the Paris Agreement, all countries need to have national arrangements with processes that will give reliability to the data produced.

Another effect of the SISC project was an improved cross-sectoral collaboration between REMA and key stakeholders in the energy and agriculture sectors. This collaboration helps address challenges related to data availability and quality by refining data collection processes and establishing mechanisms for future data access. As a result, ambiguities in activity data used for the inventory could be cleared up, leading to better emission estimates in the future.

The mentorship from the SISC project has played a crucial role in refining REMA's project activities and ensuring sustained progress. SISC has not only increased the REMA team's capacity but also provided strategic insights to help navigate project challenges.

Crucial part for cooperation with REMA was MoU between REMA and SISC, REMA couldn't start working without signing it. This MoU unleashed possibilities for REMA to allocate resources for:

- Physical Workshops: intensive sessions for hands-on learning.
- Remote Webinars: Continuous learning and progress tracking post-workshop.
- Remote support: Review of report by expert and get feedback

Outcome 1: Outcome 2: Outcome 3: Enhanced production and Improved transparency Better coordinated and analysis of reliable data by **practices** and promotion by integrated approaches partner organisations to partner organisations to make established by partner data available and accessible. inform further strengthened organisations to ensure effective national/subnational/local use of climate related data to climate action. operationalise climate actions in respective country. SISC supported the validation of SISC supported the establishment of The improvement of the knowledge and skills Rwanda's latest GHG inventory. The standardized national templates and of national experts in assessing and quantifying GHG emissions should lead to inventory was developed by external procedures for GHG inventory consultants and was in its validation management. This ensures consistency, more robust data for national GHG stage during the SISC project period. transparency, and accuracy in data inventories, which supports more informed SISC also supported REMA in collection, reporting, and verification. climate change mitigation and adaptation establishing standardized national planning. templates and procedures for Moreover, SISC supported REMA's development of Rwanda's first Biennial sustainable GHG inventory SISC also supported REMA by sharing best management, aiming to identify and Transparency Report (BTR). When practices to implement project plans with correct gaps and errors in the GHG published under the Paris Agreement, this timetables for all processes, particularly regarding the quality assurance and quality inventory. report will enhance the transparency of Rwanda's mitigation and adaptation control (QA/QC) procedures for compiling a The Swedish coaches contributed to practices. This in combination with the GHG inventory. Plans and timetables enhanced accuracy of greenhouse gas support to enhance the accuracy of the involving partners and organisations that emissions estimates in the agriculture, REMA collaborates with were produced greenhouse gas emissions estimates, will forestry, and other land use (AFOLU), during the project and will guide future efforts. improve the accountability of the energy, industrial processes and country's environmental efforts. product use (IPPU), and waste sectors. Finally, the SISC project promoted stronger collaboration with key stakeholders in the energy and agriculture sectors who became involved in cross-sectoral collaboration and data integration after the workshops on these sectors. SISC enhanced the accuracy and reliability of the greenhouse gas inventory by:

- Supporting the development of a quality assurance and quality control (QA & QC) plan for Rwanda, along with a quality assurance checklist.
- Enhancing REMA's staff knowledge on how to estimate GHG emissions based on the IPCC guidelines. Regarding the two most significant sectors in Rwanda, the Energy and the Agriculture sector, this was done in depth during multiday workshops. This resulted in an improved ability of REMA's staff to find errors and identify gaps in the GHG inventory.
- Developing capacity at REMA in carrying out uncertainty and key category analysis of the GHG inventory. This knowledge can be used to identify emission categories most in need of improvement to effectively enhance the complete GHG inventory.
- SISC assisted REMA to take control over the inventory process (reducing dependency on consultants) and the calculations of the GHG inventory by enhancing their knowledge on the requirement for activity data, emissions factors and quality assurance and quality control to be able to compile the GHG inventory.
- Sharing information with national experts on the use and function of the Common Reporting Tables (CRT) format, which is the internationally recognized standard for reporting greenhouse gas emissions.

4.7. Ethiopia

Project: Trends of Ambient Air pollution in the perspective of climate change in Addis Ababa city.

Timeframe: 2019-2021.

<u>Implementing organization</u>: National Meteorological Agency Ethiopia.

Swedish coach: SMHI

<u>Purpose:</u> Provide information on the relationship between urbanisation and industrialisation in the city of Addis Ababa and the city's air pollution - to measure and assess the gaseous and particle pollutant concentration of the atmosphere in Addis Ababa city and publish the results from the analysis.

Key achievements and insights:

The work proceeded according to the plan and gave results already in the second year of the SISC project. It is worth mentioning that Tofikk Redi (project leader from National Meteorological Agency) was much engaged to the project, ready to communicate and eager to learn from SMHI's experts. However, COVID-19 pandemic that caused the end of office-work prevented continuation of the progress and in particular arranging dissemination seminars. Lack of internet access at home-offices in Addis Ababa made communication with Sweden almost impossible.

Outcome 1:	Outcome 2:	Outcome 3:
Enhanced production and analysis of reliable data by partner organisations to inform further strengthened national/subnational/local climate action.	Improved transparency practices and promotion by partner organisations to make data available and accessible.	Better coordinated and integrated approaches established by partner organisations to ensure effective use of climate related data to operationalise climate actions in respective country.
Relevant documents and literature were collected and analysed in 2020. The study of air pollution in Addis Ababa showed that in average the levels of air pollutants were above the limits put by WHO and US EPA. A seasonal variation was found with the maximum air pollution occurring during summer (June - September). The highest air pollution was found in central parts of Addis Ababa. The reports pointed to transport sector as the main source of pollution. The data will hopefully encourage the responsible authorities to take actions to reduce air pollution in Addis Ababa, which means a reduction in old polluting cars and industries.	The results of the undertaken investigation and literature review were published in 2 reports in Global Scientific Journals GSJ: Volume 8, Issue 5. The project leader was provided the air quality data for central Ethiopia. The data was downloaded from Copernicus Atmosphere Monitoring Service site by SMHI.	Another governmental agency, the Ethiopia Environmental Protection Agency became involved in the project. Copies of the study have been sent to Environmental Protection Agency, Ministry of Health and Ministry of Environment, Forest and Climate Change.
	The project supposed to disseminate produced information via dissemination seminars however it was not possible due to COVID-19 restrictions.	

5. How SISC affected the countries we worked with

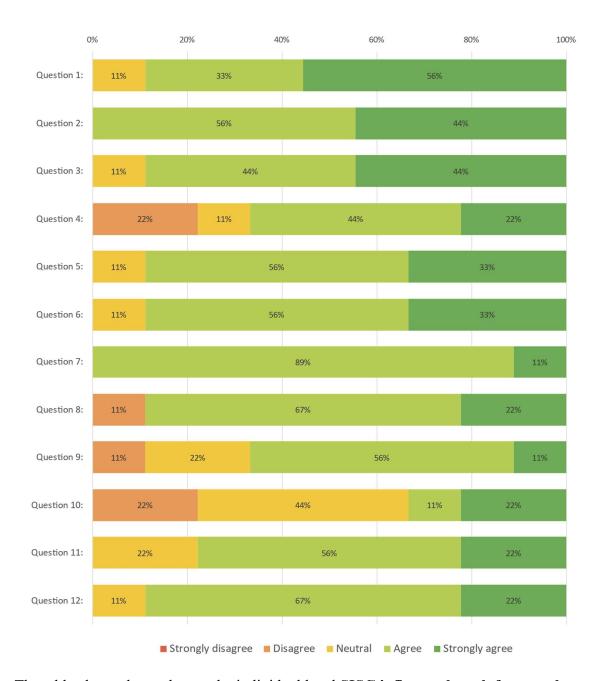
The SISC programme sent out a survey before the final workshop to the participants of the projects that were finalized in 2024. The purpose of the survey was to capture additional input from the projects on contributions to the final SISC programme report regarding its expected results. All the 6 projects that were present on the final workshop have answered the survey. Ethiopia and one project from Uganda, that was terminated couple of years ago, were not present on the workshop since their contact persons have been changed or left the organisations.

Questions were asked about change at the individual, organisational and institutional levels and whether this change was due to the SISC programme. The survey was sent to two participants in each project that stayed in the SISC programme until September 2024. Responses were received from the entities below.

