



Nutrition - WASH Toolkit

Guide for Practical Joint Actions

Nutrition-Water, Sanitation and Hygiene (WASH)

June 2016

Nutrition-WASH Toolkits: Guide for Practical Joint Actions Nutrition-Water, Sanitation and Hygiene (WASH)

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Acknowledgements

This document builds on the growing body of work that provides the evidence of how water, sanitation, hygiene (WASH) and nutrition interact. It is situated in the landscape of a UNICEF EAPRO Nutrition Strategy that has a mandatory WASH module, and recent WHO/UNICEF/USAID guidance on practical solutions for improving nutrition outcomes with better WASH.

The authors, independent consultants, Leah Richardson and Penny Dutton worked with the direction and support of Chander Badloe (UNICEF EAPRO Regional WASH Advisor), Christiane Rudert (UNICEF EAPRO Regional Nutrition Advisor) and Dorothy Foote (UNICEF EAPRO Nutrition Specialist). Thanks go out to the UNICEF Philippines, Cambodia and Indonesia country office staff that critically reviewed the document as well as the Nutrition Section at UNICEF Headquarters.

UNICEF country offices in EAPRO contributed directly to this document through interviews, the sharing of documents and the sharing of challenges and lessons learned. In addition, two in-country Theory of Change workshops in Cambodia and the Philippines with UNICEF staff, government counterparts, NGOs, and other key stakeholders helped to refine and craft the development of guidance, particularly the Theory of Change workshop model.

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Preface

“Nutrition and WASH realities and the need for integrated approaches”

Poor child nutrition and low access to safe Water, Sanitation and Hygiene (WASH) remain a key concern in East Asia and Pacific. This represents a large unfinished development agenda and is a stark manifestation of the persisting and sometimes widening inequities in the region.

Many countries still have unacceptably high levels of child stunting with seven countries having a prevalence of over 30 per cent, and two countries with a staggering 50 per cent of children stunted. Few are making sufficient progress to achieve global and national targets. The poorest and most deprived children are much more stunted than their wealthier and urban peers. An estimated 18 million children under five years are affected, nine million of them in Indonesia alone.

Improved sanitation is still unavailable for a significant proportion of households in South East Asia, and large disparities persist between rural and urban households. Across the region around 659 million people are without access to improved sanitation and 83 million people in the region still practice open defecation. Indonesia has the second highest number of people defecating in the open in the world (51 million people).

Recent evidence indicates a close relationship between stunting and poor WASH. A child’s growth is hampered by constant exposure to the contamination resulting from poor WASH, and even a well-nourished child may become stunted without safe WASH. A UNICEF analysis and mapping of WASH and nutrition data in Indonesia reveals a striking correlation between stunting and poor sanitation across Indonesia’s provinces. This study reiterates the global evidence that where poor WASH practices play a significant role in causing stunting, a combination of programmes to improve sanitation and hygiene and programmes to improve infant and young child feeding practices will have the best results in reducing stunting.

Recognizing the need for practical guides for moving forward from **evidence** to strengthened joint **programming**, the EAPRO Nutrition and WASH sections undertook this joint initiative from to develop a **Nutrition-WASH** Toolkit. The Toolkit aims to provide a high quality and practical guide with key messages and facts to further advance joint Nutrition and WASH programming, implementation, monitoring and advocacy efforts. The toolkit is based on an extensive review of available literature. It builds on feedback from consultations with numerous partners including workshops in Cambodia and Philippines to develop a joint theory of change, mapping out with stakeholders the nutrition and WASH pathways towards reducing stunting and articulating how both sets of stakeholders will work together.

I strongly encourage UNICEF colleagues to take maximum advantage of this toolkit as a guide to further strengthen joint programming and advocacy for promoting equitable and sustainable nutrition and WASH services for all children. Doing this will make a significant contribution to accelerating progress towards the stunting target, and also to reducing inequities, thereby assuring a brighter future for millions of children.



Karin Hulshof
Regional Director
UNICEF East Asia and Pacific Regional Office (EAPRO)

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Acronyms & abbreviation

ACF	Action contre la Faim (France)
BAT	Bottleneck Analysis Tool
C4D	Communications for Development
CCCs	Core Commitments for Children
CLTS	Community Led Total Sanitation
DFID	Department for International Development (UK)
EAPRO	East Asia and Pacific Regional Office (UNICEF)
EHA	Essential Hygiene Actions
ENA	Essential Nutrition Actions
FAO	Food and Agriculture Organization
HIV/AIDS	Human Immunodeficiency Virus/Acquired Immunodeficiency Syndrome
HQ	Headquarters
IYCF	Infant and young child feeding
JMP	Joint Monitoring Programme (WHO and UNICEF)
KAP	Knowledge, attitude and practice
Lao PDR	Lao People's Democratic Republic
LSHTM	London School of Hygiene and Tropical Medicine
MAM	Moderate Acute Malnutrition
M&E	Monitoring and evaluation
NGO	Non-governmental organization
RO	Regional Office
SAM	Severe acute malnutrition
SDGs	Sustainable Development Goals
SUN	Scaling Up Nutrition
ToC	Theory of Change
ToR	Terms of reference
TWGs	Technical working groups
UN	United Nations
UNICEF	United Nations Children's Fund
WASH	Water, sanitation and hygiene
WEDC	Water, Engineering and Development Centre (Loughborough University)
WHO	World Health Organization
ZHC	Zero Hunger Challenge

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1 Introduction to the toolkit

1.1 Background

1.1.1 Undernutrition in the East Asia and Pacific region

Undernutrition is a major cause of disease and death, affecting billions of people worldwide, especially women and children in impoverished communities. In the East Asia and Pacific (EAP) region, despite economic growth, and achievements in health and nutrition indicators, maternal and child malnutrition rates and burden remain high. Almost 28 million children are stunted in the EAP region, with one third of those children in China and another third in Indonesia. Diarrhoea, pneumonia and birth complications are the top three killers of children under age 5 worldwide.¹ Each year diarrhoea alone causes approximately 11 per cent of all child mortality.² Diarrhoea is also a leading cause of undernutrition in this age group and one-third to one-half of all child mortality cases are linked to undernutrition. UNICEF estimates that more than 90 per cent of deaths from diarrheal illnesses in young children can be attributed to unsafe or inadequate water, sanitation, and hygiene (WASH) practices.³ Unhygienic living conditions and lack of sanitation also affects the nutrition status of children and infants even in the absence of diarrhoea. In the EAP region around 659 million people are without access to improved sanitation; around 83 million people in the region still practice open defecation, with Indonesia, China and Cambodia being among the 12 countries in the world with the largest populations practicing open defecation.

Undernutrition is directly caused by inadequate dietary intake and/or disease, and indirectly related to many factors, including contaminated drinking water and poor sanitation and hygiene. Evidence shows that no single intervention alone can achieve effective or lasting results at reducing undernourishment. Effective and sustainable nutrition outcomes require a coordinated, multisectoral approach among the WASH and other sectors and strong community engagement.

This toolkit is intended to provide UNICEF country offices, and the national governments they support and their partners, with the necessary guidance and tools for combining WASH interventions with nutrition programmes to maximize nutrition outcomes in the EAP region. The overall better economic situation in the EAP region, compared with South Asia and Africa regions, make mobilization of national resources to improve nutrition of critical importance. Therefore this toolkit is oriented towards the enabling environment activities that can support collective malnutrition reduction efforts.

1.1.2 UNICEF's role in WASH and nutrition

UNICEF supports child survival and development, mainly focusing on the sectorial areas of child protection, education, nutrition, health, communications for development and WASH. Its programmes comprise strategic and 'upstream' work including strengthening of governments and their systems and other national actors, as well as 'downstream' programme implementation.

1 Liu et al., 'Global, Regional, and National Causes of Child Mortality: An Updated Systematic Analysis for 2010 with Time Trends since 2000', *The Lancet* 379, 2012, pp. 2151–2161.

2 WHO, 'Diarrhoeal Disease', Fact sheet N°330. Geneva: WHO, 2013, <<http://www.who.int/mediacentre/factsheets/fs330/en/>>

3 UNICEF, *Children and Water: Global Statistics*, New York City, UNICEF, 2012, <http://www.unicef.org/wash/index_31600.html>

UNICEF is the best-positioned United Nations agency to support countries to address the nutrition problems in the EAP region as a result of its mandate to work with multiple sectors, at all levels, with a focus on women and children.⁴ Reducing maternal and child undernutrition will have impacts upon adult, maternal, newborn and child mortality, newborn disability, cognitive development of young children, educational attainment in school, and economic development of society. Improved nutrition security will contribute to building resilience to the current increasing risks – climate change, price increases and natural disasters. The UNICEF EAP regional nutrition strategy also recognizes the particular importance of inadequate sanitation and drinking water as a cause of undernutrition, by causing illness, in particular diarrhoea, environmental enteropathy (EE) (damage to the small intestine) and worm infestation.

For WASH, UNICEF recognizes the importance of water, sanitation and hygiene in preventing illness and disease, and in particular, the contribution of sanitation and hygiene to reducing child mortality and undernutrition rates. Prevention focuses on homes and communities, including schools and health centres, as the starting point for improving water quality, sanitation and hygiene, and for reducing child deaths from diarrhoea. Within the EAP region, UNICEF works with partners to help governments improve the policy environment for WASH, build capacity, support the provision of safe water, adequate sanitation and handwashing facilities, research and share good practice and learning. UNICEF also leads in supporting Government on strengthening coordination mechanisms to ensure safe WASH during emergencies and humanitarian crises. These WASH actions are an integral part of the UNICEF WASH strategy.

WASH also underpins many other Sustainable Development Goals (SDGs), including those related to nutrition, health, education, poverty and economic growth, urban services, gender equality, resilience, and climate change. WASH is equally at the core of the broader UNICEF mandate for children; poor hygiene, open defecation, lack of access to adequate and safe water and sanitation systems continues to be a leading cause of child mortality and morbidity, contributes to undernutrition and stunting, is a barrier to education for girls and to economic opportunity for the poor.

1.2 Purpose, audience and structure of the toolkit

1.1.1 Purpose

This document provides a brief grounding in the interaction between WASH and nutrition and the evidence base on the importance of the convergence and integration (see Box 11) of WASH and nutrition programming for improved nutrition outcomes. The toolkit presents practical guidance to assist with the progression towards more systematically integrating WASH and nutrition programming from a holistic point of view. Programming is much more than project implementation and as such the guidance focuses both on upstream and downstream actions for improved systems. The document is intended to be a living document with regular updates and resources being added as they are created.

1.1.2 Audience

The primary audience of this toolkit is UNICEF country office staff in the EAP region, primarily WASH and nutrition specialists but also senior managers who have leverage and influence such as the Chief of Young Child Survival and Development, and Deputy Resident Representatives.

4 UNICEF, Approach to Nutrition Programming in the East Asia and Pacific Region 2014-2025, Bangkok, UNICEF, 2014, < http://www.unicef.org/eapro/Vol_1_EAPR_strategic_approach_to_nutrition_programming.pdf>

The secondary, but equally important audience, is national and local governments and partners who are seeking to maximize health gains through greater planning and integration of nutrition and WASH efforts.

1.1.3 Structure of toolkit

The document is organized into the following chapters:

- Chapter 2** provides an overview of WASH and nutrition interventions and the interaction between WASH and nutrition. It summarizes the evidence for integrating WASH and nutrition programming with the intention of improving nutritional outcomes and gives an overview of WASH interventions that contribute to nutritional status.
- Chapter 3** briefly presents the current WASH and nutrition situation in the EAP region and outlines UNICEF's regional engagement.
- Chapter 4** describes the Theory of Change (ToC) process for joint WASH and nutrition planning and gives some examples of the application of ToC in integrating WASH and nutrition.
- Chapter 5** provides guidance and examples of how to integrate WASH and nutrition at various stages of programming in a development context. The chapter contains links to reference documents, case study materials, guidelines and tools.
- Chapter 6** briefly presents how to link WASH and nutrition in humanitarian contexts.
- Chapter 7** is the annexe that includes sources for more information and a glossary of terms.

2 The interaction between WASH and nutrition

2.1 Understanding nutrition

Box 1: Nutrition definitions

Malnutrition: Malnutrition refers to all forms of nutrition disorders caused by a complex array of factors, including dietary inadequacy (deficiencies, excesses or imbalances in macronutrients or micronutrients), and includes both undernutrition and overnutrition and diet-related diseases.

