Maternal & Child Wasting (MCW):
Final findings and hypotheses on market barriers and opportunities in Pakistan (KPK)

CERP Evidence Matters

RESULTS FOR DEVELOPMENT

Country Overview

In Pakistan, stunting has only marginally declined since 2001 (0.4% per year), wasting levels have increased from 12.5% in 1990 to 17.7% in 2018, owing mainly to dismal maternal conditions, food insecurity, lack of awareness on nutrition, and high poverty levels. Health, although a devolved responsibility since 2010 (federal to provincial), continues to have low expenditure per capita across Pakistan, including KPK; within health, primary health care and nutrition lose out to management of tertiary hospitals.

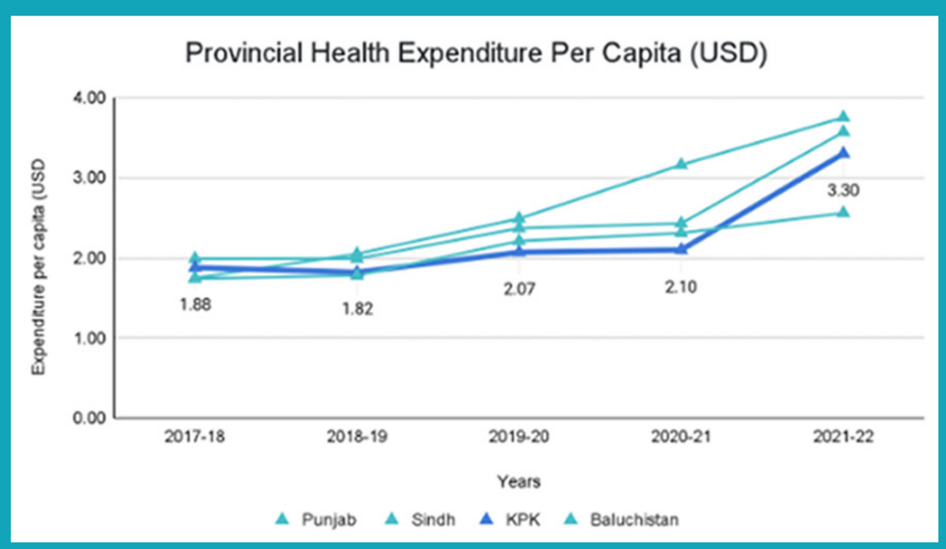
A community-level primary health care infrastructure exists but there are multifaceted inefficiencies, and the system barely caters to 40% of the population; the rest resort to the private sector. Wasting management structure exists inside the PHC infrastructure but operates outside the cadre of regular primary healthcare operations with project-based staff, procurement, and separate information management.



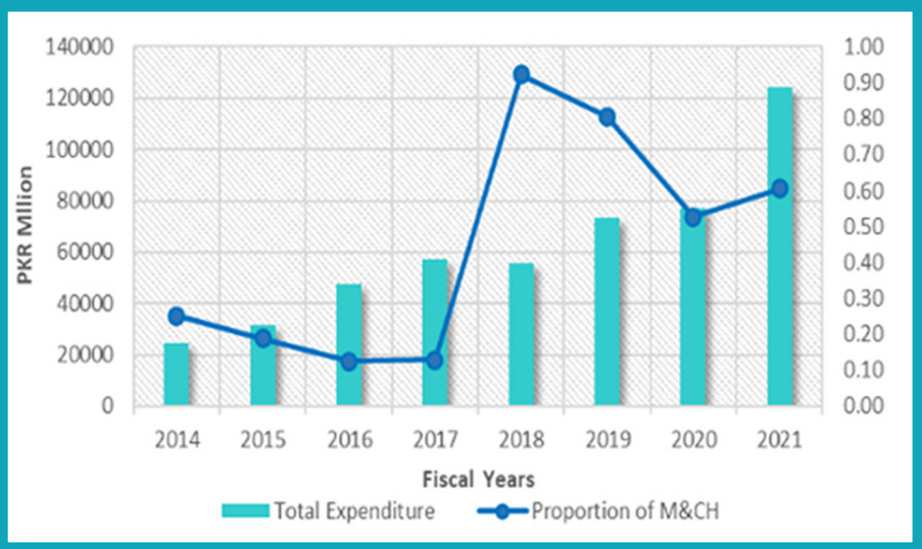
Wasting — **Wasting (GAM) Rate:** Pakistan (17.7%), KPK (15%), KP-NMD (23.1%)[1]

