
Evaluation Office

**Global evaluation of UNICEF drinking water supply programming
in rural areas and small towns
2006–2016**

Executive summary

Summary

As a precondition for human life, as well as human health, well-being and economic development, access to drinking water is a major global concern and a key priority. In 2010, the United Nations recognized access to drinking water as a human right. The Millennium Development Goal to halve, by 2015, the proportion of the population without drinking water, was met. Nevertheless, considerable challenges remain to meeting Sustainable Development Goal 6 of universal and equitable access to safe and affordable drinking water for all by 2030.

UNICEF is a leading organization in the water supply sector, having led advocacy, policy and programme efforts in developing countries, particularly in rural areas, both in humanitarian and development contexts. This report evaluates the organization's strategies and efforts in this regard, focusing on development contexts, rural areas and small towns. It finds that UNICEF played a significant role in the achievement of the related Millennium Development Goal and in improving the sector enabling environment, at both the global and country levels; and the organization's work in this area is aligned with and has influenced both global goals and national priorities. However, UNICEF only partially monitored and delivered on the commitments made in its Water, Sanitation and Hygiene (WASH) Strategy for 2006–2015, and key gaps and challenges remain. There is potential for UNICEF to make better use of its comparative advantages, maximize its added value and further advance its positioning in the sector. As a priority, UNICEF will focus on learning more systematically from its considerable experience to strengthen and mainstream equity, sustainability and efficiency in its programming, as well as in scalable service delivery models for rural and small town water supply.

I. Introduction

A. Drinking water supply on the international development agenda

1. The Convention on the Rights of the Child, which was adopted by the United Nations General Assembly in 1989 and informs the UNICEF mission statement, highlights the provision of clean drinking water as key to combatting disease and malnutrition and enabling the survival and development of children. In 2003, the Committee on Economic, Social and Cultural Rights adopted General Comment No. 15 on the right to water. Article I.1 states: “The human right to water is indispensable for leading a life in human dignity. It is a prerequisite for the realization of other human rights.” In 2010, in its Resolution 64/292, the United Nations General Assembly recognized the human right to water (and sanitation) and called upon Member States and international organizations to provide financial resources, support capacity building and facilitate technology transfer to help countries, particularly developing countries, realize this right for all.

2. The Millennium Development Goals challenged the global community to halve, by 2015, the proportion of the population without access to drinking water. In 1990, global coverage of the use of improved drinking water sources was 76 per cent, and the target aimed at 88 per cent coverage by 2015. The challenges to reaching this target were significant, particularly in developing countries, many of which were battling poverty, instability and rapid population growth. Considerable efforts were needed from all concerned parties.

3. In a major global achievement, the drinking water target was met ahead of the deadline. More than 90 per cent of the world’s population now has access to improved sources of drinking water.

4. This global figure masks the persistent and vast disparities that exist between regions and countries, urban and rural areas, geographical areas at the subnational level, population groups and wealth quintiles. Four developing regions and the 48 countries designated by the United Nations as the least developed countries did not meet the drinking water target. Based on the World Health Organization (WHO)/UNICEF Joint Monitoring Programme for Water Supply, Sanitation and Hygiene (JMP), sub-Saharan African countries experience the lowest coverage levels. While rural coverage has increased rapidly and the number of people without access in rural areas has decreased by over half a billion, 8 in 10 people lacking improved drinking water sources live in rural areas. Inequalities between rich and poor households have not been significantly reduced. Finally, water sources classified as ‘improved’, even piped water, do not guarantee the safety or continuity of the water supply.

5. The 2030 Agenda for Sustainable Development seeks to address this unfinished agenda. The Goals drinking water target (6.1) aims for universal and equitable access to safe and affordable drinking water for all by 2030.

B. Drinking water supply in UNICEF

6. Drinking water supply has long been an important part of UNICEF humanitarian and development programmes and advocacy work. The organization’s role in drinking water supply dates to the 1960s, and the organization’s activities in this area have grown in number and scope ever since. UNICEF was assisting some 70 countries with community water supply by the early 1970s, and more than 90 countries by the mid-1980s. More recently, drinking water supply was a programme component in the

UNICEF medium-term strategic plan for 2006–2009, and was made a standalone programme area in the UNICEF Strategic Plan 2014–2017. Both strategic plans directly referred to the related Millennium Development Goals target on drinking water supply and emphasized equity and sustainability in regard to drinking water programming. The UNICEF Executive Board approved the organization’s first standalone Strategies in Water and Environmental Sanitation in 1995 and the subsequent Water, Sanitation and Hygiene (WASH) Strategy in 2006. UNICEF issued a position paper on water in 2011 and in 2016, adopted a new strategy to guide its work towards the Sustainable Development Goal 6. The organization is officially mandated to monitor progress on the international development goals for water supply since 1990 and has served as lead agency and provider of last resort for water emergencies response and coordination since 2005.

7. UNICEF strategies and roles in regard to water supply reflect its work at both the downstream and upstream levels. On the one hand, UNICEF develops drinking water supply services for underserved communities and establishes the conditions for their adequate management and use; and on the other hand, UNICEF supports Governments and the sector enabling environment at the national and global levels through policy advocacy and institutional strengthening.

8. At the country level, the balance between downstream and upstream work and various forms of UNICEF engagement in these two work streams depend on the specific sector context, needs and capacities. Each UNICEF country office has a particular set of objectives and approaches that were developed with the host Government, and implements these in close collaboration with the Government. To implement certain activities, UNICEF may partner directly with non-governmental and civil society organizations, and contract private sector service providers.

