OVERCOMING THE IDENTIFIED SOCIOPOLITICAL BARRIERS TO A NATIONAL NUTRITION RESPONSE IN CAMBODIA

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ABSTRACT

Amy L. Weissman: Overcoming the identified sociopolitical barriers to a national nutrition response in Cambodia (Under the direction of Suzanne Babich)

Between 2000 and 2010, Cambodia's national stunting prevalence among children under 5 was nearly 40%, with some provinces reaching 50%. As recently as 2014, more than one-third of children were stunted, giving Cambodia one of the highest proportions of chronically malnourished children in the East Asia and Pacific region. An important contributor to stunting in Cambodia are suboptimal complementary feeding practices. Stunted children suffer irremediable damage both physically and mentally; countries with a high prevalence also face severe economic consequences. Yet, stunting could be substantially reduced through existing nutrition interventions implemented at scale. This makes it vital to understand and address the intersecting sociopolitical factors hindering a national, effective response.

This study sought to learn: 1) how favorable are current conditions in Cambodia for scaling-up evidence-based complementary feeding policies and programs to reduce child stunting? and 2) what strategies could be employed to create more favorable conditions? This qualitative study employed both document review and key informant interviews. Interviews with nutrition national working groups members, representing government, funders and civil society, were conducted using a question guide along with two card exercises, one to rank barriers to progress and another to prioritize strategies for improving complementary feeding.

Participants noted that Cambodia faces challenges in ensuring political commitment, recognizing the extent of the problem, effective policy implementation and sufficient technical capacity, strong coordination and communication, and sufficient information evidence and research. Participants reflected that successful country-level efforts will require sustained political commitment, sufficient financial resources, strong multisectoral, multi-stakeholder and multi-level governance, and technical, managerial and implementation capacity. Study results suggest that key actors in the country must step beyond their organizational mandates to collaboratively build Cambodia's capacity to lead its own response. A plan for change is proposed, in order to create policy community cohesion as a mechanism for generating traction toward coordinated action and funding around a set of agreed priorities to address malnutrition at scale in Cambodia.

To Dan, Atticus, Ezekiel, and Jedidiah

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LIST OF ABBREVIATIONS

BFCI Baby-Friendly Community Initiative

CARD Council for Agricultural and Rural Development

CDHS Cambodia Demographic and Health Survey

COMBI Communication for Behavioral Impact

CTN Cambodia Television Network

DP Development Partner

EPI Expanded Program on Immunization

FAO Food and Agriculture Organization

FHI 360 Family Health International

GDP Gross Domestic Product

GIZ Deutsche Gesellschaft für Internationale Zusammenarbei

HEF Health Equity Fund

HIV Human Immunodeficiency Virus

HKI Helen Keller International

HMIS Health Management Information System

IDA Iodine Deficiency Disorder

IDD Iron Deficiency Disorder

IMTC Inter-Ministerial Technical Committee

IRB Institutional Review Board

IYCF Infant and Young Child Feeding

KII Key Informant Interview

LANGO Law on Associations and Non-Governmental Organizations

M&E Monitoring and Evaluation

MAFF Ministry of Agriculture, Forestry, and Fisheries

MDG Millennium Development Goal

MENV Ministry of Environment

MEYS Ministry of Education, Youth, and Sports

MIME Ministry of Mines, Industry, Minerals, and Energy

MRD Ministry of Rural Development

MNS Micronutrient Supplementation

MoEF Ministry of Economy and Finance

MoC Ministry of Commerce

MoH Ministry of Health

MoI Ministry of Information

MoP Ministry of Planning

MOWA Ministry of Women's Affairs

MPA Minimum Package of Activities

MWRM Ministry of Water Resources and Meteorology

NCDD National Committee for Sub-national Democratic Development

NCHADS National Center for HIV/AIDS and Dermatology

NCN National Council for Nutrition

NEC National Ethics Committee for Health Research

NFSF The National Food Security Forum

NGO Non-Governmental Organization

NIPH National Institute of Public Health

NMCHC National Maternal and Child Health Centre

NNP National Nutrition Program

NWG Nutrition Working Group

OHRP Office of Human Research Protection

PHD Provincial Health Department

PI Principal Investigator

REACH Renewed Efforts Against Childhood Hunger

RGC Royal Government of Cambodia

SAM Severe Acute Malnutrition

SBCC Strategic Behavior Change Communication

SDG Sustainable Development Goal

SEM Socio-ecological Model

SOP Standard Operating Procedure

SP&FSN Social Protection and Food Security and Nutrition

SUN Scaling Up Nutrition

TWG Technical Working Group

TWG-AW Technical Working Group Agriculture and Water

TWG-SP&FSN Technical Working Group for Social Protection and Food Security and

Nutrition

UN United Nations

UNICEF United National Children's Fund

USAID United States Agency for International Development

VHSG Village Health Support Group

VHV Village Health Volunteer

WASH Water and Sanitation and Hygiene

WFP World Food Program

WHO World Health Organization

CHAPTER 1. INTRODUCTION

1.1 Problem Statement

1.1.1 Introduction

Across the globe, approximately 165 million children are chronically malnourished (3). This malnutrition is often expressed by stunting, which is an indicator for impaired linear growth. Stunted children suffer often irremediable damage both physically and mentally (4-10). In the short term, stunting is a major contributor to mortality, morbidity, and disability (3). In the long term, it is linked to shorter adult height, lower intellectual ability and school attainment, reduced income, and poorer health, including higher incidence of obesity and non-communicable disease (6, 11-14). Stunting also has economic consequences for affected countries as illustrated by Cambodia where malnutrition costs more than \$400 million or 2.5% of the gross domestic product (GDP) annually (15).

Stunting among young children is caused by a variety of factors across multiple socioecological levels. A primary cause is that children do not receive and/or absorb the nutrition they
require due to sub-optimal infant and young child feeding (IYCF) practices. Optimal IYCF
includes exclusive breastfeeding for six months and sustained breastfeeding through two years
and adequate complementary feeding, which requires a set of complex complementary feeding
behaviors starting at six months, such as the appropriate timing of introduction, diet diversity,
quantity and frequency of feedings, preparation methods, responsive feeding, and safe food

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¹See Annex 1: Key Constructs

preparation and storage (6). The limited coverage and scale of effective health and non-health sector interventions also contributes to the persistence of stunting (4).

In the past decade, there have been substantial increases in attention and funding to address malnutrition, including to prevent stunting. Two Lancet series (2008, 2013), a Maternal and Child Nutrition special series (2013), and a global report (2014) (16-18) played important roles in contributing to and capturing this progress. Political attention and commitment have also led to investment and action, as expressed by Scaling up Nutrition (SUN), Renewed Efforts Against Child Hunger (REACH), and 1,000 Days. SUN is an international nutrition movement with 55 member countries² aimed at generating global multi-stakeholder collaboration and national-level nutrition investments (19, 20). A guiding principle of SUN is national leadership, ownership, and accountability, as well as the alignment of financial and technical resources to support country plans (19). REACH, representing the combined efforts of four key United Nations (UN) food and nutrition agencies: Food and Agriculture Organization (FAO), World Health Organization (WHO), United Nations Children's Fund (UNICEF), and World Food Program (WFP), stems from the Paris Declaration to improve aid effectiveness (21). REACH aims to raise awareness of nutrition problems and solutions, strengthen national nutrition policies, increase nutrition capacity, and increase efficiency and accountability at country level (22). The 1,000 Days is an advocacy campaign championing investment and partnerships for improving nutrition during the 1,000 days between pregnancy and when a child reaches 2 years old, the time when action is most critical for preventing stunting (23).

²The number and a list of member countries can be found on the SUN website: http://scalingupnutrition.org/about.

1.1.2 Stunting in Cambodia

With a national stunting prevalence of nearly 40% (with some provinces reaching 50%) between 2000 and 2010, and with more than one-third of children stunted as recently as 2014, Cambodia has had one of the highest proportions of chronically malnourished children in the East Asia and Pacific region (11, 24-27). Despite these concerning numbers, there are positive trends: chronic malnutrition has declined and stunting has improved in certain age groups. For example, according to an examination of the annualized prevalence change between the 2000 and 2010 Cambodian Demographic and Health Surveys (CDHS), the country's stunting prevalence made steady but slow progress—a 10.3% decline (28). Greater reductions were seen among children older than two years (12.9% absolute change) compared to children less than two years (5.1% absolute change) (28). Between 2000 and 2005, reasons for the decline included improved adherence to seven of the eight core WHO child feeding indicators (29). Noteworthy was the 5-fold increase in exclusive breastfeeding among 0-5 month olds while, by contrast, the prevalence of feeding diversity and provision of a minimally acceptable diet for 6-17 month old children remained at approximately 25%. According to another study of pooled data from the 2000, 2005, and 2010 CDHS, progress was associated with improvements in household wealth, sanitation, parental education, and birth spacing (30).

Between 2010 and 2014, Cambodia's stunting prevalence continued to decline to 32% (26). Because the complete analysis of the 2014 CDHS is not yet available, the factors related to this decline are unclear. According to the Royal Government, it is due to the reduction of poverty between 2007 and 2013 (from 47.8% to 18.8%) and the increase in social protection programs,

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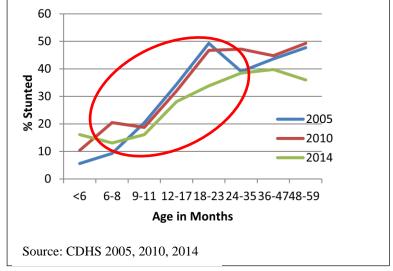
³According to UNICEF's definition, East Asia and Pacific comprises 28 countries, though UNICEF is present only in the following: Cambodia, China, Indonesia, DPR Korea, Lao PDR, Malaysia, Mongolia, Myanmar, Pacific Islands, Papua New Guinea, Philippines, Thailand, Timor-Leste, and Vietnam.

such as the health equity fund (HEF) (31). Although social safety net programming demonstrably addresses poverty and although some have conferred nutritional impacts, it is unclear which aspect of the intervention led to this outcome (32). Indeed, globally it is understood that poverty reduction is insufficient for reducing undernutrition (18, 32). There is now a growing trend to view this relationship in reverse—improving nutrition is an important means to reduce poverty (33).

Of note, according to the 2005, 2010, and 2015 CDH studies, the greatest increases in the proportion of children stunted in Cambodia occurred from the ages of 6 to 23 months (Figure 1) (25, 27). These growth patterns reflect other countries where increases were attributed in part to

suboptimal IYCF practices (4, 5, 10). Until recently, Cambodia had made significant progress in improving breastfeeding practices, but not in complementary feeding. This suggests that, without improving complementary feeding practices among Cambodian children 6-23 months at sufficient scale, progress will remain stagnant.

Figure 1. Rates in Child Stunting 0-59 months in Cambodia, 2005, 2010 and 2015

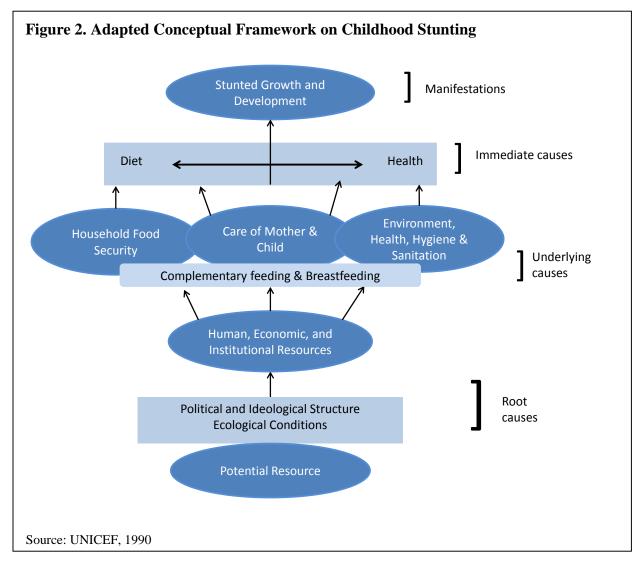


1.2 Background

1.2.1 Determinants of Stunting

The immediate, underlying and root causes of maternal and child undernutrition were illustrated more than 25 years ago in UNICEF's widely-accepted framework of the determinants

of malnutrition (34). In more recent years, this framework has been revised and adapted by WHO and Frongillo to focus on childhood stunting (6, 35). Demonstrated in Figure 2 below, it provides a helpful overview of the causes of stunting and the critical role that optimal breastfeeding and complementary feeding can play in alleviating the functional consequences.



As shown, stunting is a consequence of a variety of biological, environmental, and socioeconomic factors operating both at distal and proximal levels (3, 36). The immediate causes are long-term deprivation of essential nutrition through either inadequate intake or absorption. Root causes are associated with contextual factors, such as food prices, poverty, access to health care, societal beliefs and norms regarding food choice and eating patterns, food availability, water and sanitation infrastructure, biological factors, and toxicology (6).

Underlying causes of stunting are associated with household food security, and care of mother and child. Stunting is also affected by household environment, health, sanitation, and hygiene practices (37, 38). Hygiene and sanitation as a contributor to chronic malnutrition can be seen both through diarrheal disease and through its link to environmental enteropathy. The inflammatory condition of the gut has gained attention as another pathway to impaired linear growth and is believed to contribute to faltering by affecting nutrient absorption (39-43).

Because IYCF is interlinked with household food security, care of mother and child, and the household environment and behaviors, it too is an underlying cause of chronic malnutrition among young children (6, 44). This makes improved complementary feeding, as an IYCF component, one of the "central pillars for supporting healthy growth and development" (6).

1.2.2 Determinants of Stunting in Cambodia

As previously presented, Cambodia has a significant childhood stunting problem, especially among children 6-23 months. The Conceptual Framework on Child Stunting is useful for understanding this high prevalence (6, 34). It outlines three vital aspects of suboptimal complementary feeding: poor quality and frequency of foods, inadequate practices, and food and water safety. WHO's 10 guiding principles for complementary feeding of the breastfed child are also of value (45).

Poor quality and frequency of foods: Sufficient diet diversity, including the intake of animal source foods, and feeding frequency are important components of optimal complementary feeding. According to a study among children 12-59 months old in Cambodia, consuming a diverse diet was associated with lower levels of stunting (46). This study also found

consumption of animal source foods as protective. Diet diversity in Cambodia remains a gap. In 2010, although 70% of children were fed the minimum number of times, only 37% had been fed foods from the minimum number of food groups for their age (27). In 2010, only 24% of children 6-23 months old met the minimum standard for all three IYCF practices—number of food groups consumed, number of times a child is fed, and consumption of breastmilk or a milk product (27). Although in 2014 this figure increased to 30%, at least 2/3 of Cambodian children still do not receive an adequate diet at the right frequency (26).

Food insecurity remains a contributing factor to the lack of diet diversity in some parts of Cambodia (31, 47). Alternatively, while many households do have access to animal source foods, such as poultry or fish, consumption is limited because they are considered a source of income more than a food (46). This was true even in a homestead food production program that provided poultry products and promoted their consumption for improved nutritional outcomes (48).

Inadequate Practices: WHO recommends children be exclusively breastfed until six months of age when complementary foods should be added (45). Complementary feeding requires a set of essential nutrition actions, such as the introduction of appropriate and nutrient dense foods at six months and not before, actively feeding the child, and feeding a diverse diet at sufficient frequency, as described above (49).

In 2010, despite a relatively high prevalence of exclusive breastfeeding for children under six months (74%), exclusive breastfeeding was dramatically lower at 4-5 months (60%) (27). This was confirmed in 2014 when one in every five babies by 4-5 months was given complementary foods (26), suggesting that complementary foods are introduced too early. Further, although sugary foods are nutrient poor and may decrease a child's appetite for more

nutritious foods, mixed feeding of sweetened condensed milk, sugary drinks, chips, and other snack food is common (45, 50, 51). Bottle-feeding, often with sweetened condensed milk instead of breastmilk or formula, is also on the rise (50). The proportion of children 6-23 months old being bottle-fed more than doubled from 2005 to 2010 (27).

WHO, along with more recent research, recommends responsive feeding. This entails encouraging children to eat, using eye-to-eye contact and talking to the child during feeding, and avoiding distractions during meals to help ensure children eat appropriately and sufficiently (45, 52, 53). Conversely, the data show that young Cambodian children are frequently left to eat on their own (50).

Clean food, water, and environment: Complementary feeding also requires a set of essential hygiene actions, such as safely preparing and storing food, and washing hands before food preparation and/or feeding the child (49). A clean environment, and good hygiene and proper food handling are also highlighted by WHO (6, 45); yet, hygiene and sanitation are severe problems, with more than 70% of Cambodian households lacking improved sanitary facilities (30). The majority (56.7%) of the population, both urban and rural, also report open defecation (27). This situation likely contributes to diarrheal disease among children less than 5 years of age, the highest rates of which are in the 6-23 month age range (26.4% of 6-11 month olds and 21.1% of 12-23 month olds, compared to 14.2% of children <6 months old and 13.7% of 24-35 month olds, the next highest categories) (27).

These findings suggest that tremendous room exists for preventing stunting among young children in Cambodia through improved complementary feeding (27, 29, 50). This is confirmed by a 2012 UNICEF assessment of the scope and scale of countries' IYCF programming and implementation status. Overall, Cambodia was rated "fair," which meant that the country had

met few of the key IYCF actions or interventions implemented (54). Cambodia also received a six out of ten on the specific complementary feeding component, comprising IYCF counseling of mothers/care-givers in relation to home preparation of complementary foods, and the provision of complementary feeding supplements (micronutrients and food supplements) (54).

1.3 Evidence of Effective Complementary Feeding Approaches

The 2008 *Lancet* nutrition series estimates that existing nutrition interventions implemented at scale in the 36 highest burden countries could reduce child stunting at 36 months by more than 1/3 (7). These effective interventions target children during the "window of opportunity"—the 1,000 days from conception to age 2 (3, 7, 12, 14, 55). Because rapid increases in stunting occur from 6 to 23 months, it is particularly important to identify approaches that target children during this portion of the 1,000 days. One approach entails improving complementary feeding, which requires education, strategic behavior change communication (SBCC), counseling, food provision in food insecure settings, and micronutrient supplementation strategies. Two of these complementary feeding strategies were found most effective: 1) education on diet diversity and consumption of animal-source foods when such foods are available, and 2) the provision of complementary foods along with education in food insecure settings (3, 55). Complementary feeding outcomes are further enhanced when these interventions are paired with interpersonal communication, community mobilization, mass media, and evidence-based policy dialogue and advocacy (56, 57).

To improve complementary feeding (along with other aspects of IYCF), the *Alive & Thrive*⁴ experience suggests the importance of building on existing delivery platforms,

⁴Alive & Thrive is a Bill & Melinda Gates Foundation-funded project led by FHI 360. It improves infant and young child nutrition by improving IYCF practices in Bangladesh, Ethiopia, and Vietnam through policy dialogue, service delivery and behavior change, and nutrition products.

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particularly those with significant numbers of frontline health workers and health care providers who have contact with caregivers of children two years and under (58). Bhutta and colleagues modeled community-based delivery strategies and platforms as a mechanism for reaching poor and marginalized populations. They found that nutrition-focused communication and outreach strategies could be integrated into existing services, such as community health worker programs for maternal and child health, which would foster the scale-up of nutrition interventions (3). WHO also highlights the importance of community-based nutrition interventions, but cautions that sufficient resources must be invested to ensure their quality and sustainability (59).

Despite these and other examples of successful delivery of complementary feeding programming, few such programs have achieved scale. This is in stark contrast to other nutrition interventions, such as Vitamin A supplementation (7, 60). Reasons for this gap include a lack of understanding and/or incorrect assumptions of socio-cultural and economic barriers and determinants of poor feeding practices, lack of consensus on program approaches and documentation of program experience, lack of implementation support tools, and an absence of or delay in development of international consensus and guidance for complementary feeding (61).

1.4 Purpose and Significance of the Research

1.4.1 Remaining Challenge

Applying the evidence base at scale is aligned with the Paris and Accra Declarations, which urge countries to draw on international best practice while ensuring country ownership and relevance (21). A recent review of scaling-up nutrition shows that there is an understanding of what must be done but not an understanding of *how* to scale up the right mix of interventions for each country context and to integrate nutrition-specific and nutrition-sensitive interventions

(62). This holds true for stunting—stunting can be reduced through known interventions delivered through existing delivery platforms (3, 6, 44, 55, 56, 58, 60). Much of the evidence for stunting, however, is drawn from efficacy trials rather than effectiveness studies conducted in defined geographic areas and at relatively small scale (3, 7, 59, 63). There is a vital need to understand and address the intersecting factors hindering an effective response at scale: how to generate political and resource commitment; how to create effective multisectoral, multistakeholder and multilevel governance; how to overcome conflicting ideas about the best approaches to affect change; and how to fill gaps in evidence at sufficient scale to address the severity and magnitude of the problem (57, 62, 64).

Answering these questions requires the study of strategies to improve the uptake, implementation, and translation of research findings into healthcare policy and practice, known as implementation science (65, 66). It also requires drawing on the scaling-up and agenda setting evidence base. Combined, these approaches help to identify which strategies are best for which settings, ensure their correct application, deliver at sufficient scale and coverage, and ultimately achieve meaningful nutritional outcomes (59, 61).

1.4.2 Contribution of the Research

Although evidence for effective complementary feeding interventions exist (3, 7, 55) and some progress has been achieved, stunting remains a significant problem in Cambodia, requiring urgent and effective action. To determine the actions needed for a national response, this study addresses two research questions:

 How favorable are current conditions in Cambodia for scaling-up evidence-based complementary feeding policies and programs to reduce child stunting? These conditions include political commitment, policy frameworks and their implementation, technical capacity, financial resources and investments, multisectoral intervention coordination, national coordination and communication structures, and the evidence, information, and research available to inform and monitor the response; and

2) What strategies could be employed to create more favorable conditions?

By identifying actions needed to create more favorable conditions for scaling-up complementary feeding, this study contributes to the literature of how to tackle the sociopolitical barriers to addressing young child stunting at a country level. It also contributes to the practice of "going to scale", defined as: "the ambition or process of expanding the coverage of health interventions" (67). Further, the findings and recommendations from this study will be shared with key stakeholders—government, funders, and civil society—in Cambodia to address the barriers identified within this research towards addressing child stunting in-country.

1.5 Structure of the Dissertation

Chapter 2 of this dissertation presents a review of two bodies of literature. The first examines effective agenda setting and policy making for young child undernutrition, with an emphasis on Southeast Asia. The second body of literature concerns scaling up. Chapters 3-5 present the empirical research and Chapter 6 discusses the implications of this research study, presents a plan for change, and provides recommendations for further research.

CHAPTER 2. LITERATURE REVIEW

In this chapter, two bodies of literature are reviewed. The first relates to effective agenda setting and policy making for young child undernutrition, with an emphasis on Southeast Asia. Agenda setting and policy making processes are examined as part of the scale-up process—improving recognition of the problem, generating political commitment to address it, and formulating responsive policies. The second body of literature concerns going to scale as it relates to nutrition interventions, and specifically IYCF, when available. Reviewed articles were identified by searching three search engines: EBSCO host: Global Health, NCBI: PubMed, and Google Scholar.

2.1 Agenda setting and policy making to address young child undernutrition

2.1.1 Global Experience

Drawing from global and country-level experience, there is a growing body of scientific peer reviewed literature aimed at understanding the barriers and facilitators both of nutrition agenda setting, and policy formulation processes to address young child stunting at scale (8, 57, 68-71). This research builds on earlier work on political prioritization and agenda setting for health topics, such as maternal and child health (72-78). The nutrition-related literature is primarily found in health policy and nutrition journals, including two *Lancet* series in 2008 and 2013, and special Food and Nutrition Bulletin supplements published in 2011 and 2013. A number of the articles identified barriers to progress, such as the invisibility of chronic malnutrition, which hinders recognition of the problem. These articles also highlighted

governance and the lack of accountability, due to the absence of an obvious government body for nutrition leadership for a multisectoral response (79, 80). Some articles also cited the lack of consensus among key stakeholders as a critical barrier, largely the result of competing organizational mandates and interests (68, 70, 81).

One of the earliest articles, from 2008 identified seven actions needed to overcome these challenges to progress: 1) develop action plans with timelines, budgets, and clear roles and responsibilities; 2) identify an accountable organization; 3) create policy champions; 4) build networks; 5) use evidence to do the right thing; 6) ensure sufficient coverage among populations in need; 6) use data for decision-making and for fostering a "one voice" response; and 7) create capacity and mechanisms to respond (8). Important lessons from another review centered on minimizing challenges from societal and structural conditions by formulating mechanisms for governance and partnership coordination to build government leadership and stakeholder advocacy capacity; this review also suggested the need for a government (rather than donorowned) plan supported by donors with buy-in from local government and civil society (71).

Another study drawing upon experience from South Asia, South America, and Eastern and Southern Africa highlighted, among other key findings, the importance of: 1) vertical coordination within the government and the role of the sub-national level in the nutrition response; 2) nutrition coordination bodies that facilitate cooperation across ministries; 3) framing the issue as part of the broader development agenda; 4) reaching consensus on the "narrative," setting clear policy goals and actions; and 5) collecting accurate data on a routine basis (82). A more recent review (2013) that drew upon experience from three countries—Bangladesh, Uganda, and Vietnam—identified additional features such as informal and formal partnerships that facilitate a sense of shared responsibility, ownership, and credit among the key actors. This

review also suggested conducting country-based research to identify priorities, advocacy needs and gaps, and to inform strategies to employ, as well as continue to develop the evidence base. Another key finding noted the effectiveness of compelling, contextualized messages and strategic communication tools disseminated through multiple channels and messages and partnerships with media and key champions to promote the messages and generate interest. Sufficient resources for research and communication activities are critical to ensuring these strategies are effective (57).

A 2013 review also highlighted the importance of generating, framing, and communicating credible evidence, strengthening horizontal coordination and accountability among key stakeholders, including different sectors of government, and addressing the political economy by building advocacy capacity, including leadership and championing skills, and financial resources (18). Experience from Bolivia echoes some of these findings, highlighting in particular the importance of strengthening the capacity of nutrition policy communities, and identifying well-respected, stable champions (83). Similarly, a multi-country study of influential stakeholders in four countries found strong leadership a critical component of success.

Leadership is positively driven by an individual's motivation to address the problem due to their personal experience, training, and nutrition technical knowledge as well as their multisectoral understanding and program experience (84).

2.1.2 Southeast Asia Experience

Articles were reviewed that described nutrition policy making processes related to young child stunting with complementary feeding as a component in Southeast Asian countries.

Important policy-related lessons from Lao PDR (22), the Philippines (85), and Vietnam—first set (69, 70, 86) and second set (85, 86)—were identified. In Lao PDR, the REACH methodology

was used (22) to analyze policy assessment and change, while in the Philippines, PROFILES, a data-based approach to nutrition policy was applied (85). PROFILES models interventions and examines cost, coverage, and effectiveness. By contrast, in the first set of Vietnam articles, a participant-observer change agent catalyzed the policy process (69, 70, 86). The international expert identified key gaps, such as the lack of an organized nutrition community and the lack of government attention to nutrition, and spearheaded actions to address them. As described in the second set of Vietnam articles, a number of strategies were employed—use of strategic information, including inclusion and collection of IYCF indicators in the routine nutrition surveillance system, establishment of partnerships and harmonized technical, financial and human resources, a focus on the sub-national level, and engagement of the media in raising awareness, and mobilizing champions (87, 88). All processes in these countries led to positive change, with results ranging from strengthening existing frameworks/plans (the Philippines (85)) to creating new or strengthened plans and structures (Lao PDR and Vietnam (22, 69, 70, 86-88)).

Although different processes were applied, common factors emerged, each seen in at least two of the three studies: paired facilitators, framing, and consensus building, all of which were also highlighted by the global literature.

Paired Facilitators: In Lao PDR (22) and Vietnam (69, 70, 86), an external expert was paired with a national facilitator. This pairing was intended to build local ownership of the process and to ensure sustained action. The external expert was also tasked with developing the capacity of the local facilitator to conduct gap analyses and planning exercises, and to advocate for change.

Framing: To raise stakeholders' awareness of the importance of addressing child malnutrition, multiple messages framed for cultural significance were employed. In the

Philippines, in addition to economic arguments, "consequence models" were developed that appealed to Filipino culture's ideology regarding equity, social justice, and child welfare (85). In Vietnam, stunting was the priority nutrition problem identified by the nutrition community. To garner stakeholder commitment, socio-economic and sports arguments were made. Additional messages, building on cultural characteristics of competition and Vietnam's desire to be a world leader in development, strengthened the case (69, 70, 86).

Consensus building: In Lao PDR (22) and in the first set of Vietnam articles (69, 70, 86), the paired facilitation team was responsible for building consensus for priority issues and actions among government, non-government, and donor stakeholders. In the Philippines, the PROFILES team recognized that evidence alone was insufficient and paired technical arguments with political ones (85). In the second Vietnam articles, evidence was created through the integration of IYCF indicators into the National Nutrition Surveillance Survey and proved an effective advocacy tool; however, both capacity building and buy-in by all stakeholders was critical for adoption of the IYCF indicators (87). Consensus building was achieved by conducting formative and opinion leader research on policy priorities and barriers and holding multiple rounds of discussions with government partnership and key stakeholders (88).

2.1.3 Gaps in the Literature

While the literature reviewed here identifies key barriers and facilitators to delivering national responses to young child undernutrition and provides critical facilitators for success, gaps in the literature remain. The majority of evidence related to nutrition focuses on undernutrition, with only a few examples from the region that specifically examine policy making to address stunting. Examples related to complementary feeding are also limited. Indeed, there are no peer reviewed data and analyses that address scale-up of complementary feeding to

address stunting, revealing an important window of opportunity to contribute additional insight into the growing body of literature on undernutrition.

2.2 Going to scale

Successfully taking a high quality intervention to scale, as perhaps the ultimate goal of implementation science, is predicated in part on intervention effectiveness (demand, delivery and outcomes, and the adaptability of efficacious interventions to real world constraints), as well as political priority setting. The term "scale-up" (sometimes referred to as "going to scale" and "at scale") is widely used in public health literature. But there is neither an agreed definition nor framework for studying scale-up in international settings (67, 89-92). Scale-up has been used to describe the increased coverage of tested/effective interventions to benefit more people at a larger or national scale (90). It has also been used to describe both the purpose (to increase coverage, as well as the process of expanding interventions), the inputs required (financial or human resources), or the actual policy or strategy for expansion (67, 91). Attention, however, appears to have focused more on achieving high coverage rates than on the process of scaling-up (93). Perhaps the following general definition by Mangham and colleagues is most useful, as it is used by a number of researchers: "the ambition or process of expanding the coverage of health interventions" (67).

2.2.1 Pathways for Going to Scale

Although there is no single agreed upon approach for expanding the coverage of health interventions, a number of different pathways can be employed. "Quantitative" or "horizontal scaling-up" refers to an expansion in size, geographic base, and/or budget (62, 64). Another pathway is diversification—adding new interventions to existing innovations (also called "functional"), and a third is policy or legal actions, which is also referred to as "vertical scale-

up" (62, 64). A cascade or phased approach is yet another pathway, which entails tailoring to the local situation, and integrating into an existing delivery mechanism (3, 59, 89). Two more processes are: "1) organizational, which refers to improving organizational strength and capacity; and 2) political, which refers to political power and engagement with wider political processes" (62). Additional approaches are recommended to achieve scale: "task shifting within the public sector and increasing the capacity and service delivery of community health workers (67)," and using the private and NGO sectors for service delivery (56, 58, 67).

For complementary feeding, a four-part approach for "disseminating, replicating, and scaling-up" improved programs is drawn from four countries' experience: 1) engendering political commitment, government ownership, and partner support at all stages; 2) evidence-based program planning by employing contextualized practices and using a theory of change; 3) program implementation using doable, locally-relevant, action-oriented messages and foods, strengthening the health system to provide sustained support to families, and building capacity of and utilizing actors from all sectors; and 4) program evaluation to assess and improve quality through processes and impact studies (60).

Nutrition interventions have tremendous diversity in strategy/product as well as context, both of which can be either simple or complex (62). The appropriate scale-up strategy depends on the intervention characteristics—simple and applied in a specific setting, or complex and implemented across a system (92, 94). Interventions can also be characterized as complex, meaning they can be product or service intensive (67). Furthermore, they can be delivered through different—and sometimes multiple—channels, such as clinical, community-based preventive or promotional, mass media, or legislative, all of which affect the scale-up strategy (56, 95).

