Country Profile: Zambia

Introduction

Zambia, a lower-middle-income country in southern Africa, is landlocked and resource-rich.[1] Zambia has made some progress toward the international targets for stunting and wasting. However, Zambia still has persistent maternal and child nutrition challenges, especially since there has been no progress towards achieving the target for reducing anemia.[2] A national prevalence of anemia of approximately 36.7% (2023), representing 107,500 pregnant women,[3] indicates that more than one in three pregnant women is anemic. In addition, 7.6% (2022)[4] of women were underweight, contributing to increased risks of adverse maternal and birth outcomes.

Data available on the World Health Organization's Global Health Observatory indicate that several birth outcome indicators remain elevated: stillbirths were at 14 per 1,000 total births in 2023,[5] preterm births were at 7.66%,[6] and low birthweight was at 11.2%[7] in 2020, infant mortality at 30.86 per 1,000 live births in 2023.[8] While iron and folic acid (IFA) supplementation has been available for decades, both adherence and delivery remain inconsistent.[9,10] In 2024, 82%[1] of pregnant women accessed at least four antenatal care (ANC) visits, and 93.5%[1] received some form of iron-containing supplements.[11]

The most recently available adherence data from the Zambian Demographic and Health Survey 2018 show that only 73%[2] of pregnant women took iron supplementation for 90 days or more.[12] As Zambia continues to face challenges in maternal and newborn health, the country aims to strengthen policies and programs to improve access to comprehensive prenatal care and nutritional support for mothers and infants.

Nutrition International (NI)'s policy brief shows that switching from Iron Folic Acid (IFA) to Multiple Micronutrient Supplements (MMS) could prevent 199,631 disability-adjusted life years (DALYs)[3] over 10 years, save 2,390 children's lives, and yield benefits 331 times the cost. Transitioning to MMS is highly cost-effective and could improve perinatal health outcomes.[13] Given these significant

[1] Zambian Demographic Health Survey, Key Indicators Report 2024, Table 9 Maternal care indicators.
[2] Zambian Demographic Health Survey, Key Indicators Report 2024, table 11.12 Micronutrients intake among mothers.
[3] A Disability Adjusted Life Year (DALY) represents one lost year of perfect health, calculated by aggregating the effect of a health issue on mortality and morbidity. Interventions seek to avert DALYs.

advantages, prioritizing a shift from IFA to MMS is essential for improving the health of Zambian mothers and their children, and the country stands to benefit immensely from MMS intervention.

This country profile presents an overview of Zambia's progress toward MMS adoption, with particular emphasis on the role of emergency response learning and implementation research led in part by World Vision Zambia in informing policy decisions and pathways for national scale-up.

MMS Policy and Regulatory Status

Zambia is taking steps to establish an enabling policy environment for the introduction and scale-up of MMS. A national Technical Advisory Group (TAG) has been constituted to guide evidence review, stakeholder coordination, and policy adaptation related to MMS implementation research and emergency response distribution. In response to climate-related shocks, including the 2024/25 drought, the Ministry of Health (MOH) and the Disaster Response and Mitigation Unit (DMMU) initiated efforts to adapt World Health Organization (WHO) recommendations to enable MMS distribution during emergencies. In 2024, UNICEF NutriDash reported that the Government of the Republic of Zambia developed a draft policy strategy that explicitly includes MMS for pregnant women. Ongoing policy discussions are informed by lessons emerging from emergency MMS distribution and implementation research, ensuring that national guidelines are grounded in local evidence.

Implementation Status

Implementation pathway: emergency response and implementation research: Zambia's MMS rollout is progressing through two complementary but distinct pathways: emergency response delivery and implementation research to inform routine ANC integration and scale-up.

MMS emergency response: In the context of drought and heightened food insecurity, MMS has been deployed as part of an emergency nutrition response to mitigate risks of micronutrient deficiencies among pregnant and breastfeeding women. Through initiatives such as the Nyamuka Campaign, launched in March 2025 by the Government of the Republic of Zambia and SUN II partners, MMS has been distributed across multiple districts as a rapid, lifesaving intervention. Emergency delivery has leveraged existing ANC and community platforms to achieve broad geographic reach and immediate coverage.

Learning from the emergency response: The emergency use of MMS has generated valuable operational lessons on supply chain management, provider training, demand creation, and adherence in resource-constrained, high-risk settings. These insights are being systematically reviewed to inform longer-term programming decisions, particularly regarding feasibility, delivery modalities, and social and behavior change (SBC) approaches in collaboration with learnings from the implementation science research processes.

Implementation research to inform scale-up: The Ministry of Health, World Vision Zambia (WVZ), and the Tropical Diseases Research Centre (TDRC), Epilight consultancy LTD, with support from partners including Kirk Humanitarian, The Power of Nutrition, and Vitamin Angels, are implementing a structured implementation research (IR) program under the Zambia Multiple Micronutrient

Supplementation (ZMMS) project. The implementation research aims to generate context-specific evidence to inform national decision-making on MMS integration into routine ANC services. Key areas of inquiry include the feasibility of delivery within existing health systems, adherence and acceptability among pregnant women, effectiveness of SBC strategies, health worker capacity and practices, and supply chain functionality. In its second phase, the MMS project has adopted a Human-Centered Design (HCD) approach to refine MMS delivery models and SBC interventions based on user and provider feedback. The IR is being conducted across selected districts and provinces, allowing for in-depth testing, learning, and adaptation before national scale-up. Findings are intended to directly inform policy formulation, guideline development, and the design of a phased national rollout strategy.

