

## Towards Improved Maternal and Child Health

▶ Ethiopia, Insights Brief



The aim of the insights brief is to recommend clear considerations to ensure that all *births should be assisted by skilled health professionals and services should continue post-childbirth, as timely management and treatment can make a difference towards survival of at-risk mothers and babies.*

### Introduction

15,000 children and 800 women still die every day mostly of preventable or treatable causes

Improvement in health care services addressing the needs of women and newborns across the continuum of care remains critical to safeguarding the lives of mothers and their children around the time of birth. Despite innovations in logistics and practices around many essential, evidence-based reproductive, maternal, newborn, and child health (RMNCH) interventions, significant gaps remain in their universal coverage. Progress has been slow and uneven in spite of marked improvements in maternal, newborn, and child health (MNCH) outcomes globally. Accordingly, evidence-based interventions are recommended to close this gap in health outcomes.

# Phase I Assessment

The Asset Tracker Phase I assessment identified 14 assets including drugs, devices, and approaches which could effectively improve maternal, newborn, child health, and nutrition (MNCHN) outcomes at national and subnational levels. An analysis conducted from September to December 2019, leveraged publicly available data from 81 countries monitored through the Countdown to 2030 mechanism for MNCHN. This Phase I assessment identified more than 11,000 data points, notwithstanding limitations in data availability and quality.

The MNCHN interventions across various countries were grouped into three categories based on common features and barriers to scale. Appropriate policy, guidelines, training, health management information system (HMIS), supply chain, and effective governance for these interventions emerged as vital for realizing an equitable and complete provision of MNCHN at subnational, national, and global levels.



Maternal  
Health



Child Health



Nutrition

## Phase I Assessment, 2019

A rapid, multi-pronged analysis to describe progress toward scale-up of key maternal, newborn, and child health interventions and approaches.



81 countries with deep-dives into Burkina Faso, Ethiopia, India (Bihar and Uttar Pradesh), Kenya, Malawi, Nigeria, Tanzania.



Nine Interventions: Amoxicillin dispersible tablets, 7.1% Chlorhexidine, Misoprostol, community regimen for Possible Serious Bacterial Infection, Kangaroo Mother Care, Magnesium Sulfate, tools for Neonatal Resuscitation, Iron Folic Acid, Oxytocin.



Literature review



Key-informant interviews



Data visualization resulting in >11,000 data points.

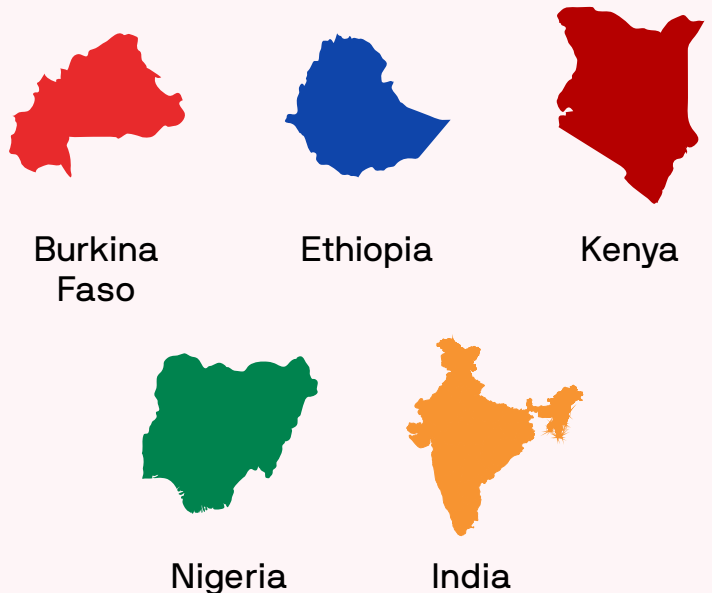
# Phase II Assessment

An Asset Tracker Phase II assessment was planned during 2021 to further validate and improve pathways to scaling MNCHN services. The Phase II assessment was designed to first understand programmatic implementation of 14 interventions, and secondly to validate pathways to scale-up and group assets that were hypothesized in Phase I. The assessments for Phase II were carried out in Burkina Faso, Ethiopia, India, Kenya, and Nigeria. Nine subnational geographies, provinces, were selected in each of these five countries. Mixed methods were used for the assessments, including interviewing key service providers and health management staff, inventory spot checks, facility data, and focus group discussions (FGDs) with community health workers (CHWs).

