Case study report

December 2025

Evaluation of Innovation in UNICEF

West and Central Africa Regional Thematic Case Study Report

Contents

List of Figures

List of Tables

Acronyms and Abbreviations

AGYW	Adolescent Girls and Young Women
ALNAP	Active Learning Network for Accountability and Performance in Humanitarian Action
CEWAS	Centre for Water and Sanitation
CHC	Community Health Centre
CLTS	Community-Led Total Sanitation
CO	Country Office
COAR	Country Office Annual Report
CPC	Country Programme Cooperation
FGD	Focus Group Discussion
HIVST	HIV self-testing
ICTD	Information and Communication Technology Division
ISC	Innovation Steering Committee
LGA	Local Government Area
M1	Tier 1 of Revolving Fund (Joint fund managed by RUWASSA)
M2	Tier 2 of Revolving Fund (Funds to MFIs)
MFI	Microfinance Institution
MICS	Multiple Indicator Cluster Surveys programme
NLP	Natural Language Processing
OoI	Office of Innovation
PB	Plastic bricks
PG	Programme Group
PNLS	Programme National de Lutte contre le SIDA (national HIV programme)
PPRM	Programme Planning, Research & Monitoring
RFS	Revolving Fund for Sanitation
RO	Regional Office
RUWASSA	Rural Water and Sanitation Agency
SD	Supply Division
SDG	Sustainable Development Goal
T4D	Technology for Development
TBO	Toilet Business Operator
UN	United Nations
UNCRC	United Nations Convention on the Rights of the Child
UNEG	United Nations Evaluation Group
USSD	Unstructured Supplementary Service Data
WASH	Water, Sanitation and Hygiene
WCA	West and Central Africa
WCAR	West and Central Africa Region
WCARO	West and Central Africa Regional Office

Executive Summary

Introduction

This regional thematic case study was developed as part of the global Evaluation of Innovation in UNICEF, which assessed the organization's ability to accelerate progress toward child rights and the Sustainable Development Goals (SDGs). Although published separately, it is one of seven regional thematic case studies comprising Annex 6 of the global evaluation. This regional thematic case study from the West and Central Africa Region (WCAR) contributes to the global evaluation evidence base by examining the relevance, effectiveness and sustainability of three innovations supported by UNICEF, and by identifying the enabling and hindering factors that influence their implementation and outcomes. Its purpose is to provide insights and lessons learned, rather than a full standalone evaluation, and should be read in conjunction with the main report. This case study was conducted between March and October 2025.

A structured and comparative case study approach was adopted to generate insights from purposively selected innovations. Whilst there were more than 260 ongoing initiatives in the region, this case study explores three innovation initiatives selected for their programmatic relevance, regional significance and alignment with UNICEF's Strategic Plan 2022–2025. These are: (1) *Plastic bricks* in Côte d'Ivoire, which used recycled plastic to build classrooms; (2) *U-test* in Côte d'Ivoire, a digital HIV self-testing platform for adolescents; and (3) *Revolving Fund for Sanitation* (*RFS*) in Nigeria, a blended finance mechanism supporting household access to toilets through microloans and local market actors.

An appreciative inquiry methodology was applied as a participatory and strengths-based approach to guide data collection and analysis. Evidence was triangulated through document review, portfolio analysis, and semi-structured interviews with UNICEF staff and partners. The approach adhered to UNEG norms and UNICEF ethical standards, ensuring informed consent and confidentiality. Findings are primarily qualitative and illustrative and should not be interpreted as representative of the entire regional innovation portfolio.

Key findings

Programme effectiveness: All three initiatives demonstrated successful development and delivery of solutions, achieving their intended reach targets. Each initiative was well-aligned with national priorities and was included in key government strategies and plans. *Plastic bricks* contributed to improved learning environments and was formally endorsed by the Ministry of Education. *U-test* increased adolescent HIV testing and was integrated into the draft National HIV Strategic Plan. *RFS* exceeded sanitation construction targets in its strongest implementation site, reflecting its alignment with Nigeria's Clean Nigeria Campaign. The translation of reach into measurable outcomes for children was, however, inconsistently documented. Outcome data were limited or anecdotal, and the sharing of consolidated learnings was infrequent.

Equity, gender equality and inclusion: All three initiatives aimed to reach underserved and marginalised populations, yet equity and inclusion, particularly for persons with disability, were inconsistently integrated in design and delivery. *Plastic bricks* employed vulnerable women in its factory workforce and provided improved classroom environments, though lacked tactile or disability-sensitive learning adaptations. *U-test* reached a high proportion of adolescent girls and young women and addressed stigma through discreet digital testing, but accessibility for visually impaired users was a gap. The *RFS* facilitated sanitation loans for many rural households yet faced challenges to reach more populations in informal labour, and women-headed households, highlighting systemic barriers in

microfinance targeting. Disaggregated data and inclusive design processes were inconsistently applied, reinforcing existing barriers for marginalized groups.

Cost-effectiveness: Each initiative showed cost advantages over traditional approaches. *Plastic bricks* was found to be 30–40 per cent cheaper than standard school construction methods while also reducing environmental impacts. *U-test* costs approximately 30 per cent less per test compared to clinic-based services. Though *RFS* lacked a formal cost-effectiveness analysis, it offered lower-than-market interest rates and attracted government co-financing, indicating good value for money. However, performance varied widely by location, with implementation in some states facing challenges including weak institutional buy-in, lower prioritization of water, sanitation and hygiene (WASH) at the state level, a lack of matched funding, and limited market development, which raised concerns about the consistency and sustainability of financing mechanisms.

Scale and sustainability: Each initiative secured formal government endorsement, yet sustainability and scalability were also influenced by institutional partnerships and resource availability. *Plastic bricks* and *U-test* secured national-level policy support, which increased their visibility and legitimacy. Yet both required stable funding and private-sector partnerships for continued scaling. *RFS* proved effective in Bauchi State due to intense political engagement and functional microfinance networks, but its expansion elsewhere was limited by weak institutional capacity, insufficient market development and microfinance institutions' reluctance to invest in sanitation finance. All three initiatives underscore the importance of embedding sustainability planning from the outset. The *Plastic bricks* initiative also raised questions about the role of innovation in areas at the edge of UNICEF's mandate, such as building construction. All three initiatives rely on continued funding, private-sector engagement and enabling institutional environments. Long-term scale and sustainability will require stronger systems integration and diversified financing models.

Lessons and the way forward

The featured initiatives in WCAR highlight that innovation can be most effective and sustainable when embedded in national systems, supported by strong government ownership, and aligned with policy priorities. UNICEF's advocacy and convening role helped build trust and foster strategic partnerships with ministries, private sector actors and civil society. Community participation also played a vital role, with peer networks and local actors contributing to uptake, trust-building and contextual relevance. UNICEF's provision of technical assistance further strengthened operations and implementation quality; however, this was not necessarily linked to effectiveness or outcomes. Together, these factors helped create the conditions for innovation to respond to the persistent development challenges in a way that was locally grounded and institutionally supported.

The initiatives also revealed persistent constraints to innovation. Financial sustainability remains a challenge, particularly where innovations rely on donor funding or fragile supply chains. Inclusion of persons with disabilities was not systematically addressed, and gender equity in access to finance—especially for sanitation—was limited. These gaps underscore the need for more intentional design processes that prioritize equity and accessibility from the outset.

Finally, the sustainability of digital and financial innovations depends on long-term institutional commitments and market readiness. Without stable funding, strong local ecosystems, and inclusive delivery models, promising innovations risk stalling before they reach scale.

1 Introduction

1.1 Purpose of the evaluation, objectives and scope

Innovation was made a key change strategy in UNICEF's Strategic Plans for 2018–2021 and 2022–2025, aimed at accelerating progress toward the Sustainable Development Goals (SDGs) by addressing stubborn barriers and stagnating progress with new solutions. UNICEF defines innovation broadly as a new or significantly improved solution that advances results for children and young people across five categories: Data, Digital, Innovative finance, Product and Social innovations.

The Evaluation of Innovation in UNICEF (2025), carried out by the Evaluation Office, aimed to provide a credible and independent assessment of UNICEF's 'fit for purpose' to use innovation as a change strategy to achieve transformational organizational outcomes and goals. Combining formative and summative elements, **the evaluation had four objectives:**

Objective 1: To assess the relevance, coherence and sustainability of UNICEF institutional arrangements to integrate innovation as a change strategy;

Objective 2: To examine the relevance, effectiveness, efficiency and sustainability of UNICEF innovation approaches;

Objective 3: Assess the relevance, effectiveness, efficiency, impact and sustainability of innovation initiatives to enhance programme effectiveness and accelerate positive outcomes for children; and

Objective 4: To identify and analyse the enabling and hindering factors influencing innovation within UNICEF, the generation of new knowledge and thought leadership to influence the innovation ecosystem and promote child rights.

