

TRILATERAL SOUTH-SOUTH COOPERATION

# The trajectory of a shared learning journey

Cooperation on Condominial Sewerage System, Waste Management Services and Public Health in the Municipality of Viana, Luanda, Angola



UNICEF/Angola16/Karin Scherbrucker

The partnership between the IBSA Fund (India, Brazil & South Africa), the government of Angola and UNICEF



## Aim for change inspires innovation and a new journey on peri-urban Sanitation in Angola.

This article discusses the Trilateral South-South Cooperation (TSSC) between the IBSA Fund, the government of Angola and UNICEF, supported by the United Nations Office on South-South Cooperation (UNOSSC). Implemented within the area of Water, Sanitation and Hygiene (WASH) and in line with the Sustainable Development Goal 6 (Clean Water and Sanitation), the initiative is focused on Condominial Sewerage systems<sup>1</sup>, Waste Management and Public Health in the peri-urban municipality of Viana, Luanda, Angola.

Through financial support from the IBSA Fund, this TSSC aims for innovation and change in the sanitation sector of Angola. The Government of Angola and UNICEF jointly implement the initiative in partnership with four Government institutions of Brazil, namely the Brazilian Cooperation Agency (ABC), the National

<sup>1</sup> A Condominial sewerage system is a low-cost sewer system that is notable for the emphasis on community participation in all aspects of planning, management and maintenance of the system at housing block level. This shallow system collects wastewater in small-diameter pipes laid at fairly flat gradients that are located under front or back yards or the pavement rather than under a road as with conventional sewerage

Health Foundation (FUNASA) of the Ministry of Health, the Ceará State Department for Cities and the Ceará State Water and Sewage Company (CAGECE).

The partnership between Angola, UNICEF and the IBSA Fund demonstrates how South-South Cooperation can add value to a sector with limited resources to boost new possibilities with evident potential for mutual learning.

*“Sanitation and environmental education are of crucial importance to Angola. This South-South Cooperation partnership serves as an important catalyst for the work that lies ahead while bringing Brazil and Angola closer together.”*

**Filipe Zau**, Minister of Culture, Tourism and Environment, Angola

Although the learning experience is still in an early stage, the exchanges have brought about essential insights and lessons, which in turn have generated a joint vision for the journey that will follow throughout the months and years to come.

The emerging Trilateral South-South Cooperation between the IBSA Fund, the government of Angola and UNICEF is thus an example of a horizontal partnership build-up with a true spirit of solidarity between nations. Following the initial exchange visit facilitated by UNICEF of a delegation from Angola to Brazil in November



### TRILATERAL SOUTH-SOUTH COOPERATION

**South-South Cooperation** is a development cooperation modality where two or more developing countries pursue individual or shared national capacity development objectives through exchanges of knowledge, resources, and technical know-how and through (inter-)regional collective actions.

**Trilateral South-South Cooperation (TSSC)** brings together developing countries, developed countries and International Organisations to share knowledge and implement initiatives with common development goals. TSSC builds on shared governance among different actors and identifiable comparative advantages.

<https://unsouthsouth.org/about/about-sstc/>

**The IBSA** facility for poverty and hunger alleviation (IBSA Fund) was established jointly by India, Brazil and South Africa in March 2004 and became operational in 2006 to identify replicable and scalable projects that can be disseminated to developing countries on a demand-driven basis as examples of best practices in combating poverty and hunger. IBSA Fund-supported projects help partner countries in the Global South to achieve their national priorities, as well as all other internationally agreed development goals.

[https://www.ibsa-trilateral.org/ibsa\\_fund.html](https://www.ibsa-trilateral.org/ibsa_fund.html)

2019, efforts were made to capture insights, impressions and shifts in perception among the participating counterparts, with regards to urban sanitation services. This paper seeks to present what has emerged from these interactions between peers working to address similar challenges in somewhat similar yet significantly different contexts.

## THE INSPIRATIONAL JOURNEY TOWARDS COOPERATION

The first step towards progress is to understand the problem, everyday needs and shared interests. When the problem is poorly understood, “solutions” may create new problems. There is no guarantee the proposed solutions will address the situation at all. Conversely, the more we know about the problem, the more likely we are to understand the root causes and

to create countermeasures that address and prevent the problem from recurring.