The evidence from Phase II led to fine-tuning of pathways (linear to multilevel), identification of indicators, and a recognition that stages could overlap or occur concurrently. A contextualized archetypes and pathways are the outcome of the Phase II assessments.

## Phase II - Qualitative Assessment

To further analyze the information; identify barriers and enablers to access, uptake, implementation, and coverage; and recommend strategies to accelerate progress toward equitable uptake, implementation, and coverage of each.



**Five Countries:** The assessments for Phase II were carried out in Burkina Faso, Ethiopia, India, Kenya, and Nigeria. Nine subnational geographies, provinces, were selected in each of these five countries.



Mixed methods were used for the assessments, including interviewing key service providers and health management staff, inventory spot checks, facility data, and focus group discussions (FGDs) with community health workers (CHWs).



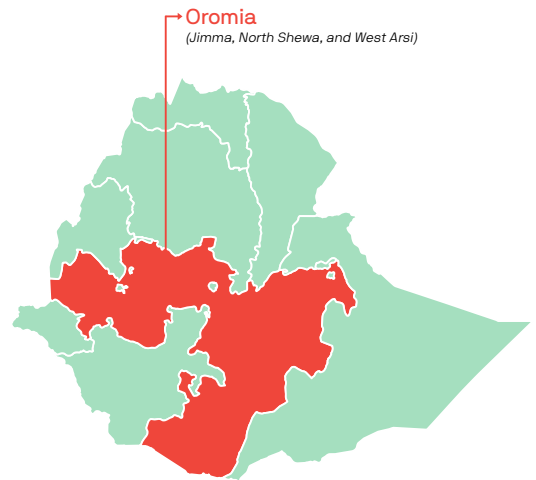
**158 facilities, 275 provider interviews, 94 DHMT interviews, and 158 facility observations.**

## Phase II Coverage: Ethiopia

The Oromia region of Ethiopia was covered during the assessment. The three zones of Jimma, North Shewa, and West Arsi were studied in Oromia using MNCH service provision and performance.

Mixed methods used in-depth interviews (5 District Health Management Team (DHMT) and 13 service providers), dyads/triads/FGDs (20 CHWs in 10 dyads/triads/FGDs), and facility observation (13 health facilities). The fieldwork was conducted during May and June of 2021.

Information, insights, and data were organized as themes specifically pertaining to policy awareness, routine use, enablers, and barriers for the 14 assets.