Stunting — **Stunting Rate:** Pakistan (40.2%), KPK (40%), KP-NMD (48.3%)

With merger of previously tribal areas (“FATA)” as districts into KPK, the province’s wasting rates exceed the national average (already above WHO’s threshold of emergency level at 15%) and indicate the critical need for nutrition-specific interventions to reduce child morbidity and mortality levels



Across Pakistan, provinces spend less than $4 USD/capita on health; KPK fares even lower than Punjab and Sindh



In KPK, maternal and child care components make up <1% of the total health expenditure across current & development portfolio

Project Background:

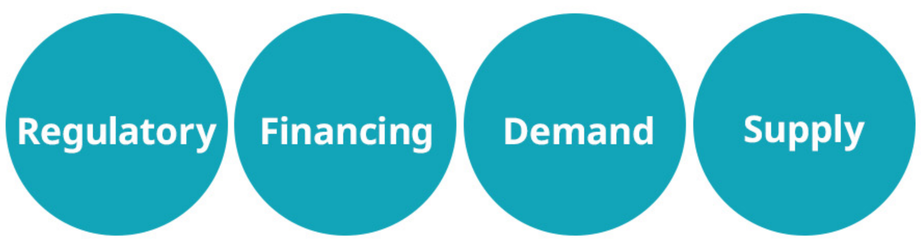
The Maternal and Child Wasting Management (MCW) project is funded by BMGF. This initiative is jointly implemented by R4D and CERP. At its core, the MCW project is a landscaping study on specialized nutrition foods. Its primary focus is on wasting treatment and prevention in Pakistan, with a specific focus given to the Khyber Pakhtunkhwa (KP) province. Our aim is to explore market dynamics and identify both barriers and opportunities for the introduction or scale-up of four key lipid-based supplement (LNS) commodities. These essential supplements encompass Ready-to-Use Therapeutic Food (RUTF), Ready-to-Use Supplementary Food (RUSF), LNS-MQ (Wawa Mum), and LNS-PLW (Maamta), along with their equivalent local brands.

Addressing a Critical Gap:

In the vast array of nutrition-related pathways in Pakistan, including food fortification, dietary diversity, and educational awareness, wasting treatment products often remain underserved, primarily relying on humanitarian or one-off development interventions.

Key Objectives:

The project's overarching objectives are structured around data collection and analysis across four fundamental categories:

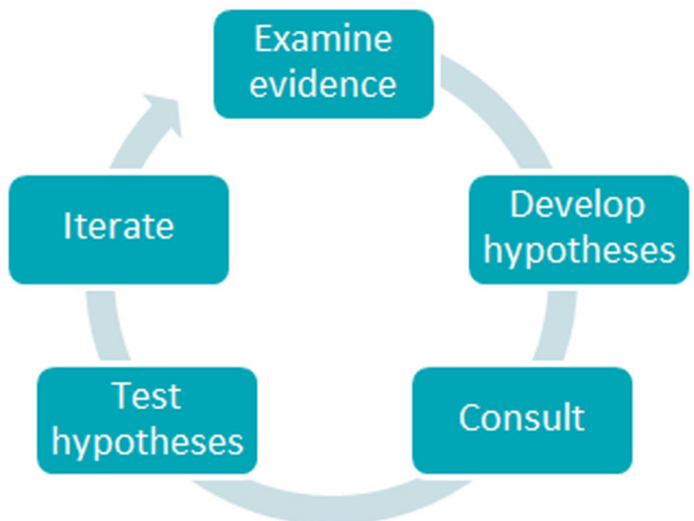


The MCW project aims to

- Identify governments’ and donor strategic priorities around MCW
- Identify key upstream market inefficiencies for the existing set of MCW products across Pakistan
- Briefly conduct private sector scoping of these products