II. Evaluation approach

A. Rationale for and scope of the evaluation

9. Drinking water supply will remain an important area of work for UNICEF. The related Sustainable Development Goal emphasizes the need for Member States and their development partners to scale up efforts in this area, establish efficient and sustainable water supply management systems, ensure the quality of drinking water, and adopt a stronger equity lens in order to leave no one behind. This new agenda provides UNICEF with an opportunity to reflect on the relevance and quality of its drinking water supply portfolio, which, until now, had not been evaluated at the global level.

10. This evaluation assesses UNICEF global programming on drinking water supply. Its aim is to fill specific knowledge gaps, generate lessons for decision-making and contribute to improving the appropriateness of UNICEF strategies and activities at all levels of the organization. The findings help determine how UNICEF can adjust its approach to optimize its contribution to the related Sustainable Development Goals going forward. The results also assure internal and external stakeholders regarding the level of performance and the quality of the programmes that they have supported, and contribute to evidence-based learning in the water sector more broadly.

11. The evaluation covers the timeframe 2006–2016. This corresponds to the period of the UNICEF WASH Strategy 2006–2015 and includes the first year of the WASH Strategy 2016–2030 and therefore some of the latest development in UNICEF water

supply programming. It focuses on water supply for drinking purposes and on rural settings and small towns, which are the organization's main areas of intervention. Purely emergency operations are excluded from the scope of the evaluation, as are non-community settings such as schools and other institutions.

B. Evaluation criteria, questions and areas of inquiry

12. UNICEF rural and small-town drinking water supply (RWS) programming is evaluated based on six criteria: effectiveness, efficiency, equity, sustainability, innovation and relevance. The overarching evaluation question is the following: How effective have UNICEF strategies and programmes been in improving access to drinking water and contributing to the achievement of the related Millennium Development Goal in rural areas and small towns; and what adjustments are needed to make UNICEF programming fit for purpose in the new Sustainable Development Goals era?

C. Methodology

13. The evaluation assesses the level of performance for each evaluation criteria, question and area of inquiry. Achievement is measured against what was explicitly or implicitly intended in the WASH Strategy 2006–2015, as well as the situation at the beginning of the evaluation period and sector comparators, standards and good practices. The evaluation unpacks the implementation and results chain, and investigates the conditions of programme implementation and the underlying factors that influenced successes and failures.

14. The evaluation relies on a wealth of quantitative and qualitative data. The evaluation team reviewed more than 2,800 UNICEF and non-UNICEF documents, datasets and systems; carried out an online survey to which 535 staff and partners from subnational, country, regional and global levels responded; interviewed 63 key informants; and conducted in-depth case studies and field visits in eight countries from various regions: the Plurinational State of Bolivia, Cambodia, Chad, Ethiopia, Guinea, Nepal, Rwanda and Zimbabwe.

15. The main limitation of the evaluation is the suboptimal comprehensiveness, disaggregation and/or accuracy of data extracted from corporate expenditure and results monitoring systems, despite continuous improvements during the evaluation period. This is due to two factors: 1) continuing weaknesses in the corporate beneficiary results and financial monitoring systems, and the disconnection and misalignment between the two systems; and 2) the lack of specific consideration given to equity, sustainability and innovation in UNICEF programme monitoring, evaluations and reporting. As a result, some evaluative analyses are less detailed than initially intended, cover a shorter timeframe, rely on best estimates and ad-hoc, external assessments, and therefore do not provide a complete picture of UNICEF RWS programming.

III. Findings

A. Effectiveness

The UNICEF contribution to the achievement of the Millennium Development Goals target for drinking water supply in rural areas and small towns

16. UNICEF supported almost all countries with significant RWS coverage gaps and operated in more countries than any other WASH donor, although the geographical spread of its operations slightly decreased over time, from more than 80 countries at the beginning of the evaluation period to 65 in 2016.

17. UNICEF exceeded its resource mobilization goal for drinking water supply, despite constraints on and variability in official development assistance (ODA). The organization's annual beneficiary contribution tripled during the evaluation period. The total number of water beneficiaries reported by the organization between 2007 and 2016 was 271 million, with one third (90 million) reached through development programming and two thirds (181 million) reached through humanitarian programming. Data reported by UNICEF suggest that the organization contributed significantly to the achievement of the Millennium Development Goals target for drinking water: at least 8 per cent of the 976.6 million beneficiaries of new improved water supply in the later years of the concerned period (2007–2015) and a significantly higher proportion in rural areas. The organization expanded both its overall investment and share in global support to the sector by 150 per cent during the period under review.

Contribution to the sector enabling environment

18. UNICEF strengthened the sector agenda and enabling environment at the global level by using its convening role and investing in several relevant and effective initiatives and partnerships. The organization also improved sector monitoring by co-hosting, co-managing and making substantive contributions to the JMP. UNICEF supported the development of the global goals and normative framework on RWS and co-shaped these agendas through its participation in the JMP, UN-Water and consultations for the formulation of the Sustainable Development Goals. Through the Sanitation and Water for All partnership, UNICEF advocated for increased financial commitment and accountability among national Governments vis-à-vis global development targets. Finally, the organization facilitated networking and developed knowledge and capacities within the global RWS community through its active involvement in the Rural Water Supply Network.

19. In line with the UNICEF WASH Strategy 2006–2015, country offices progressively increased their level of investment in all building blocks of the RWS enabling environment, though with varying intensity and success. A number of external and internal factors limited the effectiveness of these efforts, including: the prioritization of quantifiable (beneficiary) results by donors, Governments and UNICEF; the lack of expertise in evidence-based policy advocacy and institutional strengthening; and the disruption of initiatives due to staff turnover, short funding cycles and emergencies.