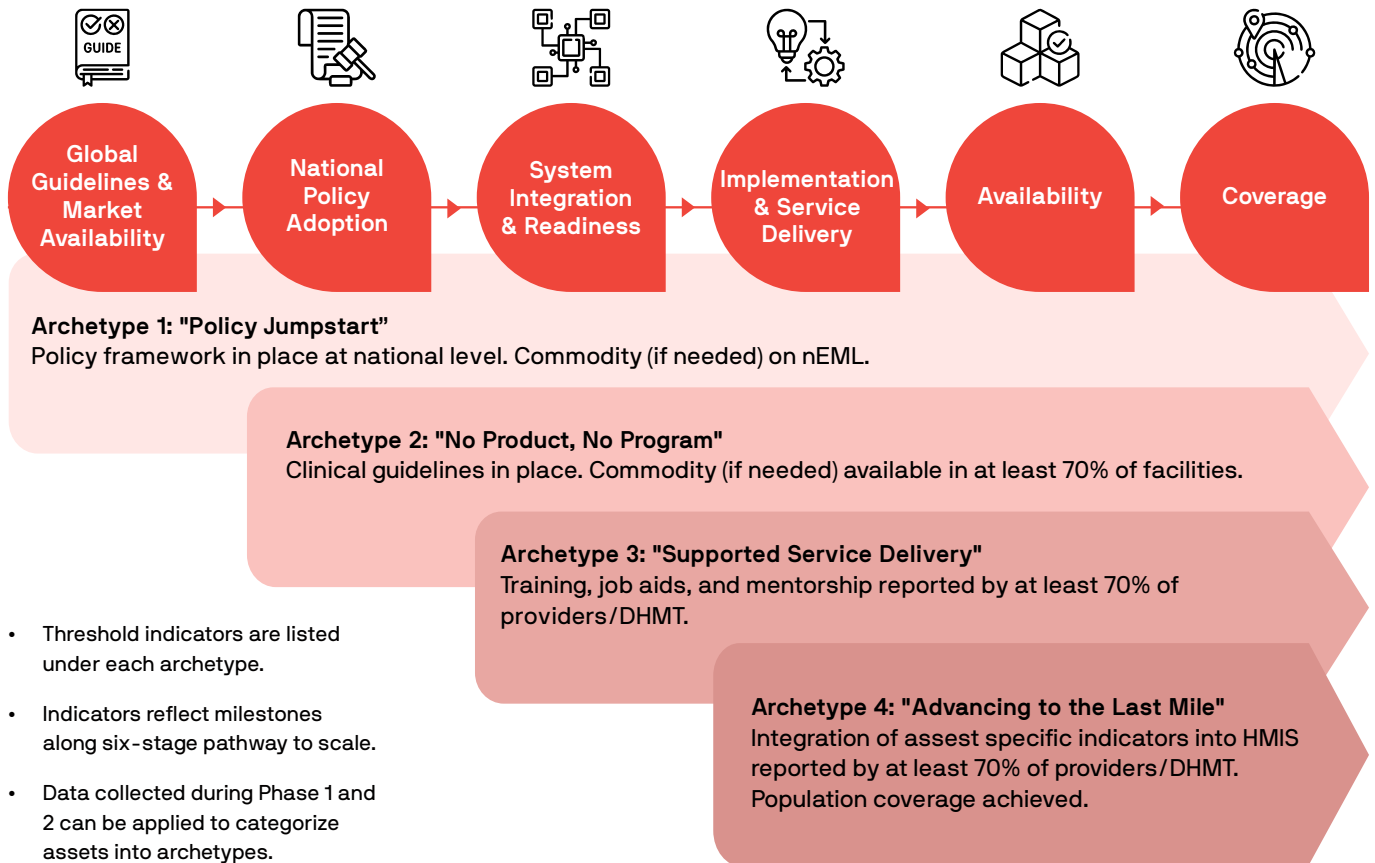
## Tracking Interventions for MNCHN

The Asset Tracker Framework uses three interrelated components. The first component classifies the interventions (referred to as assets) by use, newer/older/complex to deliver interventions, maternal/newborn/childhood interventions, or used for preventive (community) or treatment (clinical) purpose. Use of these assets effectively at community, primary, secondary, and tertiary level can improve MNCHN at the subnational level.

The second component classifies assets based on how they are supported by policy, program, delivery, and last mile coverage (referred to as the four archetypes). The threshold indicators for each archetype provide a guideline for advancing towards the last mile, that of equitable population coverage.

The third component is an adapted six-stage framework that moves use of assets and MNCHN program effectiveness at the subnational, national, and, eventually, the global level by realizing equitable and universal coverage. The performance of each threshold indicator reflects milestones along this six-stage pathway to scale.

## Data-driven, Contextualized Archetypes
















## Assets, National Policy, Enablers and Barriers

The Maternal, Child Health and Nutrition (MCHN) directorate under the State Minister's office for Programs implements the major priority programs for all respects of maternal, child health and nutrition issues.<sup>1</sup> Some of the maternal health programs initiated are emergency obstetric and newborn care, prevention and management of obstetric fistula and pelvic organ prolapse, and obstetric and gynecologic problems referral and network system. Newborn initiatives include newborn care corner, neonatal intensive care unit (NICU), and health packages on Community Based Newborn Care (CBNC), while a few of the child health initiatives are Integrated Management of Newborn Child Illnesses (IMNCI), and the Early Childhood Development (ECD) initiative.

The second phase assessment findings helped identify the enablers and barriers as perceived by providers and DHMT, summarized in the table below. The National Policy is identified as a threshold essential for introduction and supported service and coverage, and relevant policies are indicated below:

<sup>1</sup> Maternal, Child Health and Nutrition (MCHN) | MINISTRY OF HEALTH - Ethiopia (moh.gov.et)

