NIGERIA HEALTH WATCH

Informed commentary, intelligence, and insights on the Nigerian health sector

ACADEMIA-MNDC ROUNDTABLE CONVENING

ADVANCING SUSTAINABLE FOOD FORTIFICATION IN NIGERIA: BRIDGING RESEARCH, INNOVATION, AND LOCAL PREMIX PRODUCTION FOR IMPROVED NUTRITION

REPORT

25TH OCTOBER, 2025 | ABUJA

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INTRODUCTION

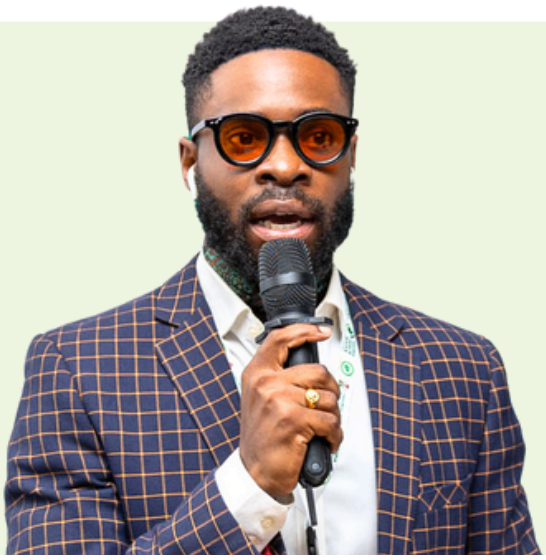
Micronutrient deficiencies and inadequacies have persisted over decades in Nigeria. Food fortification has long been recognised as a vital strategy for improving nutrition and overall population health, yet its sustainability remains vulnerable. Mandatory fortification of staple foods such as flour, sugar, oil, and salt has contributed significantly to reducing micronutrient deficiencies and improving nutritional outcomes among vulnerable populations. Yet, despite these gains, a persistent vulnerability threatens the initiative's long-term sustainability: the nation's heavy reliance on imported premixes for its fortification programmes. This dependency constraints opportunities for local innovation and leaves Nigeria's nutrition security vulnerable to the turbulence of global supply chains, foreign exchange volatility, and escalating production costs.

Addressing these systemic challenges demands more than improved coordination across the supply chain, it requires sustained investment in research and development (R&D). A strong R&D ecosystem is central to building the scientific and industrial capacity needed to produce high-quality premix locally. Through applied research, local institutions can generate evidence on nutrient stability, raw material suitability, and production standards tailored to Nigeria's context. Development-focused innovation can then translate this evidence into scalable technologies and partnerships that meet both regulatory and market demands. When effectively leveraged, evidence from such research becomes a strategic asset guiding policy, informing private investment, and shaping the evolution of Nigeria's fortification landscape.

This critical need for investment in R&D was strongly echoed during the previous **Nutrition Roundtable** hosted on the 28th of August 2025 by Nigeria Health Watch. A major gap identified during the roundtable was the lack of investment in research and development, which continues to limit the impact and long-term success of food fortification initiatives in Nigeria. Stakeholders emphasised that bridging the divide between academic research and industrial application is essential not only to strengthen local production capacity but also to ensure that nutrition interventions are grounded in science, responsive to local realities, and sustainable over time.

In response to this insight, Nigeria Health Watch in collaboration with the Federal Ministry of Health co-organised the Academia-MNDC Roundtable on Local Premix Production, themed "Advancing Sustainable Food Fortification in Nigeria: Bridging Research, Innovation, and Local Premix Production for Improved Nutrition" on the 25th of October. The roundtable convened key representatives from Micronutrient Deficiency Control (MNDC) Committee including the Federal Ministry of Health and Social Welfare (FMoHSW); Federal Ministry of Agriculture and Food Security; the National Agency for Food and Drug Administration and Control (NAFDAC); the National Primary HealthCare Development Agency (NPHCDA); The National Fortification Alliance (NFA); the Standards Organisation of Nigeria (SON); and premix suppliers, BNSL; development partners and CSOs including, Global Alliance for Improved Nutrition (GAIN) and Civil Society-Scaling Up Nutrition in Nigeria (CS-SUNN), to advance local premix production through research, innovation, and stronger collaboration.

WELCOME REMARKS



CHRISTOPHER BASSEY
Programme & Events Manager on behalf of the Managing Director of Nigeria Health Watch.

