Suaahara – "Good Nutrition" Through a Comprehensive 1,000 Day C4D in ECD Strategy in Nepal

1. Background

Overview: Infant and Childhood Malnutrition in Nepal

Sita and Rajan's parenting and feeding practices have changed dramatically since their first daughter Sapana, now 9 years old, was born. Like many other parents from their community in rural Nepal, they did not provide Sapana the proper nutrition during her infancy: Sapana was exclusively breastfed for just four months, and was then fed porridge without any green vegetables. Sita also did not give Sapana "first milk" (colostrum) due to the belief that it would cause intestinal worms. Today, Sapana is a thin and quiet child who falls ill regularly; her health stands in marked contrast to that of Bipana, Sita and Rajan's second daughter, who was fed according to recommended guidelines, and at 17 months old is physically robust and quick to grasp new skills. The differences between her daughters have spurred Sita to take an active role in her community, where she counsels other mothers on optimal feeding practices.[1]

Sapana's story is all-too common in Nepal, a landlocked nation nestled in the Himalayas, where childhood malnutrition remains a persistent public health problem. According to the 2011 Nepal Demographic and Health Survey (NDHS), 41% of children under five years of age are stunted,[2] 11% are wasted,[3] and 29% are underweight.[4][5] Poor nutrition outcomes are highest among historically disadvantaged groups (DAGs), such Dalits and Hill Janajatis.[6]

Infant and Young Child Feeding Practices and Maternal Nutrition

Suboptimal infant and young child feeding practices (IYCFP) and inadequate nutrition among pregnant and lactating mothers are among the manifold causes of these poor nutrition outcomes.

Low prevalence of optimal breastfeeding practices:

- Only 35% of mothers initiate breastfeeding within one hour of birth;
- Less than half of mothers exclusively breastfeed for the child's first six months of life.

Inadequate complementary feeding practices:

[1] http://ccp.jhu.edu/wp-content/uploads/Suaahara_MostSigChangeStories.pdf
[2] Low height for age
[3] Low weight for height
[4] Low weight for age
[5] DHS and https://www.unicef.org/infobycountry/stats_popup2.html
[6] Cunningham K, Singh A, Pandey Rana P, Brye L, Gautam B, Lapping K, Alayon S, Underwood C, Klemm RDW. Suaahara in Nepal: An at-scale, multi-sectoral nutrition program influences knowledge and practices while enhancing equity. Matern Child Nutr. 2017;e12415. doi: 10.1111/mcn.12415

- One-third of families initiate complementary feeding too soon,[7] with many families introducing food during the rice feeding ceremony, which typically takes place when a baby is younger than 6 months;
- Many caregivers don't feed their children complementary meals frequently enough;
- The food provided is often not sufficiently nutritious or diverse.[8]

Poor maternal nutrition:

- 40.1% of pregnant women have anemia;[9]
- Many women do not eat a diet that is sufficiently diverse or nutritious: less than 20% of mothers eat meat and less than 5% eat eggs;[10]
- The amount and nutritional diversity of food consumed does not increase during pregnancy;
- Meat and eggs are added to mothers' diets after delivery, but only for a brief period of time.[11]

Sociocultural Determinants of Infant and Young Child Feeding Practices and Maternal Nutrition

Underlying these IYCFP and maternal nutrition trends is not only a lack of access to adequate foods, but also a lack of knowledge about nutrition, along with common misconceptions, beliefs, and norms. These include, but are not limited to the following list.

Sociocultural barriers to optimal breastfeeding:

- The perception among mothers that babies get thirsty due to the hot weather and need to be given water;
- The perception among mothers that colostrum can make babies sick;[12]
- Families' belief that infants should be given food at three to four months of age;
- Mothers' heavy workloads at home and in the fields, coupled with minimal or no support from their husbands.