Mocambique	Eduardo Mondlane University
Zimbabwe	Department of Spatial Planning and Development
Kenya	Civil Society Urban Development Platform
Uganda	Makerere University, Centre for Climate Change Research and Innovations
Zimbabwe	University of Zimbabwe
Uganda	Ministry of Lands, Housing and Urban Development
Rwanda	Rwanda Environment Management Authority
Kenya	County Government of Migori Department of Environment
Kenya	Department of Environment, Natural Resources, Climate Change and Disaster Management

Below are the responses from the respondents regarding whether they agree or disagree that the SISC influenced change. The majority of the respondents believe SISC contributed to a greater focus on climate issues, both individually, organizationally and at the institutional level.

- Q1: My work responsibilities, after joining SISC, have a stronger focus on climate related education, data production / promotion / use.
- Q2: After joining SISC, I spend more working time on raising awareness about or seeking support for the application of good practice for climate related education, data production / promotion / use.
- Q3: Compared with three-five years ago, my department/unit has a clearer idea about the potential benefits to our own organisation of promoting and/or improving practices related to climate related education, data production, promotion or use.
- Q4: Compared with three-five years ago, my department/unit address climate change more often by allocating more financial and/or human resources to climate related education, data production, promotion or use.
- Q5: The SISC project has had an influence on my overall organisation/agency or department/unit's work addressing climate change, climate related education, data production, promotion or use.
- Q6: The SISC has led to positive changes in my organisation? If yes, which?
- Q7: Compared with three-five years ago, my department/unit collaborates more with other sector agencies or organsations in our work around climate related education, data production, promotion or use.
- Q8: The SISC project has had an influence on your overall organisation/agency or department/unit's collaboration with other sector agencies or organisations around climate related data production, promotion or use
- Q9: The SISC project has contributed to changes in the national level, regional level, or sectoral regulatory framework, concerning climate related education, data production, promotion or use.
- Q10: The SISC project has contributed to the development and revision of guidelines or guidance (nationally, on regional level or at sector level) related to climate change adaptation and mitigation.
- Q11: The SISC has contributed to the demand from national or regional agencies to apply improved practices related to climate related data production, promotion or use, towards implementation of NDCs.
- Q12: The SISC project has contributed to the routines and practices around climate change adaptation and mitigation, towards implementation of NDCs.



The table above shows that on the individual level SISC influenced work focus and knowledge on climate issues (Q1-Q2)

During the past three-five years, eight out of nine respondents say that their organisation or department or unit made changes in the organisational structure to support improved practices related to climate change adaptation and mitigation. These states that there is a clearer idea about the potential benefits of improving practices to climate issues. (Q3) The majority of the respondents also say there are more financial and human resources allocated to the area of work which the respondent credit SISC for. (Q4)

Eight out of nine answer that their organisation or department or unit has made changes in the organisational structure to support improved practices related to climate change adaptation and mitigation. Eight out of nine agrees that the SISC project has had an influence on their overall organisation or agency or department or unit's work addressing climate change, climate related education, data production, promotion

or use. (Q5) However, the participant from Eduardo Mondlane University in Moçambique answered that "the SISC project enabled them to improve engagement with sectors that we had no resources for supporting such logistics needed. The positives changes into the organization were limited as project could not support comprehensive actions at the University. Most of work is being financed through other partners". That the SISC project did not provide financial resources was for them the biggest challenge. Budgetary constraints were a challenge for several of the respondents¹. Most respondents agree that SISC has led to positive changes in their organisation. (Q6). For example, Civil Society Urban Development Platform, Kenya answers that "prior to weak link to our strategic pillar on climate change and community resilience has been strengthened significantly and now forms the leading pillar in our organisational work. Others say, "There has been talk on replication of the Harare project to other areas" and the respondent from Department of Environment, Natural Resources, Climate Change and Disaster Management in Kenya that the positive change is the use of organized structure in dissemination of climate action ToT and the WCCPCs (Ward Climate Change Planning Committees).

The survey indicates that over the past three to five years, there has been a **significant increase in collaboration** among various departments and agencies focused on climate-related education, data production, promotion, and usage. (Q7) This shift has been notably influenced by the SISC project, which has strengthened partnerships and improved coordination among stakeholders. (Q8)

For example, a representative from the University of Zimbabwe noted that there has been stronger collaboration with key players in urban development: "Compared to three to five years ago, the Faculty of Engineering and the Built Environment now collaborates more with the Environmental Management Agency, the Meteorological Office, and Harare." This representative also mentioned that SISC has helped establish clearer collaboration arrangements with Pilot Project stakeholders.

Additionally, a representative from the Department of Spatial Planning and Development in Zimbabwe highlighted that SISC has particularly enhanced collaboration with the environmental agency on wetlands mapping. The representative from Ministry of Lands, Housing and Urban Development in Uganda says SISC's working group meetings have fostered greater collaboration compared to three to five years ago. The participant from Rwanda Environment Management Authority says, there has been increased cooperation between the agriculture and energy sectors, with training provided through SISC being applied to improve emission data across institutions.

In summary, the survey demonstrates that the SISC project has significantly influenced collaboration among organizations, agencies, and departments working on climate-related issues.

The answers indicate, six out of nine, that the SISC project has contributed to changes in the national level, regional level, or sectoral regulatory framework. (Q9) For example, representative from Eduardo Mondlane University in Moçambique, stated that through SISC workshop in Victoria Falls, the Ministry of Environment learned from the experience of Kenya on climate act. Now there is a process of reviewing of environment policy to include climate change aspects. Kenya example was being captured as good practice where SISC enabled government to learn from. Through the trainings and

¹ more about financial issues can be found under §8 – Lessons learned

engagements, share of experiences, learning was being applied in several processes of Nationally Determined Contributions (NDCs) and Biennial Update Reports (BURs), which might have contributed to the changes.

In terms of the development or revision of guidelines related to climate change adaptation and mitigation, seven out of nine respondents indicated that **new guidelines have been produced** recently. Three out of seven agree that the SISC contributed to this. (Q10) For example the representative from the Department of Spatial Planning and Development in Zimbabwe answered that "amongst stakeholders consulted about climate change legislation are the partners in the project" and the representative from the County Government of Migori Department of Environment answered that the programme helped develop climate risk assessment guidelines.

Compared with three to five years ago, eight out of nine answered that there is an increasing demand from national or regional agencies to apply improved practices related to climate adaptation, promotion or use, towards implementation of NDCs. Seven out of these agree that SISC contributed to this. (Q11)

Compared with three to five years ago, eight out of nine answered that the **routines and practices** around climate related education, data production, promotion or use, **towards implementation of NDCs have improved** (nationally and or within my sector) and that the SISC project has contributed to this. (Q12) For example, the representative from the County Government of Migori Department of Environment says that a participatory approach has been adopted and the representative from Makerere University, Centre for Climate Change Research and Innovations says that the NDC targets now are well known, and all climate change action is aligned to NDC. All respondents agree or strongly agree to that after joining SISC, they spend more working time on **raising awareness** about or seeking support for the application of good practice for climate related education, data production or promotion or use.

In summary, the SISC programme significantly influenced results by facilitating structural changes in organizations, leading to enhanced climate practices and better resource allocation. Participants reported increased clarity on climate issues and notable improvements in collaboration among various departments and agencies. SISC's initiatives fostered partnerships, particularly in urban development and across different sectors. Additionally, SISC contributed to the development of new guidelines for climate adaptation and mitigation, while also prompting changes at national and regional levels. Overall, SISC has played a key role in promoting collaboration and strengthening climate action in the participating countries.

We would like to provide additional context regarding the SISC workshop in Victoria Falls in 2019, that was mentioned earlier in this section, which was discussed at the final SISC workshop as a significant turning point for many participants:

The workshop was organised by the SwEPA, Statistics Sweden and the Swedish Energy Agency with the kind assistance of the Ministry of Environment, Water and Climate in Zimbabwe and the University of Zimbabwe. The workshop targeted countries and organisations within the programme involved in the calculation of GHG emissions in both stationary and mobile energy as well as national energy statistics and nationally inventory arrangements.

