

An Investment Framework for Meeting the Global Nutrition Target for Breastfeeding

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Key Messages

- Reaching the global nutrition target of increasing exclusive breastfeeding to 50 percent by 2025 will require an additional investment of \$5.7 billion over 10 years, or \$4.70 per newborn, for all low- and middle-income countries.
- The costs of not making this investment would be at least 520,000 child deaths and 105 million children not exclusively breastfed, plus additional morbidity from childhood diseases and cognitive losses.
- Investing in this package will yield a \$298 billion in economic gains over 10 years across all low- and middle-income countries. Every \$1 invested is estimated to generate \$35 in economic returns, making a breastfeeding strategy one of the best investments a country can make.
- The extension of maternity leave cash benefits to six months, which may increase breastfeeding rates and generate other social, health, and developmental benefits, is estimated to cost an additional \$24.1 billion over 10 years.
- Although achieving this target requires substantial effort and resources, it appears less ambitious than the other global nutrition targets. Analyses suggest that there may be scope to go beyond the current target by 2025 or 2030.



BREASTFEEDING TARGET

INCREASE THE RATE OF EXCLUSIVE BREASTFEEDING IN THE FIRST 6 MONTHS UP TO AT LEAST 50% BY 2025

In 2012, the World Health Assembly set the target of increasing the rate of exclusive breastfeeding in the first six months to at least 50 percent (from 38 percent) by 2025 (WHO 2012). This summary describes the estimated resources required to achieve this target, and the impact that this investment is expected to have on nutrition, health, and economic outcomes

Optimal Breastfeeding and Its Benefits

Exclusive breastfeeding is defined as the practice of giving an infant only breastmilk for the first six months of life, with no other food, other liquids, or even water (UNICEF 2011). *Optimal breastfeeding* practices also include initiation of breastfeeding within an hour after birth and continued breastfeeding until two years of age and beyond.

Note: This summary is based on Shekar, Meera, Jakub Kakiyete, Julia Dayton Eberwein, and Dylan Walters. 2017. *An Investment Framework for Nutrition: Reaching the Global Targets for Stunting, Anemia, Breastfeeding, and Wasting*. Directions in Development. Washington, DC: World Bank. doi:10.1596/978-1-4648-1010-7, available at <https://tinyurl.com/InvestmentFrameworkNutrition>. Suggested citation for this brief is: Walters, Dylan, Julia Dayton Eberwein, Lucy Sullivan, Mary D'Alimonte, and Meera Shekar. 2017. *An Investment Framework for Meeting the Global Nutrition Target for Breastfeeding*. Washington, DC: World Bank Group. All dollar amounts are U.S. dollars.

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Optimal breastfeeding could have the single largest potential impact on child mortality of any preventive intervention (Bhutta et al. 2013). The evidence of the health, nutritional, cognitive, and long-term economic benefits of breastfeeding is clear and persuasive. Breastfeeding has protective effects for newborns and young children that prevent common diseases such as diarrhea and pneumonia, which are major causes of child mortality (Victora et al. 2016). The recent *Lancet* breastfeeding series estimates that optimal breastfeeding could help prevent 823,000 child deaths and 20,000 maternal deaths from breast cancer per year (Rollins et al. 2016; Victora et al. 2016). Breastfeeding also reduces the risk of childhood obesity and diabetes and, for nursing mothers, reduces the risk of breast and ovarian cancer later in life. Exclusive breastfeeding for the first six months is also a natural contraceptive that can be helpful in increasing birth spacing (Victora et al. 2016).

Breastfeeding is associated with higher intelligence quotients (IQs) (Horta, Loret de Mola, and Victora 2015) and, in the longer term, with enhanced labor market and economic outcomes (Lutter 2016; Rollins et al. 2016). The current low breastfeeding rates globally are estimated to result in economic losses of about \$302 billion annually, or 0.49 percent of world gross national income (Victora et al. 2016).

