

Strengthening routine immunization

Key lessons from **Chad**

The Gates Foundation launched the Routine Immunization Strengthening Program (RISP) in 2019 to improve routine immunization (RI) in subnational areas with low immunization coverage and high risk of polio transmission. From 2023 to 2026, the RISP Learning Consortium (LC) synthesized evidence across RISP countries to foster cross-country learning, identify lessons from different implementation approaches, and generate practical evidence to inform future immunization policies, programs, and investments.

KEY LESSONS

- ▶ **Memorandum of understanding (MoU) spending followed a clear trajectory—from upfront capital investments in the early years to a focus on operational and supervisory functions at the health facility level in later years.**

As spending declined and coverage increased, the cost per third dose of pentavalent vaccine (Penta3) fell steadily—from US\$17 to US\$18 between 2020 and 2022 to US\$8.87 by 2024.

- ▶ **The MoU contributed to improvements in governance, accountability, and vaccine service delivery.**

However, inadequate and delayed financing led to operational weaknesses in service delivery and a lack of coordination of demand generation activities under the MoU.

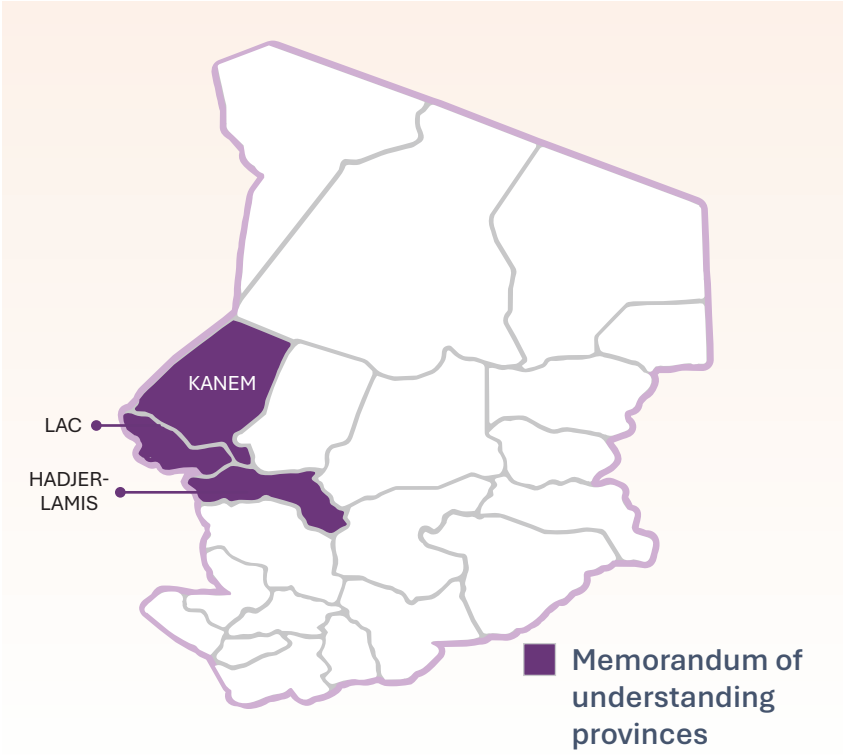


ROUTINE IMMUNIZATION
STRENGTHENING PROGRAM
LEARNING CONSORTIUM

BACKGROUND

In 2019, the Chadian government signed an MoU with the Gates Foundation and the Aliko Dangote Foundation to strengthen routine immunization across three provinces (Hadjer-Lamis, Kanem, and Lac). The shared cost model was designed to progressively transition financial responsibility to the government.