Knowledge management

20. Knowledge management poses a challenge for a large organization such as UNICEF. Despite the intentions set in the WASH Strategy 2006–2015, the organization only began to actively embrace this challenge in 2014 with the development of plans, processes, tools and capacities. Overall, the UNICEF approach to knowledge management in RWS has been dispersed and disjointed.

21. Of the considerable body of WASH knowledge products produced throughout the period, only one fifth were specifically related to RWS. Many of those published by Headquarters have become reference documents for the entire RWS sector.

Dissemination and training initiatives focused on internally-produced rather than broader sector knowledge, and were primarily top-down, Headquarters-led, and thus imperfectly matched country office demand.

22. Institutional processes, resources and incentives for making relevant knowledge and guidance available to countries, and for effectively utilizing and re-incorporating these into country programmes remain lacking.

B. Efficiency

Results, financial performance and unit costs

23. Available quantitative data from evaluations and value-for-money assessments show an achievement of target results above 100 per cent, nearly 100 per cent budget consumption and a performance-to-expenditure ratio above 123 per cent on average during the evaluation period. Field observations indicate that the quality of infrastructure was reasonable or good, though there were some design and construction issues that arose consistently across countries. The UNICEF average investment cost per beneficiary ranged between US\$23 and US\$42 depending on the country, year and calculation method. This was similar to or slightly lower than national averages.

Technology choice

24. The evaluation examined UNICEF engagement in four types of low-cost approaches and technologies—no-subsidy approaches to community-led water supply; spring catchment protection; manual drilling; and solar-powered piped network systems.

25. Half of countries with RWS programming have promoted at least one low-cost technology or approach—most commonly solar-powered systems and manual drilling—with evidence of cost savings and positive results. Regional and country offices in sub-Saharan Africa invested the most effort in this regard. In-country upscaling was uneven and generally limited, however. The most critical constraints were the lack of strategic vision and prioritization at the corporate level despite the commitment to low-cost approaches in the WASH Strategy 2006–2015, and the deliberate choice, in some countries, to promote a higher level of service better suited to context and demand.

Contracting and contract management

26. UNICEF procurement guidelines and procedures are designed to maximize results and control costs in line with international standards. The organization has encouraged new approaches to procurement and produced additional RWS resources and guidance to support country offices to carry out efficient procurement and contract management and professionalize the national drilling sector. Positive feedback from UNICEF partners indicates that these changes have improved the efficiency of procurement, though some UNICEF staff perceived the procedures as complex and lengthy.

27. In terms of contract management and quality assurance, good sector practices have not been consistently applied across UNICEF. A major efficiency concern is that many countries have not met the requirement for professional, independent and rigorous field supervision.

Partnership management

28. At the corporate level, UNICEF established relevant, strategic partnerships with global organizations and networks, research institutions and private companies. The organization missed partnership opportunities with major development banks and international non-governmental organizations mentioned in the UNICEF WASH Strategy 2006–2015, however.

29. Corporate-level reforms clarified and streamlined partnership rules applicable to all country offices, introduced the concept of risk assessment and differentiation, systematized partner audits and field spot-checks, and encouraged fewer and longer-term partnerships whenever possible. Evidence indicates positive results for RWS-related partnerships, though establishing and managing partnerships in an effective, efficient and impactful manner remains a work in progress. For example, capacity assessments and cost-effectiveness considerations were not applied with the same level of scrutiny during collaborations with government partners as they were in collaborations with non-governmental organizations or private contractors.

Integrated programming

30. At the corporate level, UNICEF has demonstrated an intention to promote programme convergence and further integrate RWS with other WASH and non-WASH interventions, though without a corresponding vision, strategy and incentives to translate this intention into practice.

31. The geographic concentration of RWS programmes and their integration with other types of WASH interventions in the field was generally unsystematic. RWS was better integrated with hygiene promotion than with sanitation and WASH-in-schools programmes. Synergies with UNICEF interventions outside of the WASH sector, such as health, nutrition, education or communication for development, were even less frequent. In recent years, a few countries have launched joint initiatives, primarily with nutrition.

32. Several internal and external factors enabled or constrained programme integration. The three most commonly cited obstacles were: (a) the difficulty of bridging sectoral compartmentalization within both UNICEF and government and donor counterparts; (b) a lack of willingness to challenge established ways of working; and (c) different geographical targeting criteria, investment priorities and intervention modalities across sectors.

Quantity, quality and management of human resources

33. UNICEF WASH staffing tripled during the evaluation period, but has not kept pace with the considerable growth in funding. This has generated heavy workloads for staff, who have had to prioritize the delivery of key outputs at the expense of other important activities.

34. RWS staff were widely recognized as competent and committed. Nonetheless, the evaluation found a risk of increased disconnect between their backgrounds/qualifications and the progressive evolution of UNICEF programming away from purely technical engineering work in the field and toward more institutional support to Governments and the broader sector enabling environment. In addition, the turnover and internal rotation of international staff in management positions can undermine programme continuity and efficiency.

C. Equity

UNICEF engagement at the global level

35. The WASH Strategy 2006–2015 recognized equity as an important area of work even before UNICEF pledged a renewed organization-wide focus on equity in 2010. The progressive rise of equity to the top of the UNICEF WASH agenda over the past 10 years materialized in its RWS-related global policy advocacy, especially during the formulation and adoption of the Sustainable Development Goals.

