



SUSTAINABLE AGRICULTURE AND PRODUCTION LINKED TO IMPROVED NUTRITION STATUS, RESILIENCE, AND GENDER EQUITY

BARRIER ANALYSES FOR EXCLUSIVE BREASTFEEDING AND COMPLEMENTARY FEEDING

In the Chittagong Hill Tracts (CHT) region of Bangladesh, an ethnically diverse and remote area with limited access to essential services and resources, the USAID-funded Resilience Food Security Activity, Sustainable Agriculture and Production Linked to Improved Nutrition Status and Gender Equity (SAPLING), began in 2015. SAPLING is implemented in partnership with the Ministry of Chittagong Hill Tracts Affairs of the Government of the People’s Republic of Bangladesh (GOB).

months (180 days) of life to achieve optimal growth, development, and health.^{2 3} Optimal complementary feeding (CF) begins from six months up to 24 months of age.⁴ Proper complementary feeding refers to the amount, frequency, and variety of complementary foods, including animal-source foods, fruits and vegetables, legumes, and oils and fats.

The SAPLING baseline found 27.6% of all children under five years of age were underweight and the prevalence of wasting and stunting rates were 10.4 and 31.5%, respectively. Almost 44% (43.7%) of mothers reported exclusively breastfeeding (EBF) their 0-6 months-old children, which was lower than the national rate of 55.3%.¹

Findings from SAPLING qualitative research suggest EBF at baseline in the CHT may have been over-reported. Caregivers in the research recited correct guidelines on EBF, but also explained that rice was an important component of a child’s diet, introduced as early as one month, indicating they may not understand the definition of EBF or they do not consider rice as corruptive to an infant diet. The Bangladesh National Strategy for Infant and Young Child Feeding (IYCF), in accordance with World Health Organization guidance, states that infants should be exclusively breastfed for the first six



In SAPLING, women receive information and support through individual counseling, as well as through group sessions. Seen here, a lactating mother learns how to breastfeed her infant. Photo credit: Nusrat Jahan

The baseline also found that only 34.1% of children aged 6-23 months met a minimum acceptable diet, with inadequate consumption of animal-source foods (66.3% consuming adequate ASF), and 53.8% of children in Bandarban started complementary food early from 4-5 months of age. Qualitative research participants described varying feeding practices, including feeding rice to babies in various forms by four months and not feeding vegetables or animal-source foods to children under 12 months.

To explore the multi-dimensional factors and determinants of EBF and CF, two barrier analyses were conducted using the Designing for Behavior

Change Framework⁵ For exclusive breastfeeding, the sample included 90 mothers of children 5-10 months, with 45 who reported practicing EBF (doers) and 45 who did not (non-doers). The results found that significant determinants of practicing exclusive breastfeeding were: self-efficacy, positive consequences, negative consequences, social norms, access, reminders, risk, severity, culture, and divine will. Mothers who did not exclusively breastfeed were more likely to say practicing EBF was difficult because of a heavy workload, lack of adequate support, and inadequate supply of breast milk.

BARRIERS	ENABLERS
SELF-EFFICACY: Lack of family help	SELF-EFFICACY: Family support
SELF-EFFICACY: Heavy workload	SELF-EFFICACY: Lighter workload
SELF-EFFICACY: Perception of insufficient supply of breast milk	SELF-EFFICACY: Perception of a sufficient supply of breast milk
NEGATIVE CONSEQUENCES: Perception that EBF can cause children to become sick if the mother is hot or tired from working	POSITIVE CONSEQUENCES: Perception that EBF helps child physical, emotional, and cognitive development and health
SOCIAL NORMS: Mother-in-law, husband and other family members disapprove of EBF	SOCIAL NORMS: Mother-in-law and other family members approve of EBF
CUES TO ACTION: Remembering to practice EBF	SOCIAL NORMS: Doctors approve of EBF
PERCEIVED DIVINE WILL: Perception that children's health is governed by divine will	SUSCEPTIBILITY OF RISK AND PERCEIVED SEVERITY: Perception that children will not get sick or malnourished in the coming year and that, if they do, it will not be serious.
	PERCEIVED DIVINE WILL: Perception that children's health is not governed by divine will



A caregiver participates in a growth monitoring session in Panishakhal Para, Gazalia, Lama. These sessions have been critical for identifying malnourishment in children.