Innovation at UNICEF involves a wide range of distributed activities and diverse stakeholders at multiple levels. The primary audiences for the evaluation are internal UNICEF stakeholders:

- Global level (particularly the Global Innovation Board, the Innovation Steering Committee (ISC), the Office of Innovation (OoI), Supply Division (SD), Information and Communication Technology Division (ICTD) and Programme Group (PG));
- Regional level (particularly Regional Programme and Planning Chiefs, Regional Evaluation Advisers, and Regional Technology for Development (T4D) Specialists); and
- Country level (particularly Country Office (CO) staff developing innovation strategies, thematic teams involved in portfolio governance, and staff working on specific programmatic innovations).

Secondary audiences include the UNICEF Global Leadership Team, UNICEF National Committees, the Executive Board of UNICEF, as well as external development partners and governments. The findings will inform UNICEF's approach to innovation as a change strategy, including the internal governance and systems for innovation at the global level.

The temporal scope of the evaluation is the period from 2019 to 2024, encompassing both the management response to the 2019 Evaluation of Innovation in UNICEF's Work,[i] and implementation of the current Strategic Plan (2022-2025).

1.2 Purpose of this regional thematic case study

Thematic case studies were developed during the global evaluation to explore how innovation is implemented across UNICEF's seven regions. These case studies aim to assess the **relevance, effectiveness, and sustainability of innovation initiatives** (evaluation Objective 3), and to generate insights into **enabling and hindering factors** (evaluation Objective 4). The case studies were not intended as standalone evaluations, but rather as explorations of what is working in different regions and the challenges associated with implementing and scaling different types of innovations. They were designed to draw out common learnings of relevance to the global evaluation, rather than assessing the regional innovation situation or specific individual innovation initiatives. They contribute to evaluation questions under Objectives 3 and 4.

Evaluation questions under Objective 3:

- 3.1 To what extent did innovations implemented through the regional portfolios contribute to programme effectiveness and accelerate positive outcomes for children?
- 3.2 To what extent did they address considerations of equity, gender, and disability inclusion in achieving child rights?
- 3.3 What specific outcomes were achieved for marginalized or underserved populations through these innovations?
- 3.4 Is there data on the cost-effectiveness of the innovations compared to alternatives?
- 3.5 How are the innovations being scaled or sustained over time?

Evaluation questions under Objective 4:

- 4.1. What factors have enabled (or hindered) the successful implementation of innovation, scaling and replication of innovation within UNICEF?
- 4.2. What new knowledge and insights have been generated through UNICEF innovation initiatives, and how have these contributed to thought leadership and influence within innovation ecosystems?
- 4.3. In what ways has UNICEF's approach to innovation disrupted traditional sector practices, and what impact has this had on the broader field of child rights and development?

Each regional case study has a distinct thematic focus and includes two to three illustrative examples to generate comparative insights into how innovation is identified, supported and scaled across UNICEF's programming. The initiatives have been selected to highlight specific dimensions of innovation—such as scale, participatory design or systems integration.

This regional thematic case study for the West and Central Africa Region (WCAR) focuses on programme innovation, reflecting the region's emphasis on integrating innovation into service delivery to address persistent development challenges**.** This case study looks at 3 innovation initiatives, selected from more than 260 ongoing initiatives in West and Central Africa (WCA). These initiatives are:

- ***Plastic bricks*:** A product innovation to construct classrooms using recycled plastic waste to expand educational infrastructure and promote environmental sustainability in Côte d'Ivoire.
- ***U-test*:** A digital innovation promoting adolescent HIV self-testing uptake through a digital, peer-supported, and zero-rated mobile platform in Côte d'Ivoire.

- ***Revolving Fund for Sanitation*** **(*RFS*):** An innovative finance mechanism in Nigeria to expand access to household toilets through microfinance mechanisms and community-led financing.

These initiatives reflect different models of innovation—public-private partnerships, digital platforms, and blended finance—and offered lessons on equity, sustainability, and systems integration.

The case study report is structured into six sections, findings are organised by sub-question. Following this introduction, Section two provides a brief methodology. Section three is an overview of the three case study initiatives, situating them within the region's broader structures and in relation to other innovation initiatives. Section four provides an analysis of the findings relevant to the five evaluation sub-questions, and Section five draws out common enabling and hindering factors to innovation related to the thematic focus of this case study. Finally, the report concludes with a summary of the achievements and challenges of these initiatives, as relevant to the broader evaluation.

2 Methodology

2.1 Case sampling strategy

A total of seven regional thematic case studies were developed during the global evaluation, each focusing on a different thematic area (scaling, co-creation, emerging technologies and innovation strategy). The themes were strategically selected and assigned to each region in consultation with UNICEF stakeholders to ensure alignment with strategic, portfolio and learning priorities in each region and ensure thematic diversity across the global sample.

The thematic focus for the WCAR case study was programme innovations. This was selected due to the diverse innovations being implemented in WCAR and the strategic emphasis on integrating innovation into programming to address persistent challenges.

Once a theme was assigned to a region, one to three innovation initiatives were purposively selected to illustrate the assigned theme and to enable comparative insights into how innovations are identified, supported and scaled within different regional and country contexts. The selection of initiatives was guided by the sampling strategy for the global evaluation, which was designed to ensure a balance of initiatives based on the following factors: type of innovation (data, digital, innovative finance, product and/or social innovation), stage of development (early stage pilot through to scale), sector (i.e. health, learning, youth etc.), and design origin/approach (i.e. country, regional or globally led).

Following extensive consultation, portfolio review and document review (described below), a sample of 18 innovation initiatives was identified for the global evaluation sample. Once the initiatives for each region were selected, the implementing countries were identified, with the most suitable CO invited to participate in data collection. The original data collection approach proposed in-depth in-person data collection in one or two of the countries, with lighter touch remote data collection in the other one or two countries per region. Organizational changes[ii] in some COs meant alternative countries and/or innovation initiatives had to be selected in line with the regional theme and overall global sampling strategy. To accommodate staffing capacities, some regions shifted to highlighting a regional innovation initiative that involved lighter-touch data collection across multiple countries. A total of 16 initiatives were included in the final global sample.

The three innovation initiatives featured in this regional thematic case study (*Plastic bricks*, *U-test*, and *RFS*) were selected from more than 260 ongoing initiatives in WCAR. The **programme innovations** are implemented in Côte d'Ivoire (*Plastic bricks* and *U-test*) and Nigeria (*RFS*), which were selected based on the maturity and documentation of these innovations, as well as feasibility considerations for data collection. Together, they represent different models of innovation—public–private partnerships, digital platforms, and blended finance—and offer lessons on equity, sustainability, and systems integration.

2.2 Summary of the approach to data collection and analysis

A structured and comparative case study approach was adopted to generate insights from the purposively selected innovations. Appreciative inquiry methodology was used as a participatory and strengths-based approach to guide data collection and analysis. This approach was well-suited to the evaluation's focus on relevance, effectiveness, sustainability and the enabling and hindering factors influencing innovation, as outlined in Objectives 3 and 4. The robustness of the appreciative inquiry approach was enhanced though triangulation of the following data:

- **A document review** of 34 key documents from UNICEF Côte d'Ivoire, Nigeria and their partners (see Annex A.1). The evaluation team used a structured format to map documents against the evaluation questions. The evaluation team also utilised the natural language processing (NLP) tool Claude.ai to conduct a keyword and sentiment analysis of Country Office Annual Reports (COARs) for the countries in the 24 countries in the WCA region, exploring the ways innovation is implemented in the region.
- **Twenty-four interviews, two group interviews** and **three in-person focus group discussions** (FGDs) were held. Thirteen interviews were with CO staff, two with Ministry of Education officials, three with partner staff and six with health providers. Group interviews were conducted with school stakeholders (parents association/school community group and teachers). The three FGDs were conducted with teachers (1) and young people (2) involved in the initiatives (see Annex A.2). Of the key informant interviews (KIIs), 10 were women and 14 were men. Group interviews and FGDs included two women-only groups, two mixed-gender groups, and one men-only group, allowing for gender-sensitive insights into the implementation and impact of the innovations. In addition, the team carried out **direct observations** at **four** school sites constructed using recycled *Plastic bricks*, visited the Conceptos Plásticos factory, and observed two adolescent-friendly clinics and one community HIV testing event supported by the *U-test* initiative. A sampling frame was developed during the inception phase, and interviews were conducted in April and May 2025, including during a five-day field visit to Côte d'Ivoire. The interview data was transcribed, coded in MaxQDA, reviewed and discussed by the evaluation team. Key findings were categorised in an evaluation matrix, ensuring alignment with evaluation objectives and facilitating triangulation across data sources.
- The **portfolio review** collated dashboard data available from the OoI Dashboard, Venture Fund Dashboard and INVENT. Analysis identified a number of initiatives supported across innovation type, region, stage and thematic area. Analysis also explored alignment to priorities, budget allocation, reach and outcomes, where this was recorded.