Geographical targeting

36. At the global level, the largest share of UNICEF RWS funding benefited countries from regions that were lagging behind on water coverage, primarily low-income countries and countries in sub-Saharan Africa. The equity focus of UNICEF in regional targeting was significantly better than that of the rest of the donor community. During the period 2012–2016, for which disaggregated data are available, low-income countries accounted for 47 per cent of UNICEF RWS investment compared with 22 per cent of all ODA; and sub-Saharan African countries accounted for 72 per cent of UNICEF RWS investment compared with 21 per cent of all ODA.

37. Among beneficiary countries, those with lower water coverage, slower progress towards the Millennium Development Goals target, larger unserved populations and/or larger coverage inequalities between income categories did not benefit from proportionally more funding. The dependency on earmarked funding (85 per cent of UNICEF funding for water supply), and thus on donors' own strategies and priorities, constrained the organization's ability to direct its support to the individual countries where it was most needed. Other constraining factors included varied in-country capacities and opportunities for fundraising, and the suboptimal allocation of un-earmarked funding by UNICEF Headquarters.

38. Within countries, rural areas received 82 per cent of UNICEF investment, compared with only 31 per cent of all donor investment (during the 2014–2016 period). Within rural areas, at the subnational level, the selection of beneficiary provinces and districts was only partly guided by equity considerations. Other factors considered and sometimes prioritized included programme effectiveness and efficiency, alignment with the government strategy and emergency situations.

Equity in situation analysis, programme design and implementation

39. Situation analyses conducted by country offices lacked an equity lens. Forty per cent of country offices complemented their situation analyses with specific gender assessments, but only eight countries attempted to identify and analyse the location, interests and needs of vulnerable groups other than women.

40. Based on evidence from evaluations and country case studies, UNICEF programming has not demonstrated a systematic and holistic approach to equity. The only measure mainstreamed in all country programmes is the involvement of women in water user committees. The participation of other vulnerable and marginalized groups, such as ethnic and religious minorities, in these committees was only promoted in four countries. Special considerations for remote or pastoralist groups in water-point siting, for technology designs adapted to children and disabled and elderly people and for pro-poor, but viable, tariff schemes were lacking in most of the country programmes evaluated.

Country-level policy advocacy

41. Evaluations and country case studies identified more examples of missed opportunities than of successes in mainstreaming equity into national policies. Several factors may have constrained UNICEF engagement in equity-focused policy advocacy in-country: a lack of disaggregated data and detailed situation analysis; a lack of appropriate skills related to equity and policy advocacy among RWS staff; and a reluctance to challenge government partners on politically and culturally complex issues.

Success in reducing inequalities

42. Without equity-framed monitoring and evaluation systems and data, it is difficult to assess the extent to which UNICEF targeting, field implementation and sector advocacy efforts reduced inequalities. Nonetheless, evidence suggests that UNICEF programming likely benefitted disadvantaged populations and contributed to improving their conditions. In sub-Saharan Africa specifically, UNICEF contributed to improving water coverage in rural areas (+22 percentage points during the Millennium Development Goals period) and reducing the gap with urban areas (-18 percentage points). Few measures specifically targeted the most vulnerable groups, though UNICEF interventions likely disproportionately benefited them, particularly the poor and women, given that they suffer the most from poor access to adequate water supply. Moreover, rural communities tend to apply internal solidarity mechanisms for their most disadvantaged members, such as exempting them from paying tariffs and fetching water for the elderly and the disabled.

D. Sustainability

UNICEF engagement

43. Responding to the growing evidence of the poor sustainability of RWS services and programmes, UNICEF Headquarters has made this issue a key priority in its WASH Strategy 2006–2015 and in policy advocacy during that period. The organization developed guidance documents and training designed to help country offices identify sustainability bottlenecks and mainstream sustainability considerations into their programming and within the sector. However, these efforts have come piecemeal, without an overarching vision or conceptual framework, and many years after the commitment was made in the WASH Strategy 2006–2015.

44. Working closely with Headquarters, the Dutch Ministry of Foreign Affairs imposed sustainability compacts signed with partner Governments and regular post-intervention field surveys (“checks”) in the country programmes it funded in sub-Saharan Africa. This approach was subsequently diffused to other countries and donors and became a major element in the UNICEF approach to WASH/RWS sustainability.

45. Although evidence indicates weaknesses in country office analyses of sustainability challenges and how these challenges have been addressed in programming, there is some indication that country offices gave greater consideration to sustainability issues towards the end of the evaluation period. Efforts at downstream and upstream levels were not always consistent and interlinked, however.

Technical sustainability

46. Technical sustainability is defined here as the capacity of infrastructure to continue to function over time with minimal technical defects. This is achieved through good quality construction and the ability to repair the infrastructure when needed.

47. In addition to improving its own construction contract management practices and supporting the professionalization of the drilling sector, UNICEF strengthened the spare part supply chain and supported the maintenance business in more than 15 sub-Saharan African countries. The most common threats to the technical sustainability of UNICEF-supported RWS services were: deficits in the management and supervision of construction activities and weaknesses in maintenance arrangements, with at least half of communities lacking ready access to spare parts and skilled repair services.

48. Despite these bottlenecks, quantitative data indicate that the functionality of UNICEF-supported water points was similar or higher than sector averages. Functionality was above 90 per cent in the first two years after construction, and subsequently fluctuated between 77 and 82 per cent until year seven (the last year for which data were available). The frequency and duration of breakdowns remained significant at UNICEF-supported water points, however.