2.2.2 Factors for Effectiveness

Drawing from the literature, factors of effective scale-up efforts common across case studies are "strong leadership, effective management, realistic financing arrangements, country ownership, and technical innovation" (67, 93). Further, approaches that build partnerships among stakeholders at various levels, from community members to policy makers, to researchers and technical experts, appear to have been more successful than those that do not (93). Experience with nutritional interventions in Bangladesh, Ethiopia, and Vietnam confirm these findings, highlighting three core strategies for scaling-up and maintaining quality: "1) using national-level coordinating and information exchange mechanisms to catalyze action in a harmonized way; 2) providing institutional support and sharing ownership with carefully selected implementing partners to facilitate sustainability; and 3) generating and disseminating evidence regularly through routine program monitoring, rigorous evaluation, documentation, and stakeholder forums" (56).

Experience from a community-based nutrition program in Thailand found that a dual approach encompassing action at policy and community levels to be key. Facilitators of success also entailed capitalizing on cultural values regarding the care of children, raising community awareness of the problem and presenting a solution, using indicators for multisectoral efforts, focusing programming on targeted geographic areas, and developing human, financial, and management resources (96). Many of these attributes were also identified by a 2015 scale-up nutrition literature review, which synthesized articles about theoretical frameworks and programmatic experience with scale-up into nine key elements (62). As presented here, these elements are further summarized into seven: 1) having a clear vision/goal, with metrics, for large-scale impact, and framing why the issue is important and how it can be addressed; 2)

identifying clearly what is being scaled, the evidence of effectiveness, and the scale-up strategy, processes and pathway(s); 3) understanding well the socio-political environment, such as the degree to which there is national ownership and commitment, political support for a coordinated multisectoral response and supporting governance structures, and champions to catalyze and sustain efforts, or systematic incentives for change; 4) establishing governance mechanisms for creating and managing horizontal and vertical actions; 5) developing strategic and operational capacity to plan, implement, monitor, and evaluate the scale-up process; 6) ensuring financial resources are available for capacity building and going to scale; and 7) developing monitoring and evaluation (M&E) to support accountability and generate data for course correction and evidence of impact (62).

2.3 Frameworks

There are numerous frameworks to guide going to scale in the literature, yet an agreed framework is missing, which could direct efforts and lead to more effective accumulation of evidence across multiple settings. A frequently cited scale-up framework by Simmons and Shiffman links five factors: "1) the innovation; 2) the resource organization or resource team (those involved in the development and testing of the innovation and/or to facilitate its wider use); 3) the user organization (the institutions or organizations expected to widely adopt and implement the innovation); 4) the scaling-up strategy (the mechanism for communicating, transferring, or promoting the innovation); and 5) the environment (policy setting, the political system, bureaucratic culture, the health sector, the socioeconomic and cultural contexts and the influence of global trends)" (64). Hanson and colleagues' framework aims to classify the constraints of scale-up using an ecological approach, organizing constraints by level—community and household, health service delivery, health sector policy and management, public

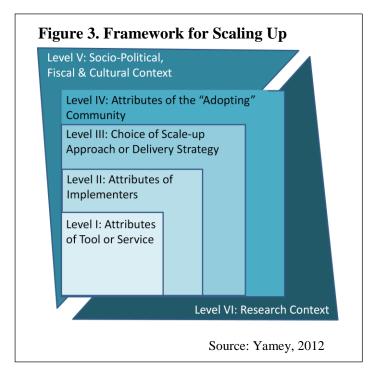
policies, and environmental and contextual characteristics (97). Gericke and colleagues developed a framework to facilitate the systematic analysis of intervention complexity, considered a key barrier to program expansion (94, 98-100). The framework identifies four dimensions of intervention design: the characteristics of the intervention itself, how it is delivered, the government's capacity to deliver, and usage characteristics.

Yamey's six-level framework for guiding successful scale-up (Figure 3) draws from the previous three frameworks, qualitative interviews with "scale-up leaders", and the literature on implementation science and political priority setting (89, 101). A description of each level follows, along with additional references to overlapping and similar frameworks:

Level I: Attributes of the Tool or Service—A simple intervention is more likely to be successful than a complex one (94), consequently, this framework prioritizes the assessment of whether the intervention is simple or complex. Also examined is the degree to which the intervention is "manualized" since having technically- and scientifically-based programmatic

policies, guidance, standard operating procedures, and training manuals facilitate scale-up (56).

Another useful model for examining factors affecting an innovation's successful implementation and scale-up is one developed by Durlak and colleagues (Figure 4) (102). Durlak's framework is grounded in the implementation science literature,



which seeks to understand, for instance, the importance of fidelity versus adaptability/customization when going to scale (99, 103-106). According to Durlak, implementation is dependent on five factors, the first is *innovation characteristics*—its compatibility, fit with norms and values, and adaptability.

Level II: Attributes of the Implementers—In this level, Simmons and Shiffman's categories of the resource organization and the user organization are combined across the macro, meso, and micro levels to examine whether implementers have the necessary capacity, the health system is sufficiently functioning, if strong leadership and governance are in place at national and local levels to champion the intervention, the degree to which implementers and key stakeholders are engaged and supportive, and the role NGOs and the private sector can play—in addition to the public sector—in scaling-up the intervention.

Durlak's second, third, and fourth factors are also relevant here: *provider characteristics*, the perceived need for the innovation, perceived benefits of the innovation, and the self-efficacy and skills proficiency of the implementers/service providers; *community factors*, the political context, funding availability, and the existence and enforcement of relevant policy; and the *delivery system*, the organizational factors, such as norms regarding change, the organizational policies and practices, such as related to decision-making and community involvement (also Level IV of Yamey), and staffing, such as the existence of a leader/champion.

Level III: Choice of Scale-up Approach or Delivery Strategy—To spread innovations,
Yamey draws from Rogers' diffusion of innovations theory (the relative advantage,
compatibility, simplicity, trial-ability, and the observability of the innovation and its effects)
(107) and social networks theory (the characteristics and complexities of the social network into
which the innovation is to be disseminated) (98, 108). Durlak's final factor, the *support system*,

guidelines, standards of care, job aids, training and performance support needed to ensure implementation quality, is not one included in many other frameworks, yet as experience from *Alive & Thrive* demonstrates, it helps to ensure the effectiveness of innovations as they spread (56, 58, 109).

Level IV: Attributes of the "Adopting" Community—Rather than examining the attributes of the user organization as per Simmons and Shiffman, Yamey focuses on the level of engagement, activity, and the readiness of the community members because community involvement in planning, implementing, and monitoring interventions facilitates scale-up (110). Social mobilization was recognized as essential to achieving results while scaling up IYCF in Bangladesh, Ethiopia, and Vietnam, among other settings (56, 57, 111).

Level V: Socio-Political, Fiscal, and Cultural Context—Political will and priority setting as well as country ownership are critical components of scaling-up. Other factors include the existence and enforcement of relevant, supportive policies, sufficient financing and donor coordination (101). Recognizing this, building an enabling environment was highlighted in the 2013 Lancet series as a significant component of the delivery, implementation, and scale-up of evidence-based nutrition interventions (18). Three key factors were identified that shape enabling environments—1) knowledge and evidence provides a context-specific framing of the issue; 2) politics and governance among a wide variety of stakeholders who have or should have a vested interest in nutrition; and 3) capacity and resources in nutrition and in alliance building and networking, communication and collaboration, and the leveraging of resources (18).

Four domains of political agenda setting were also identified by Shiffman: 1) *actor power*, defined as the strength of the individuals and organizations concerned with the issue; 2) *ideas*, meaning the ways those involved with the issue understand and portray it, and encompass an

internal and an external frame; 3) *political context*, the environment in which actors operate; and 4) *issue characteristics*, which are features of the problem, such as its severity (76).

Level VI: Research Context—Yamey draws from Simmons and Shiffman who posit that "the systematic use of evidence to guide the process and incorporate new learning" is necessary for successful scale-up (64). This is echoed by Greenhalgh who recommends further research on the process and not the package—"What features account for the success of program x in this context and the failure of a comparable program in a different context (98)?" Greenhalgh's use of the term "context" as part of the evidence-base is broadly interpreted to encompass knowledge, experience, contextual understanding, goal clarity, and ability to adapt to dynamic contexts at all levels. This interpretation is echoed by Wheatley who, examining leadership using a quantum lens, recognizes that growth occurs due to the small changes taking place at all levels of a system (112). Meanwhile, Damschroder and Proctor argue that while it is critical to measure the implementation and replication process and to use data to make course correction, it is also critical to measure implementation outcomes ("acceptability, adoption, appropriateness, feasibility, fidelity, implementation cost, penetration, sustainability") (99, 113).

2.4 Conclusion

The substantial body of literature on policy making processes to address undernutrition around the world provides an ideal start for understanding the complex elements needed for improving health and development outcomes. As suggested by Pelletier and colleagues, the nutrition community likely has the answer to create successful country-level efforts; they must be comprehensive and include sustained political commitment, sufficient financial resources and strong multisectoral, multi-stakeholder, and multi-level governance. Technical, managerial and implementation capacity are also critical elements for success (57). The frameworks and

interventions presented in this chapter help the nutrition community understand how to address nutrition problems at scale, but there remains a need to bolster the multisectoral nutrition response through further consensus, experience, and evidence for doing so (62). This is especially true for complementary feeding, a complex set of behaviors requiring interventions that employ multisectoral strategies using multiple channels. In response, this research study seeks to identify current conditions and strategies for improving conditions for a national scale complementary feeding response to young child stunting in Cambodia, where despite recent progress, stunting, in part due to suboptimal complementary feeding, remains a severe and widespread challenge. It adapts and builds upon the existing literature by exploring how to create and sustain change within a broader environmental context, while identifying solutions that recognize the complex interdependence of each level within the sociopolitical system (103).

CHAPTER 3. METHODS

3.1 Study Design

This qualitative study was designed to answer two research questions: 1) How favorable are current conditions in Cambodia for scaling-up evidence-based complementary feeding policies and programs to reduce child stunting? and 2) What strategies could be employed to create more favorable conditions? Qualitative methods are appropriate for understanding what must be done to create a more favorable environment for taking complementary feeding to scale in the context of Cambodia (114-116). They also allow researchers to understand a problem in its milieu, helping ensure this study's findings and recommendations are relevant for and feasible in Cambodia (116).

This study utilized an adapted conceptual framework (Figure 3) of scaling-up domains, a form of the socio-ecological model (117), as presented in Chapter 2. SEMs are often employed in qualitative inquiries because they allow a systematic analysis of individual or group behavior. They also help to explain how factors within the micro, meso, and macro levels affect this behavior (118). Because this study aimed to determine current conditions and strategies needing improvement for a national scale approach to addressing child stunting through complementary feeding—and not to identify an evidence-based intervention to take to scale and the delivery channel for doing so—only select aspects of Yamey's six level framework (those at the higher levels of the SEM) were examined.

To answer the two research questions, this study employed two methods. The first, document review, entailed the structured extraction of information on current conditions, including existing coordination mechanisms (e.g., working groups) and nutrition policies and strategies (114). The second method used was key informant interviews (KIIs), verbal interchanges with purposefully selected individuals who have specific knowledge or understanding of the research topic (114-116). This helped answer the research questions by giving key experts the opportunity to share their views and experience with the principal investigator (PI). During the KIIs, card ranking and sorting exercises were used to gather participants' perspectives on priority barriers and strategies to improve complementary feeding practices. Using multiple methods in qualitative data is known as triangulation. This technique fosters a deeper understanding of data from different sources, facilitating an accurate interpretation (116).

A set of sub-questions (Table 1), based on the conceptual framework (101), and drawing from tools and experience measuring readiness for scale for both nutrition and newborn health (119, 120), guided this research.

Table 1. Study Sub-questions

Topics/Questions per Sub-question

Political commitment/Shared understanding (Levels 2 & 5)

What is in place:

- To what degree is there political commitment for addressing child stunting through complementary feeding policies and programs? (What level of understanding/recognition of stunting as a problem exists? To what degree is there agreement on the issue definition, causes, and solutions for child stunting? What local framing/public portrayal of the issue can make stunting resonate with decision makers/donors? What are potential policy windows?)
- To what extent do the stakeholders have a common understanding/view of these factors? Improvements needed:
- How could greater political commitment be generated?

Topics/Questions per Sub-question

Policy frameworks and systems (Levels 1, 3 & 5)

What is in place:

 What policy documents (including strategies, plans, SOPs, pre-service/in-service training curricula for providers, delivery protocols) exist to promote, protect and support complementary feeding to address child stunting?

Improvements needed:

• What more is needed? How could gaps be filled?

Policy Implementation (Level 5)

What is in place:

- To what degree are complementary feeding policy frameworks (as identified in section 2) being implemented?
- Are sufficient funds available?
- What are the barriers to implementation?
- What are the barriers to sufficient budget allocation?

Improvements needed:

• How can these barriers be overcome?

Coordination and Communication (Levels 1 & 2)

What is in place:

- What coordination and communication mechanisms are in place (donor, technical, implementer, multisectoral) and how well are they functioning? (What is the strength of individuals and organizations concerned with the issue (guiding/leading institutions)? What are current alliances? What are ways to strengthen/build alliances to raise national attention to this issue and is further collaboration needed, among whom? Who are current leaders and champions and how can they be tapped/created?)
- Which key stakeholders are not engaged?

Improvements needed:

 How could these mechanisms be improved? How can those missing from the dialogue be engaged?

Information, Evidence, Research (Level 6)

What is in place:

- To what extent is evidence on factors affecting complementary feeding in Cambodia available?
- What kind of data on stunting and complementary feeding programs have been incorporated into data systems?

Topics/Questions per Sub-question

- To what extent are data elements actually being collected? How is available data being used for program management and decision making?
- What are the barriers for greater collection and use of such data? Improvements needed:
- How can barriers be overcome? What evidence is regularly gathered and how is it conveyed? How could information be made available to those who need it? What additional evidence is needed? What gaps in knowledge/what research is needed to more effectively address child stunting in the Cambodian context?

3.2 Study Population and Sampling

This study was conducted in Cambodia, where the Khmer are the majority culture among multiple ethnic groups and the dominant actors in public and political spheres. Because of this, references to Cambodian culture and society are primarily to that of the Khmer.

Study participants were national and international stakeholders purposefully sampled to ensure they were best able to answer the research questions. Participants were drawn from two national working groups responsible for nutrition: the Nutrition Working Group (NWG) and the Technical Working Group for Social Protection and Food Security and Nutrition (31) (31). The NWG is housed within the National Nutrition Program (121) of the National Maternal and Child Health Centre (NMCHC) in the Ministry of Health (MoH). It is a government-led group. The TWG-SP&FSN is chaired by the Council for Agricultural and Rural Development (CARD), a government coordinating body, and co-facilitated by the WFP and FAO. Members of these groups are those who currently make or contribute to the development of nutrition-related policy documents, both government and non-government actors, and/or fund or implement nutrition programming and/or conduct nutrition research in Cambodia. Participants were divided into one of three categories: government, funder, or civil society.

3.2.1 Inclusion criteria

Upon receipt of government permission, the PI requested an interview with representatives of all member organizations of these groups meeting the following criteria:

NWG: Participants had to have attended more than three meetings from 2013-2014 (with one having to be in 2014) or at least two of the three meetings for which there were meeting minutes in 2014. To develop the list of organizations to sample, the PI reviewed all available meeting minutes from 2013 and 2014, and compared it to two membership lists produced by the National Nutrition Program (121), one from July 2014 and one from December 2014. Individuals who represented participating organizations in the meetings were named in the meeting minutes, so invitations were sent to them.

TWG-SP&FSN: To develop the list of organizations to sample, the PI reviewed the official Royal Government of Cambodia (RGC) declaration of the TWG dated January 2014 that lists members, reviewed the membership email list received from the WFP (one of two official TWG co-facilitators), and reviewed the February 5, 2015 meeting participation list.

Organizations had to be listed on at least two of these documents to be included. If no individual representing the organization was named on these lists, the PI sought advice from CARD, the RGC Chair of the TWG, WFP, a co-facilitator, as well as from two active members—UNICEF and World Vision—to identify the individuals from eligible organizations to invite for an interview. Members working only on social protection, and not also nutrition, were considered ineligible.

3.2.2 Recruitment

To invite NWG participants, the PI made an announcement during the December 5, 2014 NWG meeting and then contacted each eligible member by email. The email described the

purpose of the study and attached the informed consent form and the National Ethics Committee for Health Research (NEC) approval letter. To invite TWG-SP&FSN participants, the PI sent an email explaining the purpose of the study, noting that the PI had received the recipient's contact details from WFP as co-facilitator of the group. The PI also included the informed consent form and the NEC approval letter. All email sent requested participants to propose an interview date. If no response to this initial email was received, additional requests were made by email and/or text message and/or telephone. For both groups, a participant was considered "declined" if there was no response after three contacts or if they responded and declined to participate.

3.3 Data Collection Procedures

3.3.1 Document Review

Documents dated between 2000 and March 2015 were gathered by conducting internet-based literature searches using EBSCO host: Global Health, NCBI: PubMed, Google Scholar and Google, reviewing government and organizational websites, and by request to government, funders, and national and international organizations via phone, email, or in person, sometimes during interviews. Documents were also gathered from email distribution lists, and when participating in meetings or events. The document inclusion dates were aligned with the first DHS conducted in Cambodia (2000) and the final interview conducted by the PI.

3.3.2 Key Informant Interviews

Between December 2014 and March 2015, the PI conducted the interviews with participants. Interviews were conducted in a private space, and lasted between 30 minutes and 2 hours. All but one interview was conducted in English. For the interview conducted in Khmer, the PI brought an interpreter. The PI obtained written consent from the study participants at the time of the interview (Annex 2). With participant permission granted, all interviews but one were

audio recorded. For the one, based on the participant's request, the PI took notes. An interview guide specifically developed for this study was used (Annex 3). This guide covered the study framework domains: political commitment/shared understanding; policy frameworks and systems; policy implementation; coordination and communication; and information, evidence, and research (note: all informants were asked the same questions).

During the interviews, two card exercises were conducted with participants. The first was a ranking exercise. Potential barriers, drawn from the study framework and the literature, were each listed on a card (Annex 3). Participants were asked to place the cards in order from most to least significant barrier.

The second, a card sorting exercise, was used to assess the degree to which participants concurred on the components of a priority package of services for implementation at scale incountry. Participants were given 12 cards, with 1 approach per card, and asked to sort the cards into 3 piles—must do, maybe do, not do (Annex 3). Approaches selected for inclusion in this exercise aimed to represent each of the levels of the SEM (individual, household, community, society, national/policy) and were drawn from the literature and Cambodian policies and strategies (31, 45, 55).

3.4 Data Management

As collected, documents were stored on the PI's computer. They were sorted into folders by type of document: policy/strategy, progress report, and other. These were then uploaded into NVivo for analysis. Following each interview, the digital recordings were labeled with a deidentifying short code for participant category, working group membership, and date of interview. All were logged. The PI then transcribed the digital recordings following the interviews. For the interview that was not recorded, the PI expanded upon the interview notes

when typing them. For the card exercises, following the interviews, the PI recorded the sequences and the piles in a computer file created for this purpose. The cards were collected in order during the interview to facilitate accurate documentation, but notes were also taken during the interviews and cross-checked.

3.5 Data Analysis

Subsequent to transcribing and conducting an initial read of the interview transcripts, the PI coded and analyzed all narrative data using NVivo. As recommended by Saldaña, multiple coding cycles were used (coding and re-coding) (122). At each cycle, different strategies were employed. The first cycle used structural coding, with a priori analysis categories based on the study framework. This strategy was supplemented in the first and second cycles with sub-coding, breaking codes into further sub-units. Attribute coding was also used to identify the demographic characteristics of the study participants: government, funder or civil society, and magnitude coding was used to determine the intensity and/or frequency of data points. Codes were revised and refined during the analysis process and emergent codes were added as they were created, and transcripts re-coded. All codes were maintained in a code book.

To manage the relatively large data set, which included data related to both research questions and two card exercises, the PI partitioned the data, using codes to make boundaries. The PI created and analyzed a data set for each card exercise and employed counts and matrices to determine the ranking and sorting results. For the narrative data, throughout the coding and analysis process, the PI drafted memos to document, sort and organize emerging themes. The PI ran queries using NVivo tools, including word frequencies, examining counts but also cluster analyses to determine patterns and explanatory ideas. Matrices, such as co-occurrence matrices,

were also utilized to compare themes with one another as well as to help analyze them by participant attributes.

Code frequencies and counts were used to determine the number of unique participants who mentioned it, and comparisons were made by participant group. These frequencies helped to determine salience, which was considered "present" if the majority of participants discussed it or "absent" if not. Code frequencies also helped the PI determine if further sub-coding was needed to better describe the data and/or if a code rarely occurred and needed refining or deletion. Each domain was also examined for its degree of favorability—favorable, neutral, or unfavorable. The domains were examined by all participants combined and by participant group. A condition was rated unfavorable when the majority of participants in a category considered it a problem, and favorable when the majority of the participants viewed it in a positive light. A condition was rated neutral when there was a relatively even mix of positive, negative, and neutral comments.

Card sorting results were analyzed by all participants and by participant group. For the first card ranking exercise, the card sequence was analyzed to determine the top three perceived barriers to progress for each participant and these rankings were then aggregated to determine the top priorities across all groups. Participants' explanations as to why they placed each card in its sequence were also analyzed to discern the full meaning of each barrier. For the pile sorting card exercise, services had to be selected by at least half of the participants of any group to be reported. Those most frequently selected services were identified for each participant group, and then tallied to create the summary list for all.

3.6 Ethical Approval

The study protocol was reviewed and approved the Cambodian NEC at the National Institute of Public Health (NIPH), Cambodia on November 17, 2014. NEC is registered with the

U.S. Office for Human Research Protection (OHRP) and has a federal-wide assurance.

Following a review by the institutional review board (IRB) of the University of North Carolina, the study received a research exemption on December 9, 2014.

CHAPTER 4. RESULTS: QUESTION 1 CURRENT CONDITIONS

4.1 Study Participants

There were a total of 40 participants in the 35 interviews conducted for this study. In five of the interviews, two members of the organization participated in response to the organization's request. Because these participants reached consensus on their responses, the two individuals were collectively counted as one. As such, participation is counted as 35. These 35 interviews comprised 23 individuals from the NWG and 19 from the TWG-SP&FSN. Seven participants were members of both groups and their interviews counted in both the NWG and the TWG. Of the 35 interviews conducted, 10 were representatives of the RGC, 10 were funders, and 15 were civil society actors (Table 2).

The majority of organizations eligible and invited for an interview participated (30 of 40 or 75%). In terms of individuals, for the NWG, 3 of 26 invited were not interviewed, all from civil society. Although all accepted the invitation, a time was never agreed upon, despite multiple contacts by the PI. No additional participants were recruited because saturation had been achieved (2). Further, the distribution of study participants from the NWG (14 civil society, 6 funders, and 3 RGC) reflected the composition of the group (Table 2).

For the TWG-SP&FSN, 6 of the 25 individuals who were invited either declined or did not respond to the invitation. Reasons given for declining the interview included that the participant's organization was not an active member of the group and/or that the scope of work

or the mandate of the organization was not relevant to the study. Of those who declined or did not respond to the invitation, one was from civil society, and five were from government.

Table 2. Sampling Frame by Working Group

		Total				
Participant categories	NV	WG	TWG-S	interviews		
	Invited	Interviewed	Invited	Interviewed	per category	
RGC	3	3	13	8	10	
Funders	6	6	7	7	10	
Civil Society	17	14	5	4	15	
Totals	26	23	25	19	35*	

^{*}Because 7 participants were members of both groups, their interviews were counted in both the NWG and the TWG.

4.2 Summary of Key Findings

Overall, participants' perceptions of Cambodia's current situation—its willingness, readiness, and ability to address young child chronic malnutrition at scale—were unfavorable. This was true for all the study framework domains except policy frameworks, which participants viewed in a positive light. All the rest—political commitment, recognition of the problem, policy implementation (intervention coordination, technical capacity to address the problem, and funding), coordination and communication, and information evidence and research—were perceived to be barriers to progress.

During the card exercise, overall funding was identified as the greatest constraint. When examined by type of participant, government named funding as the most significant barrier, funders selected political commitment, and civil society ranked two issues equally: national coordination and intervention coordination (Table 3).

Table 3. Card ranking barriers to progress overall and by organization type

Rank	Organization Type					
	All	RGC	Funder	Civil Society		
#1	Funding	Funding	Political Commitment	National coordination;		
#2	Political commitment	Intervention coordination	Technical capacity	Intervention Coordination Political commitment; Funding		
#3	Intervention coordination	Political commitment	Funding			

The second top-ranked barrier mentioned by all participants was political commitment, although some government officials perceived political commitment to be in place.

Detailed results for each of these domains are presented in this chapter.

4.3 Political commitment, Recognition of the Problem, and Shared Understanding

4.3.1 Political Commitment

Political commitment is defined as sustained expressions of concern about the issue by national political leaders (76) combined with "political and policy processes that build and sustain momentum for the effective implementation of actions that reduce undernutrition" (18). Although the majority of participants viewed political commitment as a gap, this perspective varied by participant type. Civil society considered political commitment as needing attention, and funders, based on an analysis of the narrative data, were neutral, despite having ranked it as the top barrier during the card exercise. Most government participants considered political commitment in place, though these officials were not from the health community.

Between 2000 and 2015, momentum around young child malnutrition grew in Cambodia (Table 4). This was demonstrated by a number of key events, such as the 2012 National Nutrition

Seminar presided by the Prime Minister. In his opening speech, the Prime Minister stated that childhood malnutrition is a problem in Cambodia and identified CARD as a coordinating body. Mounting political will was also demonstrated when Cambodia's joined the Scaling up Nutrition (SUN) movement in 2014, the establishment in 2014 of a National Nutrition Day to be held annually on November 6th, and a national nutrition conference held in March 2015. This conference, as expressed by one participant, intended to build political will among key decision makers:

The conference is focused on stunting, and aims to get them [government representatives] together to talk about the issues, and then put them in the hot seat and ask them what they're going to do about that.

-Funder

Growing political commitment was also demonstrated by the variety of policy frameworks promulgated. According to one official, the government's commitment to nutrition can be seen through sectoral and multisectoral policies, as well as those for the entire country, such as the Rectangular Strategy for Growth, Employment, Equity and Efficiency Phase III, 2013-2018. Also highlighted are the National Strategic Development Plan 2014-2018, the National Strategy for Food Security and Nutrition, 2014-2018, and the Fast Track Road Map for Improving Nutrition, 2014-2020.

Table 4. Timeline of IYCF-related Events and Documents, 2000 to March 2015

Year	Event/Document
2015	National Nutrition Conference & Declaration, 2015
2014	• National Nutrition Day established • Prime Minister Directive No. 1317, Sor Chor Nor ⁵ • Sub-decree 133 and Joint Prakas 061 oversight board established ⁶ • Cambodia joined the SUN movement • Journal article: Economic consequences of malnutrition •

⁵Directive on the eight-recommendations (related to food security and nutrition) of Samdech Akka Moha Sena Padei Techo Hun Sen, Prime Minister of the Kingdom of Cambodia during the Dissemination Workshop on National Strategy for Food Security and Nutrition 2014-2018.

⁶Sub-decree 133 regulates the advertising and marketing of IYCF products in accord with the International Code of Marketing on Breast-milk substitutes and Prakas 061 is the implementation guidance for sub-decree 133.

Year	Event/Document					
	National Strategic Development Plan 2014-2018 • Fast Track Road Map for Improving Nutrition, 2014-2020 • National Strategy for Food Security and Nutrition, 2014-2018 • Food Security, Nutrition and Social Protection TWG formed					
2013	• The Economic Consequences of Malnutrition in Cambodia: A Damage Assessment Report • Masters of Science in Nutrition Degree program established • Community-based nutrition costing study					
2012	• 4 th National Seminar on Food Security and Nutrition: Improving Child and Maternal Nutrition in Cambodia and Prime Minister Hun Sen's opening speech					
2011						
2010						
2009						
2008	• National Nutrition Strategy, 2008-2015 • National Policy on IYCF (update) • Nutrition Working Group (established after merging Micronutrient and IYCF groups) • Guidelines for use of IFAs among pregnant and lactating women and WRAs • National Framework for Food Security and Nutrition					
2007	• Inter-ministerial Joint Prakas 061 on the implementation of Sub-decree 133 • Pilot study on micronutrient powders					
2006	Child Survival Strategy					
2005	• Sub-decree 133 on the marketing of products for IYCF • National IYCF communication strategy					
2004	• Food Security and Nutrition Technical Working Group established • Baby-friendly Community Initiative launched					
2003	• Cambodia adopts country specific Millennium Development Goals (MDGs) • National Food Security Forum established					
2002	Baby-friendly Hospital Initiative launched • National IYCF Policy					
2001	• World Breastfeeding Week celebration • National IYCF TWG established • Guidelines on prohibiting marketing of IYCF products • Pilot Vitamin A supplementation distribution strategy					
2000	• National Micronutrient survey • National Vitamin A program assessment					

Three themes emerged among participants, primarily civil society and funders, who considered political commitment weak: 1) lack of ownership, 2) relative importance of nutrition, and 3) recognition of the issue. This latter point, its own domain, is presented in a separate subsection.

1) Lack of ownership: Participants described a lack of political commitment as those in high-level positions did not consider themselves responsible or accountable for moving the agenda.

In 2012 they had the big meeting with Hun Sen [the Prime Minister] and he brought together CARD and MoH to try and demonstrate political commitment to this issue. ...But I don't think there's been any follow through and I think when the commitment was made, there wasn't anything clearly articulated that said: 'This is exactly what we're committed to doing and why.'

—Civil Society

A government official expressed dismay that the government's words are empty, having no action or budget behind them:

The government is always saying nutrition is very important. So if it's very important what do they do to address this issue? [The Prime Minister] should not only talk nicely, but translate the work into practice.

—RGC

For both civil society and funders, the absence of commitment was seen in the government's lack of ownership of the agenda. A few civil society participants expressed frustration that this lack of commitment was also seen in the government's lack of ownership of the work itself:

The government says: 'This is your work.' So they leave us to do and we work alone. And when our project ends? There is no more. But we still try to work with them. When we go to the field or conduct follow-up supervision, we always go with the government, but we give the per diem and transportation, otherwise they would not go.

—Civil Society

Without funders and civil society, the agenda does not progress because, as one funder explained, "Every time we let it go, it doesn't happen."

Nutrition requires a multisectoral response, but the sector was also perceived to be "fragmented" with no one government body recognized as responsible. Different ministries are

in charge of different aspects of nutrition, such as the Ministry of Planning (MoP) for food fortification and the Ministry of Mines, Industry, Minerals and Energy (MIME) for food-related laws.

Who is in charge of nutrition in Cambodia? About 5, 6 or 7 ministries, depending on what you're talking about. If you're talking about the quality of food, it's the MIME. If fortified foods, it's the Ministry of Planning. If sprinkles, then it falls on the MoH. Everyone has a piece and there's hardly any coordination between them.

—Civil Society

2) Relative importance of nutrition: The government's lack of commitment was expressed as the limited power and budget given to the NNP or to the MoH more broadly. This was considered true particularly when compared to other health sector programs, such as the National Center for HIV/AIDS and Dermatology (NCHADS), or when compared to the urgent need to address child stunting.

I don't see strong support for NNP even though the problem is quite significant. [There is a lack of support from] the national level. There is a limited amount of funding for the NNP, or within the MoH. The question is: 'Where would the country put nutrition in the hierarchy of needs?'

—Civil Society

4.3.2 Recognition of the Issue

Overall, participants agreed that there is insufficient recognition of stunting both as a problem and as one that requires action. This is truer of government from all sectors and funders than of civil society. In particular, participants saw policy makers' and the general public's levels of understanding of young child chronic malnutrition needing improvement. This section presents the findings related to: 1) awareness and recognition, 2) shared understanding of the causes of stunting, and 3) shared understanding of complementary feeding.

1) Awareness and recognition: All participants' were aware of the country's stunting prevalence. The majority also believed that stunting is recognized as a problem, but not by all

who should recognize it. As one funder explained, individuals who are not nutritionists or do not have a medical background may not understand stunting because a stunted child often looks healthy. Another participant put it this way:

I hear a lot about it being a priority, but the actual complexity is still [a problem]. There is some work we need to do in terms of explaining stunting to WASH [water, sanitation, and hygiene], to the different sectors because even when I worked with the WASH sector, they didn't have the same understanding of malnutrition that the nutrition community does.