Methodology:

1. Evidence-Driven Team Approach
2. Engaging Stakeholders for In-depth Insights
3. Uncovering Private Sector Dynamics



Stakeholder engagement: Cross-cutting stakeholder engagement with participants from Federal and KP health department, local manufacturers of nutrition commodities and multilateral organizations was conducted in regard to MCW commodities.

Demand

Demand Landscape:

Demand quantification methodology & ownership:

- There are set quantification formulas to determine SAM (RUTF) and MAM (RUSF) caseloads (requirements) at country, province and district levels with surveys like National Nutrition Survey, MICS and PDHS contributing to the calculation of prevalence rates
- Conversely, both LNS-PLW and LNS-MQ requirements are calculated at a population level and usually only targeted at high-burden areas or through the social security program
- Quantification is mainly owned by the government with technical assistance provided by UNICEF; in case of disasters (e.g. floods 2022), agencies collaborate with NDMA and UN-OCHA to conduct rapid needs assessments

Quantification to resource mobilization

- In KPK, UNICEF leads the resource mobilization for RUTF mainly through humanitarian funds while WFP caters to RUSF, Maamta and Wawa Mum; the scale and target districts change as per donor preferences or in aftermath of disasters
- At the provincial government level, resource mobilization has been limited to one-off development programs due to limited fiscal space, lack of awareness and overall perception of "nutrition is a donor-focused area"
- BISP Nashonuma is a federal conditional cash transfer program targeted at social protection beneficiaries; it provides px commodities at a tehsil level across KP but has limitations

Mobilization to procurement:

- Often, resource mobilization (funding approval) does not translate into on-ground procurement for nutritional commodities due to changing political priorities, electoral motivation, or procurement-led challenges
- Government usually prefers a parallel supply chain for nutritional commodities to bypass stringent procurement laws and other operational limitations

MMS an emerging federal priority:

- While limited to humanitarian distribution and research implementation right now, federal government is prioritizing MMS over IFA in policy documents and discussions; however it's cost increment over IFA is a concern

In KPK, commodities are procured and provided primarily through the UN agencies, coupled with government's commitment through some Annual Development Programs

Organizations	Programs	Program Coverage	Commodity Focus	Status
UNICEF	CMAM., disaster relief interventions all under the Integrated Nutrition Program	Varies each year based on disaster prone areas	RUTF, MNP, MMS	Various programs implemented
WFP	CMAM., disaster relief interventions, technical support to BNP, KP-Spring	Varies each year based on disaster prone areas	RUSF, LNS-PW, LNS-MQ	Various programs implemented
World Health Organization	CMAM, disaster relief interventions	>50% rural areas, >70% urban areas, >90% in camp situations	F-75, F-100	Various programs implemented
KPK Health Department	IHP (2 rounds), HCIP	**HCIP:** ¼ of the population of KP (8.4 million) and 63% of the overall refugee population in 4 districts: Haripur,Nowshera,Peshawar, Swabi , **IHP**: rural KP	RUTF	HCIP has no commodity IHP round 1 procured RUTF only in one year
Department of Planning and Development	KP-SPRING	4 districts of KP; D.I Khan,Tank, Bannu, Nowshera	LNS-PLW, LNS-MQ	WFP funds spent for pilot phase, govt funds not released
Ministry of Social Protection and Poverty Reduction	BNP	Registered BISP Kafalat beneficiaries	LNS-PLW, LNS-MQ	Ongoing
Planning Commission	National Multi-sectoral Nutrition Program to Reduce Stunting and Other Forms of Malnutrition	36 high burden districts country wide, including KPK	RUTF, RUSF, MMS, Deworming	Recently launched

