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Technical Advisory Group Membership

The Technical Advisory Group (TAG) met on four occasions (March 19, 2015; June 10, 2015; October 7, 2015; and February 22, 2016) to advise the research team (table A.1).

The final meeting of the TAG was a full-day workshop in Washington, DC, where all results were vetted and discussed. The following individuals partici- pated in this meeting: Daniel Arias (Results for Development Institute), Hugh Bagnall-Oakeley (Save the Children), Ammad Bahalim (Global Health Visions), Nora Coghlan (Bill & Melinda Gates Foundation), Helen Connolly (American Institutes for Research), Mary Rose D'Alimonte (Results for Development Institute), Julia Dayton Eberwein (World Bank Group), Luz Maria De-Regil (Micronutrient Initiative), Kaia Engesveen (World Health Organization), Robert Hecht (Results for Development Institute), Augustin Flory (Children's Investment Fund Foundation), Patrizia Fracassi (Scaling Up Nutrition Movement Secretariat, UN Development Programme), Kate Goertzen (1,000 Davs), Robert Greener (Oxford Policy Management), Saul Guerrero (Action Against Hunger), Stephanie Heung (Results for Development Institute), Jakub Kakietek (World Bank Group), Priyanka Kanth (World Bank Group), David Laborde (International Food Policy and Research Institute), Ferew Lemma (Ministry of Health, Ethiopia), Kedar Mankad (ONE Campaign), Alyson McColl (GMMB), Sandra Mutuma (Action Against Hunger), Obey Assery-Nkya (Prime Minister's Office, Tanzania), Kelechi Ohiri (Ministry of Health, Nigeria), Clara Picanyol (Oxford Policy Management), Amanda Pomeroy-Stevens (John Snow, Inc.), Danielle Porfido (1,000 Days), Kate Pritchard (GMMB), Ellen Piwoz (Bill & Melinda Gates Foundation), Hilary Rogers (Results for Development Institute), Meera Shekar (World Bank Group), Shan Soe-Lin (Results for Development Institute), Lucy Sullivan (1,000 Days), Dylan Walters (World Bank Group), Neil Watkins (Bill & Melinda Gates Foundation), and William Winfrey (Avenir Health).

Table A.1 Keanggotaan TAG

Name	Organisasi
Victor Aguayo	United Nations Children's Fund
Obey Assery-Nkya	Prime Minister's Office, Tanzania
Robert Black	Johns Hopkins University
Hugh Bagnall-Oakley	Save the Children
Helen Connolly	American Institutes for Research
Luz Maria De-Regil	Micronutrient Initiative
Kaia Engesveen	World Health Organization
Augustin Flory	Children's Investment Fund Foundation
Patrizia Fracassi	Scaling Up Nutrition Movement Secretariat, UN Development Programme
Robert Greener	Oxford Policy Management
Saul Guerrero	Action Against Hunger
Lawrence Haddad	International Food Policy and Research Institute
Rebecca Heidcamp	Johns Hopkins University
Sue Horton	University of Waterloo
David Laborde	International Food Policy and Research Institute
Ferew Lemma	Ministry of Health, Ethiopia
Kedar Mankad	ONE Campaign
Saul Morris	Children's Investment Fund Foundation
Sandra Mutuma	Action Against Hunger, United Kingdom
Obey Assery-Nkya	Prime Minister's Office, Tanzania
Kelechi Ohiri	Ministry of Health, Nigeria
Anne Peniston	U.S. Agency for International Development
Clara Picanyol	Oxford Policy Management
Ellen Piwoz	Bill & Melinda Gates Foundation
Amanda Pomeroy-Stevens	John Snow, Inc
William Winfrey	Avenir Health

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Baseline Intervention Coverage Rates, by Target

The tables in this appendix present the percentage of the population that would be covered by the relevant interventions for four targets: stunting, anemia, breast- feeding, and wasting. The full references for the sources of these data are pro- vided in the References section at the end of the appendix.

Tabel B1. Stunting Traget: Percentage of Target Population Covered by Relevant Intervention at Baseline, by Country

				Interver	ntion				
Country	Stunting prevalence	Vitamin A supplementation for children	Complementary feeding education	Public provision of complementary food for children	Infant and young child nutrition counseling	Antenatal micronutrient supplementation	Balanced energy-protein suppementation for pregnant women	Intermittent presumptive treatment of malaria pregnancy in malaria- endemic regions	Prophylactic zinc supplementation for children
Benin	34.0	48.6	32.2	32.2	40.4	0.0	0.0	15.6	0.0
Bangladesh	36.1	59.5	20.9	20.9	61.0	0.0	0.0	n.a.	0.0
Burundi	57.5	80.7	74.0	74.0	72.5	0.0	0.0	0.0	0.0
Cambodia	32.4	70.9	24.0	24.0	71.4	0.0	0.0	n.a.	0.0
Central African Rep.	40.7	78.0	25.2	25.2	19.8	0.0	0.0	90.0	0.0
China	9.4	0.0	40.7	40.7	51.0	0.0	0.0	n.a.	0.0
Congo, Dem. Rep.	42.6	70.4	21.5	21.5	31.9	0.0	0.0	42.6	0.0
Egypt, Arab Rep.	22.3	16.7	41.4	41.4	49.6	0.0	0.0	n.a.	0.0
Eritrea	50.3	38.0	42.5	42.5	25.8	0.0	0.0	0.0	0.0
Ethiopia	40.4	53.1	22.4	22.4	49.8	0.0	0.0	0.0	0.0
Guatemala	48.0	41.7	75.9	75.9	35.3	0.0	0.0	n.a.	0.0
India	38.7	18.1	20.7	20.7	44.2	0.0	0.0	n.a.	0.0
Indonesia	36.4	61.1	41.2	41.2	40.1	0.0	0.0	n.a.	0.0
Kenya	26.0	30.3	38.5	38.5	29.6	0.0	0.0	41.2	0.0
Lao PDR	43.8	59.1	34.4	34.4	25.9	0.0	0.0	n.a.	0.0
Liberia	32.1	60.2	24.5	24.5	27.7	0.0	0.0	63.2	0.0
Madagascar	49.2	72.7	2.7	2.7	48.8	0.0	0.0	71.1	0.0
Malawi	42.4	85.6	18.5	18.5	68.2	0.0	0.0	53.8	0.0
Mexico	13.6	63.0	40.7	40.7	14.7	0.0	0.0	n.a.	0.0
Mozambique	43.1	70.6	83.6	83.6	39.0	0.0	0.0	18.6	0.0

	1			Inter	vention				
Country	Stunting prevalence	Vitamin A supplementation for children	Complementary feeding education	Public provision of complementary food for children	Infant and young child nutrition counseling	Antenatal micronutrient supplementation	Balanced energy-protein supplementation for pregnant women	Intermittent presumptive treatment of malaria pregnancy in malaria- endemic regions	Prophylactic zinc supplementation for children
Myanmar	35.1	86.0	41.0	41.0	3.0	0.0	0.0	n.a.	0.0
Nepal	40.5	90.4	57.1	57.1	68.0	0.0	0.0	n.a.	0.0
Niger	40.0	59.6	62.1	62.1	21.7	0.0	0.0	34.8	0.0
Nigeria	0.4	41.3	30.2	30.2	11.5	0.0	0.0	33.7	0.0
Pakistan	45.0	72.1	36.3	36.3	36.4	0.0	0.0	n.a.	0.0
Papua New Guinea	49.5	15.0	57.1	57.1	35.6	0.0	0.0	n.a.	0.0
Philippines	30.3	85.2	55.0	55.0	31.0	0.0	0.0	n.a.	0.0
Rwanda	37.9	92.9	16.8	16.8	83.3	0.0	0.0	72.2	0.0
Sierra Leone	37.9	83.2	22.7	22.7	8.7	0.0	0.0	27.5	0.0
Somalia	25.9	62.0	11.0	11.0	8.0	0.0	0.0	9.0	0.0
Sudan	38.2	60.5	49.4	49.4	6.0	0.0	0.0	0.0	0.0
Tanzania	34.7	60.8	21.3	21.3	45.1	0.0	0.0	26.3	0.0
Timor-Leste	57.7	50.7	0.0	0.0	0.0	0.0	0.0	n.a.	0.0
Uganda	34.2	56.8	23.8	23.8	67.2	0.0	0.0	24.5	0.0
Vietnama	19.4	78.8	41.8	41.8	16.0	0.0	0.0	n.a.	0.0
Yemen, Rep.	46.6	11.0	76.3	76.3	7.6	0.0	0.0	n.a.	0.0
Zambia	40.0	76.5	37.3	37.3	56.0	0.0	0.0	70.2	0.0