WASH is a common term that travels in journals, magazines, and different cultures, with positive or negative associations, depending on a given context. However, wherever WASH services work, positive memories and experiences will always be found.

TSSC and other collaboration modalities enrich the world with unambiguous learning agendas and programmes defined through collaborative, iterative and participatory processes by country delegations while holding the potential to reach beyond individual learning experiences, generating impact with broader societal benefits. The strive of countries to solve similar problems leads to the search for suitable partners willing to share knowledge, explore problems and discuss practical solutions to sanitation-related challenges.

*“If you can find a path with no obstacles, it probably doesn’t lead anywhere.”*

Frank A. Clark

### CONTEXT

The Government of Angola faces complex challenges in expanding access to and improving the quality of water, sanitation, and hygiene (WASH) services for its growing urban population, especially for the most vulnerable groups in peri-urban Luanda. Housing approximately 10 million people, the municipality of Viana represents 23 % of the population living in the province of Luanda. The peri-urban area of the city of Viana in Luanda has the highest population density in the country and finds itself short of services.

The main challenges identified are:

1. Inappropriate community sewerage treatment in low-income areas
2. Inappropriate waste management in low-income areas
3. Compromised community health
4. Frail legal framework

The government of Angola’s response is evident in several policies, programmes, and strategy mechanisms. However, sanitation is lagging. The TSSC initiative supports improving the quality of community life in low-income peri-urban settlements through the training and implementation of a Condominial sewage system project, incorporating waste management approaches for youth jobs creation and promoting actions to improve public health and hygiene in the community municipality of Viana.



Niklas Stephan

Visit to Vista Waste Management, Luanda, Angola

*“Even a mistake may turn out to be the one thing necessary to a worthwhile achievement.”*

Henry Ford

## The open dialogue

The initiative was developed following a formal letter of request from the Ministry of the Environment of Angola (MINAMB, now MCTA) with technical support from UNICEF to the Government of Brazil (27/12/2018), accepted in 2019.

In November 2019, UNICEF mediated an experience of knowledge sharing between Brazil and Angola to stimulate learning exchange about tried and tested models for urban sanitation. Brazil is well-known for its advanced urban WASH regulation, policy frameworks, services, planning and management (at central and local levels), including the Condominial sewerage system (technology and management components) and waste management. Angola has timidly

initiated the development of an enabling environment with examples of local leadership and management of services delivered within a municipal system. This UNICEF-brokered connection was established to share knowledge, experiences and technical know-how in these areas. The Government of Angola and UNICEF Angola<sup>2</sup> visited Brazil in 2019 to verify on-site the advantages and disadvantages of the given technologies. UNICEF Angola and Brazil also reached out to UNICEF Ethiopia to discuss the lessons learnt from the previous partnership with Brazil, given that the cooperation with Ethiopia was UNICEF’s first-ever experience of a TSSC Project in

<sup>2</sup> The Brazilian Ministry of External Relations, through the Brazilian Agency for Cooperation, worked with the UNICEF Brazil/Angola Country Offices to prepare the exchange visit schedule, in collaboration with FUNASA, the Ceará State department for Cities, CAGECE and the Ceará regulation agency (ARCE).



## ENSURE AVAILABILITY AND SUSTAINABLE MANAGEMENT OF WATER AND SANITATION FOR ALL

### TARGET 6.1

By 2030, achieve universal and equitable access to safe and affordable drinking water for all.

#### INDICATOR 6.1.1

Proportion of population using safely managed drinking water services.

### TARGET 6.2

By 2030, achieve access to adequate and equitable sanitation and hygiene for all and end open defecation, paying special attention to the needs of women and girls and those in vulnerable situations.

#### INDICATOR 6.2.1

Proportion of population using safely managed sanitation services, including a hand-washing facility with soap and water.