One of the goals of the workshop was training in calculation of greenhouse gas emissions from the energy sector in accordance with the reporting guidelines under UNFCCC, the Paris agreement and with IPCC 2006 methodology guidelines.

The workshop wasn't just focusing on how to calculate emissions from the energy sector but also discussed activity data and delivery of data with good and accurate quality. SISC invited individuals working with the GHG inventory, people at the countries Statistical office and in some cases also persons working at the Ministry of Energy. SISC received a good mixture of people and responsibilities at the workshop.

Some years after the workshop SISC held a workshop in Sweden and one of the participants that had also been at the Victoria Falls workshop told that the group SISC team had invited from Zimbabwe still met and had a project together. The participant from Moçambique told us that the presentation of the national arrangements for the GHG inventory that was presented by Kenya had inspired the creation of national arrangements in Moçambique. Therefore, this workshop not only played significant role in training of the participants but also allowed to create a network, share experience and provide inspiration.

6. Sustainability and long term effects

The evaluation report for the SISC programme showed that the results of the implemented projects are likely to be high. SISC team decided to go deeper in this question and during the final workshop in September 2024, participants discussed what will happen when the programme ends. Key questions included whether things would revert to the way they were before the program, or the changes will last, what is needed to sustain those changes and what are the long-term effects of the programme's results?

This discussion showed that the programme has empowered participants with knowledge that is already influencing national policies and practices. For instance, a deeper understanding of greenhouse gas emissions is now being applied to enhance national climate reports. Additionally, the programme has fostered improved communication and collaboration among stakeholders, leading to a greater awareness of national circumstances. Social planning culture was embedded in informal settlement communities and impacted education at the tertiary level.

Some notable long-term impacts include the establishment of urban design guidelines, as well as the interest to replicate these guidelines in other cities and towns. Additionally, the programme has integrated climate change adaptation and mitigation actions into county planning and budgeting processes. This has in some cases led to a progressive adoption of climate-smart strategies, and to the promotion of the use of the ToT approach in other county projects. There is also an example (Kenya, Migori) that a legal framework has been developed to support climate change adaptation and mitigation.

All the participants of the final SISC workshop replied that the programme benefits will likely to continue after the programme ends, because of all the achievements mentioned above.

However, it is also said that certain factors could threaten the sustainability of these results, such as wrong political decisions and crises, financial challenges, and staff turnover, which may lead to a loss of institutional memory.

To ensure continued progress, it is essential to maintain engagement and networking through various means. Suggestions include creating interactive platforms, establishing

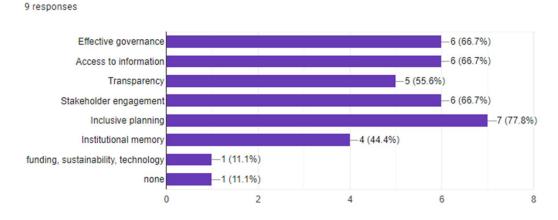
agreements among relevant stakeholders, fostering political will, and ensuring budgetary allocations.

7. Cross-cutting issues

The evaluation report of the programme stated that the cross-cutting issues (Gender, Biodiversity, Anti-corruption and Human Rights) of the programme were addressed weakly. However, during the preparation of the programme in 2018 above mentioned cross-cutting issues were not planned to be addressed in the programme. The issues that were addressed in the SISC programme were:

- Effective Governance
- Inclusive planning
- Transparency
- Stakeholder engagement
- Institutional memory and
- Access to information

In the SISC survey the nine respondents answered that the following cross cutting issues were raised during the implementation of the SISC programme:



During the final workshop of the programme that took place in September 2024, participants were asked to discuss what expected and unexpected results they reached in their projects withing listed cross-cutting issues. Below comes the summary of these exercise.

Effective Governance

The expected results of effective governance included the acceptance and active participation of local governance structures, the existence of relevant policies and laws related to the project, political goodwill, inclusivity, and collaboration among stakeholders. Additionally, there was a focus on raising awareness through credible data to support informed decision-making and transparent governance. Unexpected results included staff transfers, the project's influence on policy changes in Zimbabwe (by created guidelines), the provision of leadership and space by the University of Zimbabwe, reduced involvement from some high-level government structures (that supposed to be involved but didn't have a will), and partial co-funding.

Inclusive Planning

In terms of inclusive planning, the expected outcomes included the engagement of institutions in Kenya, Uganda, and Zimbabwe, the involvement of civil society, local experts and consultants, participation from all levels of target groups, buy-in/consensus among relevant stakeholders, and the inclusion of relevant stakeholders. Unexpected results included involvement of BTH on a later stage of SISC programme implementation (that wasn't originally planned but benefited a lot to the programme), participation and involvement from the embassy despite not being part of the original design in Zimbabwe, the entry of new agencies and organizations, and varying levels of responsiveness.

Transparency

For transparency, the expected results included the development of an implementation plan, conducted project activities, sharing information about the project, and ensuring project synergy with ongoing similar initiatives. Dissemination seminars spread knowledge on climate change adaptation to villagers all over Migori County. Result-based management of the project in some cases helped to promote transparency. Unexpected challenges arose from bureaucratic hindrances in some projects. In another project, the lack of barriers was an unexpected bonus. Another unexpected bonus was that some agencies did not require payment for data as it was originally expected (Zimbabwe).

Stakeholder Engagement

The expected results were stakeholders' engagement from the cities of Harare, Kampala, and the Migori County. Other expected results were active participation and mobilization of stakeholders, a clear feedback-loop, that target groups would be happy to engage, and a clear mapping of stakeholders and strategy for their engagement. Unexpected challenges in some projects included demands from stakeholders for expense reimbursement (Zimbabwe), disinterest from a major partner (in one project), and cultural or belief-related unwillingness to participate.

Institutional Memory

The expected results related to institutional memory included the adoption of project results in institutional plans, an accessible data storage platform, documentation of findings and gaps, and historical data in the Department of Spatial Planning in Zimbabwe; mainstreaming of climate change as well as adoption of the Training of Trainers concept as an effective approach to reach grassroots communities in Migori County. Additional expected results were the existence of reports, laws, and experiences at the institutional level, a situation analysis of urban design guidelines, guidelines for climate change strategies, and cooperation and communication. Unexpected results included departmental coordination, demand for education on climate change issues, integration in the conventional development plans, overachievement in relation to the number of beneficiaries, and the adoption of social planning aspects in Nakuru City and Kenyatta University.

Access to Information

The expected results for access to information included periodic progress reports on project implementation, accessibility of information for all levels of government, capturing both scientific and indigenous knowledge on climate change, and addressing

potential barriers to information access. Access to the SMHI Climate Information Portal was also anticipated. Unexpected results included feedback being integrated into a higher-level institutional database, sharing information among regional partners, that over 600 participants receiving information, receiving information free of charge, and continued access to the SMHI information portal. Another unexpected result was use of SMHI Climate Information Portal by the local consultant (E-Cue Associate) in an environmental impact assessment for Technopolis, a large technology hub to be built in the outskirts of Machakos, Kenya.

Despite the list of cross-cutting issues targeted in the SISC programme, **Gender balance and equality** were actively addressed in Migori when selecting participants for Training of Trainers and members of Climate Change Planning Committees. Strengthening women's positions and status was addressed. An unexpected result was that both female project leaders of Migori were promoted in their jobs during SISC programme.

8. Lessons learned

8.1. Swedish Authorities and SISC management

a) Per diems and staff funding issues should be discussed clearly in advance.

The programme's structure presented challenges in covering all expenses for participants/ distributing per diems, mostly because it was unfeasible to provide it for participants that were participating in local or regional workshops in Afrika. This limitation often led to continuous discussions and practical issues for coaches tasked with managing these arrangements. In several projects questions arose regarding the compensation for local staff involved in project activities. As many of these individuals were already employed by local authorities or institutions, concerns were raised from the Swedish side about potential conflicts of interest. While the programme explored alternative solutions, such as providing all the meals to participants, the complexities of international per diem distribution and local staff compensation proved challenging. The situation with the payment for the local staff, already employed in institutions, was considered unsuitable and therefore no such arrangements were done. In some cases, the refusal from the Swedish side to provide additional compensation to local staff, who were already employed by institutions, unfortunately led to the termination of projects. Thus, choosing the right projects, strong local ownership and clear communication on the financing issues as well as updating on this issue any new team member is crucial.

b) Administrative tasks such as taking care of all the logistics should be discussed in advance.