Tabel B1. Stunting Traget: Percentage of Target Population Covered by Relevant Intervention at Baseline, by Country (cotinued)

Sources: Vitamin A supplementation for children: Most recent Demographic and Health Surveys (DHS) conducted between 2002 and 2014 (as of May 2015), except for the following: Multiple Cluster Indicator Survey (MICS) for Afghanistan, the Central African Republic, Myanmar, Somalia, and Sudan between 2006 and 2012 and FANTA (2014) for Guatemala. Infant and young child nutrition counseling, public provision of complementary food for children, probreastfeeding social policies, and intermittent presumptive treatment of malaria in pregnancy in malaria-endemic regions: Lives Saved Tool default coverage estimates. No data were available on micronutrient supplementation during pregnancy, balanced energy-protein supplementation for pregnant women, or prophylactic zinc supplementation.

Note: n.a. = not applicable.

a. At the time of these analyses, Vietnam stunting prevalence was reported as 19.4 in UNICEF, WHO and World Bank 2015. However, it was later corrected to be 25.9, as indicated in UNICEF, WHO, and World Bank 2016.

Tabel B2. Anemia Traget: Percentage of Target Population Covered by Relevant Intervention, by Country

	Anemia prevalence (%)			Baseline coverage (%	%)		Baseline coverage of fortification among staple foods (%)			Maximum attainable consumption coverage (%)		
Country	Non pregnant women age 15–49 years	Pregnant women	Iron and folic acid supplementation for nonpregnant women	Antenatal micronutrient supplementation	Intermittent presumptive treatment of malaria pregnancy in malaria- endemic regions	Wheat flour fortification	Maize flour fortification	Rice flour fortification	Wheat flour fortification	Maize flour fortification	Rice flour fortification	
Bangladesh	43.5	48.0	0.0	0.0	n.a	0.0	0.0	0.0	50.0	0.0	75.0	
Brazil	19.6	32.0	0.0	0.0	n.a	50.0	0.0	0.0	75.0	0.0	25.0	
China	19.5	22.0	0.0	0.0	n.a	0.0	0.0	0.0	25.0	0.0	50.0	
Congo, Dem. Rep	49.0	49.0	0.0	4.7	14.0	25.0	0.0	0.0	50.0	50.0	0.0	
Congo, Rep	50.7	49.0	0.0	42.9	22.0	50.0	0.0	0.0	50.0	0.0	25.0	
Egypt, Arab Rep	34.5	30.0	0.0	36.1	n.a	50.0	0.0	0.0	50.0	50.0	25.0	
Ethiopia	19.2	23.0	0.0	0.0	0.0	0.0	0.0	0.0	50.0	25.0	0.0	
Gabon	50.8	60.0	0.0	56.8	3.0	0.0	0.0	0.0	75.0	25.0	50.0	
Ghana	56.4	62.0	0.0	59.4	67.0	50.0	0.0	0.0	25.0	25.0	50.0	
India	48.1	54.0	0.0	23.0	n.a	0.0	0.0	0.0	25.0	0.0	25.0	
Indonesia	22.5	30.0	0.0	30.0	n.a	50.0	0.0	0.0	75.0	25.0	75.0	
Iran, Islamic Rep.	28.1	26.0	0.0	0.0	n.a	50.0	0.0	0.0	75.0	0.0	25.0	
Mali	56.2	61.0	0.0	18.3	20.0	50.0	0.0	0.0	25.0	50.0	75.0	
Mexico	14.4	21.0	0.0	0.0	n.a	50.0	0.0	0.0	75.0	75.0	0.0	
Myanmar	30.3	33.0	0.0	0.0	n.a	0.0	0.0	0.0	0.0	0.0	75.0	
Nigeria	48.5	58.0	0.0	21.0	15.0	50.0	50.0	50.0	0.0	50.0	25.0	
Pakistan	51.1	50.0	0.0	22.1	n.a	0.0	0.0	0.0	50.0	0.0	0.0	
Philippines	25.4	32.0	0.0	47.0	n.a	50.0	0.0	0.0	25.0	25.0	75.0	

	Anemia prevo	Anemia prevalence (%)		Baseline coverage (%)		Baseline coverage of fortification among staple foods (%)			Maximum attainable consumption coverage (%)		
Country	Non pregnant women age 15–49 years	Pregnant women	Iron and folic acid supplementation for nonpregnant women	Antenatal micronutrient supplementation	Intermittent presumptive treatment of malaria pregnancy in malaria- endemic regions	Wheat flour fortification	Maize flour fortification	Rice flour fortification	Wheat flour fortification	Maize flour fortification	Rice flour fortification
Senegal	57.5	63.0	0.0	50.0	43.0	50.0	0.0	0.0	25.0	25.0	50.0
South Africa	27.6	30.0	0.0	11.2	n.a	50.0	50.0	50.0	50.0	75.0	25.0
Tanzania	39.6	61.0	0.0	3.5	33.0	50.0	50.0	50.0	25.0	75.0	25.0
Thailand	23.8	30.0	0.0	0.0	n.a	0.0	0.0	0.0	0.0	0.0	75.0
Togo	52.7	58.0	0.0	37.1	44.0	50.0	0.0	0.0	25.0	75.0	25.0
Turkey	28.8	28.0	0.0	0.0	n.a	0.0	0.0	0.0	75.0	25.0	0.0
Uzbekistan	51.7	35.0	0.0	0.0	n.a	50.0	0.0	0.0	75.0	0.0	0.0
Vietnam	14.1	23.0	0.0	0.0	n.a	0.0	0.0	0.0	25.0	25.0	75.0

Tabel B2. Anemia Traget: Percentage of Target Population Covered by Relevant Intervention, by Country (continued)

Sources: Anemia prevalence in nonpregnant and pregnant women from Stevens et al. 2013. Iron and folic acid supplementation coverage is assumed to be 0 percent because of lack of data. Antenatal micronutrient coverage, for the purposes of anemia prevention, uses iron supplementation coverage (90+ tablets during pregnancy) from Demographic and Health Surveys (DHS) and Multiple Cluster Indicator Survey (MICS) surveys as a proxy for micronutrient coverage. Intermittent presumptive treatment of malaria in pregnancy in malaria-endemic regions coverage is also from DHS and MICS surveys. Baseline coverage of fortification among staple foods (wheat, maize and rice) is based on the existence of legislation status for foods fortified in respective countries. We assume 0 percent if fortification legislation is in the planning stages, 25 percent for voluntary status, and 50 percent if mandatory fortification is legislated. Data are from GAIN and FFI (Ghauri et al. 2016; Pachon 2016). Maximum attainable consumption coverage of fortification that could realistically be achieved, since not all foods are consumed everywhere (Ghauri et al. 2016; Pachon 2016). Note: n.a. = not applicable