—Civil Society

Many participants raised concerns that there is insufficient recognition that nutrition requires connections across sectors and a multisectoral response. This means individuals tend to see only their area of focus and thus miss the connections required to address the problem:

For agriculture, they don't think: 'In this season if the villager grows this they can earn a lot and it's also good for their health.' And rural development, they only think about infrastructure, like building roads. They don't think: 'Oh, if the road is better, there's more access to the health center, and it makes the health better.'

—Civil Society

Some participants also mentioned that the public does not recognize stunting as a problem. Rather, they believe Cambodians as a people are simply short.

The problem is that they don't even see that there is a malnutrition problem. That's the problem with stunted children, especially if the whole country is stunted. Your neighbor's children look the same. They don't even look thin necessarily; they look like normal children. They're just small. Everybody is the same size. Acute malnutrition is a different thing. That's a bit easier to see. Infections, being sick, being weak is understood. But the understanding that almost half the children are malnourished is not there.

—Funder

One participant shared her experience of returning to her own country for a visit to explain how easy it is to lose sight of the problem:

When I've been here awhile, I go back home and see my friends' children. When they tell me their children's age, I think: 'Wow, so big!' And then

you realize how easily it happens. If you've never been anywhere, you don't think it's any different, you think it's normal.

—Civil Society

For a number of participants, the lack of recognition is why there is limited political commitment to address the problem. This means that some programs, such as sanitation, have been underfunded and services available only when NGOs provide them. For other participants, although they expressed pleasure that there has been greater recognition, they emphasized that this has come without the required investment to address it.

I think that they're finally realizing. Now especially there is huge momentum around nutrition in the government, which is really great. But they still haven't put money behind it. This is something the donor community is really pushing to show that they are committed.

—Funder

2) Shared understanding of the causes of stunting: All participants cited a multitude of reasons why chronic malnutrition among young children in Cambodia has been so high for so long. Primary reasons given were a lack of knowledge and poor feeding practices.

Young kids, especially kids under two, are fed really badly. The introduction of complementary foods is pretty good, but the quality of the diets—the kinds of foods and minimum dietary diversity, and the minimum number of times kids are fed are all very bad in Cambodia. And they haven't improved over time, so that's why it's a chronic condition. There's also a big emphasis on young children being able to take care of themselves, so the idea of responsive and active feeding isn't taught to people or what's expected. It's almost the opposite. It's almost a good thing if your child eats by himself. That means it's a good child, a smart child.

—Civil Society

Traditional feeding practices were also considered sub-optimal. According to one government official, the public does not recognize current practices as a problem because they are passed from one generation to the next:

When I learn something from my grandmother or grandfather, I continue like this. I don't recognize.

—RGC

Traditional food norms was another factor. Rice is a staple in Cambodia, and many people think rice is sufficient. There is also a belief children cannot eat certain foods. According to one government official, this includes fish, a major source of animal protein in Cambodia, for fear of the child's choking on the bones.

The next most common reason cited for Cambodia's high stunting prevalence was poor sanitation and hygiene, even though, according to one participant, debate remains about this issue:

Sanitation is a part of it, but there's a lot of debate about that here. Some people think hygiene and sanitation is really important and diarrheal disease is really important, while other people poo poo that and say that's only in South Asia. But I think it's because hygiene conditions are bad—hand hygiene, home hygiene, food hygiene, and there's open defecation.

—Civil Society

A few participants also mentioned that although Cambodia has achieved food security on a national level, pockets of insecurity remain. Meanwhile, others highlighted that poverty is not driving malnutrition since malnutrition exists in all socio-economic strata. Another factor a few participants cited is that caregivers have competing priorities, such as the need to earn an income, and that they have insufficient familial support to feed children adequately.

3) Shared understanding of complementary feeding: Many participants reported that among the public health community, complementary feeding is understood and that there is consensus that it is a priority issue to be addressed. This was said to be demonstrated by the production of the Communication for Behavioral Impact (COMBI) strategy. By contrast, a few participants were less sure that the link between complementary feeding and stunting is clear.

I think there is consensus that complementary feeding is a problem, whether or not there is recognition that improving complementary feeding can reduce stunting, I'm not sure.

—Civil Society

Similarly a few participants, particularly civil society and funders, mentioned that complementary feeding is understood in general, but the breadth of the definition or its concomitant response is not well understood by either health or non-health actors.

Complementary feeding, and nutrition more broadly, were seen as the purview of health alone:

It's just at NNP [National Nutrition Program]. But clearly we know from the research and evidence that the key issues for malnutrition in Cambodia are not about the areas that are under the responsibilities of MoH. It isn't about vaccinations; it isn't about [antenatal care/postnatal care], though that still needs work. But water and sanitation, and food security and dietary diversification, which aren't MoH responsibilities, were key contributors.

—Civil Society

A number of participants from the health community also mentioned that there is limited understanding of complementary feeding as complementary. Children 6-24 months of age are fed without consideration that the food is a complement to breastfeeding or breastmilk substitutes. This lack of understanding was said to be true not only among health care providers and the general public, but also among policy makers, particularly those from non-health sectors.

The word in Khmer means to start eating food, so complementary food is any food the child has. It's not seen like this [points to the UN definition of complementary feeding provided to participants]. But the understanding depends who you're talking to. I would like to say NNP, MoH sees it as a part of it. But the rest? Not necessarily.

—Civil Society

For a few participants, this understanding gap meant that needed discussions are not taking place and that the focus of the country's nutrition efforts are missing the mark.

I think the conversation is around developing supplements, developing appropriate complementary foods that can be marketed. It's not about that larger scope of complementary feeding. ... There's this idea that it has to be purée, or special foods because the baby can't eat what the family is

eating. I don't think if we're really looking at impacting that definition. I don't think that's the dialogue.

—Civil Society

One participant expressed particular frustration with the nutrition community's emphasis on the production of complementary foods, rather than on socio-cultural shifts to make long-lasting behavior change.

And that's the thing that bothers me a lot with the complementary conversation. I think in a way we are looking for that quick win that can be mass produced so we can say: 'Ta da!'

—Civil Society

4.3.3 Priorities for action

Although agreement among key decision makers, funders, and civil society on what must be done to address young child stunting at scale is critical to an effective response, according to a few participants, no priorities related to complementary feeding have been defined. In addition, although the most recent Food Security and Nutrition Strategy (2014-2018) outlines actions needed by multiple sectors, it is believed to be a "kitchen sink" approach, containing everything, with nothing identified as most important. One participant expressed dismay about this situation:

Even in the Nutrition Fast Track it was incredibly difficult, and in the end there wasn't particular prioritization. It's better than it had been; there are some things they want to see happen. But for some reason, even more in nutrition than other things in Cambodia where prioritization is really difficult, it's really difficult here.

-Civil Society

According to this same participant, what is missing is not only the ability to prioritize, but also the criteria upon which to make decisions and then to apply them. During a TWG meeting, this participant recalled a fairly high level government official taking offense to the idea that the government would develop a 1,000 days strategy focused on pregnant women and children under

two years of age. This official highlighted that there are other malnourished people in Cambodia who also need services. The person leading the meeting acquiesced:

The person who was running the meeting, who knows better, his response was not to say: 'We have to prioritize ones where there's the most problem and where we can see impact and that will affect everybody else.' He didn't explain why that focus is important. Instead, he said: 'Oh you're right, we have to worry about 13 year old boys as well...'

-Civil Society

In the card-sorting exercise, four services were selected by all participant groups as being needed at scale to improve complementary feeding: 1) water and sanitation; 2) breastfeeding maintenance; 3) SBCC/mass media; and 4) counseling/support for essential nutrition, hygiene, and sanitation actions. The water and sanitation strategy was most frequently selected by all participants and by each participant group, with near unanimity among funders and civil society. Breastfeeding maintenance was second overall and among all participant groups except funders, with near unanimity among civil society (Figure 4).

The number of services prioritized by at least half of each participant group varied, with government including the most; eight services were considered essential. Civil society was next with six, and then funders with five. Food preparation demonstrations and home gardening were not considered a priority by the majority of participants, although both are in the government's priority pile and home gardens is on civil society's priority list. Participants also raised concerns about cash transfers, supplementary foods/feeding programs, micronutrient supplementation (MNS), fortified food, and food safety. The government prioritized MNS and food safety, the only group to do so. Meanwhile, fortified food was on the priority list of funders and civil society.

Participants explained their reasoning for selecting and rejecting priorities, clustered as three criteria: 1) evidence, 2) existing platform, and 3) not relevant to all. The importance of

these criteria varied to some degree by participant type, with evidence being of greatest importance to civil society and then to funders.

Figure 4. Ranked priority actions to be implemented at scale by participant group

All		RGC		Funders		Civil Society	
1.	Water and sanitation	1.	Water and sanitation	1.	Water and sanitation	1.	Water and sanitation
2.	Breastfeeding maintenance	2.	Breastfeeding maintenance	2. 3.	SBCC/mass media Counseling/	2.	Breastfeeding maintenance
3.	SBCC/mass media	3.	SBCC/mass media		support for	3.	SBCC/mass media
4.	Counseling/ support for essential nutrition, hygiene and sanitation actions	4.	Home gardens/household support for diversified food production	4.	essential nutrition, hygiene and sanitation actions Breastfeeding maintenance	4.	Counseling/ support for essential nutrition, hygiene and sanitation actions
		5.6.7.8.	Micronutrient supplementation Counseling/ support for essential nutrition, hygiene and sanitation actions Food safety Food preparation demonstrations	5.	Fortified food	5.6.	Home gardens/household support for diversified food production Fortified food

1) Evidence: Evidence of effectiveness or ineffectiveness was a reason to prioritize or not to prioritize a strategy, despite there being insufficient evidence in Cambodia as described in section 4.7 Information, Evidence and Research. This criteria was discussed primarily by civil society participants, and then by funders; however, it was not highlighted by government.

Evidence includes country-specific evidence, such as SBCC/mass media, which is cited as effective for improving exclusive breastfeeding or, water and sanitation, which is said to have

reduced stunting in Cambodia. An action was also considered effective if it was linked to stunting prevention more generally, or if it had global evidence or is believed to have worked in Cambodia. (It was noteworthy that participants did not mention any link between an action and its effect on complementary feeding.) This latter consideration was, at times, related to the quality of its implementation.

Everyone wants sprinkles [micro-nutrient powders] or something, but it's the good old fashioned breastfeeding maintenance and counseling support [that is needed]. Here in Cambodia, the statistics show that exclusive breastfeeding rates have made a lot of progress. So it's continuing breastfeeding as complementary foods are introduced that is important.

-Civil Society

According to both civil society and funders, a lack of evidence was expressed as a negative experience with an intervention. This was portrayed as food demonstrations "not working," meaning that these do not result in behavior change, or when a strategy does not impact stunting, such as micronutrient supplementation. The way an action is implemented was also a reason for not prioritizing it. An example related to food preparation demonstrations was given:

I don't think we need food preparation demonstrations. Maybe we do, but they need to be revised. If I was a mother in the community I would be so happy. I would take my child whenever an NGO does it. I would take my child on that day and sit down and listen and have a gossip with other mothers and my baby would get food. And then I wouldn't need to feed my child anything else that day. And they don't cook together. It's the VHSG [village health support group] who cook. And if the mother can't come, the VHSG delivers the food in a bag on a moto so the child gets it.

-Civil Society

Another participant highlighted a problem with home gardening programs, stating that all too frequently households do not receive counseling about how best to use the food grown.

Another participant raised similar concerns about supplementary foods:

You give them a package of something, powder, and they're supposed to put it in the porridge at home and feed it to their moderately malnourished children. If the children get this, they gain weight, but it ends there. What happens next? This mother only knows that she gave this porridge and the kid is now better. She doesn't have it anymore, so she goes back to where she was with the child losing weight.

-Civil Society

2) Existing platform: The second theme that emerged as a criteria was if there is an existing delivery platform that could easily be built upon. Fortified foods being produced by local companies was offered as an example. Another example from within the health sector was identified by another participant:

One of the better options for getting messages across for people to really understand and engage is one-on-one. At the health center, they could do it any time a child came in; just five minutes of key messages. Even the VHSGs. It's a huge resource to have two VHSGs in each community, but unless an NGO is working in that community, they're not doing anything because they're not getting paid. But I think counseling and education programs could be nationwide.

-Civil Society

A few participants also considered if there is a readiness to apply an approach, despite its being important. Other than by the government, food safety was not selected. The lack of readiness to address food safety was because of Cambodia's reliance on food from Thailand and Vietnam, and the inability to control or restrict importations.

3) Not relevant for all: According to a number of participants, certain approaches were important, but not relevant to all and thus not a priority for implementation at scale. These approaches were classified as being needed only for sub-populations, in certain areas of the country or, in certain situations, such as food distribution in emergencies.

Cash transfers only for a while. This should only target the poor [until] the poverty is reduced.

-RGC

4.3.4 *Summary*

Political commitment was said to be lacking in Cambodia, except by government officials. This gap was because the government has not backed up its expressions of commitment with budget or action, and because nutrition has not received the attention given to other issues, such as HIV/AIDS. Recognition of the problem of young child stunting was also lacking among policy makers and the general public. Participants agreed that sub-optimal feeding practices were the primary cause of chronic malnutrition among young children, but that complementary feeding was not well understood by all needing to understand it, and that there is limited prioritization of actions to address it. When given actions to prioritize, participants agreed on four: water and sanitation, breastfeeding maintenance, SBCC/mass media, and counseling/support for essential nutrition, hygiene, and sanitation actions. However, funders and/or civil society disagreed with a number of government priorities. Two of these priorities (food preparation demonstrations and home gardening) were rejected by the majority of participants even though one of them, home gardens, was also prioritized by civil society. Concerns were also raised about three others approaches on the government's priority list micronutrient supplementation, food safety, and food fortification (fortified food was also on the priority list of funders and civil society). From the analysis of participants' explanations of how they selected priorities, three criteria were used: evidence of effectiveness, an existing platform on which to build, and relevant only for select populations.

4.4 Policy Frameworks and Systems

4.4.1 Policies Overview

From 2000 to 2015 (Table 5), Cambodia promulgated at least 28 policy frameworks (e.g., policies, sub-decrees, guidelines, standard operating procedures) related to the 1,000 days (123-

125). In general, participants perceived a plethora of policies. For a few of the government participants, Cambodia has the policies it needs, which reflects the government's commitment to addressing nutrition. One official commented that Cambodia has been capable in this area: "We are making policy. We have all the policies."

According to some participants from civil society and funders, there are too many policies, and policy making has been too much the focus of efforts over the past 5-10 years. Despite there being many policies, participants did not consider all valuable. Rather, primarily from the perspective of civil society and funders, some policies were 1) good, while some were 2) inadequate.

4.4.2 Good Policies

The majority of participants considered policy frameworks "good" if they demonstrated the government's commitment to addressing nutrition or are related to young child stunting, such as the IYCF policy. Good policies were also based on evidence or if they were up to a global standard, even if not implemented/enforced. Sub-decree 133 was cited as an example. One civil society participant highlighted the National Strategy for Food Security and Nutrition, 2014-2018 for being the first policy document to have officially made the links across the sectors needed to be engaged in the nutrition response.

4.4.3 Inadequate policies

Participants, primarily civil society and funders, gave four reasons for considering a policy inadequate: 1) exclusive development process, 2) does not address on-the-ground needs, 3) lacks implementation guidance, and 4) not feasible.

Table 5. Health-related 1,000 days-related policy frameworks (2000-2015) (123-125)

- Nutrition Fast Track Road Map for Improving Nutrition, 2014-2020
- National Interim Guidelines for the Management of Acute Malnutrition, 2011
- National Policy and Guidelines for Micronutrient Supplementation to Prevent and Control Deficiencies in Cambodia, 2011
- National Policy on the Control of Acute Respiratory Infection and Diarrheal Disease among Children under the Age of Five, 2011
- Communication for Behavioral Impact Campaign to Promote Complementary Feeding in Cambodia 2011-2013
- National Communication Strategy to Promote the Use of Iron/Folic Acid Supplementation for Pregnant and Post-partum Women July 2010 – December 2013, 2010
- Implementation Guidelines for Baby-Friendly Community Initiative (BFCI), 2009
- Protocol Teaching Caretakers about Home Feeding through Food Demonstration, 2009
- National Nutrition Strategy, 2008 -2015
- Health Strategic Plan II, 2008-2015
- National Policy on Infant and Young Child Feeding, 2008
- Community Participation Policy for Health, 2008
- National Communication Strategy for the promotion of Vitamin A in Cambodia, 2008
- Guidelines for use of IFAs among Pregnant and Lactating Women and WRAs, 2008
- National Interim Guideline for the Management of Acute Malnutrition 2007
- Inter-ministerial Joint Prakas 061 on Marketing of Products for IYCF, 2007
- Anemia guideline, 2007
- National Vitamin A Policy Guideline, 2007
- Cambodia Child Survival Strategy, 2006-2015
- Sub-Decree on Marketing of Products for Infant and Young Child Feeding, 2005
- National Communication Strategy for the Promotion of IYCF in Cambodia, 2005-2007
- Ministry of Health Guidelines on the Implementation and Enforcement of the Sub-decree on Marketing of products for IYCF and the Joint Prakas
- Joint-Prakas on the Management and Procedures of All Kind of Iodized Salt Exploitation, 2004
- Sub-decree on the Management of Iodized Salt Exploitation, 2003
- National Policy and Guideline for Micronutrient Supplementation to prevent and control Deficiencies in Cambodia
- Law on Management of Quality and Safety of Products and Service, 2000

Sources: Mengkhean, K. 2013; Global database on the Implementation of Nutrition Action (1), WHO; http://camnut.weebly.com/policy--guidelines.html.

1) Exclusive development process: A policy development process that is exclusive and does not engage all relevant stakeholders does not generate the nutrition community's ownership

or commitment. One civil society actor expressed frustration with the development of the Nutrition Fast Track, citing another, better policy development experience.

It could be very useful if it hadn't just been developed by a few people. I don't know what it means; what kind of follow-up there's supposed to be; who's in charge; what kind of monitoring there is; who's being brought together; who's being held accountable for it happening? When the Fast Track for Maternal and Newborn Mortality was developed, there was a working group; there were events once a year; people needed to get together; it was clear who was responsible for each piece. The Nutrition Fast track was more getting a document than coordinating action and rallying people together.

Civil Society

- 2) Does not address on-the-ground needs: A policy was also considered inadequate when it lacked flexibility in implementation. The IYCF guideline for making enriched bobor, a porridge promoted for feeding children from six months, was cited by many civil society actors—as well as by some government officials—to be difficult for mothers to follow. It was perceived as too restrictive about which foods can be used, including foods not available in all parts of Cambodia. According to one participant, not having the right ingredients frustrates mothers and leads them to abandon the effort altogether.
- 3) Lacks implementation guidance: A few participants mentioned that although the IYCF guidelines dictated that people need to know about certain topics and be counseled, they were missing the "who, when, and where" of providing counseling. Furthermore, according to a civil society actor, the guidelines focus was on Vitamin A and albendazole distribution without a comprehensive focus on nutrition and, in particular, without sufficient guidance on supporting child growth.
- 4) Not feasible: A policy was also inadequate when it does not prioritize action or is not implementable.

If you think through what would be needed, it's all there. The problem with [the Food Security and Nutrition Strategy] is that everything is there, there's no

prioritization. ...You would need to do an exercise where you prioritize and you do a costing exercise to bring it down to something implementable. That's the step that is missing...

- Funder

4.4.4 *Summary*

The majority of participants reported that an abundance of policy frameworks exist in Cambodia and highlighted that this has been a major focus of efforts. A few participants had favorable views of the relevance and utility of some frameworks. Others were considered inadequate, either because they have not been developed by the nutrition community as a whole, have not enforced, do not address real needs, or are not feasible.

4.5 Policy Implementation

This section presents participants' perceptions of the degree to which policies have been implemented or enforced in Cambodia, and three implementation barriers: 1) technical capacity to address the problem, 2) intervention coordination, and 3) funding.

The issue with lack of policies comes down to lack of implementation. Policies and strategies are out there, but there's no funding to do it, people aren't coordinating to do it, there's not the technical expertise to lead on it. So they just sit there, not utilized.

— Civil Society

4.5.1 Policy Implementation

The majority of participants reported that many policy frameworks in Cambodia have been infrequently enforced. As one civil society actor noted: "There is a policy for everything, but there is no implementation of it." Participants named three factors: 1) insufficient commitment and funding, 2) lack of relevance to local context, and 3) lack of awareness to explain why policies in Cambodia are not implemented or enforced.

1) Insufficient commitment and funding: As noted, political commitment for addressing young child chronic malnutrition was believed to be on the rise, yet still an issue requiring greater attention. According to civil society and funders, although many policies exist, some of which are considered good, they are thought irrelevant without commitment to implement or enforce them.

Funding, either from the government or non-government sources, was another barrier to policy implementation. (The issue of funding for nutrition is discussed in greater detail in section 4.5.4.) According to one civil society actor, guidelines are not implemented due to the absence of budget for community-based delivery of nutrition services:

The big thing in this country for any implementation is that the VHSGs [village health support groups] do not get any remuneration for their work. Yet, they are the key people in a community, and we ask them to do everything. These are women who can't necessarily read, they don't have an education yet we tell them do the most important work, that one-to-one transaction.

Civil Society

2) Lack of relevance to local context: Related to why a policy is perceived inadequate, policies are not implemented because they were seen as unresponsive to the realities on the ground. According to health-sector government officials and civil society, families have been unable to apply the current complementary feeding guidelines.

Sometimes when we develop a recommendation, it's okay. But later on, when we see the real practice and do an assessment, we found that mothers do not strictly follow our guideline or our policy. They say they don't have time to prepare a special porridge or something for children.

- RGC

Further, policies have been developed based on global evidence, without taking into account what would be feasible by both implementers and beneficiaries, or in terms of available

budget. This reflects the government's lack of ownership of the nutrition agenda, as identified previously.

We have the Rolls Royce of guidelines. Those SAM and MAM guidelines could be used in Cambodia, in Laos, in Vietnam; in any country. It's not Cambodia specific. And if you look at the supplementation, they're talking about weekly iron folate for women of reproductive age. This is a perfect example of someone writing a guideline without even thinking if the government can implement it. It's impossible for the government. It costs too much.

Funder

3) Lack of awareness and follow-up: The most common reason was that those who need to know about the policies are unaware, making it impossible to follow the policy frameworks.

The MPA [Minimum Package of Activities] guidelines are a very thorough document, but it's not implemented to the detail as what's in the policy. And the problem is that people in the health centers don't know. The chiefs don't know the policy document. They've never read it. They don't have it on their shelf. So sometimes they don't even know what the standards are that they should be adhering to.

- Civil Society

This lack of awareness was due to the lack of dissemination and supervision provided by higher level government officials. Another factor was that guidelines are routinely modified, making it difficult for those trying to implement them to keep up with the changes. Others also reflected that policies are not implemented because there are few staff to implement them. The low pay provided to health care workers was another barrier.

Policies are there, but not implemented. Because funding, but also lack of health staff. There are no health staff. For example, health centers should have 8 to 13 staff, but look at all the health centers. Do they have? Even if they have, not all the staff are working. They keep their name there, but they work somewhere else because of low pay.

- RGC

4.5.2 Technical capacity to address the problem

According to the majority of participants, there is insufficient technical capacity within both the health and non-health sector. This view was held by all participant groups, but was

considered particularly unfavorable by government both from the health and non-health sectors, then civil society, and then funders. A few participants believed that capacity exists; however, for the majority who perceived a capacity gap, their reasons entailed: 1) the lack of qualified people, 2) complexity of a multi-sectoral response, and 3) complexity of implementing comprehensive programming.

Among the few participants who perceived there to be available and/or improved capacity in Cambodia, their reasons are twofold. First, Cambodia's nutrition community, broadly speaking, is full of technical experts but this expertise has not been accessed or used effectively.

We've had a huge body of knowledge sitting in the nutrition TWG for years, whether that has been given space to impact or not is probably another question. There is enough technical know-how around that we could backstop or build capacity quite quickly.

—Civil Society

The second reason, as noted by a government official, related to the establishment in 2013 of Cambodia's Master's in Nutrition degree program. This participant expressed hopefulness that once current students finish the course they will become nutritionists and that each generation will be better able to respond.

1) Lack of qualified people: Among participants who believed there is insufficient capacity, the most frequently cited reason was the lack of qualified nutritionists in-country. This means that the people who should know—those in positions of influence regarding nutrition—do not have a deep enough understanding. Although participants acknowledged the new nutrition master's degree program, most still considered the knowledge base "young." One government official states: "It's still new to us. We are still in the learning stage." This means Cambodians are not yet ready to tackle the issue themselves and remain dependent on external expertise.

There are very few Cambodian people who are specialists or skilled in nutrition. Even myself, I work on nutrition, but I don't have any background on nutrition. I have background on rural development and public management. But I work on nutrition issues. ... We very much depend on the external experts from our DPs [Development Partners], like WHO, UNICEF, and WFP.

—RGC

2) Complexity of a multi-sectoral response: A few participants mentioned that this lack of capacity has limited the response. Rather than tackling the complexities of nutrition, one civil society actor stated that the focus has been too narrow.

Sometimes I think the higher-level does not have a good understanding of what nutrition actually is. [They think] nutrition is only the distribution of sprinkles and, if we do that, we don't have a problem with nutrition.

—Civil Society

The complexity of nutrition was also cited as a barrier because no one person can be an expert in all aspects of the sector.

That's the whole thing about stunting prevention. You really have to work with different sectors and different levels of expertise. It's a different set of skills to train in complementary feeding and nutrition, than building latrines and water filters. And then if you do livelihood activities, you have to know what immunizations are required for cows or sheep, and what kind of seeds grow best. Trying to bring together all these different experts to focus on improving nutrition and improve stunting is challenging and why we haven't made progress in many countries.

—Civil Society

3) Complexity of implementing comprehensive programming: According to participants, primarily government, of particular concern was that the solution for young child stunting is not yet well understood.

People know that nutrition is a big issue. They know, but they don't know how to put together an effort to respond to it.

-RGC

It is this lack of what one government official refers to as "specialized" capacity that was believed to be a barrier to progress. Without it, according to a civil society actor, those working in nutrition are unable to translate policies into programs.

4.5.3 Intervention Coordination

National coordination structures (see 4.6), such as the SP&FSN TWG, exist. Despite this, according to many participants, sub-national intervention coordination is both needed and missing. This was of particular concern to civil society actors. The reasons given for the lack of intervention coordination were two-fold: 1) many players and 2) sub-national coordination mechanisms.

1) Many players: Coordinating on the ground is difficult because of the numerous actors implementing nutrition.

Pretty much anybody who wants to work in Cambodia gets to work in Cambodia and nutrition has all kinds of small and large NGOs and private actors. They are all doing their own thing, not necessarily following policies or guidelines or national or international standards. —Civil Society

The lack of government oversight and control means there is no standard way of operating, including standard payments for volunteers. This has led to competition among implementers and volunteers deciding for themselves the implementation priorities.

When you go to the province, the government, UN, and NGOs do different activities. Even though they probably have the same purpose, somehow, there is no coordinated effort. For example, you are working in one community, you are working with the same VHV [village health volunteer], but you pay \$5 a day and the other pays \$2.

—Civil Society

A number of participants expressed frustration that organizations operating in the same geographic area and doing the same thing often fail to talk with one another to reduce duplication and the wasting of resources. An instance of this occurred despite one participant's best efforts:

I always want to try to coordinate, but there are NGOs who say: 'These are the activities we are doing, this is our coverage area, and you work around us.' I find that a pity. I ask them: 'Do you think having two of the same activities in the same community benefits the community?' But they say: 'It doesn't matter. You do your activities and I do mine.'

—Civil Society

Government participants in particular believed that coordination is hampered by Cambodia's many donors having different priorities and not harmonizing among themselves.

One government official stated: "All development partners, bi-lateral funders, and NGOs have to complement each other to avoid limited target coverage." Another stated:

We have many programs and projects supported by our development partners or bi-laterals, but they work separately; they have their own perspective, even in UN.

—RGC

Another barrier was donor-required targeting, and/or timeframes which make it difficult for organizations to coordinate or to stay up-to-date on who is doing what, where.

The coordination is taking several months of our time. I'm sure it will be worth it, but some organizations only have a year of funding and they wouldn't have the time. [Mapping] is a full time job as new NGOs come in and others phase out.

—Civil Society

In addition to being donor driven, smaller NGOs were said to not see the forest for the trees. A few of the participants felt that these smaller groups do not always recognize their efforts as contributing to the bigger picture and so do not invest time in coordinating with others.

2) Sub-national coordination mechanisms: A number of participants stated that subnational coordination is critical for a comprehensive and effective nutrition response, yet recognized many services are not delivered jointly.

Some WASH projects they do in one village and community-based nutrition in another village, but they should come together to ensure all points have been responded to.

—Civil Society

A government actor expressed a similar frustration:

So far we work line by line ministry, but nutrition is a cross-cutting issue. So health focus on health, like counseling on the nutrition diet, or supplementation, but others, they work for agriculture or rural development. They do not link the message together.

—RGC

This lack of coordination, primarily highlighted by civil society and government, is because a sub-national mechanism is missing. One government official cited CARD and the national SP&FSN TWG, but also said: "at the sub-national level we don't have."

Alternatively, according to a few participants, although mechanisms do exist, they were not perceived to function effectively. Routine meetings tend to be used to share progress updates rather than to focus on reducing duplication or ensuring coverage of nutrition services. In addition, since attendance is not required, even if the right conversations happen, not all needed actors are present.

There's a monthly meeting on health [provincial level]. It's not really focused only on nutrition. It's NGOs, government working in the health sector meeting every month. It is not to coordinate. It's just telling: 'This is what we did last month.' I've tried to invite all the nutrition groups, but only one or two come. They say: 'It's not required, so why would I go?'
—Civil Society

4.5.4 Funding

As demonstrated by the card ranking exercise, the majority of participants considered the lack of funding to be a major barrier in addressing young child chronic malnutrition at scale.

Three primary explanations for this lack of funding were given: 1) insufficient funds, 2) agenda setting, and 3) unwise use.

1) Insufficient funds: For a few participants, primarily health and non-health sector government officials, there was a true lack of funding being allocated to nutrition. This lack of funding was largely from government sources. According to the conceptual budget for the Fast

Track Road Map for Improving Nutrition 2014-2020, donors must contribute 23% of the \$40.7 million needed between 2015 and 2020 to implement the health sector nutrition response at scale. For Component 5: Supporting Exclusive Breastfeeding and Complementary Feeding, which accounts for 12% of the total budget, this proportion is even greater. Of the \$4.85 million estimated to be required, the proposed donor share is \$2.7 million compared to \$2.1 million for the government (126).

This continued reliance on donor and civil society support was recognized by many participants across all organization types. Donors and civil society were said to implement nutrition policies and, without these actors, Cambodia's nutrition program could not be sustained.

The government committed to develop the national strategy for five years, but until now we do not see how much budget they contribute. For most of the activity, the government relies on the donor. When the financial support finishes, everything related to the implementation of the activity will also stop working.

—Funder

Another consideration was that although there had been donor support, it was generally insufficient for reaching scale:

The government spends very little to intervene on the nutrition issue, except in some cases they support the MoH. Like the vitamin or other supplements or medicines that are provided to children and pregnant women. We very much depend on the external support. And the external support doesn't cover all. Say, for example, WFP covers some area they select for the pilot, and UNICEF selects some areas. They do not cover the country; not nationwide.

—RGC

According to a participant from a different part of the government, there have not been enough funds to implement at scale: "We can make our plan, but the budget does not fit with what we want, and that's why our plan to extend is slow." In addition to there being insufficient

government funds, one government official raised concerns that donor investment was inadequate or on the decline.

We don't have enough funds to deal with the nutrition gap from national sources or overseas funding agencies. So, I think this is one of the key factors that limits the interventions for the nutrition improvement.

-RGC

2) Agenda setting: The most common explanation for a lack of funding was agenda setting. Many participants mentioned that donors have invested in their own agendas, rather than aligning with government priorities, policies, and strategies. Frustration, as expressed by one government official, was acutely felt by many in the government: [Some DPs] have their own agenda. They can support this activity, but not that activity, even though that activity is important for us." Representing another part of the government:

I want all our partners to implement or support something we think is a gap, or to follow the policy or strategy. But another thing that is not so important because it's going very well already, they support. They do not listen. They do what they want or what their proposal says even though it does not fit with what we want.

-RGC

Being donor driven also meant that despite progress in an area, when a donor shifts its direction, everyone follows suit, sometimes moving away from a former priority.

Most donors come with their global or regional strategies and their funding follows these and not the government strategy. It would be great if resources went toward the things that are already in the strategy, that are already building momentum, that are already making progress. They had funded a mass of activities in [fortified food], but then [they redirected their funding]....They're a major donor who is saying this isn't important anymore.