The State of Breastfeeding Worldwide

Globally, only 43 percent of infants younger than six months are exclusively breastfed (UNICEF 2016). In low- and middle-income countries, this means that over 68 million children born this year will not be exclusively breastfed. Most of the children who are not exclusively breastfed consume water, milk, formula, or complementary food in addition to breastmilk, often leading to infections in unsafe environments. Furthermore, only 45 percent of children are breastfed within an hour of birth and only 46 percent continue to breastfeed until the age of two (UNICEF 2016).

The *Global Nutrition Report* suggests that 47 countries are off course for reaching the breastfeeding target, and a further 110 have missing data for this indicator (IFPRI 2016). However, rates of exclusive breastfeeding in some regions—South Asia and Eastern and Southern Africa for example—have increased since the year 2000 and now surpass the 50 percent target (UNICEF 2016). The rates in other regions are below the target but are progressing slowly, with the exception of the East Asia and Pacific region, which has remained at around 30 percent over the last 15 years. Comparable data for many high-income countries are lacking, but where data are available the rates of exclusive breastfeeding rates are generally low.

Although there have been modest gains in exclusive breastfeeding rates globally in recent years, these trends are not expected to continue without investment in comprehensive breastfeeding strategies. Current levels of investment in breastfeeding, though largely undocumented, are perceived to be insufficient to increase rates beyond where they are now (Holla-Bhar et al. 2015; Piwoz and Huffman 2015).

Investing in Proven Interventions to Meet the Global Breastfeeding Target

Having a comprehensive breastfeeding strategy at the national level is the most effective way to influence the powerful social, economic, and cultural forces affecting a mother's decision to breastfeed (Rollins et al. 2016). The strategy is composed of several types of interventions; the exact mix of interventions may vary from country to country, depending on the local context (Bhutta et al. 2013; Rollins et al. 2016). For the analyses presented in *An Investment Framework for Nutrition*, three interventions are assumed to comprise a minimum core of the comprehensive strategy applicable to most contexts: infant and young child nutrition counseling, pro-breastfeeding social policies, and a national breastfeeding promotion campaign (see the table). Reaching the global target for breastfeeding would require scaling up this set of interventions in all in all low- and middle-income countries to full coverage and would require an investment

of \$5.7 billion over 10 years, or \$4.70 per newborn, from 2016 to 2025. As shown in the table, the bulk of the investment is for scaling up the coverage of infant and young child nutrition counseling. The East Asia and Pacific region requires almost 40 percent of the total financing needs since they have the lowest breastfeeding rates currently, the Sub-Saharan Africa region requires one-quarter, and other regions require smaller shares of the total (see the pie chart).

Interventions and Additional Financing Needs over 10 Years to Reach the Exclusive Breastfeeding Target

INTERVENTION	ADDITIONAL FINANCING NEEDS 2016–2025 (US\$, MILLIONS)	SHARE OF TOTAL (PERCENT)
Infant and young child nutrition counseling Package of multiple counseling sessions for the mother, either in the community or at a health facility, during pregnancy and until infant is six months of age.	4,159	80%
Pro-breastfeeding social policies Policies, legislation, and monitoring and enforcement of policies related to: <ul style="list-style-type: none"> • implementation and enforcement of the International Code of Marketing of Breast Milk Substitutes • implementation of WHO/UNICEF's Ten Steps to Successful Breastfeeding • maternity leave and job protection for mothers 	111	2%
National breastfeeding promotion campaign Large-scale efforts and use of mass media to promote exclusive breastfeeding as the social norm	906	18%
SUBTOTAL	5,176	100%
Monitoring and evaluation, capacity strengthening of program delivery	570	n.a.
TOTAL	5,746	n.a.