The SISC programme held various workshops during its implementation, sometimes for one country, sometimes on a regional basis. Organizing these workshops required considerable time and effort for bookings accommodations and transportations. Throughout the implementation of the SISC programme, this issue arouse several times and caused back-and-forth discussions between programme managers and coaches. For programme managers it was difficult to manage because they had never been in the

area/or country of the workshop and hadn't met the participants, making it hard to arrange things without clear understanding of what is needed or suitable. Meanwhile for coaches this issue caused distractions and took them away from their main role as coaches and experts.

c) Be clear about expectations and requirements during the projects' initiation.

When the preparatory work for the programme started in 2018, and with its subsequent launch in 2019, it was agreed that the partner organisations should provide a project or a project idea that was in line with already on-going initiatives and of high relevance for the organisation in question. This was coupled with further assumptions e.g. that the project participants were mandated to put in necessary working hours for the project, that the project targeted a critical mass in the organisation, and that relevant stakeholder groups were to be engaged. This agreement and assumptions have worked well in some projects. However, in other projects, this has been a challenge. As a result, numerous projects were excluded during 2020-2021 due to lack of required resources, communication and deliveries.

d) Consistent and stable project management as well as limited staff turnover is crucial for the complex programmes such as SISC

SISC programme has been significantly affected by change of programme management and stuff turnover. This didn't allow to release the entire potential of the programme and reach maximum possible results, since during the change of the team members and handling over time, the momentum can be lost and not all the previous learned lessons, established way of work and relationships were entirely following the programme further. Change of staff is a crucial factor, however, can be hard to control.

e) Evaluation, if done, should be done properly and allow a possibility for discussion and deeper diving into the programme implementation

The SISC programme underwent a formal evaluation during the pre-last year of its implementation. The evaluation aimed to: evaluate the innovative approached used by the implementing partners and the internal cooperation between the implementing partners; evaluate the effectiveness of the cooperation between the implementing partners and the partner institutions to determine how well the programme reached its desired results; identify key lessons learned. While the evaluation provided a valuable opportunity for reflection and learning, some concerns were raised regarding the quality of the draft report and its final version. Certain statements lacked sufficient supporting evidence, leading to doubts about their accuracy. Additionally, the planned discussion workshop, intended to address questions and clarify findings, was not conducted by the consulting firm. The SISC programme team actively engaged with the evaluation process, providing detailed comments and questions through the designated matrix. However, some of these inputs were not fully addressed or adequately incorporated into the final evaluation report. This oversight limited the opportunity for a comprehensive and nuanced assessment of the programme's impact.

8.2. Partners

At the final workshop, partners from 6 finalizing projects were asked to share valuable insights from the "Lessons learned" exercise. The highlights of their learning are presented below.

a) A proactive approach to stakeholder engagement and strategic planning is essential.

A comprehensive analysis of stakeholders at the beginning of the process, coupled with meticulous planning, is essential. This approach ensures thorough stakeholder engagement, formalizes the analysis process, and secures appropriate budget support. Effective planning is crucial for designing work plans with realistic activity schedules and timelines. Several projects highlighted the importance of this issue. Some projects identified gaps where not all stakeholders were recognized during the project planning phase, or their involvement was not formalized. Additionally, there was potential to engage other stakeholders who were more willing and open to cooperation. This underscored the need for more thorough stakeholder mapping and analysis to select appropriate partners during project design.

In cases where key stakeholders were involved, their participation significantly facilitated the process and advanced the project at various levels.

b) Thorough discussion on financial resources, such as availability of fundings for local partners, at the beginning of the projects should be done.

Some projects have experienced lack of engagement connected to the lack of financial support locally. This issue was not properly discussed during the initiation phase and caused some drop offs of the projects and reoccurring discussions during the implementation. The absence of proper financial planning in advance caused stress and uncertainty throughout the project execution.

c) Understanding on the early stages of best practices and approaches are crucial for existing and future cooperations.

Projects have identified most effective practices that worked well for their countries and that was their positive lesson learned. Uganda and Zimbabwe stated that multistakeholder approach or involvement of key stakeholders worked best for them. For Uganda a capacity needs assessment was essential for forming training design and strategy as well as a training manual. For Kenya (CSUDP) trust and political buy-in became a foundation of the long-lasting relationships that raised from the project. It also helped them to set the stage for the project legacy and lasting memory. For Kenya (Migori) and Rwanda, the Training of Trainers approach and collaboration with coaches remotely helped to fast track the progress and deal with COVID-19 without major losses. Deeper regional cooperation for deeper learning and experience sharing was also mentioned as best practice for several countries. By understanding and applying these approaches that work best on the early stages of the projects helped participants to reach their results and reach the finish line of the programme, in comparison to some other projects.

d) Learning from each other should continue.

Participants would like to continue with regional approaches and continuous sharing of information and experiences via networking. The final workshop provided an invaluable opportunity for participants to reconnect, establish new connections, and gain deeper insights into each other's projects. During the workshop, participants discussed the

potential development of an online platform to facilitate ongoing lessons learned and exchange programs. The absence of a dedicated SISC website was also a topic for discussion, with many participants expressing regret that it had not been established.

8.3. Effectiveness in connection to five principles for capacity development

Sida has developed 5 principles for capacity development: 1) the locally driven change process is the foundation of institutional development, 2) a systems approach is required for collaboration between actors, 3) politically conscious capacity development that considers how power relations affect implementation, 4) broad competencies are needed for change, that is, holistic capacity development that builds capabilities beyond technical expertise, 5) an adaptive and long-term approach is required to solve development challenges over time. SISC programme related to it in various grades but one of the most crucial principles was locally driven change.

1) The locally driven change process is the foundation of institutional development:

The SISC programme fully embraced and implemented this principle. It was crucial for implementation and sustainability of the projects. In fact those projects that were not selected for continuation or didn't reach valid project plan were also the projects with least local ownership. The principle played a significant role for selection of robust projects that could produce results even after the end of the programme. This strong local ownership in project design and planning was a key factor in the sustainability of the successful projects.

2) A systematic approach is required for collaboration between actors:

The SISC programme was implemented through a consortium of multiple Swedish authorities (SwEPA, SLU, SMHI, SCB, STEM, Boverket, BTH) who contributed with their diverse expertise to respond to systemic needs in the area of climate adaptation and mitigation. The programme also facilitated collaboration within partner countries, involving various governmental and academic institutions. Regional workshops were organized for experience exchange among participating countries. The survey results indicated a significant increase in collaboration among various departments and agencies focused on climate-related issues, often influenced by the SISC programme. During the SISC final workshop a systematic approach was mentioned as one of the factors that need to be in place for ability to drive the projects in general and results further. Without it a lot of time and efforts are spent for establishing this approach.

3) Politically conscious capacity development that considers how power relations affect implementation:

This principle showed its importance during the final workshop task on the expected and unexpected results. The projects where the capacity development was politically conscious received several positive unexpected results such as free delivery of data, active participation and endorsement of the project activities, faster adoption projects result in the institutional plans and pipelines, and partial cofunding. The projects that had lower political consciousness faced bureaucratic hindrance, lack of leadership, less involvement of high level of government

structures, low responsiveness of different levels, dis-interest of major partners. This principle is strongly corelated with principle nr 1.

4) Broad competencies are needed for change, that is, holistic capacity development that builds capabilities beyond technical expertise:

The SISC programme aimed to strengthen not only technical skills (e.g., GHG inventory calculation) but also institutional arrangements, transparency practices, and coordination. The three simultaneous lines of action (regional workshops, distance coaching, and coaching on specific projects) aimed to provide diverse learning and support mechanisms. The inclusion of urban sustainability as a parallel track indicates an understanding of the broader context of climate action.

SISC programme is one of the few if not the only programme that Swedish EPA implemented with 5 other authorities that had broad competence required for the programme implementation. Despite its visible benefits of including broad competencies in the programme, it turned to be a rather complex task to manage this number of authorities and competences. However, with years of the programme it became smoother. As a note for the future programmes, it can be recommended to involve broad competence and various actors only for long-lasting programmes and projects where the cooperation ways could be built over the years.