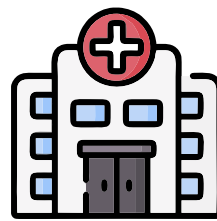
Asset	National Policy	Enablers	Barriers
 Iron and Folic Acid (IFA)	National Strategy for Newborn and Child Survival in Ethiopia (NSNCSE), 2015–2022 Management Protocol on Selected Obstetrics Topics (MPSBT), 2010	Awareness on national guideline, data and record maintenance, availability of asset, routine use and demand generation	Supply issue, side effects, lack of follow-up
 Oxytocin	Food, Medicine and Healthcare Administration and Control Authority of Ethiopia, 2014	Available national guideline	Lack of infrastructure, supply issue, lack of skills
 Magnesium Sulphate (MgSO <sub>4</sub> )	Food, Medicine and Healthcare Administration and Control Authority of Ethiopia, 2014	Available national guideline, job aids	Lack of knowledge on guideline, lack of training and supervision, lack of infrastructure
 Misoprostol	Food, Medicine and Healthcare Administration and Control Authority of Ethiopia, 2014	Available national guideline	Supply issue, lack of knowledge
 7.1% Chlorhexidine	National Strategy for Newborn and Child Survival in Ethiopia, 2015/16–2019/20 Reproductive, Maternal, Neonatal and Child Health Program Overview and Pharmaceuticals Management Training for Pharmacy Professionals, 2018	Available national guideline, availability of asset, demand generation	Gap in policy dissemination, supply issue, lack of funds
 Newborn Resuscitation Equipment (NRE)	National Strategy for Newborn and Child Survival in Ethiopia, 2015/16–2019/20	Available national guideline	Lack of infrastructure and equipment, lack of staff training related to NRE
 Kangaroo Mother Care (KMC)	National Strategy for Newborn and Child Survival in Ethiopia, 2015/16–2019/20	Available national guideline, demand generation, availability of asset	Mother's reluctance to practice, lack of infrastructure, gap in practice
 Community Regimen to Treat Possible Serious Bacterial Infections (PSBI)	National Strategy for Newborn and Child Survival in Ethiopia, 2015/16–2019/20 WHO Guideline: managing possible serious bacterial infection in young infants when referral is not feasible	Available national guideline, demand generation	Lack of policy level awareness, supply issue, lack of awareness at community level
 Amoxicillin DT	National Strategy for Newborn and Child Survival in Ethiopia, 2015/16–2019/20 National Implementation Guidelines for Integrated Community Case Management of Childhood Illness and Newborn Care (2017–2022)	Available national guideline	Lack of supply, lack of training among staff
 Multiple Micronutrient Supplements (MMS)	Guidelines for the Prevention and Control of Micronutrient Deficiencies in Ethiopia, 2016	No enablers	No awareness on national policy
 Balanced Energy Protein (BEP) Supplementation	The Seqota Declaration Implementation Plan, 2016–2030	No enablers	No awareness on national policy
 Early Initiation and Exclusive Breastfeeding (EIBF/EBF)	National Strategy for Newborn and Child Survival in Ethiopia, 2015–20 National Guideline on Adolescent, Maternal, Infant and Young Child Nutrition	Available national guideline, training, demand generation	Myths and misconceptions, nonavailability of supervision and IEC material
 Feeding Small and Sick Newborns (FSSN)	National Strategy for Newborn and Child Survival in Ethiopia 2015–20 National Guideline on Adolescent, Maternal, Infant and Young Child Nutrition	Available national guideline, training	Lack of awareness among mothers, supply issue, lack of funds, lack of follow-up visits, lack of training

# Supportive Policy, Program Delivery, and Last Mile Coverage for Effective Coverage

Policies, programs, systems, implementation framework, HMIS, monitoring and capacity building, and governance are in place for Ethiopia. Interventions like IFA, EIBF/EBF, misoprostol, and MgSO<sub>4</sub> have been part of the system for over a decade and, at times, even more. The effects are reflected in reduced mortality, in severity of postpartum and birth complications, and in neonatal deaths.

There are certain threshold indicators that can potentially jumpstart introduction of interventions, scaling up of interventions, improving effectiveness of interventions, and realizing equitable and effective coverage. Realizing the threshold value for each indicator could be the focus.

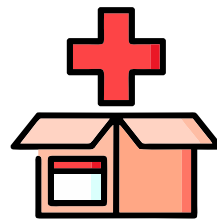
The table below lists those threshold indicators. The interventions in Ethiopia are slotted under the four archetypes based on Phase I and Phase II assessments. Focusing on attaining/surpassing 70% on the threshold indicators is critical to progress to the next stage at subnational level. These threshold indicators can converge infrastructure, equipment, supply, training, practice, demand, documentation, leadership, and governance.