Institutional sustainability

49. Institutional sustainability encompasses the management and broader institutional arrangements established, and the capacity of these arrangements/institutions to continue to function after the UNICEF-supported intervention has ended.

50. UNICEF rarely questioned and investigated the prevailing community-based management model for water supply services in rural areas, which was promoted in 85 per cent of evaluated country programmes, despite growing evidence of its shortcomings.

51. UNICEF committed to and significantly invested in building the technical and management capacities of implementing partners and beneficiaries. Within communities, water user committees were present in 82 per cent of surveyed communities and, though they had initially been trained, their functionality dwindled over time and they rarely received the support they needed from the higher level of the responsibility chain to continue to function durably. Institutionalization efforts did not sufficiently address the considerable and continuous capacity building needs of all sector stakeholders.

Social sustainability

52. The social dimension of sustainability refers to the existence of a continuing demand for the service. This is conditioned by various factors, including the willingness of households to switch from previous/unimproved supplies, the adequacy of the proposed service, the household's level of ownership and user satisfaction. Good practices to support social sustainability include: community mobilization and behaviour change communication; community involvement at all critical steps and decisions to ensure that the service adequately meets their needs; financial or in-kind contributions to support ownership; and continuous monitoring of service adequacy and user satisfaction.

53. These good practices were inconsistently applied across programmes and countries during the evaluation period. While UNICEF typically sensitized community members about the need to use safe water sources and asked them to contribute to service costs, community members were rarely involved in decisions on technology choice, management modalities and post-project monitoring. The lack of an institutionalized mechanism for following up on user satisfaction reduced the ability of UNICEF and its partners to confirm the adequacy and sustained use of the service they had established. Nevertheless, evidence demonstrates that when the service was functional, both usage levels and user satisfaction were high at 91 per cent and 78 per cent, respectively. This is because UNICEF support responded to a strong demand, especially during the dry season.

Financial sustainability

54. Financial sustainability depends on the arrangements in place for financing operational and maintenance costs, major repairs/rehabilitation and, in the long term, capital replacement work.

55. Financial sustainability has not been an area of interest for UNICEF at the corporate level, despite commitment to address this key sustainability challenge. In the field, UNICEF has not focused on ensuring adequate tariffs/revenues. In most cases, the organization conformed to government policy or left the decision to the users themselves. As a result, in over half of intervention communities surveyed, tariffs were non-existent or not applied, and revenues were not sufficient to cover recurrent costs and ensure the medium-term viability of the service.

56. In at least 15 countries, UNICEF studied and advocated for increased public budget allocations to complement user contributions, fill the gap for recurrent costs, and finance major repairs and capital replacement. A few successful cases have been recorded.

57. Effective life-cycle cost recovery was limited by a number of factors partly beyond UNICEF control. These included the high proportion of poor households in rural areas, the preference of rural households for ad-hoc tariff collection, inadequate policy provisions, the socio-political barriers to adequate tariff setting/enforcement, and Governments' and local authorities' budget constraints.

Environmental sustainability

58. The physical environment can support or threaten the sustainability of the service. In addition to local hydrogeological conditions and sources of pollution, for example, broader factors such as natural events and climate change come into play and can affect the quantity and quality of water resources.

59. From the early 2010s, as the climate change debate gained momentum within the international community, UNICEF progressively embraced the environmental dimension of RWS sustainability, especially at Headquarters. However, expenditure on water resource management and water quality represented less than 10 per cent of UNICEF total water expenditure and decreased during the evaluation period. In country programmes, measures to identify and mitigate environmental risks, and more specifically, to ensure and maintain the quantity and quality of the water at the source, were rare and dispersed. As a result, 80 per cent of field surveys measuring this indicator reported that water was not continuously available at the UNICEF-supported water sources, particularly at the end of the dry season. UNICEF did not regularly carry out water quality tests, and anecdotal data suggest that after handover

to communities, the quality of water was substandard at a high proportion of water points, including those supported by UNICEF.

E. Innovation

UNICEF commitment and capacities for innovation

60. Innovation was identified as a key area of need/opportunity and incorporated into strategic frameworks for RWS to facilitate the sustainability of RWS services. The innovation function and capacities have been strengthened through the creation of three units dedicated to supporting innovation at different levels of the organization. However, these units were not well connected to the WASH section and RWS staff were not familiar with the support that these units could offer to their innovation projects.

61. The majority of UNICEF RWS staff reported that the organization has been innovative and able to take innovations to scale. This was not the perception of the majority of UNICEF partners, however.

UNICEF engagement in four areas of innovation

62. The evaluation examined UNICEF engagement in the following four areas: real-time monitoring, innovative financing, private sector participation in the management of the service, and accountability and regulation mechanisms. These areas were chosen because they are directly related to the performance, sustainability and equity of the service and, considered together, form some of the essential building blocks of a model for RWS service delivery.

Lessons from the four innovation case studies

63. In total, 22 country offices engaged in at least one of the four innovations of interest. Few country offices have been particularly innovative. Overall, UNICEF took the reviewed RWS innovations to a limited scale. Among the 15 initiatives reviewed in more detail, only three expanded nationwide and one was replicated in several countries. These figures are modest considering that the evaluation scope covers a decade of programming and a portfolio of more than 80 country programmes. Most initiatives that UNICEF supported and effectively scaled up were technology driven (this is also the case of manual drilling and solar-powered systems mentioned earlier). This type of innovation responded to strong internal interest and capacities, and was supported by a conducive programming environment.