Overall, a comprehensive landscape analysis has been completed, along with a nutrition situation assessment, a delivery platform evaluation, and stakeholder mapping. Formative research and the design of a social and behavior change (SBC) strategy have also been finalized.[14,16] Likewise, training for health workers is used to strengthen the MMS implementation and delivery platforms.[14]

MMS Coverage and Utilization

MMS coverage in Zambia currently reflects both emergency response distribution and implementation research pilots. The World Vision Zambia pilot implementation research project covers a smaller number of districts to allow for detailed monitoring and learning, and broader distribution covers 33 districts to reach 320,000 pregnant women with MMS. Whereas the UNICEF press release on the "Nyamuka Campaign" in Zambia stated that 71,639 pregnant women and children will receive targeted MMS support in Monze, Shangombo, Kalabo, Kaoma, Mongu, Choma, Zambezi, Chipata, and Lundazi Districts.[18] Key strategies implemented to improve MMS uptake include integration of MMS delivery with other maternal nutrition interventions, such as Balanced Energy-Protein (BEP) supplementation.

In 2024, UNICEF NutriDash reported that MMS was delivered free of charge through ANC facilities and community platforms in Zambia.[15] In 2024, the country undertook the following awareness-raising activities to scale up MMS programs.

- Demand creation through advocacy, communication, and social mobilization (ACSM),
- Held meetings, seminars, and/or workshops on MMS and maternal nutrition,
- Engagement of community and social influencers on MMS and maternal nutrition (UNICEF NutriDash).[15]
- Demand creation strategies have included advocacy, communication, and social mobilization; engagement of community leaders and influencers; and capacity-building workshops for health workers on maternal nutrition and MMS counseling.

Key Program Actors and Partners

The Ministry of Health (MOH) is leading MMS implementation, and a Technical Advisory Group (TAG) has been established in the country.[14] UNICEF NutriDash reports that MMS is discussed in a broader

nutrition coordination mechanism that supports the planning and implementation of the MMS programs and activities in the country.[15] World Vision Zambia is supporting the MOH in introducing and scaling up MMS by conducting implementation research and testing MMS distribution.[14] Multiple national and international partners are currently working in Zambia to support this transition. The names of these partners are listed in Table 1.

Table 1 of national and international partners working to scale up MMS in Zambia

National partners	International partners
Ministry of Health	Action Against Hunger (ACF International/Program Against Hunger)
Nutrition cluster partners	Clinton Health Access Initiative
	Kirk Humanitarian
	Power of Nutrition
	Save the Children
	UNICEF
	Vitamin Angels
	World Vision Zambia

Monitoring, Evaluation, and Research

Monitoring, evaluation, and learning are core components of Zambia's MMS transition strategy. Implementation research led by World Vision Zambia and partners is generating evidence on adherence patterns, service delivery quality, SBC effectiveness, and system readiness. Based on research and implementation to date, key learnings from both emergency response and implementation research highlight the need for innovative Social Behavior Change strategies to improve adherence, continuous health worker mentorship, and reliable supply chains, and recognize that single-dose supplements have not fully addressed anemia in pregnant women.[14]

Data collection will include routine implementation activities, qualitative assessments with beneficiaries and providers, and outcome assessments to refine program design. These findings are being used to adjust ongoing programming and inform national engagement and planning processes.

Challenges and Next Steps

Zambia faces key challenges in implementing and scaling up MMS, low adherence to IFA, supply chain shortages, and low staff levels at facilities. Lessons learned emphasize the need for innovative Social Behavior Change strategies to improve adherence and the recognition that single-dose supplements have not fully addressed anemia in pregnant women.[19]

Next steps in MMS programming in Zambia include finalizing implementation research studies by 2026, synthesizing lessons from implementation research and emergency MMS response, advocating for strengthening national adherence guidance, national SBC strategies, and incorporating MMS into national policy, and building health worker and community volunteer capacity. Together, these actions will support informed policy adoption and a phased, sustainable national scale-up of MMS within Zambia's maternal health system.

MMS Tools and Resources

Costing and Economic Analysis Tools

These resources guide policymakers and health program managers considering a transition from IFAS to MMS. They offer practical tools and costing aids to support effective decision-making and planning.

a) A tool to aid decision-making transitioning from IFAS to MMS
b) A policy brief for Zambia: Cost-Effectiveness of Transitioning from Iron and Folic Acid to Multiple Micronutrient Supplementation for Pregnancy, Nutrition International, April 2020
c) Results for Development. "Multiple Micronutrient Supplements (MMS) Introduction and Scale-up Roadmap Costing Tool."

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