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# Gender-Inclusive Nutrition Activities in South Asia

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## *Mapping Report*

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South Asia Region - Social Development Unit  
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## Executive Summary

This report is the first of a series that will explore how gender can be more comprehensively incorporated into nutrition interventions in the South Asia Region in order to improve the effectiveness these programs. The first section presents the rationale for considering gender in nutrition programs in the first place, moving beyond traditional services for mothers and children. It draws from the literature to describe why gender is an important factor for the high undernutrition rates in South Asia and how a broad range of gender issues, rooted in a mother's capacity to care for herself and her child, affect nutritional outcomes of children. The first section concludes by identifying six key issues that a gender-aware program should ideally address: the mother's (1) knowledge and skills; (2) physical health; (3) support from other household members; (4) support from the community; (5) autonomy to make decisions and control resources; and (6) mental health.

The second section presents the results of a mapping of nutrition programs in the South Asia Region. The mapping primarily finds that, despite its importance, gender is too narrowly addressed in most interventions. Existing programs typically focus on the first two approaches mentioned above: imparting nutritional knowledge and skills to the caregiver and improving physical health through food or micronutrient supplements and health services. While knowledge and physical health are indeed essential to enhancing a mother's capacity to provide care, the remaining four "social" factors described above – household support, community support, autonomy and resource control, and mental health – which are critical to actually administering care~ are usually ignored. Additionally, the mapping finds that programs generally do not target adolescent girls who have high rates of undernutrition and bear children at an early age.

Fortunately, these "social" factors are not universally overlooked. The third section identifies several nutrition and health projects that have adopted promising approaches to include gender more comprehensively. To improve household support for the mother in providing child care, efforts to engage other members of the household such as fathers, grandmothers, and mothers-in-law appear promising. To enhance community support, interventions that leverage local groups or create mass awareness of essential nutrition actions using communications technologies such as mobile phones can be effective. To compensate for a lack of autonomy and resource constraints, programs have supported time-saving technologies as well as home gardens or other home-based economic activities under a mothers' control. Lastly, adolescent girls have been more effectively targeted through school-based interventions and by specifically incentivizing their participation in nutrition programs. Only mental health proved to be an area not exclusively addressed by any programs identified by the mapping exercise.

The final section concludes by recommending five steps to more comprehensively address gender in nutrition interventions: (1) Begin a dialogue with policymakers inside development institutions and governments to expand the conversation on gender with regard to nutrition interventions that extends beyond mothers and children. (2) Collect low hanging fruit: existing development interventions that engage adolescent girls should include a nutrition component. (3) Facilitate the generation of new ideas to address the programmatic gaps and improve targeting. (4) Evaluate promising approaches for effectiveness, scalability and applicability in different cultural contexts. (5) Conduct additional research in previously overlooked areas and fill gaps in existing data.

## Acknowledgements

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## List of Acronyms

AAMA	Action Against Malnutrition through Agriculture
ABCN	Area Based Community Nutrition Program
ADB	Asian Development Bank
AKDN	Agha Khan Foundation
AKHS	Aga Khan Health Services
ANDS	Afghanistan's National Development Strategy
ARDS	Agriculture and Rural Development Sector Strategy
AWW	Accredited Social Health Activist
BASICS	Basic Support for Institutionalizing Child Survival
BCC	Behavior Change Communication
BINP	Bangladesh's Integrated Nutrition Program
BMI	Body Mass Index
BNNC	Bangladesh National Nutrition Council
BPHS	Basic Package of Health Services
BPNI	Breast Feeding Promotion Network of India
BVF	Baby Friendly Villages
CAF	Care for Afghan Families
CCDP	Child Care and Development Program
CCP	Center for Communications Programs
CDN	Child Development and Nutrition Program
CENWOR	Center for Women's Research
CIDA	Canadian International Development Agency
CIP	Country Investment Plan
CMAM	Community Based Management of Acute Malnutrition
CNP	Community Nutrition Program
DACAW	Decentralized Action for Children and Women
DFID	UK Department for International Development
DGFP	Directorate General of Family Planning
DGHS	Directorate of Health Services
DHS	Demographic Health Survey
EAN	Equal Access Nepal

EC	European Commission
ECCD	Integrated Early Childhood Care and Development Program
EKATA	Empowerment, Knowledge and Transformation Action
ELA	Livelihoods for Adolescents
ELA	Employment and Livelihoods for Adolescents Program
ENA	Essential Nutrition Actions
EPI	National Expanded Program on Immunizations
EU	European Union
FANTA 2	Food and Nutrition Technical Assistance 2
FAO	Food and Agriculture Organization
FHAG	Family Health Action Groups
FHB	Family Health Bureau
FHM	Family Health Bureau
FNSP	Food and Nutrition Security Policy
GAFSF	Global Agriculture and Food Security Program
GAIN	Global Alliance for Improved Nutrition
GDP	Gross Domestic Product
GESI	Gender Equity and Social Inclusion
GIP	Girls Incentive Programme
GIP	Girls Incentive Programme
HANDS	Health and Nutrition Development Society
HAPPI	Healthy and Positive Pregnancy Initiative
HED	Home Economics Department
HFP	Homestead Food Production
HKI	Helen Keller International
HNPSF	new Health, Nutrition and Population Sector Program
HNSS	Health and Nutrition Sector Strategy
HPNSDP	Health, Population, and Nutrition Sector Development Program
IBFAN	International Breast Feeding Action Network
ICDDR	International Center for Diarrheal Disease Research
ICDS	Integrated Child Development Services
ICRW	International Center for Research on Women
ICRW	Center for Research on Women
IDA	International Development Association
IDD	Iodine Deficiency Disorders
IDS	Institute for Development Studies
IDS	Institute for Development Studies
IEC	Information, Education and Communication
IFPRI	International Food Policy Research Institute
IMCI	Integrated Management of Childhood Illness
INF	International Nepal Fellowship
INP	Integrated Nutrition Program
IPHN	Institute of Public Health Nutrition

IWEP	Swayamsidha Program
IWGG	Interagency Working Group on Gender
IYCF	Infant and Young Child Feeding
JHU	Johns Hopkins University
JICA	Japan International Cooperation Agency
JPAL	Abdul Latif Jameel Poverty Action Lab
JSI	John Snow Inc.
KK	Kishoree Kontha
KSY	Kishori Shakti Yojana
LHW	Lady Health Workers Program
LMRF	Lata Medical Research Foundation
LSMS	Living Standard Measurement Survey
MAIL	Ministry of Agriculture, Irrigation, and Livestock
MCH	Maternal and Child Health
MCH	Integrated Maternal and Child Health
MCHN	Improve Maternal and Child Health and Nutrition Program
MDM	Mid-Day meal Program
MFDM	Ministry of Food and Disaster Management
MI	Micronutrient Initiative
MICS	Multiple Indicator Cluster Survey
MNCH	Maternal, Neonatal and Child Health Care Program
MNCH	National Maternal, Newborn and Child Health Program
MOH	Ministry of Health
MOH	Ministry of Healthcare and Nutrition
MOH&FW	Ministry of Health and Family Welfare
MOHF	Ministry of Health and Family
MOHP	Ministry of Health and Population
MOPH	Ministry of Public Health
MOWC	Ministry of Women and Children Affairs
MOWCA	Ministry of Women and Children's Affairs
MOWCD	National Rural Health Mission
MOWCSW	Ministry of Women, Child and Social Welfare
MSF	Medicines Sans Fronteir
MTDF	Mid Term Development Framework
MVP	Model Villages Program
MYAP	Multi Year Assistance Program
NAGA	Nutrition Assessment and Gap Analysis
NCCP	Nutrition Coordinating Committee at Provincial Level
NCU	Nutrition Coordination Unit
NCWC	National Commission for Women and Children
NFHS 3	National Family Health Survey 3
NFP	National Food Policy
NFPPA	National Food Policy Plan of Action



NGO	Non Government Organization
NHED	Anganwadi Workers
NHSP II	National Health Sector Programme II
NNCC	National Nutrition Coordination Committee
NNG	Nepal Nutrition Group
NNP	National Nutrition Plan
NNS	National Nutrition Services
NNS	National Nutrition Survey
NNSC	National Nutrition Steering Committee
NNSP	National Nutrition Strategic Plan of Action
NP	National Nutrition Program
NPA	National Plan of Action
NPAG	Nutrition Program for Adolescent Girls
NPAN	National Plan of Action for Nutrition
NRHM	Ministry of Women and Child Development
NRHM	Nutrition, Health and Education
NRHM	National Rural Health Mission
NRLM	National Rural Livelihood Mission
NSAPR II	National Strategy for Accelerated Poverty Reduction II
NWG	Nutrition Working Group
PD/HEARTH	Positive Deviance/Hearth Approach
PHM	Public Health Midwives
PINS	Pakistan Integrated Nutrition Strategy
PND	Public Nutrition Department
PNDS	The Pakistan Nutrition and Dietetic Society
PNPS	Public Nutrition Policy and Strategy
PNS	Public Nutrition Strategy
RACHNA	Reproductive and Child Health, Nutrition and HIV/AIDS
RCH	Reproductive and Child Health
SABLA	Rajiv Gandhi Scheme for Empowerment of Adolescent Girls
SAFANSI	South Asia Food and Nutrition Security Initiative
SBCC	Social and Behavior Change Communication
SHE	Society for Health Education
SIDA	Swedish International Development Agency
SOFEA	Social and Financial Empowerment of Adolescents Program
SPRING	Strengthening Partnerships, Results and Innovations in Nutrition Globally
TIBF	International Bhutan Foundation
TMSS	Thengamara Mohila Sabuj Sangha
TPP	Tawana Pakistan Project
UN	United Nations
UNFPA	United Nations Population Fund
UNHCR	United Nations High Commissioner for Refugees
UNICEF	United Nations Children's Fund

UNIDO	United Nations Industrial Development Organization
UNOCHA-HSU	United Nations office for the Coordination of Humanitarian Affairs
USAID	United States Agency for International Development
WABA	World Alliance for Breastfeeding Action
WFP	World Food Program
WHO	World Health Organization
YCSD	Young Child Survival and Development Program

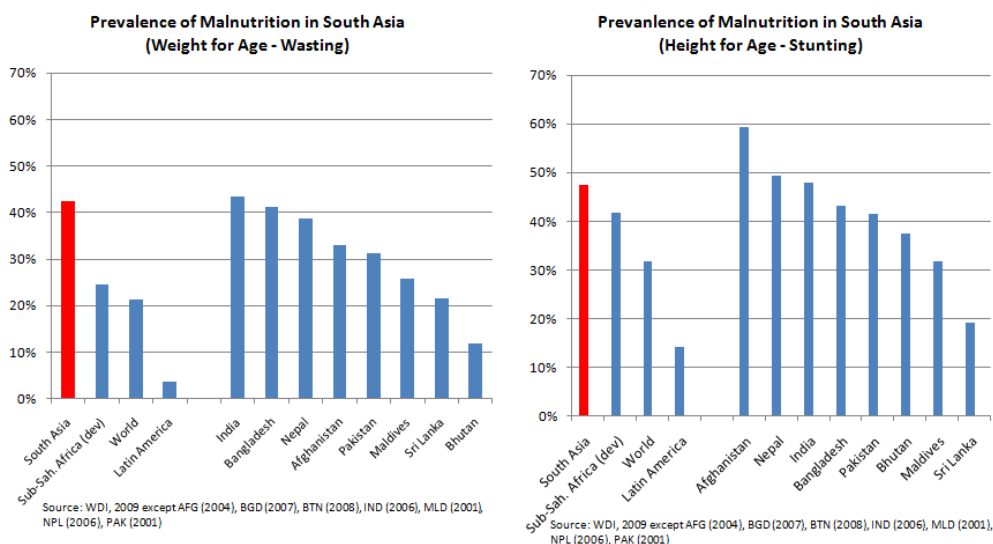
# Gender-Inclusive Nutrition Activities in South Asia

## I. Gender Matters for Undernutrition in South Asia

As compared to biological differences, (usually termed “sex”), gender refers to the “socially constructed and learned female and male roles, behaviors, and expectations” which translate biological differences between men and women into social norms that define appropriate activities, rights, resources, and power.<sup>1</sup> The literature draws empirical links between gender and nutritional outcomes and describes several pathways through which the impact occurs including preferential treatment of male children over female, expectations of marriage and childbirth at early, adolescent ages, and a woman’s capacity to care for herself and her children during pregnancy and after childbirth. As such, a broader conversation on gender is necessary even though nutrition programs already include pregnant women and mothers.

**Both gender equity indicators and undernutrition rates in South Asian countries are the worst in the world.** Undernutrition rates in South Asia are roughly double those of worldwide averages and over 15% higher than the next worst region, Sub-Saharan Africa (Figure 1). Further, as shown by the Gender Inequality Index ~ a composite of five variables (labor force participation, maternal mortality, adolescent fertility, educational attainment at secondary level or above, and parliamentary representation ~ SAR lags behind the rest of the world in gender parity (Figure 2).

Figure 1 - Undernutrition in South Asia



<sup>1</sup> (World Bank, 2011, p. 46).

Figure 2 - Gender Inequality Index (2011)<sup>2</sup>



The implications of undernutrition are dire: the condition is known to perpetuate poverty and have a significant impact on human development (Box 1 describes in greater details the indicators used to describe undernutrition and the implications of various types). Malnourished children are more susceptible to disease and death; they have a harder time learning in school; and, as adults, they are less productive.<sup>3</sup> Undernourished mothers are more likely to give birth to underweight children or die in childbirth. The economic costs of undernutrition are staggering for both individuals and societies. Individuals earn 10 percent less over a lifetime and the world economy loses 2-3% of Gross Domestic Product (GDP) due to undernutrition annually.<sup>4</sup>

#### Box 1: What does Undernutrition Mean and How is it measured?

Undernutrition is a broad term that refers to the outcome of inadequate intake of food (calories) or essential micronutrients that the body needs to grow, resist infection and disease, learn, perform physical work, and complete other essential bodily functions.

Health and nutrition studies typically describe undernutrition in children under five years of age using the following indicators:

- **Stunted** describes children with height measurements that are two standard deviations below the mean of the WHO Child Growth Standards median. “Stunted” can be interpreted to be indicator of cumulative effects of undernutrition and infection in utero and after birth. Stunting increases the likelihood of illness and poor health, reduces cognitive development, and lowers economic productivity. Women of small stature are more likely to give birth to babies with low birth weight.
- **Wasted** describes children with weight measurements that are two standard deviations below the WHO Standards median and. Since weight can change more quickly than height, wasting can be an indicator of both acute short-term reduction of food intake or stunting.
- **Underweight** describes children below two standard deviations of the WHO Standards median. This is a difficult indicator to interpret since it can reflect both wasting and stunting.
- **Low birth weight** describes babies that are less than 2500 grams (5.5 pounds) and indicates

<sup>2</sup> (UNDP 2011)

<sup>3</sup> (Victoria, et al., 2008)

<sup>4</sup> (World Bank, 2006, p. 2)

premature birth or restricted growth in the womb usually due to malnutrition, ill health, hard work or overall poor care of the mother during pregnancy.

#### Undernutrition in Adults:

- **Underweight or Thinness** describes adults who have body mass index (weight divided by height squared) less than 18.5. Mothers who are excessively thin are more likely to give birth to babies with low birth weight or suffer other complications during pregnancy and child birth.

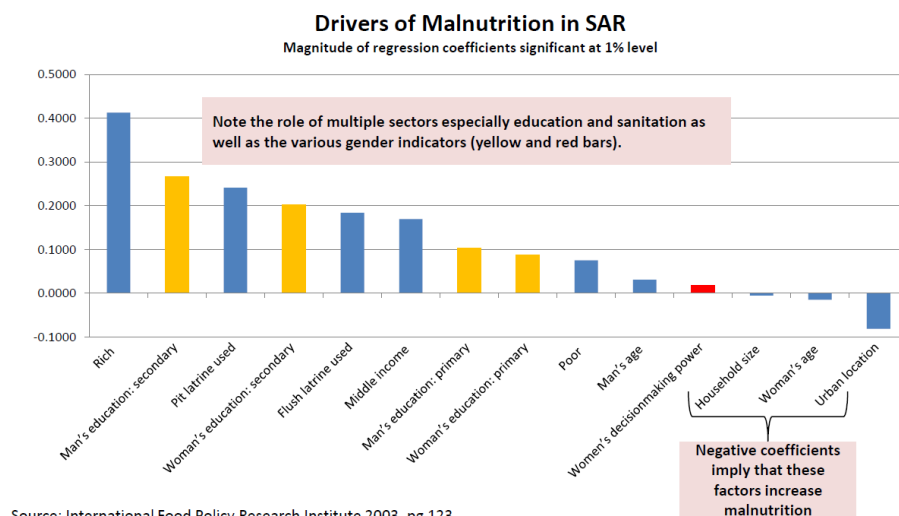
Micronutrient deficiencies for both children and adults can refer to inadequate levels of a number of critical vitamins and minerals. The following are commonly-observed deficiencies:

- **Anemia** describes a condition in which mothers or children below age five have hemoglobin concentrations in their blood below 110 grams/liter at sea level. Anemia indicates an iron deficiency but can also imply insufficient levels of folate, Vitamin B12 and Vitamin A. Anemia increases the risk of maternal and child mortality, reduces work capacity, and reduces physical and cognitive development.
- **Vitamin A deficiency** refers to blood concentration of Vitamin A of less than .7 micro-mols per liter in adults and children. The deficiency causes night-blindness (blindness in low light conditions) or, in severe forms, complete blindness. It can also reduce the ability to resist infections.
- **Iodine deficiency** refers to the condition of having an iodine concentration of 100 micrograms of iodine per liter in urine. This deficiency has significant implications for a child's mental development and survival.

Source: (WHO, 2010)

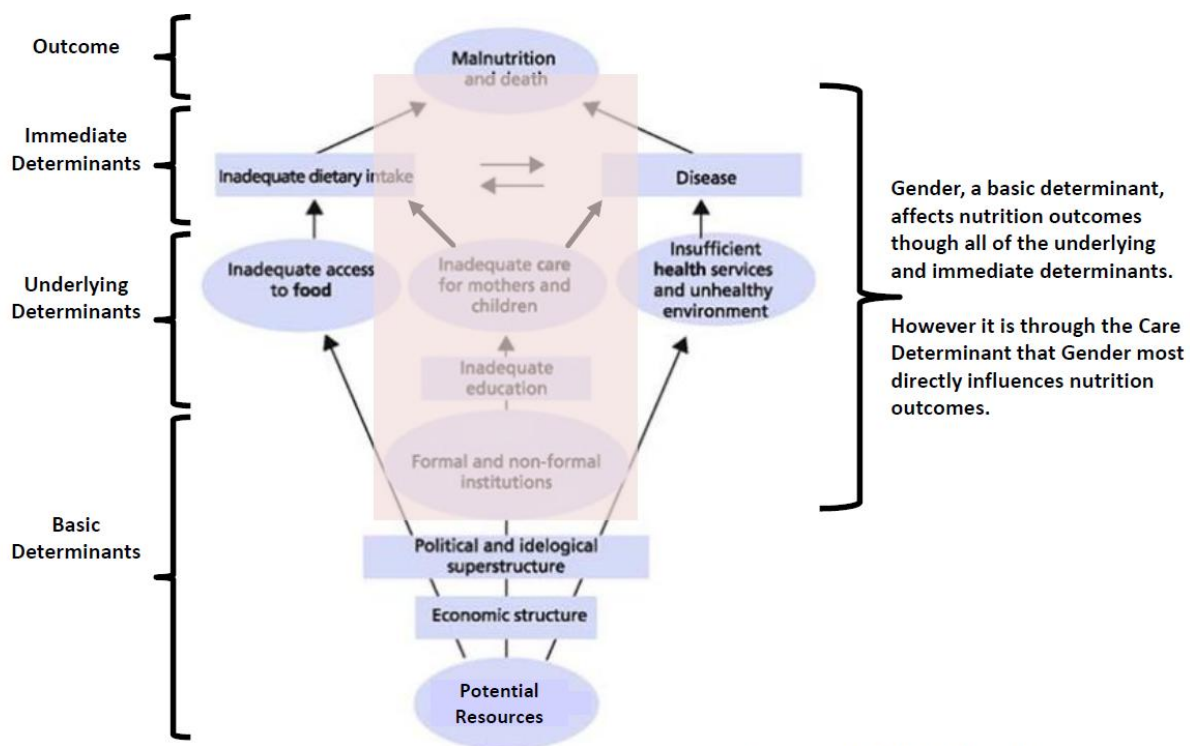
There is empirical evidence to suggest that gender, operating through women's status, is an important factor driving undernutrition in the region (Figure 3). Education, for both men and women, is also critical and is widely used an indicator of women's status.

Figure 3 - Drivers of Undernutrition in SAR



The theoretical determinants of malnutrition provide insight into the mechanisms through which low women's status affects nutrition outcomes.<sup>5</sup> As described in the diagram below (Figure 4), the immediate determinants of undernutrition are dietary intake and disease. These immediate determinants are in turn affected by underlying ~ or intermediate ~ determinants. For example, dietary intake is a function of (a) household food security and (b) the care that mother and child receive. The other immediate determinant, disease, is a function of again (b) the care that mother and child receive and (c) the health, environment, and other services available for care. Gender affects each link since men and women have different levels of access to resources and make different choices with regard to resource allocation.<sup>6</sup> Access to resources and these choices are shaped by the social norms around gender that define acceptable behavior, rights, access to resources, and the power to make decisions.

Figure 4 -- Determinants of Undernutrition



Source: UNICEF 1990

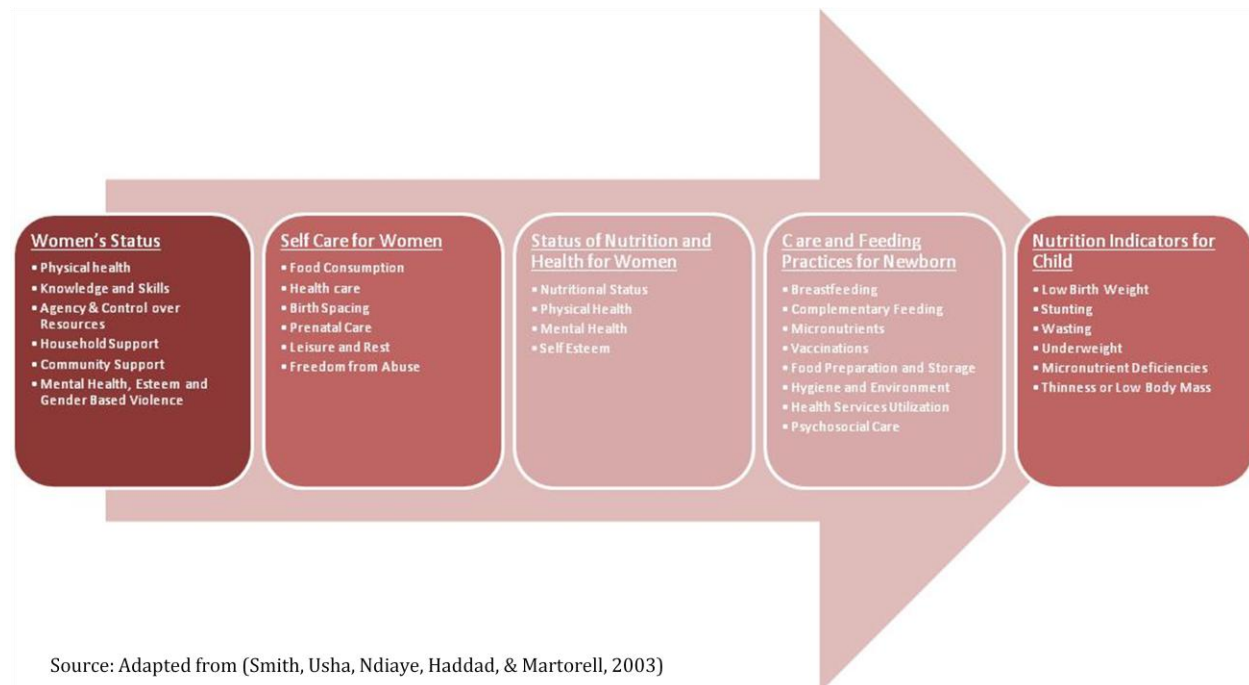
This report focuses on the linkages between women's status and nutrition operating through the care pathway since this intermediate factor affects both dietary intake and disease, the immediate determinants of undernutrition. A mother's low status in the household generally hampers her capacity to carry out critical infant and young child care practices such as breastfeeding, complementary feeding, or health services utilization. As the diagram describes

<sup>5</sup> (UNICEF, 1998, p. 24)

<sup>6</sup> There is a significant body of research that refutes the idea that households have unified preferences (the unitary model) in favor of collective models that account for differences in preferences amongst the members within a household. See for example (Alderman, Chiappori, Haddad, Hoddinott, & Kanbur, 1995).

(Figure 5)<sup>7</sup>, women's status describes: the mother's (1) knowledge and skills; (2) physical health; (3) support from other household members; (4) support from the community; (5) autonomy to make decisions and control resources; and (6) mental health. These factors affect child nutrition through a mother's capacity to take care of herself. This in turn also affects her health and nutritional status, which then directly affects the birth weight and nutritional status of the newborn and the quality of care the children receive.

Figure 5 –Implication of Women's Status on Care

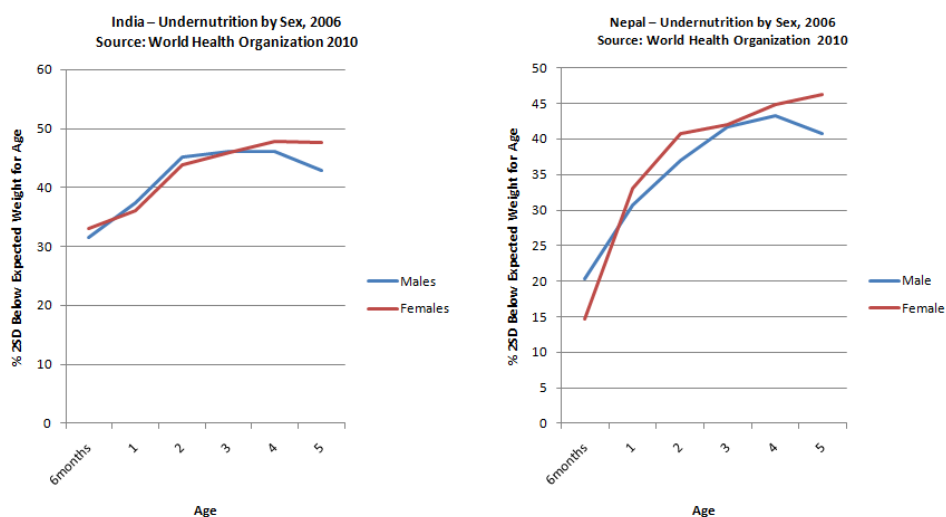


Adolescent girls have especially low status in South Asia, and child birth by undernourished mothers in adolescence transmits undernutrition to the next generation when babies are born with low birth weight or do not receive adequate nutrition while in the womb. As the gender statistics presented above for South Asia suggest, women face a lifetime of deprivation and inequality. Indeed, the preference for male children is so significant in the region that large numbers of women are “missing” due to sex selective abortions.<sup>8</sup> Yet, such male bias not only has negative health consequences for women but also impacts their children be they boys or girls. The data show that an alarming number of South Asian children are born undernourished, and that the gap in nutritional status between male and female children begins to widen around age 4 (Figure 6). Higher quality of food and care that boys receive compared to girls in the region results in differential nutritional outcomes.

<sup>7</sup> The framework is drawn from (Smith, Usha, Ndiaye, Haddad, & Martorell, 2003) and adapted from (Engle, Menon, & Haddad, 1999).

<sup>8</sup> (Sen, 2001)

**Figure 6 -- Gender Gap in Undernutrition: India and Nepal**



Such differential treatment in childhood continues into adolescence for girls, leading to poor nutritional status for them and their children. Social attitudes lead women to eat last and least, and adolescent girls are often pressured to marry and give birth at an early age (Table 1). Newly-married adolescent girls experience a substantial amount of change at a time when they typically have little control over reproductive decisions or agency in dividing household chores. In addition, they often face domestic violence.<sup>9</sup> Without sufficient status to take adequate care of themselves, they experience poor health, which in turn affects the health of their children.<sup>10</sup> Thinness of adolescent girls can lead to complications during pregnancy and birth, higher rates of maternal mortality as well as low birth weight for babies.<sup>11</sup> In the region, 30 percent of girls aged 15-19 are married – the highest rate in the world – and just over 20% of women have children before the age of 18. Indeed, 45% of adolescent girls in the region are thin, and 25 percent of babies are born with low birth weight, the worst rates worldwide. Such babies are more likely to die, suffer from undernutrition, and have cognitive impairments that affect their ability to learn and be productive.

**Table 1-- Key Statistics on Adolescent Girls<sup>12</sup>**

	Adolescent birth rate per 1,000 females aged 15 - 19 2000 - 2010	Women aged 20 – 24 who gave birth before age 18 (%) 2000 - 2010	Adolescent girls aged 15 – 19 with a BMI <18.5 (%) 2006 - 2010	Adolescents aged 15-19 currently married or in union (%) 2000 - 2010	Secondary school net enrollment ratio (%) 2007 -2010	Literacy rates (%) 2005 - 2010
Afghanistan	151	N/A	N/A	N/A	15	N/A
Bangladesh	133	40	35	46	43	77
Bhutan	46	N/A	N/A	15	49	68
India	45	22	47	30	N/A	74

<sup>9</sup> (Kapadia-Kundu, Khale, Upadhye, & Chavan, 2007)

<sup>10</sup> (Smith, Usha, Ndiaye, Haddad, & Martorell, 2003)

<sup>11</sup> (SCN 1998)

<sup>12</sup> (UNICEF, 2012)

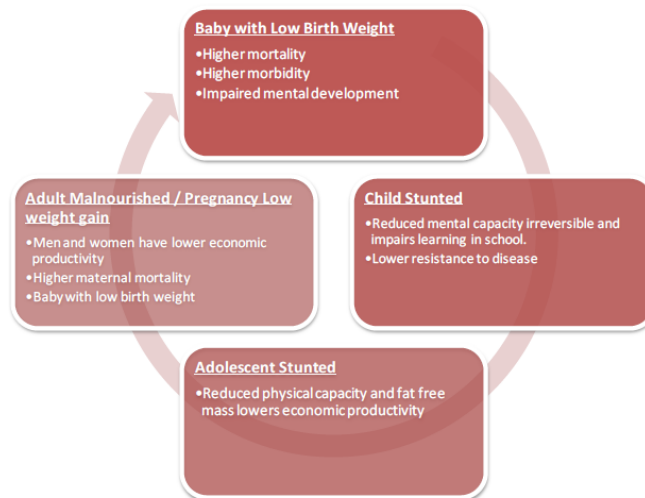


Maldives	15	1	24	5	N/A	99
Nepal	106	23	26	32	N/A	77
Pakistan	16	10	N/A	16	29	61
Sri Lanka	23	4	N/A	9	N/A	99

As such, gendered expectations around marriage and child birth combined with the undernutrition of female children that persists through adolescence can transmit undernutrition into the next generation of both boys and girls with consequences for their health, learning and economic status (Figure 7).

Thus, adequately addressing gender requires nutrition programs to focus not only on mothers but also on adolescent mothers. It requires programs to focus not only on health services for the mother, but also on the support she receives from the household and community, her autonomy, and her mental health and self-esteem.

**Figure 7 - Nutrition Across the Lifecycle (Ransom & Elder, 2003)**



## **II. Nutrition Programs Address Gender Too Narrowly**

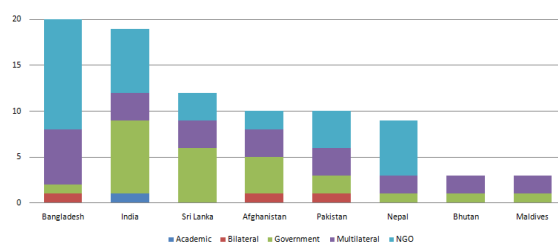
The following discussion addresses several questions:

1. What are the major nutrition programs and who are their major stakeholders?
2. Do government nutrition policies reflect an awareness of the importance of gender in nutrition?
3. Do nutrition interventions typically address gender and if so, how comprehensively do they cover the spectrum of relevant issues?
4. Are important groups such as adolescent girls specially targeted?
5. Do promising approaches exist that can be scaled-up or investigated further?