64. During the second half of the evaluation period, UNICEF slowly evolved from focusing on technological innovation to exploring a broader set of approaches that remain few and in the pilot stage. UNICEF tended to engage more in these innovative programming approaches in the context of small towns and piped network systems. The four areas of innovation reviewed are interlinked but were rarely approached as such by UNICEF. Initiatives were often fragmented and not well connected to their policy and institutional environments.

65. Overall, UNICEF engagement in the reviewed innovations appears to have been more opportunistic than strategic. In more than two thirds of the 15 cases, the innovation undertaken was not a UNICEF idea and initiative; rather, UNICEF established a formal collaboration with an institution that proposed an innovation. In the other cases, UNICEF sought out partners that could provide services that were instrumental to the initiative's success. In all cases, partnerships played a critical role.

Nevertheless, in the majority of cases, UNICEF played a financing role and provided technical support and inputs, and thereby added value to the innovation.

66. Country offices did not comply with the step-by-step process for developing, testing, adjusting, refining, documenting, evaluating and scaling up innovations set out in the UNICEF Programme Policy and Procedure Manual and summarized in the WASH Strategy 2006–2015. In seven of the 15 reviewed examples, innovation, advocacy and upscaling were not evidence-based.

F. Relevance

Alignment

67. UNICEF not only aligned with the key elements of the international RWS development agenda, it also contributed to shaping these elements and making them known and recognized by sector stakeholders at the national and global levels.

68. At the country level, the large majority of UNICEF staff and partners perceived that UNICEF effectively coordinated with other sector stakeholders, particularly Governments, and its RWS programming has been well aligned with their policies, strategies and priorities. This was evident in all evaluations and was also the opinion of 90 per cent of UNICEF RWS staff and 70 per cent of their partners. The UNICEF tendency to align with government policies and practices strengthened its relationships with national authorities. However, the organization's reluctance to challenge the status quo on some politically or culturally sensitive issues to preserve relationships was cause for concern when policy provisions or government priorities were at odds with the organization's mandate or sector best practices. In some cases, this limited the added value of UNICEF in the sector.

Credibility and positioning

69. Fifty-five per cent of non-UNICEF survey respondents across all stakeholder categories perceived that UNICEF was a credible or highly credible player in the sector; and 91 per cent felt that this credibility remained stable or improved over time. The extensive and committed UNICEF professional workforce, its technical expertise, capacity for resource mobilization, and the scale and breadth of its programming were often cited by sector stakeholders as factors supporting the organization's credibility in the RWS sector. One major donor described UNICEF as a "safe pair of hands that can spend the money and deliver results at scale"; an opinion expressed by several other donor respondents. The most frequently cited factors related to the organization's status and neutral stand as a United Nations agency; its universal and valued mandate; the worldwide scale and breadth of its programming; its long-term, continuous and decentralized presence in countries; and its strong brand and reputation. These features were perceived as distinctive and strong enough to positively impact the credibility of UNICEF RWS programming, independently of how the organization performed in the sector.

UNICEF comparative advantages and added value in the sector

70. More than half of UNICEF partners listed at least 10 distinctive comparative advantages for the organization in the RWS sector. These advantages have enabled UNICEF to advance its positioning in the RWS sector in several ways, including: mobilizing funds; maximizing its contribution to the Millennium Development Goals; building privileged relationships with Governments; gradually expanding the scope

of its activities from the downstream to the upstream level; taking up a coordination role in most countries; and playing advocacy, normative and monitoring roles at the global level.

71. UNICEF did not make the best use of its comparative advantages in several other areas, most critically: thought leadership in the sector; knowledge management and evidence-based programming; programme quality assurance; innovative programming approaches; context-appropriate balance between service delivery and support to the enabling environment; programming for equity and sustainability; cross-sectoral synergies and integrated programming; and managing for efficiency.

IV. Conclusions

Numerous comparative advantages and strengths have made UNICEF a major and increasingly well-positioned and trusted partner in RWS.

72. UNICEF demonstrated a number of comparative advantages and institutional strengths that are widely recognized and appreciated in the sector. This unique and distinctive set of organizational attributes made UNICEF a major and particularly credible, respected and well-positioned player in the RWS sector—both globally and in programme countries. The organization’s positioning and overall credibility also grew during the evaluation period, and enabled UNICEF to advance its strategic objectives and make a critical impact on the global RWS agenda.

UNICEF made significant, effective and increasing contributions to realizing the international development agenda, reducing geographic inequities and strengthening the sector enabling environment.

73. UNICEF effectively used its unique position and institutional strengths to play a significant role in the achievement of the Millennium Development Goals target for water supply. Its operations covered the highest number of countries among all external support agencies and the great majority of countries facing important water needs. Its contributions steadily increased during the evaluation period in terms of funding and beneficiaries. UNICEF consistently delivered on the programme commitments it made to host Governments and donors. It helped reduce the coverage gap for the most deprived, particularly in sub-Saharan Africa and rural areas, where it spent a much higher percentage of its aid than total sector development assistance. The services it supported remained functional for longer than the sector average. There is no evidence that this was achieved at the expense of programme efficiency: investment costs per beneficiary were broadly aligned with or even slightly lower than sector benchmarks.

74. UNICEF also made important efforts to strengthen the sector enabling environment by providing increased, meaningful and valued technical assistance to government partners and other stakeholders at the national and subnational levels. At the global level, UNICEF forged strong strategic alliances and co-led global initiatives that advanced the knowledge base and mobilized high-level political commitment to address the equity and sustainability challenges. In so doing, the organization made key features of its own mandate and agenda common priorities among national Governments and development agencies.