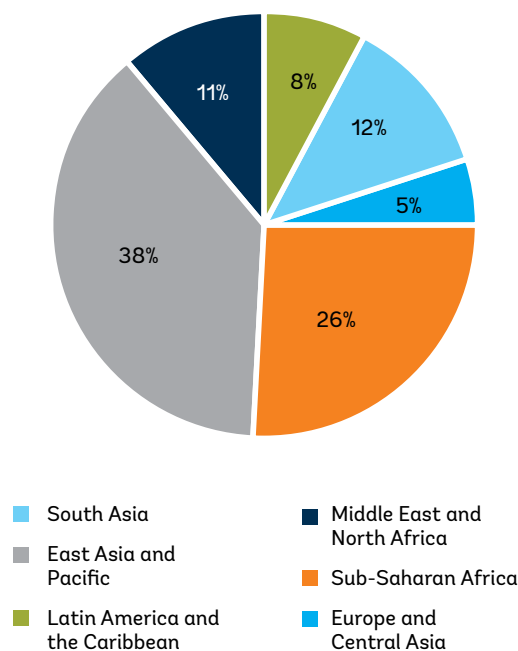
Note: n.a. = not applicable.

Extending paid maternity leave to six months is also an enabler of optimal breastfeeding practices (Sinha et al. 2015). The estimated cost of extending maternity leave cash benefits to women in the formal sector would be \$24.1 billion over 10 years for all low- and middle-income countries, but this was not included in the proposed breastfeeding package of interventions because maternity leave serves several social purposes in addition to supporting breastfeeding and its cost would likely be borne by other social and employment sectors.

Impacts of Meeting the Breastfeeding Target

Only one intervention—infant and young child nutrition counseling—is included in the impact model because there is not enough evidence to rigorously estimate the impact of the other interventions. Investment in this intervention is projected to increase the exclusive breastfeeding rate across all low- and

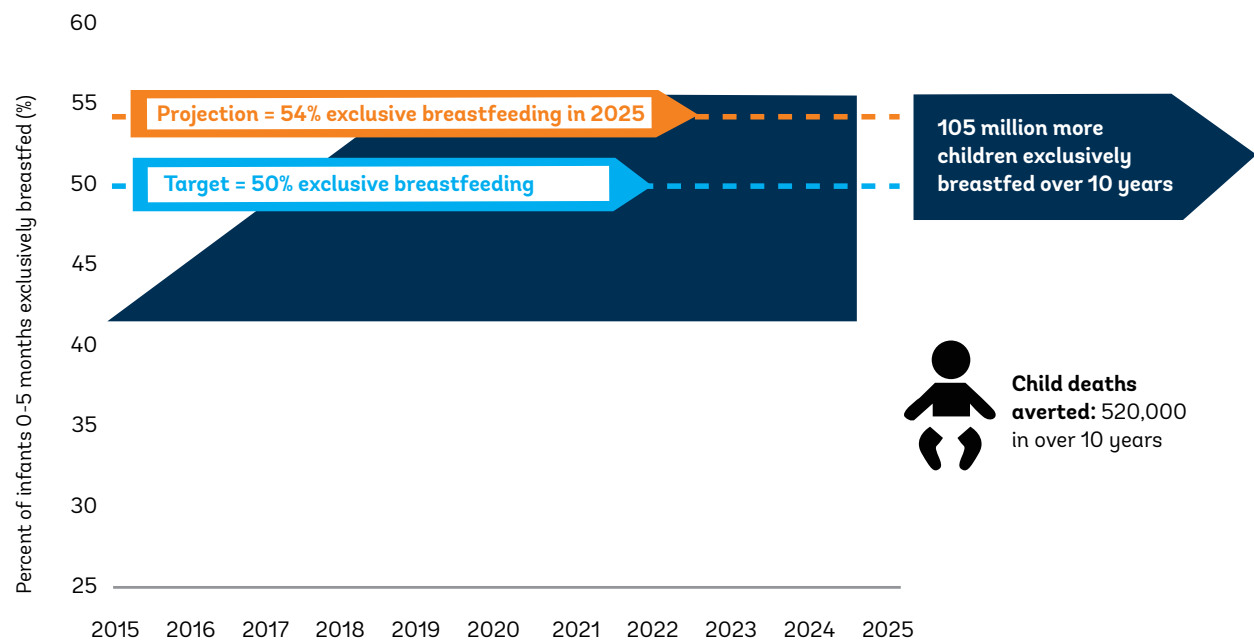
Ten-Year Total Financing Needs to Meet the Breastfeeding Target, by Region