Country	Exclusive breastfeeding (0–5 months) prevalence	Infant and young child nutrition counseling baseline coverage	Maternity leave cash benefits coverage in practice
Algeria	25.7	21.0	3.2
Bangladesh	55.3	61.0	12.1
Brazil	38.6	27.4	29.1
Chad	3.4	40.3	2.9
China	27.6	11.5	13.4
Congo, Dem. Rep.	47.6	44.2	3.2
Côte d'Ivoire	12.1	3.4	2.4
Djibouti	1.3	1.4	1.6
Dominican Rep.	4.7	5.9	10.8
Egypt, Arab Rep.	39.7	49.6	11.6
Ethiopia	52.0	49.8	3.5
Gabon	6.0	4.5	53.4
India	65.0	44.2	1.2
Indonesia	41.5	40.1	2.3
Iraq	19.6	16.0	0.7
Mexico	14.4	14.7	9.5
Myanmar	23.6	3.0	3.4
Nigeria	17.4	16.9	2.2
Pakistan	37.7	36.4	1.1
Philippines	34.0	31.0	39.6
Somalia	5.3	8.8	1.7
Suriname	2.8	0.8	8.5
Tanzania	41.1	45.1	4.0
Tunisia	8.5	5.9	12.3
Turkey	30.1	17.0	14.4
Vietnam	24.3	15.7	15.3
Yemen, Rep.	10.3	7.6	5.3

Table B.3 Breastfeeding Target: Percentage of Target Population Covered by Relevant Inter	vention at
Baseline, by Country	

Sources: Exclusive breastfeeding rates are based on the WHO/UNICEF Global Targets Tracking Tool (WHO 2015), with the exception of India, which is based on the Rapid Survey of Children result from later in 2015 (Government of India and UNICEF 2015). Baseline counseling coverage is based on the LiST default rates used, which are based on DHS survey data for 1-to-5 month exclusive breastfeeding rates. Maternity leave cash benefits coverage rates are based on ILO estimated coverage in practice (ILO 2015). See chapter 5 for more information.

Country	Region	Percentage of target population covered by outpatient treatment of severe acute malnutrition
Afghanistan	South Asia	40.14
Bangladesh	South Asia	61.00
Chad	Sub-Saharan Africa	22.95
China	East Asia and Pacific	0.00
Djibouti	Sub-Saharan Africa	0.00
Congo, Dem. Rep.	Sub-Saharan Africa	40.69
Egypt, Arab Rep.	Middle East and North Africa	0.00
Eritrea	Sub-Saharan Africa	0.00
Ethiopia	Sub-Saharan Africa	0.00
India	South Asia	12.20
Indonesia	East Asia and Pacific	0.00
Iraq	Middle East and North Africa	0.00
Mali	Sub-Saharan Africa	31.18
Myanmar	East Asia and Pacific	40.70
Niger	Sub-Saharan Africa	36.16
Nigeria	Sub-Saharan Africa	61.17
Pakistan	South Asia	52.23
Philippines	East Asia and Pacific	33.00
South Sudan	Sub-Saharan Africa	31.14
Sri Lanka	South Asia	0.00
Sudan	Sub-Saharan Africa	63.77
Timor-Leste	East Asia and Pacific	0.00
Vietnam	East Asia and Pacific	0.00
Yemen, Rep.	Middle East and North Africa	61.60

 Table B.4 Wasting Target: Percentage of Target Population Covered by Relevant Intervention at Baseline, by Country

Sources: No country-level estimates of the coverage of the treatment of severe acute malnutrition for children currently exist. To develop baseline coverage, this analysis relies on data from the Coverage Monitoring Network on the percentage of children suffering from severe wasting at subnational levels (for example, districts) for a number of countries. This database is based on information collected from organizations implementing programs in specific subnational geographic locations. For countries where coverage data were available from only one region, these data are used to represent coverage at the national level. For countries where data from multiple regions were available, a population- weighted average is used as a proxy for the national level. It should be noted that this approach likely overestimates the current treatment coverage. For countries without available data, the current coverage of treatment is assumed to be zero.

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Intervention Unit Costs and Data Source for Unit Costs

The tables in this appendix present details about the unit cost for each interven- tion in the analysis. Unit costs are presented for stunting, anemia, exclusive breastfeeding, and wasting. The full references for the sources of these data are provided in the References section at the end of the appendix.

Table C.1 Unit Costs of Interventions to Meet the Stunting Target

Country	Region	Unit cost used in the analyses (2015 US\$)ª	Sources and assumptions
Vitamin A supplementation for	children		
Benin, Niger	Sub-Saharan Africa	0.37	Unit cost estimates from Mali; Shekar et al. 2015c
Burundi, Central African Republic, Congo, Dem. Rep., Rwanda	Sub-Saharan Africa	0.55	Unit cost estimates from Congo, Dem. Rep., Shekar et al. 2015a
Eritrea, Ethiopia, Kenya, Somalia, Sudan, Tanzania	Sub-Saharan Africa	0.88	Unit cost estimates from Kenya; Dayton Eberwein et al. (forthcoming)
Liberia, Nigeria, Sierra Leone	Sub-Saharan Africa	0.44	Unit cost estimates from Nigeria; Shekar et al. 2014
Madagascar, Malawi, Mozambique, Zambia	Sub-Saharan Africa	0.94	Unit cost estimates from Zambia; Shekar et al. 2015
Uganda	Sub-Saharan Africa	0.08	Shekar et al. 2015a
Cambodia, China, Lao PDR, Myanmar, Vietnam	East Asia and Pacific	0.03	Unit cost estimates from Vietnam; Alive & Thrive 2013
Indonesia, Papua New Guinea, Timor-Leste	East Asia and Pacific	0.03	Unit cost from Vietnam; Alive & Thrive 2013
Philippines	East Asia and Pacific	4.81	Neidecker-Gonzales, Nestel, and Bouis 2007
Guatemala, Mexico	Latin America and the Caribbean	3.01	Unit cost from Guatemala; Neidecker Gonzales, Nestel, and Bouis 2007
Egypt, Arab Rep., Yemen, Rep	Middle East and North Africa	1.40	Africa average unit cost estimate multiplied by the WHO Choice regional multiplier (2.20) from Horton et al. 2010
Bangladesh	South Asia	0.04	Personal communication with the National Nutrition Program. Unit cost for delivery through campaigns twice a year (3.32 Taka per child per year)

Country	Region	Unit cost used in the analyses	Sources and assumptions
India, Pakistan	South Asia	(2015 US\$) ^a 0.09	Unit cost from India; Micronutrient Initiative 2006 (4.04 RS per child)
Nepal	South Asia	2.03	Neidecker-Gonzales, Nestel, and Bouis 2007
Infant and young child nutrition	counseling		
Benin, Niger	Sub-Saharan Africa	5.00	Unit cost from Mali; Shekar et al. 2015 Mali
Burundi, Central African Republic, Congo, Dem. Rep., Rwanda	Sub-Saharan Africa	5.00	Unit cost from the Democratic Republic of Congo; Shekar et al. 2015
Eritrea, Ethiopia, Kenya, Somalia, Sudan, Tanzania	Sub-Saharan Africa	6.90	Unit cost from Kenya; Dayton Eberwein et al. forthcoming
Liberia, Nigeria, Sierra Leone	Sub-Saharan Africa	5.00	Unit cost from Nigeria; Shekar et al. 2014
Madagascar, Malawi, Mozambique, Uganda, Zambia	Sub-Saharan Africa	7.25	Unit cost from Zambia; Shekar et al. 2015
Cambodia, China, Indonesia, Lao PDR, Myanmar, Papua New Guinea, Philippines, TimorLeste, Vietnam	East Asia and Pacific	11.25	Unit cost from Vietnam; Alive & Thrive 2013
Guatemala, Mexico	Latin America and the Caribbean	0.33	Unit cost from Guatemala for breastfeeding promotion and complementary feeding education in primary health care settings; FANTA 2014
Egypt, Arab Rep., Yemen, Rep	Middle East and North Africa	1.40	Africa average unit cost estimate multiplied by the WHO Choice regional multiplier (2.20) from Horton et al. 2010
Bangladesh, India, Nepal, Pakistan	South Asia	5.13	Menon, McDonald and Chakrabarti 2014; \$7.47 per child 6–12 months per year; \$2.8 per child 12–24 months per year; on average \$5.13 per child 6–24 months per year and \$1.67 per pregnant women per child 0–6 months per year; \$1.76 per pregnant women (assumes the number of pregnancies is equal to number of children 0–6 months); on average \$3.43 per child 0–6 months; inflation adjusted
In addition to the countries abo the breastfeeding target	ve included in the stunt	ing analysis, the f	following countries were included in
Chad, Côte d'Ivoire	Sub-Saharan Africa	5.00	Unit cost from Nigeria; Shekar et al. 2014
Djibouti	Sub-Saharan Africa	6.90	Unit cost from Kenya; Dayton Eberwein et al. forthcoming
Gabon	Sub-Saharan Africa	7.25	Unit cost from Zambia; Shekar et al. 2015