A **joint country debriefing** was held at the end of the data collection mission, bringing together UNICEF CO staff and implementing partners to validate initial findings, discuss contextual dynamics, and identify emerging lessons for scale and sustainability.

To assess effectiveness, the evaluation used three outcomes for innovation based on the Active Learning Network for Accountability and Performance in humanitarian action's (ALNAP)[iii] work on evaluating humanitarian innovation. The outcomes are:

- Consolidated knowledge and learning: New knowledge generated, or the evidence base enhanced around the area the innovation is intended to address, or around the performance of the innovation itself.
- Improved solution: The innovation offers a measurable, comparative improvement in effectiveness, quality or efficiency over current approaches to the problem addressed by the innovation.
- Widespread adoption of the solution: The innovation is taken to scale and used by others to improve humanitarian performance.

The evaluation approach and framework were developed in line with **UNICEF[iv] and United Nations Evaluation Group (UNEG) standards and principles on evaluation ethics and quality**, as outlined in the UNEG Norms and Standards for Evaluation,[v] the UNICEF Adapted UNEG Evaluation Reports

Standards, the UNEG Ethical Guidelines for Evaluation, and the UNICEF Procedure on Ethical Standards in Research, Evaluation, Data Collection and Analysis.[vi] The obligations of the evaluators include: independence, impartiality, credibility, transparency on any conflicts of interest, and accountability.

The approach to data collection and storage prioritised confidentiality and informed consent. The evaluation team provided a full disclosure of the study's context. Interviewers informed respondents that they had the right to decide whether they wanted to participate or not, and they could leave at any time. Information is stored anonymously, protected, and will be deleted six months after closure of the assignment. The anonymized data collected in the course of the evaluation will be given and stored by the Evaluation Office.

2.3 Limitations and mitigation measures

This case study report aims to contribute to the evidence base for the broader evaluation and is not intended to serve as a stand-alone evaluation nor were case studies intended to generate formal recommendations. While the evidence has been triangulated and confirmed based on the primary and secondary data sources available, the findings cannot be interpreted as representative of, or as confirming patterns across, the overall global or regional innovation portfolio. Specific limitations of the case study, and their impact, are listed in Table 1 below.

Table 1: Case study limitations and mitigation measures

Limitation	Impact on case study and mitigation measures
Document review	The document review presents limitations in the Nigerian context due to the limited availability and accessibility of publicly available reports and disaggregated data by gender and disability. Additionally, the existing evaluations tend to assess sanitation programmes in aggregate, thereby obscuring the specific impacts, mechanisms, and outcomes associated with distinct components such as *Revolving Fund for Sanitation* s, potentially limiting the ability to isolate the effectiveness or implementation fidelity of such targeted interventions. These gaps were mitigated by triangulating across available documents and interviews to fill gaps; limitations around data are discussed in the report.
Interviews	In Nigeria, the small sample size of three UNICEF staff might have offered a narrow institutional perspective, and did not include perspectives from communities, users, government, and microfinance institutions (MFIs), potentially introducing bias, and limiting understanding of the user experiences. Interviewees were identified through UNICEF focal points and partners, which may have led to a positive bias or limited dissenting views. Staff turnover may also have affected the completeness of responses. The evaluation prioritised interviews with those most involved in implementation or decision-making and triangulated their views with documentary evidence.
Data and analysis	Due to limited quantitative data (including data on outcomes, cost and cost-effectiveness), findings were largely based on qualitative feedback and anecdotal evidence. The analysis could not fully capture outcomes, impacts, cost-effectiveness nor efficiency relative to alternative solutions.

	The evaluation used a structured coding matrix aligned with evaluation questions and relied on team debriefs to validate emerging findings. Where data was anecdotal, findings were clearly framed as illustrative rather than definitive.
Incomplete Data	Baseline learning-outcome and HIV-testing data in Cote d'Ivoire was incomplete. The team had to rely on teacher diaries, youth surveys, and national HIV statistics used to triangulate trends. Similarly, detailed unit-cost data for *U-test* is still under review (cost-effectiveness study due Q3–2025). The evaluation reported costs qualitatively and flagged for follow-up in management response. Furthermore, factory cash-flow records were partly redacted for commercial reasons. The evaluation relied on audit summaries used and production volumes verified during factory visits.
Courtesy bias in interviews with implementing partners	The evaluation observed potential courtesy bias in interviews with implementing partners in Cote d'Ivoire, despite clear indications on the purpose of the interviews and assurance on anonymization of data. To mitigate this, partner claims were cross-checked against site observations and financial audits.

3 Context of the innovations

UNICEF operates across 24 countries in WCA, a region facing some of the world's highest rates of child mortality, malnutrition, and out-of-school children, compounded by conflict, displacement, and climate shocks. Programming focuses on immunization, stunting, access to education, child protection, birth registration, and sanitation, with cross-cutting efforts on gender equality, adolescent development, disability inclusion, and climate resilience. UNICEF works to strengthen systems and accelerate progress in line with the SDGs and the African Union Agenda 2063, while responding to complex humanitarian emergencies and building long-term resilience.[vii]

In 2024, UNICEF invested $1,382 million across the region. Spending concentrated on ensuring every child survives and thrives (Goal Area 1), particularly through programming aligned with SDG 2 (Zero Hunger) and SDG 3 (Good Health and Well-Being), which accounted for 56 per cent of regional resources in 2024. This was followed by ensuring every child learns (Goal Area 2), which received 16 per cent of the regional investment, largely on SDG 4 (Quality education). The other goal areas received smaller allocations, with 12 per cent of funds contributing to ensuring every child lives in a safe and clean environment (Goal Area 4), 10 per cent of funds towards ensuring every child is protected from violence and exploitation (Goal Area 3) and 5 per cent towards ensuring every child has an equitable chance in life (Goal Area 5). With large humanitarian responses, the Democratic Republic of Congo and Nigeria received the largest funding allocations in the region. [viii]

3.1 Innovation in WCA

Analysis of COARs indicates that, across WCAR, innovation was largely applied to address practical implementation challenges, particularly in contexts affected by fragility, infrastructure gaps and service delivery constraints. Most COs focused on adaptive innovations rather than novel approaches or frontier technologies. Common themes included the use of digital tools for service delivery, community engagement approaches, and efforts to build resilience in health, education, and WASH systems. While institutional investments in innovation varied across the region, progress tended to be stronger in countries with more established partnerships and digital infrastructure.[ix]