Opportunities: Demand

Barrier	Wasting ecosystem is separate from regular health operations despite being located within the same physical infrastructure, leading to higher overheads, disaggregate information collection and planning	LNS commodities are perceived as donor-funded,humanitarian products, hence government buy-in and investment is low in this sector.	Blanket provision of LNS-PLW and LNS-MQ, is costly and prevents scale	Government-led procurement is long, tedious and challenging from a regulatory and efficiency point of view - single-source procurement is not preferred and needs special approvals which are again time-consuming,	There is low awareness about importance of nutrition at the consumer level. Even at higher socio-economic classes with high prevalence of anemia and malnutrition, private demand is absent.
Opportunity	**Integrate specialized staff, procurement & reporting into mainstream health sector:** Reduction in overheads will also free up some fiscal space for actual commodity procurement and demand generation	**Advocate nutrition-related commodities to enhance investment:** A clear dosage and selection criteria could help scale up px commodities. Similarly AFs like SQ-LNS could further reduce per unit cost if efficacy is determined	**Introduce guidelines and dosage for preventive commodities to manage costs** Sensitization and advocacy is required at two critical tiers: Health Minister who will determine the department's priority areas and District Officer who will quantify demand, contribute to budget formulation and procure required commodities	**Awareness campaigns both at mass level and medical practitioners levels could bring behavioral change:** Some commodities like IFA, BF-Mama, Ensure are already prescribed by doctors and practitioners. Px commodities could be marketed as high-value alternatives. Similarly mass campaigns on TV, social media could also drive behavioral change	**Revisit procurement rules or get special long-term approvals under emergency or humanitarian contexts:** Special approvals could expedite procurement at a government level rather than them having to revert to the agencies (which might have overhead costs)

Financing

Financing Landscape:

Low, fragmented and donor-led funding:

- Government funding for health, nutrition, and wasting commodities in Pakistan and KPK remains critically low.
- Even allocated funds are often diverted to politically "visible" projects, leaving limited resources for critical nutrition initiatives.
- International donors are the predominant financiers of LNS commodities in KPK; UNICEF leads the resource mobilization for RUTF mainly through humanitarian funds while WFP caters to MAM treatment, Maamta and Wawa Mum; the scale and target districts vary as per donor preferences or in aftermath of disasters
- The unpredictability and ad hoc nature of humanitarian-led funding makes planning difficult.

Perception of High Costs:

- Low or no government financing is closely tied to the perception that LNS commodities are expensive products.
- The focus is now shifting toward exploring cost-efficient alternatives. UNICEF is testing a chickpea based RUTF formulation ; chickpea is cheaper but is still imported in Pakistan due to high aflatoxins found in local produce

Insufficient Coverage and Funding Diversification:

- Although overall coverage remains below 10% of the annual requirement, there have been no formal efforts to shift funding from ad hoc humanitarian or "PC-1" programs to regular health operations.
- UNICEF and WFP are also dependent on fluctuating donor commitments for treatment commodities. For UNICEF, 99% funding is attributed to the donors rather than UNICEF's own funds

Funding Fragmentation and Limitations:

- Fragmented funding channels, limited-time political endorsement, and geographic dispersion make long-term planning difficult.

Limited Success of Child Nutrition Fund:

- UNICEF's Child Nutrition Fund has achieved limited success in Pakistan, with only one successful case study from Sindh and an ongoing application with Punjab.

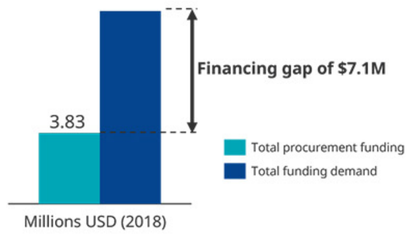
Nutrition is a multisectoral concern

- The multi-sectoral nature of nutrition adds complexity to financing coordination and comprehensive tracking between nutrition-sensitive (education, agriculture, WASH, social protection) and nutrition-specific (health) areas
- National nutrition program of the federal ministry was appreciated, approved but is still waiting for resource approval