In his welcome remarks, Christopher Bassey noted that Nigeria is at a pivotal moment in its food fortification journey. While progress has been made in policy and standards, reliance on imported premix continues to expose the system to global disruptions and rising costs. Within the challenges lies a tremendous opportunity to build a self-sustaining local premix production ecosystem that not only ensures affordability and reliability but also strengthens our national nutrition security. Food fortification requires more than nutrients; it demands collaboration that turns research into solutions and innovation into impact.

"Every locally produced premix strengthens our independence, supports local jobs, and ensures that fortified foods reach more households, particularly the most vulnerable."

KEYNOTE ADDRESS

PHARMACIST BEATRICE ORUME
Head NSPD, FMOHSW on behalf of the Director/Head Nutrition Department FMOHSW.

Securing Nigeria's nutrition future hinges on a major decisive shift: moving from dependence on imported premix to localising premix production. This transition requires a deliberate fusion of research, innovation, and enabling policy. Research must provide the evidence base for context-appropriate premix formulations. Innovation must translate that evidence into scalable technologies and initiatives that leverage local materials and expertise. And policy must create the environment where these solutions can thrive through coherent regulation, fiscal incentives, and trusted quality systems. The vision is clear: a Nigeria that produces its own high-quality premix, secures its nutrition supply chain, and strengthens its economy in the process.

"Achieving this vision requires collective effort. It requires academia to lead with evidence; the private sector to invest with confidence; development partners to support with resources and technical know-how; and policymakers to act with foresight and consistency."

ONLY THROUGH THIS ALIGNMENT CAN NIGERIA FORTIFY NOT JUST ITS FOOD, BUT ITS FUTURE.

PRESENTATION:

FOOD FORTIFICATION R&D IN NIGERIA: LANDSCAPE ANALYSIS, GAPS, AND OPPORTUNITIES.

PROFESSOR KOLA MATTHEW ANIGO,
National Coordinator, Academic and Research Network, SUN

Micronutrient deficiencies continue to undermine Nigeria's health and economic potential. Iron, vitamin A, and zinc deficiencies remain widespread, contributing to more than 1.5 million disability-adjusted life years lost annually and weakening national productivity. Beyond a health issue, malnutrition is an economic crisis that limits cognitive development, workforce efficiency, and overall growth. The success of food fortification initiatives depends on a strong foundation of research and development (R&D). R&D drives innovation in fortification technologies, ensures quality assurance, and generates the evidence needed for data-driven policymaking. Without it, efforts remain fragmented, compliance inconsistent, and outcomes difficult to measure. Strengthening Nigeria's research ecosystem is essential to design context-specific solutions that reach the populations most affected by malnutrition, particularly those relying on locally produced and consumed foods.

CURRENT GAPS AND BARRIERS

Nigeria's fortification landscape is constrained by several systemic barriers:

01.

Limited laboratory infrastructure and technical capacity weaken quality monitoring and data reliability. The capacity to conduct reliable nutrient testing and quality control remains limited, forcing Nigeria to rely on foreign laboratories for analysis, an approach that drains resources and prevents local skill development.

02.

Heavy reliance on imported premixes, which raises costs and reduces local resilience.

03.

Low investment in R&D, leaving gaps in innovation, evidence generation, and product development. Quality research requires consistent financing. Without domestic budgetary commitment, innovation in fortification technologies and delivery mechanisms will remain stunted.

04.

Weak linkage between academia, industry, and policy, resulting in poor translation of research into practice.

05.

Inadequate consumer engagement, which limits awareness, trust, and uptake of fortified foods.

06.

Minimal integration of the informal food sector, despite its vital role in sustaining household nutrition.

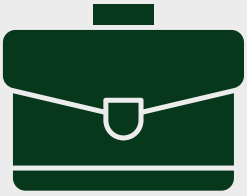
To transform the fortification landscape, Nigeria must prioritize homegrown innovation and collaboration. Establishing well-equipped national laboratories, supporting local premix producers, and encouraging industry-academia partnerships will strengthen quality assurance and sustainability. Universities and research institutes must be empowered to solve real-world problems, while regulatory bodies should adopt digital monitoring systems to ensure transparency and compliance. The rural households responsible for a large share of food consumption and are a core target for fortification efforts must also be integrated into fortification strategies through decentralized, context-specific technologies and initiatives such as small-scale fortification at community milling points. This will ensure that fortified foods reach those who need them most, bridging the gap between national policy and local impact.