middle-income countries to 54 percent, resulting in an additional 105 million children being exclusively breastfed and 520,000 child deaths averted over the next 10 years (see the figure)¹. In fact, their actual impacts are likely to be even larger since these estimates do not include the contribution of social policies and campaigns designed to increase exclusive breastfeeding rates, nor do they include the full range of cognitive and productivity benefits.

Although achieving this target requires substantial effort, the analyses presented in *An Investment Framework for Nutrition* show that it is less ambitious than the other global nutrition targets and there may be scope to go beyond the current target by 2025 or 2030.

Exclusive Breastfeeding: Total Additional Costs and Impact to Reach Target Over 10 Years



Economic Benefits of Meeting the Breastfeeding Target

Implementing a comprehensive breastfeeding promotion, protection, and support package is an excellent investment for countries. Breastfeeding promotes cognitive development in children, which leads to higher intelligence and greater earnings in adulthood (Victora et al. 2016). Investing in this package is projected to yield a net benefit of \$298 billion over 10 years across all low- and middle-income countries by preventing cognitive losses and child mortality. Every \$1 invested is estimated to generate \$35 in economic returns, making breastfeeding promotion, protection, and support one of the most cost-effective investments a country can make. Additional health system treatment cost-savings are also likely because breastfeeding reduces the burden of childhood illnesses such as diarrhea and pneumonia.

¹ Importantly, this projection depends heavily on India's 2013-14 Rapid Survey of Children result of 65 percent exclusive breastfeeding, which — because of India's population size — affects the global figures greatly.

Call to Action

Optimal breastfeeding practices are among the best actions that can be taken to set a child up for life-long good health and prosperity. Current investment levels are insufficient to drive the kind of progress that is needed to meet the global breastfeeding target and therefore urgent action to scale up financing is required. It is estimated that countries are currently spending about \$250 million annually on the core package of interventions, with donors contributing a further \$85 million annually. An estimated additional \$570 million per year, on average, is required from all sources to reach the exclusive breastfeeding target, meaning that investment in breastfeeding will need to nearly triple from current levels.

These analyses were conducted with the best available data, but improved data and modeling methods related to breastfeeding are currently lacking. Better measurement of the coverage of infant and young child nutrition counseling, from pregnancy through age two, is urgently needed. It is expected that a recently added Demographic and Health Survey (DHS) survey question addressing breastfeeding counseling will help with the estimation of coverage of any counseling, but this will not be sufficient to assess intervention coverage of comprehensive counseling for new mothers all the way until their children reach the age of two. Furthermore, program implementers and researchers should collect and publish cost data so that future costing studies can be based on more robust data. Impact modeling software must also adapt to include a variety of breastfeeding interventions and to make stronger projections for the highest-burden countries. Further advances in experimental and quasi-experimental methods are also needed to better understand the impact of interventions such as policies, media, and maternity leave, among others.

The case for investing in a breastfeeding renaissance in the 21st century is strong. Scaling up a core set of interventions that enable optimal breastfeeding practices can have a major impact on preventing child deaths and generate strong returns on investment over time for societies, labor markets, and their economies. The costs of not making these investments would be at least 520,000 child deaths and 105 million children not exclusively breastfed. Given the undeniable benefits of breastfeeding and its proven economic and human development gains, greater investment is urgently needed.

Acknowledgments

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For more information please see: <https://tinyurl.com/InvestmentFrameworkNutrition>

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