Sociocultural barriers to optimal complementary feeding practices:

- A local taxonomy of foods according to which foods categorized as "hot" or "cold" are harmful for mothers and babies; many nutritious foods, such as green leafy vegetables, are excluded from mothers' and babies' diets as a result;
- The perception that watery food is easier for children to digest, and nutrient-rich animal source foods such as eggs, meat, and fish, are too difficult;
- Quantity of food is often emphasized over quality, with many caretakers describing filling their children's belly as the first priority;

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[7] tech brief
[8] [TECH BRIEF, ADD DATE of study]

[9] https://www.usaid.gov/opengov/developer/datasets/Nepal%202013%20FTF%20ZOI%20PBS%20Country%20Report%20-%2020140505.pdf
[10] tech brief
[11] tech brief
[12] tech brief

- Increasing preference for store-bought, packaged food over locally-produced food, because packaged food is advertised as having vitamins, and is thus perceived as nutritious and as a way to express love for one's children[13] [14]

Sociocultural barriers to optimal maternal nutrition:

- Gender inequity and power imbalances within households:[15]
    - Mothers—including pregnant women—typically eat last and thus often end up getting less food than other family members.
    - Women of reproductive age often lack power over their household's food purchases and consumption, and thus may not have control over their own diet: fathers typically decide how money is spent, and mothers-in-law hold significant decision-making power over what food family members—including pregnant and postpartum women—should eat.
    - Family members with more decision-making authority do not prioritize pregnant women's diets, and don't make arrangements to ensure that pregnant women receive animal source food.
- The belief that "hot" and "cold" foods, including green leafy vegetables can cause health problems in mothers and babies, and therefore must be avoided during pregnancy and after delivery.[16]

Suaahara: A Program to Improve Nutrition During the First 1,000 Days

To combat child malnutrition, the Government of Nepal, in collaboration with USAID and other partners, launched Suaahara, a five-year (2011 – 2016) multisector nutrition program that focused on improving the nutrition of women and children during the critical 1,000 day period from conception through a child's second birthday. Suaahara, which means "good nutrition" in Nepali, integrated nutrition activities into a variety of the domains that influence child nutrition, including nutrition, water, sanitation and hygiene (WASH), agriculture, family planning, reproductive health, and child health. The program included a cross-cutting multi-level social and behavior change (SBCC) strategy, of which a flagship component was Bhanchhin Aama or "Mother Knows Best," a campaign aimed at improving IYCFP by addressing the underlying sociocultural determinants. Gender and social inclusion, particularly of families from DAGs, was a priority across all areas of the program.

Sita and Rajan are among the 1.4 million adults reached by Suaahara's integrated activities; it was listening to the Bhanchhin Aama radio show that inspired them to change their parenting practices. Unlike Sapana, who was born prior to the program, Bipana was breastfed optimally and given timely and adequate complimentary food. The benefits to the child's health have been apparent, and many other parents in the village have followed Sita and Rajan's lead and adopted new IYCFP. Sita notes the village-wide transformation that the program and her work as a community facilitator have helped spark: "Vegetables are planted by everyone [now]. We used to sell eggs earlier, but these days we give them to our children."

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[13] [tech brief and finalprint ready)

[14] tech brief

[15] tech brief and formative

[16] tech brief

2. Goals and Objectives

The goal of the Suaahara program was to improve the nutritional status of Nepali women and children under two years of age.[17] The program aimed to achieve the following intermediate results:

- Improved health and nutrition behaviors at the household and community levels
- Increased use of quality health services by women and children
- Increased production and consumption of diverse and nutritious foods by women and their families
- Strengthened coordination on nutrition between government and other stakeholders[18]

Suaahara's specific SBCC objectives were to:

- Empower families with the knowledge, favorable attitudes, support, and self-efficacy to adopt healthy behaviors in the following domains:
    - Nutrition:
        - Practice breastfeeding and complementary feeding according to recommended guidelines;
    - Healthy timing and spacing of pregnancies:
        - Start using a family planning method within 45 days after a baby is born;
    - Support from fathers and other household members in providing special care for pregnant and lactating women:
        - Provide an extra meal for pregnant women and two extra meals for breastfeeding women;
        - Share pregnant and nursing women's workloads;
    - Special care for children under the age of two:
        - Adopt optimal hygiene practices, including washing hands with soap and water before feeding a baby;
        - Adopt correct practices for caring for a sick child; for example, give ORS and zinc to a child with diarrhea.
- Increase demand for health and nutrition services.
- Help families practice small doable actions that foster sustained behavior change.
- Advocate for national, district, and community level attention and strengthened coordination to improve nutrition during the 1,000 day period.[19]

[17] https://www.k4health.org/sites/default/files/Suaahara_Program_Description.pdf
[18] sbcc strategy final
[19] https://www.spring-nutrition.org/sites/default/files/events/sbcc4nutrition-suaahara_nutrition_project.pdf and https://www.thehealthcompass.org/sites/default/files/project_examples/BHANCHIN%20AAMA%20Radio%20brochure_Eng%26Nep.pdf