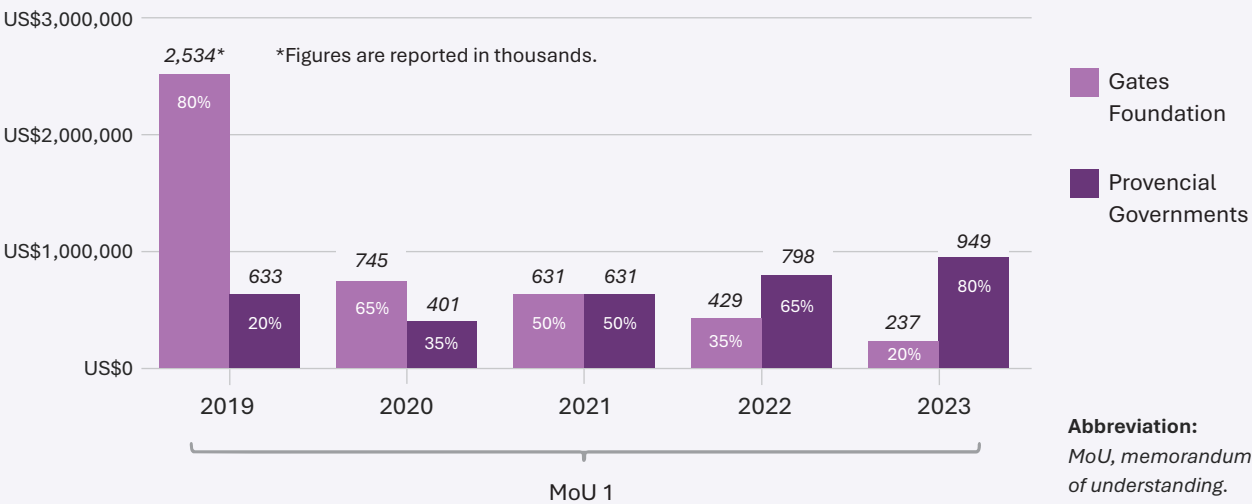
The three provinces were selected due to low RI coverage, polio transmission, and social inequities. At baseline, coverage of Penta3 ranged from 25 to 29 percent—all within the lowest quartile of provinces for coverage. Approximately 66,603 children are eligible for immunization in the MoU provinces annually, representing 10 percent of the national burden. Fertility rates in Chad are among the highest in Africa, and literacy is very low—particularly in Hadjer-Lamis, Kanem, and Lac.



THE GOALS OF THE MOU INCLUDED:

- Achieve 80 percent Penta3 coverage.
- Stop poliovirus transmission.
- Improve immunization equity.
- Reduce child morbidity and mortality.

Provincial governments and the Gates Foundation collectively committed US\$7.9 million, with phased government cost-sharing.



TA PARTNERS:

- **Gavi, the Vaccine Alliance**—vaccine procurement financing, logistics, and strengthening of the cold chain.
- **McKing Consulting Corporation**—political advocacy and coordination.
- **Solina Centre for International Development and Research**—overall support for activity implementation.
- **United Nations Children’s Fund (UNICEF)**—vaccine logistics and community engagement.
- **World Health Organization**—support.

INTERVENTION DOMAINS:

- Governance and accountability.
- Service delivery.
- Vaccine supply chain.
- Monitoring and evaluation.
- Supervision.
- Financial management.
- Community engagement.

STRENGTH OF EVIDENCE

The RISP LC applied a strength-of-evidence rating (strong/moderate/limited) to each finding, reflecting the level of convergence across sources:

STRENGTH OF EVIDENCE: **STRONG**

- Clear convergence across multiple, diverse sources; rich and credible evidence supporting program theory; minimal uncertainty.

STRENGTH OF EVIDENCE: **MODERATE**

- Partial convergence or convergence within a smaller set of data sources; theory-supported with some remaining uncertainty.

STRENGTH OF EVIDENCE: **LIMITED**

- Mixed or inconsistent signals; lower information power; exploratory interpretations.