Undernutrition: Undernutrition occurs when the body's requirements for nutrients are not met as a result of underconsumption or impaired absorption and use of nutrients. Undernutrition commonly refers to a deficit in energy intake from macronutrients (fats, carbohydrates and proteins) and/or to deficiencies in specific micronutrients (vitamins and minerals). It can be either acute or chronic. Undernutrition is commonly referred to as malnutrition.

Stunting (chronic malnutrition) is a form of growth failure, which develops over a long period of time. Inadequate nutrition over long periods of time and/or repeated infections can lead to stunting. In children, it can be measured using the height-for-age nutritional index.

Wasting (acute malnutrition) is characterized by a rapid deterioration in nutritional status over a short period of time. In children, it can be measured using the weight-for-height nutritional index or mid-upper arm circumference. There are different levels of severity of acute malnutrition: moderate acute malnutrition (MAM) and severe acute malnutrition (SAM).

Micronutrient deficiency: Micronutrient deficiencies are when there is an inadequate long-term intake of nutritious food or infections such as worms. Essential vitamins or minerals such as vitamin A, iron and zinc are lacking and women and children are high-risk populations.

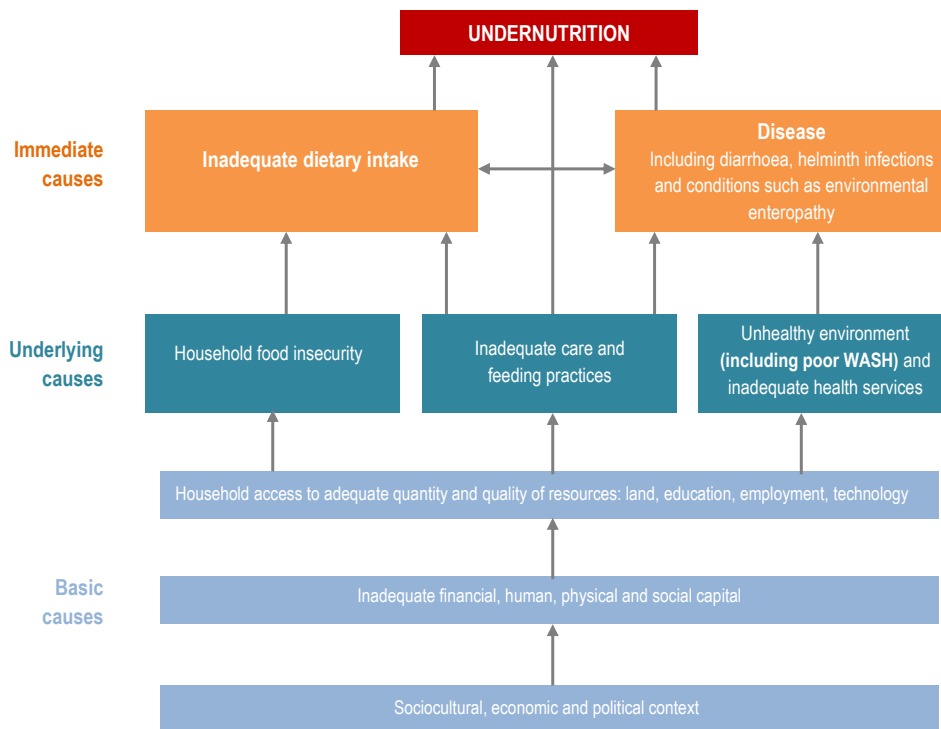
Undernutrition is the underlying cause of 45 per cent of child deaths each year.⁵ Despite targeted and comprehensive nutrition-specific interventions, the persistent presence of undernutrition globally has caused a renewed focus on underlying causes that go beyond lack of nutrients.

The immediate causes of child undernutrition include inadequate diet and diseases. Underlying causes are household food insecurity, inadequate maternal and childcare and feeding practices, poor WASH and lack of health services. These underlying factors directly influence nutrients intake and presence of disease. Poor WASH conditions cause infectious disease, especially diarrhoea, and consequently undernutrition due to poor appetite and nutrients mal-absorption. Poor nutritional status further increases susceptibility to infectious diseases, thereby creating a vicious cycle of worsening illness and deteriorating nutritional status.

The resources available in a society (human, financial, physical) and how they are used (social, economic, political and cultural) constitute the basic causes of undernutrition (Figure 1). The determinants of undernutrition will vary in different contexts, and data on the determinants should be carefully analysed in defining the most appropriate prioritization and combination of interventions and strategies.

5 Black, Robert E. et al., 'Maternal and Child Undernutrition and Overweight in Low-Income and Middle-Income Countries'. The Lancet. 382 (9890), 2013, pp. 427–451, <http://www.unicef.org/ethiopia/1_Maternal_and_child_undernutrition_and_overweight_in.pdf>

Figure 1: Conceptual framework of causes of undernutrition



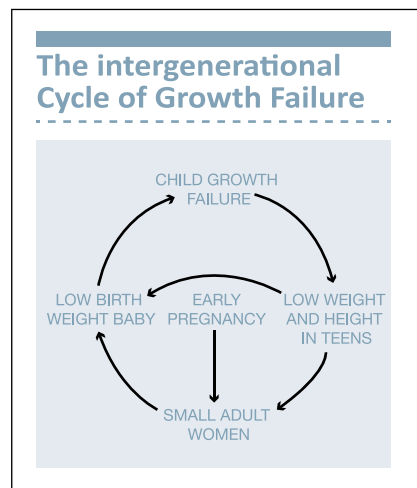
Source: WHO, UNICEF, USAID, Improving Nutrition Outcomes with Better, Sanitation and Hygiene, 2015, <http://www.unicef.org/media/files/IntegratingWASHandNut_WHO_UNICEF_USAID_Nov2015.pdf>

Optimal nutritional status results when children and families have access to foods that are conducive to a healthy diet and meet dietary needs (e.g., sufficient, safe and nutritious); appropriate maternal and child care practices; adequate health services; and a healthy environment, including safe water, sanitation and good hygiene practices.

2.1.1 Undernutrition and the life cycle

The most crucial period in a child’s growth and development is the **first 1,000 days** starting from conception until the child’s second birthday. Adequate nutrition during this time is essential for healthy physical growth and brain development. Nutritional deficiencies during this period have the most severe consequences on a child and often cannot be fully reversed. Undernutrition not only can result in disease and death, but also can have long-term consequences on cognitive and social abilities, school performance and work productivity in adulthood.

Figure 2: Intergenerational cycle of undernutrition



Source: Save the Children, Nutrition in the First 1,000 Days: State of the World’s Mothers Report 2012

For unborn and newborn babies, undernutrition in the womb results in retarded growth and low birth weight which can increase mortality and morbidity in newborns and infants, retards intellectual and emotional growth, leads to permanently stunted height, and predisposes newborns to nutrition-related chronic diseases later in life (Figure 2).

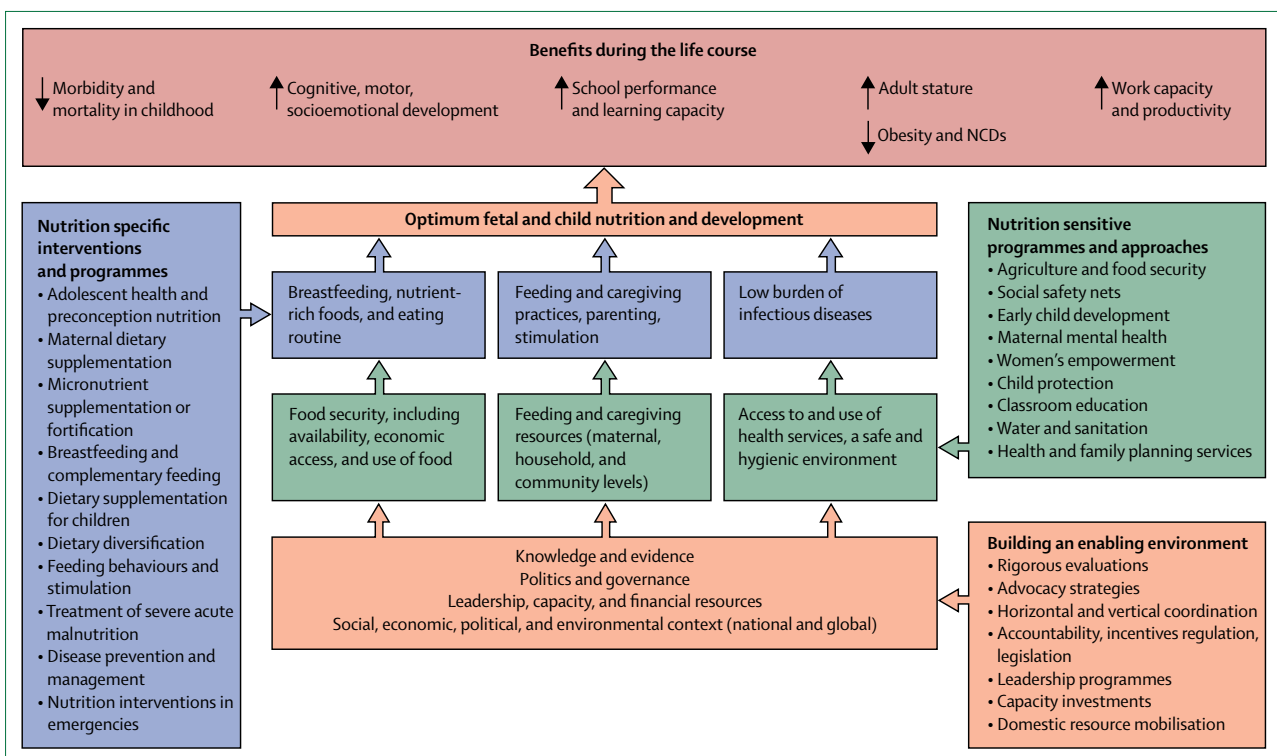
The ‘window of opportunity’ for improving nutrition is very small – conception to 24 months of age

The result of undernutrition in infants and young children under 24 months is that growth slows, and common childhood infections last longer and are more frequent and serious. Undernourished children are at a high risk of permanently stunted growth and development. Undernutrition in early life also increases the risk of later overweight, obesity and non-communicable diseases.

Undernutrition can span across generations and affect all stages of the life cycle. Girls suffering from undernutrition are likely to become undernourished mothers who are, in turn, more likely to give birth to low birth weight infants. Adolescent girls are particularly vulnerable to undernutrition because they have high nutrient needs due to growth and because they are at risk for becoming pregnant (Black et al., 2013).

The Lancet series highlights that achieving 100 per cent coverage of the set of 10 nutrition-specific interventions will only lead a 20 per cent reduction in stunting, highlighting the importance of combining nutrition-specific interventions with nutrition-sensitive interventions, including WASH (Figure 3).

Figure 3: Framework for actions to achieve optimal foetal and child nutrition and growth



Source: Black, Robert E. et al., Maternal and Child Undernutrition, Lancet Series Paper 1, 2013

Box 2: What is nutrition specific and nutrition sensitive programming?

Nutrition-Specific Interventions and Programmes: Interventions or programmes that address the immediate determinants of foetal and child nutrition and development – adequate food and nutrient intake (diets), feeding, caregiving and parenting practices, and low burden of infectious diseases.

Examples: Adolescent, preconception and maternal health and nutrition; maternal dietary or micronutrient supplementation; promotion of optimum breastfeeding; complementary feeding and responsive feeding practices and stimulation; dietary supplementation; diversification and micronutrient supplementation or fortification for children; treatment of severe acute malnutrition; disease prevention and management; nutrition in emergencies.

Nutrition sensitive interventions and programmes: Interventions or programmes that address the underlying determinants of foetal and child nutrition and development – food security; adequate caregiving resources at the maternal, household and community levels; and access to health services and a safe and hygienic environment – and incorporate specific nutrition goals and actions. Nutrition-sensitive programmes can serve as delivery platforms for nutrition-specific interventions, potentially increasing their scale, coverage, and effectiveness.

Examples: agriculture and food security; social safety nets; early child development; maternal mental health; women's empowerment; child protection; schooling; WASH; health and family planning services.