CALL TO ACTION

GOVERNMENT

- Establish a national fortification research hub and reference laboratory linking academia and the MNDC Committee to coordinate studies on premix formulation and quality assurance
- Create fiscal incentives to encourage local premix manufacturing.
- Government must align research outputs with policy decisions, strengthen monitoring systems, and fund R&D for nutrition innovation.

PRIVATE SECTOR



- Private sector stakeholders should invest in local production capacity and adhere to fortification standards.
- Dedicate a proportion of annual profits to research and development, mirroring global best practice.
- Strengthen collaboration with academia to co-develop cost-effective, context-appropriate fortification solutions.

ACADEMIA & RESEARCH INSTITUTIONS

- Academia and research institutions must drive innovation and capacity building, providing the evidence base for policy and practice.
- Undertake studies on traditional and local food vehicles to expand fortification reach beyond industrial products.
- Build a coordinated national research agenda aligned with national fortification and food systems goals.

NGOS & CIVIL SOCIETIES

- Civil society and NGOs should lead advocacy and social media campaigns to drive public awareness and accountability around fortification efforts.
- Facilitate dialogues that hold institutions accountable for enforcing fortification standards and scaling impact equitably.

DEVELOPMENT PARTNERS:

- Development partners can add value by providing expertise, funding, and access to relevant technologies.
- Strengthen transparency and sustainability by advancing the digitisation of fortification monitoring systems and knowledge-exchange platforms.

PLENARY SESSION I:

FROM RESEARCH TO REALITY: BARRIERS LIMITING LOCAL PREMIX PRODUCTION AND FORTIFICATION SCALE-UP

Moderator:
Ridwan Awosanya, Program Manager, CS-SUNN, Nigeria

"Over 90% of premixes are imported, every ton of these imported premises, tells a story of untapped local potential."

The session focused on highlighting the barriers limiting local premix production and fortification scale-up and how to strengthen Nigeria's food fortification agenda through stronger research–industry collaboration. Stakeholders examined barriers to collaboration, policy and regulatory gaps, and proposed strategies to enhance data sharing, build technical capacity, and align local premix production with global quality standards.

BARRIERS TO TRANSLATING ACADEMIC RESEARCH INTO SCALABLE INDUSTRIAL SOLUTIONS

KEY POINTS RAISED:

Academic research operates largely in isolation from industry needs, resulting in limited translation of findings into practical applications.

Weak collaboration between academia, industry, and policymakers prevents research from informing production realities.

Inadequate funding and absence of policy incentives for private-sector investment in R&D constrain innovation.

Lack of a unified national research agenda leads to fragmented studies with minimal alignment to policy or market needs.

Limited industry-sponsored research and low uptake of academic outputs reduce knowledge transfer and scale-up potential.

Inadequate technical capacity and infrastructure weaken the quality and uptake of locally generated evidence.

FRAMEWORKS OR INCENTIVES COULD PROMOTE DATA SHARING, JOINT PROJECTS, AND CROSS-INSTITUTIONAL COLLABORATION

Strengthening trust between academia and industry through formal collaboration frameworks such as joint research grants, innovation hubs, and co-located R&D facilities can foster practical, demand-driven research.

Establishing data-sharing protocols and centralised knowledge platforms would help researchers, regulators, and producers align efforts and avoid duplication.

Government-backed incentives, including tax reliefs and matching grants, could encourage private-sector participation in nutrition-related R&D.

Existing platforms like the Academia Research Network on Scaling Up Nutrition (ARN-SUN) should be scaled and sustainably funded to coordinate research and translate findings into actionable policy and industrial practice.

BRIDGING THE CAPACITY GAP BETWEEN ACADEMIC INISTITUTIONS AND INDUSTRIES

Universities and research institutions face major constraints, from underfunded laboratories to outdated infrastructure that hinders innovation. The current academic landscape forces many lecturers and researchers to self-fund their work, leaving limited opportunities for innovation or meaningful, sustained collaboration with industry. This has created a cycle where academic outputs rarely translate into industrial solutions. There is need for deeper, more practical engagement between research and industry to exchange knowledge. Sabbaticals could extend beyond university-to-university exchanges, to placements within industries, allowing lecturers and researchers to understand firsthand the technical and production challenges facing manufacturers.

Beyond collaboration, structural trust and financial accountability emerged as key barriers. Many grants and partnerships falter because of bureaucratic bottlenecks that restrict access to research funds within universities. Participants proposed independent frameworks or intermediary bodies to manage project funding transparently, the need to rebuild trust across sectors and establish a government-led committee that brings together academia, industry leaders, and partners like the Dangote Foundation to coordinate funding, foster accountability, and drive sustained support for local premix production and research.