Country	Region	Unit cost used in the analyses (2015 US\$)ª	Sources and assumptions	
Turkey	Europe and Central Asia	13.35	Africa average times the WHO Choice regional multiplier (2.20) from Horton et al. 2010	
Suriname	Latin America and the Caribbean	0.70	Unit cost from Guatemala; FANTA 2014	
Brazil, Dominican Republic	Latin America and the Caribbean	7.50	Global cost estimate; Horton et al. 2010	
Iraq	Middle East and North Africa	7.50	Global cost estimate; Horton et al. 2010	
Algeria, Tunisia	Middle East and North Africa	13.35	Africa average unit cost estimate multiplied by the WHO Choice regional multiplier (2.20) from Horton et al. 2010	
Public provision of complement	tary food for children			
Burundi, Central African Republic, Congo, Dem. Rep., Rwanda	Sub-Saharan Africa	40.25	Unit cost from Democratic Republic of Congo; Shekar et al. 2015	
Eritrea, Ethiopia, Kenya, Somalia, Sudan, Tanzania	Sub-Saharan Africa	47.99	Unit cost from Kenya; Dayton Eberwein et al. forthcoming	
Liberia, Nigeria, Sierra Leone	Sub-Saharan Africa	51.10	Unit cost from Nigeria; Shekar et al. 2014	
Madagascar, Malawi, Mozambique, Zambia	Sub-Saharan Africa	87.50	Unit cost from Zambia; Shekar et al. 2015	
Uganda	Sub-Saharan Africa	66.50	Shekar et al. 2015 Uganda	
Cambodia, China, Indonesia, Lao PDR, Myanmar, Papua New Guinea, Timor-Leste, Vietnam	East Asia and Pacific	36.00	Unit cost from Indonesia; personal communication with the Ministry of Health (2015)	
Philippines	East Asia and Pacific	15.84	Personal communication with the Ministry of Health (May 2015): Rice Mongo Instant Blend/Rice Mongo Sesame Blend (P 6.00/ pack); 6–11 mos. old: 120 days x P 6.00/pack of CF = P 720.00/ child; 12–23 months old: 88 days (weekdays) x P 6.00/pack of CF = P 528.00; average cost per child \$15.84.	
Guatemala, Mexico	Latin America and the Caribbean	66.23	Africa average unit cost estimate multiplied by the WHO Choice regional multiplier (2.25) from Horton et al. 2010	
Egypt, Arab Rep., Yemen, Rep.	Middle East and North Africa	66.23	Africa average unit cost estimate multiplied by the WHO Choice regional multiplier (2.20) from Horton et al. 2010	
Bangladesh, India, Nepal, Pakistan	South Asia	29.03	Supplemental food for children 12–26 months; Menon, McDonald, and Chakrabarti 2016	

Country	Region	Unit cost used in the analyses (2015 US\$)ª	Sources and assumptions
Prophylactic zinc supplementatic Benin, Burundi, Central African Republic, Congo, Dem. Rep., Eritrea, Ethiopia, Kenya, Liberia, Madagascar, Malawi, Mozambique, Niger, Nigeria, Rwanda, Sierra Leone, Somalia, Sudan, Tanzania, Uganda, Zambia	on for children Sub-Saharan Africa	4.61	Based on cost of micronutrient powders (Sprinkles supplementation for children from the Democratic Republic of Congo (see Shekar et al. 2015). A box of 30 sachets of micronutrient Sprinkles costs \$0.86 and each child receives 120 sachets per year; additional 25% for transportation costs \$0.31 per child for distribution of kits, identification of beneficiaries, establishment of community health structures, and supervision.
Cambodia, China, Indonesia, Lao PDR, Myanmar, Papua New Guinea, Philippines, TimorLeste, Vietnam	East Asia and Pacific	4.61	Based on cost of micronutrient powders (Sprinkles) for children from the Democratic Republic of Congo (see Shekar et al. 2015). A box of 30 sachets of micronutrient Sprinkles costs \$0.86 and each child receives 120 sachets per year; additional 25% for transportation costs \$0.31 per child for distribution of kits, identification of beneficiaries, establishment of community health structures, and supervision.
Guatemala, Mexico	Latin America and the Caribbean	6.19	Based on cost of micronutrient powders (Sprinkles) for children from the Democratic Republic of Congo (see Shekar et al. 2015). A box of 30 sachets of micronutrient Sprinkles costs \$0.86 and each child receives 120 sachets per year; additional 25% for transportation costs \$0.31 per child for distribution of kits, identification of beneficiaries, establishment of community health structures, and supervision. Unit cost estimate multiplied by the WHO Choice regional multiplier (2.35) from Horton et al. 2010.
Egypt, Arab Rep., Yemen, Rep.	Middle East and North Africa	6.01	Unit cost from the Democratic Republic of Congo; Shekar et al. 2015. Based on cost of micronutrient powders (sprinkles) for children from the Democratic Republic of Congo (see Shekar et al. 2015). A box of 30 sachets of micronutrient Sprinkles costs \$0.86 and each child receives 120 sachets per year; additional 25% for transportation costs \$0.31 per child for distribution of kits, identification of beneficiaries, establishment of community health structures, and supervision. Unit cost estimate multiplied by the WHO Choice regional multiplier (2.20) from Horton et al. 2010

Table C.1 Unit Costs of Interventions to Meet the Stunting Target (continued)

Country			Region	Unit cost used in the analyses (2015 US\$)ª	Sources and assumptions
Bangladesh, Pakistan	India,	Nepal,	South Asia	2.40	Based on in-home micronutrient powders (Sprinkles) supplementation costs in Pakistan (Sharieff, Horton, and Zlotkin 2006) Adapted to 120 days a year (one sachet per child per day, 120 sachets per child per year): Includes production: \$0.015 per sachet; distribution and overhead: \$0.005 per sachet; total cost per sachet: \$0.02.