3. C4D Strategy

a. Participant Groups / Target Audiences

Suaahara was implemented at scale in 41 of Nepal's 75 districts, reaching over 2.4 million people.[20] "Thousand day families" – those with a pregnant or breastfeeding mother and/or a child under two years of age—were the primary audience of the SBCC component. The program prioritized reaching rural 1,000 day families from DAGs, and coordinated with local authorities to map the location of all DAGs in each district.[21] An explicit effort was also made to engage fathers in taking a more active role in housework in order to support mothers' efforts to breastfeed and foster more equitable gender norms. Radio was selected as the mass media platform for the Bhachhin Aama campaign, as it is the most widely-accessed mass media channel in the program districts, and is a trusted source of information.[22] Bhachhin Aama was broadcast in three languages, and was thus accessible to diverse populations.

Given the multifaceted causality of malnutrition, Suaahara engaged participant groups at all levels of the Social Ecological Model (SEM) and across a variety of sectors, including health, agriculture, education, local development, and water and sanitation, among others. The main participant groups are outlined in the table below:

SEM Level	Overview of Expected Outcomes
Policy/Enabling Environment National Government of Nepal. Among the Ministries included were: ● Ministry of Health and Population ● Ministry of Agriculture ● Ministry of Local Development ● Department of Water Supply and Sanitation Local levels of government, including: ● District Development Committees (DDCs) ● Village Development Committees (VDCs)	● Improved national policies, strategies, and guidelines and increased investment in nutrition ● Increased commitment to and prioritization of nutrition among non-health sectors[23],[24]
Organizational ● Health facilities, health workers	● Improved provider knowledge and communication skills related to nutrition, hygiene, family planning,

[20] https://nepal.savethechildren.net/news/suaahara-reached-over-24-million-people
[21] (DAG)
[22] DD III
[23] http://www.securenutrition.org/resources/integrated-nutrition-project-suaahara-building-strong-and-smart-families
[24] https://siteresources.worldbank.org/SOUTHASIAEXT/Resources/223546-1328913542665/2.7.DilaRamPanthi-MSNPNepal-NPC.pdf

• Media outlets and journalists	and more • Increased proportion of providers who discuss and model healthy practices with families during routine appointments[25] • Increased knowledge about nutrition among journalists, and enhancement of their capacity to report high quality stories on nutrition[26] • Increased interest among journalists in reporting stories about nutrition
Community • Female Community Health Volunteers (FCHVs)/social mobilizers • Traditional healers • Mothers groups • Citizen Awareness Center, and other community-based groups.	• Improvement in social mobilizers'[27] knowledge and communication skills related to ICYFP • Increased proportion of social mobilizers who counsel caretakers on the adoption of optimal IYCFPs • Increased proportion social mobilizers who encourage fathers and mothers-in-law of to help mothers with their workload • Communities are mobilized around 1,000 day nutrition
Household and Individual • 1,000-days mothers (pregnant and breastfeeding women, and mothers of children under two years old) • Caretakers of a child - anyone who is taking care of a child under two years old • Husbands • Mothers-in-law • Other family members	• Increased proportion of 1,000 day households that have adopted optimal IYCFP • Increased proportion of 1,000 day households that have adopted proper WASH and child health practices • Increased proportion of 1,000 households that seek health and nutrition services • Increased proportion of fathers and mothers-in-law who share mothers' workloads

b. Delivery platforms and communication content

Suaahara's SBCC strategy included a mix of mass media, service delivery, and community-based platforms. The strategy was carefully designed in response to formative research findings. Suaahara's baseline study found that mothers-in law have great potential as nutrition change agents due to their deciding power over what food is purchased and eaten by family members; their role as a primary source of information about child-feeding and maternal diet; and their willingness to learn new

[25] [Sbcc Strat)

[26] https://ccp.jhu.edu/projects/suaahara-nepal/

[27] Here, 'social mobilizer' refers to all community influencers listed in the 'Community' level of the SEM, including but not limited to FCHVs, women's group members, traditional healers, Citizen Awareness Center members, and members of other community-based groups.

information and change their practices if it is for the benefit for their grandchildren.[28] Thus, the program created a mother-in-law character who appeared on the radio show and all visual materials, and was central to the brand of the Bhanchhin Aama campaign. Baseline research found that female community health volunteers (FCHVs) are another long-trusted source of information for caregivers. Thus FCHVs conducted home visits to reinforce the messages being transmitted over radio and other platforms.[29]