To answer these questions, a mapping exercise was conducted of nutrition interventions and policies across the South Asia region through a process of desk research and interviews with key policy makers, program managers, and researchers. A chain-referral sampling strategy was used to identify a network of stakeholders involved in nutrition and gender initiatives in the eight South Asian countries<sup>13</sup>; examination of secondary sources augmented the stakeholder interviews and vice versa. These initial interviews led to the identification of other stakeholders who were subsequently contacted and interviewed. Interviews were used to gather background information on the both the gender and nutrition issues in each country, identify relevant research and programs, and map out other stakeholders to interview. Sources were identified through Google Scholar searches using key words from the gender and nutrition framework described above. Specifically, searches included specific program information as well as general searches for nutrition, country and combinations of other relevant keywords.<sup>14</sup> A series of policy, program and literature summaries were produced for each country (see Country Appendices). These program summaries were then post coded according to which gender issues they addressed, what approach was used, and which groups they targeted. The national-level policy documents on nutrition were also examined for their references to gender

85 interventions with some type of gender component were identified which are currently being implemented or have recently been completed by governments, bi-laterals, multi-laterals, NGOs, or academic groups (Map 1). Often the work of the bi-lateral and multilateral organizations are in support of government programs and are not separate operations and these have not been included. Government is the primary provider of nutrition services in India, Sri Lanka, and Afghanistan whereas NGOs are the major players in Bangladesh and Nepal. Save the Children and CARE are amongst the most active NGOs. Amongst the international donors, UNICEF, WFP and World Bank along with USAID, a bilateral, have a significant presence in the region on the issue.

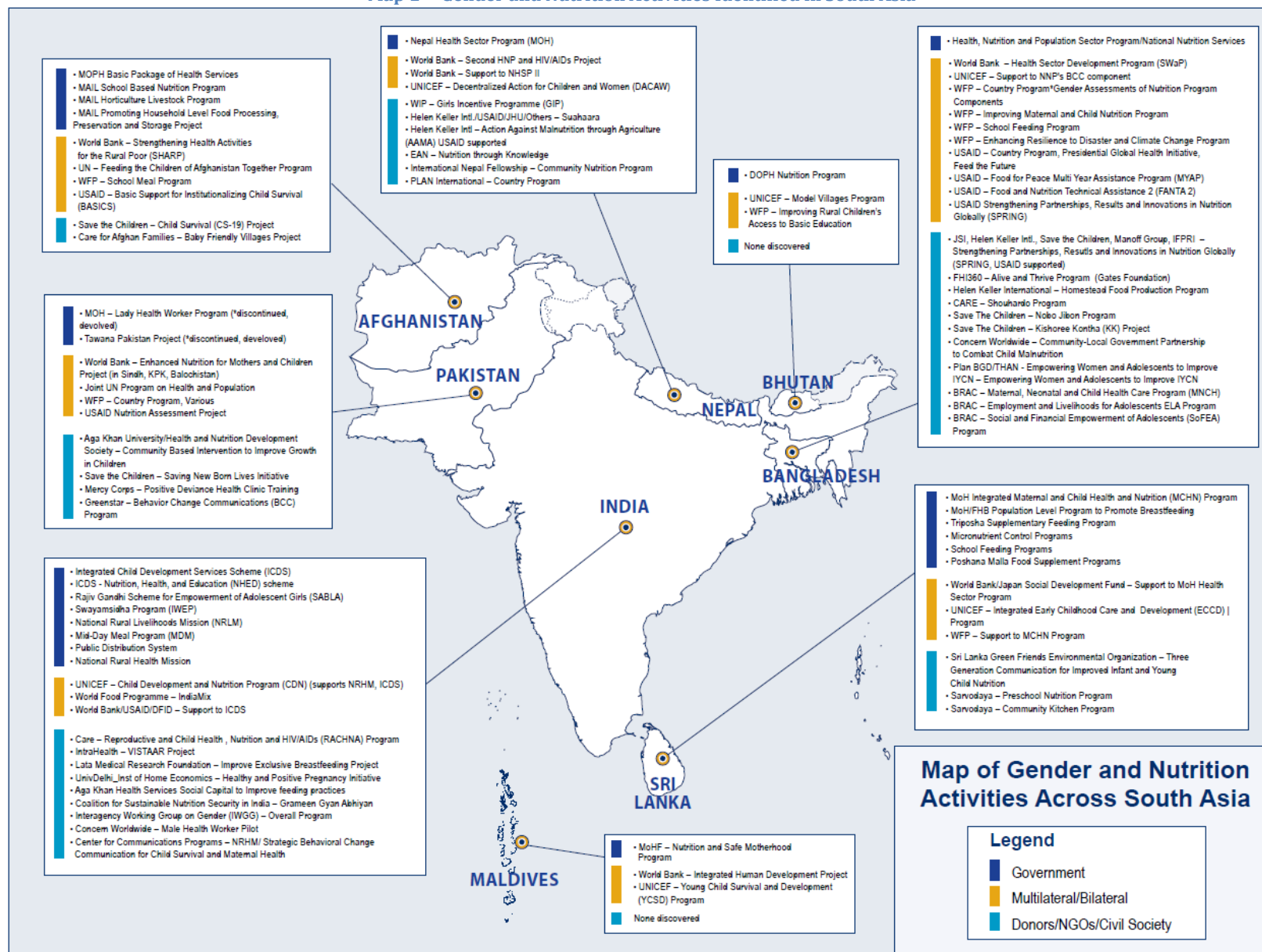
**Figure 8 - Regional Distribution of Nutrition Interventions With Gender Components**



<sup>13</sup> This technique is effective in identifying hidden or unknown stakeholders, and works by identifying initial (index) individuals who subsequently recommend additional stakeholders from within their circle of acquaintances (Schensul, Schensul, & LeCompte, 1999). For this study, index stakeholders included World Bank staff with expertise in nutrition and gender, authors of notable research papers on nutrition and gender, nutrition and gender focal points at key Ministries and country offices for development partner organizations (e.g., World Bank, UNICEF, FAO, WFP, WHO, USAID, DFID, and AusAid). Initial contact was made with index stakeholders via email and phone in December 2011. Semi-structured interviews were conducted in person and over the phone from December 2011 through January 2012 using a standard questionnaire developed for this study. A total of 35 stakeholders were interviewed during this period (Appendix 3, p174).

<sup>14</sup> These included: gender, education, access to and control over resources, autonomy, decision making and bargaining power, mothers time and childcare, mothers participation in productive work, alternative child care, paternal roles, technology that reduces time poverty, gender bias in society (i.e. different treatment, care, resources), maternal and paternal norms, values, and identities, and domestic violence.

Map 1 -- Gender and Nutrition Activities Identified in South Asia



**Finding 1: With a few exceptions, the national nutrition policies of South Asian countries do not adopt broad view of gender.** Nepal stands out among its South Asian peers and is currently developing an ambitious multi-sector nutrition plan that will coordinate the planning and implementation of nutrition activities across five ministries. This new plan calls for inclusiveness and gender equity, and includes strategies to empower women and improve leadership skills, address gender divisions of labor to reduce the workload on women, and improve adolescent girls' education, life skills, and nutrition. Other South Asian countries have policies and plans in place that typically include strategies to reach pregnant and lactating women, young children, and in some cases, adolescent girls. However, few plans include specific strategies to address the underlying gender-driven causes of undernutrition. Bangladesh and India have nutrition policies and action plans developed in the mid-nineties that are outdated, whereas Afghanistan, Bhutan, and Sri Lanka have recently updated their policies. Pakistan devolved its Ministry of Health in 2011, and provincial governments are in the process of developing their own nutrition policies and action plans to secure funding directly from development partners.

**Finding 2: The lack of availability of nutrition data is also a basic constraint for some countries (Table 2). Even less data for adolescent girls exists since most nutrition surveys and studies focus on pregnant and lactating women and children up to the age of five.** Recent Demographic Health Survey (DHS) data collected within the past six years is available for all South Asian countries, with the exception of Bhutan where no DHS data is available. Multiple Indicator Cluster Survey (MICS) data is available for most countries but is dated from 1995, with the exception of Bangladesh where a survey was completed in 2006 and Sri Lanka, which has no available data. A MICS for Bhutan appears to have been completed in 2010 and preliminary reports of that work are now available. Living Standard Measurement Survey (LSMS) data is only available for India, Nepal and Pakistan, and much of this data is outdated.

**Table 2 - Gaps in Health and Nutrition Data**

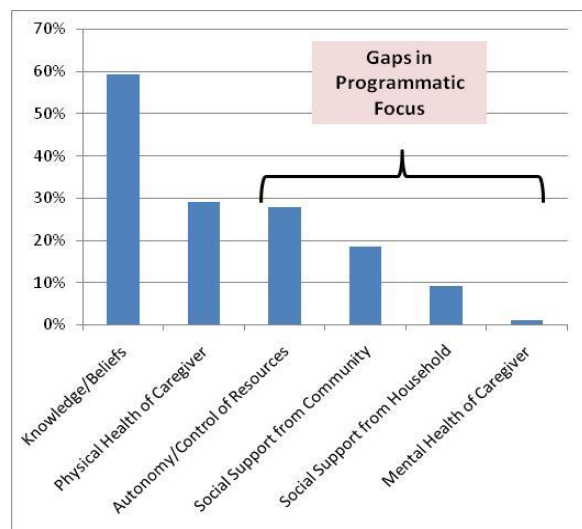
	DHS	MICS	LSMS	Other Data
Afghanistan	2010	1995	N/A	Best Estimates of Social Indicators for Children in Afghanistan 2006
Bangladesh	2007	2006	N/A	N/A
Bhutan	N/A	N/A	N/A	Multiple Indicator Survey 2010
India	2005-6	1995	1997	N/A
Maldives	2009	1995	N/A	N/A
Nepal	2006	1995	2003	2010-11 LSMS, 2010 MICS (Preliminary)
Pakistan	2006-7	1995	1991	N/A
Sri Lanka	2006-7	N/A	N/A	UNICEF Nutrition and Food Security Survey 2010

**Finding 3: Existing nutrition interventions do not address gender comprehensively.** With regard to gender, most nutrition programs are direct interventions that directly target pregnant women, lactating mothers, and young children. These interventions employ health services, food supplements and impart information through behavioral change communication (BCC) programs.

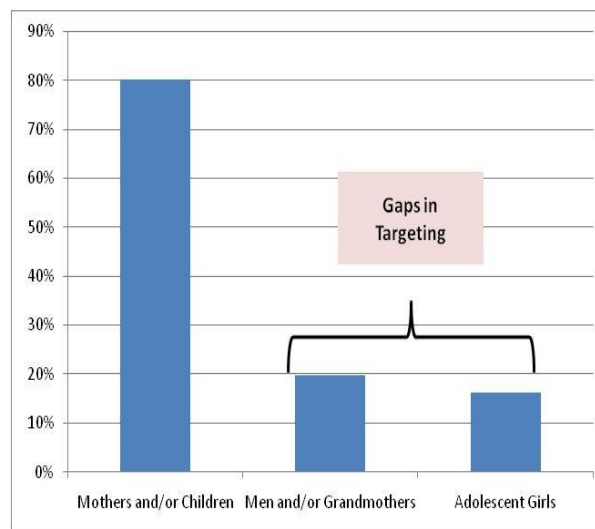
There is less emphasis on addressing other aspects of gender such as mental health, social support from the household or community, or control over resources (Figure 9).

**Finding 4: Nutrition interventions rarely target adolescent girls, fathers, or elderly women, reducing their effectiveness** (Figure 10). As noted above, most nutrition programs include a BCC component to teach mothers childcare and feeding practices, but BCC can be ineffective if it is not targeted with an understanding of the cultural context and gender dynamics in the household. For example, an evaluation of the Government of Bangladesh’s Integrated Nutrition Program (BINP) by UNICEF and Save the Children in 2005 found that the BCC activities did not achieve the desired behavior change since they did not engage mothers-in-law. Although women who entered into the program improved their knowledge, a large number of women did not put this knowledge into practice. Reasons for this lack of implementation included resource constraints (women in poorer households are less likely to eat more during pregnancies and those in households owning land or that had an elderly male relative were less likely to rest during pregnancy), and the role of mothers-in-law in enforcing traditional nutrition behaviors that contradict the BCC messages (White, 2009).

**Figure 9 – Gaps in Focus of Gender Components of Nutrition Activities Across SAR**



**Figure 10 - Target of Gender Components of Nutrition Activities Across SAR**



### III. Promising Interventions to More Comprehensively Address Gender

While most nutrition interventions focus on gender too narrowly, several promising programs point to a way forward to address gender more comprehensively. This section notes several such programs identified during the course of the mapping exercise. Some primarily tackle a specific gender issue such as improving household support or increasing autonomy and control of resources, while others focus on strengthening community support or on targeting adolescent girls. Most often, however, the categorization is not mutually exclusive as an intervention focused on a particular gender issue can have an impact on a number of others. Only programs addressing mental health and self-esteem and gender-based violence did not appear at all. Wherever possible, information regarding effectiveness of programs is noted. Generally, however, these interventions have been limited in implementation and scale, and efforts to evaluate their effectiveness have been inconsistent.

#### Household Support

Efforts to improve household support for the mother often incorporate husbands and elderly women in the household such as mothers-in-law or grandmothers. As noted earlier, instruction in care and feeding practices is typically delivered by female community health workers through behavioral change communications (BCC) programs focused on the pregnant woman or mother.

BCC programs may see better results by combining broader targeting and adult learning approaches instead of passively presenting information to women. For instance, **Save the Children's Child Survival 19 Project in Northwestern Afghanistan** has implemented a Positive Deviance approach<sup>15</sup> to promote household behaviors among mothers, mothers-in-law and caregivers that can lead to good nutrition outcomes. A mid-term evaluation of the program found that 90% of children enrolled in the program demonstrated significant weight gain. The evaluation team concluded that the Positive Deviance/Hearth model was effective at changing household behaviors, and could generate nutritional improvements for infants and small children in Afghanistan (Save the Children, 2006). Another **Save the Children's program, Saving New Born Lives Initiative in Pakistan**, also implemented Positive Deviance trainings to change behaviors in the community and households that included mothers, mothers-in-law, fathers, fathers-in-law, and unmarried men and women. Results data showed that there was a 45% decrease in the number of mothers who gave pre-lacteal feeds to the newborns within 3 days of birth.

Another promising approach might be to vary the individual responsible for delivering the information. For example, in addition to female health workers, in India, **Concern Worldwide** is piloting the **Male Health Workers for Accessible Health Care** project. The project aims to provide maternal health and nutrition information to husbands using a group of male community health workers. Currently, men make a number of decisions regarding food purchases and health

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<sup>15</sup> Positive deviance approaches identify high performers from the community and facilitate peer to peer learning to spread good practices from these high performing "deviants" to others to improve their outcomes.

care access which affect nutritional outcomes. However, they often lack any training on maternal health or nutrition. The typical health volunteer is usually female and faces difficulties reaching out to men to discuss family planning or nutrition issues. Male health workers, acting as peer counselors, may have greater success. A pair of male and female health workers working together could also travel more safely at night and to more isolated places, extending the reach of their services overall (Concern Worldwide, 2012).

Similarly, **the Grandmother Project**, through their work on several projects mostly in Africa, recognizes the role grandmothers play in maternal health and childcare by transmitting information between generations, influencing men and younger women in the household, and providing guidance on pregnancy and child-rearing. The Project has designed programs to leverage the special role of grandmothers to act as nutrition educators and sources of influence to change behaviors and adopt new practices. In one instance, Indian daughters-in-law were found to learn better and adopt new practices more quickly when being taught by grandmothers or mothers-in-law (Aubel, 2010).

### **Community Support**

**Moving beyond framing community support for nutrition as involving only growth monitoring and promotion, a number of projects are trying to form community groups or create mass awareness campaigns using various communications approaches and technologies.** For example, **the Shouhardo project implemented by CARE in Bangladesh** used a rights-based livelihoods approach and implemented a range of activities focused on mother and child health and nutrition, sanitation, women empowerment, poverty and food insecurity alleviation, empowerment of the poor and disaster mitigation and response. The women's empowerment component was comprised of three interventions: support for the formation of social groups for women and adolescent girls, pre-school for young girls, and formation of parent-teacher associations. An impact evaluation of the Shouhardo project by the Institute for Development Studies (IDS) found that stunting prevalence among project participants fell by nearly 16 percentage points over a three-and-a-half year period. The evaluation also found that the project's women's empowerment interventions had the strongest independent impact on stunting (Smith, Khan, Frankenberger, & Wadud, 2011). CARE is currently implementation a follow-on Shouhardo II program, and Save the Children is implementing a smaller scale program with similar objectives called Nobo Jibon.

Similarly, The Government of Pakistan implemented the **Tawana Pakistan Project (TPP)**, a pilot project from 2002 to 2005 to address poor nutrition status and school enrolment of primary school-age girls. TPP's main intervention involved creating a safe environment for village women to make collective decisions. Women were taught to plan balanced menus, purchase food, and prepare and serve a noon meal at school prepared using locally available foods at nominal costs (USD 0.12/child). An evaluation of the project found that wasting among participating girls decreased by 45% (from 14.3% to 7.9%). The number of underweight girls decreased from 23.2 % to 18%. Chronic under-nutrition and stunting only decreased by 6% during the duration of the project. The project increased school enrollment by 40% by attracting un-enrolled girls who came



to attend the feeding program. The average number of girls per school also increased from 64 to 89 by the end of the project (Badrudin, Agha, Peermohamed, Rafique, Khan, & Pappas, 2007).

The groups can include more than just women. In Afghanistan, **Care for Afghan Families (CAF) implements the Baby Friendly Villages program** in four districts of Takhar Province. The program seeks to improve child-feeding practices by creating breastfeeding support groups with all key stakeholders– including mothers-in-law, husbands and other male members of the family, health workers, traditional healers, birth attendants, and local religious leaders. The project combined such groups with breastfeeding counseling centers and enlisted the support of community health workers and professionals health services. The objective focused on transforming entire villages into baby-friendly locations where all individuals have the proper knowledge and skills to support a breastfeeding mother.

**Mass media campaigns can spread awareness about undernutrition identification and prevention practices using a variety of methods and technologies.** **Save the Children's Integrated Nutrition Program (or Suaahara) in Nepal** combines a communications program, mass media campaigns, and a community mobilization strategy that uses music, theater, links to religious festivals. **Concern Worldwide** is implementing the **Local Government Partnership to Combat Child Undernutrition project in Bangladesh** which engages men through awareness campaigns using a combination of traditional tools and modern technologies such as cell phone messages, awards and subsidized services to promote behavior change. The program also encourages support from local government and women's participation in leadership bodies. **Equal Access Nepal (EAN)** is implementing the Nutrition through Knowledge project in Nepal. The project uses radio programs to raise awareness among parents about infant and young child nutrition to empower women to address various socio-cultural determinants of undernutrition at the household level, and to engage men as key stakeholders, agents of change, and advocates within families.

### **Autonomy, Decision-Making and Control Over Assets**

**Nutrition programs can do much to ease constraints of resource access and autonomy.** However, increasing women's autonomy, decision-making and control over assets cannot be the work of nutrition programs alone. The contributions of programs focused on education, livelihoods, financial inclusion sectors are vital.

For instance, **Helen Keller International (HKI) is implementing a Homestead Food Production (HFP) program in Bangladesh and Nepal**, which integrates nutrition, agriculture and food production, maternal self-care, infant and young child feeding, gender awareness, and women's empowerment interventions. An evaluation of the HFP model in Bangladesh, Cambodia, Nepal and the Philippines from 2003 to 2007 showed that HFP participants increased production and consumption of vegetables and animal food products, increased household earnings that were used to purchase additional foods, and reduced the incidence of anemia among mothers and children compared to the control group. The evaluation found that the HFP program empowered women, giving them more control over household resources from the income generated from their homestead food production activities. Such control over HFP resources and income is likely a key



factor in how the program has enhanced women's participation in household decision-making. The study also found that homestead food production has a potential positive impact on overall household spending, food preparation, food choices and intra-household food allocation as well as care-seeking behavior of women (HKI, 2010).

Another project uses technology to ease mobility constraints. In India, **Lata Medical Research Foundation** is implementing an innovative project that seeks to use cell phone technology to improve breastfeeding and reduce infant mortality. The project seeks to empower women to overcome barriers of leaving their home after delivery due to limited transportation by providing mothers with information, guidance and coaching through mobile phones.

### **Targeting of Young and Adolescent Girls**

**Schools offer the most promising means to target younger girls.** The **WFP's Girls Incentive Programme (GIP) in Nepal** provides schoolgirls with monthly rations of oil to take home as incentive for regular school attendance. Keeping girls in schools is critical for enhancing agency later in adolescence, and delaying marriage and childbirth. WFP implements the program as part of its broader school feeding program in 11 Western districts and independently in five Terai districts where girls' school attendance has been found to be particularly low. The WFP has reached more than 62,000 school girls through this program, and rates of girls' school attendance have increased by as much as 27% in areas where WFP has implemented GIP (WFP, 2012). Similarly, the **WFP School Feeding Program in Bangladesh** provides a daily micronutrient fortified biscuit to primary school students in participating schools that serve as an incentive for families to keep their children in school. A midterm evaluation of the program found that attendance rates increased between baseline and follow-up in all months for both boys and girls in the treatment schools. These differences were highly significant ( $p < 0.001$ ). The evaluation also found that increases in attendance were consistently slightly higher for girls than boys, although these differences were not statistically significant (Rogers, Coates, & Osei, 2004).

**While adolescent girls are much more difficult to reach, one approach is to provide services and information relevant to adolescents and incentivize their participation.** In India, the government has launched a adolescent girls program termed **SABLA**<sup>16</sup>, which will be piloted in 200 districts all across the country and aim to reach adolescent girls, aged 11-18, with nutrition and job training interventions to be delivered in conjunction with the Integrated Child Development Scheme at local health centers (anganwadi centers) by community health workers. The program focuses on those who have dropped out of school as well as those who have dropped out. Through the bi-monthly meetings, girls will receive a food supplement, micronutrient supplements, health checkups, family planning and reproductive counseling, life skills education and guidance on accessing government programs, and vocational training for those above the age of 16 (ICDS, 2009).

Similarly, the **Kishoree Kontha (KK) project in Bangladesh** run by Save the Children with support from the Nike Foundation. The KK program aimed to link savings schemes with other

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<sup>16</sup> Full name is The Rajiv Gandhi Scheme for Empowerment of Adolescent Girls.

non-financial services, such as health and education, to allow rural adolescent girls aged 10-19 to build human, social and economic assets. Using a group mechanism, girls were empowered to make their own decisions in terms of savings and were then given access to credit to transition to income-generation activity. The Abdul Latif Jameel Poverty Action Lab (JPAL) is conducting a randomized control trial to evaluate the effectiveness of the KK project, and Save the Children is moving forward with the UK Department for International Development (DFID) to implement a larger scale project using the KK model based on preliminary successes (IPA, 2011).

#### **IV. The Way Forward**

The preceding sections have discussed the linkages between gender and nutrition outcomes in South Asia and presented evidence from a mapping exercise to suggest that policy makers conceive of gender too narrowly and nutrition interventions addressed inadequately address gender-based factors. Gaps were noted in the programmatic focus of existing programs; programs heavily emphasize providing information and health services and fail to adequately mobilize household and community support or increase a mother's agency and autonomy. Gaps were also noted in targeting. Most existing nutrition services target mothers and young children and neglect the needs of adolescent girls and the important roles of men, mothers-in-law, and grandmothers. Even basic nutrition data is unavailable in some countries. Various approaches to close these gaps that have been taken by implementing organizations in the region were discussed.

**Five areas of follow-up to this discussion constitute one way forward:**

**(1) Begin a dialogue with policymakers inside development institutions and governments to expand the conversation on gender and nutrition that goes beyond a narrow focus on mothers and children. This dialogue should include:**

- a focus on adolescent girls;
- increased support for mothers and children from the household and community;
- interventions to reduce resource constraints to providing proper nutritional care for a mother and her child, and;
- efforts to improve mental health and self-esteem of caregivers.

**(2) Collect low-hanging fruit. Existing development interventions that engage adolescent girls should include a nutrition component.** In particular, development partners should expand school-based nutrition programs that provide incentives to families for keeping their girls in school. Generally, policy makers should be encouraged adopt multi-sectoral nutrition policies with gender-inclusive strategies. When governments and development partners begin to view the nutrition problem in a more holistic way that addresses multiple sectors, gender-driven causes of nutrition concerns become more visible as they are themselves cross cutting issues. In this respect, multi-sectoral policies create an enabling environment for developing gender-inclusive nutrition approaches. Ministries in charge of women and children's affairs should be engaged, in addition to the ministries of health and agriculture, in the development of gender-inclusive, multi-sector policies to tackle nutrition.

**(3) Support and facilitate the generation of new ideas to address the programmatic gaps and improve targeting.** Consultations with experienced practitioners, policy makers, community health workers, as well as beneficiaries may generate new ideas. Grant competitions to identify or scale new approaches may also be beneficial.

**(4) Evaluate promising approaches for effectiveness.** A lack of evidence on the effectiveness of interventions hampers their widespread adoption by governments and development partners. Pilot studies should test, for example, whether nutrition outcomes can be improved by:

- targeting BCC to other household members such as men, grandmothers and/or mothers-in-laws
- distributing behavioral change messages through male community health workers or elderly women in the household
- the use of various types of social groups to generate community support
- generating mass awareness using various mechanisms such as ICTs, television, radio, arts, media personalities
- introducing a range of time saving technologies
- providing additional homestead production activities and livelihood activities

**(5) Conduct additional research in gap areas and fill holes in existing data, including the following:**

- Knowledge, attitudes and practices of men and elder women in the household related to the care of women and children. An understanding of family systems and cultural systems is also necessary.
- Targeting adolescent girls requires region-specific information on the lives of adolescent girls and the mapping of institutions that might be used to reach them. Stakeholders interviewed noted that there is little knowledge on the roles and expectations of adolescent girls in households between the ages of five and pregnancy and how this influences nutrition outcomes.
- Health and Nutrition Data should be disaggregated for adolescent girls across the region.
- General health and nutrition information availability is poor in Bhutan.
- Given the lack of programs on mental health and self-esteem and on the incidence of gender-based violence experienced by caregivers, region-specific research should draw out the linkages between mental health, care practices and ultimately nutrition outcomes. Possible interventions should be identified.

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## **Appendix 1: Afghanistan Country Report**

### **1.1 Malnutrition and Gender in Afghanistan**

Afghanistan suffers from high levels of child undernutrition. The 2004 National Nutrition Survey (NNS) found that 60.5% of children under the age of five were stunted and 33.7% were underweight (MOPH and others, 2009). Acute undernutrition (wasting) in children under five was 8.7%, and while these figures are lower than expected wasting levels remain high for the first few years of life at 18.1% in children 1-2 years of age (Levitt, Laviolette, Mbuya, & Kostermans, 2011). The NNS data shows that the prevalence of anemia is 38% in children under five and 50% in children 6 to 24 months old (MOPH and others, 2009).

The poor nutritional status of Afghan women is also a significant challenge in Afghanistan. The 2004 NNS found that 20.9% of non-pregnant women of reproductive age had chronic energy deficiency (MOPH and others, 2009). The NNS data also shows that the prevalence of iodine deficiency in pregnant and non-pregnant women was 75%, while Iron deficiency was 48.4% and anemia 25% among non-pregnant women. Women who were literate or had access to at least primary education were less likely to be undernourished and have micronutrient deficiencies (Levitt, Laviolette, Mbuya, & Kostermans, 2011). Afghanistan has the fourth highest maternal mortality rate in the world at 1,600 per 100,000 live births annually, indicating the need for interventions such as early childhood nutrition for girls and improved maternal nutrition (UNICEF and others, 2002).

The lack of adequate care for women and children is a significant cause of undernutrition in Afghanistan (Levitt, Laviolette, Mbuya, & Kostermans, 2011). The use of prenatal care and contraceptives remains low, and despite high levels of maternal underweight, (20.9% of women have low body mass index), no supplementation programs for women are available through the health systems (Levitt, Laviolette, Mbuya, & Kostermans, 2011). Levitt et al, also find that exclusive breastfeeding is rare, and only about one-third of children are given complementary foods at the proper time of six months.

Strong gender roles in Afghanistan's culture continue to influence nutrition and health outcomes for women and children. Social barriers often prevent women from traveling outside the home or working with or providing training to men (Levitt, Laviolette, Mbuya, & Kostermans, 2011). While women are primarily responsible for childcare within the household, they have limited influence on how resources are spent and what foods are purchased (Levitt, Laviolette, Mbuya, & Kostermans, 2011). Levitt et al, also find that strong gender roles make it difficult to reach women and children with nutrition messages and services.

### **1.2 Mapping of Stakeholders**

The Public Nutrition Department (PND) of the Ministry of Public Health (MOPH) and the Home Economics Department (HED) of the Ministry of Agriculture, Irrigation, and Livestock (MAIL) are



the two government departments that are responsible for working on nutrition in Afghanistan. The MOPH funds a core PND national staff and a team of 34 provincial nutrition officers for each province. The MOPH is also responsible for managing the Public Nutrition Policy and Strategy and implementing direct nutrition interventions. The MAIL's HED focuses on promoting improved child feeding practices and household food security. The HED is also establishing a team of provincial-level home economics officers who will collaborate with the provincial nutrition officers to scale up nutrition activities (Levitt, Laviolette, Mbuya, & Kostermans, 2011).

Several other ministries support nutrition interventions in Afghanistan. The Ministry of Women's Affairs collaborates in nutrition promotion through women's groups. The Ministry of Labor, Social Affairs, Martyrs and Disabled implements social protection programs for vulnerable families (often female-headed households) and has a goal to reduce child underweight. The Ministry of Education collaborates with HED and the Food and Agriculture Organization (FAO) to promote nutrition through schools, and the Ministry of Justice is involved with legal issues related to maternity leave and work place access to nurseries for overall childcare (Levitt, Laviolette, Mbuya, & Kostermans, 2011).

Key development partners of the MOPH include Asian Development Bank (ADB), Canadian International Development Agency (CIDA), European Commission (EC), Japan International Cooperation Agency (JICA), DFID, USAID and the World Bank. These organizations also participate in the Consultative Group for Health and Nutrition along with representatives from various ministries. Nutrition is primarily discussed in this forum when the MOPH's PND, the MAIL's HED and their international nutrition counterparts that include FAO, UNICEF, WHO and Micronutrient Initiative (MI) are present (Levitt, Laviolette, Mbuya, & Kostermans, 2011).

Existing coordination mechanisms specific to nutrition occur largely through the Nutrition Task Force (coordinated by the MOPH's PND) and the UN system (Levitt, Laviolette, Mbuya, & Kostermans, 2011). The Nutrition Task Force consists of the MAIL and other relevant ministries, FAO, MI, UNICEF, WHO, WFP and NGOs. Nutrition coordination efforts have improved since the establishment of the Nutrition Cluster. The Nutrition Cluster is co-chaired by UNICEF and FAO and is the widest nutrition stakeholder meeting in Afghanistan. The cluster focuses on emergency interventions and community based management of acute malnutrition activities implemented by NGOs. Other coordinating mechanisms include the Infant and Young Child Feeding, Micronutrient and Severe Acute Malnutrition Working Groups. An Agriculture Task Force has also been established. Other coordinating mechanisms include the Infant and Young Child Feeding, Micronutrient and Severe Acute Malnutrition Working Groups (Levitt, Laviolette, Mbuya, & Kostermans, 2011)

Other stakeholders involved in nutrition interventions in Afghanistan include USAID/BASICs, the Spanish Millennium Development Goals Trust Fund, International Breast Feeding Action Network (IBFAN), Breast Feeding Promotion Network of India (BPNI), World Alliance for Breastfeeding Action (WABA), Global Alliance for Improved Nutrition (GAIN), Save the Children, Afghan Aid, Agha Khan Foundation (AKDN), Oxfam/Novib.