5) An adaptive and long-term approach is required to solve development challenges over time:

The SISC programme, with its implementation period of 2019-2024, represents a long-term engagement. The programme adapted to the challenges posed by the COVID-19 pandemic by shifting to remote work and virtual tools. The coaching approach provided flexibility during these challenging times. Besides, systematic change as well as local ownership and participation takes time to cultivate that is why long-term approach is required and can contribute to sustainability of the results. Discontinuity of the project at the nascent stage may cause redirection of the capacities built, resources mobilized and priorities of action to other work areas.

All these principles are crucial for implementation of capacity development programmes and projects. SISC programme tried to implement all of them.

In summary, the SISC programme demonstrated effectiveness in reaching results with the allocated resources, particularly in projects with strong local ownership and engagement. It aligns well with Sida's principles by fostering locally driven change, promoting collaboration through a systems approach, aiming to influence policy, building broad competencies, and adopting a long-term perspective while adapting to challenges. However, the programme also faced challenges related to financial expectations, staff turnover, and varying levels of political will, which highlight the complexities of capacity development in this context.

9. Conclusions

The SISC programme was initiated as a pilot programme. SwEPA, along with other Swedish authorities had never previously participated in a programme involving such a diverse array of Swedish authorities. The rationale behind this pilot programme was to address the complex nature of climate issues, the Paris Agreement and Nationally Determined Contributions (NDC) reporting. These challenges necessitate a collaborative approach involving various authorities and institutions working in unison to achieve these objectives. Consequently, one of the purposes of the program was to evaluate the practical implementation of this integrated approach and to determine whether similar methodologies should be adopted in future initiatives or not.

Managing a programme with multiple countries and involving numerous Swedish authorities proved to be complex. It was challenging for the managing authority, the SwEPA, to fully grasp the knowledge and expertise of all the authorities, which made it challenging to analyse their contributions and guide the programme with a unified vision. The occurred changes in programme management at SwEPA also had an impact on the situation.

Significantly fewer projects were carried out during the programme's implementation compared to the original number of projects applied (8 implemented out of 18 applied). The main reasons for the discontinuation of a large number of change projects at early stages of their implementation were a combination of lack of engagement or resources from the countries for the project in question combined with an unwillingness to conduct the projects without ensured per diems and COVID-19 during which several contacts were lost. The projects that overcame these challenges were successful and demonstrated good ownership, engagement and viability. The sustainability of the implemented projects can be assessed as "high," as noted in the programme evaluation report. A primary factor contributing to this high level of sustainability is the strong ownership demonstrated by local institutions and organizations. These entities were fully responsible for preparing project applications and planning activities, thereby enabling them to actively shape initiatives that aligned with their own goals and were integrated into national processes. Furthermore, the involved authorities took the lead in implementation, while Swedish authorities provided guidance and coaching support. Also, the Training of Trainer's concept was an efficient method significantly increasing the coverage of the project that applied this concept and strengthened the local partners' ownership and confidence. The evaluation is also providing additional information regarding the achieved results as well as recommendations for the possible future programmes.

When the programme started in 2019, it was agreed that the partner organisations should provide a project or a project idea that was in line with already on-going initiatives and of high relevance for the organisation in question. This was coupled with further assumptions e.g. that the project participants were mandated to put in necessary working hours for the project, that the project targeted a critical mass in the organisation, and that relevant stakeholder groups were to be engaged. This agreement and assumptions have worked well in some projects, but not in all. However, in the projects where it worked well and the assumption proved correct, they became very successful and sustainable because they were well anchored in the partner country. This approach should be used in further cooperations to ensure sustainability and quality.

The SISC programme has been an important part of SwEPA's international development assistance cooperation representing the only development cooperation programme with a main focus on climate, drawing on SwEPA's role as a central environment government agency in charge of implementing Sweden's climate policy through contributing knowledge and climate information, developing policy instruments and implementing necessary measures and supporting the government in the UNFCCC negotiations. The SISC programme has complemented SwEPA's climate-related cooperation and knowledge exchange with strategic partner countries such as United States and Canada (strategic cooperation, not development assistance). The programme has represented a good example of cooperation to deliver support to developing countries together with other Swedish government agencies engaged in the Swedish consortium for environmental emission data (SMED), notably Statistics Sweden, SMHI, and the Swedish Agricultural University (SLU). In summary, the SISC programme has provided valuable experiences to guide SwEPA's engagement in climate cooperation in the future in both countries prioritised for Swedish development assistance, countries strategic for global environmental cooperation in ways that effectively build upon SwEPA's and Sweden's added value while responding to needs of partner countries and priorities of the Swedish Government as new demands arise in relation to global climate commitments. Right now, SwEPA is exploring priority areas for international cooperation in the area of climate, considering both opportunities from cooperation with countries of strategic priority for global climate work, and aid-cooperation. The SISC programme played a big role as a learning model for the development of new areas of cooperation.

Appendix 1: Projects overview over the years

№	Country		Project status	
	ZIMBABWE			
1	Project 1	Localization and Implementation of the Green Star Rating Tool in Zimbabwe	Terminated in 2021 since the project	
	Organisation	The Green Building Council of Zimbabwe (GBCZ)	managers were not reachable.	
	Description	The project aimed to introduce the Green Star Africa certification system to Zimbabwe. The Green Star rating tool is a comprehensive tool that provides a holistic approach to managing the environmental impact of buildings. It includes, for example, energy, water usage, waste management and land use.		
		Awareness raising about sustainability issues in the building/real estate business was a key part of the project.		
		Legislation regarding building and construction is weak and fragmented in Zimbabwe, so an indirect objective of the project was to strengthen and develop this legislation.		
	Motivation	The project has great potential to strengthen sustainability in the building business. The green Building Council of Zimbabwe is a NGO, but they have good relations to the government.		
2	Project 2	Understanding the Interplay between Mobility, Climate Change and Design in Search of Urban Resilience Solutions in Harare	Achieved its goals and completed in 2024.	
	Organisation	The Department of Rural and Urban Planning, University of Zimbabwe		
	Description	The project had three major parts: 1) to make a survey of the traffic situation in Harare, 2) carry out an opinion poll aimed at clarifying Harare inhabitants' views on the traffic situation, and 3) using the results from the two surveys to enhance the urban design process in Harare.		
	Motivation	Harare, as many other African cities, has an un-controlled and rapidly growing traffic situation. This, in combination with the strong urbanization in the country, makes the project very relevant. If successful, it might not only help Harare, but maybe also other countries/cities.		
		UGANDA		
3	Project 1	Addresses Planning Challenges to Achieve Sustainable Development – doesn't exist in 2019 report	This project has never went further than	
	Organisation	The Ministry of Lands, Housing and Urban Development	application stage.	
	Description	The major objective of this project was to equip physical planners in practice with appropriate strategies for achieving sustainable urbanisation within the next three years. Specifically, the project was supposed to 1) Develop and implement new urban reforms to accelerate sustainable development in two selected urban centres in Uganda. 2) Monitor and evaluate strategies for sustainable urban development in two selected urban councils.		
	Motivation	There is a need of tailormade training and capacity building of physical planners in Uganda. Planners on local level need ready messages in order to present challenges and solutions and make		