UNICEF is the major funder for RUTF, but their funding is unpredictable, difficult to anticipate, and barely caters to 10% of the SAM caseload in a given year

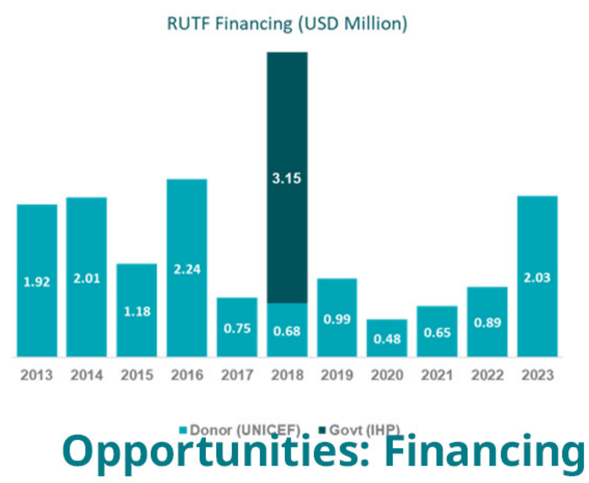
KPK-Pakistan

UNICEF-led + Govt funding* left a ~70% financing gap for RUTF in 2018, implying the gap is larger in years with no govt commitment



There is very little transparency about immediate and future funding amounts, which makes planning difficult for country stakeholders.

RUTF is primarily donor-funded except for the one-time procurement under the IHP program. UNICEF funds have also fluctuated by as much as 4x-6x over the last 10 years, leading to ad hoc initiation and closure of initiatives

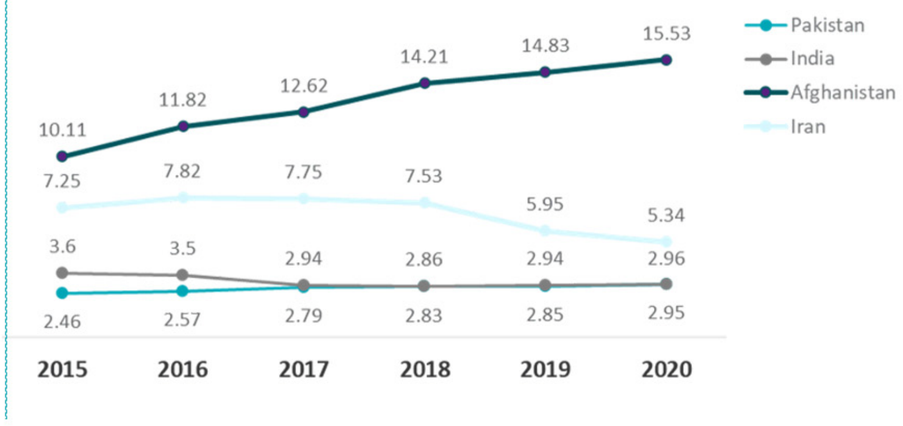


Funding for health (Overall)
Overall spending on health is low with ~3% of GDP allocated to health. This is lower than neighboring and average developing countries proportion. Moreover, only ~40% of this expenditure comes from the government, rest is out of pocket.

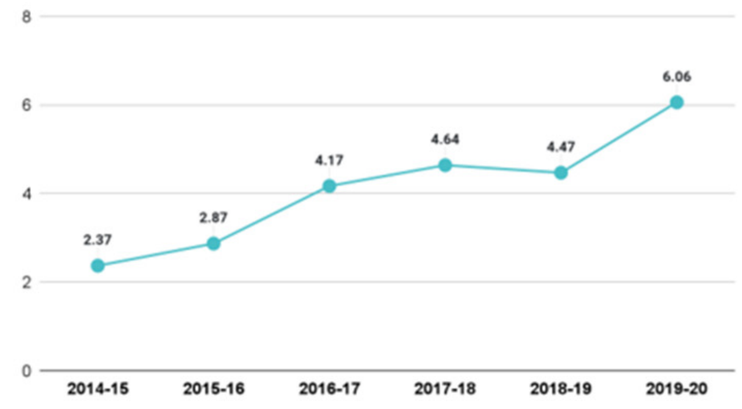
Funding for health (KP-level)
Within health budgets in 2021-2022, preventive healthcare services focusing child immunization, reproductive health and malnutrition in vulnerable segments of the society had a 38% increase from PKR 3,386 Mn to PKR 4,656 Mn2. Despite the increase, "Integration of Health Services, Delivery with special focus on MNCH, LHW and Nutrition Programme" still only accounts for 7% local allocation within the health sector allocation.