LESSON 1

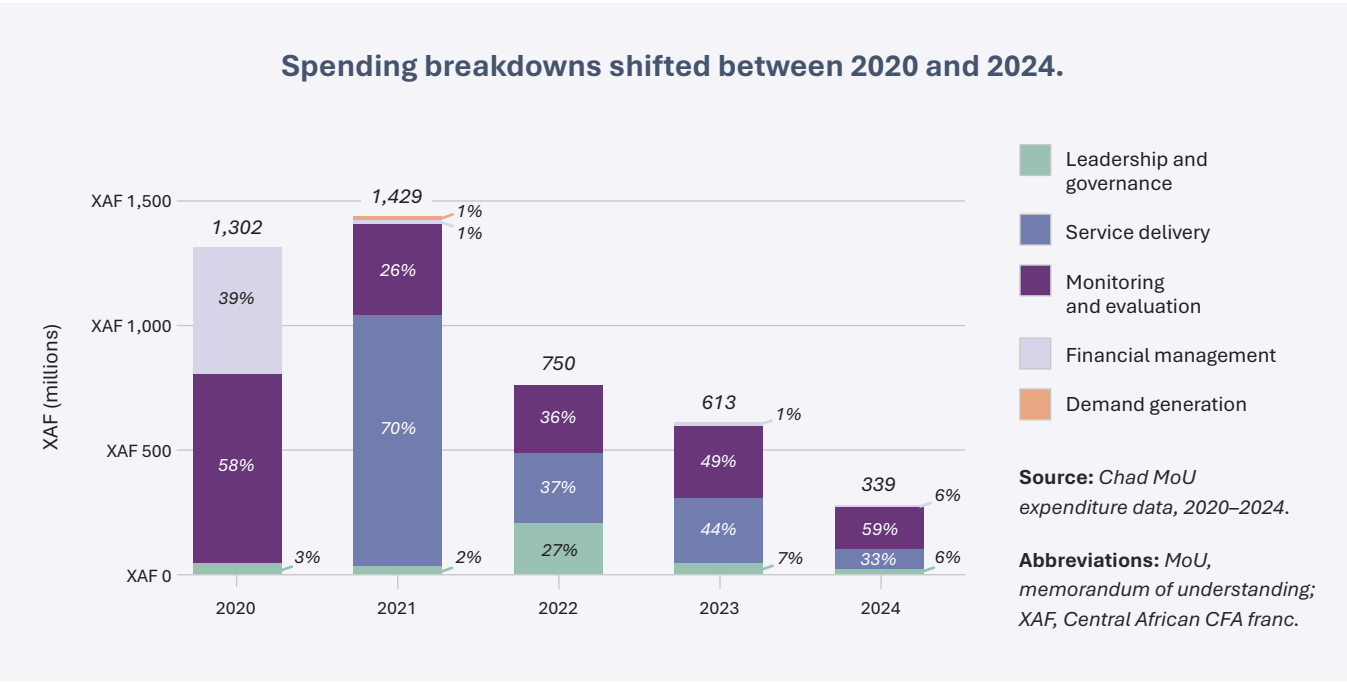
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STRENGTH OF EVIDENCE: STRONG