Antenatal micronutrient supplementation

Currently no large-scale antenatal micronutrient supplementation programs exist. The unit costs were approximated on the basis of the unit cost of delivering iron and folic acid supplementation because the delivery platform was assumed to be the same (distribution during antenatal and postnatal visits). We used the iron and folic acid supplementation unit cost from Kenya (Dayton Eberwein et al. forthcoming) and replaced the cost of the iron and folic acid supplement with the cost of a supplement that included 13 essential minerals in the following formulation: Retinol (vitamin A) 800RE; vitamin É 10 mg; vitamin D 200 International Units (5mcg); vitamin B1 1.4 mg; vitamin B2 1.4 mg; niacin 18 mg; vitamin B6 1.9 mg; vitamin B12 2.6 mcg; folic acid 400 mcg; vitamin C 70 mg; iron 30 mg (as ferrous fumarate or ferrous sulphate); zinc 15 mg; copper 2 mg; selenium 65 mcg; iodine 150 mcg. The supplement cost was extracted from the UNICEF supply catalogue, accessed 2015 (UNICEF 2015). The pack costs \$13.57 and the cost per tablet was \$0.01357. As compared with the costs for providing iron and folic acid supplementation, the multiple micronutrient tablet increased the cost by \$1.29 per pregnant women. We assumed that a similar increase would apply to all countries in the sample (because it is a result of substituting one input for another while keeping all other costs constant). We therefore calculated the cost of antenatal micronutrient supplementation as the country iron and folic acid supplementation cost plus the additional \$1.29 for substituting the currently used iron and folic acid supplement with antenatal micronutrient supplement. The table below lists sources for iron and folic acid supplementation unit costs

Benin, Niger	Sub-Saharan Africa	2.56	Unit cost from Mali; Shekar et al. 2015
Burundi, Central African Republic, Congo, Dem. Rep., Rwanda	Sub-Saharan Africa	3.29	Unit cost from Democratic Republic of Congo; Shekar et al. 2015
Eritrea, Ethiopia, Kenya, Somalia, Sudan, Tanzania	Sub-Saharan Africa	4.04	Unit cost from Kenya; Dayton Eberwein et al. forthcoming
Liberia, Nigeria, Sierra Leone	Sub-Saharan Africa	3.08	Unit cost from Nigeria; Shekar et al. 2014
Madagascar, Malawi, Mozambique, Zambia	Sub-Saharan Africa	3.40	Unit cost from Zambia; Shekar et al. 2015
Uganda	Sub-Saharan Africa	4.04	Shekar et al. 2015 Uganda
Cambodia, China, Indonesia, Lao PDR, Myanmar, Papua New Guinea, Timor Leste, Vietnam	East Asia and Pacific	2.12	Unit cost from Vietnam adjusted for iron-folic acid supplementation; Casey et al. 2011
Philippines	East Asia and Pacific	3.54	Personal communication with Ministry of Health (May 2015)
Guatemala, Mexico	Latin America and the Caribbean	7.55	Africa average unit cost estimate multiplied by the WHO Choice regional multiplier (2.35) from Horton et al. 2010
Egypt, Arab Rep., Yemen, Rep.	Middle East and North Africa	7.07	Africa average unit cost estimate multiplied by the WHO Choice regional multiplier (2.20) from Horton et al. 2010

Country	Region	Unit cost used in the analyses (2015 US\$)ª	Sources and assumptions
Bangladesh	South Asia	2.04	Personal communication with the Ministry of Health and Family Welfare (May 2015)
India, Nepal, Pakistan	South Asia	1.80	Unit cost from India; Menon, McDonald, and Chakrabarti 2016
In addition to the countries above in included in the analysis for the anem		sis for the stuntin	ng target, the following countries were
Ghana, Mali, Senegal, Togo	Sub-Saharan Africa	3.08	Unit cost from Nigeria; Shekar et al. 2014
Egypt, Arab Rep., Yemen, Rep.	Sub-Saharan Africa	3.29	Unit cost from Democratic Republic of Congo; Shekar et al. 2015
South Africa	Sub-Saharan Africa	4.04	Unit cost from Kenya; Dayton Eberwein et al. forthcoming
Thailand	East Asia and Pacific	2.12	Vietnam cost (unit cost data on iron and folic acid supplementation); Casey et al. 2011
Turkey, Uzbekistan	Europe and Central Asia	7.07	Africa average with the regional multiplier of 2.20 from Horton et al. 2010
Brazil	Latin America and the Caribbean	7.55	Africa average with the regional multiplier of 2.35 from Horton et al. 2010
Iran, Islamic Rep.	Middle East and North Africa	1.80	India costs; Menon, McDonald, and Chakrabarti 2016
Benin, Burundi, Central African Republic, Congo, Dem. Rep., Eritrea, Ethiopia, Kenya, Liberia, Madagascar, Malawi, Mozambique, Niger, Nigeria, Rwanda, Sierra Leone, Somalia, Sudan, Tanzania, Uganda, Zambia	Sub-Saharan Africa	25.00	Global cost; Bhutta et al. 2013
Cambodia, Indonesia, Lao PDR, Myanmar, Papua New Guinea, Philippines, Timor-Leste, Vietnam	East Asia and Pacific	54.72	Unit cost from Indonesia; personal communication with the Ministry of Health (May 2015)
China	East Asia and Pacific	25.00	Global cost; Bhutta et al. 2013
Guatemala, Mexico	Latin America and the Caribbean	25.00	Global cost; Bhutta et al. 2013
Egypt, Arab Rep., Yemen, Rep.	Middle East and North Africa	25.00	Global cost; Bhutta et al. 2013
Bangladesh, India, Nepal, Pakistan	South Asia	16.93	Unit cost from India; Menon, McDonald, and Chakrabati 2016
Intermittent presumptive treatment	of malaria in pregn	ancy in malaria-e	ndemic regions
Benin, Burundi, Central African Republic, Congo, Dem. Rep., Eritrea, Ethiopia, Kenya, Liberia, Madagascar, Malawi, Mozambique, Niger, Nigeria, Rwanda, Sierra Leone, Somalia, Sudan, Tanzania, Uganda, Zambia	Sub-Saharan Africa	2.18	Global cost; White et al. 2011

Senegal, South Africa, Togo

Country	Region	Unit cost used in the analyses (2015 US\$)ª	Sources and assumptions					
In addition to the countries above included in the analysis for the stunting target, the following countries were included in the analysis for the anemia target								
Congo, Rep., Gabon, Ghana, Mali,	Sub-Saharan	2.18	Global cost, White et al. 2011					

Africa

Table C.1 Unit Costs of Interventions to Meet the Stunting Target (continued)

Note: mcg = micrograms; CF = complementary food; P = Philippine peso.

a. All unit costs from the literature were converted into U.S.\$ and inflated to 2015 values

In addition to unit costs for antenatal micronutrient supplementation detailed in table C.1, the following unit costs were used for the anemia costing analysis.

Table C.2 Unit Costs of Interventions to Meet the Anemia Target
In addition to unit costs for antenatal micronutrient supplementation detailed in table C.1, the following unit costs were
used for the anemia costing analysis

used for the anemia costing analysis							
	supplementation for ant women		Unit cost used in the	analyses (2015 U	S\$)		
Country	Region	In-school program delivery + supplement	Community health system delivery + supplement	Hospital/clinic system delivery + supplement	Private retailer distribution of supplement with markup		
Bangladesh	South Asia	0.46	0.22	1.49	0.24		
Brazil	Latin America and the Caribbean	0.63	0.35	2.28	0.24		
China	East Asia and Pacific	0.63	1.60	2.07	0.24		
Congo, Dem. Rep.	Sub-Saharan Africa	0.46	0.21	1.78	0.24		
Congo, Rep.	Sub-Saharan Africa	0.46	0.21	1.78	0.24		
Egypt, Arab Rep.	Middle East and North Africa	0.63	0.44	0.54	0.24		
Ethiopia	Sub-Saharan Africa	0.46	0.21	1.78	0.24		
Gabon	Sub-Saharan Africa	0.46	0.21	1.80	0.24		
Ghana	Sub-Saharan Africa	0.46	0.21	1.80	0.24		
India	South Asia	0.46	0.22	1.49	0.24		
Indonesia	East Asia and Pacific	0.63	0.28	1.11	0.24		
Iran, Islamic Rep.	Middle East and North Africa	0.63	1.01	5.54	0.24		
Mali	Sub-Saharan Africa	0.46	0.21	1.80	0.24		
Mexico	Latin America and the Caribbean	0.63	1.76	2.28	0.24		
Myanmar	East Asia and Pacific	0.63	0.28	1.49	0.24		
Nigeria	Sub-Saharan Africa	0.46	0.21	1.80	0.24		
Pakistan	South Asia	0.46	0.22	0.54	0.24		
Philippines	East Asia and Pacific	0.63	0.28	2.07	0.24		
Senegal	Sub-Saharan Africa	0.46	0.21	1.78	0.24		
South Africa	Sub-Saharan Africa	0.46	0.21	1.80	0.24		
Tanzania	Sub-Saharan Africa	0.46	0.21	1.78	0.24		
Thailand	East Asia and Pacific	0.63	0.87	1.11	0.24		
Togo	Sub-Saharan Africa	0.46	0.21	1.80	0.24		
Turkey	Europe and Central Asia	0.63	1.78	2.31	0.24		
Uzbekistan	Europe and Central Asia	0.63	1.78	2.31	0.24		
Vietnam	East Asia and Pacific	0.63	0.28	2.07	0.24		