Project steering committee, MCTA, Luanda, Angola



The Ambassador of Brazil in Angola - Rafael Mello Vidal , ABC - Cecilia Malaguti, UNICEF Representative in Angola - Ivan Yerovi, Secretario das Cidades do Ceará – Paulo Lustosa

Agencia\_Brasileira\_de\_Cooperacao

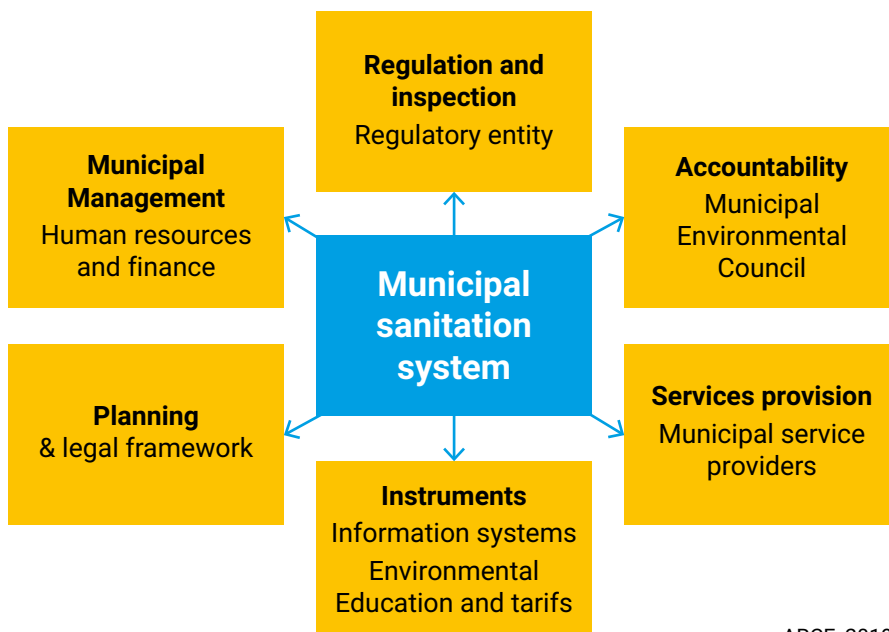
the specific area of Condominial sewage sanitation.

During the scoping mission to Brazil, Angola verified some of the early mistakes made in Brazil when introducing the technology. Whereas these mistakes were later resolved in Brazil some of them were also repeated in Ethiopia. UNICEF Ethiopia corroborated that having faced

the same challenges, corrections were addressed internally during the project preparation. The main challenges were related to factors such as:

1) Capacity and technical knowledge of national companies in the specific techniques to be applied during the construction of this type of system,

2) Poor knowledge of the operation and preventive maintenance,  
 3) Lack of continuous training of the Government Agents and Community Operators,  
 4) Lack of community involvement in problem-solving,  
 5) Need for a permanent promotion of the health education system with the beneficiaries and the solution of possible neighbourhood disputes.



ARCE, 2019

Based on the lessons learnt, which are well-known among the Brazilian institutions, capacity-building activities were proposed to the partners in Angola before initiating project implementation. All parties agreed this was the best way forward so as to avoid unnecessary delays and bottlenecks.

## Project development

The technical visit to Brazil by representatives of the Angolan Government was essential for a better understanding of the Brazilian experience. The sites visited included a Condominial sanitation housing complex as well as a facility for solid waste management, both in the state of Ceará. Throughout the exchanges, it became evident that Condominial sanitation is closely linked to solid waste management and public health. Therefore, all three components had to be included in the project design.

In addition to Ceará, the Angolan delegation also visited Brasília, which was a critical part of the visit. In Brasília, meetings were organized with FUNASA and

ABC, so as to further discuss the critical interlinkages between WASH and public health as well as to promote learning and provide guidance on how ABC coordinates international cooperation together with Brazilian entities.

In line with Brazil's methodological approach toward Trilateral South-South Cooperation, following the mission to Brazil, the counterparts agreed to proceed with a prospecting mission to Angola so as to bring about insights around the context of Angola and proceed with the project development and design. A mission was planned for the first half of 2020. However, due to health and mobility restrictions imposed by the Covid-19 pandemic the mission had to be postponed.