Low funding for commodities
Within nutrition, wasting commodities are least prioritized. There have been only two development projects that included procurement as a line item.
KP-Spring never got the funds from govt and IHP procured RUTF in one year versus planned 3 years.

Health expenditure as percentage of GDP



Health expenditure as percentage of GDP for KPK



Opportunities: Financing

Barrier	The ad hoc and fragmented nature of programming leads to inefficient planning and consistent relapse of SAM and MAM cases. A child cured with SAM is often left at MAM stage because program geographies shift.	In addition to ad hoc nature, the funding size has remained low with average coverage level not exceeding ~10%/year	Efforts to integrate nutrition in mainstream health operations (government) and more development programs (agencies) have remained negligible - still seen as a "humanitarian" issue	The BISP Nashonuma program has several limitations: long distances to THQ facilities has high costs, children without B-form are not enrolled, tx is not included	High unit prices of LNS commodities and lack of recommended dosage and selection criteria for preventive commodities hinder ownership by the government authorities
Opportunity	**Ensure continuous support & multi-sectoral interventions in high-burden areas**	**Adopt a pilot-test-scale model jointly owned by agencies and government**	**Advocate the costs & benefits of managing stunting & wasting beyond humanitarian contexts**	**Access through mobile camps, flexible criteria for unregistered cases, include tx products**	**Research, test and scale cheaper AFs**
	According to s/h, consistent programming over 4-5 years in high burden districts can significantly bring down stunting and wasting rates	Focusing all efforts on eliminating SAM from smaller number of areas and providing evidence can make a strong case for scaleup (similar to polio eradication)	Increased and long-term ownership by government and donors will lead to integration of nutrition-specific and sensitive interventions	UNICEF's mobile vans in remote flood-affected districts had higher outreach levels. This could be replicated. Providing temporary registration IDs to SAM/MAM children could enable them to secure treatment in time and save lives.	This type of support needs to be part of a broader product adoption strategy for substantial DRM or product uptake.

Regulatory

Regulatory Landscape:

Nutrition as a policy focus:

- At the policy level, nutrition has gained 'priority' status due to international commitments like the SDGs with the National Multi-sectoral Nutrition Strategy (2018-2025) adopting similar targets
- Consequently, nutrition is progressively finding its place in national and provincial policies and guidelines; however wasting commodities need more explicit focus

EML inclusion to streamline quantification & procurement:

- WHO's EML does not include commodities of interest like SQ/MQ-LNS, RUTF, RUSF, and BEP on its EML. Pakistan's EML mirrors WHO's list. Nevertheless Stakeholders, including officials from the Health Department and DRAP, , report ongoing efforts to include these commodities in the EML and bring them under DRAP's regulatory purview by 2024.

LNS classification dilemma:

- Similar to international narratives, the debate about LNS belonging to drug versus food versus some other specialized group has lingered for a while but is now largely resolved – the broader consensus is that LNS commodities fall in the over the counter nutrition/health category
- Overlap in product registration & licensing mandate:
  Multiple government bodies, such as PSQCA, HFA, DRAP, play roles in firm licensing and product registration-there appears to be overlapping jurisdiction, particularly for LNS commodities which are weakly classified
  Recent consensus among s/h and Ismail's registration of all 4 products has set precedent for DRAP's mandate to regulate these commodities.