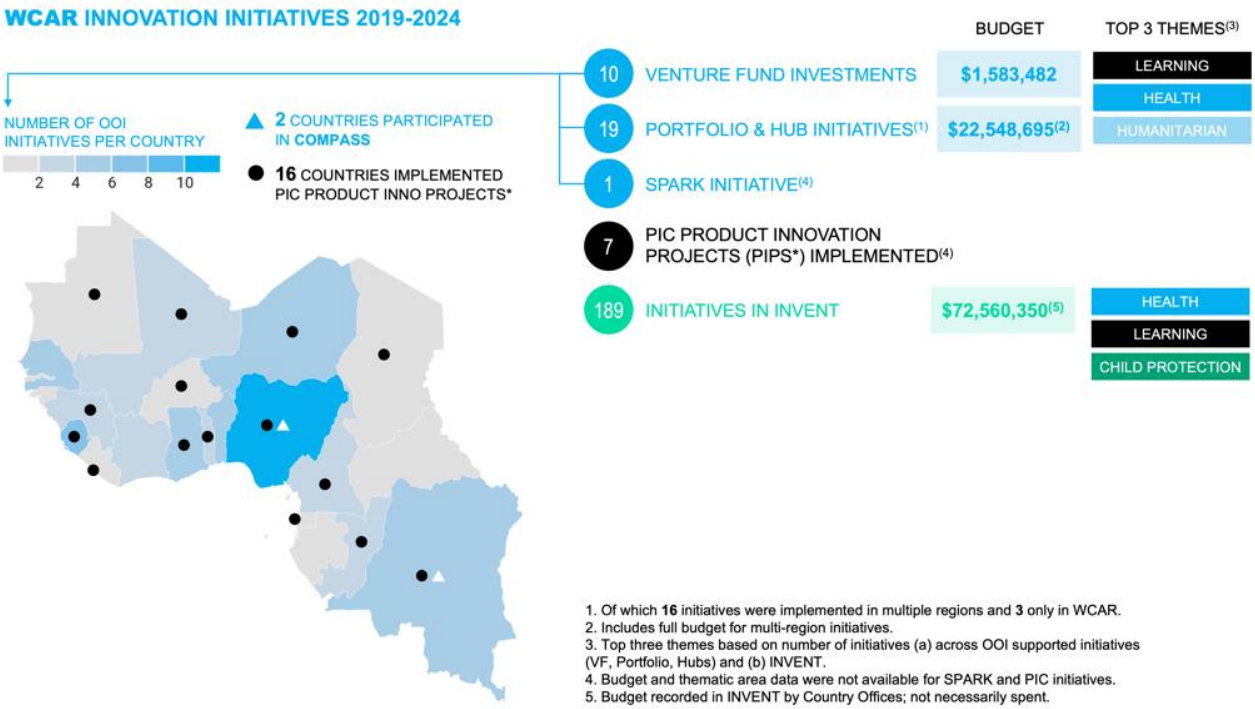
Digital innovation was a prominent feature in COARs, with a range of platforms and tools utilized to support education, health and data systems. These included learning platforms (e.g., the Learning Passport), digital feedback mechanisms (e.g., ETC-Connect in the Central African Republic), and mobile-based health interventions (e.g., VaxyRappel in Benin[x]). The focus was often on low-cost, scalable solutions that could function in low-connectivity settings.

Community-driven and social innovation was another key area, particularly in humanitarian and low-resource settings. COs reported supporting youth-led programmes, community dialogue platforms, and multi-sector coordination mechanisms (e.g., in Burkina Faso, Chad and the Democratic Republic of the Congo). These initiatives were often framed as a means of increasing local participation, improving accountability, and supporting the uptake of services at the community level.

Environmental and climate-related innovation was also a growing focus, though at a smaller scale. Several countries implemented solar-powered infrastructure and climate-resilient water or sanitation systems (e.g., in the Central African Republic, Gabon and Chad). Some also supported youth engagement in climate advocacy and piloted environment-focused financing mechanisms.

OoI and INVENT dashboard data was analysed to summarize innovation efforts in the region, including the COs involved in different OoI initiatives, budget allocation and key thematic areas (Figure 1). It is noted that INVENT is an open repository and is used in different ways by COs; it includes early ideas that may not been developed and implemented.

Figure 1: Overview of WCAR innovation initiatives (2019-2024)



Sources: Venture Fund dashboard; the OOI dashboard (which included Portfolio, Hub and Spark); the PIC dashboard; and INVENT.

3.2 Examples for this case study

This case study builds on this understanding of innovation in the region and explores three initiatives implemented in WCAR:

Case 1: *Plastic bricks*

Plastic bricks was developed in response to two problems in Côte d'Ivoire: a shortage of school infrastructure and the mounting issue of plastic waste. The initiative converted recycled plastic into interlocking bricks to construct low-cost, durable classrooms. Initially piloted in 2018–2019 and scaled within Côte d'Ivoire between 2020 and 2025, the project resulted in the construction of 473 classrooms. The solution was co-designed with Conceptos Plásticos, a Colombian social enterprise, and with the Ministry of Education. The project also generated local employment, with women accounting for 45 per cent of the factory workforce. Despite production slowdowns due to feedstock fluctuations and cash-flow gaps, the Ministry of Education endorsed the technology in 2025, committing to its use in future school-building tenders.

Case 2: *U-test*

U-test aims to re-imagine the HIV prevention landscape by promoting HIV self-testing (HIVST) and pre-exposure prophylaxis (PrEP) for at-risk youth aged 15–24, directly reaching 4.4 million young people in Côte d'Ivoire, Cameroon and Nigeria. *U-test* addressed persistent barriers to HIV testing among adolescents, especially girls and young women, by offering a discreet, digital solution for self-testing. Launched as a pilot in 2019–2020 and scaled up within Côte d'Ivoire through 2025, the programme distributed 75,000 self-test kits via zero-rated SMS/ Unstructured Supplementary Service Data (USSD) systems and peer educator networks. Designed in collaboration with the national HIV programme, Programme National de Lutte contre le SIDA (PNLS), mobile operators, and adolescent peer groups, *U-test* reached 70 per cent women users and demonstrated high acceptability among adolescents, helping to reduce stigma and increase testing. The solution was integrated into the draft National HIV Strategic Plan (2025–2030).

Case 3: Revolving Funds for Sanitation

The *Revolving Fund for Sanitation* (*RFS*) in Nigeria is a blended finance mechanism targeting improved access to safely managed sanitation for low-income rural households. It is relevant in the country where 31 per cent of the rural population, and 25 per cent of the overall population, still practise open defecation, and only 18 per cent have access to safely managed sanitation.[xi] This case study explicitly examines the *RFS* supported by pooled funds from UNICEF through the WASH Innovation Hub and Government contributions in Bauchi and Oyo States. The *RFS* was first piloted in Bauchi State in 2020 through a partnership between UNICEF Nigeria and the Bauchi State Government. It has since been expanded to Oyo State. It complements Community-Led Total Sanitation (CLTS) by addressing the financial barriers to building durable, non-shared toilets. In Nigeria, the fund began with ₦40 million (~$96,325) in 2020 and reportedly doubled to ₦80 million by 2025, with UNICEF contributing ₦60 million. It operates as a three-tiered fund (M1, M2 and M3):

- M1: Initial capital pooled by the Government and UNICEF into a joint fund managed by the Rural Water and Sanitation Agency (RUWASSA)
- M2: Funds allocated at 0 per cent interest to selected MFIs.
- Mi3: MFIs disburse loans at up to 9 per cent interest to households via Toilet Business Operators (TBOs), who also collect repayments.

This TBO-centric model was unique to Nigeria; in comparison to the Ghanaian *RFS* pilot that used a cashless voucher system, while Togo's was administered by Municipal Sanitation Committees. This formal *RFS* structure operates alongside traditional community-based financing mechanisms, such as *Adashes* (Community Savings and Credit Groups), which offer an alternative pathway for households to fund sanitation improvements.

4 Case study findings

4.1 Effectiveness and outcomes

All three initiatives achieved their intended reach, contributing to improved service delivery and infrastructure. However, outcome measurement was limited and inconsistently documented. Reported contributions include:

- ***Plastic bricks*** effectively addressed school infrastructure needs, constructing 159 classrooms.[xii] Teachers explicitly noted classroom improvements: "Temperatures have dropped inside classrooms, children can now concentrate better. There are fewer days we lose due to heavy rains compared to old structures".[xiii] However, quantifiable learning-outcome data were not collected, limiting the ability to measure direct educational impacts.
- ***U-test*** significantly improved HIV-testing rates among adolescents, distributing approximately 44,000 self-testing kits by December 2024. This resulted in increased first-time testing, particularly among adolescent girls and young women (AGYW). Peer educators said they had seen notable behavioural changes, for example: "Many adolescents who were afraid to visit clinics finally got tested because they could do it privately at home".[xiv] PNLS data confirmed increased adolescent test result reporting but there were challenges linking adolescents that tested positive to HIV care and counselling services.[xv] There is no data on the services received by adolescents who tested positive.
- ***RFS*** monitoring, case study and evaluation data from Nigeria indicated that its contributions to effectiveness and outcomes varied across states. The project results were strongest in Bauchi State, where 2,980 toilets were constructed (exceeding the 2,000-target), facilitated by well-established MFIs.[xvi] Interviews indicate improved access to sanitation, expanded business opportunities for MFIs and TBOs, and enhanced community satisfaction as a result of the initiative. However, the WASH programme evaluation reported inconclusive evidence on the effect on diarrhoea prevalence across all WASH programmes. It is important to note that multiple factors influence diarrhoea prevalence, and *RFS* is but one component within a broader UNICEF WASH programme designed to address diarrhoea and cholera. While national data (Multiple Indicator Cluster Surveys programme [MICS], Demographic and Health Survey, WASHNORM) indicated little change in diarrhoea rates among children under five (12-15 per cent), qualitative insights indicated improved access to latrines among the targeted Local Government Area (LGA) communities.[xvii]