Even though these restrictions temporarily slowed down the negotiations, dialogues between the counterparts of Brazil, Angola and UNICEF continued to advance remotely online. Building on the formal request from Angola and following the takeaways of the mission to Brazil, a concept note was jointly developed and submitted to the Board of Directors of the IBSA Fund, with Brazil's sponsorship. The concept note spelt out the overall project proposal, under the title "Improvement of WASH in Angola through Trilateral South-South Cooperation" and was submitted in December 2020. Upon evaluation by Pretoria, New Delhi and Brasília, the proposal was approved for support by the IBSA Fund at the meeting of its Board of Directors held on 04/01/2021.

### TIMELINE OF COOPERATION

#### Summary of key events





Signing ceremony at MCT on 1 April 2022

In the preparation of the project document, an alignment meeting was held on 10/06/2021, with the coordination of the Brazilian Cooperation Agency, the participation of the Secretariat of The Cities of the Government of the State of Ceará, FUNASA, CAGECE, UNICEF Brazil and Angola, UNOSSC and the Government of Angola. At this meeting, a proposed roadmap was presented, so as to guide the development of the project document.

The alignment meeting was followed by a series of technical meetings between the counterparts of Angola, Brazil and UNICEF, in line with the virtual prospecting process developed by ABC, which culminated in a

virtual prospecting mission (part of that process) in July 2021. This process led to a jointly developed and agreed results matrix, followed by the elaboration of a full project document, which was validated by all parts and formally submitted and approved by the IBSA Board in February 2022.

Following the approval of the project document and subsequent signature in April 2022, a mission from Brazil to Angola was organized in May 2022. The main objectives of the mission were as follows:

- Conduct the first meeting of the Project Management Committee, in order to validate and approve the 2022 Annual Work Plan;

- Start training governmental and non-governmental institutions, companies (private sector) and communities in the areas of Simplified Condominium Sanitation, Waste Management and Public Health.
- Increase the Brazilian-Angolan understanding of sanitation in the development of disadvantaged communities and its possible impacts through the project.
- Discuss and exchange experiences on technical mechanisms and legal framework processes in solid waste management, similar to Brazil.

## Common views on challenges and agreements

The simplified sewerage system was created in the 1980s by José Carlos Rodrigues de Melo, a Brazilian civil engineer from the State of Pernambuco, North of Brazil (1980). The technology has already been shared with several countries, such as Ethiopia, Tanzania, Paraguay and Peru,

and is still being used in Brazil. Soon this technology will also be used in Angola.

The simplified Condominial sewerage system is based on the combination of community participation and appropriate technology. It provides savings of up to 65 % compared to conventional sewage systems due to the smaller extensions and depths of the wastewater collection network and to

the design of decentralised wastewater treatment micro-systems (DEWATS). The name **“Condominial Sewerage System”** draws on the approach of bringing together the community of an urban neighbourhood, thereby forming a condominium, although with an informal organization and structure.

Buildings are connected to this public network through a



Visit to the Public Water Company of Luanda (EPAL)

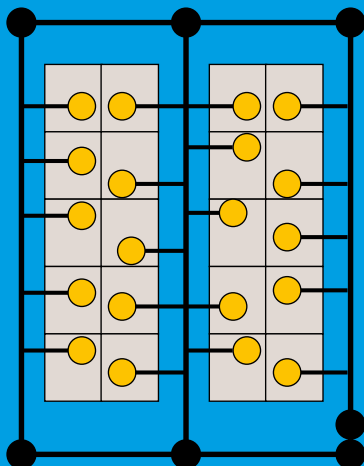


Niklas Stephan

### SIMPLIFIED SEWAGE SYSTEM

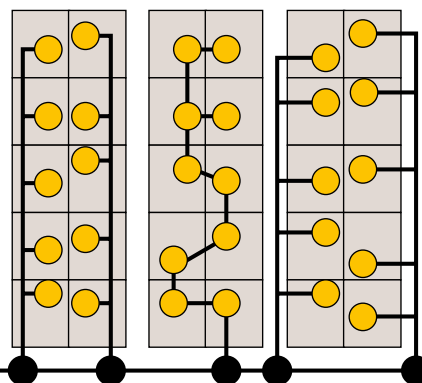
Below front yard  
Below sidewalk  
Below back yard

