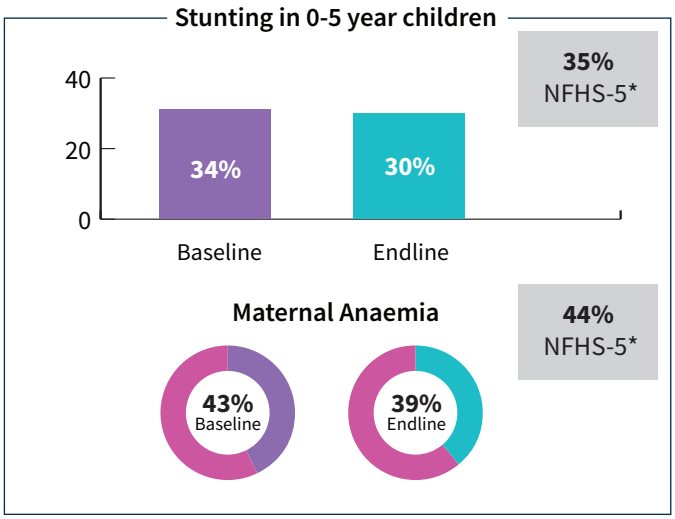
Breaking the Cycle of Stunting: Evidence-Based Strategies and Policy Directions for Sustainable Impact

Childhood stunting, defined as low height-for-age, is a significant public health challenge in India, with 35.5% of children under five years being stunted[1], making India one of the countries with the highest number of stunted children globally[2]. Stunting is indicative of chronic undernutrition with far-reaching implications on a child's physical and cognitive development and is associated with diminished human capital and reduced economic productivity[3]. Despite the implementation of extensive national policies and interventions, the reduction in stunting prevalence slowed significantly, with an annual average rate of reduction (AARR) of 1.33% between NFHS-4 and NFHS-5, compared to 2.20% between NFHS-3 and NFHS-4[4]. In Mumbai, India's largest metropolis, 42% of the population live in slums[5], which are among the poorest and most underserved communities in the country. Consequently, malnutrition rates among children in slums are generally higher than in non-slum areas[6]. Although the factors contributing to childhood stunting are complex, the first 1000 days of a child's life offer a critical window when linear growth is highly responsive to modifiable environmental factors like feeding, morbidity treatment, and psychosocial care. Growth trajectories are set early in life and 70% of stunting reportedly occurs during this period[7].



Source: SNEHA Baseline-Endline Survey (2021-24) *NFHS-5 Maharashtra-Urban

This policy brief presents evidence from the Endline survey of an implementation project carried out in five intervention clusters in Dharavi, Mankhurd and Govandi between 2021 and 2024.

KEY FINDINGS

Stunting Reduction

- Stunting in children under five years reduced from 34% to 30%

Improvement in Maternal Health

- Maternal Anemia: Prevalence among pregnant women decreased from 43% to 39%

Increased Uptake of Health and Nutrition services:

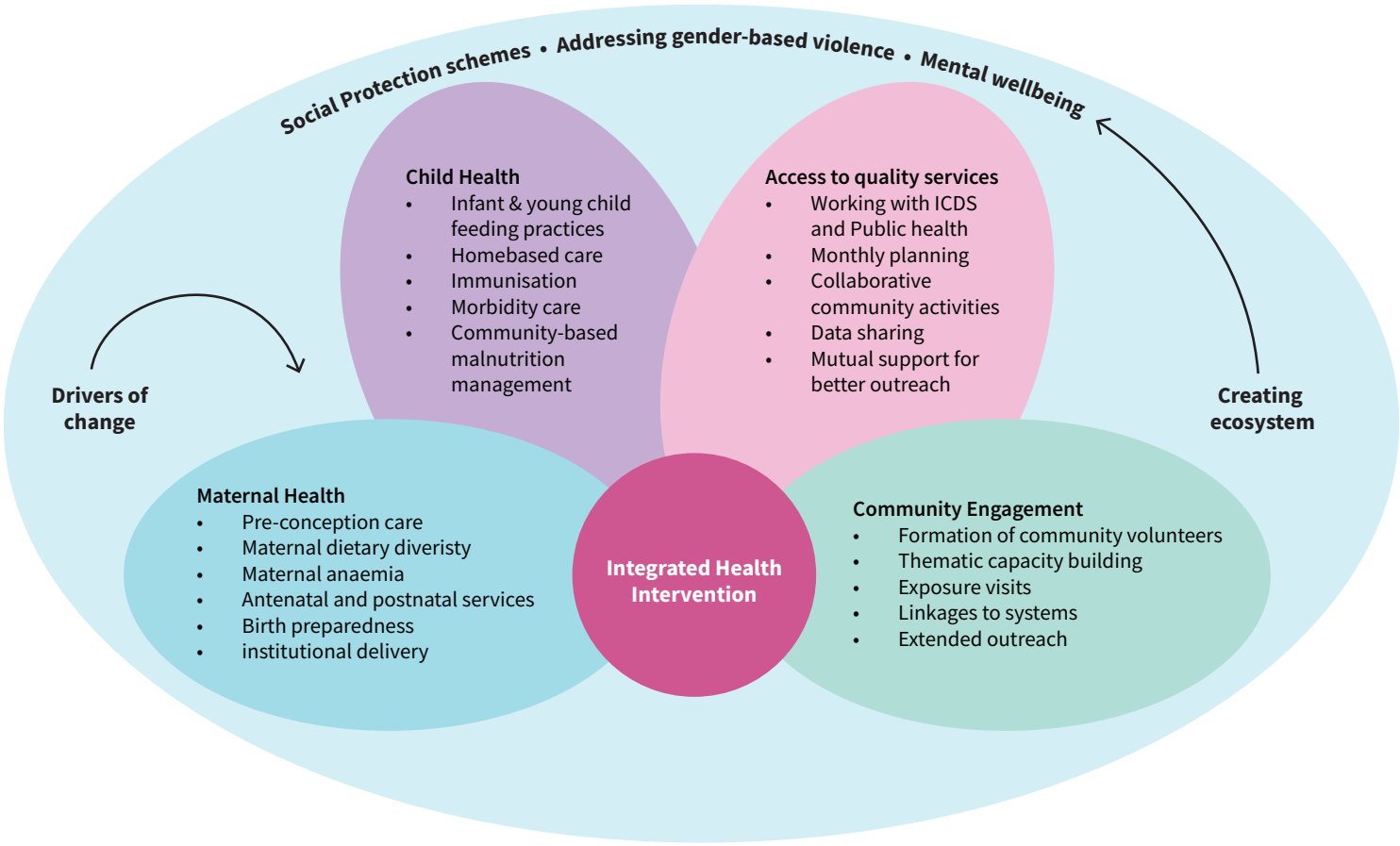
- Early Pregnancy Registration (First Trimester) increased from 48% to 58%
- Proportion of pregnant women receiving four or more antenatal check-ups increased from 84% to 94%
- Iron and Folic Acid (IFA) Supplementation coverage among pregnant women improved from 93% to 98%
- Anthropometry Coverage by ICDS (Children Under Five Years) rose from 79% to 87%

Enhanced Infant and Child Feeding Practices

- Minimum Dietary Diversity (Children Aged 6-23 Months): Increased from 24% to 35%
- Minimum Acceptable Diet (Same Age Group): Improved from 16% to 24%
- Age-Appropriate Initiation of Complementary Feeding: Improved from 60% to 77%

IMPLEMENTING PARTNERS

SNEHA's INTEGRATED HEALTH INTERVENTION MODEL IN VULNERABLE URBAN COMMUNITIES OF DHARAVI, MANKHURD AND GOVANDI



PROJECT OVERVIEW: SNEHA'S INTEGRATED HEALTH INTERVENTION

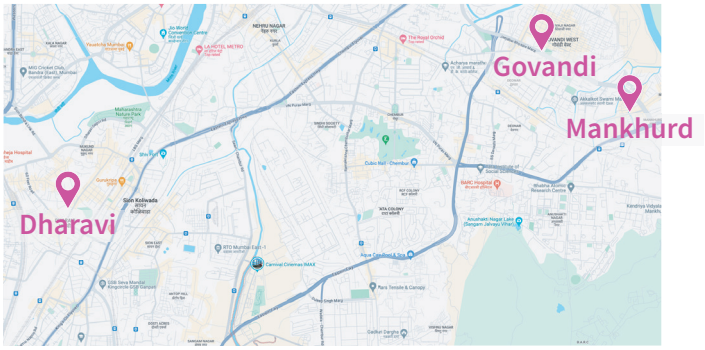
The project was implemented in 23,000 vulnerable households focusing on enhancing maternal and child health seeking behaviors of the community, strengthening access of quality nutrition and health services and community participation for catalyzing this. The project employed a comprehensive, multipronged strategy of working with individuals, groups and systems to deliver these bundled interventions.

Maternal health key interventions included early registration of pregnancy, uptake of antenatal services, referral of high-risk cases, maternal nutrition counseling, anemia prevention & treatment, institutional delivery and uptake of modern contraceptives. Child health and nutrition addressed homebased child care, growth monitoring, child feeding practices complemented with immunization and morbidity care. Another critical component was the development of a trained cadre of ~500 community volunteers, ensuring outreach to the last-mile beneficiaries. In order to create nurture conducive ecosystem for health, the intervention addressed broader health determinants, including social protection, gender-based violence, and mental well-being.

Project envisaged community health through dual approach of:

Demand side: Creating informed users who demand quality health services

Supply Side: Partnering with public sector health providers to ensure uninterrupted, high-quality health and nutrition services through this initiative, significantly improving related health outcomes like child malnutrition, maternal anemia, early pregnancy registration, and the uptake of health and nutrition services.