Stringent quality control and absence of local standards

- UNICEF and WFP, being the primary procurers, drive quality controls and standards, which are stringent and time consuming.
- No relevant public institution in Pakistan has issued quality standards for any nutrition commodity of interest but as the classification and jurisdiction debate is resolved, national standards could be issued based on global/UN-agency standards, and local testing capacity can reduce turnaround time and cost for new market entrants and established firms.

Multiple government bodies have a role to play in both firm licensing and product registration, quality control and classification of product with overlapping boundaries

Organizations	Role	Key Responsibilities
Ministry of Health (Federal)	Policy & coordination	Provides oversight of regulatory bodies in health sector; responsible for enforcement of drugs laws and regulations; leads national and international coordination in the field of public health;and, is the custodian of population welfare coordination
Drug Regulatory Authority of Pakistan	Oversight & regulation	Responsible for the regulation, licensing and manufacturing of therapeutic goods, including over-the-counter non-prescription drugs such as homeopathic products, nutritional products, and food supplements
Pakistan Standards & Quality Control Authority	Oversight & regulation	Mandated to foster and promote industrial (esp. manufacturing) standards); licences all manufacturing concerns, including manufacturers of health products, milk, food stuffs
Competitive Commission of Pakistan	Oversight	An independent commission mandated to promote competition in all sectors of commercial & economic activity, including by preventing monopolization and deceptive marketing practices and, taking action against entities engaged in such practices
KP Provincial Health Department	Policy & coordination	Responsible for providing health services, monitoring the provision of the same and for broadly regulating the health sector
Food Safety and Halal Food Authority	Oversight & regulation	Mandated to regulate and monitor the food business in order to ensure provision of safe food; certifying foods for import and export; and, implementing rules and regulations related to fortified foods, nutraceuticals, health supplements etc.
KP Infant Feeding Board	Oversight	An independent Board that advises the Government on developing policies and guidelines for promotion of breastfeeding as well as on products manufactured, marketed, promoted or otherwise represented as a complement to mother's milk

Jurisdiction: LICENSING, QUALITY, CLASSIFICATION

Legend ○ Mandated ☐ Vague/Conflicting Mandate

Essential Medicines List (EML) and its Significance

Pakistan's EML is based on the WHO Model List of Essential Medicines. The inclusion of commodities is advantageous in several ways:

Streamlining Procurement: It expedites the public procurement process by reducing the requirement for obtaining at least three vendor quotations, thus making procurement of essential nutrition commodities more efficient.

Empowering Local Entities: It allows districts and other local government-level entities to directly procure commodities without the need for bureaucratic approval from higher government levels, be it provincial or federal.

Opportunities: Regulatory

Barrier	Although nutrition and wasting is being increasingly incorporated in national and provincial policy documents, MCW commodities are not explicitly highlighted as a course of action for treatment.	WHO's EML, which is adapted in Pakistan, does not classify commodities as medicine complicating the classification process.	Although DRAP is the dejure regulatory institution, there is still lack of formal/legal clarity on its authority to license firms and register products – LNS commodities are still weakly classified	There is still reliance on WFP and UNICEF for quality controls, standards and testing	Locally produced agri raw materials like peanuts and chickpeas, while abundant, are exposed to Aflatoxins that makes them unsuitable for production.
Opportunity	**Advocate stronger inclusion in policy documents** Amending current nutrition-related vision, policy and strategy documents or explicit inclusion in new documents could exhibit stronger focus.	**Advocacy for Inclusion to drive procurement** The presence of RUTF on the WHO's EML will facilitate its' demand and procurement at provincial and district levels	**Formalize & Codify** A notification on the classification status of the LNS commodities and a clear mandate of DRAP can improve private sector participation & enable market buoyancy.	**Establish a more coherent & robust domestic regulatory regime** Domestic standards, aligned with international procurers, and local testing capacity (public and/or private) could boost domestic production and research and ease government-led procurement	**Foster domestic crop and other raw material industries to reduce imports and promote AFs** This will not just reduce per unit cost of commodities but also generate spillovers for domestic livelihoods, income generation and food safety