#### CONVENTIONAL



### Simplified condominium sewerage system

front yard    back yard    sidewalk



### ADVANTAGES

- Small diameter pipes
- Flexible design
- Reduced costs
- Promotes community engagement and togetherness



Visit to Estalagem



Workshop and knowledge sharing, Luanda, Angola

collective connection to the system (i.e. through a simplified Condominial line/pipe). The location, maintenance and sometimes setup of the system are agreed upon collectively within each zone together with the service provider and based on a responsibility-sharing scheme between the interested community group and the public authorities

It should be noted that the **Condominial Sewerage System** requires continuous and

sustained efforts of training of all agents involved (i.e., population – government – institutions), as well as intra- and extra-domiciliary monitoring so as to ensure effectiveness. Records of unsuccessful experiences are commonly due to the lack of monitoring and the absence of awareness raising in the community. This also points out the relevance of planning and implementing Environmental Health actions within the Education curriculum in parallel

to the sanitary infrastructure actions in order to make the proposal sustainable over time.

It is important to emphasize that, within the scope of good practices, the issue of sanitation is in Brazil addressed in an integrated manner following the model of the national policy for basic sanitation, which is organized around four overarching axes: (i) water, (ii) sewage, (iii) solid waste and (iv) rainwater drainage.

## Way forward

The design and set-up of this project are highly complex. It seeks to construct a pilot Condominial sewerage system while improving and integrating solid waste management through selective collection and entrepreneurship. The project also foresees capacity development and community mobilization around the operation

and maintenance of the system, as well as complementary lines of action, such as social and behavioural change communication on public health and hygiene. For the project to be successful, all the above-mentioned pillars need to be implemented in an interdependent and interconnected manner. Furthermore, implementation depends on political leadership and engagement at all levels

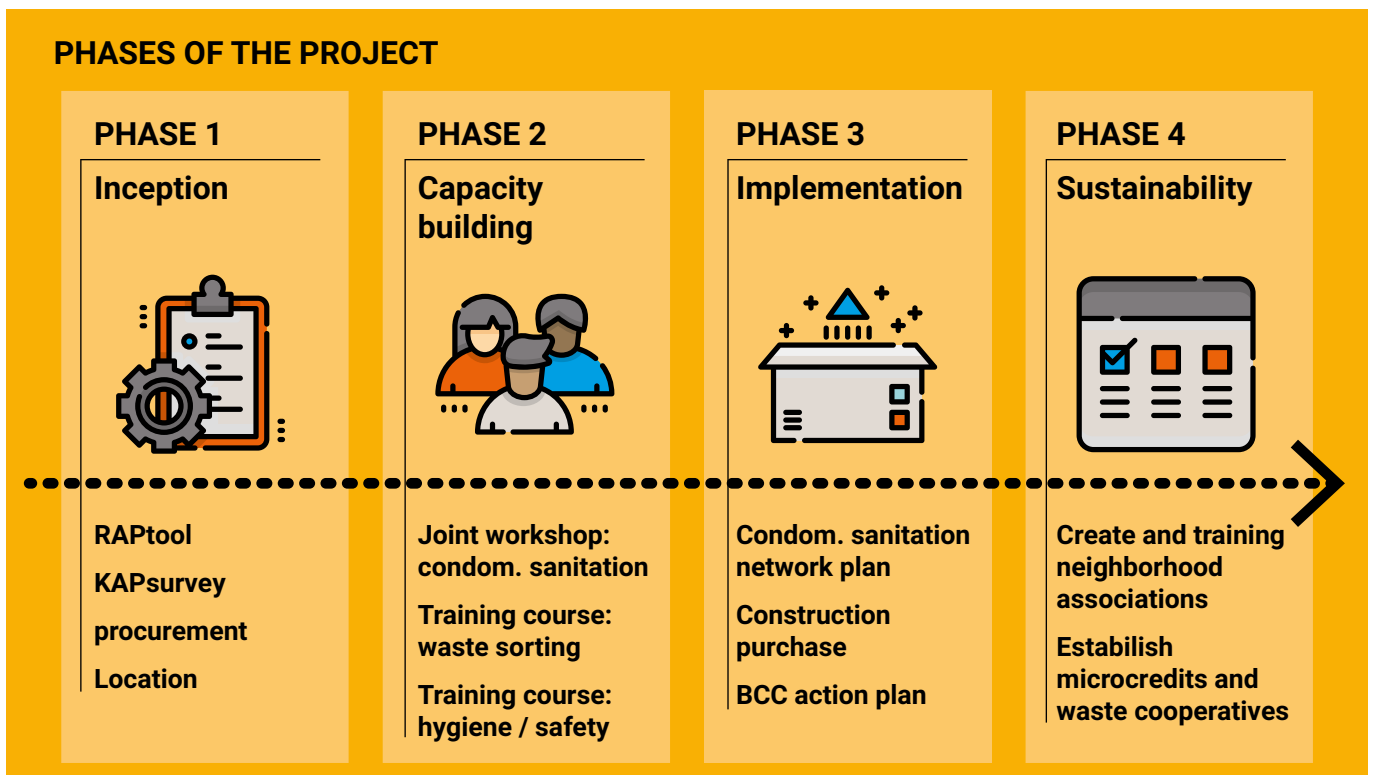
(central, provincial and local), as well as community participation, especially among target beneficiaries.