Overall the SBCC activities for Suaahara included the following:

Media:

- **The Bhachhin Aama radio soap opera and a call in show**: The programs covered a broad range of topics related to maternal and child health and nutrition, including infant and young child feeding (IYCF), hygiene and sanitation, agriculture, and family planning.
- **Radio discussion groups:** Groups were held among marginalized populations and facilitated by trained social mobilizers.
- **Printed and visual materials**: Comic books featuring the mother in law character (used by social mobilizers to facilitate radio discussion groups); billboards

Community-based

- **Peer education[30] and mothers group meetings**
- **Celebrating role models:** Certificates and public recognition given to "ideal" families
- **Food production:** Introduction of homestead gardens, poultry production, village model farms
- **Performing arts:** Participatory community theatre; folk song competition where community members created songs about nutrition during the 1,000 days
- **Special events:** Local fairs and festivals; World Egg Day celebrations; Incorporation of nutrition messages into key life events such as naming and rice-feeding ceremonies;
- **Trainings:** Cooking classes; training model farmers to serve as a resource on home gardens for other community members; training households on planting homestead gardens with diverse vegetables, raising poultry for animal-source protein, and building latrines[31]

Service delivery-based

- **Capacity-building:** Trainings for health providers on how to counsel patients on IYCFP, healthy timing and spacing of pregnancies, and management of childhood illnesses
- **Home visits:** FCHVs visited 1,000 day households to provide counseling on and demonstrations of nutrition and hygiene behaviors[32]

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[28] formative research
[29] tech brief
[30] sbcc strat

[31] **https://2012-2017.usaid.gov/nepal/fact-sheets/suaahara-project-good-nutrition**

[32] (SBCC)

c. Enabling Environment / Implementation Strategies

To create an enabling environment for sustained behavior change, Suaahara worked at the macro level to facilitate multisectoral collaboration; advocate for supportive policies; strengthen health and agricultural systems; and improve the quality of health services. The program brought together leaders from various sectors, including health, agriculture, and water, and helped them establish mechanisms to improve planning and coordination of nutrition and food security initiatives at national, district, and village levels.[33] Suaahara also advocated for policies to help Nepal's government meet the nutrition goals it had outlined in its National Nutrition Action Plan.

Capacity-building was central to Suaahara's work. The program trained district and local leaders on nutrition governance and built the capacity of local NGOs to work with district government and strengthen community groups. To improve the quality of health services and embed nutrition into routine health care, the program provided trainings and support for health facilities and health workers, as well as for female community health volunteer (FCHVs), a long-established network of volunteers who incorporated key IYCFP messages into their routine household visits. Trainings were also conducted with agriculture, livestock, and WASH frontline workers to improve food security and WASH conditions.

Suaahara worked in close partnership with the Government of Nepal, including with the Ministry of Health and Population (MoHP), Ministry of Agriculture (MoA), Ministry of Local Development (MoLD), and Department of Water Supply and Sanitation; there was also close coordination with district-level government. While Suaahara was funded by USAID, there were multiple Implementing partners. These included Save the Children (prime), Helen Keller International, Jhpiego, Johns Hopkins Center for Communication Programs (JHU·CCP), Nepali Technical Assistance Group (NTAG), Nutrition Promotion and Consultancy Service (NPCS) and Nepal Water for Health (NEWAH).

4. Monitoring, Evaluation, and Results

Impact

Suaahara made substantial strides in changing caregivers' knowledge and practices around breastfeeding and complementary feeding. At the start of the program in 2013, just 47% of children from 6 – 23 months old were fed an adequate diet; this figure increased to 59% by 2015. During the same time frame, the proportion of newborns who are breastfeed within an hour of birth increased from 59% to 73%.[34] The program also fostered greater household gender equity and closed persistent gaps between DAG and non-DAG groups.