—Civil Society

Alternatively, when a donor recognizes a new area, progress will accelerate. One government official explained that if a donor has money to support nutrition programming, nutrition programming will be funded. Yet, if a donor expresses interest in emerging diseases,

then "everyone goes to emerging diseases." Further, by funding the bulk of the work, a donor can define what it means to respond to nutrition in Cambodia, such as by providing food.

A couple of the donors who like to give food and who like to pass food around also push this [feeding programs and food]. And this is also just money, money, money. It doesn't have anything to do with nutrition. And there was money for those programs and those are expensive programs. So, money is there.

—Civil Society

According to a few of the participants, agenda setting was also seen by the government's budgetary decision makers' lack of prioritization, recognition, and commitment to address the issue.

I think it is difficult to convince the policy makers and the MoEF [Ministry of Economy and Finance] to support or fund the investment in nutrition because as the policy maker, they may think broadly about the whole forest rather than the tree. In the country there are many issues they want to solve, not just nutrition. But due to the limited funds, they can support a limited amount for nutrition.

-RGC

Similarly, even though ministries, such as MoH, have recognized the importance of addressing young child stunting, they do not hold the purse strings. As one funder explained, "the highest budget decisions are made at MoEF and they aren't convinced."

3) Unwise use: According to a number of participants, there would be sufficient funds in Cambodia to address stunting if funds were spent on the right things in the right places.

Whether the funding is utilized the right way, used most effectively... If we had clear coordination, clear identification of the problem and all that stuff, then the funding should fit. If we said this is the biggest problem in nutrition, we could put funding there. It's not that there's a lack of funding. More funding would be good, but it's not critical.

—Civil Society

A few participants expressed exasperation with the lack of strategic targeting and coverage of services. Reportedly multiple organizations have been working in the same

geographic areas, yet not covering provinces where malnutrition rates are highest. Funders too recognized that support has not always been utilized most effectively:

I think as a community we have enough funds, we just don't always do the right things with it. I don't think there is a lack of funding necessarily in the whole development community. I think there is a lack of funding just when you think about stunting prevention. I think the money is going to other interventions.

—Funder

Highlighting again the lack of donor coordination, a government official stated: "I think there needs to be better coordination among donors because now the budget is here and there."

"Unwise use" was also expressed as implementing an approach without evidence. A funder stated that because of the lack of M&E, informed decisions about what should be done where have not been easy to make.

It's hard to really decide what is essential and also what has worked in the past. There were two things we said 'no' to because we have experience using those and knowing they're not effective. But do we have concrete data on that? No, we don't. So maybe another organization says: 'This is what we do and we think it's effective.' So I think it's really hard, again, because there isn't great M&E to say 'no this is working, this isn't working.'

—Funder

Similarly, a civil society actor expressed disappointment that new programming for Cambodia has prioritized activities that do not yet have evidence behind them:

I just heard the new GIZ [Deutsche Gesellschaft für Internationale Zusammenarbeit, a German development company] program will include food demonstrations and gardens. I just heard about that yesterday. I thought: 'Really, why?' It's not proven to be effective.

—Civil Society

4.5.5 *Summary*

Despite the existence of many policy frameworks in Cambodia, participants concurred that implementation and enforcement was a major gap. This was said to be due to a lack of

political commitment or funding, a lack of awareness, or a lack of follow-up. Technical capacity, implementation coordination, and funding are all needed to implement policy frameworks, yet these also were considered insufficient in Cambodia. Technical capacity was viewed as lacking particularly by government officials, and many participants agreed that Cambodia does not yet have a cadre of nutritionists. Civil society in particular raised concerns about the lack of on-the-ground coordination. The numerous organizations working in the nutrition sector were seen as tripping over one another while leaving parts of the country untouched. Although funding was considered a barrier to progress, this was not only a true lack of dollars, but also a misalignment between donor and government priorities, and funds being spent on non-priorities or on efforts unknown to be effective. Also of concern was the lack of sustainability of nutrition programming in Cambodia without ongoing donor investment.

4.6 Coordination and Communication

This section presents participants' perceptions of the degree to which coordination and communication mechanisms are in place in-country, particularly at the national level, the type of alliances that exist in the nutrition community, the organizations with significant influence and why, and the degree of dissonance among these actors.

4.6.1 National coordination

Cambodia has 18 officially recognized coordination bodies known as Technical Working Groups (TWGs). They are led by the government and include funders and NGO participants.

Three of these TWGs include nutrition: 1) TWG-SP&FSN, chaired by CARD, 2) Health, chaired by the MoH, and 3) Agriculture and Water (TWG-AW), co-chaired by the Ministry of Agriculture, Forestry, and Fisheries (MAFF) and the Ministry of Water Resources and Meteorology (MWRM). The TWG for Food Security and Nutrition was initially established in

2004 but, in 2014, it was merged with the Social Protection TWG to form the TWG-SP&FSN (Table 6) (127).

There is also the Inter-Ministerial Technical Committee (IMTC), housed within the National Council for Nutrition (NCN) in the MoP. The IMTC is chaired by the MoP. Within the IMTC, there are sub-national Committees on iron deficiency disorders (IDD) and iodine deficiency disorders (IDA) (128).

"Unofficial" nutrition coordination mechanisms also exist. The NWG was established in 2008 by merging and renaming the Micronutrient TWG and the IYCF TWG. The NWG is chaired by the Director of the NNP of the National Maternal and Child Health Centre of the MoH. The National Food Security Forum (NFSF) is a sub-group of the TWG-SP&FSN (Table 6).

Table 6. Nutrition-related working groups

Name	Mandate	Lead	
Technical Working Groups			
TWG- SP&FSN	Improve food security and nutrition in Cambodia through coordination; sharing information across ministries, donors, and other organizations; monitoring and providing feedback on progress towards national strategies and policies; policy formulation and prioritization (129).	CARD	
TWG-Health	Ensure effective coordination in the health sector, and contribute to the achievement of Cambodia's development goals through implementation of National Strategic Development Plan and Health Strategic Plan (130)	МоН	
TWG-AW	Ensure coordination among agriculture and water sectors, develop policy frameworks, mobilize resources related to improved agricultural production and diversification, and water resource development and management (131, 132)	MAFF and MWRM	
IMTC	Facilitate stakeholders related to nutrition technical matters, particularly related to IDD and IDA (128).	NCN	
"Unofficial" mechanisms			

Name	Mandate	Lead
NWG	Support nutrition policy development and planning, implementation, M&E of nutrition interviews; increase advocacy and initiate relevant nutrition research and interventions; and establish and strengthen linkages, collaboration, and communication with other sectors working in nutrition and food security (133).	NNP
NSFS	Improve information sharing experiences and lessons learned from on-going programs and innovative approaches among ministries, development partners, and civil society organizations (134).	CARD

Despite the government's efforts to put in place these coordination mechanisms, the majority of participants from all organization types—with unanimity among government—identified national coordination as a major barrier to addressing stunting in Cambodia. Reasons given included the following: 1) nutrition is a disjointed sector, 2) deterrents/disincentives to collaboration, 3) hierarchical barriers, 4) CARD lacks needed support, and 5) coordination mechanisms (NWG, TWG-SP&FSN, and FSN Forum) need improvement.

1) Disjointed sector: Given the multisectoral nature of nutrition, participants considered it imperative to have multiple government bodies engaged. Doing so was perceived to be difficult, however, because of the structure of the government itself.

...the responsibilities are so cut up that I don't blame them for not being coordinated, for not being able to effectively address one issue. It is a much divided government structure. If you talk to people individually at the government, there is a commitment to addressing malnutrition or stunting. But how you actually build consensus, draw on that commitment to work together, pool the poorly funded ministries or departments that have other objectives, how you get that coordination among all the players that are required to fully address this issue. The structure, the system as it stands, is insufficient.

—Funder

Notwithstanding the existence of TWGs, coordination was said to be weak because there were too many groups. According to a government official, each line ministry has its own TWG

and members were more likely to join their own sectoral TWG rather than the TWG-SP&FSN. Alternatively, because the same people participated in all the groups, discussions tended to be among only this segment of the community, and did not include all who needed to be engaged.

The NWG and the TWG or even the forum are not well connected. You see the same people everywhere. The problem is the disconnection, the lack of cross-sharing. What is discussed is discussed among themselves.

—Funder

Another difficulty identified was the lack of a precedent for how to work with multiple government bodies. One funder explained that it needed to work with five ministries to implement an activity. When this funder asked the government how to do so, the response was: "We don't know because we never work that way or we've never done that."

Collaboration within ministries, because nutrition is often stretched across multiple departments, was also identified as a challenge. This was because each department sought to maintain its domain.

At the MoP there are two separate bodies. One is the sub-committee for the salt iodization and the other is the sub-committee for the micronutrient fortification. They want to combine that, but they learned the [difficult] experience of food security and now they try to keep them separate.

—Funder

According to one government official, this was also because no one is pushing departments within ministries to work together and, as such, they do not do so.

So many vertical programs. They work very independently and no one controls it. This is the big issue of coordination. ... Now there are too many ministers. Minister of Nutrition, Minister of HIV/AIDS, Minister of TB, Minister of Malaria, Minister of Dengue.

-RGC

2) Deterrents/disincentives to collaboration: A number of participants mentioned that there are disincentives to collaborate and even stronger incentives not to collaborate. One is a

desire to protect one's territory and receive credit for the work. The development of the Fast Track Road Map for Nutrition was highlighted as an example:

I remember at different times sitting in meetings, and, especially around the complementary feeding pieces, it was so MoH focused. But what about food diversity and a multitude of other things that need to be taken into play for this to work? And basically everybody was just like: 'We can't deal with that. It's out of our jurisdiction.'

—Civil Society

Similarly, a funder stated that there has been a perception that nutrition "belongs" to one sector or another:

We consider nutrition belongs to the Ministry of Health and they work for health. Some people think it belongs to the Ministry of Agriculture because they work for food sustainability.

—Funder

A few participants mentioned that for some working in nutrition there was no benefit to working together when they could secure funds directly for their own activities. A desire to focus on one's mandate and not be distracted by coordination was said to be another reason.

People sometime don't want to be coordinated. This is not only government people, but the DPs [development partners] as well. It depends on the individual, rather than the institution. Some people have their own agenda probably because they're here for a short time and have specific work to do.

—Funder

Even if different ministries had planned to coordinate, additional hurdles needed jumping before a coordinated action could be taken.

Let's say those three ministries [MAFF, MRD, MoH] agree on a program. They have to go back to MoEF to get approval for their budget, and then get the budget. Then they have to go to the MoP to get their strategy approved.

—Funder

3) Hierarchical barriers: Many participants identified a lack of nutrition leadership and considered those who should to be leading nutrition as not having the power to do so. For some,

particularly civil society, the NNP was thought to be too low a level in the government's hierarchical structure.

In Cambodia, who needs to take the leadership is the MoH because there's so much the health system is not doing and there are so many essential interventions in health. And health workers, doctors, nurses, midwives are seen as providing trusted information on how to take care of your kids.Right now the highest level that really cares and is being pushed is NNP and they're too low in the MoH. It has to be the Minister or a Secretary of State or one of the Deputy Generals. It has to be that level in that ministry or pretty much in any ministry to get any action.

—Civil Society

Because of NNP's level, it was said to be unable to coordinate directly with other ministries. Yet, one participant mentioned that NNP has had limited influence within the MoH as well.

The NNP has a very weak position in Cambodia. They are at the bottom of the list in the MoH to receive funding. When they say something in meetings at MoH no one listens to them.

—Civil Society

Prior to CARD being given the mandate to coordinate, NNP was thought to have insufficient capacity or stature to coordinate all aspects of nutrition. This is, according to one funder, why food fortification coordination became the responsibility of the MoP:

In Cambodia we have another group who work in nutrition, the National Council of Nutrition. This was established before CARD and it's led by the high level officer of the MoP. Most of the activity responsible by the National Council of Nutrition is related to food fortification. I think this was a political issue because before they had CARD there was no institution to coordinate. When they brought this issue to the MoH, the MoH, especially the NNP, had no capacity to absorb. So they asked the MoP to do this.

—Funder

4) CARD lacks needed support: According to many participants, the idea of CARD serving as a coordinating body had merit although, as expressed by one funder, CARD was not yet as effective as needed.

The idea of CARD as a coordinating body has validity, especially given this multi-sectorial, complex issue that involves a complex set of actors. But, with anything that one is trying to do that requires consensus building and cooperation, it is only as effective as those involved. So, if the people or the entities that CARD is responsible for coordinating actually take that involvement seriously, are committed to working through the issues, are committed to coordination and cooperation, then CARD will be successful. But no matter how good and committed the members of CARD are, they can only push so much. And yet, without an entity like CARD, Cambodia would not move forward to the extent it is.

—Funder

One government official suggested that CARD would be more effective if it mobilized resources for the line ministries, and shifted funders' current practice of funding ministry-by-ministry.

If you think in terms of coordination, you have to think in terms of the power to mobilize resource. If you have no power to mobilize resource to the ministries, they may lack interest to coordinate, and some DPs want to work directly with the line ministries without the coordination, without the TWG.

-RGC

Another government perspective was that CARD alone was insufficient. Rather, it needed to be bolstered by the ministries themselves.

I'm not quite sure how capable CARD is. Because CARD is just one small unit. CARD needs strong back-up from these relevant agencies.

-RGC

5) Coordination mechanisms (NWG, TWG-SP&FSN, and FSN Forum) need improvement: Overall, participants perceived information sharing to be an inadequate purpose of the working groups. According to one civil society actor, the groups do not "give us an opportunity to sit down and talk about some of the issues or to think about coordination." Members of each group provided specific insights into their respective group's functioning and effectiveness.

NWG: Participants in the NWG had mixed views of the meetings, their purpose, and the influence and functioning of the group. Some participants found the meetings a great opportunity to receive technical updates, learn what is happening globally, and in Cambodia regarding nutrition, and to be a connected sector working toward a common goal.

...People go because they're genuinely interested in the information. People get really good constructive feedback from it. ... I know it's not perfect, but I really do feel it's something pretty impressive.

—Funder

The NWG was also seen as a technical forum in which the public health nutrition community has influenced government directions and supported the development of policies and strategies. By contrast, as explained by one civil society actor, the meetings alone were inadequate to influence policy.

You can use the group for effective policy change, but you can't only use the group. You have to have those other background, foreground discussions. You have to have agreement on how much the group can decide and how much to recommend and to whom, and what else you need. It can play that role, but it's only part of the process.

—Civil Society

Despite the benefit of sharing information during the meetings, some participants highlighted that the NWG has not resulted in coordination because, in the end, organizations continue to have their own funding and activities. They further lamented that everyone working in nutrition in Cambodia was not present at every meeting. (See "Missing from the Dialogue" below.) The lack of participation was because some found the meetings useless, some were unaware of the meetings, or some were working too far from Phnom Penh to join.

Another reason cited by a number of participants was that the membership list and the meetings themselves were not well managed.

The purpose is not particularly clear. They're not very good at organizing their meetings, or running their agendas well, so you feel you're sitting there twiddling your thumbs while people rant and rave not necessarily on the topic of the presentation and not necessarily with constructive feedback.

—Funder

Although participants desired a strategic agenda with topics of import that could be discussed and debated—something proactive instead of reactive—the lack of purpose was said to be because NNP has insufficient technical capacity.

Participant: Sometimes I think it's useless. They just come to talk, but there is no conclusion. NNP just sits and waits for someone to inform them, to update about their activity.

PI: Why don't they take charge?

Participant: Because they don't know what to do. The real thing, the appropriate thing for nutrition, they don't know.

—Civil Society

Of note, some participants mentioned a change in the NWG in recent years, which one participants attributed to the relatively new leadership of Dr. Prak Sophonneary, Director of NNP. Most appreciated this shift, which has entailed more NNP control and oversight.

They seem to be quite on top of who is doing what and I think they're very direct, which is good. I went to one meeting where someone gave a presentation, the results of a study. The NWG didn't know it was going on and people in the group were questioning why the study had been done. Then the leadership said: 'Don't come once it's done and show us the results. Come when it's being planned and involve all of us in the planning.' I appreciate that.

—Civil Society

TWG-SP&FSN: Participants engaged in the TWG-SP&FSN identified its broad scope and size, particularly since social protection was merged with FSN, and its hierarchy as areas of concern. The hierarchical structure was said to limit technical discussions.

The meetings of the TWG are very high level. They are chaired by Yim Chhay Ly, [the Deputy Prime Minister]. If you have a meeting at that level, you don't talk technical issues. It's only to kind-of sign off on things.

—Civil Society

Hierarchy also led to jockeying to get one's issue on the agenda and to be recognized by His Excellency Yim Chhay Ly who chairs the meetings or by their own leader. According to one government official, "they want to speak up in front of the big man, in front of their representative." By contrast, according to a funder, having His Excellency Yim Chhay Ly present meant some participants are too fearful to speak: "When DPM is there, no one opens his or her mouth." Another concern was the lack of sustained interaction between meetings.

It's like you finish the meeting and you close the book. Then in two months, they call for the meeting and you open the book. No follow-up. No continuing the work after the meeting.

—Civil Society

The FSN forum, with open membership—compared to the invitation only TWG—was intended to resolve some of these challenges. Yet, according to one funder, it has not done so. Similar to the NWG meetings, the forum was also said to lack a strategic agenda.

You don't notice the difference between the forum and the TWG. If you look at the form that takes, they look the same. And, it's a big group, about 70 or more, and that's not always easy.

—Funder

4.6.2 Community Connections and Influence

To help understand the current state of national coordination in Cambodia, participants shared their views on: 1) existing connections and influence, 2) who was missing from the dialogue, and 3) dissonance in the nutrition community.

1) Existing connections and influence: Participants who discussed having a connection to others named UNICEF most often, WHO second, and NNP third. These organizations were

frequently identified as influential actors, and those most influential were said to have: a historic voice of authority, hierarchical power, or funding or size.

Historic voice of authority: The majority of respondents cited the UN as having the greatest influence in the nutrition realm. A few participants recognized this as the result of UN funds going directly to the government. However, from the government's perspective, this was because the UN was seen as working with the government in support of the government's agenda.

UNICEF, when they have any plan to support, it is not on behalf of UNICEF, but the national program. Other NGOs? They work for their project. So, first I discuss with UNICEF and WHO how can we solve this problem. Then, when we develop anything or have an idea, we discuss with other partners.

-RGC

The UN was also recognized, particularly UNICEF and WHO, as the global authority. According to a health-sector government official, "We follow all for recommendations from WHO and UNICEF" because these bodies set global technical standards and guidelines. Another reason the UN, particularly UNICEF and WHO, was perceived to have greater influence was because it was considered an authoritative voice with historical significance.

After the Khmer rouge, WHO was in charge; they literally ran the MoH. They financed it, ran it, developed it, and designed the district model. The government has had a long standing, very close relationship with WHO. And UNICEF also did a lot of implementation post war, while WFP's relationship seems to depend on how much food they bring in. Right now they're not bringing in much food.

—Civil Society

The level of influence and on which part of the government was said to have varied, depending on who—if anyone—was employed. According to one civil society actor, this means who sits in those organizations matters: "Whatever they say will pretty much happen eventually." The level of influence was also said to depend on available budget and technical expertise.

At this point in time, WHO doesn't really have a nutrition person and they're kind of ceding leadership to UNICEF. I think UNICEF is not comfortable with that, but they have CARD. That's how they previously decided to divide it up.

—Civil Society

According to some participants, because the UN itself has been disjointed, it has not been as influential or effective as it could be.

They [the government] are encouraged by the two main donors, WHO and UNICEF, to do things separately. So a lot of the things they could be doing preventatively for complementary feeding that would make the most sense, like combining with EPI [expanded program on immunization] as in most countries, they aren't doing. They don't seem to want to have those discussions and interactions to actually link those two systems so kids under two are taken care of in a more holistic way.

—Civil Society

Hierarchical power: Because Cambodian society is very hierarchical, leaders at each level have significant power and influence (135, 136). The most critical influencer as identified by most participants was the Prime Minister. Getting him on board was thus considered crucial.

The Prime Minister has the power to say and to influence the execution of any law or any legislation. Now we use the Deputy PM from CARD. He is quite important, but for breastfeeding and complementary feeding, it should be the Prime Minister.

—Civil Society

Also important was having leaders of the nutrition coordinating mechanisms and government programs who were at a high enough level to influence the Prime Minister.

According to some participants, CARD met this criteria.

CARD has the power to report our issues to the Prime Minister, because they are chaired by the Deputy Prime Minister. When we get the political commitment from CARD, then the issue will go [to the Prime Minister]. You know the Prime Minister has the power. If he says something, then his voice will be heard all over the country. We will get the funding and then not just funding from international NGOs, but also to tell the government to give more funding for nutrition.

-RGC

CARD's connections were said to not only be to the Prime Minister, but also to other parts of the government that were needed to support the nutrition agenda.

CARD is helping me a lot to move things forward at the high level. CARD staff know people at the Ministry [of Information], they open those doors. ... Working with NNP opens some, but not many. Working with CARD opens big ones.

—Funder

Other participants, by contrast, did not view CARD as using its power effectively, or having the power required.

A lot of people don't believe CARD is very important. It needs to start behaving like it's influential and has power. When talking with other ministries, I say: 'Have you spoken with CARD about this?' I always refer to CARD. Even within civil society. I say: 'You haven't met with CARD?' They say: 'No, I've met with NNP.' And I say: 'You have to talk with CARD. They're the ones who have the strategy. They're accountable. If nutrition doesn't improve, it's not MoH's problem, it's CARD's.'

—Civil Society

Perceptions of NNP's power also varied. For some, NNP's influence was perceived to be more within than beyond the MoH. According to a government official: "How can a program manager talk to the MoP? Why would he listen to you?"

To move the nutrition agenda on the ground, local leadership was considered more critical than national leadership. The Provincial Health Department (PHD) allocates budgets, and therefore was said to have significant influence. Village leaders were also said to be able to affect change. According to one civil society actor, an active village leader or commune council member can make a real difference when they tell people: "Make sure you have a toilet; make sure you wash your hands; make sure you eat this."

By contrast, a few of the participants mentioned that nothing moves at the local level without the endorsement of the next level up.

When we work with the OD [operational district] level for nutrition activities, they always say to us: 'But we need a letter from the PHD.' They will always ask from the top if they are allowed to do things.

—Civil Society

Funding or Size: Most participants stated that having money or being a large organization with a big program gave one greater influence on government priorities and directions.

I think there are serious power plays and I think those that come to the table with the most money have the loudest voice, or potentially have the greatest policy influence.

—Civil Society

Although some participants highlighted the importance of smaller organizations' on-the-ground experience, according to a government official, a small organization will be consulted, but only after key players have had their say.

They are our member, but in a small thing. When we do anything, we invite only the big organizations that work fully for nutrition. We do not invite the others at first because they are small.

—RGC

Although many participants believed that a large budget was the lever needed for influence, some participants noted that how money is used and to whom it is given affects the degree of influence an organization can have. That USAID does not give money directly to the government was offered as an example.

Those two [WHO and UNICEF], even though they don't give a lot of money, they give it to the right people. USAID gives a ton of money in nutrition, so they should be influential, but they don't give money to the central level or to standardized trainings that would get money to the central level. So the fact that they're spending \$16.5 million on a nutrition project isn't buying them any influence.

—Civil Society

Despite this, the US Government was considered by a few to be an influential voice.

USAID is spending the most money on nutrition with food security and water and sanitation and everything, but they don't have much influence

on government because the way they play is not always well accepted by the government. But, they put a lot of money, so people listen to them. Money has power.

—Funder

A few participants mentioned that although an organization may be considered a small actor and not deserving a voice in national fora, they would have a voice at a lower level because in their area of operation they provide significant resources.

If you're in three villages and you have \$200,000, that's a lot. That's even more than what my organization is bringing to national things. Of course they have power. But in their district, not at the national level.

—Funder

2) Missing from the dialogue: Overall, some members of civil society, the private sector, and parts of the government were said to be missing from the nutrition dialogue.

Civil Society: In addition to reasons mentioned in the section on working groups, civil society was considered absent because of their inconsistent participation in coordination mechanisms. Though no one organization was thought to be missing, their contribution to the dialogue was seen as unreliable. A few participants mentioned that because typically there are no introductions during meetings, it is impossible to know if someone is missing. In the case of the TWG-SP&FSN, participation was limited by invitation and thus, according to one funder, "NGOs are represented, but it's a picking of NGOs. It's a limited number."

Further, although there were many participants in the meetings, some members of civil society working in nutrition were thought to be absent.

We have loads and loads of NGOs working in nutrition in Cambodia. Sometimes we have 50 people in a meeting, which is a lot, but there is still a lot of work that some NGOs do and they're not part of it.

—Civil Society

Participants involved only in health-related nutrition work mentioned that those participating in the TWG-SP&FSN should also join the NWG so they understood the work better. The WASH sector was highlighted as an example:

I wish there was more coordination between WASH organizations and nutrition because it's really closely related. Nutritionists understand that WASH is an issue, and I know people out in the field building toilets who are doing really cool work, and they understand it as nutrition-related work, but they're not involved in the nutrition world.

—Funder

Private sector: According to a few participants from civil society and funders, the private sector should be part of the coordination mechanisms. However, one civil society actor strongly opposed this idea. According to this participant, the private sector should help to coordinate government strategy because the private sector has its own agenda—that of making money. This participant further explained that there was no clear representative of the private sector in Cambodia and that those with money and ability to contribute were not based in-country. The push for private sector engagement was said to stem from some donors' public-private partnership strategy, and thus was yet another example of the donor agenda driving the conversation.

Government: A number of line ministries were identified, particularly by government participants, as not being part of the coordination mechanisms, as needed. These were the Ministry of Education, Youth, and Sports (MEYS), and the Ministry of Women's Affairs (MOWA). MOWA was considered a gap given their mandate related to women and children. MoP was also thought to be needed since they manage food-related products.

Some participants stated that line ministries typically do join the TWG-SP&FSN. But, CARD and key line ministries, such as MAFF, MRD, MOWA, and MEYS were identified as

missing from the NWG, even though they reportedly had been invited to participate. One civil society participant viewed this absence as appropriate:

I don't really know if it's a place for other government, other ministries to come. It's more technical sharing. So I think it's ok that it's people who work in the field.

—Civil Society

A concern was also raised that other MoH departments with relevant scopes of work, such as health promotion and the centers for disease control that manage child health services have not joined the NWG on a routine basis.

3) Dissonance: The majority of participants mentioned that disagreements occur; however, civil society reported dissonance more frequently than funders or the government. Reasons civil society gave for disagreements were: differing views of technical issues, competing priorities and interests, and not following government requirements. Some participants also mentioned that there was no dissonance.

Differing views of technical issues: Conflict, particularly in the NWG, was said to be about what to do and/or how to do the work, or about how to make such decisions. This was expressed either as disconnect between global guidance and the realities on the ground, or as there being insufficient evidence to change current policies or develop new ones.

They have [growth monitoring and promotion] guidelines at the facility level, but not community level. I understand they don't have them because there is a lot of debate. Some people say it doesn't work.

—Civil Society

Competing priorities and interests: Individuals and organizations having different priorities or agendas and trying to protect them was said to have led to conflict.

Sometimes we have a hard discussion. For example, it used to be separate social protection group and food security groups. When it was combined, everyone wanted to protect their interest. ...for example, even how to present the work. Those from the food safety group want to write food safety first and then nutrition.

—Civil Society

When we first started to formulate this new strategy there was a lot of discussion; it took more than a year. Not only because of the budget constraint, but because of the technical consensus. Some said, 'It's too early to develop this strategy,' because they had their own agenda. Some said, 'Ok, but social protection is more important than food security.'

—Civil Society

Conflict within the donor community, particularly within the UN, was also identified as a problem. This was said to be because funders have not coordinated their strategies and disagree about what should be done in Cambodia to address malnutrition.

Not following government requirements: A few participants mentioned dissonance was caused by not informing the government of one's activities, such as not providing a report when asked, or doing activities that were outside the bounds of government policy.

No dissonance: A number of participants, particularly members of the NWG, said that people try to reach consensus and that the space was available to have needed discussions, but that these were primarily technical in nature. However, for most participants from both the NWG and the TWG-SP&FSN, the lack of disagreements was said to be because people did not speak up for fear of angering the government or because they did not want to be perceived as challenging authority or working against the government. By contrast, according to one participant, conflict has not occurred because issues that may cause conflict were not included in the meeting agenda. This was said to be because the government was fearful of being criticized.

4.6.3 *Summary*

Despite the existence of coordination mechanisms, participants were nearly unanimous in their view that coordination of the nutrition sector in Cambodia was happening, but not as much as needed. There were a number of reasons given, including the government's structure and hierarchy, and how one manages debate and builds consensus in the Cambodian context.

Participants also shared their perspectives on members of the nutrition community with the greatest influence, and the reasons for this, such as the historical influence of the UN dating to post-Khmer Rouge reconstruction. Although the nutrition sector has numerous government, funders, and civil society actors involved, government officials in particular identified other government, such as MOWA, that has been missing from the dialogue. Finally, participants, mainly civil society, expressed that some dissonance in the community exists, primarily related to technical matters or competing priorities.

4.7 Information, Evidence, and Research

The majority of participants considered information, evidence, and research to be significantly lacking in Cambodia. Four themes emerged to explain this perception: 1) uncertain if the investment is worthwhile, 2) quantity and frequency, 3) system gaps, and 4) capacity gaps.

1) Uncertain if the investment is worthwhile: As highlighted previously in this chapter, according to a number of participants, wise investment decisions cannot be made because there is insufficient information to know if efforts have had an impact and/or if course corrections are needed. One government official expressed this gap this way: "...if we want to know about our intervention, where it is and if what we have done is successful, we don't have the information." Another participant explained that output data, such as the number of micronutrient powder

packets produced, could be tracked, but not the outcome of their use, such as a reduction in malnutrition.

A number of participants commented that for some aspects of nutrition there was information, while for other areas, such as anemia, little was known. This gap was said to limit the community's understanding of the underlying causes of malnutrition and its ability to create a responsive program. Furthermore, a few participants highlighted that although some data were collected, they were not used. Growth monitoring data was given as an example. Another was that health care workers complete a child's chart, but do not use the data to track a child's growth and take action if the child falters.

The lack of evidence, both research and M&E, in Cambodia was also said to mean that individual actors could rationalize their efforts without being challenged or without questioning their value.

Maybe an organization says: 'This is what we do and we think it's effective.' It's really hard because there isn't great M&E to say 'This is working.'

—Funder

2) Quantity and frequency: According to the majority of participants, nutrition data is insufficient, and the data available have not been collected with the frequency needed to be useful. The CDHS conducted every five years was cited as an example.

There is 40% of stunting, but the year of measurement is 2010. In 2015, the story could be different.

—Civil Society

Data we get from the CDHS is not available regularly. Right now we wait every five years. Between those five years we don't know how our implementation goes.

—RGC

3) System gaps: The majority of participants said there was no functioning M&E system or reporting mechanism. One participant highlighted the lack of coordination in M&E.

People having different M&E frameworks, so everything is in people's own silo. Even NGOs are not able to combine their M&E in any way, shape or form. Government also has different M&E in different ministries.

—Civil Society

One reason data were unavailable and hence not used in Cambodia was because the current Health Management Information System (HMIS) has few nutrition data, though reportedly NNP has its own system. By contrast, a government official explained that service providers forget or do not pay attention to entering data into the system, or that when a donor's funding ends, the system no longer functions. This again points to the lack of sustainability of the nutrition response in Cambodia.

Although not all data desired have been routinely collected, some data were available. The reason more were included in the HMIS and therefore collected was because certain activities were considered too new. According to a government official, there was a desire to await the outcome of a program review to know if a program was effective and thus worth including in a national data system. Further, some activities, such as the baby-friendly community initiative (BFCI), were seen as having too many indicators to include in the HMIS. Indicators of impact, without a survey to measure them, also could not be included. According to a government official from the health sector, for some indicators, the system should work:

So now we have a database for SAM [severe acute malnutrition]. Hopefully now everybody will know very well how to enter data. Then, if you want to know which hospital, which child, just click. It's easy. It looks like an HIS. So we can for some, but not for all indicators in nutrition.

—RGC

4) Capacity gaps: According to a number of participants, data were not used because of a lack of capacity. This gap ranged from a lack of understanding of M&E to the inability to analyze and use data. Not understanding M&E and the data collected was said to limit one's ability to translate learning into practice, particularly interventions that prevent stunting.