### **1.3 Government Commitment and Policies**

Afghanistan's National Development Strategy (ANDS) is the country's overarching poverty reduction strategy. Within the ANDS, the Health and Nutrition Sector Strategy (HNSS) and the Agriculture and Rural Development Sector Strategy (ARDS) outline the country's approach to addressing nutrition. Afghanistan does not have a national, crosscutting nutrition strategy at this time, although gender equity is a crosscutting strategy within the ANDS (Levitt, Laviolette, Mbuya, & Kostermans, 2011).

The HNSS is focused on primary health care services. Public Nutrition is listed as one of the five core Health Care Services Provision programs, and one of the document's 18 strategies is focused on reducing prevalence of malnutrition and increasing access to micronutrients (Levitt, Laviolette, Mbuya, & Kostermans, 2011). That being said, the MOPH's PND is not given a position in the MOPH structure parallel to the four other programs that are designated as directorates. Nutrition also appears as a subcomponent of the Primary Health Care directorate, and is categorized as part of the Basic Package of Health Services (BPHS) (Levitt, Laviolette, Mbuya, & Kostermans, 2011).

Afghanistan's national nutrition and food security policies are based on the Public Nutrition Policy and Strategy (PNPS) of 2003-2006 (Levitt, Laviolette, Mbuya, & Kostermans, 2011). The PNPS adopted a holistic approach to public nutrition and emphasizes direct nutrition interventions and activities to address underlying causes of nutrition. The Public Nutrition Strategy (PNS) for 2009-2013 updates this document. This new strategy focuses on direct nutrition interventions, but includes guiding principles that seek to address the underlying causes of undernutrition, and to understand the political, economic, social and cultural factors that influence nutrition outcomes. These include cultural and social norms that influence people's ability to access food as well as their consumption patterns. The new strategy explicitly targets women, adolescent girls and children (MOPH, 2009). The National Child and Adolescent Health Strategy for 2009-2013 addresses adolescent girl health concerns, and outlines strategies to prevent early marriages and pregnancies and to promote birth spacing (MOPH, 2009).

### **1.4 Programs and Activities**

This section presents government, multilateral, bilateral and civil society programs that are focused on gender and nutrition. In some cases key government, multilateral and bilateral programs are included even though they may not be addressing underlying gender causes of malnutrition to identify the programs and agencies with whom the World Bank and its clients may need to engage.

#### **2.4.1 Government Programs and Activities**

##### **MOPH Basic Package of Health Services (BPHS)**

The MOPH provides many of the direct nutrition interventions recommended by the 2008 Lancet series on maternal and child undernutrition through the BPHS program. The BPHS is implemented by the MOPH with support from various donors and implementing partners.

### **MAIL School-Based Nutrition Program (SBNP)**

MAIL's HED manages the SBNP with funding from FAO. This program targets primary and secondary school students (grades 1-12) and seeks to integrate life-skills training with the Afghan public school curriculum. Teachers from each school are trained in key nutrition messages linked with a school garden. Five minutes are devoted to promoting key nutrition messages each day of the school year. Teachers also instruct students how to plant and care for the garden and how to harvest, process, and consume different types of vegetables and legumes. This project is implemented in 7 provinces in collaboration with the Ministry of Education, the MOPH and the Ministry of Youth Affairs (Levitt, Laviolette, Mbuya, & Kostermans, 2011).

### **MAIL Horticulture Livestock Program (HLP)**

MAIL implements the HLP with World Bank funding and support from FAO and GRM International. The Backyard Poultry Project seeks to target 200,000 women, while the Integrated Dairy Schemes Project targets women and are designed around local dairy cooperates to improve household food security and income (Levitt, Laviolette, Mbuya, & Kostermans, 2011).

### **MAIL Promoting Household Level Food Processing, Preservation and Storage Project**

MAIL implements this program with support from FAO and United Nations Industrial Development Organization (UNIDO), and seeks to establish, support and scale up community-based food processing centers. The program focuses on establishing women's groups to run community-based food processing centers as a means to increase their incomes, and to improve access to a diversified diet for households. Training is provided on food processing, preservation, and storage. The project operates in five provinces through various community-level platforms, including mothers and women's groups, literacy groups, producer groups and self help groups (Levitt, Laviolette, Mbuya, & Kostermans, 2011).

## **2.4.2 Multilateral Programs and Activities**

### **World Bank**

The World Bank supports the Strengthening Health Activities for the Rural Poor (SHARP) project. SHARP seeks to increase the provision of health care and nutrition services to women and children and expands the delivery of the MOPH's BPHS and Essential Package of Hospital Services (EPHS) programs.

### **UN Feeding the Children of Afghanistan Together Program**

This joint United Nations (UN) program is designed to promote an integrated package of nutrition and food security interventions at the community level. The package includes nutrition education, Infant and Young Child Feeding (IYCF) and family nutrition counseling, community based management of acute malnutrition, improving nutrition services provided through health

facilities, household food production and income generation activities, and nutrition monitoring and impact assessment in project areas. The program is implemented by FAO, WFP, UNICEF, WHO and UNIDO and received partial funding the Spanish Millennium Development Goals Trust Fund in 2009.

### **WFP School Meal Program (SMP)**

WFP's School Meals program aims to help the government rebuild the national education system. WFP provides a daily snack of micronutrient-enriched biscuits or a hot meal to over a million children to alleviate short-term hunger and encourage school attendance. WFP also provided a take-home ration of vegetable oil to 600,000 girl students, as an incentive for their families to send them to school. This part of the food-for-education program is aimed at closing the gender gap in Afghan classrooms in areas where female enrolment is low.

### **Key Findings**

- WFP tested two approaches before launching the school-feeding program in 2001: a take-home ration for students in 50 schools in Badakhshan and on-site meals with freshly baked bread in the rest of the country. WFP chose Badakhshan for the take-home rations because preparing and distributing bread on a daily basis in such a remote location was difficult. The WFP used take-home rations of wheat because the area suffers from a wheat deficit and poor market access. After evaluating the two approaches, evidence showed that the take-home ration school-feeding pilot in Badakhshan was more successful. The bakery-based school-feeding program did not work because of weak local physical infrastructure, community participation and management capacity (WFP, 2009).

### **2.4.3 Bilateral Programs and Activities**

#### **USAID Basic Support for Institutionalizing Child Survival (BASICS)**

USAID's BASICS program seeks to improve the effectiveness and accessibility of child health, nutrition and related pediatric services through the development of high-impact interventions to prevent and reduce illness, mortality, and malnutrition among Afghan children less than age five. Interventions include: an integrated child survival package that includes growth monitoring and promotion, Integrated Management of Childhood Illness (IMCI), new born care and pediatric hospital improvement measures; strengthening of cross cutting health system components such information, education and communication and behavior change communication materials to improve child healthcare; newborn and child health messages, and an expanded program on immunization.

The BASICS program has developed a BCC Strategic Plan in Support of Community Based Child Survival Interventions. This strategy emphasizes that increasing awareness of key nutrition and IYCF principles for all household members (including mothers and fathers) should be paired with addressing specific cultural and traditional barriers to optimal behavior change through

appropriate communication channels, and involving community networks. This includes soliciting the participation of health Shuras, Community Development Council's, community elders, teachers and other existing community networks. This work has involved Family Health Action Groups (FHAG) to enhance women's empowerment and increase their leadership roles in the community. BASICS worked closely with the MOPH to develop this strategy and the proposed BCC actions are now embedded in the National Health and Nutrition Communication Strategy for 2008-2013 (USAID BASICS, 2009).

#### **2.4.4 Civil Society Programs and Activities**

##### **Save the Children Child Survival 19 (CS-19) Project**

Save the Children's CS-19 project in northwestern Afghanistan serves approximately 288,000 potential beneficiaries, including 124,000 children under the age of five and 155,800 women aged 15-49 years. The overall objective of the program is to achieve a sustained reduction in mortality rates among mothers and children less than five years of age in the project area, and its strategic objective is to improve health practices at the household level, and increase use of essential Maternal and Child Health (MCH) services. Save the Children has implemented a Positive Deviance/Hearth approach (PD/Hearth) in several pilot villages to identify and promote household behaviors that can lead to good nutrition outcomes. A typical PD/Hearth session includes: preparatory hand washing, education on health-related topics (one topic a day: breastfeeding, weaning and feeding, pneumonia, diarrhea, immunization), food preparation with the involvement mothers/caregivers, childcare, cooking the meal, feeding the children, and cleanup.

##### **Key Findings**

- A mid-term evaluation of the program found that 90% of children enrolled in the program demonstrated significant weight gain. The evaluation team concluded that the PD/Hearth model was effective at changing household behaviors, and could generate nutritional improvements for infants and small children in Afghanistan. The PD/Hearth activities have generated wide interest in the provinces where Save the Children operates, and the provincial MOPH has asked CS-19 to document its results and procedures for a possible scale-up (Save the Children, 2006).

##### **Baby Friendly Villages (BVF)**

Care for Afghan Families (CAF) is implementing the BVF project in four districts of Takhar Province in Afghanistan. The project will address causes of improper feeding by implementing a range of interventions, including: improving the knowledge and practice of 100 pregnant and lactating mothers regarding optimal feeding practices for infants and young children; establishing 8 community support groups in the targeted villages, comprising community health workers, traditional birth attendants, local religious leaders, and traditional healers; raising awareness about optimal feeding practices of infants and young children among 100 fathers and their family

member; and establishing 4 breastfeeding counseling corners in four health facilities in the target areas to provide comprehensive counseling services to needy mothers and pregnant women. The project will create an enabling environment by involving all key players – including mothers-in-law, husbands, other male members of the family, health workers, traditional healers, birth attendants, and local religious leaders. The objective is to turn entire villages to baby-friendly places where all individuals have proper knowledge and skills to support a breastfeeding mother. This project was a winner of the 2009 Development Marketplace on Nutrition. The literature review was unable to find any information about this project on the Internet.

## 1.5 Action Research

### 2.5.1 Adolescent Girls' and Women's Status and Intra-household Bargaining

Author, Year, Organization	Focus of Study/Research	Key Findings
(Mashal, et al., 2008)	Factors associated with the health and nutritional status of children under 5 years of age in Kabul Province	<ul style="list-style-type: none"> <li>• Lack of education of the mothers, child marriage, lack of maternal autonomy, shortage of basic material needs and internal displacement showed independent and significant negative associations with child health and nutritional variables</li> </ul>
(FAO/Afghanistan)	Unpublished research by FAO-Afghanistan in Herat, Badakshan, Bamyān and Balk provinces, research in Balkh done by Emily Levitt ( <a href="mailto:EJL5@cornell.edu">EJL5@cornell.edu</a> )	<ul style="list-style-type: none"> <li>• Women reported various sources of advice about nutrition, including relatives (elders, mothers, mother in law), “experienced people”, “experienced or literate people”, literacy teachers, trainings, religious instructors, health workers, and radio and television</li> <li>• Other family members, in particular mothers in law, influenced mothers’ decision about how to feed themselves and their children</li> </ul>

(Ashrafi, 2009)	Gender dimension of agriculture and rural employment in Bamyan and Kabul provinces	<ul style="list-style-type: none"> <li>• Women have a great deal of involvement in agriculture, but few own land or livestock themselves.</li> <li>• Land and livestock ownership is considered to increase a women's decision making power inside the household, and women are often able to control income gained from these activities</li> <li>• Ownership and access to land and livestock can generate more income than most activities women are currently involved in</li> <li>• Few other income-generating options currently exist for women that can be carried out inside the village</li> <li>• Ownership of land and livestock can open up possibilities of accessing credit</li> </ul>
DFID, Ongoing	Leveraging Agriculture for Nutrition in South Asia (LANSA)	<ul style="list-style-type: none"> <li>• Study is ongoing and will examine how agriculture and related food policies can be designed to increase their impact on nutrition</li> <li>• Special focus on children and adolescent girls</li> <li>• The study will also look at how these policies can be more strongly linked to underlying determinants of nutrition such as women's status</li> </ul>

### 2.5.2 Gender Division of Labor

Author, Year, Organization	Focus of Study/Research	Key Findings
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(Grace, 2004)	Gender roles in agriculture	<ul style="list-style-type: none"> <li>• Gender roles in Afghanistan are shaped by socio-cultural factors such as restricted mobility outside the village for many women, their often restricted ability to work outside the compound — partly brought about by women’s role as the keepers of family honor — as well as the lack of ownership of the majority of productive assets by most women.</li> <li>• Roles between women appear to depend on several factors: what assets households own, where the activities are carried out, a woman’s stage in the life cycle (i.e., unmarried, married, widowed) and whether particular women are involved in income-generating work, which leads to a further allocation of household labor among other women.</li> <li>• In general, there appeared to be more age differentiation in activities among women than men.</li> </ul>
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### 2.5.3 Gender Norms, Identities and Values

Author, Year, Organization	Focus of Study/Research	Key Findings
(Levitt, Pelletier, & Pell, 2009)	Revisiting the UNICEF malnutrition framework to foster agriculture and health sector collaboration to reduce malnutrition	<ul style="list-style-type: none"> <li>• Many policy makers feel that traditional beliefs about food and household food allocation patterns play an important role in Afghan diets</li> <li>• Men noted that frequent pregnancies led to weaker women, weaker children, and a strain on family resources</li> <li>• Approaching the issue of birth spacing rather than birth control was deemed locally acceptable</li> </ul>
(Levitt, Stoltzfus J., David, & Alice, 2009)	A community food system analysis as formative research for anemia an anemia control program in northern Afghanistan	<ul style="list-style-type: none"> <li>• Qualitative research on household food allocation revealed no systematic differences in terms of quality of quantity of food allocated to men compared to women or children in Tajik communities</li> <li>• According to local women, each household member received some of each type of food available (i.e. meat, vegetables, fruit)</li> <li>• Husbands sometimes received a greater portion, but women and children both receive a sizable allocation</li> </ul>



(FAO/Afghanistan)	Unpublished research by FAO-Afghanistan in Herat, Badakshan, Bamyan and Balk provinces, research in Balkh done by Emily Levitt ( <a href="mailto:EJL5@cornell.edu">EJL5@cornell.edu</a> )	<ul style="list-style-type: none"> <li>• Mothers consumption of healthy foods is often restricted by food taboos (particularly during pregnancy and lactation), poor knowledge of women's nutritional requirements, limited resources, limited decision making power, and mothers tendency to focus on other family members needs before their own</li> </ul>
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## Appendix 2: Bangladesh Country Report

### 2.1 Malnutrition and Gender in Bangladesh

Bangladesh has some of the highest rates of malnutrition in the world. More than 54% of preschool-age children are stunted, 56% are underweight and more than 17% are wasted (FAO, 2011). Bangladeshi children also suffer from high rates of micronutrient deficiencies, particularly vitamin A, Iron, iodine, and zinc deficiencies (FAO, 2011). Maternal mortality rates have seen a steady decline over the past few decades, yet more than one-third of the female population in Bangladesh has a low body-mass and nearly 50% of women are anemic (UNICEF, 2009). Maternal malnutrition, infections during pregnancy, anemia and repeated pregnancies contribute to low birth weight babies and a high rate of maternal mortality (UNICEF, 2009). One-third of children in Bangladesh are born with low birth weight, which is directly attributable to mother's nutrition status (Hillenbrand, Transforming gender in homestead food production, 2010).

The health seeking behavior of women during pregnancy and childbirth is very low. Only 48% utilize antenatal care and 16% postnatal care (UNICEF, 2011). There is also evidence of a disparity in health seeking behavior according to educational and economic status. This research indicates that poorer and less educated women are less likely to seek qualified routine or emergency obstetric care. Only 8.6% of births take place in hospitals or local health centers, and doctors, midwives, nurses or family welfare visitors only assisted 11.8 percent of deliveries in 2001 (UNICEF, 2011). According to UNICEF, the remaining 88.2% of births were attended and assisted by relatives or other people.

The 2004 baseline survey of the Bangladesh National Nutrition Program examined the nutritional status, knowledge and practices of never married adolescent girls (aged 13-19) living in rural Bangladesh. The survey found that adolescents were of poor nutritional status; 9% were severely thin and 16% were moderately thin (ICDDR, 2006). More than half did not know the names of energy-dense and protein-rich foods (ICDDR, 2006). Prevalence of severe and moderate thinness did not vary by education or household asset quintile (a proxy for household economic condition). Adolescent knowledge regarding the nutritional value of different types of food items was limited. When asked to name major energy-dense foods, 31% mentioned rice and 12% mentioned wheat and these are correct responses. Less than half correctly identified high protein foods: lentil (20%), meat (32%) and fish (42%) (ICDDR, 2006).

According to Hillenbrand (2010), women's limited control over economic resources, exclusion from household decisions, and restricted mobility are important factors that limit their ability to influence food and health spending. Furthermore, social norms that discourage women from seeking outside employment contribute to women's disempowerment and poor nutrition status (Hillenbrand, Transforming gender in homestead food production, 2010). Women's lack of income and the undervaluation of

women's domestic work has led to the preferential feeding of income-earning men over women and children in Bangladesh (Hillenbrand, Transforming gender in homestead food production, 2010).

## **2.2 Mapping of Stakeholders**

The Ministry of Health and Family Welfare (MOH&FW) is the primary agency responsible for formulating and managing nutrition policies and programs in Bangladesh. The Institute of Public Health Nutrition (IPHN) is a government institution, and serves as a technical advisor to the MOH&FW on all nutrition issues and represents the MOH&FW in different technical bodies dealing with nutrition. The IPHN also implements a number of nutrition interventions in Bangladesh. The Ministry of Food and Disaster Management (MFDM) formulates and manages national food policy in Bangladesh. The Ministry of Women and Children Affairs (MOWC) is responsible for managing the National Plan of Action for Children, which includes specific objectives to improve nutrition outcomes for children, adolescent girls, and mothers.

The Nutrition Working Group (NWG) is a coordinating body that serves as an interface between the government and development partners working on nutrition in Bangladesh. The NWG focuses on addressing current nutrition issues of national interest, exchanging views and sharing ideas on how to solve these issues. The FAO is currently chairing the NWG, and key members include all relevant government departments, UNICEF, WFP, World Health Organization (WHO), FAO, World Bank, DFID, USAID, GAIN, MI, HKI, FHI360, BRAC, Save the Children, CARE, International Center for Diarrheal Disease Research (ICDDRDB), and others.

Other key stakeholders involved with nutrition activities in Bangladesh include the ADB, EC, Swedish International Development Agency (SIDA), Netherlands Embassy, JICA, IFPRI, Bangladesh Breastfeeding Foundation, Institute of Child and Mother Health, Center for Women and Child Health, Thengamara Mohila Sabuj Sangha (TMSS), BRAC University, Smiling Sun Franchise, The Asia Foundation, Bill and Melinda Gates Foundation, and Plan Bangladesh. ICDDRDB, IFPRI, and the BRAC Institute of Development Studies are involved in research work focused on nutrition.

## **2.3 Government Commitment and Policies**

The Bangladesh National Nutrition Council (BNNC) formulated the National Plan of Action for Nutrition (NPAN) and the National Food and Nutrition Policy in 1997. These policy documents were meant to foster multi-sectoral collaboration, but have failed to gain traction given the recent change in government. The MOH&FW is currently developing a Health, Population, and Nutrition Sector Development Program (HPNSDP 2011-2016) that will mainstream nutrition into all health activities to ensure that every contact with mothers and their children will involve nutrition messages. This plan will also target

adolescent girls. At this time it is not clear how the government plans to implement this plan and the operations plan still needs to be developed. Generally, nutrition is still viewed as a health issue in Bangladesh, and coordination among Ministries on nutrition is poor. There are efforts now to create high-level committees to coordinate collaboration between sectors, though this process has as of yet been unsuccessful. So far, only committees within the Ministry of Health and Family Welfare have been created. This Ministry and the Ministry of Food and Disaster Management are not coordinating well together. Each sector is developing its own programs without consulting the other sector. The Government still lacks a national multi-sectoral nutrition policy that puts nutrition firmly on the national development agenda and articulates the roles of the various Ministries. Gender issues are not very well understood, and are still considered a women's only issue.

The Ministry of Food and Disaster Management established the National Food Policy (NFP) in 2006 and a National Food Policy Plan of Action (NFPPA) in 2008 that runs through 2015. The NFP and NFPPA focus primarily on food security and food-based approaches to improving nutrition outcomes in Bangladesh. The NFPPA outlines a number of areas of intervention that focus on adolescent girls and women. These include the promotion of appropriate intra-household food distribution to meet the nutritional needs of all members with a particular focus on women and female children; strengthening of existing formal and non-formal education and BCC programs; and improving the health status of children and adults with a special focus on adolescent girls and women of reproductive age (MOFDM, 2008).

The National Plan of Action for Children is implemented by the Ministry of Women and Children's Affairs (MOWCA), and outlines a number of nutrition interventions targeted at children, adolescent girls, and women. Food and nutrition activities are primarily implemented through existing nutrition programs, but the plan outlines BCC programs to bring about positive change in maternal, infant, child, and adolescent caring practices with a focus on behaviors that clearly impact nutritional status. The plan also outlines strategies to empower girls primarily through education interventions, and to combat domestic violence against children (MOWCA, 2004).

The Government approved a Country Investment Plan (CIP) in 2010 that lays out a road map towards investment in agriculture, food security and nutrition. A large part of the country investment plan for Bangladesh relates to nutrition and the roles and responsibilities of various sectors in carrying out that plan. The CIP includes 12 programs that have been prioritized and appraised for donor funding. Most programs focus on food availability, access and utilization. One of these programs focuses on the Development of Community-based Nutrition Initiatives through Livelihood Approaches and includes BCC as a major focus.

The National Strategy for Accelerated Poverty Reduction II (NSAPR II) views health, nutrition and population as closely related and complementary to other sectors of the economy. The document outlines the Government's commitment to ensure quality health, nutrition and family welfare services. The NSAPR II acknowledges intra-household

inequalities and bias against women and girls and that the household is an important focus for examining gender and poverty issues. The document also acknowledges that intra-household inequalities are found to exacerbate the vulnerability of women and girls. The NSAPR II does not outline a substantial set of activities focused on gender and nutrition, but states that the value of women status in reducing malnutrition and dissemination of knowledge about nutrition amongst the citizens will be promoted (Planning Commission, 2008).

## **2.4 Programs and Activities**

This section presents government, multilateral, bilateral and civil society programs that are focused on gender and nutrition. In some cases key government, multilateral and bilateral programs are included even though they may not be addressing underlying gender causes of malnutrition to identify the programs and agencies with whom the World Bank and its clients may need to engage.

### **3.4.1 Government Programs and Activities**

#### **Health, Nutrition and Population Sector Program**

The GoB recently launched the new Health, Nutrition and Population Sector Program (HNPSPP) that will run from 2011 to 2016. The new HNPSPP is a follow on program to the first Health and Population Sector Program (HPSP 1998 – 2005) and the closing Health, Nutrition and Population Sector Program (2005 – 2011). The new program will mainstream nutrition services into regular health care services for the first time under a nutritional services program. The MOH&FW led program focuses on improving health services and strengthening health systems. The program seeks to improve the nutrition status of the population with a particular focus on pregnant women and children by integrating nutrition services in the Directorate of Health Services (DGHS) and Directorate General of Family Planning (DGFP). Nutrition interventions include facility- and community-based behavior change communication, comprehensive control of iodine deficiency disorders (IDD), vitamin A and zinc supplementation, treatment of diarrhea, iron/folate supplementation for pregnant and lactating women, growth monitoring and promotion, iron-deficiency anemia control for children under 5, iron supplementation in adolescent girls, treatment of severe-acute malnutrition, nutrition surveillance training, and attention to food safety issues.

#### **National Nutrition Services**

The National Nutrition Services (NNS) is the Government's key programmatic response to malnutrition in Bangladesh and is part of the overarching HNPSPP program. The NNS replaced the National Nutrition Program (NNP) that ended in 2011. The predecessor to the NNP was the Bangladesh Integrated Nutrition Program (BINP) that ran from 1995 to

2002. The NNS is designed to mainstream the delivery of nutrition services through the normal service-delivery chain of the DGHS and DGFP. The NNP only reached 25% of the country, and some reports indicate that service delivery challenges reduced the overall impact of the program. It is not clear how the NNS will address these shortcomings based on a literature review of policy documents.

The NNP was implemented through a multi-sectoral approach and sought to achieve sustainable improvements in the nutritional status of the population through the adoption of new behaviors and appropriate use of nutrition services. The program focused on infants, young children and women. The NNP was responsible for implementing the area-based community nutrition program (ABCN), and delivered services through Nutrition Promoters in community nutrition centers that serve up to 250 households each. Service delivery is contracted out to NGOs. The NNP's core components of the ABCN included: BCC activities; growth monitoring and promotion; food supplementation to children under 2 years of age and pregnant women from ultra poor households; micronutrient supplementation (vitamin A and iron-folate); de-worming; and promotion of infant and young child feeding.

### **Key Findings**

- An evaluation of the BINP by UNICEF and Save the Children in 2005 found that there was no evidence that the program had achieved its objectives. The evaluation also found that BCC activities did not achieve the desired behavior change. Although women that entered into the program improved their knowledge-practice gap, a large number of women did not put this knowledge into practice. Reasons for this included resource constraints (women in poorer households are less likely to eat more during pregnancies and those in households with land or living with an elderly male relative were less likely to take more rest during pregnancy), and the roles of mothers-in-law in enforcing traditional nutrition behaviors that contradict the BCC messages that were delivered to women (White, 2009).
- An evaluation of NNP has not yet been completed, and it is not clear whether the NNS has been designed to improve the delivery of nutrition BCC interventions.

### **3.4.2 Multilateral Programs and Activities**

#### **World Bank**

The World Bank has been an active supporter of the GoB's area-based community nutrition (ABCN) activities since 1995, and has funded the implementation of these activities through the BINP (1995-2002), the NNP (2000-2006) and the HNPSP (2005-2011). The HNPSP is co-financed by seven other development partners under the HNPSP pool funds. The World Bank is supporting the new HNPSP program set to run from 2011 to 2016 along through funding provided by USAID, ADB, CIDA, EC, Germany, International Development Association (IDA), Japan, Netherlands, SIDA, UNICEF, United Nations Population Fund (UNFPA), WHO, and DFID.

## **UNICEF**

UNICEF supported the NNP's BCC component during the early years of the program. In this role, UNICEF identified mechanisms to reach adolescent girls and boys, mothers, family members, community leaders and other stakeholders at the sub-national level with advocacy and communication interventions to support the alleviation of malnutrition. Innovative approaches included street theater, peer-to-peer education among adolescents, and future search conferences among community groups and decision makers.

### **Key Finding**

- Based on a UNICEF case study on IYCF programs in Bangladesh, managing the BCC component of the NNP proved frustrating because of delays, frequent changes in NNP personnel, and lack of agreement among UNICEF, the World Bank, and the NNP regarding the focus of the BCC component (UNICEF, 2009). UNICEF continues to support the Governments NNS, but is no longer in charge of the BCC component.

## **WFP Country Program**

WFP completed a gender assessment of 3 program components this year. This assessment looked at how intra-household gender roles could affect the use of food supplements, and informed the development of a new gender approach that will be applied to all WFP programs in Bangladesh starting in 2012. This strategy is laid out in the new 2012 country program strategy. WFP will implement a community wide approach to address nutrition and gender issues.

### **Key Findings**

- WFP's gender assessment concluded that mothers-in-law, community leaders, and men play an important role in influencing the use of food in households, health seeking behaviors and practices around early marriage and pregnancy. Previous attempts to change these behaviors by focusing on women only have not proved to be successful. Early marriage and pregnancy are key issues that need to be addressed for adolescent girls (DiDio, Schumacher, & Choudhury, 2011).
- Starting in 2012, WFP will target these key decision makers in the communities through behavior change communication and education to improve nutrition and health outcomes for women and children (DiDio, Schumacher, & Choudhury, 2011).

## **WFP Improving Maternal and Child Nutrition Program**



This program provides supplementary feeding and nutrition training to participants, and targets pregnant and lactating women, children under 5 years, and children less than 2 years of age. The program also works with household and community mentors to implement behavior change communications activities. These communication activities are targeted at key decision makers in the community, and will focus on maternal and child nutrition, hygiene and sanitation, food preparation, and gender patterns of intra-household food allocation. Under WFP's new approach, these activities will target pregnant and lactating women, household decision-makers, adolescent girls, community leaders, and local health service providers.

### **WFP School Feeding Program**

This program provides a daily micronutrient fortified biscuit to primary school students in participating schools. While the main objective of the program is to improve school outcomes (i.e. enrollment, attendance, performance), it has direct effects on the nutrition status of students. The biscuit delivers 70 percent of the student's daily nutrition requirement, reduces immediate hunger, and improves attention spans. While not specifically targeted at girls, the program provides an incentive for parents to keep girls in school longer. Enrollment rates for girls and boys are generally equal, but drop out rates for girls is very high in upper classes. School feeding is also a platform for delivering nutrition and health intervention, and addressing shortfalls in women's leadership in primary education. Children, parents, teachers, and community members will receive a learning package addressing health, hygiene, nutrition, deworming, promotion of safe drinking water, women's leadership and participation in school management committees and school vegetable gardening.

### **Key Findings**

- A midterm evaluation of the WFP School Feeding Program found that attendance rates increased between baseline and follow-up in all months for both boys and girls in the treatment schools. These differences were highly significant ( $p < 0.001$ ). The evaluation also found that increases in attendance were consistently slightly higher for girls than boys, although these differences were not statistically significant (Rogers, Coates, & Osei, 2004).

### **WFP Enhancing Resilience to Disaster and Climate Change Program**

This program works to improve the resilience of communities in vulnerable areas to disasters and climate change, especially flooding and typhoons. The program creates community assets by implementing cash for work and food for work programs. Participants are paid a daily wage or provided with food baskets consisting of nutritious ingredients for meals. Participants are also provided with nutrition training. The program is primarily targeted at women and most project sites have between 80 to 100 percent female workers. This targeting strategy is based on research evidence showing that women allocate more

resources to improving nutrition and health outcomes in households compared to men (DiDio, Schumacher, & Choudhury, 2011).

### **Key Findings**

- WFP creates an enabling environment for women by providing on site facilities such as clean toilets, areas for breastfeeding, and child-care. This is an innovative feature of the WFP cash for work and food for work programs (DiDio, Schumacher, & Choudhury, 2011).

### **3.4.3 Bilateral Programs and Activities**

#### **USAID Country Program**

USAID will use the new Presidential Global Health Initiative and Feed the Future Initiative to catalyze nutrition activities within existing and newly developed programs. Under these Initiatives the interventions will include pre conception to improve the nutritional status of adolescent girls, healthy eating habits for pregnant and lactating women, support exclusive breastfeeding up to five months and appropriate complementary feeding of children 6 to 24 months. The Presidential Global Health Initiative includes strategies to increase healthy behaviors through improved BCC and the strategy document for Bangladesh focuses on providing support to the Government to develop uniform and consistent nutrition messages and to work with the MOH&FW to resuscitate the national BCC policy.

The document also seeks to deepen social and behavior change communication in maternal and child nutrition for great impact by completing pilot implementation of peer-to-peer breastfeeding support, adolescent peer education, and training religious leaders in nutrition. USAID completed a gender assessment in 2010 that identified low status of women and intra-family food distribution as being major challenges for improving nutrition outcomes in Bangladesh. The gender assessment argues that the best way to address malnutrition in Bangladesh is to empower women through a combination of education, income generation and behavior change strategies targeted at men and women.

**USAID Food for Peace Multi Year Assistance Program (MYAP).** This program is operating from 2010 to 2015 and focuses on increasing the incomes of poor and extremely poor households, reducing chronic malnutrition among children under five, and reducing the vulnerability of poor communities and households to natural disasters. USAID has placed a strong emphasis on mainstreaming gender into program activities. USAID works with a number of partner organizations to implement a range of activities, many of which are focused on nutrition. This includes programs implemented by Care and Save the Children that are profiles in following sections.

#### **USAID Food and Nutrition Technical Assistance 2 (FANTA-2)**

FANTA-2 provides technical assistance to strengthen maternal and child nutrition programming in the health sector. The program focuses on implementing advocacy strategies to increase support of maternal and child nutrition, integrating maternal and child nutrition services into health service programs, developing social and behavior change communication in maternal and child nutrition by focusing on adolescent girls and increasing male involvement, strengthening capacity of local institutions in maternal and child nutrition programming, and conducting innovative research on food-based supplements to prevent chronic malnutrition. FANTA-2 is implemented by FHI360, and works with a number of national and international partner organizations.