RECOMMENDATIONS

Priority Areas

Comprehensive 1000 days intervention

Implementing nutrition-specific and nutrition-sensitive interventions within the critical 1000-day window—from conception to a child's second birthday—is essential to break the intergenerational cycle of stunting. Key nutrition-specific actions include nutritional counseling, promoting maternal dietary diversity, preventing and managing undernutrition and anaemia, improving infant and young child feeding practices, and providing supplementary nutrition with essential macro and micronutrients. Furthermore, nutrition-sensitive strategies must encompass improved WaSH (Water, Sanitation, and Hygiene) practices, comprehensive antenatal, perinatal, and postnatal care, planned parenthood, prevention of violence, fostering mental well-being for both child and caregiver, immunization against vaccine-preventable diseases, and effective management of illnesses.

Multisectoral collaboration and political commitment for enhanced access to quality health and nutrition services

Stakeholders across various cadres—from grassroots field workers to policymakers—must converge to prioritize stunting as a critical public health challenge. This will necessitate sustained resource allocation and establishment of platforms that foster coordinated action and effective implementation of maternal and child health policies and programs. Key sectors for collaboration include health, nutrition, education, sanitation and community development. Another critical area is expanding access to social protection schemes, such as cash transfers or food assistance programs, to support the most vulnerable families in urban slums. These programs can help reduce food insecurity and improve overall household nutrition.

Strengthen community participation and support systems

Engaging communities and harnessing their support is the sustainable approach for expanding outreach to underserved population for stunting reduction and ensuring that culturally appropriate and context-specific solutions are implemented. Community participation can be derived from individual volunteers, groups like Mahila Arogya Samitis or influential community leaders. This involvement can be further amplified by fostering local changemakers and forming support groups for caregivers and service providers and implementing community-based monitoring (CBM) systems.

Ensure strong monitoring, evaluation and implementation research

Use of technology and continuous capacity building

Digital tools deployed for real-time data collection and analysis to monitor growth metrics should be user-friendly and accessible to frontline health workers (FLWs). Mechanisms for regular data review and feedback at community, district, and state levels need to be implemented to ensure that program implementation is adaptive and responsive to emerging needs. FLWs and community members should be regularly trained on best practices in growth monitoring and child nutrition.

Implementation research and knowledge sharing

Research that addresses the unique challenges of urban slums in Mumbai, such as overcrowding, sanitation issues, and food insecurity, which directly impact child nutrition and growth, needs to be encouraged. Lessons learned from CBM and successful models should be documented and shared with stakeholders to inform policy and program design.

SNEHA has empowered us with so much information which I currently share with other community women. Not only now, in the future as well even if SNEHA goes, we will be staying here and solve community issues by guiding them with this information.

Manju Sharma, Community Volunteer

SNEHA and community volunteers help us to distribute take home ration, conduct anthropometry and referring children for supplementary nutrition. This coordinated efforts smooth delivery of Anganwadi services.

ICDS Sewika, Mankhurd Project

Since these are slum communities, awareness about health services was very low, however in last 3 years SNEHA team has created so much awareness that community come to avail health services like ANC registration, immunization, IFA tablets, child illness.

AMO, Dharavi Health Post

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SNEHA is a secular Mumbai-based Non-profit. Over the last 25 years, it has partnered with urban informal communities and the public health, nutrition and legal systems to build evidence-based models on health equity. SNEHA works across three large public health areas:

- Maternal and Child Health & Nutrition
- Health, Agency and Well-being of Adolescents
- Prevention of Violence against Women and Children

From Reluctance to Resilience: A Journey of Overcoming Malnutrition in Dharavi

Pooja, was a 5-year-old girl from Dharavi, living in a joint family of 16 members, including a 7-year-old brother and a 1-year-old sister. In late 2022, Pooja was identified as severely malnourished in all 3 malnutrition categories during monthly anthropometry. However, due to the challenges of living in a large family, Pooja's mother was initially unable to devote adequate attention to her children's nutritional needs and was reluctant to acknowledge Pooja's condition.

After Pooja was identified as malnourished, the SNEHA community organizer (CO), along with the ICDS anganwadi sevika visited Pooja's home to discuss her condition. Despite their efforts, Pooja's mother was initially resistant to the idea that her child was malnourished and hesitant to seek further care at the Nutrition Rehabilitation Centre (NRRTC). During their visit, the team also observed poor hygiene practices in the household, which they explained could contribute to frequent illnesses and exacerbate malnutrition not only for Pooja, but for her siblings as well.

With repeated counseling sessions and home visits by SNEHA's program officer, Pooja's mother finally agreed to take her to the NRRTC in February 2023. There, Pooja was prescribed Medical Nutrition Therapy (MNT) and began a three-month treatment regimen. SNEHA CO ensured regular follow up with Pooja and ensured community-based malnutrition management protocols were followed. With consistent care and improved dietary practices, Pooja's health gradually improved, and by April 2023, she successfully graduated from severe to a normal nutritional status.

The CO continued to provide nutritional counseling, emphasizing the importance of proper hygiene and sanitation. They engaged with other family members as well, addressing misconceptions about nutrition and the importance of early intervention for preventing relapse. Pooja's parents expressed their gratitude to the CO and the team for their persistent support and guidance, which played a crucial role in Pooja's recovery.