Infrastructure



Equipment



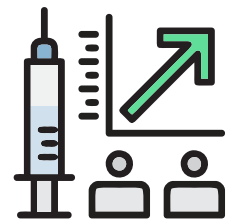
Supply



Training



Practice



Demand



Documentation



Leadership



Governance

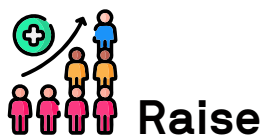
	<b>Archetype 1: Policy Jumpstart</b>	<b>Archetype 2: No Product, No Program</b>	<b>Archetype 3: Supported Service Delivery</b>	<b>Archetype 4: Advancing to the Last Mile</b>
<b>Threshold Indicators</b>	Policy framework in place at national level  Commodity (if needed) on nEML	Clinical guidelines in place  Commodity (if needed) available in at least 70% of facilities	Training reported by at least 70% of providers/DHMT  Job aids reported by at least 70% of providers/DHMT  Mentorship reported by at least 70% of providers/DHMT	Integration of asset-specific indicators into HMIS reported by at least 70% of providers/DHMT  Population coverage achieved
<b>Progress</b>	BEP MMS	Misoprostol 7.1% Chlorhexidine PSBI Amoxicillin	MgSO <sub>4</sub> NRE EIBF/EBF KMC FSSN	IFA CMAM Oxytocin
	Awareness of policy and guidelines at subnational level, though available for BEP and MMS, very low/negligible	The assets that are available in less than 70% of the facilities (CHC and Tertiary Hospitals) are:  <b>7.1% Chlorhexidine</b> (53%)  <b>Misoprostol</b> (31%)  <b>PSBI</b> Gentamycin injection (69%) Ampicillin injection (38%)  <b>Amoxicillin DT</b> Amoxicillin syrup (46%)	<b>Trainings reported</b> By providers for MgSO <sub>4</sub> (46%)  KMC (62%) FSSN (65%) NRE (69%) EIBF/EBF (77%)	<b>Asset-specific indicators included in HMIS</b>  By providers for IFA (100%)  CMAM (69%) Oxytocin (23%)



Addition and strengthening of interventions that align with global MNCH focus could further improve effectiveness MNCHN outcomes. The requirement in Ethiopia is pushing towards (1) equitable and complete coverage of population, and (2) overcoming certain hesitancy on the part of community and providers. The former requires improving effectiveness of supply, capabilities, service provision, HMIS, monitoring, and accountability. The latter requires improving awareness, acceptance, and increasing institution-based service delivery.

The analyses of these assessment findings helps identify key strategies that can help accelerate adoption and scale-up of assets and, thus, impact MNCH indicators in Ethiopia. The broad areas of intervention focuses on building blocks of health systems that include leadership and governance, health system financing, essential medicine and devices, infrastructure, human resources, health information system, and service delivery. This insights brief lists recommendations aligned with these building blocks of health system and outlines the efforts required to be raised, reduced, eliminated, and created.

## Recommendations



### 1. Augment availability of assets:

- At Hospitals
- At CHC
- At PHC
- At Community

### 2. Raise adoption of clinical guidelines

### 3. Amplify use of assets for complex cases, both existing and newer assets

### 4. Increase low dose of training and reinforcement of consistent and correct use of assets at the facilities for effective reduction in mortality (maternal, neonatal, and during childhood)

**Strategies to accelerate uptake, implementation, and coverage of assets by health system building block; based on five countries' assessment**



### Leadership and Governance

Establish a national integrated strategy for MNCH/nutrition and a collaborative team led by the Ministry of Health to champion it at national and subnational levels. Any national integrated strategy needs to be informed by the realities of subnational data and representation from subnational level stakeholders should be included in the team. Integrate assets into service delivery packages/bundles focused on the target population. Leverage existing cross-programmatic linkages and infrastructure such as integrating temperature-sensitive MNH commodities.