Photo credit: Monika Roy

For complementary feeding, SAPLING focused on animal-source foods based on the baseline data and qualitative research findings that consumption is low. The sample included 90 mothers of children aged 8-24 months, 45 who reported feeding their children animal source foods (ASF) every day (doers) and 45 who did not (non-doers). The results found significant determinants of feeding animal-source foods each day were perceived positive consequences, perceived negative consequences, perceived self-efficacy, access, perceived social norms, cues for action, susceptibility of risk, perceived severity, and action efficacy. To increase

EBF and appropriate complementary feeding, SAPLING Community Health Service Workers (CHSW) promoted optimal maternal and child health behaviors with program participants using the Essential Nutrition Actions and Essential Hygiene Actions framework (ENA-EHA). CHSWs were recruited from their communities, providing outreach and counseling in local languages to disseminate knowledge and hold culturally-appropriate discussions to support mothers and caregivers to understand information and help them to adopt optimal feeding practices.

BARRIERS	ENABLERS
SELF-EFFICACY: Not having money to purchase ASF	SELF-EFFICACY: Rearing livestock at home
ACCESS: Not having a market or other vendor nearby	SELF-EFFICACY: ASF available in the market
CUES TO ACTION: Remembering to include ASF in the meal	SELF-EFFICACY: Children like eating ASF
NEGATIVE CONSEQUENCES AND ACTION EFFICACY: Perception that feeding ASF can cause children to become sick or malnourished	POSITIVE CONSEQUENCES: Perception that ASF helps child physical and emotional development
SELF-EFFICACY: For women who do feed their child ASF, it is easy because children like eating ASF, but when the child becomes sick they do not want to eat ASF, which contradicts nutritional care of sick children.	FAMILY SUPPORT: WIDER family network (beyond immediate family members) supports feeding ASF
	PERCEIVED RISK: Perception that children will not get sick or malnourished in the coming year and that, if they do, it will not be serious.

Mothers and caregivers participated in Maternal and Child Health and Nutrition peer groups, where they learned and discussed optimal child feeding practices, giving them a safe space to talk about traditional beliefs and fears related to types of foods and potential harm to infants and young children. Traditional birth attendants, traditional doctors, and others were trained in ENA-EHA⁶ and lactation management to better support optimal breastfeeding and complementary feeding practices. CHSWs also conducted household visits with pregnant women and lactating women to discuss challenges to appropriate feeding with women and other household members, along with promotion of workload sharing and support for mothers

and caregivers to enable them to have time to breastfeed and educated not just caregivers, but others in the community to increase awareness and support for appropriate child feeding practices. Households also engaged in project-promoted poultry and other livestock rearing, home gardens, community-based Family Nutrition Centers for food production, and income generating activities to help address financial and other barriers to accessing animal-source foods. As a result of SAPLING's efforts, the proportion of children 6-23 months consuming animal source foods increased from 66.3% at baseline in 2016 to 96% in fiscal year 2020. Exclusive breastfeeding increased from 44% at baseline in 2016 to 86% in fiscal year 2020.



Du Ma Aung Marma, a former SAPLING Community Health service worker, conducts a PLW group session, enabling an opportunity to foster community and create a safe space to discuss infant and childcare.

Photo credit: Kashyaong Marma

References

- 1 Final Report: Baseline Study of Food for Peace Development Food Assistance Projects in Bangladesh, 2017
- 2 National Strategy for Infant and Young Child Feeding in Bangladesh, 2007:19-20
- 3 Exclusive breastfeeding for Optimal Growth, Development and Health of Infants (World Health Organization), retrieved February 2017 from e-Library of Evidence for Nutrition Actions (eLENA)
- 4 National Strategy for Infant and Young Child Feeding in Bangladesh, 2007: 21-22
- 5 Food Security and Nutrition Network Social and Behavioral Change Task Force. 2013. Designing for Behavior; Change for Agriculture, Natural Resource Management, Health and Nutrition. Washington, D.C.: Technical and; Operational Performance Support (TOPS) Program.
- 6 Guyon A. MD.MPH , Quinn V. PhD , Nielsen J. PhD , Stone-Jimenez M.MSc, IBCLC , Essential Nutrition Actions and Essential Hygiene Actions Training Guide: Community Workers. 2015. CORE Group: Washington, DC.

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