Source: Ruel, M., H. Alderman and the Maternal and Child Nutrition Study Group, 'Nutrition-sensitive Interventions and Programmes: How Can They Help to Accelerate Progress in Improving Maternal and Child Nutrition?' Lancet, 6 June 2013, doi:10.1016/S0140-6736(13)60843-0

2.2 Understanding water, sanitation and hygiene

Box 3: WASH definitions

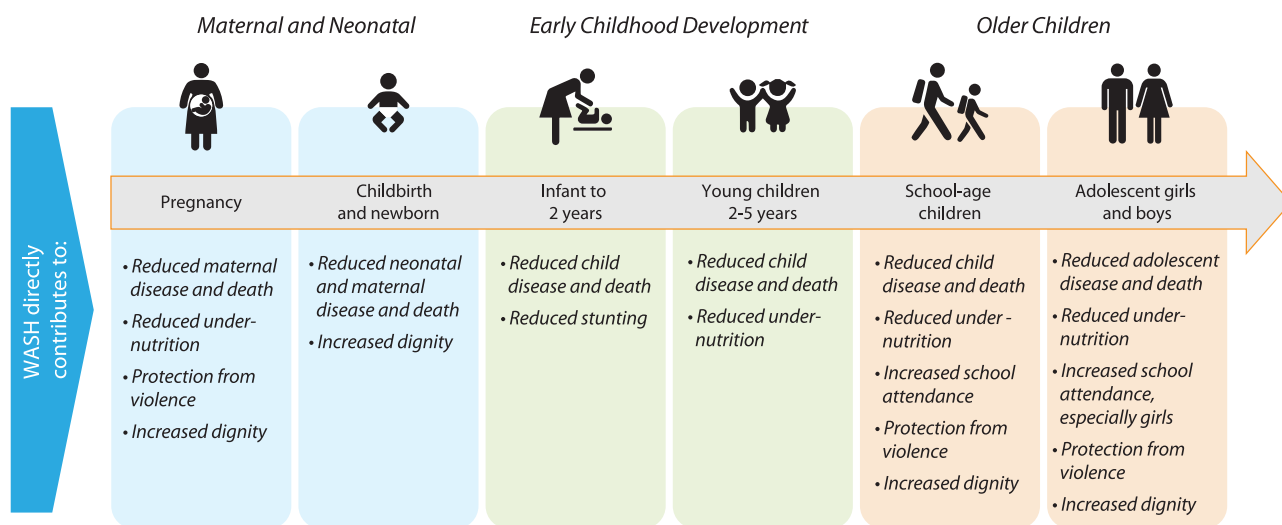
WASH typically refers to activities aimed at improving access to and use of safe drinking water and sanitation as well as promoting good hygiene practices (e.g., handwashing with soap at critical times). Interventions can include:

- 1. Water quantity:** Provision of facilities and services that increase the amount of water available for drinking, cooking and maintaining good hygiene practices within households, health care facilities or schools; and reduce the time and effort required to collect the water.
- 2. Water quality:** Improvement and protection of the microbiological or chemical quality of drinking water through water treatment and safe storage or by improving existing water sources to protect them from outside contamination. Improved water sources, as defined by the Joint Monitoring Programme (JMP) for Water Supply and Sanitation, include piped water on-site, public taps or standpipes, tubewells or boreholes, protected dug wells, protected springs and rainwater (WHO/UNICEF, 2015).
- 3. Sanitation:** Provision and use of facilities and services that safely dispose of human urine and faeces, thereby preventing contamination of the environment. Improved sanitation facilities as defined by the JMP are those that hygienically separate human excreta from human contact and include flush or pour-flush toilets to piped sewer systems, septic tanks or pits, ventilated improved pit latrines, pit latrines with slab, and composting toilets (WHO/UNICEF, 2015).
- 4. Hygiene:** Practice of handwashing with soap after defecation and disposal of child faeces, prior to preparing and handling food, before eating, and, in health care facilities, before and after examining patients and conducting medical procedures.

Source: WHO, UNICEF, USAID, Improving Nutrition Outcomes with Better, Sanitation and Hygiene, 2015

Poor sanitation, unsafe water and unhygienic practices are the major causes of a large amount of preventable illness and deaths throughout the developing world. WASH-related diarrhoea is responsible for 1.9 million deaths of under five year olds each year. However, similar to nutrition, WASH inputs can be conceptualized using a life cycle approach (refer Figure 4). There are key points in a mother's, child's, adolescent's life when WASH inputs contribute to particular nutrition outcomes, for example, sanitation and hygiene interventions that reduce diarrhoea morbidity in the post-natal to one-year period also contribute to reducing the incidence of stunting.

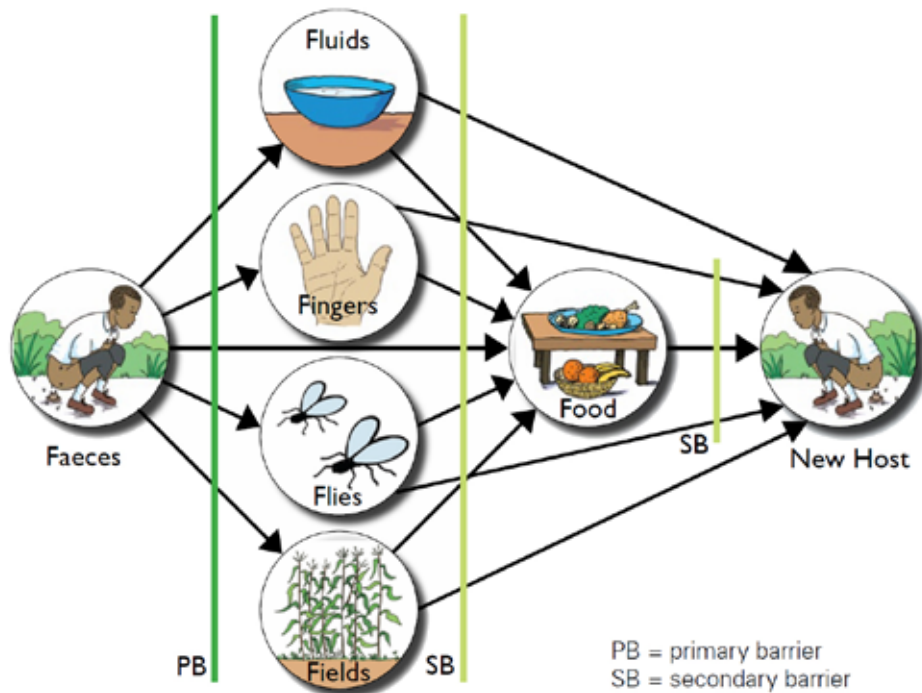
Figure 4: WASH Contributions to UNICEF's Key Outcomes for Children, Across the Life Course



Source: UNICEF, WASH Strategy 2016–2030

A major factor for the transmission of disease is inadequate disposal of human faeces including through open defecation. Disease can be spread by direct and indirect contact of human faeces with fingers, flies, drinking water contaminated with faeces, and through food, with the transmission pathways depicted in the 'F' diagram (Figure 5). The F diagram shows the importance of good sanitation in safely removing faeces from human contact. Hygiene is a secondary barrier through food hygiene and handwashing with soap after defecation or handling children's faeces, and before storing and preparing food and water, before eating, and before feeding babies and children.

Figure 5: The F diagram: Routes of faecal disease transmission and protective barriers



Source: <http://www.helioz.org/Home/WADISupport/WASHInstructions.aspx>

There is a growing body of evidence that exposure to poor sanitation and hygiene creates environmental enteric dysfunction, a condition of the small intestine which is linked to stunting in children.

While water is important for (i) handwashing and sanitation functions, (ii) and treatment of drinking water can interrupt faecal-oral transmission of disease, the largest health benefit comes from improving sanitation and hygiene practices.

Improvements in sanitation – in particular the elimination of open defecation – have been associated with a decrease in stunting among children ranging from 4–37 per cent in rural populations and 20–46 per cent in urban environments (Esrey, 1996). The safe disposal of child faeces is an often overlooked component of sanitation in general and prevention strategies to reduce diarrhoea incidence amongst children in particular. This is despite significant research highlighting that children from households which safely dispose of child faeces have a lower risk of diarrheal disease than children from households that dispose of faeces elsewhere (e.g., Auila, 1994; Gorter et al., 1998; Baltazar et al., 1989; Mertens et al., 1992). An observational study of infants and young children in Zimbabwe suggests that a significant proportion of the burden of feco-oral contamination is likely to come not only from well-characterized sources (food, water and hands) but also from direct eating of soil and animal faeces in the course of play and exploration.⁶ Avoiding the ingestion of enteric pathogens and any other causative microbes by infants and young children could prevent most of the EE burden.

Poor sanitation and high risk hygiene behaviours impact heavily on the poor and confine them in a vicious cycle of poor health, environmental degradation, malnutrition, reduced productivity and loss

6 Ngure, F.M., J.H. Humphrey, M.N. Mbuya, F. Majo, K. Mutasa, M. Govha, E. Mazarura, B. Chasekwa, A.J. Prendergast, V. Curtis, K.J. Boor, R.J. Stoltzfus, 'Formative Research on Hygiene Behaviors and Geophagy among Infants and Young Children and Implications of Exposure to Fecal Bacteria', *American Journal of Tropical Medicine and Hygiene*, 2013, 89, pp. 709–716.

of income. For women and adolescent girls, the lack of privacy and dignity to practice sanitation and hygiene have adverse impacts on health and safety, self-esteem, education and well-being. Women and girls are also affected disproportionately by lack of access to clean water and spend time fetching water that cannot be spent on more productive economic or social uses including attending school.

Increasing the equitable access to and use of safe water and basic sanitation services and improved hygiene practices will reduce child mortality, improve health and education outcomes, and contribute to reduced poverty and sustainable development as a whole. Studies have shown that handwashing with soap can reduce the risk of diarrhoea by 42 per cent;⁷ and that the economic gains from sanitation (and water supply) are significant.⁸

The ways in which water, sanitation and hygiene affect health are complex. WASH includes a number of interventions that interact, and may or may not be combined; each can be provided at various levels of service impacting disease transmission in different ways and affecting a wide range of diseases. WASH recognizes that, rather than building toilets or delivering information, education and communication (IEC) messages, changing social norms and behaviours are more effective at sustaining positive changes including handwashing with soap, stopping open defecation and using a sanitary latrine. Research has shown that the main motivating factors in changing sanitation and hygiene practices are disgust, comfort/convenience and affiliation,⁹ and these are central to the community led total sanitation (CLTS) approach (see Box 4). This approach has been adopted in 12 EAPR countries.

Box 4: Community Led Total Sanitation

Community led total sanitation (CLTS) is an innovative methodology for mobilizing communities to completely eliminate open defecation. Communities are facilitated to conduct their own appraisal and analysis of open defecation and take their own action to become open defecation free. At the heart of CLTS lies the recognition that merely providing toilets does not guarantee their use, nor result in improved sanitation and hygiene. CLTS focuses on the behavioural change needed to ensure real and sustainable improvements – investing in community mobilization instead of hardware, and shifting the focus from toilet construction for individual households to the creation of open defecation-free villages. By raising awareness that as long as even a minority continues to defecate in the open everyone is at risk of disease, CLTS triggers the community's desire for collective change, propels people into action and encourages innovation, mutual support and appropriate local solutions, thus leading to greater ownership and sustainability.