The outcomes for innovation can be considered not only in terms of demonstrated contributions to programmes, but also the addition of knowledge and learning and of improved solutions. The evaluation utilised the ALNAP innovation success criteria to assess the project's outcomes. Table 2 illustrates the strongest achievements in the area of **improving and scaling solutions and consolidating and sharing knowledge and learning.**

Table 2: Innovation outcomes based on the ALNAP criteria for evaluating humanitarian innovations

Analysis of outcomes	*Plastic bricks*	*U-test*	*RFS*
Consolidated knowledge and learning	Lessons on cost-efficiency (30–40 per cent cheaper than fired bricks), cash-flow	Insights on digital delivery, stigma reduction, and gaps in disability access reportedly	Regional[xviii] and country[xix] case studies and briefs captured progress,

	challenges, and supply chain risks informed adaptive planning; learning shared across UNICEF CO and integrated into education infrastructure strategy.	influenced design and national HIV planning.	challenges and adaptations.
Improved solution	Delivered 159 classrooms (benefiting ~24,000 learners); improved thermal comfort and rain resistance; employed 45 per cent women factory workers.	Distributed 44,000 self-test kits (70 per cent to AGYW); reduced stigma and enabled private testing; partial accessibility (e.g., USSD access, but not screen-reader compatible).	No systematic data but an indication of improved toilet construction, good repayment rate, and active engagement of MFIs and TBOs.[xx]
Widespread adoption of the solution	Endorsed by the Ministry of Education in January 2025 for national tenders; scale-up contingent on steady feedstock and factory financing.	Integrated into draft National HIV Strategic Plan (2025–2030); scale depends on formalizing telecom agreements and securing domestic financing.	No systematic data but indication of investing from the success in Bauchi and expanding to Oyo state along with regional implementation in Ghana and Togo.[xxi]

4.2 Equity, gender equality and inclusion

All three initiatives were designed to meet the needs of marginalized and underserved populations. *Plastic bricks* targeted underserved communities and aimed to provide employment for vulnerable women at its manufacturing facility. *U-test* aimed to address HIV stigma and barriers including for adolescent girls and young women. The *RFS* initiative aimed to expand sanitation financing for households in the formal and informal economy but did not target the poorest households who were targeted through alternative WASH solutions such as vouchers and subsidies. Gender considerations were acknowledged but not explicitly integrated into *RFS's* design.

Despite these considerations, equity, gender, and disability inclusion were not systematically embedded in design or implementation, and inclusion efforts varied across initiatives. It is not clear from the information reviewed for this case study whether disaggregated data was collected.

- ***Plastic bricks*** addressed infrastructure gaps in underserved communities. The initiative was successful in providing employment for vulnerable women, achieving approximately 45 per cent women workforce participation. Factory employees described clear socioeconomic benefits for them, such as: "Working at the factory allows me to send my children to school and pay my family's medical bills".[xxii] *Plastic bricks* classrooms consistently included ramps. Adapted learning resources for children with disabilities are now part of every teacher-training kit and are covered in the corresponding professional development sessions. Sign-language classes remain in pilot mode in select Abidjan schools and in those built through UNICEF's plastic-brick initiative, with a nationwide rollout already in progress. All digital platforms that support education quality now come with sign-language video explainers and interface options that automatically adjust to a learner's specific disability.

- ***U-test*** was successful at including adolescent girls and young women who comprised approximately 70 per cent of total registered users.[xxiii] FGDs with AGYWs highlighted improved testing access: "I could finally test privately without worrying about being judged at the clinic".[xxiv] The digital USSD/SMS interface does not currently support full screen-reader compatibility for visually impaired adolescents.
- **The *RFS* initiative** expanded sanitation financing for households in the formal and informal economy but disproportionately served civil servants. Farmers and cattle herders with seasonal and unstable income sources were underrepresented among loan recipients despite comprising 55 per cent of the population. This is consistent with its design as a loan-based mechanism, as the poorest households who are unable to afford loans are targeted through alternative WASH solutions such as vouchers and subsidies. This disparity suggests the need to adapt the *RFS* in states with higher poverty levels and to integrate targeted subsidy mechanisms or social funds to better support marginalized households, who might not be able to borrow or repay this loan. There were some efforts to target households headed by persons with disabilities, but no data on access or barriers was available. Despite the evidence that women are more reliable borrowers than men,[xxv] and good representation of women in WASH committees, there was limited explicit targeting of women-headed households and few household loans were disbursed to women (7.8 per cent in 2022).[xxvi] Reflections from other implementations of *RFS* in the region similarly found challenges in targeting women borrowers for sanitation, largely due to entrenched cultural and societal norms within the programme areas.[xxvii] In Bauchi, only 7.5 per cent of loan recipients were women. Learning from this, a subsequent pilot in Oyo State improved gender targeting and then achieved greater gender parity with loans disbursed to 191 men and 161 women

4.3 Cost-effectiveness

All three innovations demonstrated potential cost advantages over conventional approaches, offering promising value for money. This is a notable result because this type of analysis is unusual within UNICEF's innovation portfolios. The main findings are:

- ***Plastic bricks* -** Lessons on cost-efficiency (30–40 per cent cheaper than fired bricks), cash-flow challenges, and supply chain risks informed adaptive planning; learning shared across UNICEF CO and integrated into education infrastructure strategy.
- ***U-test*** preliminary budget analysis indicated clear cost advantages over traditional clinic-based outreach, with estimated costs per completed self-test significantly lower. Initial cost estimates for *U-test* are approximately $3.50 per completed test versus roughly $5.20 per test via clinic-based outreach.[xxviii] A comprehensive unit-cost analysis is scheduled for late 2025. Detailed unit-cost analysis for U-Test is underway as part of ongoing research/scalability work; no finalized cost-effectiveness report is available at the time of writing.
- **For *RFS*,** although there was no cost-effectiveness analysis, several proxy indicators (including interest rates, loan repayment rates, disbursement efficiency, and funding leverage) suggested that *RFS* offered promising value for money.[xxix] Data from Bauchi State found that *RFS* offered a household interest rate of 9 per cent, significantly lower than the average market interest rate of 20–34 per cent and supported broader uptake among low-income households, as shared in the interviews. *RFS* was also more predictable and offered better liquidity than traditional community-based credit systems such as *Adashes* (village savings and loan associations). However, the data on *RFS* was not consistent across locations.

For example, early data on repayment rates in Bauchi State ranged from 66 per cent to 97 per cent across different MFIs.[xxx]

Efficient use of resources was also evident where strong institutional coordination and strategic partnerships were in place. For example:

- ***Plastic bricks*** benefited from a streamlined production model. However, financial audits noted "cash-flow gaps have occasionally delayed raw-material procurement and slowed down production capacity".[xxxi]
- ***U-test*** leveraged partnerships with telecoms providers and peer networks to reach adolescents at lower operational costs.
- ***RFS*** demonstrated effective resource utilization in Bauchi State, where high-level political engagement, effective coordination with RUWASSA, matched government funding, and MFI partnerships enabled successful disbursement of approximately $91,485 (with a balanced 50:50 funding split between UNICEF and the Nigerian Government).

The long-term cost-efficiency of *RFS* in Nigeria is uncertain due to contextual factors. Regional evidence from Ghana and Togo supported the cost-efficiency of revolving fund models, with documented gains in sanitation access linked to integrated finance and service delivery mechanisms.[xxxii] It is important to note, however, that while these initiatives share the revolving fund approach, the Ghana and Togo models were independently established and operated with different funding mechanisms—primarily donor-funded without government contributions—and distinct deployment mechanisms compared to Nigeria's pooled fund model, which integrates both UNICEF and domestic government resources. Implementing the model in Nigeria was constrained by weak regulatory oversight, insufficient digital infrastructure, and underdeveloped monitoring systems. Operational costs per loan were reported to exceed the sustainability threshold of 3–5 per cent, with insufficient understanding of the project capital, portfolio growth, initial cost, and recurrent expenditures.[xxxiii] These inefficiencies, coupled with the small loan sizes and short repayment tenures, limit affordability for poor households and risks undermining long-term impact.