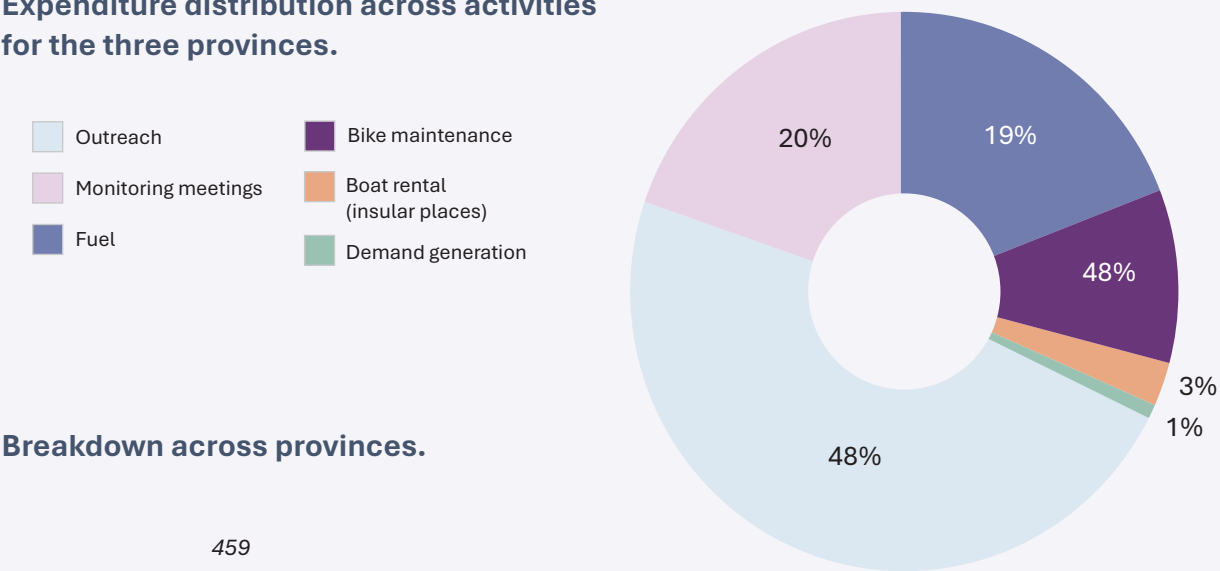
FINDINGS

- **Early MoU transactions, particularly those related to procurement, incurred very high bank charges, resulting in less funding being available for project activities.** This challenge was addressed through coordinated engagement between the government, the Gates Foundation, and the bank.
- **MoU spending followed a start-up sequence—capital first, then systems, then services—suggesting the mechanism builds readiness before it delivers service gains.**
 - **Capital dominated the first two years.** Total MoU expenditures were 4.455 billion XAF (US\$8.01 million) from 2020 to 2024, concentrated in 2020 and 2021 and peaking in 2021. This reflected one-time capital costs, primarily vehicles and motorcycles procured centrally and distributed to subnational levels. Expenditures declined from 2023 onward, following the completion of capital purchases and the delayed release of government contributions.
 - **Systems and services accounted for a growing share thereafter.** Monitoring and evaluation averaged 27percent of MoU funds across years, covering supervision and data review meetings at national, provincial, and district levels. A cost standardization initiative introduced in late 2020 reduced meeting costs in Lac (province) and Hadjer-Lamis (district). Service delivery accounted for an average of 21 percent of total expenditure, reflecting the program’s emphasis on direct service reach.

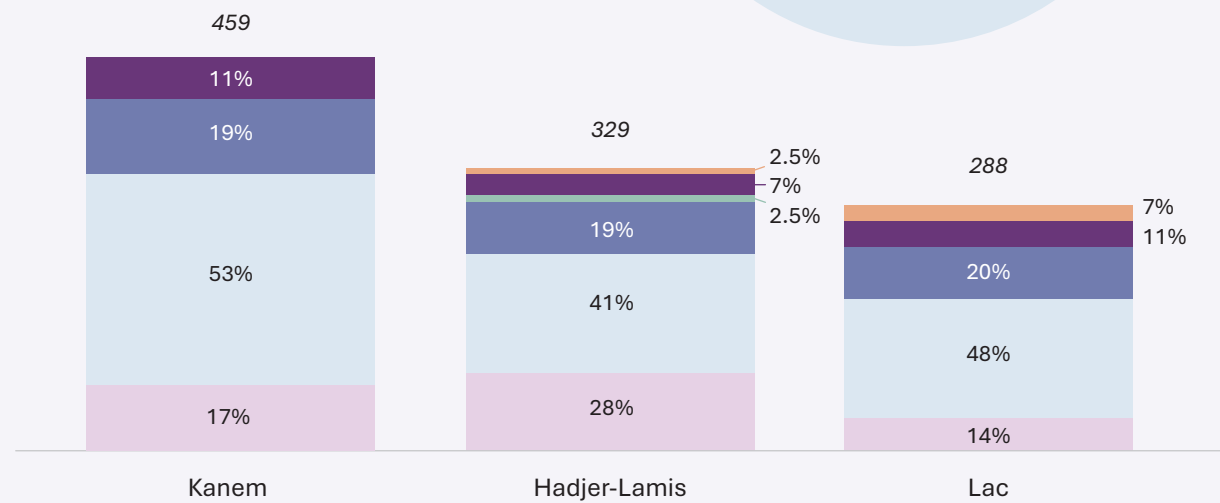


- **Subnational funds largely paid for reaching populations: Outreach logistics accounted for nearly half of spending, while districts and provinces funded supportive supervision and monitoring.**
 - **Outreach drove health facility costs.** Per diem, fuel, and boat rentals are categorized separately but collectively supported outreach vaccination sessions, together accounting for 48 percent of subnational spending. In Kanem, challenging terrain and a larger number of health facilities likely contributed to higher outreach costs.
 - **Monitoring and evaluation dominated district and provincial spending,** at 78 percent and 81 percent, respectively. This covered monitoring meetings (the largest share at both levels), supervision, fuel for supervision visits and missions, and capacity-building.
- **The cost per Penta3 dose declined steadily from US\$17 to US\$18 (2020 to 2022) to \$12.65 in 2023 and US\$8.87 in 2024 as coverage improved and MoU spending decreased.** Two factors likely drove this efficiency gain: (1) rising vaccination volumes and improved coverage—from 5,032 to 116,306 doses across the three provinces—and (2) the front-loading of capital investments in the early MoU years, which allowed subsequent years to focus on operational costs.