Source: <http://www.communityledtotalsanitation.org/page/clts-approach>

7 Luby, Stephan P., Amal K. Halder, Tarique Huda, Leanne Unicomb and Richard B. Johnston, 'The Effect of Handwashing at Recommended Times with Water Alone and With Soap on Child Diarrhea in Rural Bangladesh: An Observational Study', PLOS Medicine, 8(6), e1001052, 2011, <<http://journals.plos.org/plosmedicine/article?id=10.1371/journal.pmed.1001052>>

8 WSP, Economics of Sanitation Initiative, <www.wsp.org/content/economic-impacts-sanitation>

9 See for example Curtis, V. A., L. O. Danquah and R. V. Aunger, 'Planned, Motivated and Habitual Hygiene Behaviour: An Eleven Country Review', Health Education Research, 24(4), pp. 655–673, 2009,

Table 1: WASH interventions critical for nutritional outcomes

Hygiene promotion	
<p>Handwashing with soap at critical times:</p> <ul style="list-style-type: none"> • before preparing food or cooking • before eating or feeding a child (including breastfeeding) • after cleaning a child's bottom • after defecation 	<p><i>Soap can include detergent, or soap substitute (ash, alcohol-based product).</i></p> <p><i>Handwashing facilities should be available near latrines at households, schools, health care facilities, public places.</i></p>
<p>Food Hygiene</p> <ul style="list-style-type: none"> • Keep a clean environment for handling food (including handwashing, cleaning key surfaces and utensils, protecting food preparation areas from insects, pests and other animals). • Use safe water. 	<p><i>Food safety actions such as separating raw and cooked food, cooking food thoroughly, and safe food storage, should accompany food hygiene WASH interventions.</i></p>
<p>Environmental hygiene</p> <ul style="list-style-type: none"> • Keep animals away from food preparation and child feeding areas, child play areas and water sources. • Regularly clear compound of any animal or child faeces, at least daily. • Control disease vectors such as flies, mosquitoes, cockroaches and rats by covering food, improving drainage and safely disposing of garbage into a waste receptacle or protected pit. • Clean key surfaces, e.g., latrines, basins and kitchen floors and surfaces with soap and water (and bleach if available). 	<p><i>Environmental hygiene actions aim to minimize opportunities for infants to ingest faecal matter and other contaminants around the home.</i></p> <p><i>Additional actions include providing safe areas for children to play that can be regularly cleaned.</i></p>
Sanitation	
<p>Household and community sanitation</p> <ul style="list-style-type: none"> • Use of a hygienic toilet by all. • Safely remove and treat faecal waste. 	<p><i>A hygienic or improved sanitation facility is one that hygienically separates human excreta from human contact.</i></p> <p><i>Particular attention needs to be given to the safe disposal of infant and children's excreta.</i></p> <p><i>Sanitation interventions may include: community sanitation planning; community-based (e.g., CLTS) and/or sanitation marketing approaches to mobilization; sanitation business development; sanitation financing options for households; faecal waste management systems; integration with handwashing.</i></p> <p><i>Sanitation interventions may include: community sanitation planning; community-based (e.g., CLTS) and/or sanitation marketing approaches to mobilization; sanitation business development; sanitation financing options for households; faecal waste management systems; integration with handwashing.</i></p> <p><i>Perceptions that infant faeces are 'harmless' need to be overcome.</i></p>

<p>Sanitation for infants and toddlers</p> <ul style="list-style-type: none"> • Use of diapers/nappies and safe disposal of faecal matter into toilets and safe washing of diapers. • Promote actions and products, e.g., potties and scoops that facilitate getting faeces into latrines for safe disposal. • Make latrines ‘child friendly’. 	
<p>Sanitation for vulnerable groups</p> <ul style="list-style-type: none"> • Make structural improvements to latrine to make it easy to use, e.g., handrails/support poles, lower seats. • Ensure entrance to latrine is accessible, e.g., smooth pathway. 	<p><i>Vulnerable populations (pregnant women, older people, people with HIV/AIDS, and people with disabilities) have physical difficulty accessing and using toilets and may also disproportionately suffer from poor nutrition.</i></p>
<p>Water supply</p>	
<p>Access to safe drinking water</p> <ul style="list-style-type: none"> • Construct or improve water supply systems or services, e.g., piped water on-site, public standpipes, boreholes, protected dug wells, protected springs and rainwater. • Strengthening water safety planning and capacity for the operation and maintenance (O&M) of new/existing systems. 	<p><i>Improved water supply should address both quality and quantity.</i></p>
<p>Water treatment and safe storage</p> <ul style="list-style-type: none"> • Safe collection and transport of water to point of use. • Treatment of water, e.g., filtration, sterilization. • Safe storage of water, safe use practices. 	<p><i>Safe water storage, use and treatment should be practiced at households, schools, and health care facilities.</i></p> <p><i>Appropriate water treatment technologies need to consider ease of use, cultural preferences and motivations, and cost and availability of products, including spare parts and consumables.</i></p>

2.3 The link between WASH and nutrition

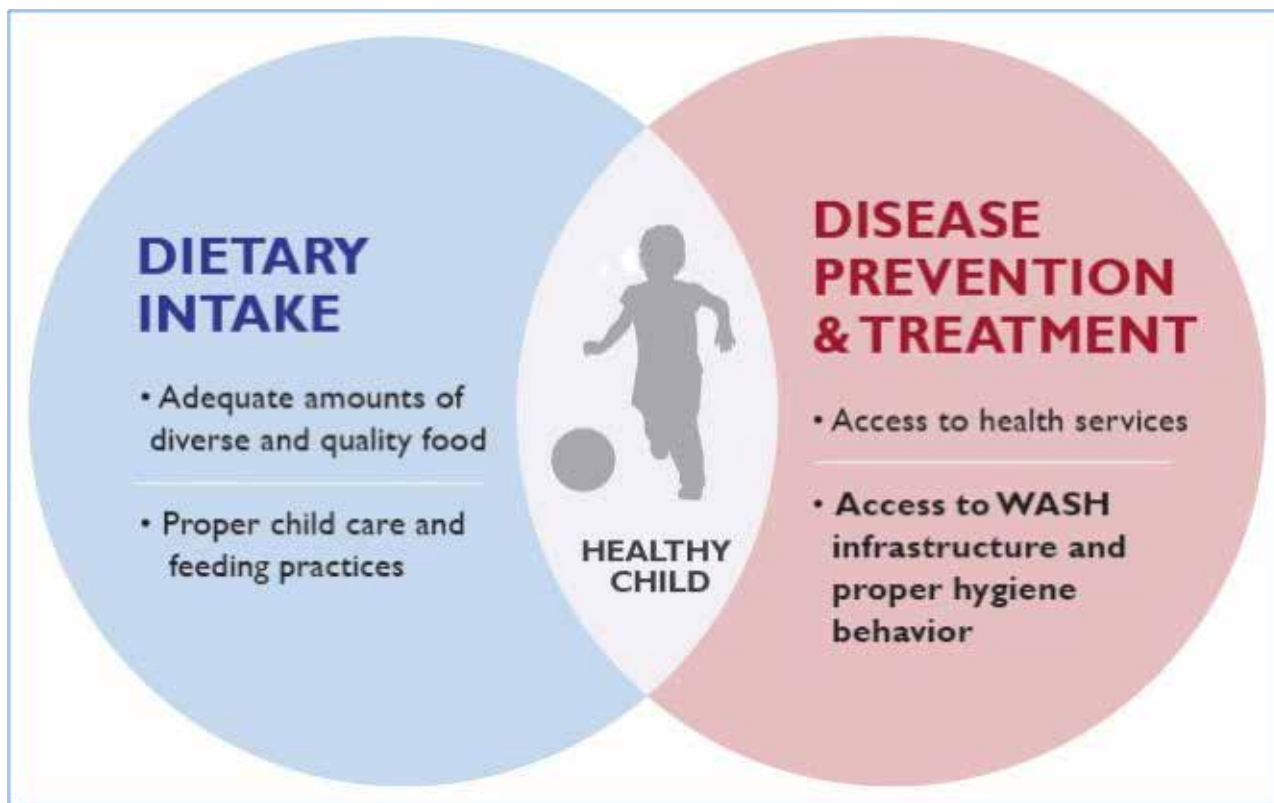
Undernutrition is determined not only by nutrient intake, but equally by nutrient loss

Inadequate access to clean water and unsafe sanitation and hygiene practices increase the risk of severe infectious diseases that can contribute to undernutrition. Further, often the most vulnerable children do not have access to the health services that can mean the difference between life and death in the case of acute diarrhoea. It is estimated that 40–60 per cent of childhood malnutrition is attributed to poor conditions of WASH, primarily through repeated diarrhoea or intestinal nematode infections.¹⁰ Recent research suggests that diarrhoea may only be the ‘tip of the iceberg’, with non-diarrhoeal faecally transmitted infections, including from unhygienic living conditions, having greater adverse effects on children’s nutritional status, than

10 Prüss-Üstün, Annette, and N. C. Corvalán, Preventing Disease through Healthy Environments, 2006, <http://www.who.int/quantifying_ehimpacts/publications/preventingdisease.pdf>; Prüss-Üstün, Annette, et al., Safer Water, Better Health, 2008, <http://apps.who.int/iris/bitstream/10665/43840/1/9789241596435_eng.pdf>; World Bank 2008.

diarrhoea.¹¹ There is strong evidence that improved water and sanitation conditions are associated with a decrease in stunting¹² especially in a certain context of high population density and high open defecation per square meter.

Figure 6: The intersection between WASH and nutrition



Source: USAID, Technical Brief, 2013

Existing research suggests three key pathways by which lack of WASH access and practice contribute to undernutrition.¹³

1. Repeated bouts of diarrhoea

A vicious cycle exists between diarrhoea and undernutrition: children with diarrhoea eat less and are less able to absorb the nutrients from their food; malnourished children are more susceptible to diarrhoea when exposed to faecal material from their environment.

2. Intestinal worm infection

Poor sanitation directly causes soil-transmitted helminthic infections – roundworm, whipworm and hookworm. Helminth eggs and larvae can survive for months in the soil and can infect humans when ingested (e.g., via contaminated water or food), by contact with objects carrying the infection organisms

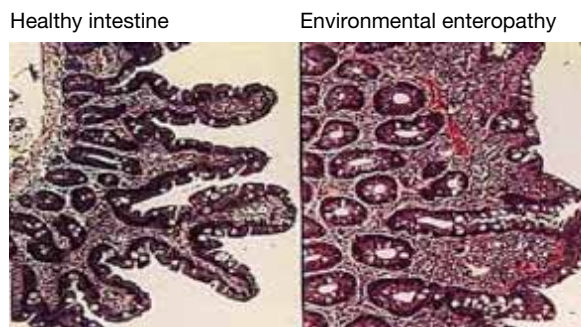
11 Chambers, Robert, and Gregor von Medeazza, 'Reframing Undernutrition: Faecally Transmitted Infections and the 5As', IDS Working Paper, No. 450, 2014, <http://www.communityledtotalsanitation.org/sites/communityledtotalsanitation.org/files/media/Wp450_Chambers_Medeazza_Reframing_Undernutrition.pdf>

12 UNICEF and WASH, Child Undernutrition: Global Evidence Base with a Special Focus on South Asia and India, 2014.

13 Bery, R., J. Rosenbaum and J. Annis, 'Horizontal Challenges: WASH and Nutrition Integrations', Briefing Paper 2196, 38th WEDC International Conference, Loughborough University, UK. 2015, <<http://wedc.lboro.ac.uk/resources/conference/38/Bery-2196.pdf>>

or by direct contact with the skin when walking barefoot on contaminated soil. Soil-transmitted helminthic infections can affect nutritional status by causing malabsorption of nutrients, loss of appetite and increased blood loss. Heavy infections with whipworm and roundworm can impair growth and hookworm infections are a major cause of anaemia in pregnant women and children.

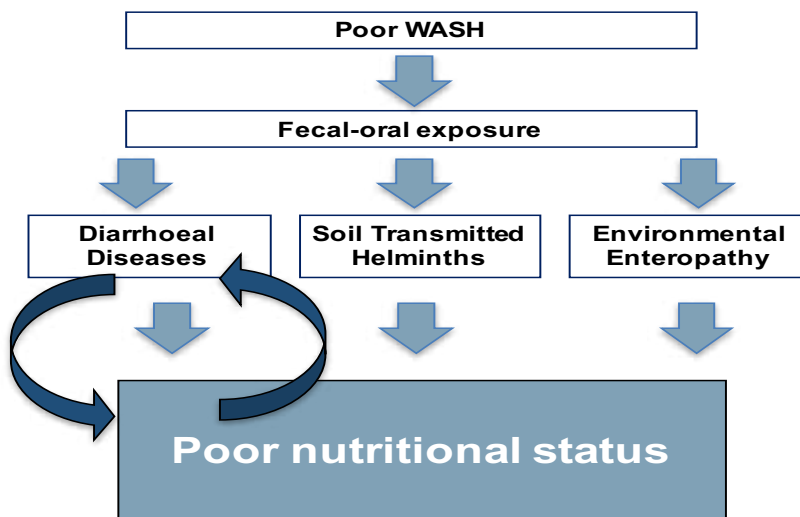
Figure 7: Healthy and unhealthy Villi



3. Environmental enteropathy hypothesis

Environmental enteropathy (EE)¹⁴ or tropical enteropathy is a condition of the gut caused by prolonged and persistent exposure to enteric pathogens from ingestion of faecal bacteria and living in poor WASH conditions. The intestinal villi flatten, thus reducing their surface area capacity for nutrient absorption, and the small intestinal lining becomes chronically inflamed leading to energy and protein consuming immune response to fight the infections. It is hypothesized that a body experiencing environmental enteropathy cannot absorb nutrients because it is too busy fighting off diseases. Infants who are crawling and putting objects in their mouths are at risk of high exposure. Environmental enteropathy can occur in infants without any diarrhoea. Environmental enteropathy may help explain why purely nutritional interventions have not been as effective at improving nutrition status in certain contexts, particularly densely populated areas with a high density of faecal contamination.

Figure 8: Linking WASH to nutritional status



Source: Cairncross, Sandy, 'Linking Toilets to Stunting', UNICEF ROSA Stop Stunting Conference, Delhi, November 2013, <<http://stopstunting.org/speakers-presentations/SandyCairncross-StopStuntingConference.pdf>>

What is the evidence?