### **USAID Strengthening Partnerships, Results and Innovations in Nutrition Globally (SPRING)**

The SPRING program is just starting up in Bangladesh and will be implemented by John Snow Inc. (JSI) along with a Hellen Keller International, Save the Children, The Manoff Group, and IFPRI. SPRING will focus on the establishment of homestead gardens and will include BCC activities to improve nutrition outcomes. BCC activities will address issues such as food allocation in households, training men to purchase the right food in the market, and working with mothers-in-law to educate them on proper health and nutrition practices.

#### **3.4.4 Civil Society Programs and Activities**

##### **FHI360 Alive and Thrive Program**

FHI360 is implementing the Alive and Thrive program with funding from the Bill and Melinda Gates Foundation. The program is focused on improving infant and young child nutrition. Three core strategies include: policy dialogue, service delivery and behavior change communication, and fortified complementary foods and other products. IFPRI manages the program's monitoring and evaluation component and recently completed a baseline survey that examined intra-household gender dynamics that influence nutrition outcomes.

##### **Key Findings**

- The baseline survey examined the needs of mothers to enable them to do a better job of feeding their children (i.e. mental health, workload, decision making). Qualitative research during year 1 also showed that men generally don't participate in nutrition and provide little support to childcare activities in the household. This baseline survey is informing the design of behavior change communication activities that will target men and other decision makers to improve their understanding of nutrition and the level of support they provide to women (Sanghvi, 2011).

- The baseline survey also found that the majority of women are not employed outside the home; in fact, less than 5 percent of women reported working outside their homes. Most mothers/caregivers also do not leave homes to go to markets. However, high work burdens within homes and homesteads with little support for chores are of concern. In fact, mental distress and postnatal depression are highly prevalent in the survey sample. Women's ownership of assets and control over sale of assets was very low, as was women's reported control over purchase of foods, clothes, and medicines for children. Combined with the fact that women do not do most of the purchasing, this limits the role of women in relation to markets (IFPRI, 2011).

### **HKI Homestead Food Production Program**

HKI and its partners work to create nutritional self-sufficiency in Bangladesh through the establishment of women-tended Homestead Food Production (HFP) gardens. The HFP program focuses on improving nutrition outcomes for women and children and emphasizes the empowerment of women. HFP improves household food security by increasing food availability, access to and consumption of micronutrient-rich foods through home gardening and poultry rearing. HFP provides trainings to improve knowledge of maternal self-care, infant-young child feeding practices, and gender awareness. HKI is currently working with 52 local NGOs and has established HFP programs for 900,000 households. HKI is starting to implement a pilot project using the stepping stone methodology to engage community members and promote dialogue on issues such as domestic violence, HIV/AIDS, and breastfeeding.

### **Key Findings**

- An evaluation of the HFP model in Bangladesh, Cambodia, Nepal and the Philippines from 2003 to 2007 showed that HFP participants increased production and consumption of vegetables and animal food products, increased household earnings that were used to purchase additional foods, and reduced the incidence of anemia among mothers and children compared to the control group (HKI, 2010).
- Most importantly, the HFP program empowered women, giving them more control over household resources from the income generated from their homestead food production activities. In most of the HFP communities, women decided which crops would be planted and when, which foods would be eaten at family meals and how income earned from surplus produce would be spent. Such control over HFP resources and income is likely a key factor in how the program has enhanced women's participation in household decision-making. The study also found that this has a potential positive impact on overall household spending, food preparation, food choices and intra-household food allocation as well as care-seeking behavior of women (HKI, 2010).

### **CARE Shouhardo Program**

CARE implemented the USAID-funded Shouhardo I project that ended in 2010, and is currently implementing the follow on Shouhardo II project. The Shouhardo I project was one of the largest programs in the US governments portfolio of the Food for Peace Title II food aid program, with a budget over \$120 million and a target of reaching 400,000 households. Shouhardo I targeted the poorest households in the most remote and vulnerable areas of the country, and south to reduce child malnutrition and poverty and food insecurity. Using a rights-based livelihoods approach, the project implemented a wide range of activities focused on mother and child health nutrition, sanitation, women empowerment, poverty and food insecurity alleviation, empowerment of the poor, and disaster mitigation and response. The follow on Shouhardo II project is similar in scope with a budget of \$100 million and a target of reaching 300,000 households. Shouhard II has five components that include: developing capacity to increase incomes and livelihoods; health, hygiene and nutrition; women empowerment; institutional strengthening; and climate change adaption (Khan, 2012). The Shouhard projects are unique in their approach to addressing structural causes of food insecurity and nutrition, which include poverty, poor sanitation, and recurrent natural disasters, as well as deeply entrenched inequalities in power between economic classes and between women and men (Smith, Khan, Frankenberger, & Wadud, 2011).

### **Key Findings**

- An impact evaluation of the Shouhardo I project by the Institute for Development Studies (IDS) found that stunting prevalence among project participants fell by nearly 16 percentage points over a three-and-a-half year period. During this time stunting was stagnant in Bangladesh as a whole, and was increasing in some areas due to a major food price crisis and adverse weather conditions (Smith, Khan, Frankenberger, & Wadud, 2011).
- The evaluation also found that the project's women's empowerment interventions had a strong independent impact on stunting. The sanitation, women's empowerment, and one poverty-alleviation interventions were also found to have synergistic impacts with direction nutrition interventions (Smith, Khan, Frankenberger, & Wadud, 2011).
- The project's key intervention to empower women was the Empowerment, Knowledge and Transformation Action (EKATA) groups. These groups created established forums for women to meet and express themselves in a public role, and included twenty women and ten adolescent girls. EKATA groups provided a platform for empowering women and adolescent girls through education, solidarity, group planning, and rights advocacy (Smith, Khan, Frankenberger, & Wadud, 2011)

### **Save the Children Nobo Jibon Program**

Save the Children implements the USAID-funded Nobo Jibon Food for Peace Title II food aid program. The program seeks to reduce food insecurity and vulnerability for over 190,000 households. Activities are focused on maternal and child health and nutrition, livelihood development, and disaster risk reduction and the program primarily targets rural disadvantaged women.

### **Key Findings**

- The Nobo Jibon Participatory Gender Analysis Report conducted in 2011 found that harmful norms and institutions are well entrenched and long-standing, but are also undergoing transformation. The report goes on to say that religious beliefs about women's rights and inheritance, restrictions on women's mobility, assumptions about women's ability to control assets and assume positions of leadership, and women's unequal responsibility for childcare and housework contribute to women's limited access to development benefits across Nobo Jibon's thematic areas (Hillenbrand & Khanam, Nobo Jibon Participatory Gender Analysis, 2011).
- The report recommends that Nobo Jibon address these challenges by continuing to offer opportunities for female leaders, encouraging quotas for females in traditional male leadership areas, encouraging and supporting women to voice discontent over inequality of asset control, sensitizing male leaders to household-wide benefits of ownership equality, providing women with information and training to develop bargaining skills, and developing household-level plans with equal participation from men and women to reduce vulnerability from disaster (Hillenbrand & Khanam, Nobo Jibon Participatory Gender Analysis, 2011).

### **Community-Local Government Partnership to Combat Child Malnutrition**

Concern Worldwide is implementing this project to promote timely, appropriate, safe and adequate infant and young child feeding practices for children under the age of two through a partnership between a municipality and multi-stakeholder platform in three wards of Kurigram municipality. Specific strategies include: strengthening the institutional capacity of the local municipality; fostering partnerships of the community stakeholders with health departments, NGOs, private sector and other government departments; promoting practical solutions at the ward level; facilitating local women's leadership; and ensuring accountability for demand driven services for the poor. The project will use mechanisms such as mothers clubs and "pot for mothers" to improve nutrition practices. Fathers will also be engaged through awareness sessions, campaigns, and actions to recognize positive practices. A combination of traditional tools and modern technologies such as cell phone messages, awards and subsidized services will be used to promote behavior change among the family members and change agents. This project was a winner of the 2009 Development Marketplace for Nutrition.

### **Empowering Women and Adolescents to Improve Infant and Young Child Nutrition**

Plan Bangladesh and THAN are implementing this project to prevent malnutrition by improving the quality and intensity of counseling on complementary feeding in addition to exclusive breastfeeding, promotion of culturally acceptable and affordable complementary foods and micronutrient powder for enriching diets of infants and young children 6-24 months of age. The program will involve adolescents and other community members, including fathers, grandfathers and influential men. The project trains community women as peer counselors who provide individual home visits. The project includes a number of innovative features, including the use of cell phones for communicating messages, the training of adolescent girls to promote infant young child feeding practices, and the involvement of influential community leaders and men. Specifically, the project will inform and involve fathers in buying diverse foods, child care, responsive feeding and parenting, and involving influential men in the community to change social norms about infant nutrition. The project will empower adolescent girls to understand the importance of appropriate nutrition for themselves and for young children by providing them with this important knowledge before they become mothers and computerized learning to improve basic computer literacy. This project was a winner of the 2009 Development Marketplace for Nutrition.

#### **Save the Children Kishoree Kontha (KK) Project**

Save the Children implemented the four-year KK project with support from the Nike Foundation. The KK program aimed to link savings schemes with other non-financial services, such as health and education, to allow rural adolescent girls aged 10-19 to build human, social and economic assets. Using a group mechanism, girls are empowered to make their own decisions in terms of savings and are then given access to credit to transition to income-generation activity.

#### **Key Findings**

- JPAL conducted a randomized control trial to evaluate the effectiveness of the KK project. Data collection has been completed on the project, which ended in 2011. Findings from this study are not yet available.
- Save the Children is moving forward with DFID to implement a larger scale project using the KK model to empowering adolescent girls in Bangladesh.

#### **BRAC Maternal, Neonatal and Child Health Care Program (MNCH)**

BRAC's MNCH program was launched in 2005 and focuses on maternal, neo-natal and child health. Key features of the program include capacity development of human resources in community health promotion, the empowerment of women and appropriate support groups, provision of health services and development of referrals to health facilities nearby. The Manoshi Urban MNCH program was launched in 2007 and is supported by the Bill and Melinda Gates Foundation. This project is scaling up in phases to serve slum

populations in Dhaka, Chittagong, Sylhet, Barisal, Khulna and Rajshahi cities including some peri-slum areas. BRAC's seeks to change behaviors at the community level through interpersonal communication, forums and meetings, popular music and theater, advocacy and mass media.

### **Key Findings**

- Lessons learned show that challenges to women's empowerment includes beliefs and practices, lack of appropriate knowledge and lack of support within the family. Lessons learned have also shown that services utilization can be improved when women, family members and community are empowered with knowledge and services are made women-sensitive and women-centric (Nasreen, Ahmed, Begum, & Afsana, 2007).

### **BRAC Employment and Livelihoods for Adolescents (ELA) Program**

The ELA program combines livelihood and life-skills training with credit facilities to help improve the quality of life of rural adolescent girls and young women between the ages of 14 and 25. It was established as a means through which they could build a savings habit to allow them to be self-supporting in the future. The program's target group is varied, with preference given to graduates of BRAC Education Program schools. ELA village organizations consists of 20 to 30 members who obtain credit in order to operate income generating activities either with the help of family members or on their own. The members invest their loans in tailoring, poultry, livestock, nursery, vegetable cultivation and other small businesses.

### **Key Findings**

- An evaluation of the ELA centers found indications of the program being useful in reducing the chances of early marriage, engaging the participants in economic activities, increasing their mobility and involvement in extra-curricular reading (Shahnaz & Karim, 2008).

### **BRAC Social and Financial Empowerment of Adolescents (SoFEA) Program**

BRAC is implementing the new SoFEA program that targets rural adolescent girls with financial support from the Nike Foundation. SoFEA integrates components of ELA and other BRAC programs that have targeted adolescents in order to empower adolescent girls both socially and financially. The program is targeting rural adolescent girls aged 11-21 years and plans to reach a total of 14,400 girls through 360 clubs in five upazilas of rural Bangladesh. There are six major components of SoFEA that complement each other to create a complete support structure for the target population. These components include a secure place for adolescent girls to socialize, life-skills training, livelihood training, financial literacy, savings and credit facilities, and community sensitization



## Key Findings

- SoFEA's baseline survey conducted in early 2010 collected information on the adolescent girl's socio-demographic profile, the level of awareness regarding health, social and legal issues, financial literacy, their perceptions of marriage, gender roles, their overall status in personal and family settings, as well as their parents' perceptions on the girls on these issues (Bhattacharjee & Das, 2011)
- The baseline survey found that approximately two-thirds of the adolescent girls included in the survey were currently enrolled in school and that the main cause of girls withdrawing from school was marriage. Other reasons included household chores and the inability to pay for educational expenses. The survey also found that adolescent girls had limited physical mobility. Marital status, educational levels, and parents valuing their daughter were the primary factors influencing girl's mobility. Adolescent girls also had low levels of awareness on health, social and legal issues. Level of education attainment was found to have a significant positive effect on girl's level of awareness. Involvement with income generating activities also increased awareness (Bhattacharjee & Das, 2011).

## 2.5 Action Research

### 3.5.1 Adolescent Girls' and Women's Status and Intra-household Bargaining

Author, Year, Organization	Focus of Study/Research	Key Findings
(JPAL, 2012)	Randomized control trial of Save the Children Kishoree Kontha (KK) Project to empower adolescent girls	<ul style="list-style-type: none"><li>• Results are forthcoming</li></ul>
(Akter & Rahman, 2010)	Duration of breastfeeding and its correlates in Bangladesh	<ul style="list-style-type: none"><li>• Breastfeeding was positively associated with maternal age, contraceptive-use, work status, and religion and was negatively associated with age at marriage, parity, delivery status, region, and maternal education</li><li>• The findings suggest that health institutions can play a significant role in promoting breastfeeding in Bangladesh. Educational campaigns that stress the benefits of lactation are important strategies for encouraging mothers to breastfeed longer</li></ul>

(Quisumbing & Kumar, Access, adoption, and diffusion: understanding the long-term impacts of improved vegetable and fish technologies in Bangladesh, 2010)	Access, adoption, and diffusion: understanding the long-term impacts of improved vegetable and fish technologies in Bangladesh	<ul style="list-style-type: none"> <li>• Results suggest that implementation modalities are important in determining the impact of new technologies on men's and women's asset accumulation</li> <li>• Women's assets increase more relative to men's when technologies are disseminated through women's group</li> <li>• These results suggest that social capital, as embodied through women's groups, not only serves as a substitute for physical assets in the short run, but helps to build up women's asset portfolios in the long run</li> <li>• Working through women's groups is an effective way of targeting women</li> </ul>
(World Bank, 2010)	Understanding the dynamics of gender and nutrition in Bangladesh	<ul style="list-style-type: none"> <li>• Greater women's empowerment and education are associated with better nutrition status of children</li> <li>• Greater involvement of women in household decisions and control over cash earnings was linked to better nutritional status for both male and female children</li> <li>• Women who participate in NGO activities or household decision-making tended to invest more in the nutrition of their sons than daughters</li> <li>• Women's participation in civic action was positively associated with improvements in both BMI and hemoglobin (an indicator of iron deficiency anemia)</li> </ul>
(IFPRI, Ongoing)	Evaluating the long-term impacts of women-focused development interventions on women's empowerment, poverty, nutrition, and diet quality	<ul style="list-style-type: none"> <li>• Findings are forthcoming</li> </ul>
(USAID, 2010)	USAID/Bangladesh Mission gender assessment	<ul style="list-style-type: none"> <li>• Women's education level and ability to control household resources are strongly associated with improvements in nutrition status for the entire family</li> <li>• Best way to address malnutrition is to empower women through a combination of education, income generation, and behavior change strategies targeted at men and women</li> </ul>

(Quisumbing & de la Briere, Women's assets and intrahousehold allocation in rural Bangladesh, 2002)	Women's assets and intra-household allocation in rural Bangladesh	<ul style="list-style-type: none"> <li>• Increased resources controlled by women are allocated towards children, in this case through children's clothing and schooling</li> <li>• Taking into account the bargaining power of other members of the extended family (mothers-in-law for example) may be key to explaining intra-household allocation outcomes in Bangladesh</li> </ul>
(Mohsena, Mascie-Taylor, & Goto, 2010)	Associations between socio-economic status and childhood under nutrition in Bangladesh	<ul style="list-style-type: none"> <li>• The present study found that there was no obvious, overall gender differential in child nutritional status; underweight, stunting and wasting prevalence were almost identical in boys and girls.</li> <li>• Bangladesh is generally thought to be a patriarchal society, but the apparent lack of a gender differential in undernutrition indicates that intra-household gender bias in feeding and health care for children in Bangladesh may be much more equal than hitherto suspected</li> <li>• Paternal education was not found to be associated with any of the malnutrition indicators</li> <li>• Maternal education showed strong associations with childhood underweight and stunting</li> <li>• Thus female education should still be one of the key policy options to achieve the MDG on malnutrition in Bangladesh</li> </ul>
(HKL, ongoing)	Formative research on engaging family member support for exclusive breastfeeding	<ul style="list-style-type: none"> <li>• Ongoing</li> </ul>
(HKL, ongoing)	Gender and nutrition baseline survey that covers attitudes towards VAW, gender attitudes, and knowledge of nutrition among mothers, fathers and mothers-in-law	<ul style="list-style-type: none"> <li>• Ongoing (available Q1 2012)</li> </ul>
(Hossain, Phillips, & Pence, 2007)	The effect of women's status on infant and child mortality in rural areas of Bangladesh	<ul style="list-style-type: none"> <li>• Autonomy is significantly negatively associated with post-neonatal mortality</li> <li>• Authority is significantly negatively associated with post-neonatal mortality</li> <li>• Empowering women with autonomy and authority in the household would be expected to reduce post-neonatal mortality by one-third</li> </ul>

(UNICEF, 2005)	Child and Mother Nutrition Survey of Bangladesh	<ul style="list-style-type: none"> <li>• Less than 10% of mothers (sample size 3050 mothers) were able to make their own decision on how much money the household spends on food, what food is bought for the household, and whether the mother or her child attends a health facility</li> </ul>
(HKI, 2010)	Gender analysis of REAL Project	<ul style="list-style-type: none"> <li>• Intra-household decision making dynamics are a primary contributor to women's and children's limited access to proper health care and nutrition</li> <li>• Typically, a woman's husband and mother-in-law are the primary decision-makers regarding issues that affect her and her children, including money, mobility, health, recreation, nutrition, family planning, antenatal care, and childcare</li> <li>• Mothers-in-law usually dictate traditional cultural feeding and health care practices which are often harmful to women and children, although they may be receptive to new practices, such as colostrum feeding after birth, when exposed to correct information</li> </ul>
(Save the Children, 2006)	Jibon-O-Jibika Project Gender Analysis	<ul style="list-style-type: none"> <li>• Husbands and mothers-in-law control food distribution within the household, which must be prioritized among members during times of food scarcity</li> <li>• Targeted interventions that seek to improve beneficiaries' knowledge about MCHN were effective in increasing nutrition-related knowledge among direct program participants; however, lack of decision-making power within the household often prevents women from applying this new knowledge in their homes</li> </ul>

### 3.5.2 Gender Division of Labor

Author, Year, Organization	Focus of Study/Research	Key Findings
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(Human Development Research Center, 2008)	Change in attitudes and behavior of garment owners, managers and workers towards gender and reproductive health issues	<ul style="list-style-type: none"> <li>• Female workers attitudes on reproductive health and gender (using a range of measurements) improved in the intervention factories</li> <li>• Working through the garment industry is an effective way to target women to improve their nutrition and health outcomes through trainings and interventions</li> </ul>
(DFID, Ongoing)	Leveraging Agriculture for Nutrition in South Asia (LANSA)	<ul style="list-style-type: none"> <li>• Results are forthcoming</li> </ul>
(Quisumbing & Kumar, Access, adoption, and diffusion: understanding the long-term impacts of improved vegetable and fish technologies in Bangladesh, 2010)	Access, adoption and diffusion: understanding the long-term impacts of improved vegetable and fish technologies in Bangladesh	<ul style="list-style-type: none"> <li>• The modality of the technology dissemination (whether through groups or individuals, directly to women or to a mixed group) makes a difference for income generation, sustainability of impact, which households gain immediately, as well as which members of the targeted households gain nutritionally</li> <li>• Horticulture technology (vegetable production) disseminated directly to women improved nutritional status, while individually-owned fish ponds—which generated substantial income controlled by men—actually saw an increase in girls' level of stunting</li> <li>• Empowering women and investing in women's groups for dissemination of technology and information can have more sustainable and profound impacts on food security and long-term nutrition gains than dissemination of such benefits to households as a whole</li> </ul>
(Haider & Begum, Working women, maternity entitlements, and breastfeeding: a report from Bangladesh, 1995)	Working Women, Maternity Entitlements, and Breastfeeding: A Report from Bangladesh	<ul style="list-style-type: none"> <li>• Among a sample of working women in Bangladesh (n=238) only 2% had continued to exclusively breastfeed into the fifth month of their employment and 99% were unaware of maternity entitlements which allowed them to take breaks in order to breastfeed</li> </ul>

### 3.5.3 Gender Norms, Identities and Values

Author, Year, Organization	Focus of Study/Research	Key Findings
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(World Bank, 2010)	Understanding the dynamics of gender and nutrition in Bangladesh	<ul style="list-style-type: none"> <li>• Acceptance of domestic violence was strongly associated with decreases in all key indicators of child nutrition (HAZ, WAZ, and WHZ)</li> <li>• Children are more likely to experience chronic malnutrition if mothers experienced domestic violence</li> <li>• Sons whose mothers experienced domestic abuse are also less likely than daughters in the same family to be stunted or to have a low body mass index</li> <li>• Mothers appear to repeat the cycle or preferring their sons over their daughters, potentially because sons have responsibility for looking after their mothers in old age</li> <li>• Experience of domestic abuse (particularly verbal abuse) had a significant negative impact on women's current Body Mass Index (BMI) and on improvements in BMI over time.</li> </ul>
(Haider, Kabir, Hamadani, & Habte, 1997)	Knowledge and perceptions affecting breastfeeding	<ul style="list-style-type: none"> <li>• Perceptions of insufficient breast milk was the reason given for early introduction of complementary foods</li> <li>• Factors that contributed to failure to exclusively breastfeed included domineering grandmothers, workload, or disinterest</li> </ul> <p>Argues that grandmothers should be included in nutrition education along with women of reproductive age</p>
(USAID, 2010)	USAID/Bangladesh Mission gender assessment	<ul style="list-style-type: none"> <li>• Women have subordinate status vis-à-vis men and senior women in the family, and reproductive roles and cultural practices encourage early marriage and child bearing, as well as food restrictions</li> <li>• Women are often the last to eat the already limited quantities of food available, because culturally, even when pregnant, they are expected to defer to husbands, children and mothers-in-law</li> </ul>

(Naved, Khan, Persson, & Ekstrom, 2007)	Violence against women and compliance of pregnant women to food supplementation in rural Bangladesh	<ul style="list-style-type: none"> <li>• No effect was found on any act of physical or emotional violence on compliance</li> <li>• Controlling behavior had a significant direct effect on compliance</li> <li>• It also had an indirect effect on compliance mediated through mental distress leading to increased morbidity of women</li> </ul>
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## **Appendix 3: Bhutan Country Report**

### **3.1 Malnutrition and Gender in Bhutan**

The lack of data in Bhutan makes a comprehensive overview of the national nutrition situation difficult. Bhutan's 2010 Multiple Indicator Survey found that nearly one in eight children under five were moderately underweight (12.7%) and 3.2% were classified as severely underweight (National Statistics Bureau , 2010). The MICS also found that more than one third of children (33.5%) were moderately stunted or too short for their age. Among this group, 13.3% were severely stunted. Wasting among children was estimated at 5.9% and severe wasting at 2%. Children in the Eastern region have the highest prevalence of stunting (42.5%), while the percentage of children with wasting is the highest in the Western region (6.7%) (National Statistics Bureau , 2010). Children whose mothers are uneducated and are from the poorest family had highest prevalence of stunting at 37.4% and 41.4% respectively (National Statistics Bureau , 2010). This compares to children with educated mothers (22.7%) and from the rich family (21.4%).

Micronutrient deficiencies in Bhutan are related to iron, iodine and vitamin A. Iodine deficiency has been addressed through the strict control of distribution of non-iodized salt within the country. Vitamin A deficiency does not appear to be a major problem because of the routine distribution of large doses of vitamin A during immunization visits. A study in 2003 estimated that 28% of men, 55% of women and 81% of children were anemic due to iron deficiency (UNICEF, 2006).

Bhutanese women have generally enjoyed a comparatively better status than women in other South Asian countries. A UNICEF study found that women have the same legal rights as men do, and have equal access to health, education and public services (UNICEF, 2006). The study also found that in some cases women are in strong positions than men. This is the case in west and central Bhutan and in some parts of the east where the family system is matrilineal and land is inherited through the mother (UNICEF, 2006). Nearly 60% of rural women hold land registration titles (UNICEF, 2006). In Bhutan is common for the most capable member of the family takes charge, and as a result the mother or the eldest daughter may become the head of the household. In Buddhist Bhutan, men and women are more equal within the household than in other neighboring countries. It is

quite common for Bhutanese men to share domestic tasks as part of the isolated, rugged, and self-sufficient traditional life-style. Boys and girls normally learn how to cook, clean and wait on elders (UNICEF, 2006). Husbands also tend to help out with cooking and assisting with childbirth (UNICEF, 2006).

That being said, women still carry a large burden within the household, tend to get married and pregnant early, are less educated than men, and suffer from domestic violence (National Statistics Bureau, 2010). According to the 2010 MICS, 7.5% of women aged 20-49 were married before their 15<sup>th</sup> birthday, while 30.8% of women aged 20-49 were married before their 18<sup>th</sup> birthday (National Statistics Bureau, 2010). With respect to education, 61.2% of women aged 15-49 had never been to school, while 12% had primary schooling. Another 26.7% had completed their secondary and higher education. The survey also found that 68.4% of women believed that a man was justified in hitting or beating his wife if the woman was not respecting the family norms (National Statistics Bureau, 2010).

### **3.2 Mapping of Stakeholders**

The Department of Public Health's Non-Communicable Disease Division is responsible for implementing the country's nutrition program. Bhutan's Ministry of Agriculture and Forests is responsible for implementing the country's new Food and Nutrition Security Policy (FNSP) that was drafted in 2010.

Important international partners in the health sector include Denmark, the Global Fund, GAVI Alliance, Japan, the European Union, World Bank, WHO, UNICEF, FAO, WFP, and UNFPA. Most of these partners are focused on tuberculosis, HIV/AIDS programs, and general support to the health sector. While UNICEF, WHO, and WFP contribute to the government's nutrition program, FAO primarily supports agriculture and food security activities.

Very few international NGO's are active in Bhutan, and none appear to focus on nutrition. Save the Children focuses on early childhood care and education, basic education, adolescent and youth development and child protection. Based on the literature review, it is not clear if these programs include nutrition interventions. A few local NGO's implement activities that are focused on adolescent girls and women. The National Commission for Women and Children (NCWC) was established by the Government of Bhutan to spearhead activities to eliminate all forms of discrimination against women. RENEW is another organization that is dedicated to relief and empowerment of disadvantaged women and adolescent girls. The International Bhutan Foundation (TIBF) promotes sustainable development in Bhutan, and focuses its work on health, youth development and childcare, and welfare of women with a particular focus on women and adolescents. Nutrition is not mentioned in these organizations' program documents.

### **3.3 Government Commitment and Policies**

The Government of Bhutan introduced its National Nutrition Program in 1985, with the primary objective of reducing protein energy malnutrition and micronutrient deficiencies among the Bhutanese population. The program targets children less than five years of age and pregnant and lactating women. Ineffective legislation, lack of a multi-sectoral approach, weak information, education and communication (IEC) strategies and inadequate monitoring, evaluation and research mechanism were identified as the main problems in implementing the policy (WHO, 2005)

Bhutan's Ninth Five Year Plan (2003-2008) acknowledged that the overall nutritional status of the population was unsatisfactory, and emphasized the need for improvements. This plan called for the development of a National Nutrition Policy and Integrated Nutrition Information, Education, and Communications Plan. The Tenth Five Year Plan does reference these documents and they are not available through the web (Royal Government of Bhutan, 2008). It is unclear whether these plans have been finalized and whether they are being implemented.

A draft FNSP was prepared by the Ministry of Agriculture and Forests in 2010. This policy focuses on improving the availability of and access to food, utilization of food, and improving nutrition security. This policy is not available through the web, and it is unclear whether the document has been finalized and is being implemented.

The NCWC prepared a National Plan of Action (NPA) on Gender for 2008-2013 (National Commission for Women and Children, 2008). This plan identifies seven priority areas for interventions to achieve Bhutan's gender goals. These areas include health and nutrition. The document also acknowledges that marriages among teenage girls continue, teenage pregnancies remain an area of concern, and nutrition problems such as anemia among adolescent girls and women remain widespread in Bhutan. The plan outlines a number of direct nutrition interventions, but does not mention underlying drivers of malnutrition such as intra-household gender dynamics.

### **3.4 Programs and Activities**

This section presents government, multilateral, bilateral and civil society programs that are focused on gender and nutrition. In some cases key government, multilateral and bilateral programs are included even though they may not be addressing underlying gender causes of malnutrition to identify the programs and agencies with whom the World Bank and its clients may need to engage.

#### **4.4.1 Government Programs and Activities**

##### **DOPH Nutrition Program**

The DOPH's Nutrition Program focuses on direct nutrition interventions to reduce protein energy malnutrition and micronutrient deficiencies among the Bhutanese

population. Specific interventions include dietary diversification, child feeding and care practices, growth monitoring, nutrition rehabilitation, iron deficiency anemia control, iodine deficiency disorder control, vitamin A deficiency control, and food fortification and vitamin supplementation. This program is closely linked to the Child Care and Development Program (CCDP) and new initiatives to improve nutrition by increasing food security. The Nutrition Program includes a school agriculture and kitchen gardening component that has been successful, and includes nutrition education for students. This program is supported by FAO.

#### **4.4.2 Multilateral Programs and Activities**

##### **World Bank**

In 2005 the World Bank produced a policy note that examined human development outcomes in Bhutan, with particular attention to areas of nutrition, food security and child health.

##### **UNICEF Model Villages Program**

The Model Villages Program (MVP) is a joint UNICEF-Government of Bhutan initiative. The MVP is designed to promote basic health, sanitation and general living conditions in Bhutanese villages. Model villages are encouraged to build footpaths, latrines, and garbage pits, maintain their water supply system and to establish kitchen gardens to improve nutrition. The program also promotes immunization and enrolment of children into schools. This model has been established in all the 202 sub-district blocks in the country and a number of other health and education programs are adopting this model. UNICEF is considering expanding the MVP into a more comprehensive community development program. This model has been established in all the 202 sub-district blocks in the country and a number of other health and education programs are adopting this model. UNICEF is considering expanding the MVP into a more comprehensive community development program.

##### **WFP Improving Rural Children's Access to Basic Education Program**

WFP supports the Government of Bhutan in its school feeding activities. This program seeks to address short-term hunger faced by children living far away from schools and by reducing the financial burden on poor households. The program also assists in alleviating certain types of micronutrient deficiencies and contributes to the overall improvement of school enrolment rates and attendance. Special attention is given to girl students and the program works to maintain regular school attendance of girls to reduce gender disparity.

### **3.5 References**

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## Appendix 4: India Country Report

### 4.1 Malnutrition and Gender in India

The scale and gender dimensions of undernutrition in India are evident in the findings of the National Family Health Survey 3 (NFHS-3) carried out between 2005 and 2006. While India has experienced economic growth of nearly 10% annually during recent years, rates of child and undernutrition remain very high. According to the NFHS-3, 48 per cent of children under the age of five are stunted due to chronic under-nutrition, and 70% of children ages 6-59 months are anemic (MOHFW, 2006). The survey shows that children from scheduled tribes have the poorest nutritional status on almost every measure, with high rates of wasting of particular concern (28%). The nutritional status of women in India is a primary driver of the nutrition situation of children. NFHS-3 shows that 36 per cent of Indian women are chronically undernourished and 55 per cent are anemic (MOHFW, 2006). UNICEF reports that recent data from Bihar and Madhya Pradesh shows that girls represent up to 68 percent of the children admitted to programs that treat severe malnourishment (UNICEF, 2012).