ADDRESSING POLICY AND REGULATORY BOTTLENECKS TO SUPPORT LOCAL PREMIX SCALE-UP

Significant structural bottlenecks continue to hinder local premix production and quality assurance. Despite progress in multi-sectoral collaboration through the National Fortification Alliance, weak laboratory capacity, limited technical expertise among independent analysts, and gaps in compliance monitoring remain major barriers. Strengthening the quality infrastructure particularly laboratory accreditation, industry quality control, and regulatory oversight was identified as essential to scaling local production without compromising standards.

01 Invest in upgrading and accrediting national and independent laboratories to reliably test premix quality.

02 Build the technical capacity of industry and regulatory quality assurance teams.

03 Strengthen compliance monitoring mechanisms to ensure consistent enforcement of fortification standards.

04 Encourage innovation and competitiveness by supporting emerging local producers with regulatory guidance and technical assistance.

NATIONAL GUIDELINES ON MICRONUTRIENT DEFICIENCY PREVENTION AND CONTROL

Pharm Orume, speaking on behalf of the Director of Nutrition, Federal Ministry of Health, Ladidi Bako-Aiyegbusi, mni, reported that the review of the National Guidelines on Micronutrient Deficiency Prevention and Control (2025) is already underway, an encouraging signal of renewed commitment to strengthen Nigeria's fortification landscape. The process is being guided by a multisectoral advisory committee that brings together government agencies, academia, industry leaders, and development partners, ensuring that diverse expertise informs the framework. However, participants noted that the effectiveness of such committees depends on more than representation, it requires the active involvement of technically competent members who can drive meaningful progress

01 Strengthen the advisory committee's effectiveness by ensuring technically qualified and committed representatives from each stakeholder group.

02 Institutionalize policy continuity through legal frameworks like the National Nutrition Act.

03 Ensure the zero draft of the revised guideline reflects robust stakeholder participation, particularly from academia, private sector, and civil society.

GROUP BREAKOUT SESSION

BUILDING A ROADMAP FOR SUSTAINABLE PREMIX PRODUCTION AND EFFECTIVE FOOD FORTIFICATION

The breakout sessions brought together diverse perspectives from academia, industry, FMoHSW, and regulatory bodies to explore practical solutions for building a sustainable, locally driven fortification ecosystem. Discussions revealed a shared recognition that Nigeria's current fortification model, largely dependent on imported premix, cannot be sustained without stronger linkages between research, policy, and industry. Participants underscored that research often remains disconnected from real-world application due to weak collaboration frameworks, limited innovation funding, and fragmented data systems.

The absence of coordinated knowledge-sharing platforms and clearly defined policy pathways further constrains progress. There is an opportunity to institutionalize collaboration through multi-sectoral structures, leverage evidence to inform regulation, and invest in local capacity that transforms research outputs into scalable solutions. Across the groups, there was alignment on the need for a more integrated fortification ecosystem, one that values collaboration, transparency, and evidence-based action as the foundation for sustainable progress. A key output from the discussions was the development of a practical roadmap that will serve as a tool for translating research evidence into actionable policy, strengthening the bridge between innovation and implementation.

ROADMAP FOR STRENGTHENING LOCAL PREMIX PRODUCTION CAPACITY

Phase 1: Short-Term (1–2 Years)

Laying the Foundation for Collaboration

Challenges Addressed

- Weak Industry-Academia Collaboration and Linkages
- Weak Data Management and Knowledge Sharing Systems
- Insufficient Funding (for initial setup and coordination)

Key Recommendations (Actions)

- Establish a National Knowledge Hub (desk review and centralized portal).
- Forge Multi-Stakeholder Linkages (steering committee, pilot plants).
- Initiate Sustainable Funding (develop proposals for seed funding).

Cross-Cutting Enablers in Action

- Partnerships: Forming the initial steering committee.
- Financing: Securing initial seedfunding
- Advocacy: Early advocacy to secure buy-in.

Key Indicators for Monitoring

- Number of coordination meetings held.
- Users accessing the knowledge portal.
- Amount of seed funding secured.

Dissemination Strategies

- Launch the Knowledge Hub
- Conduct advocacy meetings.
- Hold first multi-stakeholder forum.