5. Boost adoption of assets at community/sub-centre, such as MgSO<sub>4</sub>, NRE, KMC, EIBF/EBF, and FSSN
6. Intensify community awareness, acceptance, and demand through continuous outreach efforts and buy-in of community influencers, gatekeepers at the household, and by strengthening women's conviction in accepting treatments



## Reduce

1. Gradually lower stockout of medicines, specifically those required for treating complex situations at the facilities for prenatal, childbirth, and postnatal cases
2. Lower nonavailability of trained staff with sufficient motivation to follow the guidelines and appropriate use of assets quickly
3. Optimize number of registers to be managed by caregivers by creating hybrid formats and focusing on assets, utilization, demand, and constraints that improve uptake, contributes to reproductive and child health, and reduces mortality. Use digital devices and dashboards where feasible, both at the facilities and on the field (outreach)



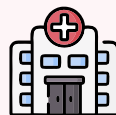
## Health System Financing

Use subnational level data to make the economic case for assets, provide a means of tracking progress, and ensure accountability. Advocate for continuous budget allocations to support provision of quality care at all levels with specific focus on district and facility levels. Community health insurance can remove barriers to accessing health services, while at the same time transform health-seeking behavior (relevant for all assets). This approach is critical due to the undue financial burden that patients are facing because they have to buy commodities that are stocked out.



## Essential Medicines and Devices

Standardize equipment, medicines, and supplies for inclusion into routine supply chain requirements. Ensure continuity of care by establishing equipment maintenance and replacement plans at all levels of care (especially relevant for chlorhexidine (CHX), Amoxicillin DT, NRE, and PSBI). Strengthen procurement forecasting capabilities and planning, and strategically leveraging donor, partner, and internally generated funds for strategic procurements.



## Infrastructure

Develop stronger advocacy to ensure electricity, running water, and adequate space availability at all service delivery points (especially relevant for FSSN, KMC, NRE, and oxytocin).



## Eliminate

1. Gradually eradicate providers' hesitancy leading to non-use of assets for complex cases. Achieve this through continuous education, low-dose training, monitoring, post-episode briefing, counseling, and equipping providers with communication skills to effectively explain to patients and their families for securing their consent
2. Eliminate supply chain bottlenecks and ensure proper storage of assets, wastage and stockouts



## Create

1. Include all asset related parameters in HMIS – supply, storage, inventory, expiry, raising demand, utilization, challenges, and others
2. Target vulnerable groups in a subnational area to ensure equitable coverage – specifically groups or families affected by social, economic, cultural, religious, and location constraints to available MCHN services
3. Create a national level mechanism for equitable and effective provision/utilization of interventions (assets) which have potential for scaling up



## Human Resources

Build staff skills through continuous quality improvement efforts that include mentoring and supportive supervision through engagement with professional organizations and academia. Strengthen preservice and Continuous Quality Improvement (CQI) in service efforts for maintenance of skills (relevant for all assets). Use innovative learning methodologies to refresh capacity and knowledge of service providers in use of assets. Implement low-dose high-frequency trainings, particularly for assets like neonatal resuscitation (NNR) and MgSO<sub>4</sub> used on a subset of the target population. Recruit and retain providers to circumvent staff shortages.



## Health Information System

Strengthen data review at facility level to solidify awareness of HMIS indicators and relevance. Invest in electronic data dashboards or real-time data monitoring systems to facilitate the use of data for decision-making and program improvement (relevant for all assets).



## Service Delivery

Strengthen referral and follow-up protocols and utilize a continuum of care approach to expand care to the community. Consider integrating nutrition interventions into established care guidelines and referral

4. Ensure appropriate support, linkages, and information systems for rolling out strategies at state, district, and facility levels for equitable and effective coverage
5. Conduct periodic assessment to track progress, cross feed learnings, and optimize strategies
6. Converge governments, administration, private sector, and community for uptake of interventions and managing expectations at all levels for effective sharing and collaboration

protocols (especially relevant for FSSN, KMC, misoprostol, and PSBI). Social and behavior change strategies for families and communities to improve awareness and care-seeking, particularly around assets with a strong community component like KMC, IFA, PSBI, and CHX. Integrate assets into service delivery packages/bundles focused on the target population (for example, linking KMC to early initiation of breastfeeding (EIBF) and exclusive breastfeeding (EBF), and FSSN training, support, supplies and funding). Conduct implementation science to inform policies for introduction of early-stage assets like Multiple Micronutrient Supplements (MMS) and optimal scale-up strategies for more established assets such as MgSO<sub>4</sub> and NNR encountering challenges to scale-up.