Collectively, the initiatives underscore the importance of integrating cost-efficiency considerations into design and planning, while recognizing that contextual factors and implementation environments significantly influence financial sustainability.

4.4 Scale and sustainability

All cases showed good alignment with national strategies, positively impacting the potential for scale-up and sustainability. For example:

- ***Plastic bricks*** was embedded in Côte d'Ivoire's National Education Infrastructure Plan (2022–2030) and directly contributed to government efforts to expand equitable access to primary education through sustainable infrastructure. The Ministry of Education formally endorsed the innovation in January 2025, committing to integrating recycled *Plastic bricks* into future school construction tenders. The government has also approved the benches made from recycled plastic for distribution in schools as part of a pilot phase aimed at assessing their viability and scaling up their use in all public schools, depending on availability and resources. Similarly
- ***U-test*** was aligned with national health strategies, particularly the draft National HIV Strategic Plan (2025–2030), which focused on reducing stigma and increasing adolescent

access to testing. *RFS* also showed strong alignment to the National Action Plan for the Revitalization of the WASH Sector (2018)[xxxiv] and the Clean Nigeria Campaign.[xxxv]

- ***RFS*** was aligned with Nigeria's Clean Nigeria Campaign and the National Action Plan for the Revitalization of the WASH Sector (2018).[xxxvi] At the regional level, *RFS* demonstrated strong alignment with RO priorities.[xxxvii]

Despite successes in policy integration for *Plastic bricks and U-test, s*ustainability among all three innovations remains contingent on stable financing, institutional capacity, private-sector engagement, and enabling environments. Specifically:

- **For *Plastic bricks (PB)*,** despite stated intentions by the Ministry of Education to mainstream this innovation into upcoming national school-building tenders,[xxxviii] The early stages of implementation presents scaling faces challenges such as ensuring consistent plastic feedstock supply and managing periodic factory-level cash-flow shortfalls. Addressing these issues requires enhanced private-sector involvement and stable procurement contracts. In addition, while it does support educational access and environmental goals, *Plastic bricks* lies at the edge of UNICEF's core mandate and requires sustained external partnerships to manage supply chains and factory operations. This raises important questions about the most appropriate business model for the initiative going forward.
- ***U-test:*** Peer educator networks have notably strengthened community engagement, boosting adoption rates: "Peer educators helped us understand the importance of self-testing and reduced our fears".[xxxix] However, long-term sustainability requires securing committed domestic funding. Institutional cooperation with the PNLS and telecommunications operators has facilitated zero-rated SMS and USSD access. Formalized long-term agreements with telecom providers offer continued free digital access.[xl]
- The ***RFS*** in Nigeria remains a localized success, with Bauchi State demonstrating strong uptake due to aligned political will, MFI partnerships, and matched-financing arrangements. However, replication in other states has faced significant barriers, including weak institutional buy-in, lower prioritization of WASH at the state level, a lack of matched funding, and limited market development. Sustainability is shaped by the willingness and capacity of MFIs to engage in sanitation finance, an area viewed as low-margin and high-risk. Reluctance from MFIs, combined with limited profitability and high operational costs, means the model's replication and scalability is contingent on the context and ecosystem. While the *RFS* model works well in a supportive environment like Bauchi State, scaling it nationally requires addressing governance, financing, market development and demand-side challenges, none of which have yet been fully resolved.

5 Enabling and hindering factors

A range of enabling and hindering factors to testing programme innovations emerged from this case study. This section highlights those most strongly evidenced in the data and most relevant to the global evaluation findings, rather than providing an exhaustive list (Table 3).

Table 3: Enabling and hindering factors to innovation from the case study examples

Enabling factors	PB	*U-test*	RFS	Hindering factors	PB	*U-test*	RFS
Strong government support and policy alignment	X	X	X	Rising costs limited affordability and demand generation			X
UNICEF's funding, advocacy and leadership support	X	X	X	Financial sustainability and cash-flow constraints	X	X	X
Convening power/Multi-stakeholder collaboration	X	X	X	Supply chain vulnerabilities	X		
Community trust through peer networks		X		Incomplete disability inclusion measures	X	X	X
Technical assistance and support			X	Sustainability of zero-rated digital infrastructure		X	
Private sector partnerships	X	X	X	Availability of sanitation infrastructure			X
				Enabling environment for innovative finance			X

5.1 Enabling factors

Strong government support and policy alignment supported effectiveness and sustainability for all three initiatives. All three innovations secured explicit government endorsement. *Plastic bricks* received formal commitment from the Ministry of Education in January 2025 to integrate recycled-plastic technology into national infrastructure standards.[xli] *U-test* was explicitly incorporated into the draft National HIV Strategic Plan (2025–2030), creating policy coherence and strong institutional support.[xlii] The *RFS* benefited from political support that led to fund-matching and sustained government commitment in Bauchi State but replication to other states faced significant barriers.

UNICEF's funding, advocacy and leadership played a pivotal role in building trust and fostering collaborative relationships with government actors across all three initiatives. UNICEF leadership provided advocacy, alignment of the innovations with UNICEF's strategic priorities and facilitated smooth integration into national policy frameworks. For the *RFS*, UNICEF's financial contributions to the pool funds were instrumental in leveraging government investments, which were important for the *RFS* to move toward scale and sustainability.

Technical assistance complemented these efforts for *RFS*. UNICEF's technical assistance for the *RFS* strengthened the capacity of MFIs, TBOs and local actors.

Multi-stakeholder collaboration improved innovation effectiveness for *Plastic bricks and U-test.* Both initiatives demonstrated effective cross-sector collaboration among UNICEF, government ministries, the private sector, civil society, and local communities. Stakeholders explicitly credited UNICEF's leadership and convening power as vital to overcoming implementation challenges and achieving scalable results. Similarly, for the *RFS*, UNICEF Nigeria actively collaborated and built partnerships with MFIs, TBOs, RUWASSA, and relevant stakeholders. It leveraged its convening power to engage with the Federal Ministry of Water Resources, the Bauchi State Government and the Federal Government.

Community trust via peer networks significantly increased community engagement and adoption rates for *U-test*. Adolescents reported high levels of trust and confidence fostered through peer-led communication: "We trusted peer educators because they understood our fears and explained testing clearly to us".[xliii] Community involvement contributed to the sustainability of the initiatives.

Private-sector partnerships provided essential technical and material support for all three initiatives. Conceptos Plásticos provided essential technical knowledge and operational capabilities for *Plastic bricks*, enabling quality-controlled, reliable production at scale. For *U-test*, telecommunications providers ensured robust digital delivery channels, maintaining cost-free USSD/SMS traffic, which is crucial for equitable access. For the *RFS*, the UNICEF team facilitated processes with the public sector to drive sanitation demand and the private sector to fulfil it.

5.2 Hindering factors

Demand generation was more difficult in the context of rising costs. For *RFS,* high inflation eroded the real value of sanitation loans, leaving them insufficient to cover the full costs of toilet construction and associated materials. This, combined with limited public awareness and cultural norms, contributed to a lack of perceived urgency around sanitation and lower household demand. The programme has not sufficiently addressed this with behaviour change or community mobilization. Although UNICEF supports community-led total sanitation, these efforts are not well integrated with the *RFS*, missing opportunities to strengthen uptake.

All three initiatives faced or will face financial sustainability and cash-flow constraints: Periodic working capital shortages at the *Plastic bricks* factory led to production delays and limited scalability. Financial audits recommended stronger private-sector engagement and long-term funding mechanisms to stabilize cash flows.[xliv] *U-test* also faces uncertain long-term domestic financing, which will be critical for sustaining programme scale-up after UNICEF's direct support phases out.[xlv] For *RFS*, financial sustainability is a major hindering factor; if MFIs are not able to cover their operating costs, they will incur a loss and exit the business of sanitation lending.

A secure and predictable supply of quality recycled plastic remains a significant operational challenge for *Plastic bricks*. Factory managers emphasized the importance of establishing stable, long-term contracts to ensure a continuous feedstock supply, which is crucial for sustainable scaling.

Incomplete disability inclusion measures risk excluding marginalized groups from the benefits of the innovations. Despite basic adaptations such as classroom ramps, the *Plastic bricks* initiative lacked comprehensive considerations on accessibility. For example, stakeholders noted a specific gap in tactile signage for visually impaired adolescents. The *U-test* digital platform does not fully accommodate visually impaired users.