Staple fo	ood fortification	Unit cost used in the analyses (2015 US\$)			
Country	Region	Wheat flour Maize f fortification fortifica		Rice fortification	
Bangladesh	South Asia	0.20	n.a.	1.41	
Brazil	razil Latin America and the Caribbean		n.a.	0.08	
China	East Asia and Pacific	0.20	n.a.	1.68	
Congo, Dem. Rep	Sub-Saharan Africa	0.15	0.15	n.a.	
Congo, Rep	Sub-Saharan Africa	0.15	0.15	0.08	
Egypt, Arab Rep	Middle East and North Africa	0.29	0.15	0.08	
Ethiopia	Sub-Saharan Africa	0.21	0.15	n.a	
Gabon	Sub-Saharan Africa	0.15	0.15	0.55	
Ghana	Sub-Saharan Africa	0.06	0.15	0.55	
India	South Asia	0.17	n.a.	0.08	
Indonesia	East Asia and Pacific	n.a.	0.15	1.41	
Iran, Islamic Rep	Middle East and North Africa	0.20	n.a.	0.08	
Mali	Sub-Saharan Africa	0.15	0.15	1.41	
Mexico Latin America and the Caribbean		0.20	0.15	n.a.	
Myanmar	East Asia and Pacific	n.a.	n.a.	1.41	
Nigeria	Sub-Saharan Africa		0.15	0.08	
Pakistan	South Asia	0.20	n.a.	n.a.	
Philippines	East Asia and Pacific	0.20	0.15	1.41	
Senegal	Sub-Saharan Africa	0.08	0.15	0.55	
South Africa	Sub-Saharan Africa	0.15	0.30	0.08	
Tanzania	Sub-Saharan Africa	0.08	0.15	0.08	
Thailand	East Asia and Pacific	n.a.	n.a.	1.41	
Togo	Sub-Saharan Africa	0.15	0.15	0.08	
Turkey	Europe and Central Asia	0.20	0.15	n.a.	
Uzbekistan	Europe and Central Asia	0.20	n.a.	n.a.	
Vietnam	East Asia and Pacific	0.20	0.15	1.41	

Note: Unit costs for antenatal micronutrient supplementation are detailed in table C.1. All unit costs from the literature were converted into U.S.\$ and inflated to 2015 values. n.a. = not applicable.

Sources for iron and folic acid supplementation for nonpregnant women: The unit costs of four different delivery platforms for nonpregnant women each include the cost of a supplement at \$0.12 per woman per year from the OneHealth Tool manual (Futures Institute 2013) plus a 10 percent transportation cost. In addition, the cost of delivery through school-based programs for the girls age 15–19 enrolled in secondary school (World Bank 2016) includes an additional program cost of \$0.33 for the Sub-Saharan Africa and South Asia regions and \$0.50 for other regions in the sample (WHO 2011). It was assumed that the cost of iron and folic acid supplements purchased through private retailers would

include an 84 percent markup, similar to the markup found by Bahl et al. (2013) for multiple micronutrient supplements, totaling \$0.24 per woman per year. The distribution of iron and folic acid supplements to a woman through community health or hospital/clinic consultation is estimated to require two consultations per year of five minutes each. Therefore, human resources for health costs are estimated by multiplying the time allocation for all annual consultations by salary estimates for community health workers, which range from \$80 to \$917 per month (Casey et al.

2011; Dahn et al. 2015; Maternal and Child Health Integrated Program 2011), and nurse salaries, which range from \$3,047 to \$40,265 per annum in sample countries (WHO 2005). See chapter 4 for more detail.

Sources for staple food fortification: Unit cost of staple food fortification per person per year were drawn either from the Global Alliance for Improved Nutrition (GAIN) costing model (Ghauri et al. 2016) for wheat and maize fortification or from Alavi et al. (2008) for rice fortification. For countries for which estimates did not exist, the best possible proxies were used. In an attempt to take into account dietary differences across populations, the available data from GAIN costing model or Food Fortification Initiative (FFI) suggested that there is, respectively, no low or moderate demand for consumption for each particular type of food staple in each country, so the per capita fortification unit costs are lowered to 0 percent, 25 percent, and 50 percent.

In addition to the unit costs for infant and young child nutrition counseling listed in table C.1, the following unit costs were used for the breastfeeding cost- ing analysis.

Table C.3 Unit Costs of Interventions to Meet the Breastfeeding Target
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In addition to the unit costs for infant and young child nutrition counseling listed in table C.1, the following unit costs were used for the breastfeeding costing analysis						
Country	Region	National breastfeeding promotion campaigns	Pro-breastfeeding social policies			
Djibouti, Gabon	Sub-Saharan Africa	800,000	200,000			
Chad, Côte d'Ivoire, Somalia, Tanzania	Sub-Saharan Africa	2,400,000	600,000			
Congo, Dem. Rep., Ethiopia, Nigeria	Sub-Saharan Africa	4,000,000	1,000,000			
Myanmar, Philippines, Vietnam	East Asia and Pacific	4,000,000	1,000,000			
China, Indonesia	East Asia and Pacific	8,000,000	2,000,000			
Turkey	Europe and Central Asia	4,000,000	1,000,000			
Dominican Republic, Surname	Latin America and the Caribbean	800,000	200,000			
Brazil, Mexico	Latin America and the Caribbean	4,000,000	1,000,000			
Algeria, Iraq, Tunisia, Yemen, Rep.	Middle East and North Africa	2,400,000	600,000			
Egypt, Arab Rep.	Middle East and North Africa	4,000,000	1,000,000			
Bangladesh, Pakistan	South Asia	4,000,000	1,000,000			
India	South Asia	8,000,000	2,000,000			

Source: Alive and Thrive 2013, 2014; Walters et al. 2016. Note: All unit costs from the literature were converted into US\$ and inflated to 2015 values. More detail on assumptions used about current coverage and implementation of pro-breastfeeding social policies is described in chapter 5.

Country	Region	Unit cost used in the analyses (2015 US\$) ^a	Sources and assumptions
Chad, Mali, Niger	Sub-Saharan Africa	135.33	Unit cost from Mali; Shekar et al. 201
Djibouti, Eritrea, Republic of South Sudan, Sudan	Sub-Saharan Africa	95.17	Based on Dayton Eberwein et al. forthcoming. Assumptions: 100% receive outpatient treatment (\$83.32 [82% inputs]); in addition, 15% of children have complications and need additional inpatient treatment (\$79.03 per case). Total unit cost: 83.32 + 79.03* 0.15 = 95.17
Congo, Dem. Rep.	Sub-Saharan Africa	162.00	Shekar et al. 2015
Ethiopia	Sub-Saharan Africa	147.74	Tekeste et al. 2012
Nigeria	Sub-Saharan Africa	160.00	UNICEF Nigeria 2015
China, Indonesia, Myanmar, Philippines, Timor- Leste, Vietnam	East Asia and Pacific	57.49	Unit cost from Vietnam; Alive and Thrive 2013, Assumptions: 2013 cost per case without complications: VND 1,252,197 (US\$55.69) and with complications: VND 1,435,897 (US\$63.85); assume 15% of cases are with complications; weighted average unit cost is VND 1,270,567 (US\$56.5); assume exchange rate of US\$1 = VND 22,727.27 [12/1/2015]
Egypt, Arab Rep., Iraq, Yemen, Rep	Middle East and North Africa	218.90	Average from Africa: Assumed that input (RUTF) cost will not be different from the African average (\$70); noninput costs (e.g., labor) were adjusted by WHO CHOICE multiplier of 2.20; (137.68 – 70) * 2.20 + 70 = 218.9
Afghanistan, Pakistan	South Asia	158.15	Unit cost from Pakistan; UNICEF 2012
Bangladesh	South Asia	179.97	Puett et al. 2013
India, Sri Lanka	South Asia	107.38	Unit cost from India; Menon, McDonald, and Chakrabati 2016

Table C.4 Unit Costs of Interventions to Treat Severe Acute Malnutrition

Note: RUTF = ready-to-use therapeutic food; VND = Vietnamese dong. a. All unit costs from the literature were converted into U.S.\$ and inflated to 2015 values.