As an example, one government official expressed uncertainty about which indicators should be used to track outcomes. Another example offered by a funder who had worked with a government partner highlighted this person's lack of understanding of the difference between M&E:

She didn't really understand the concept of what we were trying to do. So, when we say monitoring and evaluation, she thinks: 'How many people attend the trainings?' Just the idea of what evaluation is. She didn't understand that we wanted to understand if we had an impact.

—Funder

This capacity gap was also said to influence which data were collected and emphasized as important. For example, during a training one participant observed that the focus was on completing the forms—"tick here. It needs to look good"—and not on what you do with the data. According to this participant:

I don't think you can deal with this [lack of data use] before you deal with the lack of technical know-how because it means nothing to you. If you don't understand the importance, then you can collect as much data as you want.

—Funder

4.7.1 *Summary*

Effectively addressing young child chronic malnutrition requires that sufficient data be available and used for decision making. According to the majority of participants, this is not the current situation in Cambodia. Rather, participants believe appropriate investments cannot be made because the nutrition community does not know what works in Cambodia and how the

global evidence-base can be applied. They also reported that collected data are not routinely used, and outcome data, such as feeding behaviors and nutritional status, are not routinely collected. Data that are available, however, were said to be collected too infrequently to inform decision making. Further, according to participants, Cambodia does not currently have a fully functioning HMIS system, nor the M&E capacity required.

CHAPTER 5. RESULTS: QUESTION 2 IMPROVING CONDITIONS

Nearly all participants considered ways to create more favorable conditions to scale-up evidence-based complementary feeding policies and programs; however, few participants overall or from any participant group suggested strategies for improving conditions. Strategies proposed, which emerged as themes, even if only by select participants, are presented by study domain.

5.1 Political commitment and Recognition of the problem

To increase recognition of stunting as an urgent priority and the political will to respond, participants suggested ways to: 1) frame the issue, 2) reach consensus on doable priorities, and 3) utilize the right actors. Participants also suggested the Cambodian nutrition community 4) create champions.

5.1.1 Frame the Issue

The majority of participants, particularly civil society and government, offered suggestions for how to frame the issue. Despite this majority, few participants focused their response on complementary feeding. Rather, most spoke about nutrition in general and/or about young child stunting. Two themes emerged around framing: 1) an economic argument and 2) how to deliver.

1) Economic Argument: The majority of participants suggested that an economic argument for addressing stunting, and one that focused on the future productivity of individuals and the country as a whole, would resonate best both with policy makers and the general public.

If you lose that potential because of stunting, Cambodia will still be a very poor country and the cycle of the poverty will be there. You cannot have economic growth.

Civil Society

One funder suggested using an economic argument, but framing it in a positive light, showing the benefit of addressing stunting.

You have to show them the intervention can have a good impact on the economy for them. They want their country to grow, to show people their lives are getting better.

- Funder

For the public, one government official suggested this message provide a financial incentive by comparing the cost of breastfeeding and complementary feeding to purchasing products: "...a lot of children can survive with little money...when you use a product or formula, you spend a lot of money."

2) How to deliver: According to a few participants, most important for raising awareness and ultimately galvanizing change was ensuring messages were routinely repeated and disseminated through every possible channel.

The message has to get out there not just through one channel, but through 10 different channels. They have to be inundated by this message. It has to be pushed from everywhere. From the radio and TV. Everybody has to be repeating it all the time.

Funder

One civil society actor suggested that the nutrition community build on prior breastfeeding campaign experience and success. (Prevalence of exclusive breastfeeding among 0-5 month olds increased from 60% to 73.5% between 2000 and 2010 (24, 27).) This campaign was said to be successful because the health sector had a common understanding of the problem and the resolution, it created a simple, easily understood, and attractive message, and because it relied on multiple strategies and channels.

According to a funder, having a successful campaign would be dependent on using communications experts to develop messages specific to current practices and their barriers and facilitators. Such experts could develop technical messages for certain audiences and translate technical content for lay people.

Because nutrition is complex and requires a multisectoral response, which has not been well understood, a few civil society actors and funders said a message making nutrition more readily understood was needed for both policy makers and the general public. Examples of the kinds of messages needed for the public were related to complementary feeding. For instance, one funder suggested that messages for caregivers should talk about the "right food," not just about food because sub-optimal foods and feeding practices were considered the primary cause of chronic malnutrition among young children. Messages were also said to be needed to shift normative food preparation and feeding practices by focusing on how caregivers could do the best for their children.

In the western world, it's very normal that you spend extra time separately cooking for a child because you know that's what the child needs. We think that's normal, that's logical, but we have been brought up with that. We need to create a generation that's being brought up saying: 'It's only normal that you do what's best for your child.' Every parent, every caregiver in the world wants to do what's best for their child. ...So you have to give message of what they need to do that's the best for their child. — Civil Society

This idea that caregivers want the best for their children was confirmed by a number of other participants, as reflected by a government official:

No one wants their children growing badly. When they know this is important, they try to do; they try to earn money and feed the good food.

- RGC

To help caregivers recognize this, a couple of civil society actors suggested providing a vision or a goal—an understanding of a healthy growing child, as well as true understanding of stunting and its effects.

I don't think they really know, because there's no good role model or comparison of how children should be. I'm sure if a Cambodian mother could see what they're actually aiming for they would realize they should feed their children more, more energy-filled foods.

- Civil Society

[In our project] we try to draw the picture of malnourished children [of the effects of the stunted brain]. When we explain to the community they say: 'Oh. we didn't know about that!'

Civil Society

Another civil society actor suggested catering to Asian cultural norms and expectations:

Parents expect children to grow up and take care of them. So we say that when your child grows up strong, healthy and educated, they will take care of you. And then that lights a bulb. 'Oh, then I need to feed my child and send him to school.'

- Civil Society

5.1.2 Reach Consensus on Doable Priorities

As presented in Chapter 4, the majority of all participants agreed on four priority actions to be implemented at scale: 1) water and sanitation, 2) breastfeeding maintenance, 3)

SBCC/mass media, and 4) counseling/support for essential nutrition, hygiene and sanitation actions. According to a government official, reaching agreement on priority actions was said to be key: "...we cannot scale-up everything in one time, so we have to select the priority action and activity to do." Toward this, a few participants recommended galvanizing all nutrition actors around a common goal and the identified priorities. This was seen as a critical response to the current focus on individual agendas and priorities.

If we understand a common goal in this area of food security and nutrition, then the way they design the program they should link to this structure and not just to push this and that priority.

Funder

Agreeing on priorities was said to require one additional step—ensuring that what was prioritized was doable in terms of available resources, or by generating sufficient commitment and allocating sufficient budget to implement them. A few participants suggested that Cambodia needs a costed action plan for the Food Security and Nutrition Strategy and not only for each sector's plans, such as the Fast Track Road Map for Improving Nutrition.

5.1.3 Utilize the Right Actors

Addressing malnutrition requires a multisectoral response. Many participants agreed that the entire government must be involved and that each government body has a distinct, specialized role to play.

Different ministries can be involved, depending on the type of intervention. If we do a complementary feeding intervention, we should work together with the WASH program. And join with a livelihood program to promote the food security, and with MAFF for home gardening to make food available and to MIME and Ministry of Commerce (MoC) for the fortified food. We also need Ministry of Information for mass media to make people aware and know how to change their behavior so together we can reduce stunting.

- Civil Society

The majority of participants said that the MoH, MAFF, and MRD were critical for an effective, multisectoral response. These three ministries, along with MoP, have been recognized in policy frameworks, such as the National Strategy for Food Security and Nutrition, 2014-2018, as being the core ministries for addressing nutrition in Cambodia. The second most important ministries were said to be: Ministry of Information (MIF), MOWA, and MEYS. According to a couple of participants, parliament also needed to be engaged.

MoH: For many participants, particularly those working in the health sector, MoH was seen as having primary responsibility for nutrition. According to one non-health sector government official, MoH plays a critical role in nutrition improvement: "...like Sub-decree 133 [which regulates the advertising and marketing of IYCF products]. And they have the breastfeeding program, and the counseling program, and the health center level." MoH's purview was said to entail both the health system and community service delivery through the VHSGs. Further, given MoH's mandate, including those of individual departments, such as Health Promotion, MoH was considered to be responsible for preventive and curative nutrition services, and health information and education.

MAFF: MAFF was said to be responsible for the first of the three objectives of the National Strategy for Food Security and Nutrition, 2014-2018: Food-insecure households increase availability and access to food through more productive and diversified agriculture and livestock production, sustainable fisheries and forestry, and from non-agricultural employment and income opportunities (31). According to a MAFF official, the ministry aims to achieve food security through agricultural productivity, diversification, and commercialization.

According to one health-sector government official, MAFF is responsible for ensuring children have quality foods, while MoH is responsible for ensuring these foods are eaten: "They say from farm to fork. Farm is MAFF, and when you come to fork it is MoH."

MRD: Participants identified MRD as the key government body responsible for implementing their number one identified priority action at scale—water and sanitation. One government official clarified that safe water is the role of MRD, and not MoH, while another official from MRD explained the ministry's responsibilities, in comparison to MoH, in greater detail:

We are responsible for the rural water supply, hygiene and sanitation. Anything on prevention, hand washing, safe drinking, and clean environment. But not treatment because treatment is under health. We provide education and behavior change to the people.

- RGC

MoP: Only a few participants—only funders and civil society, identified MoP as having a specific role in nutrition. MoP's responsibility for nutrition was said to be related to food fortification. A few civil society actors mentioned having worked closely with MoP on salt iodization, and the fortification of fish sauce, as examples.

MIF: Because SBCC was one of the prioritized actions for implementation at scale, multiple respondents from all organization groups considered MIF's support critical. MIF was said to be able to help people recognize the importance of addressing stunting by disseminating messages to the general public.

Mass media is important. We need support from the government [because it is] very expensive. They could talk to the owner of each channel, for example CTN [Cambodia Television Network]; the popular ones.

- Civil Society

MOWA: MOWA is not officially a member of the TWG-SP&FSN and does not participate in the NWG, but was cited by select members of all participant groups as an important ministry to engage. This was because of their focus on women and children and their local structures, such as their Women and Child Committees, which could be tapped for service delivery. A government official cited MOWA as being able to engage women in home gardening, which would support household food security and diet diversity.

MEYS: According to participants, MEYS could be utilized in a few ways, such as by integrating nutrition topics into the school curriculum to increase awareness and improve knowledge.

MEYS could also reach girls before they start childbearing:

At 15 or 16 years of age, the girl may drop out of school due to family issue. But when she finds a job or gets vocational training for a job she will already know: 'I have to improve my health or my situation to contribute to my child.'

- RGC

As illustrated by one participant, others saw school campuses as a venue for teaching children skills that could benefit them at home.

Thailand teaches school gardening and we see their malnutrition rates are quite different. There are many factors, of course, but this is one thing they have been doing. Our education manager worked in Pakistan and he said the mothers would come to the school to learn gardening and the kids would go to school, so they targeted both at the same time and that worked really well....Another thing that should be done more is interlinking with WASH. Our programs do hand washing promotion with school children because children are like vehicles for change. They go home and say: 'We did this.'

- Civil Society

Another participant suggested that school campuses could be used as a venue for promoting healthy eating and hygiene practices by placing restrictions on the kinds of food available on school campuses.

Food vendors are allowed onto school grounds to sell food to children. So what are you feeding them? Is it a nutritious meal or not? Do you get the children to wash hands or not before eating?

Civil Society

Parliament: A few participants from all participant groups cited parliament as a critical actor in the response. A government official suggested that parliament has the power to persuade the MoEF to allocate sufficient resources to nutrition, but that for this to happen, parliament must understand and accept the idea that investing in nutrition is critical for the country's economic and human resource development. A funder concurred, stating that parliament can put pressure on the government:

...a champion at the parliament asking results, asking what the ministries are doing. Then maybe we will have the government spending more money on these issues. Like what's happening on HIV. A parliamentarian is asking about what is happening and asking for results. Policy makers are moving more now because they're getting pressure from upstairs.

Funder

The framing of the issue most relevant to parliamentarians related to the economy.

You have to show them the intervention can have a good impact on the economy because they all look at the economy. They want their country to grow, to show people their lives are getting better. They don't want to hear public health results. You will have less stunting. What does that mean for them?

Funder

One civil society actor cited the experience of effectively using parliament in other countries, such as Vietnam. But key would be to find the right parliamentarian committee, such as that for health.

5.1.4 Create Champions

According to a few participants, Cambodia needs nutrition "champions" (the term used by participants) to lead the nutrition response, but according to one government official, none yet exist. Although some individuals, such as Dr. Prak Sophonneary, NNP Program Manager, were identified as leaders, they were said to be focused on their particular aspect of nutrition.

According to a few participants each from government, funders, and civil society, what was thus needed was an advocate of a multisectoral nutrition response. According to a funder, this was someone in the government who was passionate, and a driving force getting everyone to "play together" to coalesce everyone around a shared agenda. Another participant agreed, comparing Cambodia's situation to that of nearby countries:

Someone who says they are willing to fight for this for the next 10 years. ... When I look at Indonesia, Vietnam, Thailand, they all had those champions. Fifteen years back people really were the focal point for nutrition for all the policy makers. That was who people would go to with questions about nutrition. We don't have that in Cambodia. We don't have someone who people say: 'Oh yes that is the nutrition person.'

Civil Society

In response to this gap, a government official suggested Cambodia build the capacity and the involvement of the line ministries. A funder concurred, suggesting that to address the multisectoral nature of nutrition, Cambodia needs a champion per ministry—ideally the Minister him/herself—to support multisectoral coordination. The advocate, according to a few participants, must be a government leader to ensure the government owns nutrition. A government leader was also thought to be more appropriate because of the short-term, project-based tenure of funders and civil society actors.

Champions were also said to be needed at the local level. One funder cited the multisectoral offices being created in districts as a place to house individuals who could serve as the "nucleus for change." This participant recognized, however, that these offices have not yet been implemented sufficiently to serve this purpose.

5.2 Policy Frameworks and Systems

5.2.1 Develop Additional Policies

Despite the range of policy frameworks (e.g., policies, sub-decrees, prakas, and guidelines) in Cambodia, the majority of participants identified that others are still needed. For instance, according to a funder, Cambodia has decrees and circulars, but no legislation, citing Sub-decree 133 on the marketing of breastmilk substitutes. If the sub-decree were a law, this funder believes it would have to be enacted and enforced.

Legislation has more power than any sub decree because it's a law. Nobody can go against the law. If somebody is breaking the law, anybody can go to the police and request a trial. That's more powerful than anything.

– Funder

A few participants called for a Multisectoral Road Map for improving nutrition, rather than sector-based documents, such as the MoH's Fast Track Road Map for Improving Nutrition, 2014-2020. Similarly, a few participants called for a food security and nutrition action plan to guide implementation of the National Strategy for Food Security and Nutrition for 2014-2018. This, as mentioned previously, was needed to help identify feasible actions and ensure they were implemented.

The policies that could support are policies that put in place the targets at lower levels, the resources, and the implementation arrangements are needed. The implementation arrangements aren't very clear on nutrition, so that is something the policy could address. By saying who is responsible for what, where are the integrated planning mechanisms happening at the lower level, who should take the lead there, what are the roles of the different stakeholders, and so on.

- Funder

Meanwhile, a funder from a non-health sector expressed a desire to see current health policies, such as the HEF applied more broadly so all nutrition services—health and non-health—would be covered.

The stunting impacts are really inequitably distributed. I think there are a lot of policies on the health side, such as the HEF. Maybe they could be widened to address other aspects that are necessary to make malnutrition decrease. Social protection and on the sanitation side we have no policies that guide us in terms of who gets assistance or not.

- Funder

To improve delivery on the ground, a few civil society participants stated the need for a growth monitoring strategy, which the government was said to also have identified. Outreach guidelines were also needed, or the finalization and approval of the still pending National Policy on Infant and Young Child Feeding, 2008. This policy is meant to guide community-based

nutrition service delivery and align all partners around a set of standards of practice and pay for volunteers.

5.3 Policy Implementation

To improve the implementation of policy frameworks, particularly the coordination of service and program delivery, and budget allocation, four themes emerged as strategies: 1) improve enforcement and relevance of policy frameworks, 2) establish government oversight, 3) use sub-national funding, and 4) strengthen sub-national coordination.

5.3.1 Improve Enforcement and Relevance

Participants identified many policies that exist in Cambodia to support, protect, and promote young child nutrition, yet a number of participants cited some that were neither enforced nor adequately relevant or feasible to implement. Sub-decree 133 and Prakas 061, which regulate the marketing of breastmilk substitute products, were named as policies that should be enforced. Enforcement of the marketing regulations has recently progressed. WHO, UNICEF, Helen Keller International (HKI), and other partners have been urging the government to establish an oversight board and write guidelines. The IYCF guideline was cited as an example of a policy that needed to be revised because it has expired. This was considered a window of opportunity to address complementary feeding.

5.3.2 Establish Government Oversight

A few participants, particularly government officials, suggested that to reduce duplication of effort and ensure civil society, funders, private sector, and research institutions are aligned with government policies and priorities, including geographic priorities, the government needs to coordinate nutrition-related activities. According to a funder, one way to do so was to restrict actors who do not abide by a set of operating regulations.

We will deny their rights first to sit at the NWG so they will not be able to put in any donor proposal saying they're part of the nutrition working group or have the support of the NNP. You're not going to get money if you're not an MoH partner. If you deny this to them that will make them think. And then, if they don't follow these requirements, they should not have permission to work in this country.

—Funder

According to some government officials, funders and civil society should also be required to have their implementation areas approved by the national program and the provincial level to ensure no one else is already working there, and to reach areas of priority not yet covered. Some organizations do meet with the government prior to selecting sites and implementing activities, but this is not a requirement, and therefore, not all do so.

What you want to do, you come to us. Which OD, which health center, and you have to check whether this already done or not. If already done, don't do it, don't waste time, money.

-RGC

To foster local ownership and sustainability, one government official highlighted the importance of engaging the local level in determining where programs should be implemented.

The sub-national level should have the right to talk with the funding agency to make clear how they can be involved to identify the target area, to identify interventions, to identify how we can coordinate everybody to support the program. We don't want the program to fail when the funding agency leaves the country. We want the program to continue.

—RGC

Some government participants also requested that funders and civil society ensure sufficient scale and coverage. For instance, target the entire health center, or ideally, the entire operational district, and not only a few villages. Although funding may be a limiting factor, such discussions and agreements were also said to be needed with the government prior to implementing activities.

5.3.3 Use Sub-National Funding

To address implementation barriers and ensure sustained provision of nutrition services, participants highlighted that the sub-national level needs to allocate funding to nutrition.

According to a few participants, the lack of standard payments, and the low level of incentives both for health care workers and for VHSGs meant services were not being delivered. To address this, as expressed by one funder, the role of both VHSGs and health care workers in the delivery of nutrition services had to be recognized at the community level.

Bring the commune council into the nutrition space. There is some incentive that the commune council could pay to the volunteer to recognize their job. I think doing this screening of all the children in the community or doing the ANC and PNC, you could give an incentive to the volunteer or midwife who will increase all those interventions.

—Funder

This funder highlighted that this approach had been included as Component 6: Removing Financial Barriers of the Conceptual Budget in the Fast Track Road Map for Improving Nutrition 2014-2018 (126). This costing exercise identified the commune council as the key mechanism for "supporting, co-financing, managing and monitoring nutrition programs" (126).

Because stipends for volunteers were said to come from the Health Center Management Committee budgets allocated by the commune council, participants recognized the MoI as the government body that must push for this change. Toward this, TWG-SP&FSN members were said to be working to raise the awareness, mobilize, and encourage local authorities to respond to nutrition. One government official expressed hope that this effort would lead to funding and local ownership:

In the future, if we can locate some money from the authority or through NCDD [National Committee for Sub-national Democratic Development], the village/community will have ownership, they will make their plan, they will think this is their role and should be improved.

—RGC

Although nutrition needs to be owned and addressed by the local level, and mechanisms exist for the local level to do so, one funder highlighted that the national level is needed to ensure MoEF allocates resources to the districts.

MRD who has no funding, can give a little bit of funding, but it provides a mechanism for the districts to go directly to the MoEF and say: 'We have to deliver on these services, but we need your resources to do so.' The district has to be able to bring together the different services that need to happen. But in order to do that effectively, they would get stuck because there are no funds. That's where the central level can help.

—Funder

5.3.4 Strengthen Sub-National Coordination

A number of participants highlighted that coordination was needed at the sub-national level, even more than at the national one. Some of these participants also stated that mechanisms exist, but were not being used effectively. These participants recommended that the meetings have a clear, strategic agenda and ensure participation by the right actors. Meanwhile, other participants, as explained by a government official, stated that additional structures were needed.

The NCDD is too broad. They try to coordinate everything, but its mission impossible. So within that they have to organize a specialized committee in order to support, advise, and coordinate all partners, including NGOs, public sector, private sector who implement food security and nutrition programs.

-RGC

Most participants who highlighted the need to strengthen sub-national coordination, also suggested that it was the responsibility of the MoI and the Office of the Governor to do so. This was because MoI coordinates the NCDD as well as manages local government structures. A few participants, as expressed by a government official, mentioned that the commune council should be responsible for coordinating the response and ensuring linkages with the health system.

The health system and the administrative systems are different. From health center, it's the health system. Community is the administrative system. The gap is between the health system and the community. The commune council is responsible.

—RGC

5.4 Coordination and Communication

To improve national coordination and communication, the majority of participants recommended strengthening the working group mechanisms—the TWG-SP&FSN and the NWG. In general, participants wanted these meetings to provide the opportunity to set and implement priorities for the nutrition sector, and to reduce the duplication of effort. A few government officials from the non-health sector suggested that the TWG-SP&FSN be used to track progress implementing the National Strategy for Food Security and Nutrition, 2014-2018 and to discuss and overcome any barriers to its implementation. To do so, however, as mentioned previously, these participants stated that this strategy must be supplemented by an action plan outlining the roles and responsibilities of the line ministries and an M&E framework for monitoring progress.

A few civil society actors involved in the NWG also called for monitoring mechanisms to ensure points of agreement were implemented. A number of the participants requested that the meetings set a collective strategy and not simply share who is doing what. One funder expressed it this way:

Everybody is presenting and saying: 'This is what I do. What's your feedback?' But it's not like: 'What are you all working on? What should we work on?'

—Funder

A civil society actor concurred, suggesting that the group have key milestones and goals related to the Fast Track Road Map and orient the meeting discussions around these.

Sometimes during the NWG, someone is just speaking about something. It doesn't go along with the larger picture. So maybe we can reframe that. If someone wants to talk about their work, we can send out an email and those interested can read it and not sit there for two hours. Instead, we all talk about one topic that is in line with the national level plan.

—Civil Society

A couple of participants also suggested that the NNP create a different platform for sharing individual organization or project updates so the NWG meetings could be used for more substantive discussions.

I think what would really help is to focus on what is urgent and important at this point and leave the other issues for a different time or a different way of communicating. We can have a platform for sharing information and if you are interested you can check it.

—Civil Society

5.5 Information, Evidence, and Research

According to a few participants, there is sufficient evidence globally for what Cambodia must do to address young child stunting, but this evidence must be adapted to Cambodia. Rather than proving "again and again" what should be implemented in each country, one funder suggested that efforts should focus on understanding how the global evidence can be applied. Without this understanding, Cambodia cannot be confident it employs the most effective model and appropriately direct its limited resources.

Cambodia needs to design and implement well-planned, monitored, and evaluated pilots. Then, the country can say: 'We've done this, it does this, and it should or should not be rolled out.'

—Funder

A government official concurred that the global evidence must be made relevant to Cambodia: "...we need to contextualize it, to make it work here. It doesn't mean we can copy from any book or any case study."

Linked to knowing what works to support an effective response and wise investments, one government official highlighted the need for M&E of policies and strategies. This would help to ensure they are relevant and suitable to the country's situation, and to know if they have been implemented and, if not, why.

A few participants, particularly government from both health and non-health sectors, and funders, identified an information gap regarding the "who, what, and where" of implementation. For instance, which health and non-health sector activities were being implemented in a particular area and by which organization. Such information would inform decision making and funding investments, and help to ensure appropriate coverage of multisectoral activities where they are most needed in the country. Mapping was identified as a way to address this need.

They have to do the mapping of who is doing what at the provincial level to make sure we don't waste the limited resources we have.

—RGC

Although some sectors were said to have maps of their own activities, one government official suggested that mapping should be done by all working in the nutrition sector. These maps could then be layered on top of one another to provide a fuller picture. This official suggested that this was a topic that should be put on the TWG-SP&FSN secretariat's agenda.

5.6 Summary

Although the majority of participants saw the need to improve current conditions, overall, few identified strategies for addressing the barriers to progress in Cambodia. In general, these strategies were not specific to complementary feeding, but rather focused on addressing nutrition more broadly. The following six actions were recommended by most:

- Frame the issue for both policy makers and the general public using an economic argument and keep messages simple, repeat them, and use multiple channels to disseminate them.
- 2. Engage key government bodies—MoH, MAFF, MRD, MoP, MIF, MOWA, MEYS, and parliament—in the nutrition response, building on their distinct roles and capacities.
- 3. Identify national and local level individuals who can champion a multisectoral nutrition response.
- 4. Develop select new policies, such as a Multisectoral Nutrition Action Plan with an M&E framework, to further support the nutrition response.
- 5. Strengthen national and sub-national coordination by improving the effectiveness of working group mechanisms through the use of strategic agendas, an agreed set of core tasks that are monitored. Further, recognize and utilize MoI's local structures and the Office of the Governor at the sub-national level and decentralize planning and management of nutrition services to the commune level to enhance intervention coordination, effective management, and budget allocation.
- 6. Produce the information and evidence needed to inform and monitor the response.

CHAPTER 6: DISCUSSION AND PLAN FOR CHANGE

Globally, evidence has been generated regarding the causes, consequences, and severity of chronic malnutrition among young children (11, 16, 137). This has contributed to international commitments and partnerships, such as the SUN movement, a shared nutrition agenda, as well as agreement on the need for multisectoral strategies (3, 17, 32).

Cambodia too has increasingly recognized stunting as a significant problem. Despite this, specific policies and programs dedicated to improving complementary feeding and a decline to 32% between 2010 and 2014 in the national stunting prevalence, these efforts have not been as effective as needed (26). Further, as seen in policy documents and in this study's results, stunting as a priority—and complementary feeding as a partial solution—is subsumed by multiple nutrition priorities. Reasons for this are linked to a number of sociopolitical barriers, including a lack of policy community cohesion and shared understanding of the problem and priority solutions. Less than effective guiding institutions and coordinating structures add to the problem. These barriers are similar to many of the contextual factors known to inhibit national action, such as "political will, politics, the regulatory environment, the donor environment (including whether donors coordinate their efforts or act in isolation), and the fiscal environment" (101).

To overcome current sociopolitical obstacles, this study's participants identified six actions, some reflecting experience from other settings as presented in Chapter 2: 1) create and communicate a unified frame; 2) engage key government bodies to represent the multisectoral nature of nutrition; 3) identify national and local level champions; 4) create action plans with

accountability mechanisms; 5) strengthen coordination mechanisms at national and sub-national levels; and 6) generate the information and evidence needed to inform and monitor the response.

The implications of the current conditions and participants' proposed strategies to improve them are discussed in this chapter. Also presented and discussed is a proposed plan for change that goes beyond participants' recommendations, drawing on the global literature, to address identified barriers to progress. The study limitations and suggestions for further research are also presented.

6.1 Discussion

This study found nutrition to be a "wicked problem" in Cambodia (138). Such problems are highly complex with multiple interlinked causes and solutions requiring cooperation among many different stakeholders as well as systemic change to achieve results. They also tend to generate a lack of consensus about priority issues and ways to respond (138).

The most significant challenge identified, at the heart of all other barriers, is the lack of cohesion and consensus among the Cambodian nutrition community. "Disagreements over strategies and interventions, complicated by politics among the actors…are…fundamentally about divergent institutional perspectives and interests" (71). This plays out, for example, in the government's lack of technical capacity and resulting heavy reliance on external actors to provide this assistance. The government does not view all technical expertise equally, preferring the UN specialists over other entities, such as civil society, funders, or universities. Yet, dissonance among the UN agencies, particularly UNICEF, WHO, WFP, and FAO, about which aspects of nutrition are most crucial to address and how to address them contributes to fragmentation.

Insufficient funding available for a national response was another barrier. Many participants perceived funding to be adequate if directed to a clear set of priorities and to the right geographies. As evident in Cambodia, where the bulk of funding for nutrition comes from external sources, donors "can significantly influence a national health agenda through personal or organizational agendas" (86). Donors greatly influence the national nutrition agenda, but also influence who has power, which is highly linked to access to and control over resources in Cambodian society. This is the heart of the patron-client relationship prevalent in Southeast Asia, which entails the patron providing resources and the client reciprocating with loyalty, support, and assistance (139-141). How donors provide funds can also shift alliances and curtail government ownership. Often due to a lack of confidence in government institutions, donors strictly manage financial sources "distorting local priority settings...leading to predominant influence of a few powerful people, mostly donors" (142).

Another constraint identified by funders and civil society was the lack of political will. This is closely linked to the absence of a unified frame. Collaborative leadership is challenging in Cambodia's interconnected patron-client, hierarchical relationships (141, 143, 144). The numerous influencing factors can be seen when trying to understand why study participants were unanimous that improvements in water and sanitation were critical for preventing stunting through complementary feeding strategies. Water and sanitation was selected perhaps because it recently received significant attention in the international literature (39-41), or because of recent evidence from Cambodia (145). Alternatively, it may be because of recent increases in donor funding for this area in Cambodia. It is interesting to note that water and sanitation was top ranked by many health sector government and civil society actors when it is the purview of the MRD and not the health sector. This could be due to a desire, in part, to deflect blame for a lack

of progress because health sector approaches have not been clearly articulated, perceived not to be working well enough or at a large enough scale, or seen not to be sufficient on their own to solve the problem. It may also reflect the underlying current of Cambodian society, which rewards interconnectedness rather than individual contribution, and thus other sectors must also have an important role in the response.

Importantly, some strategies identified as priorities do not coincide with official government documents, such as the Fast Track Road Map for Improving Nutrition. There were also government identified priorities (e.g., food preparation demonstrations) that were rejected by the majority of other participants, and strategies identified as ineffective by some (e.g., supplementary feeding and conditional cash transfers), while receiving support from major donors. Although a lack of evidence was cited as a reason for not selecting a priority, this study confirms experience in other settings that personal and organizational interests have a greater influence on the policy making process (57, 68, 70, 146).

Because the government relies to a great degree on external actors to influence the agenda, it is important to consider whether or not funders and civil society perceive themselves as contributing to the problem. Typically, individuals in such roles consider themselves part of the solution but, in Cambodia, some of their behavior has been counterproductive to improving nutrition at scale. Is this contradiction recognized and understood by these actors? Do they consider whose interests are burdened by their narrow perspective? Such reflection is an important step along the path to change. And change is what is needed in Cambodia. The next section of this chapter presents a framework for doing so.

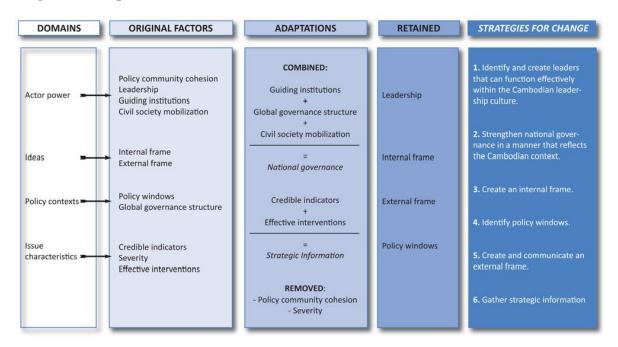
6.2 Strategies to Improve Conditions: A Proposed Plan for Change

Current conditions suggest Cambodia is not yet ready to implement a national response to address young child stunting through improved complementary feeding policies and programs. Although suboptimal feeding practices are recognized as contributing to the country's high stunting prevalence, and although the nutrition community recognizes improvements are needed, stunting has not achieved issue ascension. Rather, nearly all aspects of malnutrition in Cambodia appear to be of equal concern, or if a particular issue is considered a priority, it is by a certain individual or organization and not by the nutrition community as a whole. This reflects Cambodia's highly fractured nutrition community and has resulted in incoherent issue framing and an unfeasible list of priorities toward which the government can align in a cohesive manner and donors can direct their funds.