		planning relevant to relevant stakeholders. The project could be a way of communicating results from other change projects.		
4	Project 2	Increasing green cover in Makindye Ssabagabo municipality	Terminated in 2021 since the project leader became sick and nobody replaced him due to a lack of institutional support. The project stopped running mid-2020.	
	Organisation	The Ministry of Lands, Housing and Urban Development		
	Description	The project seeked to improve the local environment through work with awareness raising among different groups as well as the public concerning ecosystem services and planting trees and enhance green cover.		
	Motivation	As urbanization is increasing, urban areas face environmental problems such as poor air and water quality as well as floods during the raining seasons. Working with ecosystem services and increasing the tree cover is a sustainable way of dealing with problems and at the same time achieve multiple benefits such as amenity and recreation. The project is small but could serve as a pilot case within the whole programme.		
5	Project 3	Disaster Risk Reduction and Responsiveness: Making use of Geographical Infomation System (GIS) to effectively plan for landslide prone areas of Bududa District	The project participated in the two regional workshops in 2019,	
	Organisation	The Ministry of Lands, Housing and Urban Development	however no project plan was submitted so the	
	Description	This project aimed at developing GIS applications to support sustainable urbanisation planning and address the direct impact of climate change in the district. The main outcome to identify areas with potential risks for landslide and floods under changing climatic conditions, this information will be very relevant for the planning of human settlements and their protection to natural disasters.	project was terminated.	
	Motivation	Bududa District is among the landslide and flood prone districts in the country. Landslides and floods have occurred over the years leaving behind imaginable traces of environment, property and life destructions in the areas. Despite these facts, the district faces a rapid urbanisation and increasing human population. Some attempts have been made to address these challenges, but GIS applications have never been tried. Ones the system is created will facilitate spatial decision making and analysis of the specific location.		
6	Project 4	Implementation of Physical Development Plans	Merged with project 5	
	Organisation	The Ministry of Lands, Housing and Urban Development	and 9 in 2021 and called Training Programme in	
	Description	The national physical development plan for Uganda is currently developed by the ministry of lands housing and urban development. There is a need for physical planning systems to guide the growth and development of urban centres in Uganda. This project was to help developing physical planning methods better to meet this need and the implementation of the national physical development plan. It would ensure the integration of physical development plans of the districts and municipalities involved in the project and demonstrate the implementation of at least one physical development plan.	Social Planning for inclusive and Resilient Urban Development.	
	Motivation	There is a need of training and capacity building of physical planners in Uganda and to develop the physical planning system to develop urban areas in more sustainable ways and to implement the national physical development plan.		
7	Project 5	Support to Integrate Community-led Climate Change Adaptation and Mitigation Measures into Settlement-level Forums in selected Secondary Cities	Merged with project 4 and 9 in 2021 and called Training Programme in	

	Organisation	The Ministry of Lands, Housing and Urban Development	Social Planning for	
	Description	The objective of the project was to further develop existing structures for dialogue about urban development, with focus on climate change and climate adaptation. It builded on the concept of settlement level urban forums, which specifically aims to include poor and marginalized groups in the dialogue process.	inclusive and Resilient Urban Development. Achieved its goals and completed in 2024.	
	Motivation	There is a need for tools and processes that include marginalized groups in the planning process. The settlement level urban forums is an interesting concept with great potential to include more groups of people in these processes. As it already exists, there are interesting experiences and learnings that can be used in the project.		
8	Project 6	Greening Urban Economies	The project has never	
	Organisation	The Ministry of Lands, Housing and Urban Development	been developed into the proper project plan.	
	Description	The project aimed to explore and analyze alternatives to the current economic system (in general, but with emphasis on an Ugandan urban context).	proper project plani	
	Motivation	The project is interesting and addresses a big challenge that fits well into the programme. It needs, however, to be further specified and narrowed down.		
9	Project 7	Development and adoption of urban simulation using 3D modeling and GIS as tools for participatory planning and E-governance	The project has never been developed into the proper project plan.	
	Organisation	The Ministry of Lands, Housing and Urban Development		
	Description	To increase the use of 3d-modelling, the project would aim to increase the knowledge about this among spatial planners. The project would also study how effective the 3D-model is in participation and to communicate planning proposals.		
	Motivation	The main purpose is to increase the prerequisites to engage people in the planning process. Presenting 3D-models will make the proposed results and consequences from the planning such as new buildings and infrastructure easier to understand for the public as well as the decision makers.		
10	Project 8	Enhancement of Uganda's Greenhouse Gas (GHG) Inventory	The project was partially implemented but	
•	Organisation	The Ministry of Water and Environment, The Climate Change Dep.	because of COVID-19 and issues with	
	Description	The project aimed at enhancing the knowledge and capability to regularly produce GHG inventories and to track progress in achieving the Ugandan NDC.	unsustainable deliveries and change of programme budget it	
		MAIN OBJECTIVE:	was decided to terminate	
		To strengthen and increase institutional ability on managing and maintaining Uganda's Greenhouse Gas inventory.	it.	
		OBJECTIVES		
		 Develop institutional capacities for climate change data management in Uganda Establish the knowledge base for Greenhouse emissions by source and uptake by sink for different sectors in Uganda. Operationalize the Greenhouse Inventory for each pertinent sector. Coordinate, initiate and monitor Greenhouse gas inventory systems for each sector in Uganda by developing local 		

		databases with sector specific emission factors.		
		databases with sector specific chrission factors.		
	Motivation	This project is perfectly in line with the purpose of our capacity building program. After four years we hope that our activities have strengthened the CCD in their work so that Uganda will be able to produce a GHG inventory with better national data and emission factors. By that also being able to put up institutional arrangements for data collection and also to have identified a better way to report on how they are moving in accordance with their NDC.		
11	Project 9	Strengthening community resilience to climate change shocks in informal settlements	Merged with project 4 and 5 in 2021 and called	
	Organisation	Ministry of Water and Environment, The Climate Change Dep. (MWE)	Training Programme in Social Planning for inclusive and Resilient	
	Description	The aim of the project wass to deliver an area-specific tool for assessing how the local development plans take into account the Climate Change (CC) concerns, and the further implementation of a few action plans.	Urban Development. Achieved its goals and completed in 2024.	
		The expected stages were: 1) vulnerability assessment of a few major centers, 2) compilation of possible adaptive actions, 3) analysis of actual implementation, 4) design of a user-friendly screening tool of the CC integration into actual District Development Plans, 5) development of CC resilience action-plan for a few urban authorities.		
	Motivation	The project aimed to enhance the consideration of climate change resilience capacity, for both infrastructure and community, within further urban centres planning.		
		The stated motivation was to enhance the local government urban authorities' capacities to effectively handle and manage climate change resilient planning.		
		KENYA		
12	Project 1	ECO-Settlement Social Planning Model for informal urban neighborhoods	Achieved its goals and completed in 2024.	
	Organisation	The Civil Society Urban Development Platform (CSUDP)		
	Description	The project aimed to develop and try a methodology on how to involve citizens in informal settlements in urban planning. Through stewardship from coaches as well as architects, local dwellers of informal settlements are empowered and given tools to integrate planning of these areas.		
	Motivation	The project was already running by the NGO the Civil Society Urban Development Platform and was suppose to serve as a good example on how to involve local citizens in producing data and planning basis as well as specify local needs. The whole process of public participation, empowerment of the urban poor and deal with informal settlements is well developed.		
13	Project 2	Development and Implementation of County Climate Change Adaptation Plan	Achieved its goals and completed in 2024.	
	Organisation	Migori County		
	Description	This project aimed at defining a vision and an action strategy to mainstream climate change issues in the County. It would determine county-level vulnerabilities against identified hazards to enhance long term resilience and adaptive capacity. It would present adaptation actions that cover the period 2019-2028. The project		

		would also provide the background of the county's socio-economic circumstances and expected climate scenarios to be considered in planning and budgetary processes.		
14	Project 3	Kenya slum upgrading programme	Terminated in 2021	
	Organisation	Ministry of Transport, Infrastructure, Housing and Urban Development	since the project managers were not reachable.	
	Description	The project aimed to focus on the possibility of introducing small scale biogas production in the development area Kibera Zone B, in Nairobi Kenya.	- reachaore.	
		MOCAMBIQUE		
15	Project 1	Strengthening the technical capacity of local institutions for tracking progress of mitigation and adaptation actions in Moçambique NDC	Achieved its goals and completed in 2024.	
	Organisation	University Eduardo Mondlane, Faculty of Agronomy and Forestry Engineering	-	
	Description	This project was supposed to contribute to enhancing institutions at different levels of implementation of NDC in Moçambique. The institutions need technical support to better prepare the different reporting sectors to be able to develop tools, methodologies, guidelines and protocols for reliable data collection to allow enhancement of transparency for tracking the progress of NDC implementation and improvement of technical capacity to elaborate the national communications. The focus was on the Agriculture, Forestry and Energy sectors.		
		ETHIOPIA		
16	Project 1	Trends of ambient air pollution in the perspective of climate change in Addis Ababa City	Completed in 2021	
	Organisation	National Meteorological Agency Ethiopia		
	Description	Assessment of air pollution in Addis Ababa through exploring existing data on: - pollutant gases, - vehicles to road ratio and traffic's share of air pollution, - data on respiratory-related illnesses in health centres, - producing air pollution strategy including recommendations		
17	Project 2	Strengthening of Climate Services in Gorage-Zone Endegagn Wereda for Small Scale Agriculture	It is not running since 2020. The project group	
	Organisation	National Meteorological Agency Ethiopia	did not want to continue the project without	
	Description	This project would contribute to strengthening Climate Services in Ethiopia for small-scale farmers and other stakeholders. This would enable better management of the risks of climate variability and climate change by developing and incorporating science-based climate information and prediction into planning, policy, and practice on the national, regional level.	financial support. Since this approach was not in line with the aim of the programmes, as well as the situation with COVID 19 and political turbulence in the country the Swedish coach recommended that the project should be terminated.	
		RWANDA		