Evidence on the association of improved water and sanitation with lower risk of diarrhoea and better nutrition outcomes comes from a growing body of studies including randomized control trials.

14 Crane et al., 2014, uses the term environmental enteric dysfunction to describe “an incompletely defined syndrome of mucosal and sub-mucosal inflammation, reduced intestinal absorptive capacity and reduced barrier function” but environmental enteropathy is currently the more generally accepted term.

Meta-analyses (Spears 2013, 2014) based on 140 demographic and health surveys, has found that open defecation accounts for much of the excess stunting in India. The research has shown that open defecation is even more harmful where population density is high, presenting conditions in which children (and adults) are more likely to be exposed to infections from faeces.

The relationship between open defecation and stunting is further confirmed for 112 districts of India (Spears, Ghosh and Cumming, 2013). The researchers found that a 10 per cent increase in open defecation was associated with a 0.7 per cent increase in both stunting and severe stunting. Furthermore, Indian research found that having a toilet was not enough to change behaviour and that many households still practiced open defecation despite having a latrine.

Research by Quattri and Smets (2014) using Multiple Indicator Cluster Surveys (MICS) data for rural Lao PDR and Viet Nam found that community-level unimproved sanitation led to stunting in rural villages regardless if the child's household uses an improved toilet. Controlling the data for all factors that may impact a child's height, the use of unimproved latrines in rural villages in mountainous regions of Viet Nam led to five-year-old children being 3.7 cm shorter than healthy children living in villages where everybody practiced improved sanitation. Children living in rural villages of Lao PDR where community members defecate in the open and/or use unimproved latrines were 1.1 cm shorter than healthy children living in rural villages where everybody uses improved sanitation.

When the height of children of the same socio-economic status is compared between West Bengal State, India and Bangladesh, in Bangladesh with much less open defecation, children of the same socio-economic status are taller than their peers in West Bengal (Ghosh et al., 2014).

Other studies show an association of height with sanitation and of stunting with a lack of sanitation and with open defecation. A child could be 2.5 cm taller at 24 months with effective water and sanitation, independent of diarrheal prevalence, household income per head or maternal education. (Esrey 1996; Checkley et al., 2004; Fink, Gunther and Kenneth, 2011; Dangour et al., 2013).

Emerging evidence is coming from the Sanitation Hygiene Infant Nutrition Efficacy (SHINE) trial. The SHINE trial is a multi-partner research project that explores: (1) environmental enteric dysfunction (EED) in stunting and anemia; (2) whether and how chronic inflammation in EED is implicated in adverse nutrition outcomes; and (3) the extent to which EED is caused by faecal ingestion due to poor WASH conditions. The trial is being conducted in two rural districts of Zimbabwe, and will monitor length and hemoglobin for children at 18 months of age in relation to independent and combined effects of faecal ingestion and nutritional adequacy.

Key resources on WASH and nutrition linkages

1. Spears, D, 'How Much International Variation in Child Height Can Sanitation Explain?', Rice Institute Working Paper, 2013.
2. Spears, D, 'Increasing Average Exposure to Open Defecation in India 2001–2011', 2014, <www.riceinstitute.org>
3. Spears, D, 'The Nutritional Value of Toilets: Sanitation and International Variation in Height', 2014.
4. Quattri, M., and S. Smets, 'Lack of Community-Level Improved Sanitation Causes Stunting in Rural Villages of Lao PDR and Vietnam', paper to 37th WEDC International Conference, Hanoi, September 2014, <<http://wedc.lboro.ac.uk/resources/conference/37/Quattri-2040.pdf>>
5. WSP, 'Investing in the Next Generation: Children grow taller, and smarter, in rural, mountainous villages of Vietnam where community members use improved sanitation', Scaling Up Rural Sanitation Research Brief, 2014.
6. WSP, 'Investing in the Next Generation: Children grow taller, and smarter, in rural villages of Lao PDR where all community members use improved sanitation', Scaling Up Rural Sanitation Research Brief, 2014.
7. Ghosh, Arabinda, Aashish Gupta and Dean Spears, 'Are Children in West Bengal Shorter than Children in Bangladesh?', Economic and Political Weekly XLIX.8, 2014, pp. 21–24.
8. Fink, G., I. Günther and K. Hill, 'The Effect of Water and Sanitation on Child Health: Evidence from the Demographic and Health Surveys 1986-2007', International Journal of Epidemiology 40.5, 2011, pp. 1196–204.
9. Dangour, A. D., L. Watson, O. Cumming, S. Boisson, Y. Velleman, S. Cavill, E. Allen and R. Uauy, 'Interventions to Improve Water Quality and Supply, Sanitation and Hygiene Practices, and their Effects on the Nutritional Status of Children (Protocol)', 2013, <<https://researchonline.lshtm.ac.uk/1119171/1/CD009382.pdf>>
10. SHINE trial – forthcoming. For background see: Clinical Infectious Diseases, Vol. 61, Issue suppl 7, 2015, pp. S685-S702.

Development programming often focuses on a single issue, such as WASH or nutrition, to target resources and maximize returns on investments that can be more directly measured by defined goals, objectives, and single-focus indicators. However, this type of programming does not foster solutions to address the complex problems faced by the poor and vulnerable, and often promotes competition for scarce funding resources. Focusing on integrating WASH and nutrition programming to better address the immediate and underlying causes of undernutrition provides a more integrated and comprehensive approach to programming that mirrors people's lives. Reducing and ultimately eliminating undernutrition therefore requires effective implementation of nutrition-specific and complementary nutrition-sensitive interventions addressing the underlying and basic causes of undernutrition – including improving WASH.¹⁵

15 WHO, UNICEF, USAID, Improving Nutrition Outcomes with Better, Sanitation and Hygiene, 2015.

Figure 9: Making the case for integrating WASH and nutrition



Source: Cambodia Sub-working Group for WASH & Nutrition, 29 September 2015 Presentation

3 Situating the toolkit in the East Asia and Pacific region

Key resources

UNICEF, Strategic Approach to Nutrition and Implementation Guidance, EAPRO 2014-2025, 2014, <http://www.unicef.org/eapro/Vol_1_EAPR_strategic_approach_to_nutrition_programming.pdf>

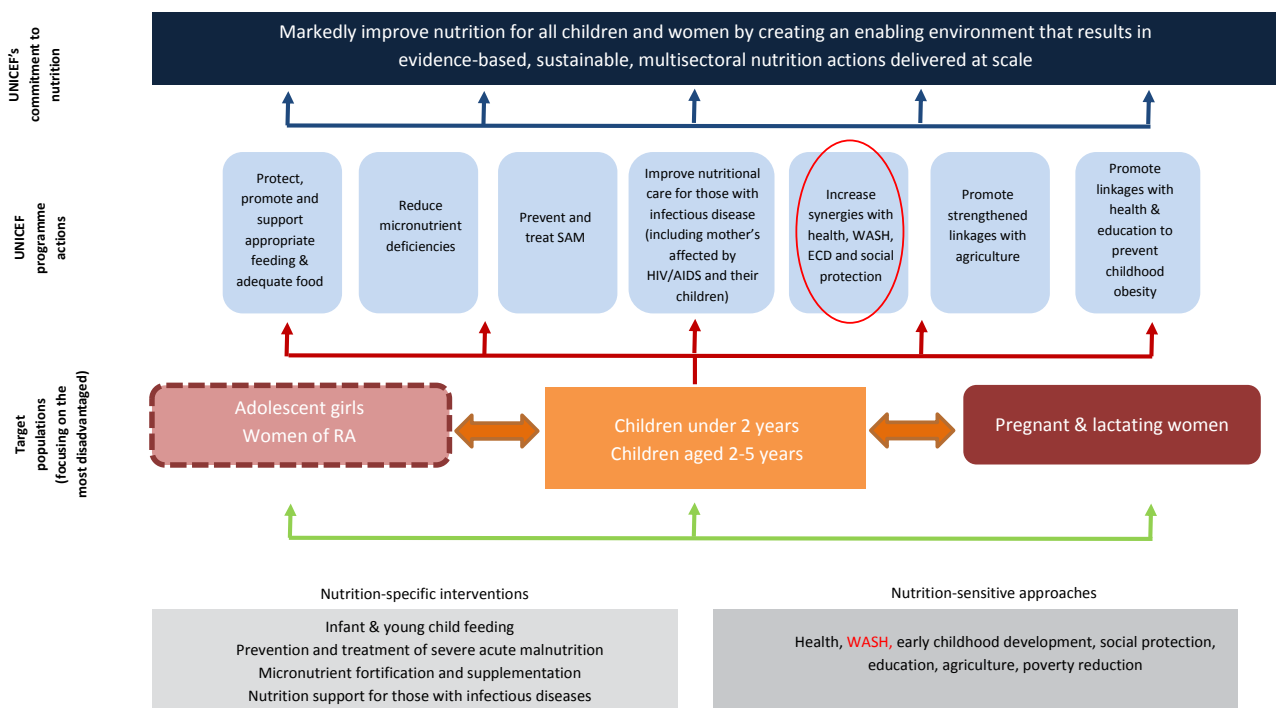
UNICEF, Approach to Scaling Up Nutrition For Mothers and Their Children, 2015, <<http://wphna.org/wp-content/uploads/2015/10/2015-06-Scaling-Up-Nutrition-UNICEF.pdf>>

3.1 UNICEF global approach

UNICEF supports and advocates for evidence-based nutrition-specific interventions and nutrition-sensitive approaches. Figure 10 shows the programme areas where UNICEF will work, with integration of nutrition actions with those from other sectors, including health, early childhood development, social protection, WASH and education.

The global approach acknowledges that poor sanitation and hygiene practices are essential determinants in the causal pathway and cycle of infectious disease burden and undernutrition. WASH includes adequate and sustainable water supply, sufficient means of sanitation (encouraging ‘total sanitation’ to eliminate the practice of open defecation), and improved hygienic practices (handwashing with soap).

Figure 10: WASH and nutrition in the UNICEF Global Strategy



Source: Adapted from: UNICEF, UNICEF’s Approach to Scaling Up Nutrition for Mothers and their Children, discussion paper, Programme Division, UNICEF, New York City, June 2015

3.2 The EAP WASH and nutrition profile

Compared with South Asia and Africa regions, the EAP region has an overall better economic situation, with several countries in the middle income category. However, the EAP region encompasses enormous variety in terms of country size, cultures and religions, and levels of development. It also encompasses great levels of inequity. Differences are significant between countries but also within countries between rural and urban populations and different economic quintiles.

With most wasted children living in South-Central Asia and Africa regions, wasting across the EAP region is comparatively low, however wasting above 10 per cent occurs in Cambodia, Indonesia, Timor-Leste and Solomon Islands.

Three of the worldwide top 10 countries with the greatest number of stunted children are in this region and the current estimated burden of stunted children in the region is 28 million. Eight countries in the region have a stunting prevalence of 30 per cent or above (Cambodia, Indonesia, Lao PDR, Myanmar, Papua New Guinea, Philippines, Solomon Islands, Timor-Leste), and if China is removed from the dataset, the average regional prevalence remains over 30 per cent. Stunting prevalence is of “public health significance” (above 20%) in 12 countries in the EAP region (see Figure 11). Close to 8 million children are wasted, with 2.5 million of them severely wasted; the majority in Indonesia. Significant achievements have been made in the region, particularly in relation to economic development, improved access to education, coverage of health interventions and water and sanitation. These advances have benefited the nutritional status of children and women. Overall, however, the implementation of nutrition interventions has lagged behind those of other sectors and the incidence of malnutrition remains high in the region, higher than might be expected compared to other social indicators.