75. The overall influence of UNICEF on and its contributions to the global water supply agenda extended well beyond its purely financial investment.

UNICEF only partially delivered on its corporate RWS commitments, primarily because the WASH Strategy 2006–2015 was not designed and rolled out to ensure that it could guide UNICEF action. Similar concerns remain for the new WASH Strategy 2016–2030.

76. The evaluation found some discrepancies between the commitments made in the WASH Strategy 2006–2015 and what UNICEF actually did or achieved, particularly with regard to: equity-driven country targeting of un-earmarked funding; the development of innovative, pro-poor and sustainable service delivery models; evidence-based programming; inter-sectoral approaches; and the quality of downstream and upstream work and the connection between the two.

77. The necessary preconditions and mechanisms were not in place to ensure that the commitments made in the WASH Strategy 2006–2015 would translate into RWS strategies and programming at the country, regional and Headquarters levels. First, the Strategy lacked the specificity needed to effectively guide or inform RWS strategies and programming. It did not indicate what UNICEF intended to do in RWS and why and how those activities would take place in various programming contexts. As a result, it was not directly implementable by UNICEF offices at all levels. The Strategy was not complemented by a more operational document for RWS. Second, dissemination and follow-up mechanisms were insufficient to ensure the Strategy's assimilation into RWS programmes and work plans. Third, the implementation of the WASH Strategy 2006–2015 was not monitored due to the lack of an associated, adequate monitoring, evaluation and reporting framework. Finally, the Strategy became partly outdated due to rapidly evolving sector dynamics, country programming contexts and corporate priorities, and was not revised to reflect these changes.

78. Ultimately, the WASH Strategy 2006–2015 constituted more of a reflection of UNICEF thinking at a certain point in time than a reference document for programming. This is a key factor explaining the Strategy's partial realization. The lack of a global framework, common agenda or common core features for UNICEF RWS programming also resulted in suboptimal coherence and visibility. It has appeared as a set portfolio of country programmes and projects of diverse focus and quality. The required set of measures have not yet been taken to ensure the successful implementation of the new 2016–2030 Strategy.

Although UNICEF RWS programming made significant progress in some of these areas, especially towards the end of the evaluation period, it lacked a holistic and systematic approach to equity, sustainability, efficiency, scalability and integration. A conceptual framework and a more deliberate strategy for achieving these objectives would have helped UNICEF maximize its contribution to global development.

79. The suboptimal performance on equity, sustainability, efficiency, scalability and programme integration was due in part to the lack of a holistic and systematic approach to these objectives in UNICEF RWS programming. At the heart of the matter lies the lack of a theoretical underpinning of the concepts, the insufficient recognition of their complex, multidimensional and interlinked nature, and the absence of guidance on how country programmes were to address trade-offs and achieve overarching objectives.

80. This was partly due to the choice of letting country offices analyse and address them in their own, specific context, which they seldom did. The multiplicity of factors

driving and impeding success also make these objectives difficult to fully embrace and realize. The definitions, analytical frameworks and identification of key determinants, bottlenecks and trade-offs put forward in this evaluation are available for further refinement.

Significant improvements have been made in monitoring, reporting, evaluation and knowledge management. Persisting weaknesses, however, constrained the ability of UNICEF to deliver effectively on its commitment to accountability and to continuously learn and improve.

81. UNICEF corporate monitoring and reporting systems currently generate organization-wide information on WASH expenditure and results in a more comprehensive, detailed and accurate manner than at the beginning of the evaluation period. Weaknesses in the financial and results monitoring systems persist, however, and the disconnection between the two systems poses an additional challenge. As a result, they are still not fully 'fit for purpose' for detailed programme effectiveness and efficiency analysis, decision-making and accountability. Reforms that will partially address this issue are ongoing.

82. Due to the limitations of the corporate systems, a significant portion of the evidence for this evaluation came from external sources, such as evaluations, studies and surveys, including sustainability checks and value-for-money assessments. Yet, they did not cover all country programmes at regular intervals, they used different methodologies and they were of uneven quality.

83. A considerable amount of knowledge has remained undocumented and tacit. The limited uptake of guidance and tools produced by Headquarters and regional offices, the unsystematic propagation of successful field innovations and good practices, and the varying quality of country programmes are signs of a deficit in knowledge exchange and utilization. Learning has been primarily individual and informal as opposed to institutionalized. Some of the underlying issues lie beyond the control of the WASH section and RWS programme staff. Others can be addressed through tailored improvements.

V. Main recommendations

Recommendations targeted to UNICEF headquarters:

Recommendation 1: Develop global programme guidance

84. The programme guidance should present an analysis of UNICEF organizational objectives regarding the Sustainable Development Goals for water supply. It should include a generic and holistic theory of change that headquarters, regional and country offices would refer to in their own strategies and programme documents. It should set out minimal requirements, describe good practices and identify the means necessary for the organization to achieve its objectives.

85. A periodically updated document repository should be associated with the guidance document, which should both be open to internal and external contributions, and available online. They would constitute a single, critical medium for knowledge management, institutional learning and programme improvements, and a major contribution of UNICEF to the sector.

Recommendation 2: Define a financing strategy

86. To fulfil its mandate and continue to contribute meaningfully to the ambitious global development agenda for RWS, UNICEF needs a financing strategy. The strategy should contain a resource mobilization plan, determine ways to sharpen country targeting and promote funding mechanisms that incentivize performance, equity and sustainability. UNICEF should be able to use the financing strategy to advocate with donors for better alignment with UNICEF fund allocation modalities, more flexible and sustainable funding modalities, and a stronger focus on outcomes, equity and sustainability system changes rather than on output delivery.