The poor nutritional status of women in India and inadequate food and nutrient intake during pregnancy has led to 30% of babies being born underweight and weighing less than 2.5kg at birth (WFP, 2007). A mid-term evaluation of the WFP-supported Integrated Child Development Services (ICDS) Programme found that among beneficiaries in four states, the average energy intake among pregnant women was 450–500 kcal less than the recommended daily allowance (Operations Research Group, 2006). Among households with a monthly income below Rs255, the estimated average intake of Iron, vitamin A and zinc was 47%, 39% and 44% of the recommended daily allowance respectively (Micronutrient Initiative, 2005). The WFP also reports that the prevalence of iron deficiency among pregnant women is 87%, with over 40% of maternal deaths worldwide resulting from anemia occurring in India (WFP, 2007).

Household food insecurity and intra-household food distribution, imbalanced diet, inadequate preventative and curative health services, and insufficient knowledge of proper care and infant feeding practices are contributing factors to the nutrition situation in India (UNICEF, 2012). Women's status in India is also an important contributing factor. There remains a strong gender bias for boys in India, and boys and men are given preferential treatment within the households with respect to care and feeding practices, and limit their access to a range of resources from education to credit. Literacy rates for women in 2011 were 65.46%, which compares to 82.14% for males (India Census, 2011). Some estimates indicate that nearly 40% of married Indian women face physical abuse by their husbands (SWAYAM, 2012).

### 4.2 Mapping of Stakeholders

The Prime Ministers Office established the National Council on India's Nutrition Challenges in 2008 to oversee the implementation of the National Nutrition Policy and the National Plan of Action on Nutrition. This council replaced the National Nutrition Mission, and is responsible for providing policy guidelines for address India's nutritional challenges, coordinating interventions across government departments, and reviewing nutrition programs on a quarterly basis. The council also serves as the national forum for policy coordination, review and direction. Special working groups have been established in all key departments to analyze the nutritional relevance of sectoral proposals and to incorporate nutritional interventions into their overall programs according to the Plan of Action. A state level nutrition council was also established to coordinate implementation at the state level.

The Ministry of Women and Child Development (MOWCD) continues to play a key role in coordinating and implementing the National Nutrition Policy and National Plan of Action on Nutrition. The MOWCD is also responsible for implementing the world's largest program for mother-and-child health, nutrition and education – the Integrated Child Development Services (ICDS) Scheme. The Ministry of Health and Family Welfare (MOHFW) implements the National Rural Health Mission (NRHM) and plays a key role in supporting the implementation of the ICDS, and providing infrastructure for the delivery of nutrition interventions.

The World Bank, UNICEF, WFP, USAID, DFID, CARE, and the Bill and Melinda Gates Foundation are key international stakeholders that support and supplement the government's work on nutrition. These organizations generally do not implement stand-alone nutrition programs as they do in other South Asian countries.

The Coalition for Sustainable Nutrition Security in India was launched in 2008, and is a network of high-level policy and program leaders committed to ending malnutrition in India. Their mission is to influence policy and program decisions at the national and state levels to achieve sustainable nutrition security in India. Save the Children is currently heading up the Coalition and members include representatives from a range of government ministries, World Bank, UNICEF, WFP, USAID, DFID, Bill and Melinda Gates Foundation, MI, IFPRI, the Hunger Project, National Institute of Nutrition, Nutrition Foundation of India, and a few private sector organizations.

Other important stakeholders working in the nutrition sector in India include the Public Health Foundation of India, Institute for Health Management, Foundation for Research and Health Services, Global Alliance for Improved Nutrition, and the Agha Khan Foundation.

### **4.3 Government Commitment and Policies**

India's National Nutrition Policy was introduced in 1993 to combat the countries problem of under-nutrition. The policy is coordinate by the MOWCD, and outlines a range of direct (short-term) and indirect (long-term) strategies and interventions to improve



nutrition outcomes. Several of these strategies and interventions focus specifically on gender. These include interventions to improve nutrition of adolescent girls to enable them to attain safe motherhood, improve nutrition of pregnant women to decrease incidence of low birth weight, nutrition education, health and family welfare, community participation, equal remuneration for women, improving literacy for women, and improving the status of women (Ministry of Women and Child Development, 1993). These interventions are generally implemented through the ICDS.

The MOWCD published the National Plan of Action on Nutrition in 1995 to operationalize the multi-sectoral strategy enshrined in the National Nutrition Policy. This document outlines key goals and objectives, and presents nutrition plans of action for a broad range of sectors (Ministry of Women and Child Development, 1995). The National Plan of Action on Nutrition is primarily concerned with outlining sectoral plans, and does not emphasize gender considerations. While the MOWCD plays an important role in coordinating and implementing the National Nutrition Policy and the Plan of Action, the Prime Minister's National Nutrition Council is the highest body responsible for overseeing the implementation of all nutrient policy and action plans.

A joint strategy paper to “Address India's Nutrition Challenge” prepared by the Ministry of Women and Child Development and the Ministry of Health and Family Welfare in 2010, and the recent call for action by the Prime Minister's National Nutrition Council appear to indicate strong consensus and commitment to address India's nutrition outcomes. The Prime Minister's National Nutrition Council has outlined the future direction for India's response to nutrition through four key recommendations. These recommendations focus on strengthening and restructuring the ICDS program to enable a special focus on pregnant/nursing mothers and children under three, provide flexibility for location action, and forge institutional convergence with other national programs; design a multi-sector plan in 200 high burden districts; implement a nation-wide information, education and communication campaign against malnutrition to address issues of status of women, the care of pregnant mothers and children under two, breastfeeding, and the importance of balanced nutrition, health, hygiene and sanitation; and involve other key Ministries to bring strong nutrition focus to their programs.

#### **4.4 Programs and Activities**

This section presents government, multilateral, bilateral and civil society programs that are focused on gender and nutrition. In some cases key government, multilateral and bilateral programs are included even though they may not be addressing underlying gender causes of malnutrition to identify the programs and agencies with whom the World Bank and its clients may need to engage.

##### **5.4.1 Government Programs and Activities**

###### **Integrated Child Development Services (ICDS) Scheme**

India's flagship mother-and-child health, nutrition and education program is implemented by the MOWCD, has been in place for 30 years and operates in all Indian states. The program offers six services that include supplementary nutrition, pre-school education, immunization, health checks, growth monitoring and referral services. The program provides supplementary nutrition for 51.4 million beneficiaries, including 23.1 million pre-school children. Supplementary feeding is provided to all children 0-6 years old for up to 300 days in a year. This includes 300 calories and 8-10 milligrams of protein for all children from 0-72 months. The program covers 50-150% of the required complementary energy needs and 70-100% of the recommended protein needs for children 6-23 months of age. Children under the age of 2 receive take home rations that typically last for several weeks (Jain, N/A). A number of other related schemes targeting adolescent girls and pregnant and lactating women are implemented under the ICDS platform. These schemes are described below.

The Nutrition, Health and Education (NHED) component forms part of the programs BCC strategy. The strategy focuses on building the capacity of women aged 15-45 to enable them to look after their own and their families health, nutrition and development needs. Anganwadi Workers (AWW) are the frontline workers of the program and are expected to provide health and nutrition education for pregnant and lactating mothers. The Accredited Social Health Activist (ASHA) and AWW are also expected to counsel and support behavior change at the household level to improve nutrition outcomes. While the ASHA is expected to work with women committees at the community level, there is no explicit mention of working with men, grandmothers and other household decision makers. The Government of India is currently working to restructure and strengthen the ICDS scheme. This includes expanding the regional reach of the program, and incorporating a greater emphasis on adolescent girls.

### **Rajiv Gandhi Scheme for Empowerment of Adolescent Girls (RGSEAG or SABLA)**

The MOWCD will use the SABLA scheme to target adolescent girls under the restructured ICDS. The SABLA scheme proposes to merge the Nutrition Program for Adolescent Girls (NPAG) and Kishori Shakti Yojana (KSY), while improving the content of the programs. The scheme will be implemented under the ICDS platform, and aims at empowering adolescent girls of 11-18 years with focus on out-of-school girls. The scheme aims to improve their nutritional and health status, and upgrading home skills, life skills and vocational skills. The scheme also aims at equipping the girls on family welfare, health hygiene, and information and guidance on existing public services along with aiming to mainstream out-of-school girls into formal or non-formal education. For the nutrition provision, 11-14 years out of school girls and all girls of 15-18 years would be covered since Mid-day meals do not cover 15-18 years girls.

### **Key Findings**

- An evaluation of the NPAG by the Nutrition Foundation of India found that the attitude of families towards grain supplements to adolescent girls was rather ambiguous. Some of the better off segments of the population felt that they were providing adequate food to adolescent girls and did not feel the need for additional food grain supplements to be given to them. There were anecdotal reports from some centers that some households sold the food grains and used the money for buying books or school uniforms. Among the poorest sections of the population both in urban and rural areas, the women of household felt when there are other persons in the family who are also not having adequate food and so they have to use the food grains to improve the household food security; therefore they cannot give all the additional food grain they got to the identified undernourished adolescent girl (Nutrition Foundation of India, 2006).

### **Swayamsidha Program (IWEP)**

The Ministry of Mother and Child Development also implements the IWEP, which seeks to empower women by ensuring their direct access to, and control over resources. The program works to establish self-reliant women's Self Help Groups (SHGs), and seeks to increase awareness of members regarding women's status, health, nutrition, education, sanitation, hygiene, legal rights, economic upliftment, and other social, economic and political issues.

### **National Rural Livelihood Mission (NRLM)**

The Ministry of Rural Development is in the process of redesigning and restructuring the on going Swarnjayanti Gram Swarojgar Yojana (SGSY) program into the National Rural Livelihood Mission (NRLM). The NRLM aims to create self-help groups among poor rural communities in India, and enhance their livelihood options through access to easy loans, capital grant and skills training. The self-help groups will stress on women participation and offer them financial support in their entrepreneurial ventures. NRLM will have multi pronged approach to strengthen livelihoods of the rural poor by promoting Self Help Groups, improving existing occupations, providing skill development & placement and other activities thereof. The training and capacity building, deployment of multidisciplinary experts and other initiatives will enhance the credit worthiness of the rural poor.

### **National Rural Health Mission (NRHM)**

The NRHM provides healthcare to rural populations throughout the country with a special focus on 18 states that have weak public health indicators and weak infrastructure. Key components include female health activities in each village, village health plan prepared locally, capacity building for rural hospitals, and improvements of health infrastructure.

The program seeks to effectively integrate health concerns with determinants of health such as sanitation and hygiene, nutrition and safe drinking water.

### **Reproductive and Child Health Program (RCH)**

India's Reproductive and Child Health Program has four major components. These are the prevention and management of unwanted pregnancy; maternal care that includes antenatal, delivery and postpartum services; child survival services for newborns and infants; and management of reproductive tract infections and sexually transmitted infections.

### **Mid-Day meal Program (MDM)**

The Ministry of Human Resource Development implements the MDM through schools and provides meals to all primary and upper primary school children in the country as an incentive to enhance enrollment, retention and attendance while improving the nutrition status of children. This program does not explicitly target adolescent girls.

## **5.4.2 Multilateral Programs and Activities**

### **World Bank**

The World Bank has supported the ICDS scheme in the past, but is currently only supporting the second Reproductive and Child Health (RCH) Project in India. This program aims to reduce maternal and child health mortality by increasing access to essential health services that include nutrition. The World Bank will also support a new nutrition project that will strengthen the policy framework, systems and capacity of the ICDS.

### **UNICEF Child Development and Nutrition (CDN) Program**

UNICEF's CDN has an overall objective of reducing hunger and undernutrition in India. The program focuses on: improving breastfeeding practices in the first two years of life; improving foods and feeding practices for children 6-23 months old; improving micronutrient nutrition and anemia control in infants and young children; improving nutrition and anemia control in adolescent girls and mothers; improving feeding care for children who are severely undernourished and/or affected by HIV. The CDN program is primarily involved in supporting the implementation of the ICDS program. UNICEF also strengthens actions with the National Rural Health Mission (NRHM) through facility-based interventions in Anganwadi and Health centers, and supported outreach initiatives such as Village Health and Nutrition Days and community-based programs to ensure a socially-inclusive continuum of nutrition care and support for children in the first two years of life, adolescent girls, and women. The CDN also supports the ICDS and NRHM to scale-up adolescent anemia control programs with state funds. The program targets girls

with weekly iron and folic acid supplements, deworming prophylaxis, and counseling and support to improve their diets and to prevent anemia. UNICEF is also supporting the MOWCD in developing the framework and implementation guidelines for the SABLA program (UNICEF, 2010).

## **WFP**

WFP is primarily involved in extending assistance to enhance the effectiveness and outreach of the ICDS in selected districts: Tikamgarh & Chhattarpur in Madhya Pradesh, Koraput, Malkangir & Nabrangpur in Orissa, Banswara in Rajasthan and Dantewada in Chhattisgarh. WFP's core activities are focused on assisting the state governments to start and expand production of low cost micronutrient fortified food known as "Indiamix". State governments are required to contribute to the cost of Indiamix by matching the WFP wheat contribution at a 1:1 cost-sharing ratio.

### **5.4.3 Bilateral Programs and Activities**

## **USAID**

USAID supports programs and technical assistance in coordination with the Government of India's flagship health programs, including the NRHM and the ICDS scheme. USAID provides food aid support to the ICDS scheme and has worked with the Government of India to change the focus from three to six year old children to children less than two years.

## **DFID**

DFID is working in three Orissa, Bihar and Madhya Pradesh to reform the ICDS scheme by bringing evidence to bear on the most appropriate age groups to target with services, improving efficiency, and strengthening the capacity of the AWWs. They are also working with the state governments to generate an evidence base of what works, but are also contributing significant resources to programming. DFID's new nutrition strategy emphasizes the first 1000 days, and does not have a strong gender focus.

### **5.4.4 Civil Society Programs and Activities**

## **IntraHealth VISTAAR Project**

IntraHealth implements the five-year, \$25 million USAID-funded VISTAAR project with Abt Associates, Catholic relief Services and several local NGOs. The program began in 2006 and is set to end in October 2012. The program works closely with the Government of India and the state governments of Uttar Pradesh and Jharkhand to implement activities. The program supports the governments maternal, newborn and child health and nutrition programs, and seeks to promote the transfer of knowledge to practice and the use

of data for decision-making. Focus areas include: complementary feeding, anemia prevention and treatment, newborn care, delay of marriage and first birth, village health committees, performance improvement and support for community health workers.

### **Key Findings**

- A midterm evaluation of Vistaar indicates that sex-disaggregated data collected during the Vistaar-supported BCC campaign show that gender-related attitudes and practices are influencing behavior (Stover, Deshmukh, Ruducha, & Ramani, 2009).
- The review also found that there is little evidence about what can be done to delay age of marriage. The review also recommends that Vistaar should refocus attention on building the evidence base about what works and the dynamics behind this by capturing family dynamics, community norms, and other social, cultural and gender factors that affect the acceptance of early marriage (Stover, Deshmukh, Ruducha, & Ramani, 2009).

### **CARE Reproductive and Child Health, Nutrition and HIV/AIDS (RACHNA) Program**

CARE implemented the USAID-funded RACHNA program from 2001 to 2006 in close collaboration with the MOWCD and local NGOs. During this time the program reached an estimated 100 million people, in 78 districts in 9 states. The Integrated Nutrition Health Program (INHP) component targeted pregnant and lactating women, and children less than two years of age to reduce child mortality and improve nutritional status. INHP had a primary objective to strengthen the ICDS scheme and increase convergence with the MOWCD's Reproductive and Child Health Program. Interventions included antenatal care, supplementary feeding, pediatric vitamin A and iron-folic acid supplementation, immunization, community-based newborn care, and promotion of appropriate breastfeeding and complementary feeding practices of children 0-2 years of age.

The operational strategy of INHP was to demonstrate "best practices" in 10% of Anganwadi centers, while replicating and scaling up these practices in other areas. The four "best practices" include community-based volunteers (change agents) to promote healthy maternal and childcare practices, fixed-day and fixed-site provision of health services, community-based monitoring systems, and block-level resource mapping. CARE began a three-year phase out of the program in 2007 to consolidate lessons learned and replicate these approaches in non-program areas through the ICDS scheme.

### **Key Findings**

- There are several evaluation reports for INHP that deserve greater analysis for lessons learned. These include The CARE baseline and end-line survey, CARE/BASICS RAP surveys, Johns Hopkins University (JHU)/KGMU Independent Evaluation of Newborn and Nutrition Components, CARE Midterm Assessment, JHU/IndiaClen Qualitative Evaluation, CARE Final Evaluation.

- Lessons drawn from the midterm review indicate that a number of social inequities created barriers to all women and children accessing health and nutrition services and information. The review found that while the ICDS and health outreach programs had design elements that were intended to overcome these inequities, these were often not effective enough (CARE, 2007).
- Gender was an important factor determining childcare. While there was little evidence of direct gender-based discrimination in the care and feeding of children for the indicators measured: girls and boys had similar levels of service coverage and behavior, and malnutrition rates were even. Gender did impact child care in terms of the meager support that the mothers received from others at home in taking care of children, however, and possibly in terms of the tendency to seek care for serious illnesses of boys more frequently than of girls (CARE, 2007).
- The level of caring and feeding did not appear to be related strongly to the occupational status of mothers: children of working and non-working mothers had similar rates of coverage in these rural areas. The influence of some of the gender (and other variables of social equity) may not be visible because of poor overall levels of childcare and feeding, and as communities learn to practice more “correct” behaviors, such prejudices may come to the fore more clearly (CARE, 2007).

### **Using Cell Phone Technology to Improve Breastfeeding and Reduce Infant Morbidity**

Lata Medical Research Foundation (LMRF) is implementing the “Evaluation of the Effectiveness of Cell Phone Technology as Community-based Intervention to Improve Exclusive Breastfeeding and Reduce Infant Mortality” project. The objective of the project is to change household health behavior through cell phones. The project is focused on improving exclusive breastfeeding over a control group by innovative use of cell phones to provide ongoing encouragement and counseling with a lactation counselor. The counseling will be provided throughout the post partum period to six months. The project has the potential to empower women to overcome barriers of leaving their home after delivery and limited transportation by providing mothers with the flexibility to call when she most needs help and through frequent reminders, promotion messages, etc. This project was a winner of the 2009 Development Marketplace on Nutrition. The study is ongoing and there are no published findings to date.

### **Healthy and Positive Pregnancy Initiative (HAPPI)**

The Institute of Home Economics (a College of the University of Delhi) is implementing the HAPPI project to reduce stress during pregnancy. The HAPPI package includes IEC material on nutrition, health and psychosocial well being during pregnancy. Interventions include theater, role-play, developing jingles, yoga, and meditation. Specific objectives are: to evaluate pregnant women on sociocultural, health and nutritional profiles, maternal personal resources, and prenatal stressors; to develop and implement an innovative intervention package to address nutritional and psychosocial well-being and reduce stress during pregnancy; to assess the effectiveness of interventions in terms of pregnancy

outcomes; and to determine associations between pregnancy outcome and sociocultural, health and nutritional profiles, maternal personal resources and prenatal stressors. This project was a winner of the 2009 Development Marketplace on Nutrition. The literature review was unable to locate information about this project on the Internet.

### **Social Capital as a Catapult for Improving Infant Feeding**

Aga Khan Health Services (AKHS) is implementing this project using the concept of social capital to improve infant feeding practices. The project seeks to improve knowledge, attitudes and practices related to infant feeding by providing adolescent girls, mothers and grandmothers of infants with accurate information to dispel any myths or misconceptions. The project is primarily targeted at mothers, but also works with adolescent girls and grandmothers. In this respect, the project seeks to work with “future mothers”, “present mothers” and “past mothers”. The project acknowledges that grandmothers exert considerable influence in the care of newborns and children and seeks to target them to encourage the adoption of proper behaviors and to discourage traditional practices, which are harmful to children. The project will also work with adolescent girls to sensitize future mothers and to reinforce practices among young mothers in the community. The project area includes seven villages in Malia block of Junagarh district in Gujarat. This project was a winner of the 2009 Development Marketplace on Nutrition. The literature review was unable to locate information about this project on the Internet.

### **Coalition for Sustainable Nutrition Security in India**

The coalition lists a number of specific objectives, including the promotion of a nutrition behavior change communication movement through Grameen Gyan Abhiyan (Village Knowledge Centers, Gyan Chaupals and other approaches). Another objective is to train one woman and one male member of each Panchayat in the science and art of identifying an adequate and appropriate diet and health practices essential for a healthy and productive life. These women and men will serve as Hunger Fighters and will work with local communities in overcoming protein-energy malnutrition, micronutrient malnutrition, and seasonal hunger in their villages and towns.

### **Interagency Working Group on Gender (IWGG)**

The IWGG used the Stepping Stones methodology to involve men in participatory workshops to challenge them to reflect on their roles as men and fathers in the family, and to help break down gender roles. This program did not focus on nutrition, but deserves to be mentioned as it involved men in participatory workshops to change gender roles in the household.

### **Improving Community Nutritional Status through Meso-micro Collaboration**

Implemented by Yugantar for the Center for Research on Women (ICRW), this program sought to strengthen activities that would increase the participation of women in the



processes of providing improved food and nutritional security at the village level and create accountability relationships with the local government.

### Center for Communications Programs (CCP) Strategic SBCC for Child Survival and Maternal Health

The CCP is working with the government of Andhra Pradesh to develop a strategic behavior change communication program to promote child survival behaviors and redefining norms around maternal health. This program is funded by UNICEF and implemented by CCP. The project provides technical assistance and capacity building for social and behavior change communication (SBCC) to the National Rural Health Mission (NRHM) in Andhra Pradesh, focusing on MNCH and nutrition. CCP will provide technical assistance for the development of a state wide SBCC strategy. The strategy will include messaging, product development, and implementation plans to reduce maternal, newborn and child morbidity and mortality. The project description does not indicate a gender focus.

## 4.5 Action Research

### 5.5.1 Adolescent Girls' and Women's Status and Intra-household Bargaining

Author, Year, Organization	Focus of Study/Research	Key Findings
(Indian Institute of Management, 2011)	Karnataka Household Asset Survey	<ul style="list-style-type: none"> <li>• Contrary to the popular belief that in the patriarchal Indian society, women do not own any assets, this data shows that women do own some assets</li> <li>• Despite this, men do own the lion's share of assets – a finding that some may say is neither new nor surprising</li> <li>• However, for the first time in India, the study has quantified what women and men own for a wide range of physical and financial assets, which has in turn, shown the extent and nature of the gender asset gap</li> <li>• The study also highlights how individuals acquire assets and how this links up to the existing legal framework</li> </ul>
(Shroff M. , 2007)	Child nutritional status and women's autonomy	<ul style="list-style-type: none"> <li>• This study found that women with high autonomy (both financial and physical) were less likely to have stunted children in Andhra Pradesh</li> </ul>

(Moestue & Huttly, 2008)	Link between household educational levels and child nutritional status	<ul style="list-style-type: none"> <li>• Grandmother's educational status is positively associated with children's nutritional status</li> </ul>
(Christian, Abbi, Gujral, & Gopaldes, 1989)	Socioeconomic determinants of child nutritional status in rural and tribal India	<ul style="list-style-type: none"> <li>• The study found that per capita monthly family income, nutrition knowledge of mothers, birth interval and age of children were significantly related to nutritional status of both boys and girls</li> <li>• Literacy of mothers affected boys' weight only</li> <li>• A stepwise multivariate regression model using the same factors for boys and girls with sex an additional independent variable showed that mothers' nutrition knowledge score, children's age, per capita monthly income and sex, in that order, were significantly related to the nutritional status of children.</li> </ul>
(Rajaram, Zottarelli, & Sunil, 2007)	Individual, household, programme and community effects on childhood malnutrition	<ul style="list-style-type: none"> <li>• The results show that maternal characteristics, such as socio-economic and behavioral factors, are more influential in determining childhood nutritional status than the prevalence of programme factors.</li> </ul>
(Saito, Korzenik, Jekel, & Bhattacharji, 1997)	Maternal knowledge of malnutrition and health-care-seeking attitudes in rural India	<ul style="list-style-type: none"> <li>• The results suggested that the gender of the child and socioeconomic factors were stronger risk factors for malnutrition than health-care availability and health-care-seeking attitudes</li> <li>• The father's occupation was a more accurate indicator for malnutrition than household income</li> <li>• These results suggest a need for intensive nutritional programs targeted toward poor female children and their mothers</li> </ul>
(Sethuraman, Lansdown, & Sullivan, 2006)	Women's empowerment and domestic violence: The role of sociocultural determinants in maternal and child undernutrition	<ul style="list-style-type: none"> <li>• Biological variables explained most of the variance in nutritional status, followed by health-care seeking and women's empowerment variables; socioeconomic variables explained the least amount of variance</li> <li>• Women's empowerment variables were significantly associated with child nutrition and explained 5.6% of the variance in the sample</li> </ul>

(Shroff, Griffiths, Adair, Suchindran, & Bentley, Maternal autonomy is inversely related to child stunting in Andhra Pradesh India, 2009)	Maternal autonomy is inversely related to child stunting in Andhra Pradesh	<ul style="list-style-type: none"> <li>• The study found that women with higher autonomy (indicated by access to and freedom to choose to go to the market) were significantly less likely to have a stunted child, after controlling for household socio-economic status and mother's education</li> <li>• In Andhra Pradesh, two dimensions of female autonomy have an independent effect on child growth, suggesting the need for interventions that increase women's financial and physical autonomy</li> </ul>
(Mishra & Retherford, 2000)	Women's education can improve child nutrition in India	<ul style="list-style-type: none"> <li>• The study found that children whose mothers have little or no education tend to have a lower nutritional status than do children of more-educated mothers, even after controlling potentially confounding demographic and socioeconomic variables</li> <li>• The age of the child, birth order, and household economic status all have independent effects on nutritional status</li> <li>• Considering the very strong impact of maternal education on child nutrition, women's education and literacy programs could play an important role in improving the nutritional status of children</li> </ul>
(Behrman, 1988)	Intrahousehold allocation among children in rural India	<ul style="list-style-type: none"> <li>• Nutrients available to children are determined largely by intrahousehold allocations</li> <li>• That study found that latent variable estimates for rural south India indicate that parental preferences have productivity-equity tradeoffs and parents favor older children</li> <li>• The productivity-equity tradeoff, however, is much less for the lean season. Therefore, when food is scarcest, parents follow more closely a pure investment strategy, exposing their more vulnerable children to greater malnutrition risk</li> </ul>
(Kesterton & Cleland, 2009)	Neonatal care in rural Karnataka: healthy and harmful practices, the potential for change	<ul style="list-style-type: none"> <li>• Grandmothers are key decision-makers regarding delivery and newborn care in the Indian state of Karnataka</li> <li>• During the 40-day confinement period of the mother and infant after birth, grandmothers ensure intensive oversight and teaching.</li> </ul>

(Wiley, 2002)	Cultural factors relating to pregnancy and childbirth	<ul style="list-style-type: none"> <li>• At critical times during pregnancy and childbirth, senior family and neighbor women play an authoritative role and greatly influence women's practices</li> </ul>
(Sharma & Kanani, 2006)	Grandmothers influence on child care and nutritional status	<ul style="list-style-type: none"> <li>• Grandmothers have a positive influence on younger women's childcare and infant feeding practices.</li> </ul>
(Kaushal, Aggarwal, Singal, HM, Kapoor, & Paul, 2005)	Newborn feeding and care	<ul style="list-style-type: none"> <li>• Younger women usually put into practice advice received from their mothers-in-law related to infant feeding, including prelacteals and complementary feeding</li> <li>• They are unable to put into practice new knowledge on infant and complementary feeding from health workers if it goes against the advice of mothers-in-law</li> </ul>
(DFID and IFPRI, Ongoing)	Transforming Nutrition	<ul style="list-style-type: none"> <li>• Research will focus on the 1,000-day period from pre-pregnancy to 24 months of age – the “window of opportunity”- where interventions are most effective at reducing undernutrition and the benefits of doing so are most enduring. Research questions include the following:</li> <li>• How can direct nutrition-specific interventions targeted to the window of opportunity be appropriately prioritized, implemented, scaled up and sustained in different settings?</li> <li>• How can social protection, agriculture, and women's empowerment interventions have a greater impact on improving nutrition during the window of opportunity?</li> <li>• How can an enabling environment be promoted, and existing and enhanced political and economic resources be used most effectively to improve nutrition? India and Bangladesh are included in this study</li> </ul>
(Maitra, 2004)	Parental bargaining, health inputs and child mortality in India	<ul style="list-style-type: none"> <li>• Study found that a unit increase in woman's decision-making power and control over household resources (combined to produce a “bargaining power index”) increased the demand of prenatal care by 40% points and the probability of hospital delivery by 25%, both of which contributed significantly to a reduction in the risk of child mortality</li> </ul>
(Das Gupta, 1997)	Socio-economic status and clustering of child deaths in rural Punjab	<ul style="list-style-type: none"> <li>• Maternal education improves child care practices such as the use of rehydration therapies as well as immunization uptake</li> </ul>

(Agarwal & Srivastava, 2009)	Social determinants of children's health in urban areas in India	<ul style="list-style-type: none"> <li>• In urban poor areas of India the likelihood of children not receiving vaccinations was significantly associated with a mothers lack of financial autonomy and with lack of educational attainment</li> </ul>
(Gaiha & Kulkarni, 2005)	Anthropometric failure and persistence of poverty in rural India	<ul style="list-style-type: none"> <li>• In rural households across India reduced stunting was associated with increased maternal age and education and with residence in a female headed household</li> <li>• A higher proportion of children whose mothers had below primary education were severally stunted (43.98% versus 36.95% of mothers who had the highest level of education)</li> <li>• Children of women under 20 were most severally stunted (43.82% of the total).</li> <li>• Data simulations showed that if women do not marry before they are 20 years old, stunting will reduce by 15.54%</li> <li>• There was a lower proportion of severally stunted children living in female-headed households (35.84% versus 42.80% in male-headed households)</li> <li>• Simulations with the data showed that a complete switch of male-headed households to female-headed ones will reduce severe stunting by 27.02%</li> </ul>
(Shroff, Griffiths, Adair, Suchindran, & Bentley, Maternal autonomy is inversely related to child stunting in Andhra Pradesh India, 2009)	Maternal autonomy is inversely related to child stunting in Andhra Pradesh	<ul style="list-style-type: none"> <li>• Two gender measures were significantly associated with child stunting: permission to go to the market and freedom to use financial resources</li> </ul>
(Sethuraman K. , 2008)	The Role of Women's Empowerment and Domestic Violence in Child Growth and Undernutrition in a Tribal and Rural Community in South India	<ul style="list-style-type: none"> <li>• In the sample of this study, tribal women had greater decision-making capabilities and freedom of movement than rural women and were more likely to be employed</li> <li>• The women's empowerment variables have a strong association with weight for height, but virtually no association with height for age at enrollment; at follow up several of the empowerment variables were found to be significantly associated with height for age</li> <li>• Where young mothers are empowered to make decisions and have greater freedom of movement, their children's nutritional status tended to improve</li> </ul>

### 5.5.2 Gender Divisions of Labor

Author, Year, Organization	Focus of Study/Research	Key Findings
(Foundation for Research in Health Systems, 2007)	Understanding health and nutritional concerns of urban poor	<ul style="list-style-type: none"> <li>• Women and their families frequently reported that women should continue doing their domestic and agricultural work to ensure easy delivery, except the heaviest work</li> </ul>
(Calev Varkey, et al., 2004)	Involving men in health and family planning	<ul style="list-style-type: none"> <li>• The Men in Maternity (MiM) study investigated the feasibility, acceptability and cost of a new and more comprehensive model of maternity care that encouraged husbands' participation in their wives' antenatal and postpartum care</li> <li>• The study found that involving men increased knowledge on health and family planning among couples and facilitated greater inter spousal communication around child feeding.</li> </ul>
(Bill and Melinda Gates Foundation, Indira Gandhi Institute of Development Research, National Institute of Nutrition in India, Planned)	Strengthening agriculture and nutrition linkages	<ul style="list-style-type: none"> <li>• Tacking the Agriculture Nutrition Divide in India (TANDI II) seeks to define the research agenda in India for exploring and strengthening agriculture and nutrition linkages.</li> <li>• Data will be generated on agriculture, income, food intake, and anthropometry.</li> </ul>