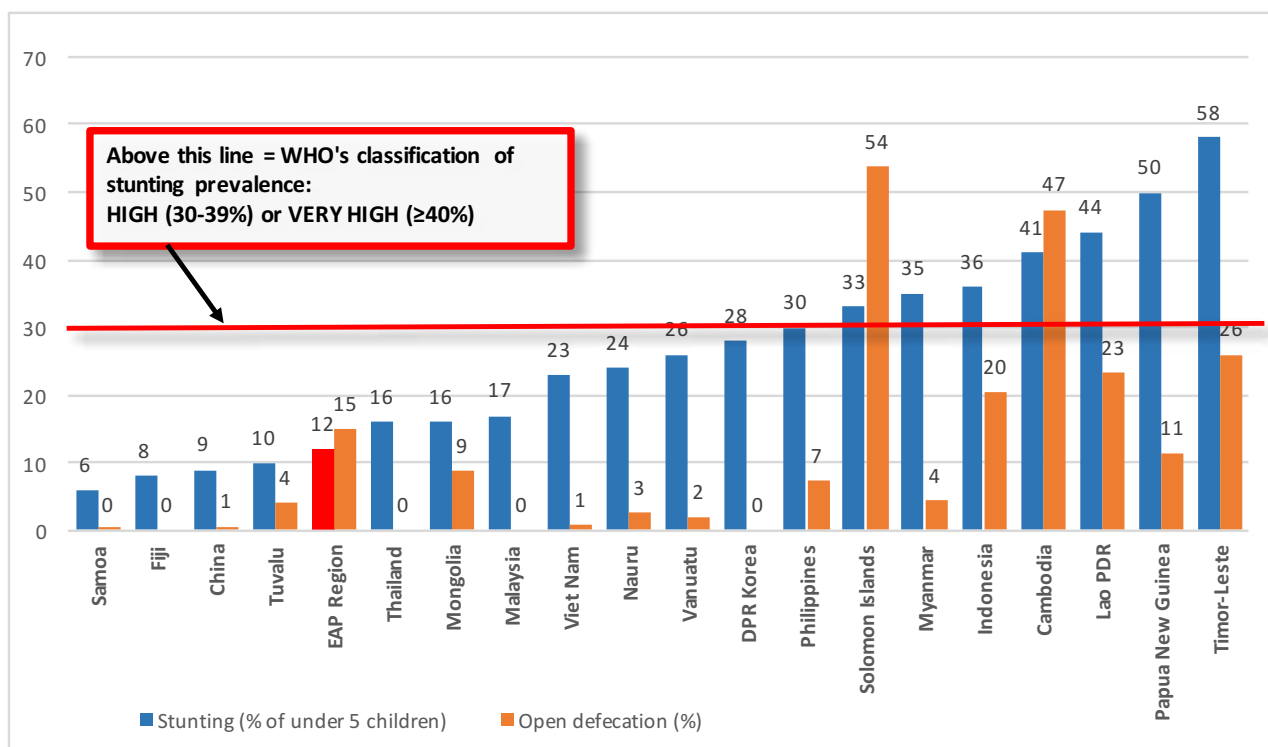
Several countries have achieved commendable progress in access to drinking water and sanitation over the past decade. According to the 2015 Joint Monitoring Report,¹⁶ an additional 770 million people accessed improved sanitation between 1990 and 2015 – the majority of them in China – and an additional 817 million people gained access to improved drinking water.

More than half of the population of the region now have safe water piped into their homes and premises. However, pronounced disparities between the rich and poor, urban and rural populations, and disparities based on ethnicity and geographic regions, particularly in sanitation and hygiene, continue to mark the region and remain one of the main contributing factors to high child mortality and under-nutrition rates.

Around 83 million people, or 4 per cent of the EAP population, continues to practice open defecation, posing a serious threat to child survival and development with three countries in the region being among top-twelve with the largest burden in the world: Indonesia (52 million and second highest in world); China (9.8 million); and Cambodia (7.4 million) (Figure 11).

16 WHO and UNICEF, Progress on Sanitation and Drinking Water: 2015 Update and MDG Assessment, 2015 <http://files.unicef.org/publications/files/Progress_on_Sanitation_and_Drinking_Water_2015_Update_.pdf>

Figure 11: Stunting and open defecation prevalence in East Asia and Pacific countries



Source: UNICEF, 'Nutrition Situation in EAPR 2015', PowerPoint presentation; State of the World's Children Report 2015; WHO/UNICEF Water and Sanitation JMP, Progress on Sanitation and Drinking Water 2015 Update and MDG Assessment, Geneva, WHO, 2015; compiled from various sources including UNICEF country database

3.2.1 Active multisectorial platforms in the region: SUN and Zero Hunger

The Scaling Up Nutrition (SUN) movement, recognizing that malnutrition has multiple causes, builds high-level support at the country level to foster collaboration and coordination across issues, sectors and stakeholders to position nutrition in all development efforts. SUN promotes scaling up both nutrition-specific interventions as well as nutrition-sensitive approaches, including clean drinking water, improved sanitation facilities and hygiene. SUN countries should have multi-stakeholder platforms with improved sharing of experiences, better support for monitoring of progress, better alignment of assistance from development partners, and stronger governance and coordination of intergovernmental action. To date, more than 55 countries have joined the SUN movement including Cambodia, Indonesia, Lao PDR, Myanmar, Philippines, and Viet Nam in East Asia and Papua New Guinea in the Pacific region. The SUN movement at the country level provides an opportune platform for engaging national governments and stakeholders in the dialogue around the importance of building the linkages between WASH and nutrition programming.

The Zero Hunger Challenge (ZHC) is a platform to communicate the importance of food security, nutrition and sustainable agriculture to deliver on the promise of the 2030 Sustainable Development Agenda Goal 2 "End hunger, achieve food security and improved nutrition and promote sustainable agriculture". The ZHC calls on all stakeholders to work together in an integrated manner, and recognizes that zero hunger can only be achieved if all elements are taken together: zero stunting and good nutrition, and access to adequate food for everyone at all times; sustainable, inclusive and resilient food systems, with no loss or waste of food; and support for smallholders, especially women and young people.

The regional application of the ZHC in East Asia and Pacific¹⁷ places emphasis on three specific and complementary areas of work of formulating or operationalizing food security and nutrition policies, improving capacity and reducing stunting and undernutrition.

WASH and nutrition initiatives to jointly improve nutritional outcomes should naturally take place within the context of these large-scale multisectoral initiatives as well as other more regional or local schemes. With existing coordination and governance mechanisms, planning processes and monitoring systems, they are an excellent framework to situate the discussion of how other sectors can contribute to health and nutrition outcomes, and to initiate and further elaborate upon the linkages between WASH and nutrition. The task will be to work together with United Nations agencies, donors, academic institutions, NGOs and other partners, to help governments develop and implement sustainable, multisectoral nutrition strategies and programmes at scale across the life course.

3.3 UNICEF’s nutrition approach in the East Asian and Pacific region

The purpose of the UNICEF EAP regional approach to nutrition is to reduce maternal and child malnutrition in the region. The UNICEF EAP approach complements the UNICEF global approach and other strategies addressing malnutrition at regional and national levels. The regional approach advocates a multisectoral approach and a focus on known effective interventions. It proposes a ‘core’ package of nutrition specific and sensitive interventions for implementation in all countries, focused on reaching women and children during the 1,000 days from conception through early childhood; the ‘critical window of opportunity’ for preventing malnutrition. The three core packages are felt to be necessary in all countries. Four ‘optional’ packages should be implemented based on the specific situational context in the country or regions of a country (Figure 12).

Figure 12: East Asia and Pacific Regional Nutrition Strategy encompasses WASH

UNICEF EAP Regional Nutrition Strategy : 7 packages of Interventions



17 Countries in the regional ZHC initiative includes Lao PDR, Myanmar, Timor-Leste, Bangladesh, Nepal and Cambodia.

The actions and interventions which make up the core package for maternal and child malnutrition are detailed in Figure 13.

Figure 13: UNICEF EAPRO nutrition specific interventions for maternal and child malnutrition

Nutrition Specific Interventions

Maternal Interventions

- Periconceptual folic acid supplementation fortification*
- Iron and folic acid or multiple micronutrient supplementation (MMS) of pregnant and lactating women
- Intermittent (weekly) iron and folic acid supplementation of reproductive age women
- Calcium supplementation of pregnant women
- Deworming of pregnant women
- Pregnancy spacing
- Nutrition counselling for healthy dietary intake
- Nutrition screening and food supplementation if under-nourished

Community-wide Interventions

- Control of marketing of breast milk substitutes*
- Universal salt iodization
- Iron fortification of condiments or staple foods
- Vitamin A fortification of condiments or staple foods

Infant and Young Child Interventions

- Delayed cord clamping
- Breastfeeding support in maternity/ newborn care incl. in context of HIV*
- Counselling, support and communication on breastfeeding incl. in context of HIV
- Communication/ counselling for improved complementary feeding
- Multiple micronutrient powders (MNPs) for home fortification*
- Vitamin A supplementation of children 6-59 months
- Deworming of children 12-59 months
- Zinc supplementation as part of diarrhoea treatment
- Treatment of severe acute malnutrition – facility-based including outpatient treatment
- Prevention and treatment of common childhood diseases (diarrhoea, pneumonia, measles, malaria etc.)

Figure 14: UNICEF EAPRO nutrition sensitive Water and Sanitation Package

Package for Water and Sanitation

1. Communication on hand washing with soap
2. Communication on the safe disposal of faeces, especially children's faeces
3. Elimination of open defecation and increased access to sanitation
4. Facilitate access to water for hand washing and hygiene practices, as well as clean drinking water

WASH interventions are considered amongst the nutrition sensitive actions. The importance of improved water and sanitation coverage for nutrition is felt to be sufficiently strong that all countries in the region should prioritize implementation of the Water and Sanitation Package (Figure 14) in order to reduce maternal and child undernutrition. This includes interventions that are likely to prevent faeces from entering the domestic environment, and the mouths of children because of the significant role poor sanitation plays in causing undernutrition. This framework is an ideal place to start for UNICEF country offices when considering the most appropriate WASH interventions to focus on for improving nutrition outcomes.

4 Using Theory of Change for integrating WASH and nutrition

Key resources

UNICEF EAPRO Theory of Change Workshop Package for Integrating WASH and Nutrition http://www.unicef.org/eapro/12205_25007.htm

Fagligt Fokus. *Theory of Change: How to Navigate towards Positive Change in Complex Social Settings*, 2015 http://www.unicef.org/eapro/12205_25007.htm

Hivos Knowledge Programme, <http://www.theoryofchange.nl/sites/default/files/resource/hivos_toc_guidelines_final_nov_2015.pdf>

Theory of Change Knowledge Creation Portal, <<http://www.theoryofchange.nl/>>

UNICEF Note on the Theory of Change for the UNICEF Strategic Plan 2014–2017, <http://www.unicef.org/strategicplan/files/2014-CRP_14-Theory_of_Change-7May14-EN.pdf>

4.1 What is Theory of Change?

Theory of Change (ToC) is an approach to planning, learning, reflection and documentation of the change we make as development stakeholders. It is a theory in the sense that it represents the best idea we have about how we can support changes and we recognize that these ideas need to be constantly tested and refined so that we can have a stronger theory next time. As with the many ways in which it is used, “Theory of Change” is also defined in numerous ways. The common elements however are summarized as follows:

- ✓ An on-going process of reflection to explore change and how it happens – and what that means for the part we play in a particular context, sector and/or group of people.
- ✓ It considers a programme or project within a wider analysis of how change comes about.
- ✓ It makes us explain our understanding of change – but also challenges us to explore it further.
- ✓ It is often presented in diagrammatic form with an accompanying narrative summary.
- ✓ The focus is on what we think will change, not on what we plan to do.

When considering integrating WASH and nutrition, the process of developing a ToC can be as useful as the actual paper product. Dedicated time to sit together with WASH and nutrition colleagues to understand others’ work sphere, agree on desired long- and short-term changes, and how you might get there, is priceless. Feedback from participants in joint WASH and nutrition ToC workshops in the Philippines and Cambodia was that the process of engaging participants through reflective thinking focused on joint outcomes was highly appreciated. The WASH and nutrition collective visioning, and co-development of the ToC and pathway was found to be very useful.