Expenditure distribution across activities for the three provinces.



Breakdown across provinces.



Source: Chad memorandum of understanding expenditure data, 2020–2024.

CONSIDERATIONS

Donors and governments can coordinate financial mechanisms and establish clear government disbursement commitments early. Early bank charges on procurement transactions and delayed government contributions in later years disrupted financial flows. Future programs should establish these arrangements prior to launch to ensure predictable and uninterrupted funding.

MoU partners can consider the value and cost-effectiveness of monitoring and evaluation investment. At 27 percent of total MoU spending, monitoring and evaluation represented a significant share of resources, reflecting intensive supervision and data review requirements across all levels. The extent to which this investment contributed to improvements in service delivery and coverage outcomes remains an important question that should be addressed.

FUTURE LEARNING

- *Analyze process indicators with MoU expenditure to identify insights on the value of investments. Based on feedback from the Expanded Programme on Immunization, conduct an analysis to assess expenses against process data (e.g., number of meetings) and intermediate outcomes (e.g., changes in knowledge/behavior) to assess the value of the investments against outcomes. This would help inform revisions to the current MoU or the structure of future MoUs.*

LESSON 2

The MoU contributed to meaningful improvements in governance, accountability, and vaccine delivery.

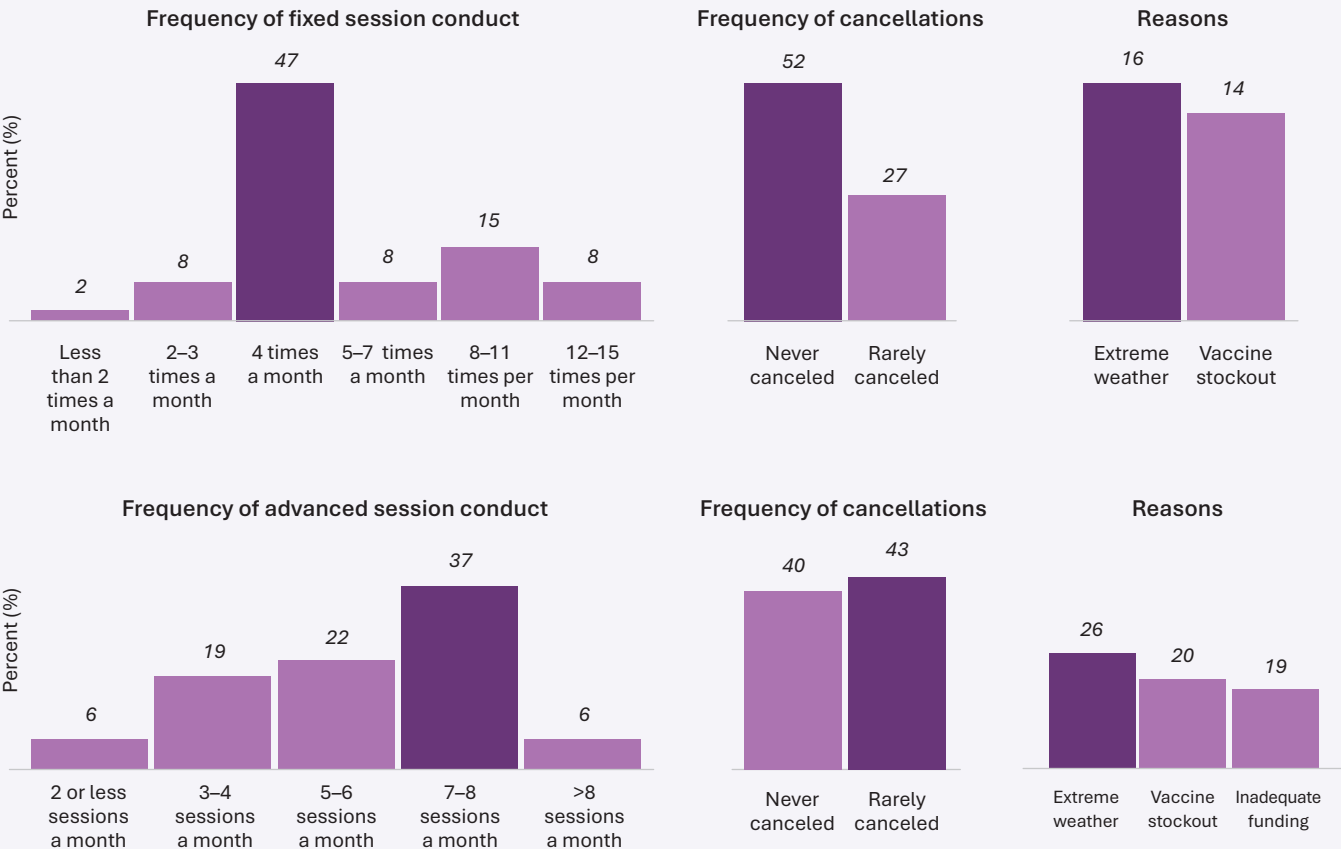
However, inadequate and delayed financing led to operational weaknesses in service delivery and a lack of coordination of demand generation activities under the MoU.