It is with this in mind that the next steps of implementation will be focused on a series of participatory capacity development activities, in which representatives of all project stakeholders will take an active part, as well as continuous efforts of community mobilization.



Meeting with Waste Pickers

Agencia Brasileira de Cooperacao

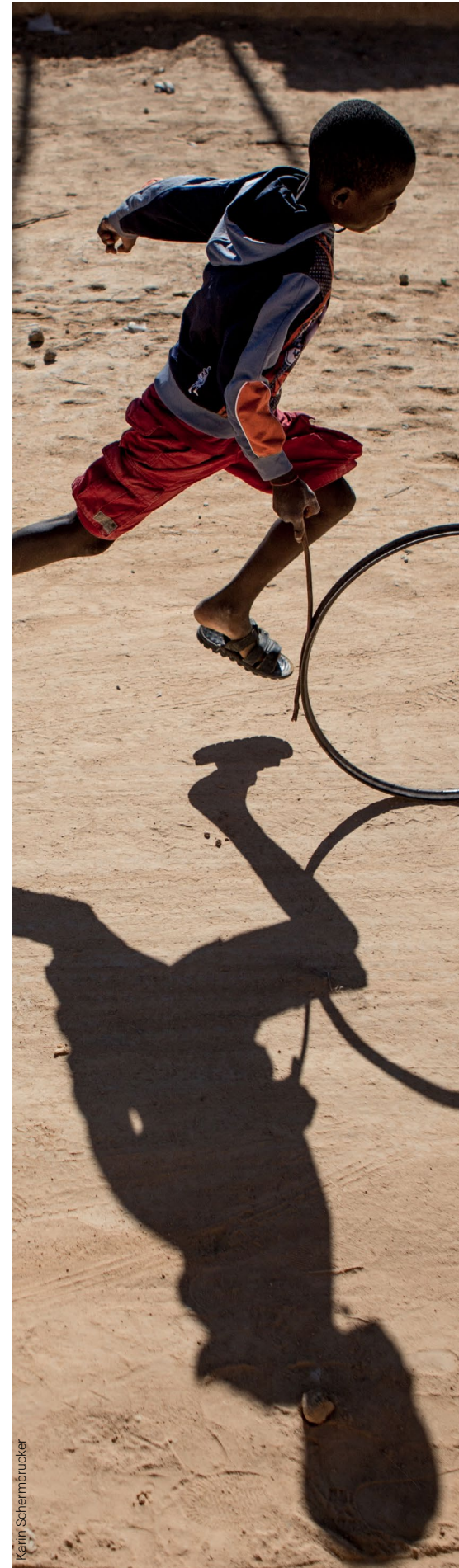


## Lessons learned so far **Extending the experience**

- 1) The importance of political leadership in WASH and Sanitation particularly at the local level to sustain progress and embedded processes.
- 2) The importance to ensure well-established institutional, financial and organizational arrangements, with adequate allocation of human capital, so as to guarantee sufficient and available resources to address challenges and mitigate risks.
- 3) Well-defined and agreed inter-institutional and inter-federative coordination mechanisms, as well as management systems, are key to supporting effective implementation, replicability, transparency and sustainability
- 4) In the sense of sharing good experiences from TSSC, it would be strategic for the project to disseminate knowledge and key results, as this can foster a process of scale-up throughout Angola while inspiring and informing similar initiatives also in other countries of the Global South.
- 5) The importance of developing and updating legal norms in order to establish guidelines, responsibilities and competencies for strengthening the WASH sector, considering local specificities.

The process undertaken with throughout this pilot project has triggered interest not only in Angola but also throughout Eastern and Southern Africa. This interest is closely aligned with the overall efforts of UNICEF to increase its programme focus on urban sanitation throughout this region, including through the approach of City-Wide Inclusive Sanitation (CWIS) as a major component of this drive. The new shift toward urban sanitation requires that the capacity of both UNICEF staff, as well as government counterparts, be strengthened to ensure quality planning, implementation and monitoring of urban sanitation programmes.

The UNICEF Regional Office for Eastern and Southern Africa (ESARO) is currently concluding the development of a regional capacity-building plan on urban sanitation. Additionally, capacity building on urban sanitation for accelerating access to safely managed sanitation was also included among the recommendations of the recently concluded 2022 UNICEF ESARO WASHNET meeting. TSSC has the potential to add value to such an agenda, promoting knowledge exchanges and capacity development between and among countries by drawing on and sharing tested solutions.