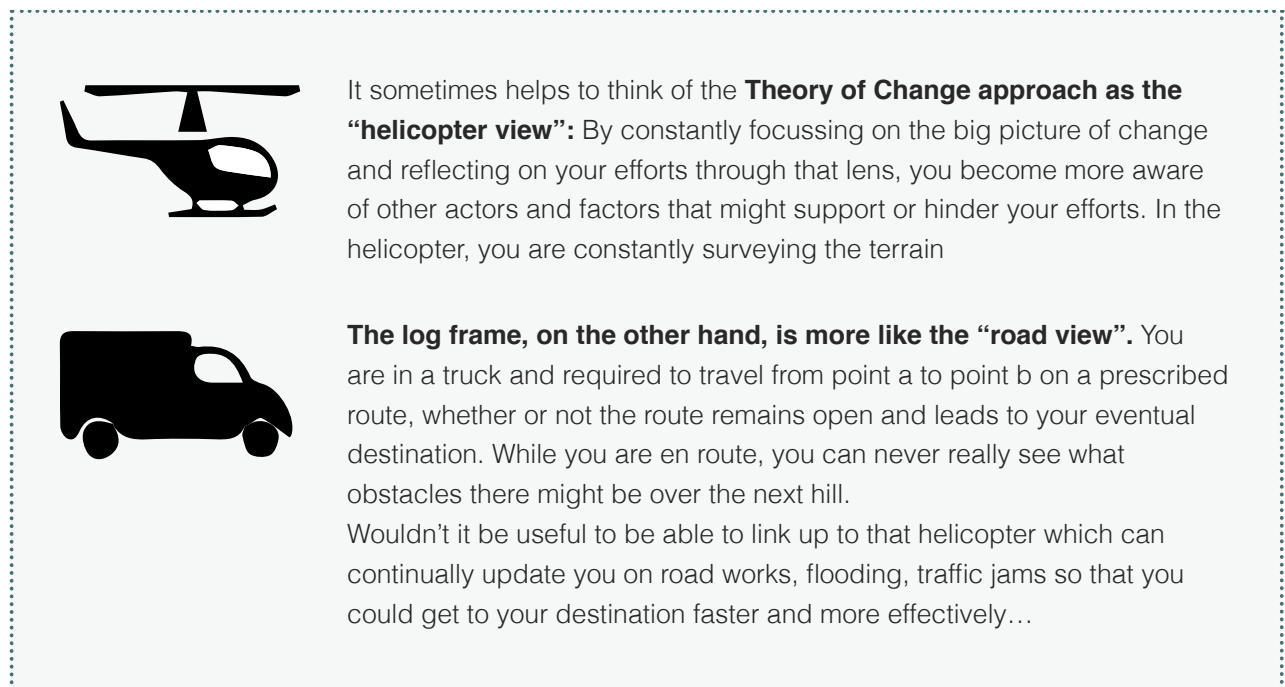
Three criteria¹⁸ for a good process are:

- 1 A group discussion and consultation process, as participatory as possible, with the involvement of stakeholders as feasible and appropriate.
- 2 Clear grounding in the context, informed by local knowledge and stakeholder perspectives, with recognition of the political economy.
- 3 Sufficient time to prepare and conduct an in-depth analysis, consult stakeholders as appropriate and achieve a genuinely reflective process.

4.2 How Theory of Change fits with other planning tools

Introducing a ToC approach to your work does absolutely not mean that well-established procedures for planning, monitoring or reporting are rejected. They are relevant and necessary. What ToC will offer is a systematic approach that enables both deeper analysis about how change happens and the specific role of different actors in this process; and a very practical way of being able to critically reflect on the effectiveness of efforts and contributions from different stakeholders to desired changes. It enables stakeholders to make stronger and more robust plans about what they will do to integrate WASH and nutrition programming and what they will achieve by doing so. Stakeholders need to be accountable for the plans they have made and therefore they need to be sure that the plans they have made are the best possible plans in the circumstances. A ToC approach to planning and critical reflection makes log frame planning and evaluation more robust.

Figure 15: Linking a Theory of Change to a logframe



It sometimes helps to think of the **Theory of Change approach as the “helicopter view”**: By constantly focussing on the big picture of change and reflecting on your efforts through that lens, you become more aware of other actors and factors that might support or hinder your efforts. In the helicopter, you are constantly surveying the terrain

The log frame, on the other hand, is more like the “road view”. You are in a truck and required to travel from point a to point b on a prescribed route, whether or not the route remains open and leads to your eventual destination. While you are en route, you can never really see what obstacles there might be over the next hill.

Wouldn't it be useful to be able to link up to that helicopter which can continually update you on road works, flooding, traffic jams so that you could get to your destination faster and more effectively...

18 DFID, Review of the use of Theory of Change in International Development, 2012.

4.3 Facilitating a Theory of Change process

One of the most challenging aspects of ToC is being able to think outside of the usual box: the process is designed to inspire greater reflection about how stakeholders work and the sequence of changes they want to be able to influence. When working in partnership with a larger group of stakeholders in moving forward the WASH and nutrition agenda, it can be challenging for someone from within that group to take the lead in a workshop or development of a theory. An external facilitator who does not represent a way of thinking or organizational aims is recommended. This does not have to necessarily be an external consultant but could be a UNICEF staff member providing support from the regional level or alternatively from a country office. This allows country UNICEF staff to take part fully in the analysis and paves the way for ongoing support and input.

To assist countries in the EAP region to facilitate their own ToC workshops for joint WASH and nutrition programming, a workshop module has been prepared and tested in Cambodia and Philippines. The workshop module contains the tools and forms needed to plan and deliver a successful ToC workshop.

Box 5: What's in the ToC workshop module for joint WASH and nutrition programming?

- Save the date letter
- Letter of invitation
- Supplies and venue format request
- Generic workshop session descriptions
- Generic workshop PowerPoint slides (to go with sessions plans)
- List of participants by type
- ToC narrative (blank)
- Evaluation form (blank)

Lessons learned and findings from these workshops have highlighted some essential features for successful workshops:

- External facilitator skilled in the ToC process.
- A small group – no more than 25 people.
- Minimum 3-day workshop, longer is better.
- A balance of people representing WASH and nutrition specialist areas. They should have practical implementation experience and be willing to contribute ideas to the process.
- Commitment by participants to give attention to and attend the ToC workshop over the duration.
- Leadership and representation by government.
- Active participation and coordination by UNICEF.

The workshop should take as its starting point existing networks and processes in the country. The ToC workshop model can be applied at national level (as in the case for government, United Nations and NGOs in Cambodia) or subnational level (as for pilot municipalities in the Philippines).

4.4 Outputs and taking it forward

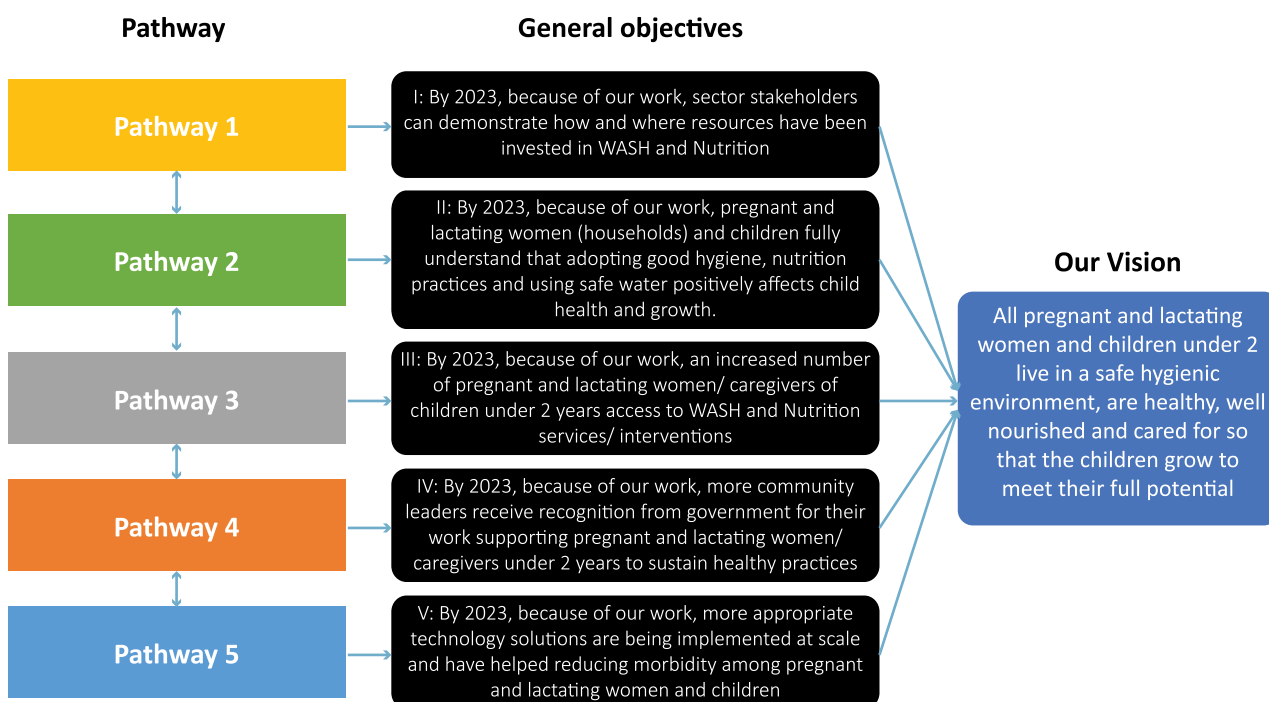
As well as a shared process and better understanding of WASH and nutrition integration, key outputs from the workshop are a pathway or series of linked changes needed to reach programme goals (depicted graphically); and a narrative or story around all the background thinking, context, assumptions, etc. which underpin the graphic narrative.

The workshop and its output are not the end of the story. This is the beginning of a new way of working to integrate WASH and nutrition. During the workshop one or two key WASH and nutrition specialists need to assist in developing the pathway into a coherent first draft. After the workshop, typically UNICEF, leading NGO or government, should take the ToC pathway to the next level of development (beyond a rough draft of meeting notes) so that this becomes the completed working version of the pathway and narrative. For efficiency, this final progression should be done through a core group before sharing with all workshop participants and wider audiences. Ideally, the WASH and nutrition pathway and narrative can be assimilated into existing mechanisms such as SUN networks.

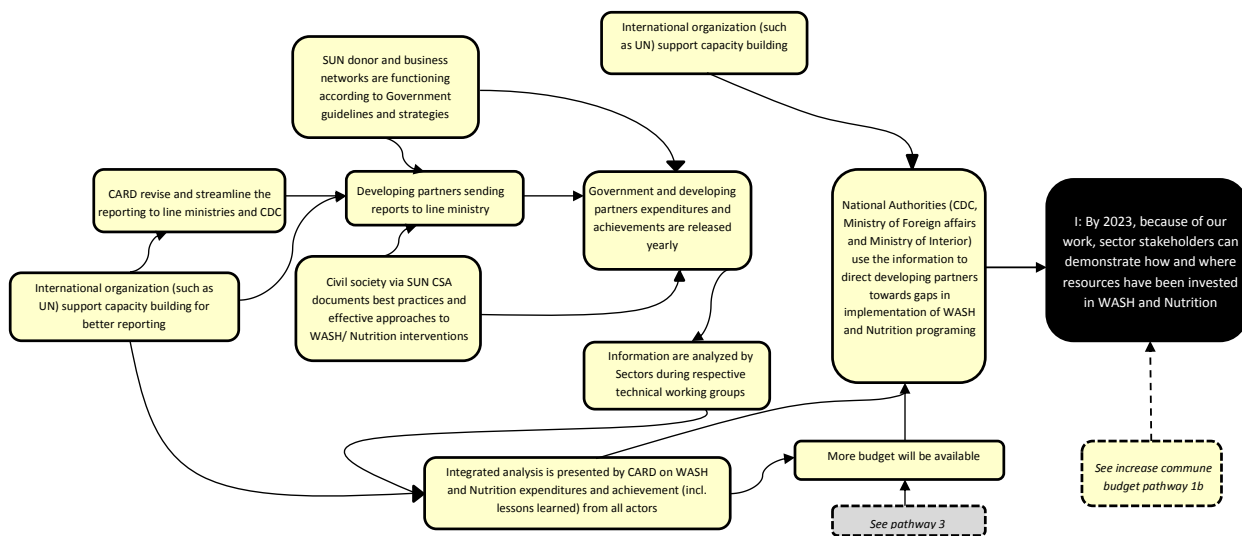
The pathway can be simply prepared in Excel or PowerPoint format, however, there are also ToC software products available, e.g., TOCO www.theoryofchange.org/toco-software/.