At this point, it is important to acknowledge that this study's focus on stunting and complementary feeding as a partial solution reflects the priority of the researcher. When required to identify a significant challenge for the purpose of this dissertation, it was the one the researcher thought needed to be investigated and overcome. Nevertheless, effective policy processes require that the community create an issue frame. This plan for change, emanating from the study findings, thus proposes a set of strategies to help Cambodia determine priorities and to unite the community around them. Importantly, it proposes a transparent, inclusive process in which Cambodian society's interconnected, hierarchical, patron-client relationships, as well as existing suspicions, jealousies, and personal and organizational mandates and interests and control of financial resources can be understood, taken into account, and managed. The goal of this plan for change is to: *Create policy community cohesion within the Cambodian context as a mechanism for generating traction toward coordinated action and funding around a set of agreed priorities to address malnutrition at scale in Cambodia.* At times, examples related to

stunting and complementary feeding will be used since this was the focus of this study, but these topics are not proposed as predetermined and agreed priorities may ultimately be different.

Figure 5. Adapted Shiffman's Framework



Shiffman's framework (73), in which 11 factors are clustered within four domains of political priority setting: actor power, ideas, policy contexts, and issue characteristics, provides a relevant platform for organizing the plan for change to address this study's identified barriers (Figure 5). Although developed to analyze international contexts, it was successfully utilized in Vietnam (86), and can be applied in additional national settings. For the purpose of identifying change strategies, the framework was modified. Policy community cohesion was excluded since this is the goal of the plan for change. Also excluded was demonstrating the severity of the issue since Cambodia in general has evidence of the magnitude of malnutrition. Select factors—guiding institutions, global governance, and civil society mobilization—were combined into one, national governance. Credible indicators and effective interventions, two separate factors in

Shiffman's framework, were also combined and are now called strategic information. As such, six factors remain, which are framed as key steps needed to facilitate change. The proposed plan is presented by each factor phrased as the action needed: 1) identify and create leaders that can function effectively within the Cambodian leadership culture; 2) strengthen national governance in a manner that reflects the Cambodian context; 3) create an internal frame; 4) identify policy windows; 5) create and communicate an external frame; and 6) gather strategic information.

Improving the sociopolitical environment requires dynamic solutions that are routinely adjusted to reflect a rapidly changing context and one that, at this point in time, is undergoing unprecedented political and social change. Thus, although the proposed plan is presented linearly (Table 7), the actions needed are interlinked and interactive. The iterative nature of the proposed actions reflects that success is dependent on seizing upon opportunities as they arise. Such openings may present themselves in the international or national context, and may be specific to nutrition or related to broader societal issues and events. Recognizing and utilizing such opportunities requires the capacity to do so, which is a core component of this proposed plan. Furthermore, building such capacity must be the mandate of funders and organizations dedicated to improving nutrition in Cambodia. Toward this, these organizations must recognize that the individuals in nutrition roles may not have the experience and abilities to do so, and thus must draw upon resources from other parts of their organizations, such as policy units. (To disseminate the study findings and facilitate uptake of this plan, the PI, at a minimum, will share a study summary with participants [see Annex 4 for a draft, to be finalized following consultations with stakeholders], to present the results during a NWG meeting as per the group's guidelines, and seek to publish the study in a peer reviewed journal.)

Table 7. Proposed Plan for Change: Creating Policy Community Cohesion

Change Factor	Recommended Actions	Measures of Success
Identify leaders at two levels: 1) mid-level strategic allies/policy entrepreneurs; and 2) champions at high level	 Determine the key attributes of effective leadership in Cambodia Identify strategic allies/policy entrepreneurs and champions per key constituency: political structures (i.e., parliament); technicians (line ministries); budgetary decision makers (MoEF); and civil society Generate donor interest in funding leadership capacity building 	Individuals per constituency meeting criteria and willing to serve as champions and policy entrepreneurs identified; Donor funds committed to leadership capacity building
Strengthen national governance	 Determine capacities needed in Cambodia Strengthen guiding institution's advocacy, leadership, consensus building capacity (and that of identified champions) Revise and utilize the Food Security and Nutrition Training program to build strategic capacity Strengthen effectiveness of formal coordination mechanism 	Guiding institution and identified champions' advocacy and leadership capacity strengthened; Coordination mechanisms routinely meeting and allowing widespread participation; Current FSN training curriculum revised to reflect governance strengthening goals
Create an internal frame	Build connections and consensus within and across each group—government, funders, and civil society on 1) decision-making process; and 2) the definition, causes and solutions to the problem	An agreed to frame for decision-making and for nutrition; Strengthened social capital within and across nutrition sector stakeholder groups
Identify policy windows	Identify upcoming policy windows of opportunity to rally all donors around a common agenda (e.g., SDGs, revision of COMBI)	Policy windows identified and utilized to build consensus and communicate the frame
Create and communicate an external frame	 Determine appropriate framing for key constituencies by conducting Opinion Leader Research Create and communicate the frame, highlighting the problem, the solution, and who must do what, when 	Develop and convey overarching message and sub- messages and create opportunities to convey them to budget holders at national and sub-national levels
Gather strategic information	 Review existing evidence and create research and evaluation plan to fill gaps Add questions to existing evaluations (e.g., NOURISH) Pilot nutrition surveillance study Create maps that overlay data with activity 	Literature review produced; Research and evaluation plan developed; Nutrition Surveillance Survey piloted in one province; Maps produced and used to plan, identify

Change Factor	Recommended Actions	Measures of Success
	• Update national data profile; develop for	priority geographies, and
	provinces (used to plan and to	monitor progress; National
	communicate/frame)	and provincial profiles
		produced

6.2.1 Identify and Create Leaders

Strong leaders who spearhead advocacy and mobilize the community around a unified vision and response, thus overcoming community fragmentation are needed at two levels: 1) strategic allies or policy entrepreneurs, who are mid-level technicians that can operate behind the scenes; and 2) champions, who are high level government officials, such as ministers, as cited by study participants (8, 18, 57, 77, 83).

Strategic allies are individuals who instigate and manage, at least initially, the change process. To be effective, these allies must have certain characteristics and abilities. They must first and foremost be self-directed, self-identified, and motivated to create change for the greater good. Yet they must also be willing to take risks and purposefully work behind the scenes so that their individual efforts go unrecognized. Such "backseat" efforts, while critical if real change is going to be achieved in Cambodia, are against the current practices of most partners, donors, and NGOs in country who are jockeying for credit for themselves, for those they fund, and/or for access to resources. These change agents must be able to step outside their own organizational mandates and work for nutrition and, broadly speaking, for Cambodia. They must also have the time, or be allowed the time by their organizations, to invest in relationship building.

Furthermore, such individuals must be considered trustworthy or able to build trust within the community that they can and will "do the right thing." Strategic allies must also be viewed as credible, both in nutrition technical content and in policy processes, and well versed and able to effectively operate within Cambodian socio-cultural norms and expectations. Importantly,

strategic allies need not be those already identified as nutrition leaders or in nutrition leadership roles in country since these individuals may not have been selected based on the capacities and traits described. This means that these allies must also be respected by and able to work with current leadership. Anyone who cares about nutrition and addressing it in a more aligned and cohesive fashion will be revealed as an ally through their interactions and behavior. Ideally, allies will foster additional allies and momentum will grow.

Nutrition sector champions are the second set of leaders needed. Having leaders at this level is aligned with Cambodia's highly hierarchical, patron-based societal structure in which leaders have significant power and influence (141, 143, 144). Particularly important, as identified in other settings, such as Bolivia (83), is having strong leaders at each level of the government system. This too is aligned with Cambodia's social structure, where a patron-based relationships exist at every level. Because nutrition is multisectoral, political entrepreneurs are also needed within each relevant sector. Combined, this means Cambodia must identify champions per key constituency: 1) politicians (i.e., parliament); 2) technicians (i.e., in each relevant line ministry); 3) budget holders (i.e., MoEF and in the Office of the Governor at provincial level); and 4) civil society.

Determining from which constituency to draw leaders is one step in creating nutrition champions. Another is identifying the right individuals to serve as champions. Because the nutrition sector reportedly has not fully accepted those currently in leadership roles and these individuals have been unable to unify the community, this step is of utmost importance. There is a significant body of literature on the key characteristics of effective leaders (147-151). There is also a growing body of literature and research on nutrition leadership (18, 84, 138). Drawing from this, champions must be motivated, knowledgeable, and able to coalesce a fractured policy

community. They also need to be well-connected and have a deep understanding of the relevant stakeholders as well as insight into these stakeholders' perspectives and how to adjust the frame to bring them on board.

Emerging Cambodian leaders will be most effective if they are able to bridge these attributes with the country's highly interconnected, patronage-based, hierarchical culture. This makes leadership as defined internationally difficult to achieve. For instance, champions must simultaneously be respected while not being perceived as better in some way by those they lead. Given the importance of relationships in this society, leaders must also be capable of building rapport and trust. Typically this is done through patron-based networks, which are seen as offering protection, but not trust per se (141). These context requirements highlight the importance of creating a set of nutrition leadership attributes for Cambodia that can be used as the basis of champion selection. As the right individuals emerge, because many are unlikely to have the leadership capacity needed to serve this function, their capacity must be strengthened and donor funding is needed to support this effort. (More on capacity building is discussed below.) As recommended by the 2008 Lancet series, DPs who seek to improve nutrition in country must recognize the importance of investing in capacity strengthening and align their support in a more coordinated fashion, independent of project support (81).

6.2.2 Strengthen National Governance

Although the involvement of the executive office was a critical component of nutrition progress in a number of settings, including Brazil, Peru, and Bangladesh, it was not a sufficient condition in Cambodia (82). Despite the Prime Minister having named CARD the country's nutrition coordinating body and assigning the Deputy Prime Minister as Chair of the TWG in 2012, as this study found, stakeholders have not fully accepted or given CARD the authority

required to play this role. The TWG too was perceived as less effective than needed to overcome the community's fragmentation and individual members' efforts to control the issue.

As with champions, guiding institutions need the capacity to lead and to manage coordination. They must have the ability to effectively generate political will and a shared agenda, to establish and manage partnerships across sectors and stakeholders, and to lead a coordinated process of planning and implementing multifaceted strategies (18, 70). Capacity to build consensus is also critical, which is discussed in the next sub-section. As a first step, Cambodia needs to determine the right "home" for nutrition. Subsequently, the DPs need to galvanize the UN to shift its focus from policy making and message delivery to strengthening this government body to serve as Cambodia's guiding institution for nutrition and to effectively manage the TWG and the SUN coordination mechanisms. As previously highlighted, this may require not only a shift in how the UN works with the government, but also who from within each organization is dedicated to this task, since it is likely to require individuals with policy formulation and capacity building skills rather than only nutritional technical expertise. Most UN agencies are likely to have such capacities in country, but not necessarily yet directed to this effort. Once the guiding institution has sufficient capacity, it must then build similar capacity at the subnational level where a sustainable and effective nutrition response is urgently needed. This means Cambodia's guiding institution requires both the capacity to lead and to transfer such capacities to others.

A prerequisite to building "strategic capacity (71)" in Cambodia is defining a set of advocacy competencies needed by a guiding institution and the identified nutrition champions. These competencies, particularly fostering effective, collaborative relationships and generating consensus, should be drawn from the literature on building nutrition advocacy (70, 71). Yet,

similar to adapting international leadership attributes to the Cambodian context, advocacy competencies must also be adapted to the country's socio-cultural norms. For instance, in Cambodian society, equilibrium is important. This means that groups with low levels of trust among members quickly assign blame, possibly removing the scapegoated individual. By contrast, a close-knit group will work hard to find a common perspective (152).

Building capacity also requires a comprehensive set of strategies—training, on-the-job coaching and mentoring, and supporting Cambodia to learn from other countries' experiences (57). But these approaches must be adapted and adjusted over time, rather than simply replicated. Bringing in multiple international, independent experts, as suggested for supporting consensus building below, is one mechanism that can be used for ongoing mentoring support. It also requires donors to prioritize such capacity building and align their support toward it. A concrete action needed is to revise the existing curriculum targeting national and sub-national decision makers implemented by CARD's nutrition training pool, which currently focuses too narrowly on project design, implementation, and monitoring skills. It needs a clear set of objectives for strengthening strategic capacities (as well as on serving as a vehicle to disseminate the internal frame and develop plans for action) at national and sub-national levels. Some of these revisions were also called for in the 2014 National Progress Report on Food Security and Nutrition (47). If Cambodia were to develop this curriculum, it would be a significant contribution to global nutrition advocacy efforts.

6.2.3 Create an Internal Frame

Multiple goals, a lack of focus and a lack of consensus within nutrition communities is a well-documented barrier to creating an internal frame to steer the nutrition response. As identified in other studies (57, 68, 146), this situation in Cambodia stems from competing

personal and organizational interests. To overcome this barrier, Cambodia needs an internal frame regarding nutrition priorities and responses. But before this frame can be developed, as found in Bolivia, Cambodia needs a frame for multi-stakeholder decision making processes (68).

In recent years, there has been a push for a new way of operating. Many donors have shifted to a country-centered approach, and a number of declarations (Paris and Accra) (21), as well as the SUN movement, have set an international norm for country-owned, partner aligned development. Cambodia must capitalize upon this shift and apply incentives or disincentives leading each stakeholder to recognize the need for and to adopt practices that allow for a collective effort.

A major culprit in Cambodia for not aligning behind a country-led response is the donor community. Currently, multilateral and bilateral donors give conflicting signals, have mandate gaps, and fund multiple, parallel activities, leaving their partners, primarily international NGOs to follow their mandate and not that of the government. As identified by this study, this situation is particularly true for the UN. The government highlighted the lack of coordination, mandate gaps, and funded parallel activities across multiple government bodies among UN agencies. In addition, Cambodia has the advantage and disadvantage of thousands of small, privately funded primarily local NGOs working to improve nutrition, bringing in critical resources, but often spending them in ways that are uncoordinated and in conflict with existing policies and priorities. There is an urgent need for donors, the UN, and NGOs to help simplify and unify the nutrition response and to ensure a collective effort that supports the government. To do so, it is imperative to identify the actors who are willing and who have the power, respect, incentive, and authority to coalesce around and promote this new country owned and partner supported norm.

As in Guatemala (68), this could be done by gathering stakeholders' perceptions of a good policy

making process. Dialogue with stakeholders could determine the key principles needed for the process, such as "focus on securing common interest (68)," the desired results from a good process, who would be willing to participate, and if they would be willing to accept the decisions resulting from such a process.

For civil society, in addition to having their donors aligned behind a government-owned and led response, incentives and disincentives to cooperate could be put in place. Positive pushes may involve government recognition, such as government medals and awards. Disincentives could come in the form of operating restrictions as well as reporting requirements. Such disincentives exist, though are not always enforced. With the passage of the Law on Associations and Non-Governmental Organizations (LANGO) in August 2015, the government now has greater latitude in controlling NGOs' ability to operate in country, and this disincentive becomes a greater threat.

To create the second frame addressing nutrition priorities and solutions, the existing divergence among government, donor, UN, and NGO priorities would need to be mitigated. This requires consensus building, identified as an effective strategy in the literature review of Southeast Asia presented in Chapter 2. Such a process must allow each actor/organization to reexamine its own priorities and offer space for frank, challenging dialogue (81). This process must also generate a sense of trust among actors, allowing issues of true significance to rise to the top without prodding from self-interest, ultimately aligning the community around a common agenda and a clear set of actions that facilitate a multisectoral response.

As presented in Chapter 2, based on experience in the region, consensus can be fostered in a number of ways. Building on the Vietnam experience of pairing a national government leader with an international expert, Cambodia will benefit from pairing with a group of experts,

given historical practice (86). Because of the discord and lack of confidence within and between funders and civil society in Cambodia, it is critical to identify experts who are both considered neutral and credible. Particularly important in this setting is identifying people inside and outside of government who are relationship builders and readily cultivate a sense of trust. Perhaps pooled funding could be used to hire external consultants to co-facilitate this process, with a selection committee comprising representatives of key stakeholders.

A second strategy involves gathering and communicating information and evidence (87, 88). The provision of evidence is not a sufficient condition for consensus building (71), but it can be used strategically to draw attention to the severity and magnitude of the problem and to effective solutions. This is discussed further in Section 6.2.6 below.

Another strategy, given that Cambodian cultural norms restrict public criticism and disagreement, requires providing opportunities and channels for individuals and organizations, regardless of their power, to safely engage and find common ground. The formal coordination mechanisms do not yet afford this opportunity, not only because they lack focus and a strategic agenda, but also because they do not necessarily create the needed space to discuss, debate, and reach consensus on topics beyond technical matters. Thus, it is necessary to utilize alternative channels, such as those established as part of SUN.

In May 2015, Cambodia established the SUN civil society network. This development is an important step in building community cohesion among civil society actors where currently the community is dominated primarily by large, international organizations. HKI was named civil society lead and in this role must ensure all members of civil society, regardless of their size, geographic coverage, or funding levels, have an opportunity to be consulted and engaged. This effort could serve as one incentive for smaller NGOs to align with the larger agenda. HKI also

has the mandate to broaden the participation of civil society, drawing in networks (e.g., a burgeoning Phnom Penh based breastfeeding network) and associations. Also important to consider—to broaden local ownership and leadership—is for HKI to mentor a local organization that can assume this convening role following HKI's two-year tenure.

Finally, to create an internal frame, Cambodia could implement several coordinated, multisectoral responses with a core set of priorities in a few provinces. These would require strong monitoring and a mandate to adapt the response adjusting for the unintended consequences (both negative and positive) that always result from implementation. As these efforts evolve, they can be profiled as examples, generating recognition, interest, and momentum. Serving as a "tipping point (153),"—a small change in the system—these efforts can spread to become the norm rather than the exception.

6.2.4 Identify Policy Windows

Windows of opportunity are moments in time that provide an opening for change. To result in change, these windows converge problem identification and recognition, a policy community proposing alternatives and a course of action, and the political stream accepting and adopting it (71, 154). Sometimes such windows cannot be predicted, while at other times they can be created. This means Cambodia's guiding institution and identified leaders need the capacity both to recognize and to create such opportunities. Also needed is the ability to utilize windows to push an agenda and rally the community to act. Three potential windows of opportunity are considered here—the soon to be revised Communication for Behavioral Impact (COMBI) Campaign to Promote Complementary Feeding in Cambodia strategy, the Sustainable Development Goals (SDGs) launched globally in September 2015, and a possible upcoming national nutrition conference.

COMBI is a communications strategy for complementary feeding, which requires a multisectoral response. Although technical in nature, if its revision were to employ a collective, inclusive strategy—engaging all relevant ministries and related actors—it would afford the nutrition community the opportunity to bridge sectoral boundaries. Such an effort is important because, as found in this study, the community recognizes the need to employ a multisectoral, coordinated effort to improve complementary feeding, but does not yet know how to do so. This approach necessitates pushing the process past the purview of MOH and into that of other actors as well. This would allow Cambodia to develop an overarching set of complementary feeding messages and strategies that are then tailored and delivered by different sectoral delivery channels, such as VHSGs and health staff for health and field extension agents for agriculture, rather than only by MOH and NGOs as historically done.

Although the MDGs were criticized for causing some of the lack of prioritization and clarity at the international level (81), they served as a mechanism for holding countries accountable for development progress. When the MDGs were developed globally, Cambodia adjusted them to reflect the country's situation, adding stunting and wasting targets. Although Cambodia's targets were not fully achieved, such a process is an important part of priority setting. Regardless of whether the international community is able to adjust the goals, indicators, and targets of the SDGs sufficiently to address the identified drawbacks, a strategic process of adapting them to Cambodia—and identifying the core strategies needed to achieve the specific goals and targets identified—could help the country focus its nutrition response. Cambodia-specific SDG goals, indicators and targets, developed jointly by government actors identified as critical to the response in the March 2015 National Nutrition Conference Declaration would then serve as a mechanism for holding the country accountable both nationally and on the global

stage. This latter point is important as international recognition is a useful incentive for progress. Cambodia received tremendous positive recognition, including an MDG award, for having achieved its targets for HIV well before 2015 (155). The potential for such attention could serve as an incentive for generating realistic goals and targets and aligning strategies toward them for this next round of global commitment.

Fora are needed where stakeholders can publicly state that they embrace the countryowned, country-led approach and explain how they will support components of Cambodia's
newly framed nutrition response. Such fora also provide the government the opportunity to hold
these actors accountable to their commitments. A potential national nutrition conference said to
be planned for November 2015 could serve this function. Although there was a National
Nutrition Conference conducted in March 2015, it was not as effective as needed. There were no
stated objectives for this conference, and although early drafts of the agenda included stunting in
the conference title, the focus was watered down to nutrition broadly. Further, although there
was a session in which government actors were asked to publicly declare their commitment to
nutrition, there appears to have been no resulting budget allocation. As such, this subsequent
conference could encourage the government to share its priorities and to put donors, the UN, and
other important stakeholders in the proverbial hot seat.

6.2.5 Create and Communicate an External Frame

Focusing attention on an agreed-to priority, raising its visibility and generating resources to address it, requires conveying it in ways that resonate with key constituencies who are external to the nutrition sector. This portrayal must not only clearly outline the problem and solution, but also articulate what each targeted actor can do. Because Cambodia relies heavily on donor funds, and the lack of government funding allocated to nutrition was identified as a barrier by this

study, MoEF and subnational leadership are the priority stakeholders for framing efforts. (Once Cambodia has an internal frame, external donors would be expected to direct their support to identified priorities.)

Although the link with economic growth was identified by this study as a useful frame to use with non-nutrition actors, participants were drawn from the nutrition arena. As such, what they consider an effective frame may not resonate with non-nutrition constituents. As an illustration, despite global evidence demonstrating nutrition as a "best buy (3)," and national evidence on the cost of malnutrition (15), as well as the amount needed for the health-sector response alone (126), to date, no significant funding allocation has been made. It is unclear if this is because communications have not effectively reached MoEF, or because they have been insufficiently focused, did not convey an "ask," or if it is because the frame itself was inappropriate. Given the limited availability of public funds, from MoEF's perspective, ensuring the most cost-effective interventions are mobilized and used appropriately to achieve desired outcomes may be of utmost importance. Meanwhile, for elected officials, visible results may resonate better. To create a truly effective external frame there must be an inclusive, collective process, and, as discussed in the recommendations for further research section, more must be understood about the perspectives of key constituencies. Such perspectives could be gathered through Opinion Leader Research as conducted by Alive & Thrive in a number of countries to identify the framing, audience, and channels of advocacy messages. Once developed, this narrative must be conveyed through multiple channels, including strategic communications and policy windows.

6.2.6 Gather Strategic Information

A systematic review of Cambodian studies found that the country lacks sufficient research examining implementation effectiveness and scaling up (156). This was particularly true for nutrition-related research, which accounted for a very small proportion of health-related articles published between 2000 and 2012, of which only one-fifth provided actionable policy-related recommendations. This finding, similar to the literature (8, 60, 62), corroborates the findings of this study, which calls for greater localized evidence and more routine collection and use of data. Both would help set priorities, contribute to policy making, and ensure the efficient use of limited resources; however, they would only be as effective as the process undertaken. To date, the conduct of research and documentation are led by the same organizations controlling resources and the nutrition agenda. Thus, it is critical that this effort be inclusive and transparent.

An important criteria identified by this study for the Cambodian nutrition community to choose an action to implement at scale was whether it was evidence-based, yet there was said to be insufficient Cambodia-specific proof of concept. The desire for country-specific evidence reflects effective policy making processes in Southeast Asia as reviewed in Chapter 2. Yet, as also highlighted in the literature, a lack of evidence can be used as a barrier to progress, and as such, having in-country evidence should not be a prerequisite to action (57, 71). To determine what evidence is missing, a review of both published and grey literature—program and project reports and studies—to see what is known in country in needed. Lessons can be applied and a research and evaluation plan for filling identified gaps can then be developed.

Since 2008, the literature has urged more funding be directed to conducting rigorous impact evaluations, particularly those that incorporate cost effectiveness and cost benefit analysis to make the case for and focus investments (60, 81). Such evaluations, along with

implementation research, would allow Cambodia to learn both from success and failure, and facilitate uptake of evidence during project design and implementation (81). While the community creates a research and evaluation plan, Cambodia can take advantage of planned studies, such as that for USAID's NOURISH project, ensuring the questions needing to be answered are included.

Routine data are not collected with sufficient frequency in Cambodia, despite such data being an important component of a national multisectoral nutrition response (82). These data are critical to help ensure the evidence-base is being applied appropriately and effectively, that coverage gaps do not exist, particularly coverage of multisectoral nutrition programming, and allow the community to assess progress and adapt programming more regularly. Such data are also particularly important for generating interest and action at the sub-national level (73, 88). Currently, some key nutrition and IYCF indicators are within the HMIS, but they are neither routinely collected nor reported, while other indicators are omitted. Data for the nutrition indicators added to the HMIS in 2014 are not currently demanded as part of routine (monthly) reporting. Including this information in monthly reports from health facilities (health centers and hospitals) would be a simple and important first step in providing essential routine information on nutritional status and service delivery to decision makers. In addition, developing reporting tools for community and facility-based IYCF service delivery that is reported up from the operational district level would help to fill the gap on feeding practices. (A similar approach is employed by the HIV sector.) Another option is a national nutrition surveillance system that collects routine data, as employed in other countries (87). Annual surveys in one or more provinces to capture additional data and those who are less frequently reached by health services or community level IYCF service delivery could also be employed and be used to demonstrate

the feasibility and utility of such a system. These approaches combined would give Cambodia the ammunition needed to advocate for funds to expand.

Yet, not only do such data need to be collected more routinely, they also must be conveyed in meaningful ways. For instance, capacity is needed to help prioritize where to work and which specific problems to address in each locale; visual tools, such as maps, could be created. These maps could overlay nutrition, hygiene, and agricultural status and practice data with information regarding where and what each sector delivers. Using these maps, the government could invest its own resources and direct donors to the geographies where the issue is most severe, and to support sectors to work together where needed. Maps at both the national and the subnational level are needed.

Another useful tool for highlighting needs, tracking progress, and conveying the frame are "profiles." These profiles, similar to those produced at the national and provincial levels in Vietnam with technical and financial support from Alive & Thrive, would provide an overview of the situation—including up-to-date nutrition and IYCF data—and the current response being implemented.

6.3 Study Limitations

There were a number of potential study limitations. Having only one author could have introduced bias into the interview process, transcript coding, and the presentation of the findings. In addition, the PI both came with a predisposed bias regarding the importance of stunting and complementary feeding as a partial solution, and gradually engaged in professional nutrition-related work in Cambodia over the study period. As a result, the researcher lost some of the "outsider" (etic) perspective. The tension between etic and emic (insider) viewpoints is well noted in qualitative research (157). The etic approach relies on existing theories and frameworks

to guide the inquiry, while an emic one uses the words of the participants to derive concepts. To reduce the subjectivity stemming from the PI's growing personal perspectives and experience, despite the initial emic approach, concepts and themes are heavily influenced by participants own words. Doing so is a recommended approach for reducing potential bias (157, 158). To triangulate findings, secondary documents were also employed. Further, as noted in the plan for change section, recognizing the slant toward stunting as the most pressing problem for Cambodia to address, proposed solutions are for generating nutrition priorities and are not focused on action specific to this issue.

In qualitative research, key informants are selected because of their expertise, experience, and opinions related to the research topic. To ensure participants met these criteria and would make meaningful contributions, a systematic process of identifying organizations was undertaken. Representatives of organizations invited to participate were sampled based on the membership/participation lists of the two primary nutrition-related working groups in Cambodia. This study's participants are considered experts and the current leaders of nutrition policy making, programming, and research in country. True to this, most were able to answer questions that drew upon their past experience and knowledge, particularly related to how the government works. Yet, as made evident by the study results, aspects of participants' knowledge and capacity key aspects of nutrition was limited, which resulted in the majority of participants unable to respond to all questions at the level required to fully answer this study's questions. In particular, the majority of participants did not have a deep understanding of issues related to complementary feeding, or ideas about how to address existing sociopolitical barriers to nutrition progress, as illustrated by few participants offering suggestions for improving current conditions. That participants were unable to respond fully reflects the broader context of Cambodia, and while

limiting the results of this study, points to the importance of building nutrition technical and structural capacity in Cambodia.

Similarly, bias may have been introduced by non-participation. Of the 51 organizations invited for an interview, 9 did not participate. Three of these were from the NWG, and six from the TWG-SP&FSN. Of the nine, five were from government, which may have affected study findings. The reason given for not participating was that their scope of work was irrelevant to the study topic. If this is the case, any bias introduced by non-participation is minimized. Of note, no one from the MEYS, identified by participants as influential in the nutrition sector, participated. This was the only ministry identified as important that was not part of this study. Representatives of the four ministries said to be most influential and responsible for nutrition— MOH, MAFF, MRD, and MOP—were interviewed. Given this, the lack of participation of segments of the government may not be of significance, yet it is a possibility that must be considered. The remaining non-participants, all civil society, did not refuse to participate; rather, the interview was not able to be scheduled during the data collection period. This lack of participation is unlikely to have significantly affected the study results because civil society was well represented in this study. Further, there is no reason to believe these organizations would have dissimilar viewpoints on the issues. This does, however, remain a possibility.

Response bias was another potential limitation of this study. The majority of participants discussed barriers to progress and to a lesser degree strategies for improvement. This was somewhat surprising given that Cambodian cultural norms view failure as shameful, and as a result, people seek to avoid criticism (135, 159). That the bulk of responses related to challenges and not solutions may be due to the way questions were formulated, including the barriers card ranking exercise. Alternatively, perhaps it was because of the rapport built between the PI and

the participants during the face-to-face interviews, or because the PI was viewed as a nutrition community outsider. In Cambodia, outsiders are frequently trusted more than members of one's community. This is thus what may have led participants to speak freely during the interviews, discussing perceived challenges in detail, even those they themselves noted as sensitive.

6.4 Recommendations for Further Research

Despite improving political will and the promulgation of policy frameworks, due to a number of sociopolitical factors, Cambodia is not yet ready to effectively reduce its burden of malnutrition. The results of this study have implications beyond Cambodia. The findings contribute to global learning regarding the barriers to a national nutrition response, as well as strategies for creating policy community cohesion in a multisectoral development arena. Such strategies, drawing from those proposed by Shiffman and others (70, 71, 74, 82), entail identifying and creating leaders, strengthening guiding institutions and coordination structures, identifying policy windows, creating internal and external frames, and gathering strategic information.

The findings from this study also highlight the need for further investigation. Particularly important is the exploration of how cultural and national traits can and need to be handled strategically and sensitively to address the sociopolitical barriers as identified by this study. Highlighted previously, understanding local definitions of leadership, for example, would help countries apply recommendations emanating from the global literature.

Further research is also needed in Cambodia. As Cambodia continues to tackle nutrition, and ideally as it applies at least some of the strategies outlined in this study's proposed plan for change, it would be beneficial to evaluate progress using a developmental evaluation approach (160). Developmental evaluation examines change as it emerges within complex environments

(or with "wicked problems (138)"), and accounts for numerous interacting and interdependent elements and nonlinear dynamics. This type of evaluation entails gathering real-time data, providing needed information for ongoing decision-making, and adaptive management. It thus provides a second "loop" of information, going beyond problem and solution identification, as done in this study, to "questioning the assumptions, policies, practices, values, and system dynamics that led to the problem in the first place, and intervening in ways that involve the modification and underlying system relationships and functioning" (160). One form of development evaluation that should be considered is a prospective, embedded, participant-observer, action-research study as was conducted in Vietnam (86).

Another needed study entails examining the efficacy and effectiveness of past and current programming, as well as assessing the implementation processes. Such an assessment was beyond the scope of this study, but doing so would fill key gaps and help the country prioritize which actions should be implemented at scale. The need to study the effectiveness of currently known solutions was highlighted by the 2003 Bellagio Conference on Child Survival (90). Participants criticized the focus on developing new technologies when two-thirds of child deaths could be prevented by known/available interventions. They thus recommended research on the "delivery and use of existing technology...breaking bottlenecks in delivery and utilization" (161). The need for impact evaluation as well as implementation research was further highlighted by the Lancet 2008 series (81), and WHO more recently confirmed the need to better understand "program quality, coverage, context, resource use, and delivery platforms" to inform policy making and programming (59).

Research that entails broadening the scope of this study to include participants from three key constituencies—non-nutrition actors, such as parliamentarians, the private sector, and sub-

national level actors would also have merit. A more inclusive framework is needed in Cambodia, one that draws on the experience and perspectives of these actors to generate solutions. This is of import because increased attention may depend on coalitions that extend beyond technically-oriented actors (162). Further analysis of the sub-national level is also warranted; in particular, an analysis of the current conditions related to political commitment and recognition, policy implementation, coordination and communication, and research and evidence and how these conditions can be improved. Such a study could compare provinces where young child stunting has improved over the years to those where it has not. Learnings from such a study are of import given decentralization and the role district and commune leadership have in setting priorities and allocating funding. It would also contribute to understanding how to translate the improving conditions to implementation. These findings would be of benefit beyond Cambodia as well.