(Headey, Chlu, & Kadiyala, 2011)	Agriculture's Role in the Indian Enigma: Help or Hindrance to the Undernutrition Crisis	<ul style="list-style-type: none"> <li>• In rural areas, 83% of working women are employed in the agriculture sector, so agricultural employment conditions are potentially an important influence on women's nutrition status as well as on important determinants of child nutrition</li> <li>• The existence of case study evidence on livelihoods shows that Indian women in agriculture work very hard, to the detriment of their own nutrition and that of their children</li> <li>• However, regression analysis on a nationally represented dataset suggests that on average at least there is nothing special about agriculture in this regard because women working in other manual jobs also have lower body mass indexes</li> <li>• A substantial part of the problem seems to relate to broader rural service problems rather than agriculture problems</li> <li>• Women in the more unskilled occupations are generally more likely to leave their children in the care of others</li> </ul>
(Coonrod, 1998)	Chronic Hunger and the Status of Women in India	<ul style="list-style-type: none"> <li>• Study in Indian Himalayas found that on a one-hectare farm, a pair of bullocks worked 1064 hours, a man 1,212 hours, and a woman 3,485 hours in a year.</li> </ul>
(Agarwal B. , 1983)	Rural Women and the High Yielding Rice Technology in India	<ul style="list-style-type: none"> <li>• Women supply 70-80 percent of the labor for transplanting, 70-80 percent for weeding, more than 60 percent for harvesting, and 25-40 percent for threshing</li> <li>• Women have benefited less from mechanization, which has implications not only for productivity but also for women's time use and energy expenditure</li> </ul>
(Rajogopalan, 1981)	Births, Work and Nutrition in Tamil Nadu India	<ul style="list-style-type: none"> <li>• In Tamil Nadu birth rates peaked just before the start of the heaviest period of agriculture work</li> <li>• Suggest that this may adversely affect infant nutrition by limiting the time available for breastfeeding</li> </ul>
(Griffiths, 2001)	The Nutrition Transition is Underway in India	<ul style="list-style-type: none"> <li>• Low adult female BMIs were 4.21 times as likely in rural areas compared with large cities in Andhra Pradesh</li> <li>• Women engaged in agriculture employment were 1.52% points more likely to be underweight</li> </ul>

(Barker, Chorghade, Crozier, Leary, & Fall, 2006)	Gender Differences in Body Mass Index in Rural India are Determined by Socio-Economic Factors and Lifestyle	<ul style="list-style-type: none"> <li>• In a study in six villages of the Pune district in Maharashtra young women had significantly lower BMI than their male peers</li> <li>• In this agriculture community, women in farming households were much thinner than those in non farming households (BMIs of 18.3 versus 20.3) and this difference was not observed in men</li> <li>• Suggested reason for this was that women were more likely to work full time in farming than men and also carry the burden of household chores including heavy activities such as washing clothes and fetching water</li> </ul>
(Skoufias, 1993)	Labor market opportunities and intra family time allocation in rural households in South Asia	<ul style="list-style-type: none"> <li>• Found that women allocated more time to home activities (which included childcare) when male wages were low and female wages were high, when farms were more valuable, and when there were more boys and more adults but fewer elderly women in the household</li> </ul>

### 5.5.3 Gender Norms, Identities and Values

Author, Year, Organization	Focus of Study/Research	Key Findings
(Foundation for Research in Health Systems, 2007)	Understanding health and nutritional concerns of urban poor	<ul style="list-style-type: none"> <li>• The study (Care and Support of Unmarried Adolescent Girls in Rajasthan) showed that many parents wanted to take extra care of their daughters' health and nutrition in anticipation of her marriage and childbearing.</li> <li>• They believed that early marriage causes poor health outcomes but were not able to overcome the social pressure to marry their daughters, early</li> <li>• After marriage, couples seemed to discuss and agree about when to have the first child, yet almost never resort to using contraception; hence, many have their first child in the first year of marriage</li> <li>• Among pregnant women, reducing food intake during pregnancy ("eating down") to ensure a small baby and easy delivery is less common than previously thought</li> <li>• However, women and their families frequently reported that women should continue doing their domestic and agricultural work to ensure easy delivery, except the heaviest work</li> </ul>



(Saito, Korzenik, Jekel, & Bhattacharji, 1997)	Maternal knowledge of malnutrition and health-care-seeking attitudes in rural India	<ul style="list-style-type: none"> <li>• The results suggested that the gender of the child and socioeconomic factors were stronger risk factors for malnutrition than health-care availability and health-care-seeking attitudes</li> <li>• The father's occupation was a more accurate indicator for malnutrition than household income</li> <li>• These results suggest a need for intensive nutritional programs targeted toward poor female children and their mothers</li> </ul>
(Sethuraman, Lansdown, & Sullivan, 2006)	Women's empowerment and domestic violence: The role of sociocultural determinants in maternal and child undernutrition	<ul style="list-style-type: none"> <li>• Maternal experience of psychological abuse and sexual coercion increased the risk of malnutrition in mothers and children</li> <li>• Domestic violence was experienced by 34% of mothers in the sample.</li> </ul>
(Ackerson & Subramanian, 2008)	Domestic violence and chronic malnutrition among women and children	<ul style="list-style-type: none"> <li>• The study found that multiple incidents of domestic violence in the previous year were associated with anemia and underweight in women and children</li> <li>• Possible mechanisms for this relation include withholding of food as a form of abuse and stress-mediated influences of domestic violence on nutritional outcomes</li> <li>• These findings indicate that reducing domestic violence is important not only from a moral and intrinsic perspective but also because of the instrumental health benefits likely to accrue.</li> </ul>

(Barua, Apte, & Kumar, 2007)	Care and support of unmarried adolescent girls in Rajasthan	<ul style="list-style-type: none"> <li>• The majority of girls in the study appeared to receive care and support from their parents both in general and specifically in terms of diet, health, and emotional care</li> <li>• Care and support are likely to be related to the household environment and that where girls are more educated, the family value their daughters more overall and vice versa</li> <li>• Education for girls is increasingly viewed positively; at an underlying level this may imply a shift in how families view girls</li> <li>• The trend in marriage appears to be that parents acknowledge early marriage is harmful and some feel that it is less common now</li> <li>• Although arranged marriage continues to predominate, some parents increasingly felt that some girls now have more say in marriage</li> </ul>
(Kapadi-Kundu, Khale, Upadhye, & Chavan, 2007)	Whose Mistake? Gender Roles and Physical Violence among Young Married Women	<ul style="list-style-type: none"> <li>• Although violent and non-violent homes had largely similar gender role expectations, their reactions to perceived failure to fulfill these expectations differed</li> <li>• Violent homes tended to have stringent standards that young married women needed to strictly adhere to; when these families perceived that their daughter-in-law did not meet these standards, the reprisal that included physical abuse was often viewed as justifiable</li> <li>• In contrast in households with flexible standards, if the marital family perceived that the daughter-in-law failed to fulfill expectations, the often gave her support and mentoring</li> <li>• Violence early in marriage often sets the tone for the nature of the relationship within a marital home between the victim and other family members</li> <li>• A better understanding of the context in which violence against women begins is critical for developing preventative interventions</li> </ul>

(Ackerson & Subramanian, 2008)	Domestic Violence and Chronic Malnutrition among Women and Children in India	<ul style="list-style-type: none"> <li>• Results indicate associations of multiple incidents of domestic violence in the previous year with anemia (odds ratio = 1.11, 95% confidence interval: 1.04, 1.18) and underweight (odds ratio = 1.21, 95% confidence interval: 1.13, 1.29) in women and a suggested relation among children</li> <li>• Possible mechanisms for this relation include withholding of food as a form of abuse and stress-mediated influences of domestic violence on nutritional outcomes</li> <li>• These findings indicate that reducing domestic violence is important not only from a moral and intrinsic perspective but also because of the instrumental health benefits likely to accrue.</li> </ul>
(Sethuraman K. , 2008)	The Role of Women's Empowerment and Domestic Violence in Child Growth and Undernutrition in a Tribal and Rural Community in South India	<ul style="list-style-type: none"> <li>• Mothers prior lifetime experience of physical violence was found to be negatively associated with children's growth</li> </ul>

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## Appendix 5: Maldives Country Report

### 5.1 Malnutrition and Gender in the Maldives

The Maldives performs better than many of its South Asian neighbors in terms of nutritional status of women and children, and has seen significant achievements in human development. Access to basic health services is nearly universal in the Maldives and progress has been made to improve access to maternal and child health services (ADB, 2007). Studies have also found that breastfeeding rates are high and the average duration of breastfeeding is more than two years in the Maldives (Abdulraheem & Binns, 2007). That being said, rates of wasted, stunted and underweight children are still considered high for a country at the current level of economic and social development. Among children under 5 years of age, 18.9% are stunted, 17.3% are underweight, and 10.6% are wasted (Ministry of Health and Family, 2009). A higher proportion of male children (20%) are stunted compared to female children (17%) (Ministry of Health and Family, 2009). While 22% of infants are born with a low birth weight, 44% of children over the age of 15 are overweight or obese (UNICEF, 2009).

Maternal mortality rates are also high at 57 per 100,000 live births. The 2009 DHS found that nearly 50% of women had a normal Body Mass Index (BMI), while 8% were considered underweight (BMI less than 18.5) and 46% were overweight or obese (BMI 25 or higher) (Ministry of Health and Family, 2009). The DHS also found that one-fifth of Maldivian women (23%) suffer from chronic energy deficiency, and that younger women (15-24 years) suffered from greater energy deficiency. Prevalence of anemia among women of reproductive age was 15.5%, while 38.4% of women of reproductive age were found to be iron deficient (Ministry of Health and Family, 2007). The micronutrient assessment also found that 26.8% of women of reproductive age were deficient in zinc, 4.7% of women were severely deficient in Vitamin A, and 1.4% was suffering from severe iodine deficiency.

Although early marriages and teenage pregnancies in the Maldives are rare (only 2 percent of adolescents have started childbearing), women are considered particularly at risk in the Maldives (Ministry of Health and Family, 2009). Gender empowerment measures suggest considerable economic and political inequalities for women in terms of opportunities, access and income. With respect to decision making power in the household, just over half of the married Maldivian women share decision making regarding their health with their husbands, while 20% decide for themselves, and 23% responded that their husbands decided for them (Ministry of Health and Family, 2009). There is evidence that increasing religious fundamentalism and an emerging prevalence of conservative ideas are negatively affecting girls' school attendance (UNICEF, 2010). There are also rising concerns about extensive gender-based violence. Recent survey results indicate that one in three Maldivian women aged 15-49 have reported one form of physical or sexual violence in their lifetime (UNICEF, 2010). Prevailing traditional and socio-cultural norms and attitudes limit

women's active participation in economic and political activities and leadership (UNICEF, 2010).

## **5.2 Mapping of Stakeholders**

The new coalition government in the Maldives merged the Ministry of Gender and Family with the Ministry of Health in 2009 to create the new Ministry of Health and Family (MOHF). This new ministry is responsible for overseeing the country's nutrition policy and interventions. The Ministry of Fisheries and Agriculture is responsible for improving food security in the Maldives, but its mission statement does not mention nutrition. The government has planned to revitalize the National Nutrition Committee and to create a small action-oriented Nutrition Task force to manage the implementation of the country's nutrition action plans.

Key international partners working on health and nutrition in the Maldives include the WHO, UNICEF, UNFPA and the World Bank. UNICEF and the World Bank have done some work on BCC to improve nutrition outcomes. There is a UN Nutrition Task Force that coordinates activities among UN agencies working on nutrition issues in the Maldives.

The Society for Health Education (SHE) was established in 1988 and is the only NGO actively involved in the government's population programs. SHE implements an integrated approach to health education and service delivery, but does not engage directly with nutrition work.

## **5.3 Government Commitment and Policies**

The Maldives developed its first National Nutrition Plan (NNP) of action in 1992. Since then the government has revised the plan for 1997-2000 and 2002-2006 to include a greater focus on food safety and growth monitoring of children, and to incorporate the "Triple A" approach (assess, analyze, and act) to nutrition. While the revised NNP's have identified new target groups to include women of child bearing age, adolescents, school children and older adults, most interventions are focused on pregnant women and children less than 5 years (WHO & WFP, 2007). The fourth NNP developed for 2007-2011 called for greater multi-sectoral coordination, and incorporated a "lifecycle" perspective to address the cycle of inter-generational malnutrition and growth failure (WHO & WFP, 2007).

The government had plans to develop a draft National Food and Nutrition Policy by the end of 2010, and has been working with the WHO and UNICEF to develop an Integrated National Nutrition Strategic Action Plan for 2011-2015 and a National BCC Strategy for Maternal and Child Nutrition. The literature review was unable to confirm whether these documents have been finalized and are being implemented. Major challenges to improving nutrition outcomes in the Maldives include the island geography, technical capacity, competing health priorities, insufficient budget and human resources, and weak multi-sectoral coordination (WHO & WFP, 2007).

The government established National Gender Equality Policy and Framework for Operationalization in 2009. This new policy includes objectives to empower women, but does not mention adolescent girls or nutrition (Republic of Maldives, 2009).

## **5.4 Programs and Activities**

This section presents government, multilateral, bilateral and civil society programs that are focused on gender and nutrition. In some cases key government, multilateral and bilateral programs are included even though they may not be addressing underlying gender causes of malnutrition to identify the programs and agencies with whom the World Bank and its clients may need to engage.

### **6.4.1 Government Programs and Activities**

#### **MOHF Nutrition and Safe Motherhood Program**

The MOHF's nutrition program focuses on improving infant and young child feeding practices; promotion of breastfeeding; increasing awareness of malnourishment and micronutrient deficiencies among adolescents, pregnant and lactating women; BCC to improve nutrition practices; and reducing fertility rates. The MOHF has also adopted a positive deviance health approach, and established an online nutrition and child health surveillance system with the support of the WHO and UNICEF. The MOHF's positive deviance health approach to nutrition primarily targets mothers through the islands Integrated Early Childhood Development Committees.

### **6.4.2 Multilateral Programs and Activities**

#### **World Bank Integrated Human Development Project**

This program focused on building the capacities of community-based organizations to provide nutrition services. Strategies included BCC to improve nutrition awareness and practices, improving nutrition surveillance, and increasing use of locally available complementary foods. The program ran from 2004 to 2011.

#### **Key Findings**

- The World Bank's Implementation and Completion Report found that achievement of the health objectives (including nutrition objectives) was moderately unsatisfactory. Many of the nutrition outcomes could not be verified because of lack of data. BCC activities appear to have been primarily targeted at health workers, rather than decision makers in the households (World Bank, 2011).



## UNICEF Young Child Survival and Development (YCSD) Program

UNICEF's YCSD program focuses on providing access to quality health services for all children under five and pregnant mothers. The YCSD program has also focused on addressing malnutrition through the Integrated Early Childhood Care and Development initiative. This initiative has established feeding centers (verandas) in and around health facilities, and uses a positive-deviance methodology to encourage mothers and caregivers to learn about appropriate nutrition practices. Under this approach, health workers bring together groups of mothers to feed their children, observe each other, compare notes, and discuss questions about malnutrition among their children to learn how successful mothers are deviating from the norm to improve nutrition outcomes. These programs are implemented in coordination with the island's Integrated Early Childhood Development Committees.

### 5.5 Action Research

#### 6.5.1 Adolescent Girls' and Women's Status and Intra-household Bargaining

Author, Year, Organization	Focus of Study/Research	Key Findings
(Ministry of Health and Family, 2009)	Demographic and Health Survey	<ul style="list-style-type: none"><li>• As women's education increases, the consumption of nutrition foods also increases</li><li>• Overweight and obesity decrease with higher levels of education</li></ul>

#### 6.5.2 Gender Division of Labor

Author, Year, Organization	Focus of Study/Research	Key Findings
(Ramachandran, 2007)	Women and Food Security in South Asia	<ul style="list-style-type: none"><li>• Maldives is an exception to other South Asian countries with over half of its female workers employed in the industrial sector, and only about one third in agriculture</li></ul>

#### 6.5.3 Gender Norms, Identities and Values

Author, Year, Organization	Focus of Study/Research	Key Findings
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(Abdulraheem & Binns, 2007)	Infant feeding practices of mothers in the Maldives	<ul style="list-style-type: none"> <li>• Breast feeding rates are high and the average duration of breastfeeding is more than 2 years in the Maldives</li> <li>• Fathers were found to be on the list in supporting and encouraging breast-feeding</li> <li>• 85% of mothers said that their baby's father preferred breastfeeding</li> <li>• 85% of mothers said that their own mothers breast-fed their children</li> </ul>
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## Appendix 6: Nepal Country Report

### 6.1 Malnutrition and Gender in Nepal

Malnutrition among children, adolescents and women remains a serious problem in Nepal. According to the 2011 DHS, 41% of children under the age of five are affected by stunting, and 16% are severely stunted (Ministry of Health and Population, 2011). Nearly one third of children (29%) are underweight, and 11% of children suffer from wasting (Ministry of Health and Population, 2011). The survey found that the nutritional status among children deteriorates after the age of 9-11 months, when over 90% of Nepalese children are given complementary foods.

The survey also highlights the differences in nutritional status of children based on place of residence and their mother's education. The nutritional status of rural children is generally worse than urban children. Nearly 50% of children living in the mountains are stunted and more than one-third are underweight (Ministry of Health and Population, 2011). The children of mothers with no education were more likely to be stunted, wasted or underweight than children with mothers who attended school (Ministry of Health and Population, 2011). While anemia rates have declined over the past decade, nearly 50% of Nepalese children ages 6-59 months are anemic, while 35% of women age 15-49 show evidence of anemia (Ministry of Health and Population, 2011). Rural women and children generally suffer from higher incidences of anemia, with 47% of children and 36% of women showing signs of anemia (Ministry of Health and Population, 2011).

Research has shown that women's status in Nepal, as measured by the degree of autonomy they enjoy in the household and outside, is very low (Dancer & Rammohan, 2009). Women have very little decision making power, and have to deal with restrictions that limit their ability to work outside the household, travel alone without being accompanied by male or elderly relatives, and accessing health care provided by males (Dancer & Rammohan, 2009). Studies have also shown that some traditional practices put women at risk. In some Nepali households women tend to be less well nourished than men because they are required to fast during menstruation, and for periods during pregnancy and lactation (Global Health Initiative, 2011). Women are often the last to eat in many households, and where food is scarce that leaves little for them (Global Health Initiative, 2011).

Nepalese women suffer from high rates of domestic violence. The 2011 DHS found that 34% of women age 15-49 years had experienced physical violence since the age of 15, and 9% had experienced physical violence within the past 12 months (Ministry of Health and Population, 2011). Women living in rural areas, married women, and women with no education were more likely to experience physical violence than their counterparts. While over 50% of women with no education had experienced physical violence, only 15% of

women with a School Leaving Certificate and higher levels of education had ever experienced physical violence (Ministry of Health and Population, 2011).

## **6.2 Mapping of Stakeholders**

A large number of stakeholders are involved in ongoing nutrition work in Nepal. The Ministry of Health and Population (MoHP) has traditionally led the development and implementation of nutrition policies and programs. That being said, the Government of Nepal is currently developing a multi-sector nutrition plan that will be led by the National Planning Commission and will involve the MoHP, Ministry of Education, Ministry of Local Development and Social Protection, and the Ministry of Agriculture and Cooperatives. The National Planning Commission oversees the National Nutrition Steering Committee (NNSC), which designates nutrition focal officers in various ministries and line agencies, and recently established a high level nutrition and food security steering committee. The Ministry of Women, Child and Social Welfare (MOWCSW) is a focus ministry for the policy, planning, programming and overall development and coordination of all activities related to women and children. The MOWCSW is not part of the multi-sector nutrition plan, although the plan recommends that all nutrition programs be implemented in coordination with the ministry.

The Nepal Nutrition Group (NNG) has been set up by Nepal's development partners to improve the coordination of their activities. The NNG includes representatives from UNICEF, WFP, WHO, DFID, USAID, World Bank, European Union (EU), HKI, Save the Children, and Micronutrient Initiative. The NNG meets with the new food security donor technical working group at least once every quarter.

The UN Nutrition Cluster also serves as a coordination mechanism for nutrition programs and projects funded and implemented by a range of donors and NGOs. The Nutrition Cluster is currently led by UNICEF and its member include the MoHP, WHO, WFP, United Nations High Commissioner for Refugees (UNHCR), United Nations office for the Coordination of Humanitarian Affairs (UNOCHA-HSU), United Mission to Nepal, AUSAID, DFID, USAID, National Public Health and Education Group, Children Fund Japan, Save the Children, CARE Nepal, HKI, National Network on Rights to Food, World Vision, New Era Nepal, Nepali Technical Assistance Group, Nepal Health Research Council, Nepal Family Health Program, International Nepal Fellowship, Youth for World Nepal, New Era Nepal, Nepalese Youth Opportunity Foundation, Nepal Red Cross Society, and Terre des Hommes Foundation Nepal.

## **6.3 Government Commitment and Policies**

The MoHP published a national nutrition policy and strategy document in 2004 that described the malnutrition situation in Nepal, and summarized the government's ongoing actions in the nutrition sector. The strategy document also introduced 13 strategic

approaches along with the overall goals, objectives and targets of each approach (Ministry of Health and Population, 2004). At the time the document was published, the government was implementing some of these approaches, while others were recommended to achieve Nepal's nutrition objectives.

Nepal carried out a Nutrition Assessment and Gap Analysis (NAGA) in 2009, which built upon a strong foundation provided by the Nepal National Plan for Action on Nutrition developed in 2007. Although the government never accepted the action plan, it provided a good starting point for the NAGA. Nepal is currently developing an ambitious multi-sector nutrition plan for accelerating the reduction of maternal and child under-nutrition. This plan is scheduled to be finalized in early 2012, and will coordinate the planning and implementation of nutrition policies and programs across five ministries. The National Planning Commission is leading the development of this plan and will involve the MoHP, Ministry of Education, Ministry of Local Development and Social Protection, and the Ministry of Agriculture and Cooperatives. The draft plan calls for inclusiveness and gender equity, and includes outputs and results focused on improving adolescent girl's education, life-skills and nutrition status. The country has also successfully applied for funding through the Global Agriculture and Food Security Program (GAFSP). Their proposal included significant nutrition components including improving knowledge regarding production and consumption of micronutrient-rich foods.

Nepal's National Health Sector Programme 2010-2015 (NHSP II) also indicates a special priority for nutrition, and emphasizes the need for a multi-sector approach to nutrition in Nepal. The NHSP includes a Gender Equity and Social Inclusion (GESI) framework that outlines policies and activities that will increase access to health care for women and children, as well as ethnic and religious groups such as Dalits, Adibasi, Janajatis, Madhesis, Muslims, and other disadvantaged groups and casts that comprise a large percent of the population. The GESI framework has eight strategies and is primarily focused on ensuring the inclusion of GESI in the development of policies; the planning, implementation, and evaluation programs and projects; and improving access and quality of health care services for women and other vulnerable groups. Awareness raising and behavior change communication activities are focused on community health workers and pregnant women. Several activities are also focused on reducing gender discrimination in the household and providing community and household counseling on gender based violence (Ministry of Health and Population, 2009).

Nepal has a National Adolescent Health and Development strategy that was developed in 2000. Although this plan focuses on all adolescents, it looks at the nutrition status of adolescent girls and proposes interventions to address this issue. One of the objectives of the strategy is to improve the nutritional status of adolescents with a particular emphasis on girls. This includes meeting protein and energy requirements and providing micronutrients such as iron and iodine (Ministry of Health and Population, 2000).

## 6.4 Programs and Activities

This section presents government, multilateral, bilateral and civil society programs that are focused on gender and nutrition. In some cases key government, multilateral and bilateral programs are included even though they may not be addressing underlying gender causes of malnutrition to identify the programs and agencies with whom the World Bank and its clients may need to engage.

### 7.4.1 Government Programs and Activities

#### National Health Sector Programme 2010-2015 (NHSP II)

NHSP II is the government's main programmatic response to malnutrition in the country. The program indicates a special priority for nutrition, and emphasizes the need for a multi-sector approach. Nepal is also using a rapid results approach, assessing what can be accomplished in 100-day increments. The purpose is to set short-term goals that serve to motivate progress. Goals are mapped for each 100-day period and the community is engaged to agree on how to achieve these goals. This approach is a demand-side, knowledge-focused, and community driven approach. Under the NHSP II, the Ministry of Health and Population is primarily involved in implementing IYCF promotion, and works closely with UNICEF to implement a joint IYCF program with micronutrient powder supplements in parts of the country. The Ministry also works with UNICEF to implement Community Based Management of Acute Malnutrition (CMAM) programs, and with the Ministry of Local Development to implement fortified flour distribution programs and a child grant program. None of these programs focus on gender and nutrition.

### 7.4.2 Multilateral Programs and Activities

#### World Bank

The World Bank supports Nepal's NHSP II and is financing a Social Safety Net project that has a strong focus on protecting and improving the nutritional status of the most vulnerable. The World Bank also supported the Nutrition Assessment and Gap Analysis and is a key partner in the development of Nepal's multi-sector nutrition plan.

#### UNICEF Decentralized Action for Children and Women (DACAW)

DACAW works to strengthen the capacity of service delivery institutions and community-based mechanisms (i.e. women federations, child clubs) to augment the delivery of programmatic results. The program focuses on: protecting children and women against violence, exploitation and abuse; increasing access to quality basic education, especially for girls and disadvantaged groups; improving maternal health; reducing childhood morbidity through improved management of childhood illnesses; increasing awareness of HIV/AIDS prevention; and reducing incidences of disease from inadequate sanitation and water

supply. Community action processes is a key strategy used by DACAW to empower communities to take action to improve the well being of children and women in a range of areas that include nutrition. Communities take part in growth monitoring of children less than three years, and are taught to take necessary actions based on locally available resources.

### **WFP Girls Incentive Programme (GIP)**

GIP provides schoolgirls with monthly take home rations of oil as incentive for regular school attendance. WFP implements the program as part of its broader school feeding program in 11 Western districts and independently in five Terai districts where girl's school attendance has been found to be particularly low.

### **Key Findings**

- According to WFP the program has reached more than 62,000 school girls, and rates of girls' school attendance have increased by as much as 27% in areas where WFP has implemented GIP (WFP, 2012).

### **7.4.3 Bilateral Programs and Activities**

#### **USAID Suaahara Program**

The USAID-funded Suaahara Program (Integrated Nutrition Program or INP) is funded under the Global Health Initiative and is closely linked to the Feed the Future Initiative. This \$46,000,000 program runs from 2011 to 2016 and is being implemented by Save the Children and a consortium that includes Hellen Keller International, Jhpiego, the Johns Hopkins University Center for Communication Program, the Nutrition Promotion and Consultancy Service, the Nepali Technical Assistance Group and Nepal Water for Health. The program is currently in the planning phase and activities are expected to begin in early 2012.

The Suaahara program is implementing a woman-and girl-centered approach, and will focus on reducing the percentage of women with low body-mass index and anemia, and reducing the percentage of children underweight for age and anemia. The program is aligned with the GESI strategy and the Global Health Initiative and Feed the Future's focus on increasing women's access to assets and equity in overall decision making. To achieve these objectives, the INP will work with households to identify and address practices that lead to undernourished pregnant women and low birth weight barriers. The program will ensure equitable gender involvement in program planning and implementation, and will increase women's access to productive assets and to health care and education by ensuring that women benefit equitably in new opportunities for leadership, training, wage income, program employment and new program sources of income. Suaahara will also work to understand and change traditional practices that put



women at risk. It will do so by implementing a gendered approach to education on household food habits, equitable food consumption, new gardening and poultry activities, and sales of extra crops. The program will also conduct studies on the nutritional status and behaviors of household members, their access to food, and the extent and effects of fasting after childbirth and during menstruation.

### **Key Findings**

- The 2009 NAGA and recent research on nutrition and gender in Nepal influenced the design of the Suaahara program. Specifically, the NAGA called for greater gender and social inclusion. Research on gender roles in households and communities, intra-household behaviors influencing allocation of income and food, women's social status and access to resources, women's empowerment and decision making power, and family members knowledge of nutrition and health practices also influenced the design of this program. Laura Seckels' study on "Factors that constrain or prevent optimal infant and young child feeding practices in rural Nepal" was particularly influential (Seckel, 2011).
- The Suaahara program design also acknowledges that nutrition interventions cannot rely on individual behavior change methods as these fail to consider intra-household gender dynamics that influence nutrition outcomes. USAID commented that group or family-based BCC should be scaled up more effectively to reach a broader audience of decision makers that influence nutrition outcomes in the household and community (Koirala, 2011).
- The Suaahara program is currently funding formative research on behavioral and cultural practices within the household that influence infant and child health and nutrition outcomes to inform the program design.

### **USAID Action Against Malnutrition through Agriculture (AAMA)**

AAMA is a four-year initiative implemented by Hellen Keller International in the Far Western Region where the population is particularly vulnerable to under nutrition. AAMA is a food-based nutrition intervention designed to improve maternal and child health and nutrition outcomes by combining HKI's signature HFP model with targeted community-based behavior change communication based on the Essential Nutrition Actions (ENA) framework. The program is aimed at increasing households' year-round production and consumption of micronutrient-rich foods through the establishment of Village Model Farms that provide technical support and agriculture inputs to beneficiary households and the community. Mothers in targeted communities who were pregnant or who had children less than 2 years old are eligible for participation.

### **Key Findings**

- An evaluation of the HFP model in Bangladesh, Cambodia, Nepal and the Philippines from 2003 to 2007 showed that HFP participants increased production

- and consumption of vegetables and animal food products, increased household earnings that were used to purchase additional foods, and reduced the incidence of anemia among mothers and children compared to the control group (HKI, 2010).
- Most importantly, the HFP program empowered women, giving them more control over household resources from the income generated from their homestead food production activities. In most of the HFP communities, women decided which crops would be planted and when, which foods would be eaten at family meals and how income earned from surplus produce would be spent. Such control over HFP resources and income is likely a key factor in how the program has enhanced women's participation in household decision-making. The study also found that this has a potential positive impact on overall household spending, food preparation, food choices and intra-household food allocation as well as care-seeking behavior of women (HKI, 2010).

#### **7.4.4 Civil Society Programs and Activities**

##### **Nutrition through Knowledge**

This project is being implemented by EAN, a communications for social change organization. The project has three overall objectives: to raise awareness among parents about infant and young child nutrition and its importance for the overall development of children; to empower Nepali women to address various socio-cultural determinants of malnutrition at the household level; and to engage men as key stakeholders and agents of change and advocates within families. The project achieves these objectives by producing and broadcasting a radio program called Mamata, which addresses the issues of nutrition of children under five years of age. The radio program is produced in radio-magazine format and highlights issues related to nutrition as representative cases and invites experts to discuss these cases. The program also includes monologues, people's voices and interviews. Every program includes success stories of male parents who have contributed and/or played a significant role in the nutrition of their child. Radio listening groups comprising both women and men are set up in each project district. These groups meet to listen to the program and discuss the key issues.

Messages will also target women and men on issues such as women's rights and gender equality to prompt families, especially men, to ensure healthy physical and social environments for mothers and young children. This approach enables the project to address issues around household power relations through effective communication, as men are usually the primary decision makers. The program will also seek to change the social norm that nutrition and development needs of infants and young children are considered a woman's domain. This project was a winner of the 2009 Development Marketplace on Nutrition.

##### **International Nepal Fellowship (INF) Community Nutrition Program (CNP)**

This program seeks to change knowledge, attitudes and practices of mothers to children's nutrition to reduce acute malnutrition. While the program is focused on providing services for children suffering from acute malnutrition, other components are focused on raising awareness on nutrition through self-help groups, local mothers groups, school and health posts and promotion of kitchen gardening.

## Plan International

Plan International is focused on reducing infant and maternal mortality rates by increasing access to child and maternal health services. They are currently involved in establishing health facilities in rural health posts and hospitals. Plan International is also involved in advocacy work to raise the awareness of HIV/AIDS, nutrition, early childcare and development. All activities target adolescent girls and mothers. Much of their training programs are focused on changing gender stereotypes and training both mothers and fathers on how to properly feed and care for children at the local community level.