STRENGTH OF EVIDENCE: MODERATE

- The MoU strengthened systems and has shown early signs of country ownership in governance and accountability.** The MoU built on existing government-led governance structures. Through the MoU, regular review meetings were established, with strong action-point follow-up and full government ownership of agenda setting and preparation. Stakeholders credit the MoU with better coordination, including no vaccine shortages and improved data collection—functions associated with effective service delivery, though the link to coverage outcomes remains to be established. Where meetings were disrupted, the main causes were funding delays and weak prioritization, compounded by political instability and natural disasters.
- Cold chain equipment (CCE) was largely available, and the majority of facilities (67 percent) reported vaccines arriving on time.** Significant operational weaknesses still persist: CCE repairs were delayed beyond two months in many instances, with direct implications for vaccine storage quality. Transport capacity was also a critical constraint—only 9 of the 90 health facilities had functional vehicles—limiting advanced outreach sessions.
- Demand generation was not MoU-funded as activities largely operated outside the MoU framework, which was a missed opportunity to develop a more integrated and coordinated strategy.** Government leadership in demand generation was evident, with 60 percent of health facilities conducting community engagement activities and 83 percent of facilities using community registers. However, standardization was absent—registers varied across districts and provinces, undermining comparability and limiting the quality of population-level tracking. Inconsistent use of registers was driven by financial motivation gaps, unavailability of materials, and training shortfalls.

- **At the facilities, the optimal number of fixed and advanced sessions were guided by good microplans.** Cancellations were attributed to funding gaps, vaccine stockouts, and poor weather rather than planning failures. Community awareness and accessibility barriers, including economic factors, remain the primary constraints on participation in fixed sessions.

Fixed and advanced sessions were held regularly, with minimal cancellations.
When sessions were canceled, the cancellations were attributed to extreme weather or vaccine stockouts (N = 90 facilities).



Source: Memorandum of understanding questionnaires, 2025.

CONSIDERATIONS

Donors and the government should strengthen demand generation as part of the MoU with a more substantive budget. Consider adding activities such as community register standardization, expanded engagement structures, and coordination with United Nations Children’s Fund (UNICEF) and other partners to strengthen demand generation activities.

Donors and the government should dedicate specific funding for CCE maintenance, logistics, and motorbike replacement/rental. Develop a centralized CCE and logistics inventory and dedicate emergency or reserved funds to minimize delays or cancellations of services at the subnational level to accelerate repairs and/or replacement of equipment.

Governments and donors should address bottlenecks early to ensure high-quality service delivery. Recurring government delays in the release of funds contributed to delays in service delivery. Partners can explore the actions needed to address delayed or non-release of funds, vaccine stockouts, and low community awareness of session schedules—all of which contribute to session cancellations and reduced vaccination coverage.

FUTURE LEARNING

- *Monitor and assess the effectiveness of the transition plan across all MoU competencies. Assess how different transition readiness activities in terms of capacity-building, advocacy, and joint planning contribute to a timely transition at the end of 2027 and the sustainment of outcomes once the MoU ends.*



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