## Participants

### Government of Angola:

Filipe Zau (Minister of Culture, Tourism and Environment of Angola), Ivan Paula Francisco (Secretary of the State for the Environment), Hassana Lima (Director General of the Institute of Environment), Karelia Botelho (Vice-Director of the Institute of Environment) Palmiro Marcolino (Head of Department of the National Directorate of Environment and Climate Change), Demétrio Sepúlveda (Municipal Administrator of Viana), Acácio Cordeiro (National Institute of Environmental Management), Vânia Mendes (Provincial Director of the Environment-Provincial Government of Viana), Ilidio João (Provincial Government of Viana) Kamia Cuzambila (National Waste Agency)

### Government of Brazil:

Rafael Mello Vidal (Ambassador of Brazil in Angola), Cecilia Malaguti do Prado (Coordinator of Trilateral South-South Cooperation with International Organizations, ABC), Guilherme Dantas Nogueira (Project Analyst, ABC), Hugo Leão (Project Assistant, ABC), Fabiano Lira (Technical Engineer, CAGECE), Otaciana Ribeiro (CAGECE) Sheila Darling (CAGECE) Marcondes Ribeiro Lima (President of SISAR - Integrated Rural Sanitation System), Daniela Cardoso Gois Santos (Coordinator of Foreign Relations, FUNASA), Fernanda Rodrigues de Moraes (Executive Director, FUNASA), Recio Ellery Araujo (Technical Engineer, FUNASA), Paulo Henrique Lustosa (Executive Secretary of Sanitation, Secretariat of Cities, State of Ceará), Juliana Café (Technician, Secretariat of Cities) Marcella

Facó (Technician, Secretariat of Cities), Vanessa Lima (Technician, Secretariat of Cities), Isabela Coelho (Environmental Engineer, FUNASA)

### UNOSSC:

Bhushan Shrestha (Results Management Specialist and focal point for the IBSA Fund)

### UNICEF Angola:

Ivan Yerovi (UNICEF Representative in Angola) Abdoulaye Fall (Chief of WASH) Edson Monteiro (WASH Specialist)

### UNICEF Brazil:

Liliana Chopitea (Chief of Social Policy, Monitoring & Evaluation and South-South Operation), Gregory Bilit (Emergency Manager), Rodrigo Resende (WASH officer), Niklas Stephan (South-South Cooperation officer), Ludmila Viegas (UNV South-South Cooperation officer)

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