18	Project 1	Strengthening national capacity for NDC implementation, tracking the progress and reporting	Achieved its goals and completed in 2024.
	Organisation	Environment and Climate Change, Ministry of Environment – Rwanda	
	Description	Rwanda submitted its first NDC in 2015 and it is finalizing the revision of its second NDC. The assessment made under the above revision process revealed that there is inadequate capacity both at national and subnational levels to implement NDC priorities and track the progress as well as be able to report in accordance with the Enhanced Transparency Framework. This project would provide additional support to strengthen the national capacity to:	
		Monitor NDC through improved data collection, storage, processing, analysis and quality assurance	
		2. Improve national capacity for the Greenhouse Gas (GHG) inventory	
		3. Mainstream NDC priorities into national planning and budgeting framework 4. Mobilize resources through bankable projects for NDC implementation.	
		This project would involve all NDC sectors including energy, transport, waste, industry, agriculture, land, forestry, water, health, disaster management, urbanisation & human settlement. It would also include CSOs and private sector.	
	Motivation	The project was targeting the three main objectives of the programme and is focusing on many of the existing capacity gaps related to NDC production, but also its implementation. The project leader and the group had a clear national mandate and needed support in terms of capacity in many areas.	

Appendix 2: Specific examples on outcome-level.

Zimbabwe: Urban design guidelines for Climate Resilience.

The city of Harare, Zimbabwe (1.6 M people) struggles with increasing traffic congestion and the growing threat of air pollution. The University of Zimbabwe recognized this challenge and, with support from the SISC program and coaching from Blekinge Institute of Technology (BTH) in Sweden, embarked on a project to understand the complex relationship between mobility, climate change, and urban design.

The core purpose of this initiative was to influence the creation of a planning framework that would decrease the city's reliance on motorized vehicles, ultimately aiming to reduce harmful Greenhouse Gas (GHG) emissions. To achieve this, the project team engaged in parallel problem-solving activities: meticulously mapped out the city's land use and used Geographic Information Systems (GIS) to analyze how vehicular movement connected to different areas. This process provided valuable empirical data on Harare's urban form, highlighting areas of congestion.

Furthermore, the project didn't stop at mapping; it dug into the reality of Harare's traffic. Students, alongside enumerators from the Harare City Council and university lecturers, conducted vehicular traffic counts and Origin-Destination surveys. This boots-on-the-ground approach not only provided crucial traffic data for the Harare metropolitan region but also led to an unexpected benefit: the training of Harare City Council enumerators and the city's subsequent decision to develop an urban mobility policy.

The collaboration extended beyond mobility. The Environmental Management Agency, a key partner, shared previously unavailable air quality data for the greater Harare region, enriching the project's understanding of the environmental challenges.

The outcome of this work was the development of draft urban design guidelines aimed at mitigating climate change in the Harare region. These guidelines, a joint effort with the Government Department of Spatial Planning and Development and the Harare City Council, promote compact development and mixed land use to encourage non-motorized transport and efficient public transport. While still in draft form at the time of the report, these guidelines hold the promise of shaping a more climate-friendly future for Harare.

Beyond the tangible outputs, the project fostered significant capacity building. The increased enrollment in the transport systems development study program at the University of Zimbabwe, a six-times increase, is a testament to the project's inspiring effect on the next generation of urban planners. By providing data, fostering collaboration, and developing practical guidelines, this SISC project empowered Harare to take concrete steps towards a more sustainable and resilient future.

Uganda: Training for Climate Resilience.

The rapid urbanization in Uganda presented a critical need for skilled professionals who could plan for inclusive and climate-resilient cities. Recognizing this, the Ministry of Lands, Housing and Urban Development, in partnership with Makerere University, embarked on a SISC project, coached by Boverket (the National Board of Housing, Building and Planning) from Sweden, to develop a comprehensive training program in social planning.

Initially conceived as three separate projects, this task merged into a unified effort focused on strengthening urban and social planning capacity at national, city, and community levels. A significant early decision was to bring Makerere University on board to spearhead the capacity-building component, injecting academic experience and ensuring long-term impact.

The project begun with a thorough situational analysis, gathering vital information on demographics, socio-economic conditions, infrastructure, urban planning, and crucially, environmental and climate risks. This evidence-based report not only documented urban resilience capacity gaps but also laid the groundwork for designing a targeted training strategy and curriculum.

A key element of the project was the development of an educational strategy, outlining the goals, target groups, and the content of five training modules focused on inclusive and climate-resilient urban development. These modules are set to be integrated into the syllabus of undergraduate urban and regional planning students at Makerere University and diploma programs at the Institute of Surveys and Land Management, ensuring that future planners are equipped with the necessary knowledge and skills.

The project adopted a Training of Trainers (ToT) approach, a strategic move to build sustainable capacity within the Ministry of Education. Staff members are being trained to become trainers themselves, amplifying the project's impact and fostering effective governance. The training modules and materials developed will also be used to train up to 40 urban planning and urban development officials, practitioners, and decision-makers in the pilot cities of Kampala and Masaka.

While the finalization of training modules and the delivery of the Training of Trainers were still underway at the time of the final workshop in September 2024, the groundwork laid by this SISC project promises a significant long-term impact. By equipping government officials, university students, and city practitioners with knowledge and skills in inclusive and resilient urban planning, Uganda is taking crucial steps towards building sustainable and thriving cities in the face of climate change.

Kenya (Migori): A Sub-National Success in Resilience Building and developed climate adaptation plan.

In Migori County, a region at significant distance from the national capital, a determined local administration, with coaching from SMHI (the Swedish Meteorological and Hydrological Institute) through the SISC program, embarked on a mission to proactively address the growing challenges of climate change. The project

aimed to develop and implement the Migori County Climate Change Adaptation Plan, a roadmap to enhance long-term resilience and adaptive capacity against identified hazards.

Unlike some other SISC projects focused on national authorities, the Migori project targeted a smaller county with a clear commitment to international cooperation and less bureaucratic complexity, which proved to be a key factor in its success. The project's design aligned seamlessly with the objectives of the Migori Department of Environment, further facilitating implementation.

A cornerstone of their approach was the Training of Trainers (ToT) model. Four intensive one-week seminars on climate change mitigation and adaptation were conducted, ensuring that the county was building a local core of experts capable of driving climate action. This empowered communities and ensured the dissemination of crucial knowledge at the grassroots level.

The impact of this training was amplified by the establishment of Climate Change Planning Committees in all 40 wards (sub-counties) of Migori. These committees, with a significant participation of women, became local hubs for prioritizing and integrating climate change considerations into decision-making processes. Multiple dissemination seminars further spread awareness and fostered a culture of climate action throughout the county.

The culmination of these efforts was the development and adoption of the Migori County Climate Change Adaptation Plan. This plan provides a regulatory framework for enhanced climate change interventions, including data collection, impact assessment, response, mitigation, and adaptation. Furthermore, the project supported the development of the Migori County Climate Change Policy, Climate Change Act, and Climate Change Fund, demonstrating a strong commitment to sustainable development.

The success of the Migori project has even inspired neighboring Homa Bay County to request similar training on climate change mitigation and adaptation. The close collaboration between the Migori Department of Environment and the Department of Agriculture, fostered by the project, also holds potential for future joint efforts in climate change adaptation and disaster risk reduction. By empowering local leaders, establishing robust planning structures, and fostering community engagement, the Migori project stands as a great example of effective climate action at the sub-national level, made possible through the SISC program.