Sustainability of zero-rated digital access is threatened by the lack of formal long-term commitments. Although initial partnerships with telecom providers facilitated zero-cost SMS and USSD access for *U-test*, there are currently no formal long-term commitments. Securing explicit, enduring telecom commitments will be essential to maintaining equitable digital access for adolescents beyond UNICEF's initial support period.[xlvi]

Insufficiently developed sanitation ecosystem and market risks gains made through *RFS*. For *RFS*, lack of affordable and accessible pit emptying services posed a risk to sustained toilet use. The weak local sanitation market, including the limited availability of affordable services, goods, supplies, and service providers, represents a hindering factor. The initiative focussed on toilet construction but did not incorporate downstream services like toilet maintenance and pit emptying services, which are essential for a sustainable sanitation ecosystem. The additional costs may discourage households from continued use of improved sanitation facilities.

The enabling environment for innovative finance varies considerably based on the capacity and interest of MFIs involved in the *RFS* to work on sanitation. National efforts to expand partnerships (e.g., with the Development Bank of Nigeria and the National Association of Microfinance Banks) are underway, but many MFIs are reluctant to engage in sanitation finance, and there are concerns about low profitability and high operational costs. Additionally, regulatory and policy frameworks, particularly those governing the integration of digital finance, remain underdeveloped, restricting innovative financial solutions that are critical for scaling. Political instability and fluctuating government interest exacerbate these challenges, preventing matched funding outside of Bauchi State.

6 Concluding achievements and challenges

The examples in this case study stand out for their integration of innovation into national systems and policies, demonstrating how UNICEF-supported initiatives can influence structural change when well-aligned with government priorities. *Plastic bricks* addressed infrastructure deficits while promoting environmental sustainability and women's employment. *U-test* helped reduce stigma and increase adolescent HIV testing through a discreet digital platform. The *RFS* provided microfinance access to households for toilet construction, particularly in Bauchi State, with strong local government buy-in.

Despite these achievements, the initiatives faced notable challenges in implementation and sustainability. *Plastic bricks* experienced feedstock shortages and working capital constraints that limited production capacity as well as challenges in addressing concerns about plastic toxicity. *U-test*, while cost-effective and widely accepted by adolescents, requires longer-term telecom partnerships and depends on connecting HIV-positive young people to existing HIV services. Moreover, the use of technology, particularly with adolescents and other vulnerable groups, underscores the need for robust safeguarding measures to be better integrated into project implementation to ensure data protection and privacy. The *RFS* achieved promising results in Bauchi State but encountered barriers in reaching women-headed households and financial sustainability of MFIs.

Collectively, the initiatives underscore the potential of well-supported innovations to deliver measurable improvements for children and communities. At the same time, they emphasize the need for more inclusive design processes, outcome measurement, and planning for sustainability from the outset.

A.1 Documents reviewed

Regional and CO documents

- UNICEF. *Country Office Annual Reports (COARs), 2021–2023: Benin, Burkina Faso, Cameroon, Cabo Verde, Central African Republic, Chad, Congo, Democratic Republic of Congo, Côte d'Ivoire, Equatorial Guinea, Gabon, Gambia, Ghana, Guinea, Guinea-Bissau, Liberia, Mali, Mauritania, Niger, Nigeria, São Tomé and Príncipe, Senegal, Sierra Leone, and Togo*.

Côte d'Ivoire

- Conceptos Plásticos. *Financial Audit Summary Report*. Abidjan: Conceptos Plásticos, 2023.
- Conceptos Plásticos. *Partnership and Operational Agreement Documents*. Abidjan: Conceptos Plásticos, 2018–2025.
- Government of Côte d'Ivoire. *National Education Infrastructure Development Strategy 2022–2030*. Abidjan: Government of Côte d'Ivoire, 2022.
- Government of Côte d'Ivoire. *National HIV Strategic Plan (Draft)*. Abidjan: Government of Côte d'Ivoire, 2025–2030.
- Ministry of Education. *Press Release on Plastic bricks Initiative Endorsement*. Abidjan: Government of Côte d'Ivoire, January 2025.
- Programme National de Lutte contre le SIDA (PNLS). *Dashboard on HIV Testing and Adolescent Uptake*. Abidjan: PNLS, December 2024.
- Programme National de Lutte contre le SIDA (PNLS). *HIV Strategy and Reports*. Abidjan: PNLS, December 2024.
- UNICEF Côte d'Ivoire. *Communication Materials Related to Plastic bricks and U-test: Press Kits, Brochures and Flyers*. Abidjan: UNICEF, 2020–2025.
- UNICEF Côte d'Ivoire. *Construction Audit Report*. Abidjan: UNICEF, 2018–2022.
- UNICEF Côte d'Ivoire. *Country Office Annual Report (COAR)*. Abidjan: UNICEF, 2022.
- UNICEF Côte d'Ivoire. *Environmental Report*. Abidjan: UNICEF, 2023.
- UNICEF Côte d'Ivoire. *HIV Costing Analysis Brief*. Abidjan: UNICEF, January 2025.
- UNICEF Côte d'Ivoire. *Innovation Dashboard Extracts: Plastic bricks and U-test*. Abidjan: UNICEF, 2024–2025.
- UNICEF Côte d'Ivoire. *Monitoring and Evaluation Plans: Plastic bricks and U-test*. Abidjan: UNICEF, 2022–2025.
- UNICEF Côte d'Ivoire. *Project Planning Documents for Plastic bricks*. Abidjan: UNICEF, 2019–2025.
- UNICEF Côte d'Ivoire. *Project Planning Documents for U-test*. Abidjan: UNICEF, 2019–2025.
- UNICEF Côte d'Ivoire. *Public Awareness Campaign Documentation for U-test, Including SMS/USSD Promotional Materials*. Abidjan: UNICEF, 2023–2024.
- UNICEF Côte d'Ivoire. *U-test Technical Specifications and Implementation Plans*. Abidjan: UNICEF, 2021–2025.
- UNICEF Evaluation Office. *Evaluation of Innovation: Synthesis Report*. New York: UNICEF, 2019.
- UNICEF Evaluation Office. *Regional Thematic Case Study Template*. New York: UNICEF, 2023.
- UNICEF Evaluation Office. *Terms of Reference for the Evaluation of Innovation*. New York: UNICEF, 2023.

- UNICEF. *Case Studies in Gender-Transformative Approaches in Health, Nutrition, and HIV: Côte d'Ivoire*. New York: UNICEF, 2022.
- UNICEF. *Global Innovation Strategy 2022–2025*. New York: UNICEF, 2022.
- UNICEF. *Procedure on Ethical Standards in Research, Evaluation, Data Collection and Analysis*. New York: UNICEF, 2024.

Nigeria

- Centre for Water and Sanitation (CEWAS) and UNICEF Nigeria. *Evidence Generation for Innovative Finance – Regional Revolving Fund: Case Study in Nigeria* (internal document). 2022.
- Enimu, Sunday, E. O. Eyo, and E. A. Ajah. "Determinants of Loan Repayment among Agricultural Microcredit Finance Group Members in Delta State, Nigeria." *Financial Innovation* 3, no. 21 (2017). https://doi.org/10.1186/s40854-017-0072-y.
- Federal Ministry of Water Resources. *National Action Plan for the Revitalisation of Nigeria's Water, Sanitation and Hygiene Sector*. Federal Republic of Nigeria, 2018. https://www.wateraid.org/ng/sites/g/files/jkxoof381/files/nigerias-national-action-plan-for-the-revitalization-of-the-wash-sector.pdf.
- Federal Ministry of Water Resources, Sanitation and Water for All, and UNICEF Nigeria. *Nigeria Water, Sanitation and Hygiene Sector: Finance Advocacy Strategy and Plan* (internal document). 2022. https://knowledge.unicef.org/wash/resource/nigeria-water-sanitation-and-hygiene-sector-finance-advocacy-strategy-and-plan.
- Konterra and UNICEF Nigeria. *End-Cycle Independent Evaluation of the Nigeria–UNICEF WASH Country Programme Cooperation (CPC 2018–2022)* (evaluation report). 2024.
- UNICEF. *Unlocking Finance for Sanitation in West Africa: Leveraging Development Funds towards Commercially Scalable Solutions (WASH Field Note)*. 2023.
- UNICEF WCARO. *WASH Nutrition Strategy: West and Central Africa* (strategy document). 2024. https://knowledge.unicef.org/wash/resource/wash-nutrition-strategy-west-and-central-africa.
- United Nations. *Convention on the Rights of the Child (UNCRC)*. 1989. https://www.unicef.org.uk/wp-content/uploads/2016/08/unicef-convention-rights-child-uncrc.pdf.
- United Nations. *Transforming Our World: The 2030 Agenda for Sustainable Development*. 2015.
- WaterAid Nigeria. *Clean Nigeria Campaign*. n.d. https://www.wateraid.org/ng/get-involved/clean-nigeria-campaign. Accessed October 23, 2024.