Recommendation 3: Establish global priorities, partnerships and incentives for RWS-related policy advocacy, innovation and knowledge; these initiatives should focus on advancing equity, sustainability and scalable models for achieving universal access by 2030

87. Defining organization-wide policy advocacy priorities would enhance clarity, visibility and positioning for UNICEF. It would also enable increased convergence and mutual reinforcement of global and country-level advocacy efforts with Governments—including those of other development partners—and make such initiatives more focused, strategic and effective. Shared priorities must be tied to an innovation and knowledge agenda, enabling a closer connection between the upstream and downstream components of RWS programming. Mechanisms such as an innovation fund can be set up to incentivize and finance the testing and demonstration of complete, well-designed RWS service delivery models.

88. The global agenda, partnerships, fund and other incentives should concentrate on the five following areas for which UNICEF and the sector as a whole need a strengthened knowledge base and improved policy and practice. These areas are identified in the WASH Strategy 2016–2030 as high priorities or emerging programming areas:

- (a) Professionalization of management and maintenance of RWS services, combined with sound monitoring, regulation and accountability mechanisms;
- (b) Financing and contractual arrangements for viable and pro-poor services and improved life-cycle cost recovery;
- (c) Measures to identify, address and monitor the condition of various vulnerable groups;
- (d) Effective, sustainable and scalable approaches to improving water security and water quality at point of consumption, and their continuous monitoring;
- (e) Effective, efficient and scalable ways of integrating community water supply with other WASH and non-WASH interventions.

89. Successful advances in these areas could trigger the type of transformational changes that the sector needs to make meaningful steps towards Sustainable Development Goal 6.

Recommendation 4: Improve programme planning, monitoring, evaluation and reporting systems and processes for increased alignment with the 2030 Agenda

90. UNICEF must promote the conduct by country offices of RWS-specific and in-depth situation and causal analyses as part of the country programme planning process. Such analysis should complement the generic theory of change and programme guidance, and guide their adaptation to the country environment. It would

help improve beneficiary targeting and develop more complete intervention packages for service delivery and institutional strengthening. The evaluation recommends the development of a template and guidance for such analysis and the enrichment of the current content of the WASH bottleneck analysis tool for a more comprehensive assessment of the various dimensions of equity, sustainability, scalability and cross-sectoral approaches and their underlying factors.

91. The system for monitoring progress towards Goal 6 demands more complete, disaggregated and harmonized data to be reported by Governments with the support of their development partners. As a United Nations agency and co-lead agency for the JMP, UNICEF is well placed to support Governments to strengthen their monitoring, evaluation and reporting systems, and should be a role model in better aligning its own practices with Goal requirements. By better integrating safety, affordability/equity and sustainability into such systems and practices, UNICEF and Governments will be able to transparently share successes, challenges and failures, continuously improve their policies/strategies and programmes and boost progress towards Goal 6 based more firmly on evidence and sector best practices.

92. To this end, UNICEF must maintain emphasis on, refine and further roll out the tools it developed for assessing and monitoring the performance of the sector as a whole and/or of its own programming: the bottlenecks analysis tool, key performance indicators, the value for money self-assessment and sustainability (and equity) checks. The organization should also promote more regular evaluations of RWS country programmes, especially those that are large or have great potential for learning, and more often lead them jointly with government and other relevant sector partners. In parallel, strong processes need to be established to ensure the knowledge generated by these initiatives feeds back into programming.

Recommendation 5: Adapt human resources to the evolving programme needs

93. With the 2030 Agenda and the evolving programming within UNICEF come new needs in terms of human resources and skillsets. The organization needs a wider variety of skills. Strengthened capacity is required in sector analysis, innovative and complex programming approaches, financing and funding modalities, institutional strengthening, monitoring, evaluation and knowledge management. This involves recruiting additional, specialized staff, and developing a more strategic, structured and continuous approach to staff capacity development.

Recommendation targeted to regional offices, in support to Headquarters and country offices:

Recommendation 6: Support and complement Headquarters-led initiatives and roll them out in priority countries

94. Regional offices play an important role in the success of the above-recommended actions by supporting Headquarters, contextualizing global level initiatives and rolling them out in their region. They will focus their attention on the priority countries identified in the programme guidance and financing strategy, and the global priorities for policy advocacy, innovation and knowledge management.

Recommendation 7: Strengthen regional capacity to support and oversee the quality of country programmes and their alignment with global priorities

95. Stronger capacities are required in order for regional offices to play their role. Additional capacities at this level would also mitigate the disadvantages associated with the UNICEF decentralized decision-making and accountability structure, notably in terms of uptake in the field of corporate guidance and tools and innovations and good practices, as well as in terms of monitoring, knowledge management, cross-country learning and overall programme coherence and quality oversight. In situations where staff capacities are stretched, and resources are not currently available to reinforce them, regional offices will need to make best use of resources, tools and partnership opportunities.

Recommendation targeted to country offices:

Recommendation 8: Prioritize equity in RWS programming

Recommendation 9: Adopt a more systematic, holistic and sector-oriented approach to sustainability

Recommendation 10: Provide an integrated intervention package to beneficiary communities whenever necessary

Annex I

Global evaluation of UNICEF drinking water supply programming in rural areas and small towns, 2006–2016

The full text of the evaluation report, including the executive summary in English, and a separate executive summary in French are available from the UNICEF Evaluation Office website:

www.unicef.org/evaldatabase/index_103361.html