Rwanda: Building Capacity for Climate Reporting.

For Rwanda to effectively address climate change, having accurate and reliable data on its greenhouse gas emissions is essential. The Rwanda Environment Management Authority (REMA) holds the central responsibility for producing the nation's Greenhouse Gas Inventory (GHGI). Recognizing the need to enhance their internal capacity, REMA partnered with the SISC program, receiving coaching from SLU (the Swedish University of Agricultural Sciences) and SwEPA (the Swedish Environmental Protection Agency).

At the beginning, REMA emphasized the critical need for training their own staff to independently compile and calculate the GHG inventory across all sectors defined by the Intergovernmental Panel on Climate Change (IPCC). This would reduce their reliance on short-term consultants and build sustainable expertise within the institution. Even when working with consultants, REMA recognized the importance of having improved knowledge to set clear requirements and conduct rigorous quality control.

The SISC program responded directly to this need by delivering comprehensive training sessions on the compilation and calculation of GHG emissions. The Swedish coaches also collaborated closely with REMA to enhance the quality of the GHG inventory by supporting the development of an effective Quality Assurance and Quality Control (QA/QC) system. This included developing national templates and procedures for GHG inventory quality control, aligning with the requirements of the Paris Agreement for robust national arrangements.

Through the project, REMA's team gained a deeper understanding of the IPCC methodology guidelines and the reporting requirements under the Paris Agreement. This improved their ability to estimate GHG emissions across various sectors and to effectively perform quality assurance on the work of consultants. An important lesson emerged when a local consultants failed to deliver on time and REMA faced a critical test as the responsible authority ultimately accountable for delays, even when caused by consultants. REMA sued their local consultants and with the support from SISC reinforced its role as the contracting authority and strengthens its capacity as the responsible body for the GHG inventory and as a contracting agency.

Furthermore, the SISC project fostered improved cross-sectoral collaboration between REMA and key stakeholders in the energy and agriculture sectors. This collaboration helped to address challenges related to data availability and quality, leading to more accurate emission estimations in the future.

The mentorship provided by the SISC programme played a vital role in refining REMA's project activities and ensuring sustained progress. By empowering REMA's staff with the knowledge and tools to manage their GHG inventory effectively and fostering crucial inter-agency collaboration, the SISC program has significantly strengthened Rwanda's capacity for transparent and accurate climate reporting, a cornerstone of their Nationally Determined Contributions.

Moçambique: Improved climate data management and strengthened NDC implementation.

In Moçambique, the University Eduardo Mondlane (UEM), with coaching support from SLU and SwEPA through the SISC program, took on the challenge of strengthening the technical capacity of local institutions to track progress on the country's Nationally Determined Contributions (NDCs). The project recognized that having control and access to reliable data is fundamental for the successful implementation of climate policies and measures 33.

The project's varied purpose included improving communication among sector stakeholders regarding NDC implementation, strengthening institutional arrangements and Quality Assurance/Quality Control (QA/QC) for data, enhancing the existing Monitoring, Reporting and Verification (MRV) system, and building capacity towards establishing a Centre of Excellence in Climate Change at UEM.

A key factor in the project's achievements was the project leader's awareness of existing gaps and their strong ability to communicate with stakeholders, which facilitated adaptation of planned activities. The flexibility and adaptability of both the Moçambiquean and Swedish partners were crucial in navigating specific circumstances during implementation.

Specifically, the project improved institutional arrangements and QA/QC on data for mitigation and adaptation by providing technical support to the data management unit responsible for the Greenhouse Gas inventory, knowledge that was applied during the preparation of Moçambique's 2019-2021 GHG inventory. It also enhanced the implementation of the existing MRV system by assessing it at the central level and facilitating discussions among 30 participants from different NDC sectors to gather input for improvement.

Furthermore, the project fostered improved communication, awareness, and understanding among sector stakeholders on the importance of NDC implementation. This resulted in a process to update the Memorandum of Understanding (MoU) between UEM and the Ministry of Land and Environment to include new adaptation collaboration needs. The collaboration between the government and academia was strengthened, with the government endorsing the creation of the Centre of Excellence in Climate Change and actively collaborating on its implementation. The project even led to the submission and funding of a project to UNIDO for adaptation action at the subnational level, following a design training for bankable projects provided by SISC. Through these efforts, the SISC project helped Moçambique strengthen its foundation for effective NDC implementation and progress towards its climate goals.

Ethiopia: providing data for informed policy.

The rapid pace of urbanization and industrialization in Addis Ababa, Ethiopia, brought with it growing concerns about air pollution and its links to climate change. To gain a clearer understanding of this critical issue, the National Meteorological Agency Ethiopia partnered with the SISC programme, receiving expert coaching from SMHI. The project aimed to measure and assess the concentration of gaseous and particle pollutants in the city's atmosphere and to publish the findings.

Under the dedicated leadership of the project leader from the National Meteorological Agency, the work progressed according to plan in the initial years, yielding results relatively quickly. Relevant documents and literature were collected and analyzed in 2020. The study revealed concerning findings: average levels of air pollutants in Addis Ababa exceeded the limits set by the World Health Organization (WHO) and the US Environmental Protection Agency (EPA). The study also identified a seasonal variation, with maximum air pollution occurring during the summer months (June - September),

and pinpointed the central parts of Addis Ababa as having the highest pollution levels, attributing a significant portion of the problem to the transport sector.

These findings, published in two reports in the Global Scientific Journals (GSJ), provided valuable data that will hopefully encourage responsible authorities to take action to reduce air pollution in Addis Ababa, such as implementing measures to reduce the number of old, polluting vehicles and industries. The project also involved the provision of air quality data for central Ethiopia by SMHI and the engagement of another governmental agency, the Ethiopia Environmental Protection Agency. Copies of the study were shared with the Environmental Protection Agency, the Ministry of Health, and the Ministry of Environment, Forest and Climate Change.

The planned dissemination seminars to share the project's findings unfortunately were hampered by the COVID-19 pandemic, which caused office closures and made communication challenging due to limited internet access in home offices. Despite this setback, the project successfully collected and analyzed crucial air quality data, providing valuable insights into the state of air pollution in Addis Ababa. This information, made accessible to key government agencies, lays the groundwork for informed decision-making and potential future climate action to improve the city's air quality and protect public health.

Appendix 3: SISC programme outcome matrix

ULTIMATE OUTCOME

Improved implementation of Nationally Determined Contributions (NDCs) in partner countries by enhancement of effective governance and transparency frameworks that integrate climate efforts made at national, subnational and local levels.

PROGRAMME OUTCOME

Programme partner organisations have contributed to further implemented and developed national processes in NDC implementation through enhanced use of climate related data for mitigation, adaptation, urban planning and governance measures.

INTERMEDIATE OUTCOME 1	INTERMEDIATE OUTCOME 2	INTERMEDIATE OUTCOME 3
1. Enhanced production and analysis of reliable data by partner organisations to inform further strengthened national/subnational/local climate action.	2. Improved transparency practices and promotion by partner organisations to make data available and accessible.	3. Better coordinated and integrated approaches established by partner organisations to ensure effective use of climate related data to operationalize climate actions in respective region and country.
IMMEDIATE OUTCOMES 1.1 Strengthened skills of participants to identify, produce and interpret reliable data.	IMMEDIATE OUTCOMES 2.1 Increased ability of participating organisations to present transparent (available and accessible) data related to data management and processes.	IMMEDIATE OUTCOMES 3.1 Strengthened capacities of participants to establish links between change projects implementation and results to relevant policies, strategies and planning frameworks.
1.2 Strengthened capacities of participants to enhance necessary stakeholder engagement in data production and analysis.	2.2 Strengthened capacities of participants to ensure compliance with national and international reporting requirements.	3.2 Increased understanding and awareness among participants of opportunities and needs involved in NDC implementation.
1.3 Improved capacities of participants to establish relevant system for data flow and data storage to monitor progress.	2.3 Increased ability among participants to ensure that available data is actively shared and communicated (made accessible) "beyond compliance" to inform relevant stakeholders.	3.3 Improved the capacity of participating organisations to increase access to climate finance (by development of bankable projects) for NDC implementation.