A.2 List of people consulted

Organisation	Role
Blockauss Community Health Centre (CHC)	Health Provider
Blockauss CHC	Health Provider
Blockauss CHC	Health Provider
Blockauss CHC	Health Provider
Blockauss CHC	Health Provider
Blockauss CHC	Health Provider
Community	Adolescent Girls
Community	Mixed Youth Group
Conceptos Plásticos	Community Liaison Officer
Conceptos Plásticos	General Manager
Conceptos Plásticos	Operations Lead
EPP Abobo Agbekoi	Parents Association and School Community
EPP Félix Houphouët-Boigny	Teachers
EPP Gendarmerie	Teachers
Ministry of Education	Associate Coordinator
Ministry of Education	Coordinator
UNICEF Côte d'Ivoire	Adolescent & Youth Manager
UNICEF Côte d'Ivoire	Chief, Education
UNICEF Côte d'Ivoire	Chief, Programme Planning, Research & Monitoring (PPRM)
UNICEF Côte d'Ivoire	Chief, Supply & Logistics; OIC Deputy Ops
UNICEF Nigeria	Chief, WASH
UNICEF Côte d'Ivoire	Country Representative
UNICEF Côte d'Ivoire	Deputy Representative Operations
UNICEF Côte d'Ivoire	Deputy Representative Programme
UNICEF Côte d'Ivoire	Education Specialist
UNICEF Côte d'Ivoire	Technology Consultant
UNICEF Côte d'Ivoire	*U-test* Focal Point
UNICEF Nigeria	WASH Manager
UNICEF Nigeria	WASH Consultant

Endnotes

[i] Evaluation Office, *Evaluation of Innovation in UNICEF's Work* (New York: UNICEF, 2019).

[ii] This evaluation took place during a time of significant organisational change for UNICEF. The availability of country staff was consequently affected by concurrent strategic planning, restructuring and downsizing processes associated with the restricted funding context and the Future Forward Initiative

[iii] ALNAP is a global network to advance humanitarian learning.

[iv] Economic and Social Council at the United Nations, *Revised Evaluation Policy at UNICEF* (2023).

[v] United Nations Evaluation Group (UNEG), *Ethical Guidelines for Evaluation* (2020).

[vi] UNICEF, *Global Evaluation Report Oversight System: Handbook for UNICEF Staff and Independent Assessors* (2017).

[vii] RAM3 COAR.rdl

[viii] Transparency tool | Transparency portal

[ix] Based on evaluation synthesis of COARs

[x] A vaccination Reminder Platform

[xi] Federal Ministry of Water Resources, National Bureau of Statistics, World Bank, and UNICEF, *Water, Sanitation and Hygiene National Outcome Routine Mapping (WASHNORM) 2021: A Report of Findings* (Nigeria, 2022), https://www.unicef.org/nigeria/reports/water-sanitation-and-hygiene-national-outcome-routine-mapping-report-2021.

[xii] UNICEF Côte d'Ivoire, *Country Office Annual Report (COAR)* (Abidjan: UNICEF, 2022).

[xiii] Teacher, Yopougon school, KII, April 2025.

[xiv] Peer Educator, FGD, May 2025.

[xv] Programme National de Lutte contre le SIDA (PNLS), *HIV Strategy and Reports* (Abidjan: PNLS, December 2024).

[xvi] Konterra and UNICEF Nigeria, *End-Cycle Independent Evaluation of the Nigeria–UNICEF WASH Country Programme Cooperation (CPC 2018–2022)* (2024).

[xvii] Ibid.

[xviii] https://knowledge.unicef.org/wash/resource/field-note-unlocking-finance-sanitation-west-africa

[xix] https://knowledge.unicef.org/resource/case-study-nigeria-evidence-generation-krc8-innovative-finance-regional-revolving-fund

[xx] Konterra and UNICEF Nigeria, *End-Cycle Independent Evaluation of the Nigeria–UNICEF WASH Country Programme Cooperation (CPC 2018–2022)* (2024).

[xxi] Ibid.

[xxii] Women factory worker, Site Visit, May 2025

[xxiii] Programme National de Lutte contre le SIDA (PNLS), *Dashboard on HIV Testing and Adolescent Uptake* (Abidjan: PNLS, December 2024).

[xxiv] Adolescent girl, FGD, Abobo, May 2025

[xxv] Sunday Enimu, E. O. Eyo, and E. A. Ajah, "Determinants of Loan Repayment among Agricultural Microcredit Finance Group Members in Delta State, Nigeria," *Financial Innovation* 3, no. 21 (2017), https://doi.org/10.1186/s40854-017-0072-y.

[xxvi] CEWAS and UNICEF Nigeria, *Evidence Generation for Innovative Finance – Regional Revolving Fund: Case Study in Nigeria* (2022).

[xxvii] UNICEF, *Unlocking Finance for Sanitation in West Africa: Leveraging Development Funds towards Commercially Scalable Solutions (WASH Field Note)* (2023).

[xxviii] UNICEF Côte d'Ivoire, *HIV Costing Analysis Brief* (Abidjan: UNICEF, January 2025).

[xxix] Konterra and UNICEF Nigeria, *End-Cycle Independent Evaluation of the Nigeria–UNICEF WASH Country Programme Cooperation (CPC 2018–2022)* (2024).

[xxx] Ibid.

[xxxi] Conceptos Plásticos, *Financial Audit Summary Report* (Abidjan: Conceptos Plásticos, 2023).

[xxxii] UNICEF, *Unlocking Finance for Sanitation in West Africa: Leveraging Development Funds towards Commercially Scalable Solutions (WASH Field Note)* (2023).

[xxxiii] CEWAS and UNICEF Nigeria, *Evidence Generation for Innovative Finance – Regional Revolving Fund: Case Study in Nigeria* (2022).

[xxxiv] Federal Ministry of Water Resources, *National Action Plan for Revitalization of Nigeria's Water, Sanitation and Hygiene Sector* (Federal Republic of Nigeria, 2018), https://www.wateraid.org/ng/sites/g/files/jkxoof381/files/nigerias-national-action-plan-for-the-revitalization-of-the-wash-sector.pdf.

[xxxv] WaterAid Nigeria, *Clean Nigeria Campaign*, n.d., https://www.wateraid.org/ng/get-involved/clean-nigeria-campaign. Accessed October 23, 2024.

[xxxvi] Federal Ministry of Water Resources in Nigeria. National Action Plan for the Revitalisation of Nigeria's Water, Sanitation and Hygiene Sector. Federal Republic of Nigeria, 2018. https://www.wateraid.org/ng/sites/g/files/jkxoof381/files/nigerias-national-action-plan-for-the-revitalization-of-the-wash-sector.pdf.

[xxxvii] UNICEF WCARO, *WASH Nutrition Strategy: West and Central Africa* (2024).

[xxxviii] Ministry of Education, Press Release on *Plastic Bricks* Initiative Endorsement, Government of Côte d'Ivoire, Abidjan, January 2025.

[xxxix] Adolescent, FGD, Abobo, May 2025.

[xl] Programme National de Lutte contre le SIDA (PNLS), *HIV Strategy and Reports* (Abidjan: PNLS, December 2024).

[xli] Ministry of Education, *Press Release on Plastic Bricks Initiative Endorsement* (Abidjan: Government of Côte d'Ivoire, January 2025).

[xlii] Programme National de Lutte contre le SIDA (PNLS), *HIV Strategy and Reports* (Abidjan: PNLS, December 2024).

[xliii] FGD, adolescent participants, Abobo, May 2025

[xliv] Conceptos Plásticos, *Financial Audit Summary Report* (Abidjan: Conceptos Plásticos, 2023).

[xlv] Programme National de Lutte contre le SIDA (PNLS), *HIV Strategy and Reports* (Abidjan: PNLS, December 2024).

[xlvi] Ibid.

unicef
for every child

For further information, please contact:

UNICEF

Evaluation Office

3 United Nations Plaza

New York, NY 10017

USA

www.unicef.org/evaluation

UNICEF-Evaluation

twitter.com/UNICEFEval

evalhelp@unicef.org