Improved knowledge and practices among caregivers and families

Mothers who listened to the Bhanchhin Aama program were significantly more likely than non-listeners to:

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[33] https://www.mcsprogram.org/wp-content/uploads/2015/08/HKI-Nepal-OR-Brief.pdf

[34] https://www.thehealthcompass.org/sites/default/files/project_examples/I_Suaahara%20Press%20Release%20English I_0.pdf

- Know that they should (1) give a sick child an extra meal or more breast milk, (2) give their children ORS during bouts of diarrhea, (3) wash their hands before feeding children, and (4) feed children eggs and meat;[35]
- Exclusively breastfeed for the first six months of their child's life
- Feed their children diverse diets, including giving their children dark leafy greens
- Receive support from their husband or other family members in carrying out work typically relegated to women[36]

Audience Response

Each episode of Bhanchhin Aama generated an average of 1,600 phone calls to the show, with over 200,000 calls made throughout the campaign.[37] Four out of five people who listened to the program reported taking a recommended action related to complimentary feeding, and more than half discussed the topics raised in the show with friends and family.[38] Listeners reported enjoying the show and its characters and feeling motivated to take the actions promoted.

> "I regularly listen to Bhanchhin Aama radio program and really like Mana Aama (ideal mother, hero of the radio drama).... Mana Aama taught me to share things to my husband, so that I receive the support I needed at home... She motivated me to maintain my kitchen garden and reminded me of the variety of vegetables I required to grow to eat and feed my baby for a healthier life." *Sobita Karki, 24, thousand-day mother, Baglung.*

Greater equity between DAGs and non-DAGs

The program also closed gaps between DAG and non-DAG children in key nutrition and hygiene areas. In districts where Suaahara was implemented, DAG and non-DAG mothers are now equally likely to:

- Know how to prevent malnutrition during the first 1,000 days;
- Give their babies colostrum within the first hour of life;
- Have contact with frontline health workers.

In districts where Suaahara was not implemented, there continues to be a gap between DAG and non-DAG families.

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35 https://www.thehealthcompass.org/sites/default/files/project_examples/Suaahara%20Technical%20Posters%20for%20Int%27l%20Conference.pdf

36 https://ccp.jhu.edu/projects/suaahara-nepal

37 https://ccp.jhu.edu/2016/06/28/suaahara-improves-nutrition/

38 [BHACCHIN AAMA FINAL)

5. Lessons learned

Challenges

- Limited nutrition capacity of government functionaries, particularly those outside the health sector and at regional and local levels.[39] [40]
- Coordination across all levels and sectors.[41] [42]

Key Take Aways

- Complex, multilevel programs that engage multiple sectors in nutrition are highly effective and can be done at scale.[43]
- A strong emphasis on building the capacity of existing institutions and community platforms is critical and can address challenges related to limited capacity
- Multiple delivery platforms and entry points are key to implementing a program at scale with sufficient reach.
- Integrating nutrition into local governance structures also proved critical.[44]
- Suaahara's impact on equity shows that making gender equity and social inclusion a cross-cutting area works.
- Developing SBCC messaging for all family members, rather than just mothers, made proper feeding practices more feasible for mothers and helped chip away at longstanding inequitable gender norms.
- Carefully mapping marginalized groups and implementing tailored interventions for them is an effective approach for reducing health and nutrition inequities and is feasible to do at scale.[45]

Looking forward

The learnings from Suaahara are now paving the way for further gains in the fight against infant and childhood malnutrition in Nepal: USAID is now funding Suaahara II from 2016 to 2021. Hopefully other

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[39] http://docs.scalingupnutrition.org/wp-content/uploads/2015/12/Nepal-Presentation-January-2016-Teleconference.pdf

[40] Cunningham K, Singh A, Pandey Rana P, Brye L, Gautam B, Lapping K, Alayon S, Underwood C, Klemm RDW. Suaahara in Nepal: An at-scale, multi-sectoral nutrition program influences knowledge and practices while enhancing equity. Matern Child Nutr. 2017;e12415. doi: 10.1111/mcn.12415

[41] http://docs.scalingupnutrition.org/wp-content/uploads/2015/12/Nepal-Presentation-January-2016-Teleconference.pdf

[42] Cunningham K, Singh A, Pandey Rana P, Brye L, Gautam B, Lapping K, Alayon S, Underwood C, Klemm RDW. Suaahara in Nepal: An at-scale, multi-sectoral nutrition program influences knowledge and practices while enhancing equity. Matern Child Nutr. 2017;e12415. doi: 10.1111/mcn.12415

[43] . (CUNN)

[44] (ICN)

[45] (ICN)

countries will follow suit, and large-scale integrated nutrition programs with an equity lens will pave the way for infants worldwide to grow up healthy and strong.