## 6.5 Action Research

### 7.5.1 Adolescent Girls' and Women's Status and Intra-household Bargaining

Author, Year, Organization	Focus of Study/Research	Key Findings
(Arnold et al., 2000)	Early childhood	<ul style="list-style-type: none"> <li>• There is a hierarchy of power and decision-making in families based on gender and age</li> <li>• Mothers-in-law have considerable authority over decisions regarding daughters-in-law and grandchildren</li> </ul>
(Dancer & Rammohan, 2009)	Maternal socio-economic status and child nutrition outcomes	<ul style="list-style-type: none"> <li>• Maternal education and autonomy exert a far greater influence on child nutrition than father's education</li> <li>• The study also found large gender and regional differences in the various nutritional outcomes</li> </ul>
(USAID Suaahaara Program, Planned)	Nutritional status and behaviors of household members, their access to food, and the extent and effects of fasting after childbirth and during menstruation	<ul style="list-style-type: none"> <li>• Baseline study conducted by IFPRI</li> <li>• RFP's for formative research are scheduled for release in early 2012</li> </ul>

(Aaryal, 2005)	Differentials of breastfeeding among rural women in Western Nepal	<ul style="list-style-type: none"> <li>• The study revealed that age of mother, education, occupation and socio-economic status of family showed statistically significant effects on the duration of breastfeeding</li> <li>• Education, occupation, and birth interval were found to be inversely related with the duration of breastfeeding, whereas parity, age of mother and socio economic status showed positive effect on the duration of breastfeeding</li> </ul>
(Seckel, 2011)	Factors that constrain or prevent optimal infant and young child feeding practices in rural Nepal	<ul style="list-style-type: none"> <li>• Identified six important factors that need to be considered by program planners and incorporated into intervention design. These factors are (a) demands and constraints faced by mothers, (b) feeding practices, including complementary feeding and breastfeeding, (c) household-level factors that impinge on family decision-making, (d) sources &amp; availability of foods, (e) the role of health workers, including FCHVs, and (f) larger cultural &amp; contextual factors, including gender roles</li> </ul>
(Nyyssölä, 2007)	Tested whether child nutritional status is improved in families where mother's intra-household status is better using the Nepal Living Standards Survey data from 1995/1996	<ul style="list-style-type: none"> <li>• Study found that maternal age at child-bearing had a positive influence on child nutritional status</li> <li>• A decrease in educational difference between partners tended to increase child nutritional status in terms of weight for age and weight for height; mother's knowledge of contraceptive methods also positively influenced child's weight for age</li> </ul>
(Eklund, Imai, & Felloni, 2007)	Women's organizations, maternal knowledge, and social capital to reduce prevalence of stunted children: evidence from rural Nepal	<ul style="list-style-type: none"> <li>• Higher capabilities of the Mothers' Group are found associated with lower underweight</li> <li>• The study also demonstrates that enhanced knowledge diffusion, combined with growth promotion, represents an effective instrument for empowering rural women in acting to reduce prevalence of chronic malnutrition.</li> </ul>

## 7.5.2 Gender Division of Labor

Author, Year, Organization	Focus of Study/Research	Key Findings
(Bondevik, Ulstein, Lie, Rana, & Kvale, 2000)	Anemia in pregnant Nepali women in Kathmandu	<ul style="list-style-type: none"> <li>• High prevalence of anemia were observed among teenagers, farmers, women of short height, the ethnic groups Lama/Sherpa/Tamang, and women married to industrial workers or illiterate men</li> <li>• Work within the service professions, higher education, and high body mass index were associated with a lower risk of anemia</li> </ul>
(Panter-Brick, Motherhood and subsistence work: the Tamang of Rural Nepal, 1989)	Motherhood and subsistence work (Tamang of rural Nepal)	<ul style="list-style-type: none"> <li>• Study found remarkable behavioral similarity between the two groups of women when workloads are high is explained by reference to childcare practices and labor constraints prevailing in the community</li> </ul>
(Panter-Brick, Women's Work and Child Nutrition: The food intake of 0-5 year old children in rural Nepal, 1992)	Women's work and child nutrition	<ul style="list-style-type: none"> <li>• Differences in women's workloads according to caste highlights the constraints' imposed by lifestyle on the feeding of young children.</li> </ul>
(Levin, 1988)	Women's work and infant feeding	<ul style="list-style-type: none"> <li>• Mountain agriculture in Nepal involves special, intensive systems of cultivation with heavy reliance upon the work of women</li> <li>• Traditional practices of male seasonal labor migration add to women's work responsibilities</li> <li>• These factors result in decreased time for child care and diminished opportunities for infant feeding.</li> </ul>
(Yamanaka & Ashworth, 2002)	Differential workloads of boys and girls in rural Nepal and their association	<ul style="list-style-type: none"> <li>• In Nepal, girls are expected to help their mothers in time-consuming and energy-demanding tasks from an early age</li> <li>• On average, girls worked twice as long as boys (5.8 vs. 2.8 h/day, <math>P &lt; 0.001</math>) and undertook more heavy work (1.5 vs. 0.7 h/day, (<math>P &lt; 0.001</math>), but they did not have poorer anthropometric status</li> <li>• Children in the hills worked longer hours and did heavier work than those in the terai and were more stunted in growth</li> </ul>

(Nakahara, et al., 2006)	Availability of day care, mothers work, and child nutrition	<ul style="list-style-type: none"> <li>• Unavailability of child care support was significantly associated with a 3-fold higher risk of being underweight and 4-fold higher risk of being stunted among children aged 10-24 months whose mothers were not engaged in paid work</li> <li>• Unavailability of child care support was also significantly associated with a 4-fold higher risk of children being underweight among children aged 10-24 months whose mothers were engaged in paid work</li> </ul>
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### 7.5.3 Gender Norms, Identities and Values

Author, Year, Organization	Focus of Study/Research	Key Findings
(Aubel et al., 1999)	Child nutrition	<ul style="list-style-type: none"> <li>• Grandmothers play multiple roles related to the nutrition and well being of children and women (caring for grandchildren, kitchen gardening, caring for small animals, helping with housework, and giving advice on various family matters)</li> </ul>
(Arnold et al., 2000)	Early childhood	<ul style="list-style-type: none"> <li>• Female family members have primary responsibility for childcare</li> <li>• Male family members have only a limited role in childcare</li> </ul>
(Masvie, 2006)	Maternal and child nutrition	<ul style="list-style-type: none"> <li>• Research activities that include a more systematic and in-depth analysis of both intra-household dynamics and the interactions and influences between women and other family and community resource persons and networks have consistently revealed the significant influence of senior women.</li> </ul>
(Mathur, Malhotra, & Mehta, 2001)	Adolescent girls' life aspirations and reproductive health in Nepal	<ul style="list-style-type: none"> <li>• Adolescent girls in these communities have dreams and aspirations for a better future and those adults acknowledge and support these ideals</li> <li>• However, social norms and institutions are restrictive, especially for girls, who are often unable to realize their hopes for continuing education, finding better-paid work or delaying marriage and childbearing, and this directly impacts reproductive outcomes</li> </ul>

<p>(Gittelsohn, Opening the box: intrahousehold food allocation in rural Nepal, 1991)</p>	<p>Intra-household food allocation in rural Nepal</p>	<ul style="list-style-type: none"> <li>• The results document a variety of mechanisms by which some individuals are favored over others through household food distribution, including serving order, serving method, refusing to serve foods, channeling foods and substituting low status foods for high status foods</li> <li>• No differences were observed in mechanisms of food distribution or nutrient intake between male and female children, contrary to evidence in the literature suggesting that male children will be favored</li> <li>• On the other hand, adult women were less likely to meet their nutrient requirements for energy, beta-carotene, riboflavin, and vitamin C than men of the same age</li> <li>• Women's late position in household serving order, channeling of special foods to males and children, and lower total intake of food accounts for these findings</li> </ul>
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(Gittelsohn, Thapa, & Landman, Cultural factors, caloric intake and micronutrient sufficiency in rural Nepali households, 1997)	Cultural factors, caloric intake and micronutrient sufficiency in rural Nepali households	<ul style="list-style-type: none"> <li>• While a relationship exists between caloric intake and sufficiency of intake of several key micronutrients (i.e., beta carotene, vitamin C and iron) for the study population as a whole, this relationship is weaker for certain subgroups</li> <li>• In particular, micronutrient intakes of adolescent girls and adult women are much less likely to be tied to total caloric consumption when compared with the intakes of other household members</li> <li>• This gender differential appears linked in part to specific food beliefs and practices that tend to reduce women's consumption of micronutrient-rich foods, such as dietary restrictions during menstruation, pregnancy and lactation</li> <li>• Overlapping with these beliefs and practices, an overall pattern of favoritism of females in the intra-household allocation of food is evident in the study communities</li> <li>• While staple food items (i.e. rice, lentil soup, bread, etc.) are distributed fairly equally, side dishes usually containing a higher proportion of micronutrients (i.e. vegetables, meat, yogurt, ghee, etc.) are often preferentially allocated to valued household members, including adult males and small children (of both sexes)</li> </ul>
(Sudo, Sekiyama, Maharjan, & Ohtsuka, 2006)	Gender differences in dietary intake among adults of Hindu communities in lowland Nepal	<ul style="list-style-type: none"> <li>• The study found that gender differences in per-day energy and protein intake were related to sex differences in body size and energy expenditure</li> <li>• The study concludes that intra-household unequal distribution of food incurs risk of iron deficiency among female subjects.</li> </ul>



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## **Appendix 7: Pakistan Country Report**

### **7.1 Malnutrition and Gender in Pakistan**

Maternal and child malnutrition remains a serious problem in Pakistan. According to preliminary findings of the 2011 National Nutrition Survey (NNS), 57% of households in Pakistan were facing food insecurity (Wasif, 2011). Within these households, 50% of women and children were found to be malnourished (Wasif, 2011). The study also found that iron deficiency (anemia) and vitamin A deficiency remain widespread in the country, while iodine deficiencies have decreased. Other nutritional indicators show that maternal anemia rates are 49%, 16% of women suffer from night blindness, 43% of children are stunted, while 13% of children suffer from wasting. Malnutrition rates vary significantly by province, with Sindh, Balochistan, and the Federally Administered Tribal Areas suffering from the greatest level of chronic malnutrition (Wasif, 2011).

While the complete 2011 NNS results are not yet public, older data from the previous NNS indicated that 25% of girls between 5 and 12 years of age were stunted and 15% wasted (Badrudin, 2008). In 2005 literacy rates among females 15 years and above was 36%. Only 22% of girls above the age of 10 had completed primary level or higher level schooling, which compared to 47% for boys (Badrudin, 2008).

Important causes of malnutrition in Pakistan include poor infant and young child feeding practices, lack of exclusive breastfeeding practices, and lack of awareness and poor food choices (World Bank, 2011). Low literacy rates among women, their lack of empowerment and involvement in decision making, early marriages, high fertility rates with lack of birth spacing and poor access to health care facilities are also key determinants (World Bank, 2011).

### **7.2 Mapping of Stakeholders**

In 2011 the Government of Pakistan passed the 18<sup>th</sup> amendment and devolved the Ministry of Health, effectively transferring the responsibility of implementing nutrition activities to the provincial governments (Nishtar, 2011). Provincial governments are in the process of developing provincial nutrition policies and action plans that will be funded directly by development partners. The Nutrition Section in the Planning Commission is still responsible for overseeing the national nutrition policy, developing annual and long-term plans dealing with food and nutrition, funding research, drafting policy papers, providing nutrition education, providing capacity building for nutrition programs, and serving as the focal point for all national and international agencies working on nutrition in Pakistan. The Federal Nutrition Syndicate is a high level inter-ministerial body with representatives from various ministries, donors and NGOs that is responsible for providing overall policy and planning guidance for nutrition activities (World Bank, 2011).

Very few development partners support non-emergency nutrition activities in Pakistan. These organizations include the World Bank, UNICEF, WFP, FAO, WHO, AusAid, USAID, DFID, EU, Norwegian Government, GAIN and the Micronutrient Initiative. The World Bank chairs a coordination mechanism for these organizations. The Nutrition Cluster includes a long list of member organizations, but is primarily concerned with enabling coordination of flood responses. Mercy Corps and Save the Children have done some interesting work on nutrition and gender in the past.

The Pakistan Nutrition and Dietetic Society (PNDS) is a coalition established in 2003 that represents, promotes and advances the science and profession of nutrition to improve nutrition outcomes for the population. Members include representatives from hospitals, community health centers, private practice clinics, educational institutions, research and development organizations, food industries and the private sector.

### **7.3 Government Commitment and Policies**

The nutritional status of Pakistani citizens has not been a priority political issue, and there has been weak political and operational support for nutrition programs to date (Laviolette, 2010). Lack of political commitment to systematically address malnutrition, minimal investment in nutrient interventions, and the lack of a clear and focused strategy are important factors that have contributed to persistently high rates of malnutrition in Pakistan (Laviolette, 2010). Multi-sectoral nutrition interventions are featured in the Mid Term Development Framework (MTDF) 2005-2010 and Annual Plans, but Pakistan still lacks an overarching multi-sectoral plan of action with financial allocations and regular reviews of achievements (Laviolette, 2010).

The Ministry of Health (MOH) developed a National Nutrition Strategic Plan of Action (NNSP) in 2005 and a National Plan of Action on Micronutrient Control (Laviolette, 2010). Following the devolution of the Ministry of Health in 2011, the Planning Commission has assumed responsibility for overseeing the national nutrition policy. This policy is currently being updated. The provincial governments are responsible for implementing all nutrition interventions, and are currently developing their own nutrition strategies and program plans for funding from the federal government and development partners. It is not clear how gender will be incorporated and addressed in the revised national nutrition policy and provincial nutrition strategies and programs.

The UN has developed a Pakistan Integrated Nutrition Strategy (PINS). This strategy was developed with limited input from the Government and has three overarching objectives: the prevention and treatment of malnutrition among children under five years of age, improved nutritional status of pregnant and lactating women, children 0-2 years, under five children, school aged children, people in emergency situations and other vulnerable groups; to establish a central Nutrition Coordinating Council with a broad multi-sector mandate to develop and implement wide-ranging policy decisions to improve nutrition nation-wide and in the provinces; and to strengthen the capacity of institutions,

communities and individuals for effective planning, delivery and monitoring of nutrition interventions (UN, 2011). The PINS outlines three levels of priority activities for the next 5 years. While the strategy seeks to promote adolescent girls and women's nutrition status through supplementation, education and counseling, it does not have a strong gender focus. The PINS will likely influence the national nutrition policy that is currently being updated, and several provincial governments are adopting this framework for their own nutrition strategies and programs (Laviolette, Senior Nutrition Specialist, World Bank, 2012).

While Pakistan has good overall capacity to develop strategies, the government is weak on transforming these strategies into costed and monitored plans (Laviolette, 2010). Coordination capacity among different agencies is also weak (Laviolette, 2010). There are good platforms in place for the delivery of direction nutrition interventions in the provinces (i.e. lady health workers, health facilities, NGOs), but in the past these organizations have not prioritized nutrition and are in need of capacity building (Laviolette, 2010). This is now changing as the provincial governments are gearing up to take responsibility for the implementation of nutrition programs and are developing their own nutrition strategies and programs. NGO's have an important role to play to fill coverage gaps, and there is virtually no use of platforms to deliver nutrition interventions outside the health sector (Laviolette, 2010). The Government needs significant capacity building to develop a multi-sector approach in evidence-based planning, implementation, monitoring and creating accountability (Laviolette, 2010). While the country has good technical capacity for operations research and evaluation in the academic, nonprofit, and private sectors, the government remains weak in this respect (Laviolette, 2010).

## **7.4 Programs and Activities**

This section presents government, multilateral, bilateral and civil society programs that are focused on gender and nutrition. In some cases key government, multilateral and bilateral programs are included even though they may not be addressing underlying gender causes of malnutrition to identify the programs and agencies with whom the World Bank and its clients may need to engage.

### **8.4.1 Government Programs and Activities**

The MOH had a number of programs that included nutrition components prior to its devolution in 2011. These programs included the National Nutrition Program, the Essential Health Services through the National Expanded Program on Immunizations (EPI), the Lady Health Workers (LHWs) Program, the National Maternal, Newborn and Child Health (MNCH) Program, and the National Program for Family Planning and Primary Health Care. The provincial governments are currently developing their own nutrition strategies and programs. Development partners will work directly with the provincial governments to fund and implement these nutrition programs. The MOH

National Nutrition Program is no longer active, but a description is included below as background information.

### **MOH National Nutrition Program**

The National Nutrition Program sought to improve the nutrition status of the overall population, with a focus on women of childbearing age, adolescent girls and children. The program's interventions targeted maternal health and nutrition, infant and child health and nutrition, adult health and nutrition, nutrition and health of elderly, BCC, fortification, food safety and regulatory issues, and institutionalization of nutrition and management strategies. At the village and community level, the Lady Health Worker (LHW) was the main implementing agent for nutrition programs. The LHW program was designed to provide basic health care services to the communities, especially in rural areas, and to bridge the gap between communities and static health services. LHW's provided a range of targeted nutrition interventions, including anemia control, growth monitoring, counseling on breastfeeding and weaning practices. They also coordinated the delivery of vitamin A supplementation to children under 5 and micronutrient supplementation to women of childbearing age.

### **Government of Pakistan Tawana Pakistan Project (TPP)**

The Tawana Pakistan Project (TPP) was a pilot project funded by the Government of Pakistan that ran from 2002 to 2005, and sought to address poor nutrition status and school enrolment of primary school age girls. TPP's main strategy was to create a safe environment for village women to take collective decisions. By applying a reflective learning process, women were supposed to learn to plan balanced menus, purchase food, prepare and serve a noon meal at school prepared using locally available foods at nominal costs (USD 0.12/child). The project was a public private partnership, and was managed and implemented by a consortium that included the Department of Community Health Sciences of the Aga Khan University, and two arms of the Ministry of Social Welfare and Special Education (Badrudin, Agha, Peermohamed, Rafique, Khan, & Pappas, 2007)

### **Key Findings**

- An evaluation of the project found that wasting among participating girls decreased by 45% (from 14.3% to 7.9%). The number of underweight girls decreased from 23.2 % to 18%. Chronic under nutrition and stunting only decreased by 6% during the duration of the project. The project increased school enrolment by 40% by attracting un-enrolled girls who came to attend the feeding program. The average number of girls per school increased from 64 to 89 by the end of the project. Results data also showed that the number of women that were able to correctly define what constitutes a balanced diet and identify the basic three food groups increased from 4% to 35%. The program faced a number of challenges, including ownership of the project among the different stakeholders, uneven flow of funds,

and government bureaucracy at the district level (Badrudin, Agha, Peermohamed, Rafique, Khan, & Pappas, 2007).

#### **8.4.2 Multilateral Programs and Activities**

##### **World Bank Enhanced Nutrition for Mothers and Children Project**

This World Bank program was scheduled to begin in 2011, but was delayed following the devolution of the MOH. The program is now moving forward, and the World Bank will work directly with provincial governments to fund and implement their nutrition programs. Sindh, KPK, and Balochistan provinces are currently developing nutrition programs for World Bank funding under this project. The program will focus on improving nutrition outcomes for pregnant women and children under five. Interventions will include infant and young child feeding implemented through the Lady Health Workers, CMAM, scale-up of a few key maternal nutrition interventions such as de-worming and iron folic acid supplementation for women of child-bearing age, and mass media for behavior change focusing on nutritional practices. The program is also supporting micronutrient initiatives and is strengthening and building capacity of nutrition units at federal, provincial and district levels.

The World Bank is also funding analytical work through South Asia Food and Nutrition Security Initiative (SAFANSI) to produce a report that will bring stakeholders together to begin developing a multisectoral nutrition approach in Pakistan. Four provincial policy notes will also be produced based in part on analysis of the 2011 NNS results. These notes will review experiences from the provinces in working multisectorally, and will examine what has worked and what has not worked, and creating a forum for dialogue on the different options for available for different sectors. These policy notes will eventually lead to provincial multisectoral plans for nutrition.

##### **Joint UN Program on Health and Population**

This joint UN program seeks to improve nutrition of pregnant women and prevent malnutrition related to disease in children under five in Khyber, Pakhtunkhwa, Balochistan, Federally Administered Tribal Areas, Azad Jammu, and Kashmir. The objective of the program is to improve health policy, planning and regulation leading to a more equitable, responsive and fair financing of a decentralized health system. Program areas include maternal nutrition and child health, family planning and reproductive health, communicable disease control, nutrition and health promotion, health systems development, HIV and AIDS, and population census. UNICEF, UNFPA, WHO and WFP are they key UN agencies that are implementing nutrition interventions under this program. Key messages on infant and young child nutrition have been integrated into child week campaigns and disseminated to mothers and caregivers. The program has also established partnerships with media, religious leaders and professional organizations to promote appropriate infant and young child feeding practices.

## **WFP Country Program**

WFP's Pakistan program has been operational since 2005 and seeks to improve the status of disadvantaged women and girls by facilitating their access to food in ways that promote engagement in development opportunities. The program has addressed gender disparities in education, health, and access to productive assets for 5.9 million beneficiaries. The country program includes three core activities: assistance to girls' primary education; promoting safe motherhood; and creating assets for rural women. The assistance to girls' primary education activity provided one 4-liter can of edible for oil as an incentive for families to keep their girls in school for at least 20 days per month. WFP collaborated with the governments Tawana project as part of this initiative. The creating assets for rural women activity targets adolescent girls and women and seek to create and preserve physical, economic and social assets. The program works with women's organizations to create opportunities for employment and income-generation through food for work activities and food for training.

- The program has promoted the retention of girl students in school, and facilitated an increase in their pass rate from a baseline of 39% to 65% through the end of 2010 (WFP, 2011).

### **8.4.3 Bilateral Programs and Activities**

#### **USAID Nutrition Assessment Project**

USAID is supporting the Government of Pakistan to conduct a survey to assess the level of nutrition among mothers and children in the country from April 2011 to April 2012. The data from this survey will inform future family planning, nutrition and immunization programs.

### **8.4.4 Civil Society Programs and Activities**

#### **Community-Based Intervention to Improve Linear Growth in Children**

Aga Khan University (AKU) and the Health and Nutrition Development Society (HANDS) are implementing this project, which will conduct a randomized, controlled trial of counseling mothers/family members by senior women community-workers to introduce chicken liver as a complementary food for infants aged 6-18 months. The intervention will compare the potential benefits of incorporating chicken liver into routine infant and toddler feeding versus optimized traditional complementary feeding regimens. The use of chicken liver as a complementary food for infants is an innovative idea as chicken liver is rich and zinc and iron. The project is also innovative in its approach to working through elderly women from the local community to counsel mothers and families of infants on the use of the chicken liver supplement.



## **Save the Children Saving New Born Lives Initiative**

Save the Children piloted a positive deviance approach through its Saving Newborn Lives initiative from 2000 to 2004. The pilot project had an overall objective of improving maternal and newborn care using positive deviance approaches to change behaviors in the community and households, and included nutrition interventions. Positive deviance trainings were followed by regular mohallah sessions that included mothers, mothers-in-law, fathers, fathers-in-law, and unmarried men and women.

### **Key Findings**

- Evaluation of the pilot project found significant rates of preparation for births, exclusive breastfeeding, improved diet and other important practices among the 85 women tracked during the project. Results data showed that there was a 45% decrease in the number of mothers who gave prelacteal feeds to the newborns within 3 days of birth. Findings showed that the positive deviance approach can be used in health and other related issues for sustainable behavior change.

## **Mercy Corps Positive Deviance Health Clinic Training**

Mercy Corps initiated a program to run 12-week courses in Positive Deviance Health Clinics in 2009 to help dangerously underweight children gain weight, and helping mothers learn more about healthy cooking and good nutrition by highlighting best practices in the community. The positive deviance approach tries to "identify and optimize existing resources and solutions within the community to solve community problems," rather than try to solve problems using external resources.

## **Greenstar Behavior Change Communication Programs**

Greenstar Social Marketing Pakistan is an NGO that implements a range of activities focused on improving the quality of life among low-income people in Pakistan. While Greenstar does not explicitly focus on nutrition, it does focus on mother and child health. Greenstar's behavior change communication programs are designed to motivate and create demand among low-income Pakistani women and men for health services and products. This is achieved through mass media campaigns on television, radio, newspapers, billboards, public relations, Clinic Sahoolats (Free Clinics), mohalla (neighborhood) meetings, and seminars. At the community level, Greenstar uses street theater and mohalla ("neighborhood") meetings to foster greater awareness of family planning and health issues, which leads to increase client flow to members of the Greenstar Network of providers. For women, mohalla meetings have been designed to encourage open discussion of sensitive issues in a safe and conducive environment.

### **Key Findings**

- Each year, the mohalla meetings reach thousands of low-income women. Studies have shown that as many as 25 percent of attendees subsequently seek a family planning consultation with a Greenstar provider. A 2002 external evaluation identifies Greenstar as the only organization in Pakistan to have successfully increased client flow for providers. To date Greenstar has contacted over 1.3 million people to promote FP methods and conducted more than 5,600 Clinic Sahoolat. About 115,000 women participated in "Clinic Sahoolat Activity" of which about 93,000 women adopted FP methods (81%). Participation rate is about 20 women per CS. 65 % of women were new to clinic (visited the provider for the first time due to IPC intervention) (Greenstar, 2012).

## 7.5 Action Research

### 8.5.1 Adolescent Girls and Women's Status and Intra-household Bargaining

Author, Year, Organization	Focus of Study/Research	Key Findings
(Alderman & Garcia, 1993)	Poverty, household food security and nutrition in rural Pakistan	<ul style="list-style-type: none"> <li>• Education, particularly for females, was found to be strongly correlated with better nutrition in children (much stronger than increasing incomes)</li> </ul>
(Nazli & Hamid, 1999)	Concerns of food security, role of gender and intra household dynamics in Pakistan	<ul style="list-style-type: none"> <li>• The existence of vast gender disparity in all basic aspects of life are reflected in the extremely low status of women, their high illiteracy, low health status, less participation in paid work, and lack of awareness about their rights</li> <li>• Despite providing a considerable input within and outside home, women of Pakistan, especially in rural areas have limited control over productive resources</li> <li>• Understanding the dynamics of intra-household decision making is crucial not only for the effective design and implementation of welfare policies but also their evaluation in Pakistan</li> </ul>

(Sathar & Kazi, 2000)	Women's Autonomy in the Context of Rural Pakistan	<ul style="list-style-type: none"> <li>• Women's involvement in economic decisions is extremely limited</li> <li>• Majority of women participate only in decisions related to the purchase of food. In all other decisions, either domestic or economic they are consulted but do not act as major decision makers</li> <li>• The authors found a positive relationship between women's paid employment and power of decision making</li> <li>• Women living in the nuclear family are more empowered and are more likely to play a crucial role in important household decisions.</li> <li>• The study observes a strong and positive association between mobility and decision- making authority. Age, education, nature of employment, and family structure are the determining factors of mobility and, hence, of the role in major decisions</li> <li>• Very few women own land or other physical assets. The lack of asset ownership, especially in terms of land, limits their access to the institutional credit.</li> </ul>
(Guha-Khasnobis & Hazarika, 2006)	Women's status and children's food security in Pakistan	<ul style="list-style-type: none"> <li>• It is found that the more educated a child's mother relative to her father, the better her long-term nutritional status as measured by the height-for-age standard.</li> <li>• Further, the earning of cash income by mothers improves children's shorter-term nutritional status as measured by the weight-for-height standard.</li> <li>• Additionally, children's weight-for-age anthropometric nutritional Z-scores increase in these two measures of mothers' status.</li> <li>• It is also found that women's status as gauged by the difference between the educational attainments of his wife and household head, and the percent age difference between them, is significantly negatively related to the share of the household's budget expended upon the three adult goods of tobacco, adult clothing, and adult footwear.</li> <li>• This suggests that resources allocated to children and, by plausible implication, their food security increase in these two measures of women's intra-household status.</li> </ul>

(Iqbal, 1995)	Influenced on Pakistani mothers attitudes toward breastfeeding	<ul style="list-style-type: none"> <li>• A woman's decision whether or not to breastfeed is strongly influenced by the mother in law's proximity and advice</li> </ul>
IFPRI, Ongoing	Household survey	<ul style="list-style-type: none"> <li>• Broad household survey will include nutrition and health information. The survey data will be used in future research papers. The survey is just getting started and it is not yet clear whether research will focus on adolescents, women's role in agriculture, intra-household behaviors that affect nutrition outcomes, and so forth.</li> </ul>
DFID, Ongoing	Leveraging Agriculture for Nutrition in South Asia (LANSA)	<ul style="list-style-type: none"> <li>• This is a DFID-funded regional initiative focused on four countries: India, Bangladesh, Afghanistan, Pakistan. The initiative will examine how to make agricultural growth strategies and policies and public-private interactions more nutrition-sensitive. It will also look at how agriculture policies and interventions can be better-designed and targeted to address (or do no harm to) issues of women's status, sanitation and disease, and diet quality.</li> </ul>

### 8.5.2 Gender Division of Labor

Author, Year, Organization	Focus of Study/Research	Key Findings
(Fafchamps & Quisumbing, 2003)	Social roles, human capital, and the intrahousehold division of labor: evidence from Pakistan	<ul style="list-style-type: none"> <li>• The intra household division of labor is influenced by comparative advantage based on human capital and by long- lasting returns to learning- by- doing, but we also find evidence of a separate effect of gender and family status.</li> <li>• Households seem to operate as hierarchies with sexually segregated spheres of activity.</li> <li>• The head of household and his or her spouse provide most of the labor within their respective spheres of influence; other members work less.</li> <li>• When present in the household, daughters- in- law work systematically harder than daughters of comparable age, height, and education. Other findings of interest are that there are increasing returns to scale in most household chores, that larger households work more</li> </ul>

### 8.5.3 Gender Norms, Identities and Values

Author, Year, Organization	Focus of Study/Research	Key Findings
(Sathar & Kazi, 2000)	Women's Autonomy in the Context of Rural Pakistan	<ul style="list-style-type: none"> <li>• A majority of women face the fear of domestic violence either in form of disagreement or in form of beating</li> </ul>
(Hazarika, 2000)	Gender Differences in Children's Nutrition and Access to Health Care in Pakistan	<ul style="list-style-type: none"> <li>• It is found that, among 0 to 5-year-old children, boys are favored in the allocation of health care.</li> <li>• However, girls appear as nourished as or better nourished than boys.</li> <li>• This is taken to be evidence that intra-household gender discrimination has primary origins not in parental preference for boys but in differential returns to parents from investment in boys and girls.</li> </ul>

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## Appendix 8: Sri Lanka Country Report

### 8.1 Malnutrition and Gender in Sri Lanka

The 2010 Nutrition and Food Security Assessment found that prevalence of stunting, wasting and underweight among children aged 0-59 months were 19.2% percent and 21.6% respectively (Ministry of Healthcare and Nutrition, 2010). The assessment also found that 4.6% of children within this age group suffer from severe stunting, with the comparable figures for severe wasting and severe underweight being 1.9% and 3.9% respectively (Ministry of Healthcare and Nutrition, 2010). Risk of stunting, wasting and underweight increased with increasing age. Meanwhile, the occurrence of anemia was found to be high during the first 6 months of life, followed by a sharp and consistent decline (Ministry of Healthcare and Nutrition, 2010). The assessment notes that female children had a significantly lower risk of wasting and anemia compared to males. Nearly 1 in 4 pregnant women are underweight when they register for pregnancy, and maternal undernutrition is particularly common in adolescent girls (Ministry of Healthcare and Nutrition, 2010). Anemia rates for Sri Lankan women and children are generally lower than elsewhere in South Asia. The prevalence of anemia was 16.2 percent among pregnant women, 19.6 percent among lactating women, and 21.7 percent among non-pregnant and non-lactating women (Ministry of Healthcare and Nutrition, 2010).

Gender disparities in undernutrition rates in Sri Lanka are not as large as elsewhere in South Asia, and these disparities have declined over time and have generally benefited girls more than boys (World Bank, 2007). Women have benefited from the absence of overt gender discrimination of health care, the provision of free health services, and the priority given to maternal and child health services by the government (World Bank, 2007). Permissive social and cultural norms, high levels of maternal education, and limited physical and financial barriers to access public health care are some underlying reasons for the high use of health care services among women (World Bank, 2007). Social and cultural norms in Sri Lanka enable women to have a high degree of autonomy over their own and their children's health care, women are more likely to be excused from work during pregnancy, are allocated more food than many of their regional counterparts within the household, and over 85% of women are literate (World Bank, 2007).