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LAMPIRAN D

Current Government Investments in Nutrition

Table D.1 presents estimates of government investments on nutrition specific programs by source, indicating where expenditure data versus budget data were available. These data were compiled through a systematic review of all available data on government nutrition financing, as described in chapter 8.

Although access to data on government financing for nutrition is limited, efforts to track government investments in nutrition have been growing as a result of promotion by the Scaling Up Nutrition (SUN) Movement and other platforms advocating for countries to build an investment case for nutrition. Data availability has come a long way forward over the last few years. However, many limitations in the quantity and quality of government nutrition financing data still exist. With the paucity of domestic expenditure data in the public domain, it is impossible to get a precise estimate of what is actually spent on nutrition programming. Even when data on nutrition budget allocations and expenditures do exist, the granularity of this information at the program and project level is commonly not accessible. More research is needed in this area, along with capac- ity building to ensure financial tracking systems are established within countries and used to monitor progress toward national nutrition plans.

Table D.1 Estimates of Government Expenditure on Nutrition Programs, Various Sources

Country	Source	Type of financing data	Most recent data year	Total GEN (US\$, millions) ^a	GEN per stunted child under five (US\$) ^b	GEN per child under five (US\$) ^b	GEN as a share of GGE (%) ^b	GEN as a share of GHE (%) ^b
Low-income count	ries (n = 15)			53.34	2.09	0.85	0.15	1.38
Benin	GHED	Expenditure	2012	0.37	0.65	0.22	0.02	0.20
Burkina Faso	GHED	Expenditure	2013	1.00	1.02	0.32	0.03	0.22
Burundi	GHED	Expenditure	2012	9.00	9.09	4.49	1.02	8.18
Cambodia	GHED	Expenditure	2012	0.20	0.35	0.11	0.01	0.09
Comoros	GNR adjusted	Approved budget allocation	2014	0.06	1.75	0.54	0.03	0.47
Congo, Dem. Rep.	GHED	Expenditure	2013	3.00	0.53	0.24	0.05	0.54
Ethiopia	GHED	Expenditure	2008	2.23	0.38	0.15	0.03	0.17
Haiti	GHED	Expenditure	2012	0.03	0.10	0.02	0.00	0.05
Madagascar	GNR adjusted	Approved budget allocation	2014	1.01	0.62	0.38	0.05	0.34
Malawi	Save the Children budget analysis	Approved budget allocation	2014	0.81	0.66	0.10	0.04	0.44
Nepal	GNR adjusted & SPRING	Approved budget allocation	2014	1.75	1.64	0.62	0.05	0.34
Niger	GHED	Expenditure	2013	12.00	7.57	3.01	0.58	6.73
South Sudan	GNR adjusted	Approved budget allocation	2012	0.01	0.01	0.00	0.00	0.01
Tanzania	PER	Expenditure	2012	21.30	6.70	2.37	0.28	2.82
Uganda	GHED	Expenditure	2012	0.57	0.25	0.08	0.01	0.06

Country	Source	Type of financing data	Most recent data year	Total GEN (US\$, millions) ²	GEN per stunted child under five (US\$) ^b	GEN per child under five (US\$) ^b	GEN as a share of GGE (%) ^b	GEN as a share of GHE (%) ^b
Lower middle-income countries $(n = 13)$				2240.37	11.85	4.67	0.14	1.55
Bangladesh	GNR adjusted	Approved budget allocation	2014	45.00	8.11	2.96	0.18	1.84
Cameroon	GHED	Expenditure	2011	0.06	0.05	0.01	0.00	0.01
Côte d'Ivoire	GHED	Expenditure	2013	1.91	1.89	0.56	0.03	0.32
Guatemala	Budget analysis	Expenditure	2014	63.11	66.16	27.20	0.81	4.48
India	Budget analysis	Approved budget allocation; Expenditures	2013	2060.46	33.13	16.86	0.41	8.59
Indonesia	Budget analysis	Approved budget allocation; Expenditures	2015	18.96	2.16	0.83	0.01	0.19
Kenya	GHED	Expenditure	2013	5.02	2.73	0.69	0.04	0.49
Lesotho	GNR adjusted	Approved budget allocation	2014	1.39	15.28	5.25	0.09	0.62
Mauritania	GHED	Expenditure	2013	1.63	12.91	2.71	0.11	2.11
Pakistan	GNR adjusted	Approved budget allocation	2014	16.06	1.50	0.75	0.03	0.66
Philippines	GNR adjusted	Approved budget allocation	2012	22.06	6.60	1.89	0.05	0.63
Vietnam	GNR adjusted	Approved budget allocation	2014	3.53	2.39	0.50	0.01	0.35
Zambia	Save the Children budget analysis	Approved budget allocation	2014	1.18	1.08	0.41	0.02	1.34

Table D.1 Estimates of Government Expenditure on Nutrition Programs from Various Sources (continued)

Table D.1 Estimates of Government Expenditure on Nutrition Programs from Various Sources (continued)

Country	Source	Type of financing data	Most recent data year	Total GEN (US\$, millions) ^a	GEN per stunted child under five (US\$) ^b	GEN per child under five (US\$) ^b	GEN as a share of GGE (%) ^b	GEN as a share of GHE (%) ^b
Upper-middle-income countries $(n = 3)$				227.82	54.50	8.14	0.03	0.23
Brazil	Budget analysis	Approved budget allocation	2015	57.21	48.1	3.88	0.01	0.05
Mexico	Budget analysis	Approved budget allocation	2014	118.85	75.11	10.73	0.03	0.28
South Africa	Budget analysis	Approved budget allocation	2015	51.76	40.28	9.83	0.05	0.35
All low-and middle-income countries $(n = 31)$				2521.53	11.25	3.16	0.13	1.34

Note: GEN = government expenditure on nutrition; GGE = general government expenditure; GHE = government health expenditure; GHED = Global Health Expenditure Database (WHO 2015); GNR = Global Nutrition Report (IFPRI 2014); PER = public expenditure review; SPRING = Strengthening Partnerships, Results, and Innovations in Nutrition Globally. *GNR adjusted* means that the reported figure was adjusted by an internal standardization process to be able to compare data points (described in chapter 8).

a. Income group categories are reported as totals across income groups.

b. Income group categories are reported as averages across income groups.

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LAMPIRAN E

Current Development Assistance for Nutrition Across Aid Categories

All data on donor funding for nutrition were extracted from the Creditor Reporting System (CRS) of the Organisation for Economic Co-operation and Development (OECD).

Table E.1 provides a summary of all the purpose codes included in this analysis. As discussed in chapter 8, the basic nutrition purpose code does not capture all official development assistance (ODA) for nutrition, so multiple purpose codes within health and emergency relief—identified by stakeholders as most likely purpose codes to contain nutrition programs—were explored. The following section describes in more detail the methods used for exploring the other purpose codes.