Key Actors

All Relevant stakeholdres, including Federal ministry of health and social welfare, Federal ministery of Industry, trade and Investment

ROADMAP FOR STRENGTHENING LOCAL PREMIX PRODUCTION CAPACITY

Phase 2: Medium-Term (3–5 Years)

Implementation, Incentivization, and Capacity Building

Challenges Addressed

- Weak Mechanisms for Translating Research into Practice.
- Lack of Incentives for Collaboration.
- Limited Technical & Human Capacity.

Key Recommendations (Actions)

- Formalize Knowledge Transfer (feedback loops, policy).
- Implement Fiscal Incentives (tax waivers, research grants).
- Build Technical Capacity (training, curriculum integration).

Cross-Cutting Enablers in Action

- Financing: Tax incentives and research grants.
- Partnerships: Co-designed training programs.
- Capacity Building: Focus on technical/practical skills.

Key Indicators for Monitoring

- MOUs signed between academia and industry.
- Industry-focused research publications.
- Researchers trained in fortification tech.
- Private sector R&D investments.

Dissemination Strategies

- Host bi-annual Research & Industry Fair.
- Publish policy briefs and technical reports.
- Media partnerships for awareness.

Key Actors

All Relevant stakeholdres, including Federal ministry of health and social welfare, Federal ministery of Industry, trade and Investment,Academias.

ROADMAP FOR STRENGTHENING LOCAL PREMIX PRODUCTION CAPACITY

Phase 3: Long-Term (5+ Years)

Institutionalization and Sustainable Integration

Challenges Addressed

- Ensuring Long-Term Sustainability.
- Continuous Knowledge Update and Innovation.
- Chronic Funding Challenges.

Key Recommendations (Actions)

- Institutionalize Knowledge Management (integrate into SOPs).
- Legislate Sustainable Funding (mandatory R&D allocation)
- Foster a Culture of Innovation (commercialization focus).

Cross-Cutting Enablers in Action

- Advocacy & Political Commitment: For legislation and enforcement.
- Strategic Financing: Diversified, permanent funding streams.
- Partnerships: Mature, integrated ecosystem.

Key Indicators for Monitoring

- Patents/innovations commercialized.
- Percentage of budget allocated to fortification R&D.
- Financial sustainability of producers.
- Market reach of fortified products.

Dissemination Strategies

- Showcase success stories nationally/internationally.
- Publish comprehensive impact reports.
- Use hub to share commercial innovations.

Key Actors

All Relevant stakeholdres, including Federal ministry of health and social welfare, Federal ministery of Industry, trade and Investment

KEY RECOMMENDATIONS FROM THE BREAKOUT SESSION

- Establish a coordinated national mechanism linking academia, industry, and policymakers to drive research translation and fortification innovation.
- Create an industry–academia knowledge hub for data sharing, evidence synthesis, and cross-sector learning.
- Introduce fiscal incentives and public–private financing models to stimulate local R&D and premix production.
- Strengthen laboratory infrastructure, quality assurance systems, and human capacity to ensure global-standard compliance.
- Embed advocacy and communication strategies to increase awareness, transparency, and trust across the fortification value chain.

CLOSING REMARKS-

Ladidi Bako-Aiyegbusi, mni
Director, Department of Nutrition, Federal Ministry of Health

The roundtable ended with a strong consensus that Nigeria's fortification journey has entered a defining phase—one that demands intentional coordination, not new structures. Stakeholders recognized that while the country has made progress in developing policy frameworks and technical expertise, these assets remain scattered and underleveraged. The task ahead is to knit them into a coherent system that connects research to regulation, industry to innovation, and evidence to impact.

Existing networks such as the Academia Network and the SUN Business Network were identified as strategic anchors for collaboration.

Strengthening these platforms with clear mandates, shared accountability, and measurable deliverables—will be key to sustaining momentum. A technical working group is expected to translate insights from the dialogue into a concrete roadmap that integrates ongoing efforts under a unified national fortification agenda.

CONCLUSION

Nigeria's fortification challenge is not a shortage of evidence or commitment, but the absence of alignment between those who generate knowledge and those who act on it. Real progress will come from transforming research into practice through stronger linkages, local innovation, and institutional accountability.

The convening reaffirmed that sustainable fortification is both a nutrition and economic imperative. It calls for a shift from dependency to domestic capability, where local production, data-driven policy, and public–private partnerships shape a resilient food system. As Nigeria moves forward, the goal is not merely to fortify foods, but to fortify systems, to build an ecosystem where science, industry, and governance work together to secure a healthier future for all.











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