That being said, there are regional disparities, and the nutritional status of children and women in the estate sector are worse than in other parts of the country. While stunting, wasting and underweight figures were 14.3%, 11%, and 17.7% for urban areas, the figures for the estate sector were much higher at 46.7%, 12.3% and 37.9% respectively (Ministry of Healthcare and Nutrition, 2010). The number of underweight women (BMI<18.5) was found to be 11.3% in urban areas, 18.7% in rural areas, and 42.6% in the estate sector (Ministry of Healthcare and Nutrition, 2010). Reasons for these differences include different systems of health care delivery, geographical and social isolation of the



population, poor environmental conditions, heavy workload and lack of empowerment of women, poor awareness of care practices and economic vulnerability (De Silva, 2009).

## **8.2 Mapping of Stakeholders**

The Ministry of Healthcare and Nutrition (MOH) is the primary agency responsible for developing and implementing the National Nutrition Policy and associated programs and activities. Within the MOH, the Family Health Bureau (FHB) makes most decisions regarding policy and strategy, while the Public Health Midwives (PHMs) are the key implementing agents. In the Estate sector, health and nutrition activities are implemented through the Plantation Human Development Trust, which is not linked or accountable to the public sector (World Bank, 2007).

The new National Nutrition Policy approved in 2010 establishes a number of bodies with clearly defined responsibilities (Ministry of Healthcare and Nutrition, 2010). The National Nutrition Steering Committee (NNSC) coordinates national policy decisions and provides overall monitoring of activities. The NNSC is comprised of high-level representatives of relevant ministries. The National Nutrition Coordination Committee (NNCC) makes key technical decisions, periodically reviews the action plan, and prioritizes program activities. The NNCC is comprised of nutrition professionals from different sectors. The Nutrition Coordinating Committee at Provincial Level (NCCP) plans and manages nutrition programs and interventions within the provinces, while the Nutrition Coordination Unit (NCU) functions as a secretariat and is responsible for coordinating between implementing agencies to ensure smooth implementation of key decisions by the NNSC and NNCC.

The Ministry of Livestock, National Water Supply and Drainage Board, Ministry of Agriculture, Department of Agriculture, Department of Fisheries and Aquatic Resources, Ministry of Samurdhi and Poverty Alleviation, Department of Census and Statistics, the Medical Research Institute and the Family Health Bureau of the MOH participate on the steering committee of the national nutrition surveillance system. The surveillance system has been supported by the World Bank's Health Sector Development Project and will likely continue to receive support from the Second Health Sector Development Project that is set to start in 2012.

A UNICEF-led nutrition cluster coordinates nutrition interventions among a range of stakeholders, including the MOH Medical Research Institute and Family Health Bureau, FAO, UNHCR, UNOCHA, WFP, WHO, World Bank, Alliance Development Trust, Canadian Red Cross, ICRC, International Relief and Development, Medicines Sans Fronteir (MSF), Nazarene Compassionate Ministries, Sarvodaya, Save the Children, Social Economic Rehabilitation Organization, Terre des Homes, World Vision, and ZOA. Most of these organizations are involved in humanitarian work, and are not focused on long-term nutrition programs. The Center for Women's Research (CENWOR) does some interesting research work on gender in Sri Lanka, but has not focused much on nutrition and gender. The National Nutrition Alliance is a consortium of approximately 26 NGOs that are working on nutrition and food security issues.

### 8.3 Government Commitment and Policies

The Government established the Food and Nutrition Policy Division in 1978 to coordinate all activities related to food and nutrition. This division is housed within the Ministry of Plan Implementation. The National Agriculture, Food and Nutrition Strategy was published in 1986 and represents the first comprehensive national framework for food and nutrition policy in Sri Lanka. While this plan focused primarily on agriculture and livestock development, the National Nutrition Plan of Action of 1997 adopted a more multi-sectoral approach. The plan includes strategies to achieve household food security, improve maternal and child health services and sanitation, alleviate poverty, and empower women. The National Nutrition Coordination Committee (NNCC) managed activities and was able to institutionalize the integration of maternal care during pregnancy, and lactation and breastfeeding promotion within maternal and child health care programs (World Bank, 2007).

In recent years there has been a high level of political interest to address malnutrition in Sri Lanka (De Silva, 2009). The President's Office set up a Presidential Nutrition Task force in 2008 and MOH revived the National Nutrition Steering Committee in 2009 (De Silva, 2009). The MOH also announced the formation of a Ministerial level committee for inter-sectoral coordination. A National Food and Nutrition Action Plan was developed for 2006-2010, and a new National Nutrition Policy was published in 2010. This new policy will be updated in 2013 and revised in 2018. The Government's policy response to malnutrition consists of three broad strategies: direct food assistance programs, poverty reduction programs, and the Ministry of Health's provision of an integrated package of maternal and child health and nutrition services (World Bank, 2007). There are also small programs that target the reduction of micronutrient deficiencies and supporting food fortification. These programs are largely funded and implemented by the public sector, with support from key development partners (World Bank, 2007).

The Government's new National Nutrition Policy has strategies in place to improve the nutritional status of pregnant women, lactating women, infants and young children, pre-school and school children, adolescents, and adults and elderly (Ministry of Healthcare and Nutrition, 2010). The policy also has strategies to promote behavior change communication to all sections of population to enable them to make right food choices and care practices (Ministry of Healthcare and Nutrition, 2010). The Government, particularly the MOH has started to focus greater attention on addressing adolescent nutrition during the past couple of years. The government's current program consists of iron supplementation given weekly to all schoolgirls between age 12-18, and nutrition education through the school curriculum (De Silva A. , 2012).

## 8.4 Programs and Activities

This section presents government, multilateral, bilateral and civil society programs that are focused on gender and nutrition. In some cases key government, multilateral and bilateral programs are included even though they may not be addressing underlying gender causes of malnutrition to identify the programs and agencies with whom the World Bank and its clients may need to engage.

### 9.4.1 Government Programs and Activities

#### **MOH Integrated Maternal and Child Health (MCH) and Nutrition Program**

The MOH's Family Health Bureau (FHM) implements the country's most comprehensive health and nutrition program for mothers and children in partnership with UNICEF and WHO. Services range from maternal care during pregnancy and lactation to growth monitoring for infants and immunizations. Direct nutrition interventions include midwife-provided nutrition education and counseling at home and at clinics; weight gain monitoring during pregnancy and growth monitoring for children; provision of mineral supplements (iron, folic acid, calcium, vitamin C) during pregnancy; anthelmintic therapy for young children; and provision of fortified soy-based products (World Bank, 2007). The program actively encourages and requests father's participation in activities offered through clinics (De Silva, 2012). Plantation Human Development Trust is now implementing similar interventions in the estate sector.

#### **Population-Level Nutrition Programs**

The MOH's FHM implements several population-level programs to address specific nutrition issues. These programs include interventions to promote breastfeeding through public education using electronic media, complementary feeding practices, promotion of feeding during illness, efforts to extend maternity leave, conducting regular in-service training courses on lactation management for healthcare workers, and implementing the national marketing code for breast milk substitutes (World Bank, 2007).

#### **Thriposha Supplementary Feeding Program**

This Government program provides a precooked blend of wheat and soya fortified with minerals and vitamins to supplement energy, protein, and micronutrients among pregnant and lactating mothers (for up to six months after delivery), and infants aged 6-11 months (World Bank, 2007). Children aged 12-60 months, identified as nutritionally vulnerable or growth faltering, also receive it.

#### **Micronutrient Control Programs**

Government programs include Iron deficiency control (iron and foliate supplements and de-worming during pregnancy), Salt Iodization (80 percent of all salt supplies), and Vitamin

A deficiency control (comprising a combination of food-based approaches and Vitamin A supplementation). UNICEF supports the Government in implementing these programs.

### **School Feeding Program**

This Government program provides poor children hot meals in school but has limited coverage (World Bank, 2007). The Ministry of Education and the provincial councils implement the program with the support of NGOs and the UN agencies. The program seeks to attract poor children to attend school and to provide these children with adequate nutrition to remain in school.

### **Poshana Malla Food Supplement Program**

This Government program was initiated in 2006 and distributes a bag of nutritious food to pregnant or lactating woman from low-income families.

## **9.4.2 Multilateral Programs and Activities**

### **World Bank**

The World Bank recently approved \$24 million in additional support for the Government Health Sector Development project to scale up activities. The World Bank conducted a situation analysis of the nutrition services and needs in the estate and rural sectors in the East in 2009. The situation analysis included specific questions on women's status and empowerment, gender divisions of labor, and cultural beliefs influencing nutrition outcomes (De Silva, 2012). The World Bank through the Japan Social Development Fund is also providing emergency support for local level nutrition interventions in the Northern Province. This program includes BCC interventions to raise awareness on nutrition among mothers, fathers and mothers-in-law in the North of the country (De Silva, 2012).

### **UNICEF Integrated Early Childhood Care and Development (ECCD) Program**

UNICEF continues to support the ECCD program that focuses on maternal and childcare practices. The program seeks to promote care during pregnancy and lactation, and promote positive care with respect to the survival, growth and development rights of children.

### **WFP Support to Improve Maternal and Child Health and Nutrition (MCHN) Program**

The WFP is targeting 84,000 children under five years old and pregnant and lactating women in Badulla, Monaragala, Nuwara Eliya, Ratnapura, Hambantota and Anuradhapura, selected on the basis of poverty, food insecurity and under-nutrition prevalence in 2008. The project aims to improve the nutritional status of malnourished children and their mothers. Implemented through the clinic network of the MOH, it also aims to foster community mobilization activities for the effective delivery of nutrition

education programmes. The project also includes capacity enhancement for the local production of blended food (*Thriposha*). Thriposha is a supplementary food made of maize and soya beans that is given to pregnant women and children 6-59 months old who exhibit growth faltering during three consecutive weighing's.

#### **Key Findings:**

- WFP recently revised its gender policy, and plans to begin working with grandmother groups to change attitudes on childcare and feeding practices to improve nutrition outcomes in 2012. This new program component is being driven by the realization that many women don't practice what they have been taught and that other factors may be influencing their care and feeding practices within the household (De Silva D. , 2011).

#### **9.4.4 Civil Society Programs and Activities**

##### **Three-Generation Communication for Improved Infant and Young Child Nutrition**

Sri Lanka Green Friends Environmental Organization is implementing this project to improve complementary feeding practices and nutrition of expecting and nursing mothers. The project will deliver messages through radio and with radio stations operated by three generations of women – adolescents, mothers, and grandmothers – in a creative community network to change key nutritional behaviors. The project is implementing an approach that draws on the considerable influence that grandmothers have on young mothers and adolescent girls. Communication societies will be organized through the members of the National Nutrition Alliance to broadcast a range of programs. This project was a winner of the 2009 Development Marketplace on Nutrition.

##### **Sarvodaya Preschool Nutrition Program**

This program is implemented through the Sarvodaya NGO community groups. *Sarvodaya* is a Sri Lankan organization involved in women's empowerment, community development, and micro-credit. The Sarvodaya network covers 15,000 villages. Sarvodaya is the representative of the International Baby Food Action Network (IBFAN) in Sri Lanka and plays an active role during World Breastfeeding Week. Community-based breastfeeding activities include mothers and fathers support groups. Children aged 3-5 years attending the Sarvodaya preschools are provided with one nutritious meal a day through a community kitchen to which each family makes a contribution. Children are also taught about personal hygiene and growth is monitored monthly.

##### **Sarvodaya Community Kitchen Program**

Sarvodaya initiated the Community Kitchen Program in response to the food shortages in 1973 and was designed to provide children and needy mothers with a meal that could supplement the food eaten at home. There is a special focus on pregnant and lactating

women. The program also provides health education to community members to improve long-term nutrition and health outcomes

## 8.5 Action Research

### 9.5.1 Adolescent Girls and Women's Status and Intra-household Bargaining

Author, Year, Organization	Focus of Study/Research	Key Findings
(Ministry of Healthcare and Nutrition, 2010)	2010 Nutrition and Food Security Assessment	<ul style="list-style-type: none"> <li>• Factors associated with being thin among non-pregnant women aged 15-49 years include younger age, being in the estate sector, lower level of husband's education, lower family income, and belonging to the poorest wealth quintile</li> <li>• A higher level of husband's education and higher wealth quintiles were associated with high risk of overweight and obesity</li> <li>• The study also found that women resident in the estate sector, and in households where the expenditure on food as a percentage of household expenditure was above 90 percent, had a higher risk of anemia</li> </ul>
(De Silva, Wijekoon, Hornik, & Martines, 2001)	Care seeking in Sri Lanka	<ul style="list-style-type: none"> <li>• Found that health care seeking for children in Sri Lanka has been shown to be responsive to perceived symptoms and severity but unrelated to socioeconomic status as measured by type of house and maternal education</li> </ul>

(Caldwell & Indrani, 1997)	Gender and health in Sri Lanka	<ul style="list-style-type: none"> <li>• Finds that the autonomy of women has contributed to the decline of overall mortality, once modern health services developed</li> <li>• Women are seen as the family care takers and are given a high level of autonomy to seek care for themselves and their families</li> <li>• Women living and working on tea estate areas had less autonomy with regards to health care seeking behaviors, even though they are the main income earners</li> <li>• The rise in female age at marriage from 18 years early this century to the present age of 24 years has increased their influence in family decision making vis-à-vis their husbands</li> <li>• This change in marriage age has also allowed women to pursue more education and to become income earners – increasing their status and decision making power within the household</li> </ul>
(World Bank, 2007)	Malnutrition in Sri Lanka	<ul style="list-style-type: none"> <li>• Data shows that maternal education is an important determinant of good nutritional status in Sri Lanka</li> <li>• In 2000, children whose mothers had no schooling were twice as likely to be underweight or stunted compared to children whose mothers had secondary schooling</li> <li>• These differentials have widened over time, particularly for stunting</li> </ul>
(Senanayake, Weerawarna, KW, & de Silva, 199)	Do babies need water in Sri Lanka?	<ul style="list-style-type: none"> <li>• The majority of women who give birth in a hospital and are advised to exclusively breastfed do not do so, choosing to follow alternative advice from their grandmothers and other senior women in the family.</li> </ul>
(Wandel & Holmboe-Ottesen, 1988)	Women as nutrition mediators	<ul style="list-style-type: none"> <li>• Found that women's access to material resources in particular and to some extent their lack of knowledge about feeding of the children during the weaning period that restricted women's opportunities to ensure their children adequate nutrition</li> </ul>

(De Silva A. , Situational Analysis of the Nutritional Services and Needs in Estate and Rural Sectors (East), 2009)	Situation analysis of the nutritional services and needs in estate and rural sectors	<ul style="list-style-type: none"> <li>• Elders (mothers-in-law) have a strong influence regarding food habits; post partum mothers are not given solid foods for 2-3 days, animal foods are not given 2-3 weeks post partum</li> <li>• The man of the household does all the purchasing of foods; the degree of empowerment of a women in deciding foods that would be purchased varied</li> <li>• Cultural practices regarding foods are very strong and enforced rigidly by mothers-in-law and other elders</li> <li>• Micronutrient supplements were not taken regularly and pregnant women share the food supplements with the family (Thriposha)</li> <li>• Adolescents do not have a concept of healthy eating habits; they often leave school at age 14 or 15 and do not acquire any knowledge on nutrition</li> <li>• Adolescents are not given any nutrition education or BCC after leaving school</li> </ul>
(Malhotra & Mather, 1997)	Do Schooling and Work Empower Women in Developing Countries? Gender and Domestic Decisions in Sri Lanka	<ul style="list-style-type: none"> <li>• Findings substantiated that education and employment of women play important roles in determining women's input in financial decisions</li> <li>• However, they were less important in making decisions related to social and organizational matters influencing their households</li> <li>• The study also implied that male family members had serious concerns about women's conduct that could potentially challenge their authority particularly in the matters falling within the male specific domain of activities</li> </ul>

### 9.5.2 Gender Division of Labor

Author, Year, Organization	Focus of Study/Research	Key Findings
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<p>(De Silva A. , Situational Analysis of the Nutritional Services and Needs in Estate and Rural Sectors (East), 2009)</p>	<p>Situation analysis of the nutritional services and needs in estate and rural sectors</p>	<ul style="list-style-type: none"> <li>• Women continue to work through the pregnancy and do all the housework and other chores; only rarely are they assigned to nearby fields in the last trimester of pregnancy upon request</li> <li>• Exclusive breastfeeding for &gt;6-8 weeks is rare since mothers resume work during the period of maternity leave; the maternity bonus is often spent by the family on material items or alcohol; some estate managers indirectly encourage mothers to come back to work early</li> <li>• Mothers on some private estates were not given breastfeeding breaks; mothers on RPC estates are entitled to breastfeeding breaks but do not always take them because of long distances from work areas</li> <li>• Due to low wages and the system of bonus payments, women work daily and through the weekend if work is available, thereby compromising nutritional care of their children</li> <li>• Working mothers do not spend much time for cooking and feeding since they have to be at work by 8 am; lunchtime is rushed since they have to eat and get back to work; dinner is of poor quality because mothers are tired and have to complete all chores</li> <li>• Fathers rarely participate in childcare activities</li> <li>• The primary motive for female estate workers is to work as many days as possible to improve their earning capacity, at the expense of all other activities including nutrition</li> <li>• Working mothers did not like taking a day off work and attending clinics if estate transportation was not provided or their attendance was not marked; often private estate workers did not have such support and did not attend clinics</li> <li>• Some mothers work on distant vegetable plantations and are away the entire day; they are not entitled to maternity leave or any other rights since they work as casual workers</li> </ul>
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(De Silva A. , Situational Analysis of the Nutritional Services and Needs in Estate and Rural Sectors (East), 2009)	Situation analysis of the nutritional services and needs in estate and rural sectors	<ul style="list-style-type: none"> <li>• Fathers rarely participate in childcare activities</li> <li>• The man of the household does all the purchasing of foods; the degree of empowerment of a women in deciding foods that would be purchased varied</li> <li>• Cultural practices regarding foods are very strong and enforced rigidly by mothers-in-law and other elders</li> </ul>
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### 9.5.3 Gender Norms, Identities and Values

Author, Year, Organization	Focus of Study/Research	Key Findings
(Aubel et al., 1999)	Child nutrition	<ul style="list-style-type: none"> <li>• Grandmothers play multiple roles related to the nutrition and well being of children and women (caring for grandchildren, kitchen gardening, caring for small animals, helping with housework, and giving advice on various family matters)</li> </ul>
(De Silva A. , Situational Analysis of the Nutritional Services and Needs in Estate and Rural Sectors (East), 2009)	Situation analysis of the nutritional services and needs in estate and rural sectors	<ul style="list-style-type: none"> <li>• Fathers rarely participate in childcare activities</li> <li>• The man of the household does all the purchasing of foods; the degree of empowerment of a women in deciding foods that would be purchased varied</li> <li>• Cultural practices regarding foods are very strong and enforced rigidly by mothers-in-law and other elders</li> </ul>
(Abeykoon, 1995)	Sex Preferences in South Asia: Sri Lanka an Outlier	<ul style="list-style-type: none"> <li>• Sri Lanka is considered an outlier in terms of sex preferences</li> <li>• Sri Lanka is characterized by rapid fertility decline, no son preference, and normal sex ratio at birth</li> </ul>

(Rathnayake & Weerahewa, 2002)	Intra-household allocation of food	<ul style="list-style-type: none"> <li>• Results show that there was a significant difference among calorie adequacy ratios of fathers, mothers and children</li> <li>• Fathers have the highest and children have the lowest mean calorie adequacy ratios</li> <li>• Regression results indicate that income of mother and family size has significant positive and negative impacts respectively on mother's relative calorie allocation</li> <li>• Results also show that there was an age and gender biased calorie allocation within the family</li> <li>• Income of mother had a negative effect on children's calorie allocation</li> <li>• Though expansion in employment opportunities could alleviate malnutrition among women, it may aggravate malnutrition among children</li> </ul>
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## Appendix 9: Additional Appendices

### 9.1 Policy Landscape for Gender and Nutrition

Map of Government Policy and Implementation Landscape for Gender and Nutrition								
	Afghanistan	Bangladesh	Bhutan	India	Maldives	Nepal	Pakistan	Sri Lanka
<b>National Plan for Nutrition</b>	Health and Nutrition Sector Strategy included in the National Development Strategy; Public Nutrition Strategy 2009 - 2013; National Child and Adolescent Health Strategy 2009 - 2013	National Food and Nutrition Security Policy 1997; Country Investment Plan 2010; National Strategy for Accelerated Poverty Reduction II 2009-2011	Food and Nutrition Security Policy 2010; National Plan of Action on Gender 2008-2013	National Nutrition Policy 1993 and National Plan of Action on Nutrition 1995	National Nutrition Plan 2007-2011; Gender Equity Policy 2009	Multi-Sector Nutrition Plan (In Development 2012); National Nutrition Policy 2004	National Nutrition Strategic Plan of Action 2005; National Plan of Action on Micronutrient Control 2011	National Nutrition Policy 2010
<b>Plan Addresses Gender</b>	Yes (NCAHS)	Yes (NSAPR II)	Yes (Gender Action Plan)	Yes (Nutrition Action Plan)	Indirectly (Gender Equity Policy)	Yes	No	Yes
<b>Implementer of Nutrition Agenda</b>	Public Nutrition Dept within Ministry of Public Health; Mome Economics Dept of Ministry of Agriculture, Irrigation and Livestock	Ministry of Health and Family Welfare; Ministry of Food and Disaster Management; Bangladesh National Nutrition Council; Nutrition Working Group; and Behavioral Change Communication Working Group	Department of Public Health -- Non-Communicable Disease Division	National Council on India's Nutrition Challenges in 2008 (Prime Minister's Office); Ministry of Women and Child Development; Coalition of Sustainable Nutrition Security in India	Ministry of Health and Family; National Nutrition Committee with Nutrition Task Force	National Planning Commission with Ministry of Health and Population, Ministry of Education, Ministry of Local Development and Social Protection, Ministry of Agriculture and Cooperatives	Provincial Nutrition Committees; Planning Commission --Nutrition Section creates policy and monitors	Ministry of Healthcare and Nutrition; Presidential Nutrition Task Force and National Nutrition Steering Committee

## 9.2 Table of Activities Identified by Mapping Exercise

Country	Agency	Program	Target Women/ Children	Target Adolescents	Target Household	Knowledge/ Beliefs	Physical Health	Mental Health	Autonomy/ Control Resources	Family Support	Community Support
Afghanistan	1 Government	MOPH Basic Package of Health Services	1						1		
	2 Government	MAIL School Based Nutrition Program	1						1		
	3 Government	MAIL Horticulture Livestock Program	1				1				
	4 Government	MAIL Promoting Household Level Food Processing, Preservation and Storage Project	1								
	5 WB	World Bank – Strengthening Health Activities for the Rural Poor (SHARP)	1								
	6 UN	UN – Feeding the Children of Afghanistan Together Program	1								
	7 WFP	WFP – School Meal Program	1				1				
	8 USAID	USAID – Basic Support for Institutionalizing Child Survival (BASICS)	1			1	1			1	
	9 STC	Save the Children – Child Survival (CS-19) Project	1				1				
	10 Care for Afghan Families	Care for Afghan Families – Baby Friendly Villages Project	1			1	1				1
Bangladesh	11 Government	Health, Nutrition and Population Sector Program/National Nutrition	1	1			1				1
	12 UNICEF	Support to NNP's BCC component (ended 2012)	1	1		1	1		1		
	13 WFP	Country Program -- Research of Gender	1			1	1			1	1
	14 WFP	Improving Maternal and Child Nutrition Program	1	1		1	1			1	1
	15 WFP	School feeding Program	1				1				
	17 WFP	Enhanced Resilience to Disaster and Climate Change Program	1						1		
	18 USAID	Food for Peace Multi Year Assistance Program									
	19 FHI360	Food and Nutrition Technical Assistance 2 (FANTA 2)	1	1			1				
	20 JSI, HKI, STC, Manoff Group, IFPRI	SPRING (funder: USAID)	1			1	1	1	1		
	21 FHI360	Alive and Thrive (Gates Foundation)	1				1	1			
	22 HKI	Homestead Food Production	1						1		
	23 CARE	Shouhardo Program	1				1	1		1	
	24 STC	Nobo Jibon Program	1						1		
	25 Concern WW	Local Govt Partnership to Combat Child Malnutrition	1				1		1		1
	26 Plan BGD/THAN	Empowering Women and Adolescents to Improve IYCN		1		1	1	1			
	27 STC	Kishoree Kontha Project		1					1		
	28 BRAC	Maternal, Neonatal and Child Health Care Program (MNCH)					1				
	29 BRAC	Employment and Livelihoods for Adolescents ELA Program		1					1		
	30 BRAC	Social and Financial Empowerment of Adolescents (SoFEA) Program		1					1		
Bhutan	31 Government	Dept of Public Health's Nutrition Program	1				1	1			
	32 UNICEF	Model Villages	1				1	1		1	
	33 WFP	Improving Rural Children's Access to Basic Education	1				1				
India	34 Government	Integrated Child Development Services Scheme (ICDS)					1	1			
	35 Government	ICDS - Nutrition, Health, and Education (NHED) scheme	1				1				
	36 Government	Rajiv Gandhi Scheme for Empowerment of Adolescent Girls - SABLA		1							
	37 Government	Swayamsidha Program (Ministry of Women and Child Development)	1				1		1		
	38 Government	National Rural Livelihood Mission (NRLM, Min of Rural Dev)	1				1		1		
	39 Government	Mid-day Meals Program (Min of Human Resource Dev)	1								
	40 Government	Food Distribution System									
	41 Government	National Rural Health Mission									
	42 UNICEF	Child Development and Nutrition Program (CDN) (supports NRHM, ICDS)	1	1			1	1			
	43 WFP	IndiaMix	1					1			
	44 WB/USAID/DFID	Support to ICDS									

[illegible]



### 9.3 List of Persons Interviewed

Gender and Nutrition Mapping Exercise -- Interview List					
No #	Name	Organization	Designation	Date met	Location
1	Emily Hillenbrand	Hellen Keller International/Bangladeh	Deputy Regional Director	6-Dec-11	Phone Interview
2	Meera Shekar	World Bank	Lead Health and Nutrition Specialist	6-Dec-11	Phone Interview
3	Leslie Elder	World Bank	Senior Nutrition Specialist	6-Dec-11	Phone Interview
4	Haider Yaqub	Plan International	Deputy Regional Director, South Asia	7-Dec-11	Phone Interview
5	Debora DiDio	WFP/Bangladesh	Gender & M&E Consultant	11-Dec-11	Phone Interview
6	Britta Schumacker	WFP/Bangladesh	Head of Programs	11-Dec-11	Phone Interview
7	Nusha Shoudhury	WFP/Bangladesh	Nutrition Specialist	11-Dec-11	Phone Interview
8	Thibault Williams	USAID/Bangladesh	Health Officer	12-Dec-11	Phone Interview
9	Mahmuda Khan	USAID/Bangladesh	Gender Advisor	12-Dec-11	Phone Interview
10	Katheleen Kurz	Development Alternatives Incorporated	Senior Nutrition and Food Security Specialist	12-Dec-11	Washington DC
11	Melanie Galvin	Micronutrient Initiative	Regional Director, Asia	13-Dec-11	Phone Interview
12	Kavita Sehuraman	FHI 360	Senior Maternal Child Health and Nutrition Advisor on FANTA 2	13-Dec-11	Washington DC
13	Tina Sanghvi	FHI 360/Bangladesh	Nutrition Advisor on Alive and Thrive	13-Dec-11	Phone Interview
14	Agnes Quisumbing	IFPRI	Senior Research Fellow	16-Dec-11	Phone Interview
15	Felix Brooks -Church	Project Healthy Children/Nepal	Associate Director of Programs	19-Dec-11	Phone Interview
16	Emily Levitt	World Vision	Senior Policy Advisor on Maternal and Child Nutrition	20-Dec-11	Phone Interview
17	Judy Aubel	Grandmother Project	Founder	21-Dec-11	Phone Interview
18	Sophia Uprety	WFP/Nepal	Nutritionist	22-Dec-11	Phone Interview
19	Passana Gunasekera	USAID/Sri Lanka	N/A	23-Dec-11	Phone Interview
20	Sonali Thahir	USAID/Sri Lanka	N/A	24-Dec-11	Phone Interview
21	Kai Beard	USAID/Sri Lanka	JO Program/Project Developmetn	25-Dec-11	Phone Interview
22	Dula DeSilva	WFP/Sri Lanka	Nutrition Specialist	28-Dec-11	Phone Interview
23	Charlotte Dufor	FAO/Afghanistan	Household Food Security and Nutrition Expert	29-Dec-11	Phone Interview
24	Sylvia Cabus	USAID	Gender Advisor	29-Dec-11	Phone Interview
25	Kai Spratt	USAID	Gender Specialist	29-Dec-11	Phone Interview
26	Katrina Kosec	IFPRI/Pakistan	Postdoctoral Fellow	29-Dec-11	Phone Interview
27	Anna Herforth	World Bank	Nutrition Specialist	3-Jan-12	Phone Interview
28	Carrie Morrison	WFP/Afghanistan	Nutrition Specialist	4-Jan-12	Phone Interview

29	Hari Koirala	USAID/Nepal	Health Specialist	5-Jan-12	Phone Interview
30	Lyn Lederer	Save the Children/Nepal	COP Integrated Nutrition Program	5-Jan-12	Phone Interview
31	Suneetha Kadiyala	IFPRI/India	Research Fellow	5-Jan-12	Phone Interview
32	Natasha Mesko	DFID/Nepal	Health Advisor	5-Jan-12	Phone Interview
33	Nastu Sharma	AusAid/Nepal	Senior Program Manager	5-Jan-12	Phone Interview
34	Anirudra Sharma	UNICEF/Nepal	Emergency Nutrition Specialist	9-Jan-12	Phone Interview
35	Manisha Khale and Ashok Dyalchand	Institute of Health Management	Founder and Directors	11-Jan-12	Pune, India
36	Purnima Menon	IFPRI - Delhi, Pov, Health and Nutr. Div	Research Fellow	12-Jan-12	New Delhi, India
37	Nidhi Sabrawal	Institute of Dalit Studies	Director	12-Jan-12	New Delhi, India
38	Meera Chatterjee	World Bank SASDS	Sr. Social Development Spec.	12-Jan-12	New Delhi, India
39	Jasmine Rajbandhary	World Bank SASEP	Social Protection Spec.	17-Jan-12	Kathmandu, Nepal
40	Afra Alawi Al-Ahmadi	World Bank SASSP	Sr. Human Dev. Spec.	18-Jan-12	Kathmandu, Nepal
41	Pooja Pandey	Helen Keller International - Nepal	Director of Programs	18-Jan-12	Kathmandu, Nepal
42	Bindu Gautam and Kirk Dearden	Suahaara Project	Project Managers	18-Jan-12	Kathmandu, Nepal
43	Rolf Klemm	Johns Hopkins Univ. - CRSP	Scientist	18-Jan-12	Kathmandu, Nepal
44	Angela DeSilva	University of Colombo/Sri Lanka	Nutrition Specialist	18-Jan-12	Phone Interview
45	Gayatri Acharya	World Bank SASDA	Sr. Economist	19-Jan-12	Kathmandu, Nepal
46	Luc Laviolette	World Bank SASHN	Sr. Nutrition Spec.	19-Jan-12	Kathmandu, Nepal
47	Bert Voetberg	World Bank SASHN	Lead Health Spec.	19-Jan-12	Kathmandu, Nepal
48	Rajiv Rimal	Johns Hopkins School of Public Health	Faculty Director	20-Jan-12	Phone Interview
49	John Meyer	Save the Children/Bangladesh	COP Nono Jibon Program	24-Jan-12	Phone Interview
50	Kumari Navaratne and Sundar Gopalan	World Bank SASHN	Sr. Health Spec.	27-Jan-12	Colombo, Sri Lanka
51	Fahim Khan	CARE/Bangladesh	COP Shouhardo Program	30-Jan-12	Phone Interview
52	Luc Laviolette (Follow up)	World Bank/Pakistan	Senior Nutrition Specialist	30-Jan-12	Phone Interview