Capturing Nutrition Investments within the CRS Purpose Code for Basic Nutrition

Chapter 8 described the methods used to track intervention-level disbursements within the basic nutrition purpose code. Table E.2 presents the results of this analysis by showing the breakdown of how disbursements for basic nutrition to the 60 highest-burden countries are distributed between interventions.

Capturing Nutrition Investments within CRS Purpose Codes for Health

In practice, nutrition interventions are often delivered through maternal and child health programs and other health initiatives, and ODA for these programs is most often coded under health. To that end, this study analyzed ODA disbursement data under six health codes: basic health care, reproductive health, health education, health personnel development, infectious disease, and person- nel development for population and reproductive health. These six were chosen through consultations with nutrition financing experts, donors, and nutrition advocates, and desk research.

Purpose code	Purpose code name	Total disbursements in 2013 (US\$, millions)	Screening method used	Percent of projects screened under the purpose code using the related method	Percent of disbursements found to be aligned with the costed package of interventions
12240	Basic nutrition	946	Project-level categorization	70 (n = 945)	53.0a
12220	Basic health care	3,217	Keyword search	100	0.9
12250	Infectious disease control	1,369	Keyword search	100	< 0.01
12261	Health education	167	Keyword search	100	1.5
12281	Health personnel development	107	Keyword search	100	2.4
13020	Reproductive health care	1,678	Keyword search	100	5.7
13081	Personnel development for population & reproductive health	68	Keyword search	100	0.0
51010	General budget support-related aid	9,629	Keyword search	100	0.0
52010	Food aid/food security programs	1,290	Keyword search	100	2.0
53030	Import support (capital goods)	315	Keyword search	100	0.0
53040	Import support (commodities)	58	Keyword search	100	0.0
72010	Material relief assistance and services	7,405	Keyword search	100	1.2
72040	Emergency food aid	3,835	Keyword search	100	5.3
72050	Relief coordination; protection and support services	835	Keyword search	100	0.5
73010	Reconstruction relief and rehabilitation	625	Keyword search	100	0.0
74010	Disaster prevention and preparedness	1,017	Keyword search	100	0.2%

Source: Compiled by authors based on 2013 disbursement data from the Creditor Reporting System (CRS) of the Organisation for Economic Co-operation and Development (OECD) (OECD 2016). a. Remaining disbursements within the basic nutrition code went toward interventions not included in the costed package of interventions (including deworming and salt iodization), nutrition-sensitive interventions such as school feeding, and unspecified disbursements.

Intervention category	Averageallocation(%)	
Infant and young child nutrition counseling	13.7	
Treatment of acute malnutrition	15.2	
Deworming	0.5	
Supplementation		
Iron and folic acid for pregnant women	0.6	
Micronutrientpowdersforchildrenandpregnantwomen	0.7	
Therapeutic zinc and oral rehydration solution	3.6	
Vitamin A for children	1.3	
Public provision of complementary food	4.1	
Salt iodization	0.2	
Staple food fortification	2.7	
Research and development	2.6	
System strengthening	12.7	
Nutrition-sensitive ^a	42.1	

Table E.2 Average Segmentation of Basic Nutrition (Purpose Code 12240) Disbursements in 2013, by Intervention/Activity in 60 Countries

Source: Compiled using 2013 disbursement data from the Creditor Reporting System (CRS) of the Organisation for Economic Co-operation and Development (OECD) (OECD 2016).

a. Nutrition-sensitive includes school feeding programs, household food security interventions, food safety programs, women's empowerment interventions, and other nutrition-sensitive programs.

A keyword search for "nutrition" was conducted within project titles and short/ long descriptions of the additional health codes (table E.1).¹ For pur- pose codes for basic health care, reproductive health, health education, and health personnel development, projects containing the word nutrition repre- sented 1 to 6 percent of total disbursements to that code. No mention of nutrition was found within the code for personnel development for popula- tion and reproductive health.

A rapid assessment of project descriptions indicated that the majority of these disbursements were linked to the following interventions: infant and young child nutrition counseling, treatment of severe acute malnutrition for children, antenatal micronutrient supplementation, vitamin A supplementation for children, and prophylactic zinc supplementation for children. In order to disaggregate the estimated nutrition disbursement by the interventions included in the health code, the same relative-cost weighting method that was used for the basic nutri- tion code analysis, as described in chapter 8, was employed.

Capturing Nutrition Investments within CRS Purpose Codes for Emergency Reliefand Food Aid

A similar methodology was used for the additional health codes on emergency and food aid codes. Keyword searches for "nutrition," "community based manage- ment of acute malnutrition," "severe acute malnutrition," "ready to use therapeu- tic foods," and all acronyms used to describe these terms were conducted across project descriptions. The following purpose codes were included: general budget support-related aid, food aid/food security programs, import support, material relief assistance and services, emergency food aid, relief coordination, reconstruction relief and rehabilitation, and disaster prevention and preparedness. No mention of the keywords was found in general budget support-related aid or import support (capital goods and commodities), so these codes were removed from the rest of the analysis.

Table E.1 shows that from less than 1 percent to a maximum of 5 percent of disbursements to these purpose codes were captured within the keyword search. Rapid assessment of project descriptions indicated that all disbursements were targeted toward the treatment of severe acute malnutrition for children.

Searching for Food Fortification

The agriculture sector code (311) was analyzed to search for funding for food fortification efforts. No additional financing for staple food fortification was found within this code.

Note

1. When downloaded, data had been last updated by the OECD CRS on October 19, 2015.

Reference

OECD (Organisation for Economic Co-operation and Development). 2016. Creditor Reporting System Database (CRS). https://stats.oecd.org/Indix.aspx?DataSetCode=CRS1

KERANGKA INVESTASI UNTUK NUTRISI

Mencapai Target Global Untuk Stunting, Anemia, Menyusui dan Wasting

Kerangka Kerja Investasi untuk Gizi: Mencapai Target Global untuk Stunting, Anemia, Pemberian ASI dan Wasting memperkirakan biaya, dampak dan skenario pembiayaan untuk mencapai target gizi global dari Majelis Kesehatan Dunia untuk stunting, anemia pada wanita, menyusui eksklusif dan peningkatan pengobatan wasting yang parah di antara anak-anak.

Untuk mencapai keempat target tersebut, dunia membutuhkan dana sebesar US\$ 70 miliar selama 10 tahun untuk berinvestasi pada intervensi gizi yang berdampak besar. Investasi ini akan memberikan manfaat yang sangat besar : 65 juta kasus stunting dan 265 juta kasus anemia pada perempuan dapat dicegah pada tahun 2025 dibandingkan dengan data dasar tahun 2015. Selain itu, setidaknya 91 juta anak akan mendapatkan perawatan untuk wasting yang parah dan 105 juta bayi akan mendapatkan ASI eksklusif selama enam bulan pertama dalam kurun waktu 10 tahun. Secara keseluruhan, pencapaian target-target ini akan mencegah setidaknya 3,7 juta kematian anak. Setiap dolar yang diinvestasikan dalam paket intervensi ini akan menghasilkan keuntungan ekonomi antara US\$ 4 hingga US\$ 35, sehingga menjadikan investasi di bidang gizi awal sebagai salah satu tindakan pembangunan dengan nilai terbaik. Meskipun beberapa target, terutama target untuk mengurangi stunting pada anak dan anemia pada perempuan, cukup ambisius dan membutuhkan upaya bersama dalam hal pembiayaan, perluasan, dan komitmen yang berkelanjutan, pengalaman terbaru dari beberapa negara menunjukkan bahwa pencapaian target ini dapat dilakukan. Investasi ini dalam periode 1000 hari yang kritis pada anak usia dini tidak dapat dicabut dan tidak dapat dipulihkan dan akan memberikan keuntungan seumur hidup, tidak hanya bagi anak-anak yang terkena dampak langsung tetapi juga bagi kita semua dalam bentuk masyarakat yang lebih kuat yang akan mendorong ekonomi masa depan.





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