6.5 Conclusion

Since March 31, 2015, the end of this study's data collection period, Cambodia has continued to demonstrate its commitment to addressing malnutrition. This can be seen by the development of the terms of reference for the oversight board and implementation guidelines for Sub-Decree 133, the national code on the marketing of breastmilk substitutes, and by Cambodia signing-on to the Zero Hunger Challenge. Despite these steps, until Cambodia addresses the sociopolitical barriers that have hindered greater success, in particular, the lack of policy community cohesion and clarity of focus, it will be difficult for the country to achieve sufficient scale and coverage of an effective nutrition response.

As seen in Cambodia, and similar to other contexts as noted by Pelletier, nutrition communities recognize that successful country-level efforts require sustained political commitment, sufficient financial resources, strong multisectoral, multi-stakeholder and multi-

level governance, and technical, managerial and implementation capacity (57). Also seen in Cambodia is that for an effective multisectoral nutrition response, consensus on how to make decisions as well as on the decisions themselves is needed (62). SUN also highlights the importance of country-owned and directed nutrition responses, requiring that all partners—donors, the UN and NGOs, align behind the government's priorities. As proposed here, doing so requires such actors to step beyond their organizational mandates and personal interests to collaboratively build Cambodia's capacity to lead its own response. With this capacity to lead, and with a strong guiding national institution, Cambodia can effectively utilize external technical and financial assistance to define priorities, champion the cause, and frame and communicate the issue to demonstrably to reduce malnutrition.

APPENDIX 1: KEY CONSTRUCTS

Terms	Definitions	Source		
Nutrition-related	Nutrition-related			
Chronic malnutrition	I time Inadequate nutrition over long periods of time			
Complementary feeding	A "complex set of behaviors, comprising the timing of introduction, food choices, and dietary diversity, preparation methods, quantity, feeding frequency, responsiveness to infant cues, and safe preparation and storage of foods." It entails the use of age-appropriate, adequate and safe solid or semi-solid food in addition to breast milk or a breast milk substitute. The process starts when breast milk or infant formula alone is no longer sufficient to meet the nutritional requirements of an infant. It is not recommended to provide any solid, semi-solid or soft foods to children less than 6 months of age. The target range for complementary feeding			
is generally considered to be 6–23 months. An infant receives only breast milk. No other liquids or solids are given – not even water – with the exception of oral rehydration solution, or drops/syrups of vitamins, minerals or medicines. WHO and UNICEF recommend that infants should be exclusively breastfed for the first six months of life to achieve optimal growth, development, and health. Thereafter, infants should receive nutritionally adequate and safe complementary foods, while continuing to breastfeed for up to two years or more.		WHO, Media Center Factsheets		
Infant and young child feeding (IYCF)	Term used to describe the feeding of infants (less than 12 months old) and young children (12–23 months old). Optimal infant and young child feeding entails: 1) early initiation of breastfeeding with one hour of birth; 2) exclusive breastfeeding for the first six months of life; and 3) the introduction of nutritionally adequate and safe complementary foods at six months together with continued breastfeeding up to two years and beyond.	WHO, Media Center Factsheets		

Terms	Definitions	Source
Malnutrition	A broad term commonly used as an alternative to 'undernutrition', but which technically also refers to overnutrition. People are malnourished if their diet does not provide adequate nutrients for growth and maintenance or if they are unable to fully utilize the food they eat due to illness (undernutrition). They are also malnourished if they consume too many calories (over-nutrition).	
Nutrition sensitive programs and approaches	Efforts that directly indirectly to nutritional outcomes and tend not to have nutritional improvements as their aim (e.g., agriculture and food security, women's empowerment).	Black, et al., 2013; WHO 2013
Nutrition specific interventions and programs	These efforts, also called direct nutrition interventions, directly contribute to nutritional outcomes and have nutritional improvements as their aim (e.g., micronutrient supplementation, breastfeeding promotion)	Black, et al., 2013; WHO 2013
Undernutrition An insufficient intake and/or inadequate absorption of energy, protein or micronutrients that in turn leads to nutritional deficiency. Stunting, wasting, and deficiencies dessential vitamins and minerals (referred to as micronutrients) comprises undernutrition.		Black, et al., 2008
Scaling-up relate		
Agenda setting	Agenda setting is the first step in the policy making process, and is followed by identifying alternatives, choosing among alternatives, and implementing the decision. A government agenda is the "list of subjects to which government officials and those around them are paying attention."	Kingdon, 2012
Enabling environment	A political and policy process that builds and sustains momentum for effective implementation of actions that address a problem	Gillespie, et al., 2013
Evidence-based interventions	Evidence-based Interventions that have been evaluated and considered efficacious (internally valid) and/or effective (eternally	
Implementation science The study of methods to improve the uptake, implementation, and translation of research findings into healthcare policy and practice.		Padian, et al., 2011; Peterson, et al., 2012
Leadership	Leadership entails creating a vision of the future and identifying and implementing strategies needed to produce change to achieve the vision. It also entails "aligning people", creating consensus, "commitment to and momentum" for change, and "motivating and inspiring" people to keep them moving forward to achieve the vision.	Kotter, J. 2001

Terms	Definitions	Source
Political Priority	Political Priority "National political leaders publicly and privately express sustained concern for the issue; the government, through an authoritative decision-making process, enacts policies that offer widely embraced strategies to address the problem; and the government allocates and releases public budgets commensurate with the problem's gravity."	
Scaling-up The ambition or process of expanding the coverage of health interventions		Manghan, et al., 2010

APPENDIX 2: INTERVIEW CONSENT FORM

Introduction/Purpose of research

Thank you for agreeing to meet with me today. As I mentioned in previous communications, I am conducting this study as part of my doctoral studies at the University of North Carolina in the United States. The purpose of this research study is to identify the barriers and facilitators to scaling up complementary feeding in Cambodia and the actions needed at local, provincial, and national levels to address Cambodia's high rate of child stunting. To gather information, I will be talking with policy makers, donors, and nutrition implementers.

Research Procedure

Today's discussion should last approximately 1 to 1.5 hours. I have a list of questions I would like to ask you today. Please note that there are no right or wrong answers and you can skip questions you do not want to answer. To ensure I am able to use all of your useful input, I would like to audio record our discussion. This will give me an exact record of what you say. I will also take notes about our discussion.

Risks

There are no personal risks for your participation in this study. Because I will take precautions to protect your identity, no one will know what you say to me today. However, some questions may make you feel uncomfortable or embarrassed. If that is the case, you are free to refuse to answer them.

Benefits

Although there is no direct or immediate benefit to you for participating in this study, by doing so, you have the opportunity to share your experience and opinions, which will help to improve the health of Cambodian children.

Confidentiality

All information in the research will be kept confidential and only serve the research purpose. Only I will have access to documents and audio recordings from today's interview. I will not share the recording of your voice, and I will keep all documents and audio recordings in a locked cabinet in a locked room. Your name will not be connected to what you say in the interview. Your name will not be written on any document. I will destroy the recording when the research is completed.

Voluntary participation and withdrawal from the research

Your participation in this interview is completely voluntary. If you want, you can refuse to participate in the interview, or—as I mentioned previously—you can refuse to answer any questions at any time.

You have the right to refuse to participate in the study without any punishment or harm. Even when you have agreed to participate in the study, you can withdraw from the study in case of any inconvenience. No one will know of your withdrawal from the research, and your doing so will not harm you in any way.

Do you have any questions?

Contact information

If you have any further question about the research, please contact me, as principle investigator. If you have any questions about your rights while you are in the research, please contact a representative of the NEC:

Ms. Amy Weissman Tel: 078.666.595

Email: <u>aweissma@live.unc.edu</u>; or amyweissman@gmail.com

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E-mail: research03@online.com.kh

Signature page

Participant's Commitment

	red my questions, I am volunteering to participate in the research at the research at any time and the interviewer is willing to answer implementation of this research.
DD/MM/YY	
Name of participant	
Signature of participant	
Investigator's commitment "I have explained all the proced participating in the research for y	ures involved in this research as well as risks and benefits wher voluntary participants."
DD/MM/YY	
Name of Investigator	
Signature of Investigator	

APPENDIX 3: QUESTION GUIDE

Introduction (to be read to the participant)

Thank you for meeting with me today. As I explained in the letter of introduction, my name is Amy Weissman. I am a doctoral candidate in the School of Public Health of the University of North Carolina in the United States. I have been living and working in Cambodia for 3 years, with a US-based NGO called FHI 360.

Today I asked to speak with you for the purposes of my doctoral research at UNC, and not in my official capacity as part of FHI 360. I am interested in learning more about how to effectively address critical nutrition problems at scale. Therefore, my research aims to identify strategies that can create more favorable conditions for implementing complementary feeding with national coverage and impact in Cambodia to address chronic malnutrition as indicated by young child stunting. I am interested to hear your views and to discuss your ideas on this topic.

This interview is completely confidential. Any information you provide will be presented with that provided by other participants, or via anonymous/non-identifiable quotes. Tapes and transcripts will be destroyed at the end of the research study.

I would like to record our discussion today. Do I have permission to do so? (if yes:) If there are questions that you do not feel comfortable talking about, please feel free to skip them. You may also ask me to stop recording and/or leave the interview at any time.

Questions with probes		Purpose/Instructions/Notes	
W	arm-up		
1.	How long you have worked with your organization?	These questions aim to put the participant at ease and for the PI to get to know the participant and his/her organization in brief.	
2.	Please describe briefly what your organization does in the area of nutrition? (listen carefully for how "nutrition" is defined)		
3.	Please describe briefly your role in your organization?		
Po	Political Commitment/Shared Understanding		
4.	Are you aware of Cambodia's prevalence of chronic malnutrition as indicated by young child stunting? Probe: what is it?	These questions aim to identify participants' understanding of young child stunting ("shared understanding") and to	

Questions with probes	Purpose/Instructions/Notes
 5. In your view, why is Cambodia's young child stunting prevalence high? Probe (allow for "we are short"/not viewed as a problem): Lack of programming? Lack of policies? Lack of technical know-how (among whom)? Lack of political commitment? Lack of recognition of the issue (among whom)? Lack of funding? 	assess the level of priority given to this issue. In Q4, if participant is unaware of the stunting prevalence, explain that it has been ~40% for over a decade and higher than many other countries in the region.
6. Because the stunting rate has not changed for many years, one could argue that there hasn't been much progress in reducing stunting in Cambodia. There are likely many reasons that this is the case. I have here a set of cards with a possible reason listed on each one. Please place these cards in order from the most important to the least important reason. For the top ranked card, ask why it was chosen (if "other" ask for a specific reason). And: If high in the ranking, for technical know-how and/or lack of recognition ask among whom	Read aloud each of the cards to the participant, and then hand him/her the stack and ask him/her to place the cards in order from most to
Card statements:	least important reason.
Insufficient M&E	
 Lack of targeting and coverage of interventions/services Limited coordination of interventions Lack of national coordination Lack of policies Lack of technical know-how Lack of political commitment Lack of recognition of the issue Lack of funding Other 	

Questions with probes	Purpose/Instructions/Notes	
 Questions with probes 7. I would now like to talk about ways to address child stunting. There is evidence that young child stunting can be reduced in part, through appropriate complementary feeding. CF is defined by the UN as the following: Complementary feeding is the transition from exclusive breastfeeding to family food. It is the provision of ageappropriate, adequate and safe solid or semi-solid food in addition to breast milk or a breast milk substitute to 6-24 month old children. To what extent do you think people understand and/or agree with this definition? To what extent is there consensus in Cambodia that CF can effectively address child stunting? 	Read the definition aloud. Allow time for questions of clarification on this definition, if any.	
 Probe: If consensus, among whom? If no consensus, why? If no consensus, which stakeholders disagree? What are their views on how to reduce child stunting? 		
 8. To generate commitment for complementary feeding to reduce child stunting among all stakeholders how would you "sell" complementary feeding to: Government officials in the health sector; agriculture sector, planning/finance sector? Funders? Implementers? 	Ask about ways to frame the issue to raise attention to it/generate commitment to it (seek the elevator speech). If need be, give an example: Competition and national pride in Vietnam.	
Policy Frameworks and Implementation		
9. Cambodia has produced a number of policies and related documents for strengthening complementary feeding to address child stunting. Please tell me about Cambodia policies or related policy-type documents that you believe are effective.	Have a list of policy documents based on literature review findings in case needed to prompt participant.	
(Ask one-by-one about what they name])		

Questions with probes	Purpose/Instructions/Notes
 Why do you think X is effective? Probe: Is it based on evidence? Is it feasible?/implementable (being implemented?) Are there any gaps/areas of improvement needed? 	Allow the participant to respond to the first question, writing down the name of each one they list. Then, ask the next question and the probes one-by-one for each document mentioned.
 10. Now consider what key policies or related documents that you believe are still needed for ensuring complementary feeding in Cambodia. Where are the gaps? Probe: Why isn't this in place yet? What is needed to put this in place? 	Allow participant to respond to Q10, writing down the name of any they list. For each one mentioned, ask the probe questions.
 11. There are a number of complementary feeding solutions that have been identified for addressing child stunting, some of which are being implemented in Cambodia and some are not. I have listed one solution on each of these cards. (Read the cards and hand them to the participant then say and ask:) For a national scale approach, I would like you to sort the cards into three piles – those that you think are most urgent/should be done, those you think maybe should be done, and those you think should not be done. You placed x, y, z into the <i>do not do</i> pile? Why? You placed x, y, z into the <i>maybe</i> pile? Why? Are there any solutions missing from this list? If so, which ones? Cards: • Strategic Behavior change communications/Mass Media Food preparation demonstrations Supplementary foods/ feeding programs 	Read aloud each of the cards to the participant, and then hand the stack to the participant and ask him/her to sort the cards into three piles – must do, maybe do, and not do.

Questions with probes	Purpose/Instructions/Notes
Home gardens/Support to household diversified food	
production support	
Water and sanitation improvements	
Breastfeeding maintenance counseling/support	
• Individual/household counseling/support for essential feeding (quality, quantity, variety, consistency, responsive feeding, feeding during and after illness), food preparation, and hygiene and sanitation practices	
Micronutrient supplementation	
Cash transfers/livelihood opportunities	
Fortified food	
Food safety	
• Enforced sub-decree 133 regulating the promotion of breast milk and CF substitutes	
12. You placed x, y, z in the <i>must be implemented</i> pile. Why?	
Who needs to be involved to make these strategies happen?	
Probe:	
 Government bodies (which ones? – probe for departments within and individuals by position title/name) 	Be sure to probe about other ministries/ government
Private sector (how/why?)	bodies when talking with
• Funders	government (e.g., when
• Implementers/experts (to do what?)	talking with MoH, ask about Agriculture).
*What role do each of these stakeholders have in implementing these solutions?	*Ask one-by-one for all stakeholders named: What
What is needed to make these priority solutions happen?	role do you see for each of these stakeholders?
Probe:	
• Funding (at what level)?	
• Commitment (by whom)?	
• Technical capacity (of whom, what specifically)?	
"Proof of concept" in Cambodia?	
Coordination and Communication	

Questions	with probes	Purpose/Instructions/Notes
 13. In most countries there are a few people and/or organizations that are especially influential when it comes to developing, promoting, and implementing nutrition agendas, plans, programs, etc. Given this, how would a decision to implement the top priority you named above, get made? (Seek examples) Probe: Which organizations/individuals have more influence? Why do they have more influence? Do you or other nutrition stakeholders have any concerns about this? 14. You are a member of the NWG/FSN&SPWG. How often to you attend the monthly meetings? What do you think of this mechanism? (major strengths and weaknesses) (If a member of both, ask one-by-one) Probe: Useful? Effective? Purpose is Political? Technical? Overlap across groups?/Duplication? 		Look for issues related to organizational mandates, influential people/groups, historical preferences, professional preferences, comfort zones, ideological positions, funding availability, and allegiance to authoritative "voices", such as WHO/WFP/UNICEF, Lancet.
15 W/h at 4	The "right" people are not participating/present?	
Probes 16. On wh 17. Are the	Progress in policy making? Progress in programming? Funding? New evidence? at topics is there consensus among group members? ere topics for which there is disagreement among members? (Seek examples)	

Questions with probes	Purpose/Instructions/Notes
18. Why is there disagreement? Probe: are there power or relationship issues?	Ask this question of non- government participants
19. Are there any stakeholders missing from the "dialogue" that should be engaged/would have important input?	
Probe: Government (specific bodies/departments) Implementer Funder Private sector	
Information, Evidence, Research	
20. With whom do you normally or most frequently discuss nutrition issues?	Seek to understand current sources of information, evidence, dialogue
21. What source do you rely on most for technical information?	
22. In your opinion is there is sufficient information available to support the government of Cambodia to successfully implement interventions to improve complementary feeding practices at scale? If not, what is missing?(If participant has trouble responding, ask specifically about the priority he/she identified in Q12)	Often evidence in-country must be generated in addition to external evidence. This question aims to understand what, if any
 Probe: What to actually do? How to do it? Effectiveness of current practices? Current coverage? 	in-country evidence gaps exist that would preclude uptake of CF at scale.

Conclusion (to be read to the participant)

I have reached the end of my questions. Is there anything you would like to ask me? (Answer any questions the informant has and then thank him/her for his/her time.)

APPENDIX 4: DRAFT STUDY SUMMARY TO SHARE WITH STAKEHOLDERS

Introduction

Between 2000 and 2010, Cambodia's national stunting prevalence among children under 5 was nearly 40%, with some provinces reaching 50% (24, 25, 27). As recently as 2014, more than one-third of children were stunted (26). This means Cambodia has had one of the highest proportions of chronically malnourished children in the East Asia and Pacific region (11). This is of concern because stunted children suffer irremediable damage both physically and mentally. Stunting also has economic consequences for affected countries, as illustrated by Cambodia, where malnutrition costs more than \$400 million or 2.5% of the gross domestic product (GDP) annually (15).

The reasons why young child stunting is such a significant problem in Cambodia can be understood using three aspects of suboptimal complementary feeding from WHO's Guiding Principles for Complementary Feeding of the Breastfed Child (45):

- 1. Poor Quality and Frequency of Foods: Diet diversity remains a gap in Cambodia. In 2010, although 70% of children were fed the minimum number of times, only 37% had been fed foods from the minimum number of food groups for their age (27). In 2010, only 24% of children 6-23 months old met the minimum standard for all three IYCF practices—number of food groups consumed, number of times a child is fed, and consumption of breastmilk or a milk product (27). Although in 2014 this figure increased to 30%, at least two-thirds of Cambodian children still do not receive an adequate diet at the right frequency (26).
- 2. Inadequate Practices: In Cambodia, although exclusive breastfeeding is relatively high for children less than 6 months, the proportion drops dramatically by 4-5 months, suggesting that complementary foods are being introduced too early (26). Further, although sugary foods are nutrient poor and may decrease a child's appetite for more nutritious foods, mixed feeding of sweetened condensed milk, sugary drinks, chips, and other snack food is common (50, 51). Bottle-feeding, often with sweetened condensed milk instead of breastmilk or formula, is also on the rise (50). The proportion of children 6-23 months of age being bottle-fed more than doubled from 2005 to 2010 (27). Further, despite the importance of responsive feeding, young Cambodian children are frequently left to eat on their own (50).
- 3. Food and Water Safety: In addition to nutrition actions, complementary feeding also requires a set of essential hygiene actions, such as safely preparing and storing food, and washing hands before food preparation and/or feeding the child. Yet, hygiene and sanitation are severe problems, with more than 70% of Cambodian households lacking improved sanitary facilities (30). The majority (56.7%) of the population, both urban and rural, also report open defecation (27). This situation likely contributes to diarrheal disease among children less than 5 years of age, the highest rates of which are in the 6-23

month-old age range (26.4% of 6-11 month olds and 21.1 of 12-23 month olds, compared to 14.2% of children less than 6 months old and 13.7% of 23-35 month olds, the next highest categories) (27).

The 2008 Lancet nutrition series estimated that existing nutrition interventions implemented at scale in the 36 highest burden countries could reduce child stunting at 36 months by 1/3 (7). These existing effective interventions target children during the "window of opportunity"—the 1,000 days from conception to age 2. Because rapid increases in stunting occur from 6 to 23 months, it is particularly important to identify the interventions that target children during this portion of the 1,000 days. One approach entails optimizing complementary feeding, which requires education, strategic behavior change communications (SBCC), counseling, food provision (in food insecure areas), and micronutrient supplementation strategies (3, 55).

Applying the evidence base at scale is aligned with the Paris and Accra Declarations, which urge countries to draw on international best practice while ensuring country ownership and relevance (21). Thus, it is important to address stunting through known interventions delivered through existing delivery platforms. However, a recent review of scaling-up nutrition shows that there is an understanding of what must be done but not an understanding of how to scale up the right mix of interventions for each country context and to integrate nutrition-specific and nutrition-sensitive interventions (62). Much of the evidence is drawn from efficacy trials rather than effectiveness studies conducted in defined geographic areas and at relatively small scale (3, 7, 59, 63). There is a vital need to understand and address the intersecting factors hindering an effective response at scale: how to generate political and resource commitment; how to create effective multisectoral, multi-stakeholder and multilevel governance; how to overcome conflicting ideas about the best approaches to affect change; and how to fill gaps in evidence at sufficient scale to address the severity and magnitude of the problem (57, 62, 64).

The Study

To support an improved nutrition response in Cambodia, one that applies the evidence base at scale, this study sought to answer two research questions:

- 1) How favorable are current conditions in Cambodia for scaling-up evidence-based complementary feeding policies and programs to reduce child stunting? These conditions include political commitment, policy frameworks and their implementation, technical capacity, financial resources and investments, multisectoral intervention coordination, national coordination and communication structures, and the evidence, information, and research available to inform and monitor the response; and
- 2) What strategies could be employed to create more favorable conditions?

Two methods were employed, document review and key informant interviews. Interviews were conducted using a question guide along with two card exercises, one to rank barriers to progress and another to sort strategies for improving complementary feeding into priority piles.

Study participants were drawn from two national working groups related to nutrition: the Nutrition Working Group (NWG) and the Technical Working Group for Social Protection and Food Security and Nutrition (31) (31). The NWG is housed within the National Nutrition Program of the National Maternal and Child Health Center (NMCHC) in the Ministry of Health (MoH). It is a government-led group. The TWG-SP&FSN is chaired by the Council for Agricultural and Rural Development (CARD), a government coordinating body, and cofacilitated by the WFP and FAO. Participants were divided into one of three categories: government, funder, or civil society.

Results: Participants' Perceptions of Current Conditions

Overall, participants' perceived that Cambodia faces many challenges in its willingness, readiness, and ability to address young child chronic malnutrition at scale. Except for the positive assessment of the current policy frameworks, study participants perceived barriers to progress among these domains: political commitment; recognition of the problem; policy implementation (intervention coordination, technical capacity to address the problem, and funding); coordination and communication; and information, evidence, and research.

Recognition of the problem

All participants knew the stunting prevalence in Cambodia and recognized it as a problem. But, recognition of the problem of young child stunting was to be lacking among policy makers and the general public. The majority of participants agreed that sub-optimal feeding practices are the primary cause

The quality of the diets—the kinds of foods and minimum dietary diversity, and the minimum number of times kids are fed are all very bad in Cambodia. There's also a big emphasis on young children being able to take care of themselves, so the idea of responsive and active feeding isn't taught or what's expected. In fact, it's almost a good thing if your child eats by himself. That means it's a good child, a smart child.

—Civil Society

of chronic malnutrition among young children, but that complementary feeding was not well understood by all who need to understand it, and that there has been limited prioritization of actions to address it.

Political commitment

Primarily civil society and funders said political commitment was lacking in Cambodia, though some government officials also identified this as a gap. The lack of political commitment was said to be because the government has not backed up its expressions of commitment with budget or action, and because nutrition has not received the attention given to other issues, such as HIV/AIDS.

The government is always saying nutrition is very important. So if it's very important what do they do to address this issue? [The Prime Minister] should not only talk nicely, but translate the work into practice.

—RGC

Priorities for action

Four strategies emerged as top priorities among all participants—water and sanitation; breastfeeding maintenance; SBCC/mass media; and counseling/support for essential nutrition, hygiene and sanitation actions. However, funders and/or civil society disagreed with a number of government priorities. Two of these priorities (food preparation demonstrations and home gardening) were rejected by the majority of participants even though one of them:

Even in the Nutrition Fast Track it was incredibly difficult, and in the end there wasn't particular prioritization. It's better than it had been; there are some things they want to see happen. But for some reason, even more in nutrition than other things in Cambodia where prioritization is really difficult, it's really difficult here.

—Civil Society

home gardening, was also prioritized by civil society. Concerns were also raised about three other approaches on the government's priority list—micronutrient supplementation, food safety, and food fortification (fortified food was also on the priority list of funders and civil society).

From the analysis of participants' explanations of how they selected or rejected priorities, three criteria were identified: evidence of effectiveness (either existing evidence or a lack of evidence), an existing platform on which to build, and relevant only for select populations.

Policy frameworks

The majority of participants' reported that an abundance of policy frameworks exist in Cambodia and highlighted that this has been a major focus of efforts. A few participants had favorable views of the relevance and utility of some frameworks

We are making policy. We have all the policies.

–RGC

(e.g., Sub-decree 133). Others were considered inadequate, either because they were not developed by the nutrition community as a whole, or were not enforced, or did not address real needs, or were unfeasible to implement.

Policy implementation

Despite the existence of many policy frameworks in Cambodia, participants concurred that implementation and enforcement was a major gap. This was said to be due to a lack of political commitment or funding, a lack of awareness, or a lack of The issue with lack of policies comes down to lack of implementation. Policies and strategies are out there, but there's no funding to do it, people aren't coordinating to do it, there's not the technical expertise to lead on it. So they just sit there, not utilized.

Civil Society

follow-up. Funding, intervention coordination, and technical capacity are all needed to implement policy frameworks, yet these also were considered insufficient in Cambodia.

Funding: The majority of participants considered the lack of funding to be a major barrier to progress in addressing young child chronic malnutrition at scale. This lack of funding was not only a true lack of dollars, but also a misalignment between donor and government priorities, and funds being spent on non-priorities or on efforts unknown to be effective. Also of concern was

the lack of sustainability of nutrition programming in Cambodia without ongoing donor investment.

I want our partners to implement or support something we think is a gap, or to follow the policy or strategy. But they do not listen. They do what they want or what their proposal says even though it does not fit with what we want.

—RGC

The government committed to develop the national strategy for five years, but until now we do not see how much budget they contribute. For most of the activity, the government relies on the donor.

—Funder

I think as a community we have enough funds, we just don't always do the right things with it.

—Funder

Intervention coordination: Civil society in particular raised concerns about the lack of on-the-

ground coordination. The numerous organizations working in the nutrition sector were seen as tripping over one another while leaving parts of the country untouched. The lack of sub-national coordination mechanisms was also highlighted as a gap hindering coordination and effective and efficient implementation.

We have many programs and projects supported by our development partners or bilaterals, but they work separately; they have their own perspective, even in UN.

—RGC

Technical capacity: Technical capacity was viewed as lacking, particularly by government officials, and many participants agreed that Cambodia does not yet have a cadre of nutritionists. According to the majority of participants, there is insufficient technical capacity within both the health and non-health sector. This view was held by all participant groups, but was considered particularly unfavorable by government both from the health and non-health sectors, then civil society, and then funders.

It's still new to us. We are still in the learning stage.

—RGC

People know that nutrition is a big issue. They know, but they don't know how to put together an effort to respond to it.

—RGC

Coordination and communication structures and processes

Despite the existence of coordination mechanisms, participants were nearly unanimous in their view that coordination of the nutrition sector in Cambodia was happening, but not as much as needed. Of particular concern was the lack of strategic agendas guiding meetings, inclusive processes, and use of sessions toward achievement of agreed to work plans and goals. There were a number of reasons given, including the government's structure and hierarchy, and how one manages debate and builds consensus in the Cambodian

...the responsibilities are so cut up that I don't blame them for not being coordinated, for not being able to effectively address one issue. It is a much divided government structure.

—Funder

People sometime don't want to be coordinated. This is not only government people, but the DPs {development partners} as well. It depends on the individual, rather than the institution. Some people have their own agenda probably because they're here for a short time and have specific work to do.

—Funder

context. Participants also shared their perspectives on members of the nutrition community with the greatest influence, and the reasons for this, such as the historical influence of the UN dating to post-Khmer Rouge reconstruction. Although the nutrition sector has numerous government, funders, and civil society actors involved, government officials in particular identified other government, such as MOWA, as missing from the dialogue. Finally, participants, mostly civil society, expressed that some dissonance in the community exists, primarily related to technical matters or competing priorities.

Information, evidence, and research

Effectively addressing young child chronic malnutrition requires sufficient data be available and used for decision making. According to the majority of participants, this is not the current situation in Cambodia. Rather, appropriate investments cannot be made because the nutrition community does not know how to implement the global evidence in country. In addition, participants reported collected data are not routinely used, and outcome data are not routinely collected. Those outcome-related data that are collected are collected too infrequently

...if we want to know about our intervention, where it is and if what we have done is successful, we don't have the information.

-RGC

People having different M&E frameworks, so everything is in people's own silo.

—Civil Society

Data we get from the CDHS is not available regularly. Right now we wait every five years. Between those five years we don't know how our implementation goes.

-RGC

to inform current decision making. Further, Cambodia does not currently have a fully functioning HMIS system, nor the required M&E capacity.

Results: Participants' Perceptions of How to Improve Conditions

Participants identified strategies for addressing the identified barriers to progress Cambodia. In general, these strategies were not specific to complementary feeding, but rather focused on addressing nutrition more broadly. Six actions were recommended by most:

- 7. Frame the issue for both policy makers and the general public using an economic argument and keep messages simple, repeat them, and use multiple channels to disseminate them.
- 8. Engage key government bodies—MoH, MAFF, MRD, MoP, MIF, MOWA, MEYS, and parliament—in the nutrition response, building on their distinct roles and capacities.
- 9. Identify national and local level individuals who can champion a multisectoral nutrition response.
- 10. Develop select, new policies, such as a Multisectoral Nutrition Action Plan with an M&E framework, to further support the nutrition response.
- 11. Strengthen national and sub-national coordination by improving the effectiveness of working group mechanisms through the use of strategic agendas, and an agreed set of

core tasks that are monitored. Further, recognize and utilize MoI's local structures and the Office of the Governor at the sub-national level and decentralize planning and management of nutrition services to the commune level to enhance intervention coordination, effective management, and budget allocation.

12. Produce the information and evidence needed to inform and monitor the response.

Recommendations

Since March 31, 2015, the end of this study's data collection period, Cambodia has continued to demonstrate its commitment to addressing malnutrition. This can be seen by the development of the terms of reference for the oversight board and implementation guidelines for Sub-Decree 133, the national code on the marketing of breastmilk substitutes, and by Cambodia signing-on to the Zero Hunger Challenge. Despite these steps, until Cambodia addresses the sociopolitical barriers that have hindered greater success, in particular, the lack of policy community cohesion and clarity of focus, it will be difficult for the country to achieve sufficient scale and coverage of an effective nutrition response.

As seen in Cambodia, and similar to other contexts, successful country-level efforts require sustained political commitment, sufficient financial resources, strong multisectoral, multistakeholder and multi-level governance, and technical, managerial, and implementation capacity (57). For an effective multisectoral nutrition response, consensus on how to make decisions as well as on the decisions themselves is needed (62). SUN also highlights the importance of country-owned and directed nutrition responses, requiring that all partners—donors, the UN, and NGOs, align behind the government's priorities (19). Doing so requires such actors to step beyond their organizational mandates and personal interests to collaboratively build Cambodia's capacity to lead its own response. With this capacity to lead, and with a strong guiding national institution, Cambodia can effectively utilize external technical and financial assistance to define priorities, champion the cause, and frame and communicate the issue to demonstrably to reduce malnutrition.

Using a framework developed by Shiffman (73), actions needed for creating greater policy community cohesion and, ultimately, for having a strong, nationally-led nutrition response at scale in Cambodia are outlined in the table.

Table. Proposed Plan for Change: Creating Policy Community Cohesion

Change Factor	Recommended Actions	Measures of Success
Identify leaders	Determine the key attributes of effective	Individuals per constituency
at two levels: 1)	leadership in Cambodia	meeting criteria and willing to
mid-level	• Identify strategic allies/policy entrepreneurs	serve as champions and policy
strategic	and champions per key constituency: political	entrepreneurs identified; Donor
allies/policy	structures (i.e., parliament); technicians (line	funds committed to leadership
entrepreneurs;	ministries); budgetary decision makers	capacity building
and 2)	(MoEF); and civil society	
champions at	Generate donor interest in funding leadership	
high level	capacity building	
Strengthen	Determine capacities needed in Cambodia	Guiding institution and identified
national	• Strengthen guiding institution's advocacy,	champions' advocacy and
governance	leadership, consensus building capacity (and	leadership capacity strengthened;
	that of identified champions)	Coordination mechanisms
	Revise and utilize the Food Security and	routinely meeting and allowing
	Nutrition Training program to build strategic	widespread participation; Current
	capacity	FSN training curriculum revised
	• Strengthen effectiveness of formal coordination	to reflect governance
	mechanism	strengthening goals
Create an	Build connections and consensus within and	An agreed to frame for decision-
internal frame	across each group—government, funders, and	making and for nutrition;
	civil society on 1) decision-making process; and	Strengthened social capital within
	2) the definition, causes and solutions to the	and across nutrition sector
	problem	stakeholder groups
Identify policy	Identify upcoming policy windows of	Policy windows identified and
windows	opportunity to rally all donors around a common	utilized to build consensus and
	agenda (e.g., SDGs, revision of COMBI)	communicate the frame
Create and	Determine appropriate framing for key	Develop and convey overarching
communicate an	constituencies by conducting Opinion Leader	message and sub-messages and
external frame	Research	create opportunities to convey
	Create and communicate the frame,	them to budget holders at national
	highlighting the problem, the solution, and who	and sub-national levels
	must do what, when	
Gather strategic	Review existing evidence and create research	Literature review produced;
information	and evaluation plan to fill gaps	Research and evaluation plan
	• Add questions to existing evaluations (e.g.,	developed; Nutrition Surveillance
	NOURISH)	Survey piloted in one province;
	Pilot nutrition surveillance study	Maps produced and used to plan,
	Create maps that overlay data with activity	identify priority geographies, and
	Update national data profile; develop for	monitor progress; National and
	provinces (used to plan and to	provincial profiles produced
	communicate/frame)	

REFERENCES

- 1. Bloem MW, de Pee S, Hop LT, Khan NC, Laillou A, Moench-Pfanner R, et al. Key strategies to further reduce stunting in Southeast Asia: Lessons from the ASEAN countries workshop. Food & Nutrition Bulletin 2013;34(Supplement 1):8S-16S.
- 2. Guest G, Bunce A, Johnson L. How many interviews are enough? An experiment with data saturation and variability. Field methods 2006;18(1):59-82.
- 3. Bhutta ZA, Das JK, Rizvi A, Gaffey MF, Walker N, Horton S, et al. Evidence-based interventions for improvement of maternal and child nutrition: what can be done and at what cost? The Lancet 2013;382(9890):452-477.
- 4. Lutter CK, Daelmans BM, de Onis M, Kothari MT, Ruel MT, Arimond M, et al. Undernutrition, poor feeding practices, and low coverage of key nutrition interventions. Pediatrics 2011;128(6):e1418-27.
- 5. Shrimpton R, Victora CG, de Onis M, Lima RC, Blossner M, Clugston G. Worldwide timing of growth faltering: implications for nutritional interventions. Pediatrics 2001;107(5):E75.
- 6. Stewart CP, Iannotti L, Dewey KG, Michaelsen KF, Onyango AW. Contextualising complementary feeding in a broader framework for stunting prevention. Maternal & Child Nutrition 2013;9(S2):27-45.
- 7. Bhutta ZA, Ahmed T, Black RE, Cousens S, Dewey K, Giugliani E, et al. What works? Interventions for maternal and child undernutrition and survival. The Lancet 2008;371(9610):417-40.
- 8. Bryce J, Coitinho D, Darnton-Hill I, Pelletier D, Pinstrup-Andersen P, Maternal, et al. Maternal and child undernutrition: effective action at national level. The Lancet 2008;371(9611):510-26.
- 9. Victora CG, Adair L, Fall C, Hallal PC, Martorell R, Richter L, et al. Maternal and child undernutrition: consequences for adult health and human capital. The Lancet 2008;371(9609):340-57.
- 10. Victora CG, de Onis M, Hallal PC, Blossner M, Shrimpton R. Worldwide timing of growth faltering: revisiting implications for interventions. Pediatrics 2010;125(3):e473-80.

- 11. Black RE, Allen LH, Bhutta ZA, Caulfield LE, de Onis M, Ezzati M, et al. Maternal and child undernutrition: global and regional exposures and health consequences. The Lancet 2008;371(9608):243-60.
- 12. Horton S, Shekar M, McDonald C, Mahal A, Brooks JK. Scaling up nutrition: what will it cost? Washington, DC: World Bank Publications; 2010.
- 13. Ramirez-Zea M, Melgar P, Rivera JA. INCAP Oriente longitudinal study: 40 years of history and legacy. Journal of Nutrition 2010;140(2):397-401.
- 14. Black RE, Alderman H, Bhutta ZA, Gillespie S, Haddad L, Horton S, et al. Maternal and child nutrition: building momentum for impact. The Lancet 2013;382(9890):372-375.
- 15. Bagriansky J, Champa N, Pak K, Whitney S, Laillou A. The economic consequences of malnutrition in Cambodia, more than 400 million US dollar lost annually. Asia Pacific Journal of Clinical Nutrition 2014;23(4):524.
- 16. International Food Policy Research Institute. Global Nutrition Report: Actions and accountability to accelerate the world's progress on nutrition. Washington, DC; 2014.
- 17. SUN. Scaling Up Nutrition: A Framework for Action; 2010.
- 18. Gillespie S, Haddad L, Mannar V, Menon P, Nisbett N. The politics of reducing malnutrition: building commitment and accelerating progress. The Lancet 2013;382(9891):552-569.
- 19. Nabarro D, Menon P, Ruel M, Yosef S. Scaling up nutrition (SUN): A global movement to accelerate progress in reducing maternal and child malnutrition; 2012.
- 20. SUN. Scaling up Nutrition: About. http://scalingupnutrition.org/about. (accessed on: July 23, 2015).
- 21. OECD. The Paris Declaration on Aid Effectiveness and the Accra Agenda for Action. Report; 2005/2008.
- 22. Pearson BL, Ljungqvist B. REACH: an effective catalyst for scaling up priority nutrition interventions at the country level. Food & Nutrition Bulletin 2011;32(Supplement 2):115S-127S.

- 23. 1,000 Days: What we do. www.thousanddays.org/about/what-we-do/. (accessed on July 29, 2015).
- 24. National Institute of Statistics Cambodia and the Directorate General for Health. Cambodia demographic and health survey, 2000. Phnom Penh, Cambodia: National Institute of Statistics Directorate General for Health; 2001.
- 25. National Institute of Statistics Cambodia and the Directorate General for Health. Cambodia demographic and health survey, 2005. Phnom Penh, Cambodia: National Institute of Statistics Directorate General for Health, Ministry of Health; 2006.
- 26. National Institute of Statistics, Ministry of Planning, Ministry of Health, and ICF International. The 2014 Cambodia Demographic and Health Survey Key Indicators Report. Phnom Penh, Cambodia; 2015.
- 27. National Institute of Statistics Cambodia and the Directorate General for Health. Cambodia demographic and health survey 2010. Phnom Penh: National Institute of Statistics Directorate General for Health, Ministry of Health; 2011.
- 28. Tzioumis E. Personal communication with author regarding study on annual rate of change in stunting between study periods; 2015.
- 29. Marriott BP, White AJ, Hadden L, Davies JC, Wallingford JC. How well are infant and young child World Health Organization (WHO) feeding indicators associated with growth outcomes? An example from Cambodia. Maternal & Child Nutrition 2010;6(4):358-373.
- 30. Ikeda N, Irie Y, Shibuya K. Determinants of reduced child stunting in Cambodia: analysis of pooled data from three Demographic and Health Surveys. Bulletin of the World Health Organization 2013;91(5):341-349.
- 31. CARD and the TWG-SP&FSN on behalf of the Royal Government of Cambodia. National Strategy for Food Security and Nutrition, 2014-2018. Phnom Penh: Cambodia: Royal Government of Cambodia; 2014.
- 32. Ruel MT, Alderman H, Group tMaCNS. Nutrition-sensitive interventions and programmes: how can they help to accelerate progress in improving maternal and child nutrition? The Lancet 2013;382(9891):536-551.

- 33. Tomkins A. Tackling undernutrition in children-new opportunities for innovation and action. Paediatrics and International Child Health 2014;34(4):235-238.
- 34. UNICEF. Strategy for improved nutrition of children and women in developing countries: A UNICEF policy review. New York: United Nations; 1990.
- 35. Frongillo EA. What is good for growth? Growing children, nutrition, and expectations for impact of interventions. In; 2014.
- 36. Frongillo EA, Jr., de Onis M, Hanson KM. Socioeconomic and demographic factors are associated with worldwide patterns of stunting and wasting of children. Journal of Nutrition 1997;127(12):2302-9.
- 37. Spears D. How much international variation in child height can sanitation explain? In: Working papers, Princeton University, Woodrow Wilson School of Public Health and International Affairs, Research Program in Development Studies; 2013.
- 38. Fink G, Günther I, Hill K. The effect of water and sanitation on child health: evidence from the demographic and health surveys 1986–2007. International Journal of Epidemiology 2011;40(5):1196-1204.
- 39. Petri WA, Naylor C, Haque R. Environmental enteropathy and malnutrition: do we know enough to intervene? BMC Medicine 2014;12(1):187.
- 40. Chambers R, von Medeazza G. Reframing Undernutrition: Faecally-Transmitted Infections and the 5 As. In: IDS Working Paper 450; 2014.
- 41. Korpe PS, Petri WA. Environmental enteropathy: critical implications of a poorly understood condition. Trends in Molecular Medicine 2012;18(6):328-336.
- 42. Humphrey JH. Child undernutrition, tropical enteropathy, toilets, and handwashing. The Lancet 2009;374(9694):1032-1035.
- 43. Checkley W, Buckley G, Gilman RH, Assis AM, Guerrant RL, Morris SS, et al. Multicountry analysis of the effects of diarrhoea on childhood stunting. International Journal of Epidemiology 2008;37(4):816-830.

- 44. Daelmans B, Ferguson E, Lutter CK, Singh N, Pachón H, Creed-Kanashiro H, et al. Designing appropriate complementary feeding recommendations: tools for programmatic action. Maternal & Child Nutrition 2013;9(S2):116-130.
- 45. PAHO. Guiding principles for complementary feeding of the breastfed child. Report. Washington, DC; 2003.
- 46. Darapheak C, Takano T, Kizuki M, Nakamura K, Seino K. Consumption of animal source foods and dietary diversity reduce stunting in children in Cambodia. International Archives of Medicine 2013;6(1):29.
- 47. CARD in consultation with the Technical Working Group on Social Protection and Food Security and Nutrition. National Progress Report on Food Security and Nutrition. Phnom Penh: Cambodia; 2014.
- 48. Olney DK, Vicheka S, Kro M, Chakriya C, Kroeun H, Hoing LS, et al. Using program impact pathways to understand and improve program delivery, utilization, and potential for impact of Helen Keller International's Homestead Food Production Program in Cambodia. Food & Nutrition Bulletin 2013;34(2):169-184.
- 49. Guyon AB, Nielsen, J., and V. Quinn. Understanding the Essential Nutrition Actions and Essential Hygiene Actions Framework. Washington, DC; 2015.
- 50. Anderson VP, Cornwall J, Jack S, Gibson RS. Intakes from non-breastmilk foods for stunted toddlers living in poor urban villages of Phnom Penh, Cambodia, are inadequate. Maternal & Child Nutrition 2008;4(2):146-59.
- 51. Holden J. Qualitative study on child caregiver perceptions, practice and constraints in child nutrition. In. Phnom Penh, Cambodia; 2012. p. 1-41.
- 52. Bentley ME, Wasser HM, Creed-Kanashiro HM. Responsive feeding and child undernutrition in low-and middle-income countries. The Journal of Nutrition 2011;141(3):502-507.
- 53. Black MM, Aboud FE. Responsive feeding is embedded in a theoretical framework of responsive parenting. The Journal of Nutrition 2011;141(3):490-494.

- 54. UNICEF. Infant and young child feeding programming status: results of 2010–2011 assessment of key actions for comprehensive infant and young child feeding programs in 65 countries. New York: UNICEF; 2012.
- 55. Dewey KG, Adu-Afarwuah S. Systematic review of the efficacy and effectiveness of complementary feeding interventions in developing countries. Maternal & Child Nutrition 2008;4 Suppl 1:24-85.
- 56. Baker J, Sanghvi T, Hajeebhoy N, Abrha TH. Learning from the design and implementation of large-scale programs to improve infant and young child feeding. Food & Nutrition Bulletin 2013;34(Supplement 2):226S-230S.
- 57. Pelletier D, Haider R, Hajeebhoy N, Mangasaryan N, Mwadime R, Sarkar S. The principles and practices of nutrition advocacy: evidence, experience and the way forward for stunting reduction. Maternal & Child Nutrition 2013;9(S2):83-100.
- 58. Baker J, Sanghvi T, Hajeebhoy N, Martin L, Lapping K. Using an evidence-based approach to design large-scale programs to improve infant and young child feeding. Food & Nutrition Bulletin 2013;34(Supplement 2):146S-155S.
- 59. World Health Organization. Essential Nutrition Actions: improving maternal, newborn, infant and young child health and nutrition. Report. Geneva: WHO; 2013.
- 60. Lutter CK, Iannotti L, Creed-Kanashiro H, Guyon A, Daelmans B, Robert R, et al. Key principles to improve programmes and interventions in complementary feeding. Maternal & Child Nutrition 2013;9(S2):101-115.
- 61. Piwoz E, Baker J, Frongillo EA. Documenting large-scale programs to improve infant and young child feeding is key to facilitating progress in child nutrition. Food & Nutrition Bulletin 2013;34(Supplement 2):143S-145S.
- 62. Gillespie S, Menon P, Kennedy AL. Scaling Up Impact on Nutrition: What Will It Take? Advances in Nutrition: An International Review Journal 2015;6(4):440-451.
- 63. Menon P, Covic NM, Harrigan PB, Horton SE, Kazi NM, Lamstein S, et al. Strengthening implementation and utilization of nutrition interventions through research: a framework and research agenda. Annals of the New York Academy of Sciences 2014;1332(1):39-59.

- 64. Simmons R, Shiffman J. Scaling up health service innovations: a framework for action. Geneva: WHO; 2007.
- 65. Padian NS, Holmes CB, McCoy SI, Lyerla R, Bouey PD, Goosby EP. Implementation science for the US President's Emergency Plan for AIDS Relief (PEPFAR). Journal of Acquired Immune Deficiency Syndrome 2011;56(3):199-203.
- 66. Peterson HB, Haidar J, Merialdi M, Say L, Gulmezoglu AM, Fajans PJ, et al. Preventing maternal and newborn deaths globally: using innovation and science to address challenges in implementing life-saving interventions. Obstetrics & Gynecology 2012;120(3):636-42.
- 67. Mangham LJ, Hanson K. Scaling up in international health: what are the key issues? Health Policy and Planning 2010;25(2):85-96.
- 68. Hill R, Gonzalez W, Pelletier DL. The formulation of consensus on nutrition policy: policy actors' perspectives on good process. Food & Nutrition Bulletin 2011;32(Supplement 2):92S-104S.
- 69. Menon P, Frongillo EA, Pelletier DL, Stoltzfus RJ, Ahmed AM, Ahmed T. Assessment of epidemiologic, operational, and sociopolitical domains for mainstreaming nutrition. Food & Nutrition Bulletin 2011;32(Supplement 2):105S-114S.
- 70. Pelletier DL, Frongillo EA, Gervais S, Hoey L, Menon P, Ngo T, et al. Nutrition agenda setting, policy formulation and implementation: lessons from the Mainstreaming Nutrition Initiative. Health Policy and Planning 2012;27(1):19-31.
- 71. Pelletier DL, Menon P, Ngo T, Frongillo EA, Frongillo D. The nutrition policy process: the role of strategic capacity in advancing national nutrition agendas. Food & Nutrition Bulletin 2011;32(Supplement 2):59S-69S.
- 72. Shiffman J. Issue attention in global health: the case of newborn survival. The Lancet 2010;375(9730):2045-9.
- 73. Shiffman J. Generating political priority for public health causes in developing countries: Implications from a study on maternal mortality, Center for Global Development Brief; 2007.
- 74. Shiffman J. Generating political priority for maternal mortality reduction in 5 developing countries. American Journal of Public Health 2007;97(5):796-803.

- 75. Shiffman J. A social explanation for the rise and fall of global health issues. Bulletin of the World Health Organization 2009;87(8):608-613.
- 76. Shiffman J, Smith S. Generation of political priority for global health initiatives: a framework and case study of maternal mortality. The Lancet 2007;370(9595):1370-9.
- 77. Shiffman J, Sultana S. Generating Political Priority for Neonatal Mortality Reduction in Bangladesh. American Journal of Public Health 2013;103(4):623-631.
- 78. Smith SL, Shiffman J, Kazembe A. Generating political priority for newborn survival in three low-income countries. Global Public Health 2014;9(5):538-354.
- 79. Haddad L. How Can We Build an Enabling Political Environment to Fight Undernutriton? European Journal of Development Research 2013;25(1):13-20.
- 80. Menon P, Raabe K, Bhaskar A. Biological, programmatic and sociopolitical dimensions of child undernutrition in three states in India. IDS Bulletin 2009;40(4):60-69.
- 81. Morris SS, Cogill B, Uauy R, Maternal, Group CUS. Effective international action against undernutrition: why has it proven so difficult and what can be done to accelerate progress? The Lancet 2008;371(9612):608-621.
- 82. Acosta AM, Fanzo J. Fighting maternal and child malnutrition: analysing the political and institutional determinants of delivering a national multisectoral response in six countries. A synthesis paper. Institute for Development Studies, United Kingdom 2012.
- 83. Hoey L, Pelletier DL. Bolivia's multisectoral Zero Malnutrition Program: insights on commitment, collaboration, and capacities. Food & Nutrition Bulletin 2011;32(Supplement 2):70S-81S.
- 84. Nisbett N, Wach E, Haddad L, El Arifeen S. What drives and constrains effective leadership in tackling child undernutrition? Findings from Bangladesh, Ethiopia, India and Kenya. Food Policy 2015;53:33-45.
- 85. Burkhalter BR, Abel E, Aguayo V, Diene SM, Parlato MB, Ross JS. Nutrition advocacy and national development: the PROFILES programme and its application. Bulletin of the World Health Organization 1999;77(5):407-15.

- 86. Lapping K, Frongillo EA, Studdert LJ, Menon P, Coates J, Webb P. Prospective analysis of the development of the national nutrition agenda in Vietnam from 2006 to 2008. Health Policy and Planning 2012;27(1):32-41.
- 87. Hajeebhoy N, Nguyen PH, Tran DT, Onis M. Introducing infant and young child feeding indicators into national nutrition surveillance systems: lessons from Vietnam. Maternal & Child Nutrition 2013;9(S2):131-149.
- 88. Hajeebhoy N, Rigsby A, McColl A, Sanghvi T, Abrha TH, Godana A, et al. Developing evidence-based advocacy and policy change strategies to protect, promote, and support infant and young child feeding. Food & Nutrition Bulletin 2013;34(Supplement 2):181S-194S.
- 89. Yamey G. Scaling up global health interventions: a proposed framework for success. PLoS Medicine 2011;8(6):e1001049.
- 90. Simmons RS, Fajans P, Ghiron L. Scaling up health service delivery: from pilot innovations to policies and programmes. Geneva: World Health Organization; 2007.
- 91. Hanson K, Cleary S, Schneider H, Tantivess S, Gilson L. Scaling up health policies and services in low- and middle-income settings. BMC Health Services Research 2010;10 Suppl 1:I1.
- 92. Norton WE, McCannon CJ, Schall MW, Mittman BS. A stakeholder-driven agenda for advancing the science and practice of scale-up and spread in health. Implementation Science 2012;7:118.
- 93. Subramanian S, Naimoli J, Matsubayashi T, Peters DH. Do we have the right models for scaling up health services to achieve the Millennium Development Goals? BMC Health Service Research 2011;11:336.
- 94. Gericke CA, Kurowski C, Ranson MK, Mills A. Intervention complexity--a conceptual framework to inform priority-setting in health. Bulletin of the World Health Organization 2005;83(4):285-93.
- 95. Chopra M, Sharkey A, Dalmiya N, Anthony D, Binkin N. Strategies to improve health coverage and narrow the equity gap in child survival, health, and nutrition. The Lancet 2012;380(9850):1331-1340.

- 96. Winichagoon P. Scaling up a community-based program for maternal and child nutrition in Thailand. Food & Nutrition Bulletin 2014;35(Supplement 1):27S-33S.
- 97. Hanson K, Ranson MK, Oliveira-Cruz V, Mills A. Expanding access to priority health interventions: a framework for understanding the constraints to scaling-up. Journal of International Development 2003;15(1):1-14.
- 98. Greenhalgh T, Robert G, Macfarlane F, Bate P, Kyriakidou O. Diffusion of innovations in service organizations: systematic review and recommendations. Milbank Quarterly 2004;82(4):581-629.
- 99. Proctor E, Silmere H, Raghavan R, Hovmand P, Aarons G, Bunger A, et al. Outcomes for implementation research: Conceptual distinctions, measurement challenges, and research agenda. Administration and Policy in Mental Health and Mental Health Services Research 2011;38(2):65-76.
- 100. Damschroder LJ, Aron DC, Keith RE, Kirsh SR, Alexander JA, Lowery JC. Fostering implementation of health services research findings into practice: a consolidated framework for advancing implementation science. Implement Sci 2009;4(1):50.
- 101. Yamey G. What are the barriers to scaling up health interventions in low and middle income countries? A qualitative study of academic leaders in implementation science. Global Health 2012;8:11.
- 102. Durlak JA, DuPre EP. Implementation matters: a review of research on the influence of implementation on program outcomes and the factors affecting implementation. American Journal of Community Psychology 2008;41(3-4):327-50.
- 103. Green LW, Glasgow RE. Evaluating the relevance, generalization, and applicability of research: issues in external validation and translation methodology. Evaluation and the Health Professions 2006;29(1):126-53.
- 104. Glasgow RE, Emmons KM. How can we increase translation of research into practice? Types of evidence needed. Annual Review of Public Health 2007;28:413-33.
- 105. Glasgow RE, Eckstein ET, Elzarrad MK. Implementation Science Perspectives and Opportunities for HIV/AIDS Research: Integrating Science, Practice, and Policy. Journal of Acquired Immune Deficiency Syndrome 2013;63 Suppl 1:S26-31.

- 106. Kerner JF. Integrating research, practice, and policy: what we see depends on where we stand. Journal of Public Health Management and Practice 2008;14(2):193-198.
- 107. Rogers EM. Diffusion of Innovations, 5th Edition: Simon & Schuster; 2003.
- 108. McCannon CJ, Berwick DM, Massoud MR. The science of large-scale change in global health. JAMA 2007;298(16):1937-9.
- 109. Sanghvi T, Martin L, Hajeebhoy N, Abrha TH, Abebe Y, Haque R, et al. Strengthening systems to support mothers in infant and young child feeding at scale. Food & Nutrition Bulletin 2013;34(Supplement 2):156S-168S.
- 110. Mendel P, Meredith LS, Schoenbaum M, Sherbourne CD, Wells KB. Interventions in organizational and community context: a framework for building evidence on dissemination and implementation in health services research. Administration and Policy in Mental Health 2008;35(1-2):21-37.
- 111. Sanghvi T, Jimerson A, Hajeebhoy N, Zewale M, Nguyen GH. Tailoring communication strategies to improve infant and young child feeding practices in different country settings. Food & Nutrition Bulletin 2013;34(Supplement 2):169S-180S.
- 112. Wheatley M. Leadership and the new science: Discovering order in a chaotic world, 3rd edition: Berret-Koehler; 2011.
- 113. Damschroder LJ, Aron DC, Keith RE, Kirsh SR, Alexander JA, Lowery JC. Fostering implementation of health services research findings into practice: a consolidated framework for advancing implementation science. Implementation Science 2009;4:50.
- 114. Creswell JW. Research design: Qualitative, quantitative, and mixed methods approaches: Sage Publications, Incorporated; 2009.
- 115. Patton MQ. Qualitative research: Wiley Online Library; 2005.
- 116. Bentley ME, Tolley EE, Pequegnat W. Qualitative inquiry: An end not just a means. In: How to Write a Successful Research Grant Application: Springer; 2011. p. 153-172.

- 117. Semba RD, de Pee S, Sun K, Sari M, Akhter N, Bloem MW. Effect of parental formal education on risk of child stunting in Indonesia and Bangladesh: a cross-sectional study. The Lancet 2008;371(9609):322-328.
- 118. McLeroy KR, Bibeau D, Steckler A, Glanz K. An ecological perspective on health promotion programs. Health Education & Behavior 1988;15(4):351-377.
- 119. Nishida C. Landscape analysis on countries' readiness to accelerate action in nutrition. SCN News 2009(37):3-9.
- 120. Moran AC, Kerber K, Pfitzer A, Morrissey CS, Marsh DR, Oot DA, et al. Benchmarks to measure readiness to integrate and scale up newborn survival interventions. Health Policy and Planning 2012;27(suppl 3):iii29-iii39.
- 121. NNP M. 2008 Annual Progress Report on the Implementation of The National Nutrition Program and Minimum Package of Activities (MPA) Module 10; 2008.
- 122. Saldaña J. The coding manual for qualitative researchers: Sage; 2012.
- 123. K. M. Final Cambodia Policy and Decision Making Audit (Unpublished Report). In: Helen Keller International, ARCH Project. Phnom Penh: Cambodia; 2013.
- 124. World Health Organization. Global database on the Implementation of Nutrition Action (GINA). https://extranet.who.int/nutrition/gina/en/policies/1400. (accessed on: March 29, 2015).
- 125. CamNut: Community library for documents related to nutrition in Cambodia. http://camnut.weebly.com/policy--guidelines.html. (accessed on: May 15, 2015).
- 126. CARD. A Conceptual Budget for Cambodia's Fast Track Road Map for Improving Nutrition Implementation, Financing and Cost-Sharing Scenarios Phnom Penh: Cambodia; 2015.
- 127. Royal Government of Cambodia. Cambodia Country Paper, Prepared for the Bi-regional Meeting on Scaling-up Nutrition, Colombo, Sri Lanka. Phnom Penh: Cambodia: Royal Government of Cambodia; 2011.
- 128. Royal Government of Cambodia. Forums and Committees: About the Inter-Ministerial Technical Committee National Council for Nutrition (Ministry of Planning). http://www.foodsecurity.gov.kh/forums-committees?id=2. (accessed on: July 3, 2015).

- 129. Royal Government of Cambodia. Forums and Committees: About the Technical Working Group for Food Security and Nutrition (TWGFSN). http://www.foodsecurity.gov.kh/forums-committees?id=3. (accessed on: July 3, 2015).
- 130. Royal Government of Cambodia. Ministry of Health Department of International Cooperation Policy Framework and Operational Guidelines. Phnom Penh: Cambodia; 2012.
- 131. Royal Government of Cambodia. Joint Monitoring Indicators 2014-2018. http://www.cdc-crdb.gov.kh/cdc/JMIs/2014-2018/agriculture_and_water.pdf. (accessed on: July 3, 2015).
- 132. Royal Government of Cambodia. Terms of Reference: Strategy for Agriculture and Water Implementation Roadmap http://www.gafspfund.org/sites/gafspfund.org/files/Documents/Cambodia 13 of 16 INVESTM ENT TOR for SAW ImplementationRoadmap.pdf. (accessed on: July 3, 2015).
- 133. Royal Government of Cambodia. Terms of Reference: Nutrition Working Group (NWG), National Nutrition Programme (NNP), National Maternal and Child Health Center (NMCHC), Ministry of Health (MoH) http://www.foodsecurity.gov.kh/sites/default/files/docs/TOR-NWG-revised-Nov-2010.pdf. (accessed on: July 3, 2015).
- 134. Royal Government of Cambodia. Forums and Committees: About the Food Security Forum (Council for Agricultural and Rural Development). http://www.foodsecurity.gov.kh/forums-committees?id=1. (accessed on: July 3, 2015).
- 135. Bockers E, Stammel N, Knaevelsrud C. Reconciliation in Cambodia: thirty years after the terror of the Khmer Rouge regime. Torture Journal 2011;21(2):71-83.
- 136. David J. Posttraumatic stress disorder among survivors of Cambodian concentration camps. American Journal of Psychiatry 1984;141:645-650.
- 137. Black RE, Victora CG, Walker SP, Bhutta ZA, Christian P, de Onis M, et al. Maternal and child undernutrition and overweight in low-income and middle-income countries. The Lancet 2013.
- 138. Jordan T. Skillful engagement with wicked Issues: a framework for analyzing the meaning-making structures of societal change agents. Integral Review 2011;7:47-91.

- 139. Khan MH. Patron-Client networks and the economic effects of corruption in Asia. The European Journal of Development Research 1998;10(1):15-39.
- 140. Scott JC. Patron-client politics and political change in Southeast Asia. American Political Science Review 1972;66(01):91-113.
- 141. Jacobsen T, Stuart-Fox M. Power and Political Culture in Cambodia. In: Asia Research Institute Working Paper Series No. 200. Singapore: Asia Research Institute, National University of Singapore Singapore; 2013.
- 142. Kapiriri L, Martin DK. A strategy to improve priority setting in developing countries. Health Care Analysis 2007;15(3):159-167.
- 143. Un K. State, society and democratic consolidation: the case of Cambodia. Pacific Affairs 2006:225-245.
- 144. Collins W. Grassroots civil society in Cambodia. Center for Advanced Study, Phnom Penh, November 1998.
- 145. Kov P, Smets S, Spears D, Vyas S. Growing Taller Among Toilets: Evidence from Changes in Sanitation and Child Height in Cambodia, 2005–2010. In: Amston: Research Institute for Compassionate Economics (RICE); 2013.
- 146. Yamey G, Feachem R. Evidence-based policymaking in global health—the payoffs and pitfalls. Evidence Based Medicine 2011;16(4):97-99.
- 147. Goleman D. What makes a leader? Harvard Business Review 2004;82(1):82-91.
- 148. Bennis WG, Thomas RJ. Crucibles of leadership. Harvard Business Review 2002:62-69.
- 149. Collins J. Level 5 leadership. Harvard Business Review 2007;2:27-50.
- 150. Rooke D, Torbert WR. Seven transformations of leadership. Harvard Business Review 2005;83(4):66-76.
- 151. Ancona D, Malone TW, Orlikowski WJ, Senge PM. In praise of the incomplete leader. Harvard Business Review 2007;85(2):92-100, 156.

- 152. Arensen L. Personal communication with Lisa Arensen, cultural anthropologist working in Cambodia; 2014.
- 153. Gladwell M. The tipping point: How little things can make a big difference: Little, Brown; 2006.
- 154. Kingdon JW. Agendas, alternatives, and public policies (longman classics edition): Longman Publishing Group London; 2002.
- 155. UNAIDS. Cambodia takes MDG prize for excellence in its AIDS response. http://www.unaids.org/en/resources/presscentre/featurestories/2010/september/20100920fsmdgc amboda-award. (accessed on: August 25, 2015).
- 156. Goyet S, Touch S, Ir P, SamAn S, Fassier T, Frutos R, et al. Gaps between research and public health priorities in low income countries: evidence from a systematic literature review focused on Cambodia. Implementation Science 2015;10(1):32.
- 157. Patton MQ. Qualitative research & evaluation methods, 3rd edition. Thousand Oaks, CA: Sage; 2010.
- 158. Yin RK. Qualitative research from start to finish. New York: The Guilford Press; 2010.
- 159. Hofmann SG, Asnaani A, Hinton DE. Cultural aspects in social anxiety and social anxiety disorder. Depression and anxiety 2010;27(12):1117-1127.
- 160. Patton MQ. Developmental evaluation: Applying complexity concepts to enhance innovation and use: Guilford Press; 2011.
- 161. Leroy JL, Habicht JP, Pelto G, Bertozzi SM. Current priorities in health research funding and lack of impact on the number of child deaths per year. American Journal of Public Health 2007;97(2):219-23.
- 162. Shiffman J. Network advocacy and the emergence of global attention to newborn survival. Health Policy and Planning 2015;September 24. pii: czv092. [Epub ahead of print]:1-13.