Examples of pathways from Cambodia and Philippines are in Figure 16 and 17. For Cambodia, the general pathway developed at the ToC workshop was subsequently developed and refined into five pathways. The overall goal and examples from pathway 1 are shown in Figure 16. The narrative and accompanying documentation is available at http://www.unicef.org/eapro/12205_25007.htm

Figure 16: Joint WASH and nutrition Theory of Change (Cambodia, 2016)



Pathway 1a – National integration



Pathway 1a- Sub-national level: Commune

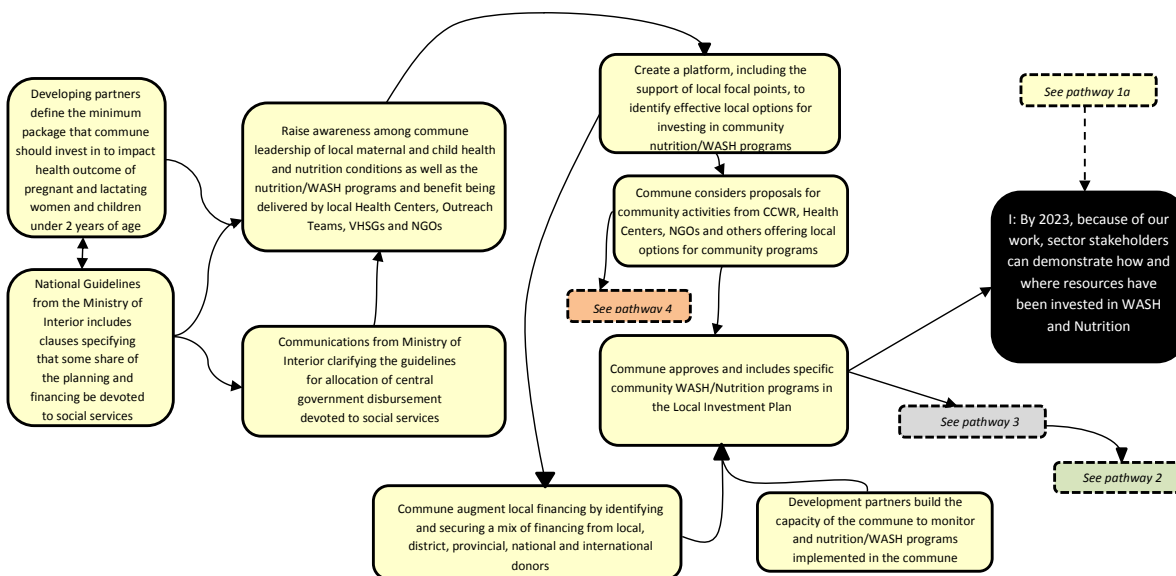
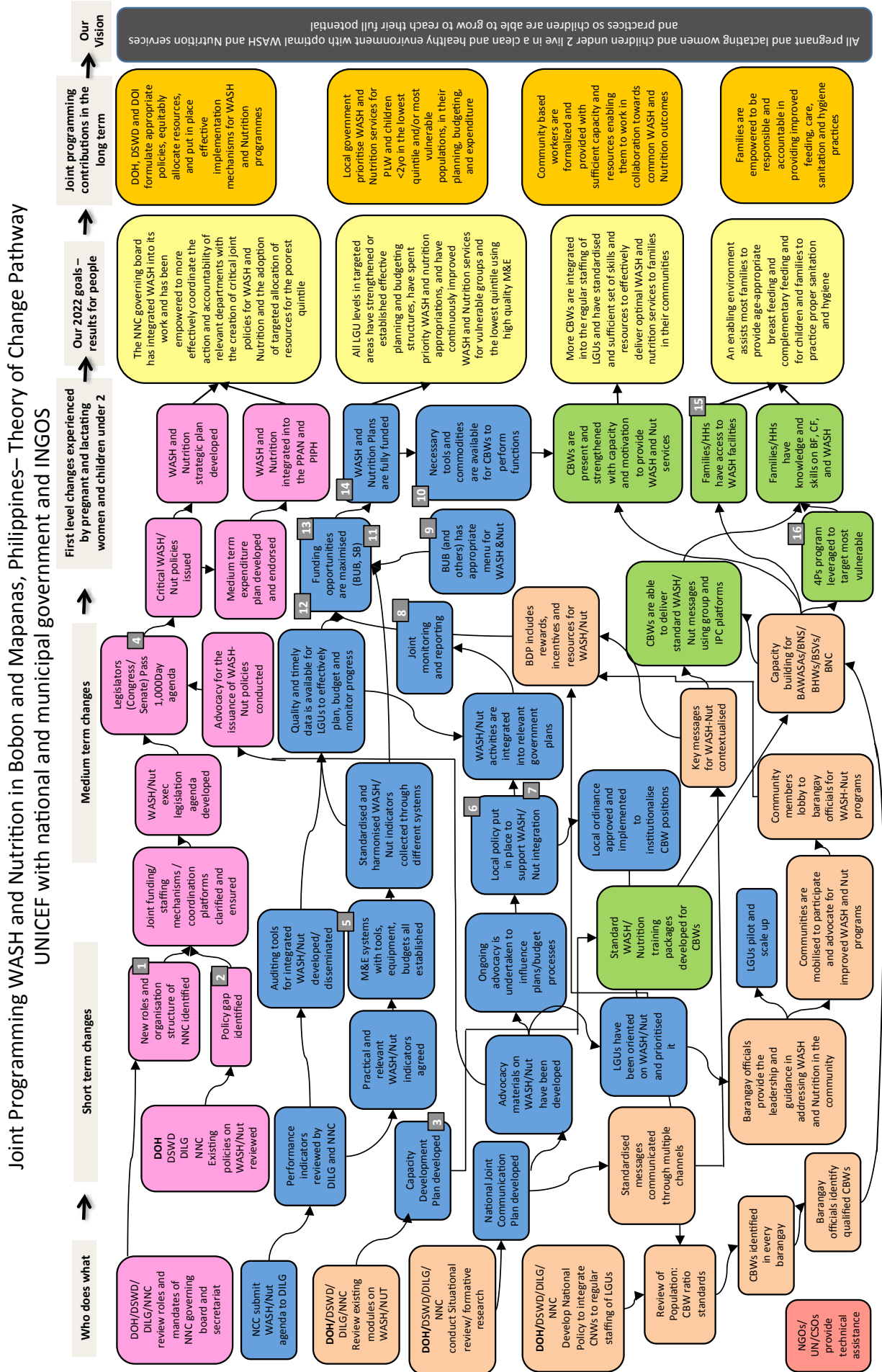


Figure 17: Joint WASH and nutrition Theory of Change (Philippines, 2016)



5 The guidance

5.1 Key principles

Box 6: Key population for this toolkit

This guidance focuses on the first 1,000 days of a child's life. The first 1,000 days of a child's life is from conception to 2 years, therefore, the primary focus is on pregnant women and children under 2. Why? This is consistent with UNICEF's EAP Regional Nutrition Strategy, and the approach of the SUN initiative, and is based on evidence of the first 1,000 days being a critical period of intervention for impacting on stunting reduction. In some situations, dependent on the programme design and desired outcomes, additional key populations could also be targeted such as:

- Children up to 3 years of age
- Children up to 5 years of age
- Adolescent girls
- Women of reproductive age

Older children may be targeted through WASH in Schools and School Feeding however these are outside of the 1,000 day focus.

Key resources

WHO, UNICEF, USAID, Improving Nutrition Outcomes with Better Water, Sanitation and Hygiene: Practical Solutions for Policies and Programmes, 2015,
<http://www.who.int/water_sanitation_health/publications/washandnutrition/en/>

USAID, Integrating Water, Sanitation, and Hygiene into Nutrition Programming, 2013,
<http://washplus.org/sites/default/files/wash_nutrition2013.pdf>

Concern Worldwide, How to Better Link WASH and Nutrition Programmes, 2014,
<https://doj19z5hov92o.cloudfront.net/sites/default/files/media/resource/how_to_better_link_wash_and_nutrition_programmes.pdf>

Some key principles for integration of WASH and nutrition programmes adopted for this guidance include:

- Focus on the first 1,000 days of a child's life (from conception to age 2)¹⁹
- Focus on interventions that affect both WASH and nutrition (see box 7 below)
- Identify overlapping geographic work areas – both WASH and nutrition programmes typically focus on the most vulnerable populations including geographies with high poverty rates, communities with low access to improved sanitation and/or high open defecation rates, regions with high percentages of stunting, etc.

19 Although outside of the 1,000 days' scope, both WASH in schools and school feeding programmes have longer-term merit in terms of stunting reduction efforts. Both interventions can have an immediate effect on attendance (particularly continued attendance of girls in secondary school), and in the long-term is beneficial for stunting reduction (mothers' and fathers' level of education is strongly correlated with less stunting).

- Mainstream gender into all actions – coordination, analysis, capacity building, advocacy, and for implementation conduct gender analyses that identify gender dynamics, roles, and how they impact WASH and nutrition behaviours for men, women and children.
- Plan and budget for adequate WASH infrastructure and hardware to successfully and sustainably integrate WASH.

Box 7: Nutrition and WASH actions

NUTRITION

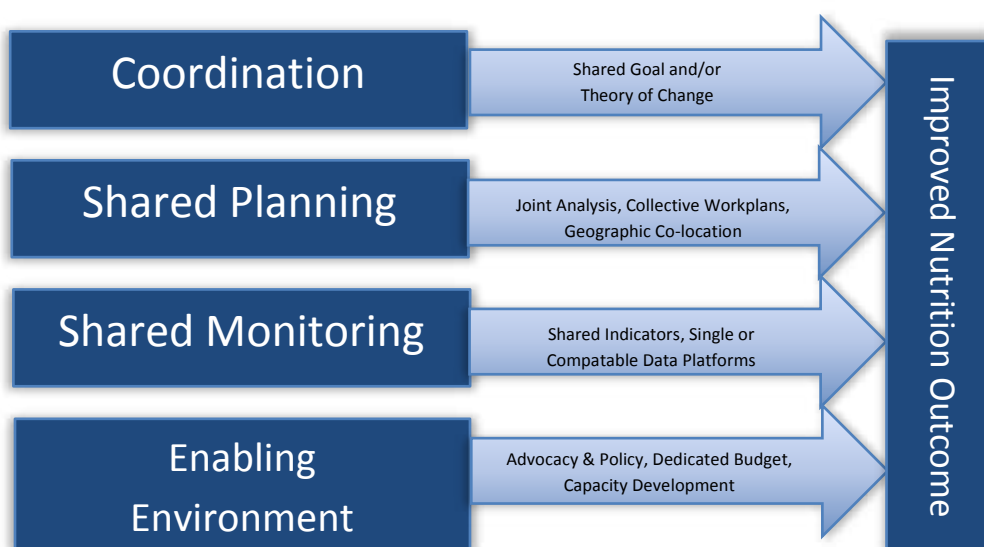
- Protection, promotion and support for breastfeeding support
- Counselling and communication for complementary feeding
- Deworming and Vitamin A supplementation
- Nutrition Counselling for dietary intake
- Prevention and treatment of diarrhoea
- Treatment of acute malnutrition (severe and moderate)

WASH

- Handwashing with soap at critical times
- Food hygiene
- Environmental hygiene around home
- Household and community sanitation
- Safe disposal of infant faeces
- Safe drinking water
- Safe collection and storage of water

The following section sets out guidance for ways to develop and improve joint planning and programming of WASH and nutrition interventions in the EAP context. This guidance is based on practical experience of actions that can improve integration of relevant areas of WASH and nutrition sectors and on the findings from a growing body of research. The guidance focuses on the key ingredients of joint planning and programming which will improve nutritional outcomes. Taken together they will provide a holistic framework for jointly moving towards improved nutritional outcomes with application and reference to the environment of operation. Figure 18 provides an overview of the primary ingredients that will lead to success.

Figure 18: Ingredients for success



Source: Adapted from: Grieve, H., and D. Green, 'Cross sector programming in sentinel sites to improve nutrition outcomes- could this be a possibility?' PowerPoint Presentation. Department for Foreign Affairs and Trade (DFAT) (Australia), Timor-Leste

5.2 Coordination

Coordination is at the core of joint WASH and nutrition integration since it is the basis for bringing two different sectors together for planning, budgeting, implementation and monitoring of interventions that aim to have an impact on nutritional outcomes.

Previous experience with multisectoral nutrition programmes dictates that a high-level coordination forum is needed to agree to and sign off on the national plan and budget, the situation analysis, and the programme and policy assessment. Once national sectoral budgets are agreed, each sector implements its own plan, each of which will have nutrition-specific and/or nutrition-sensitive interventions included.²⁰ It is important to foster an environment that is conducive to collaboration between programmes and sectors, rather than competitive. In countries where SUN or Zero Hunger Challenge multisectoral coordination forums already exist, these should be the starting point for high-level coordination on joint WASH-nutrition programming.

Figure 19: Nutrition and WASH coordination platform



20 UNICEF EAP Nutrition Strategy p. 49.

COORDINATION WITHIN UNICEF

The Chief of Young Child Survival and Development (YCSD) is a key person to facilitate internal coordination between UNICEF WASH and nutrition personnel. Where there is no YCSD Chief, the Deputy Resident Representative should assume this facilitation role.

Good coordination starts within UNICEF teams. This can be done through:

- ☑ Regular dialogue between WASH and nutrition staff on how they jointly can improve nutritional outcomes.
- ☑ Annual planning processes.
- ☑ Quarterly coordination meetings.
- ☑ Joint monitoring of integrated project or geographic area of programming convergence.
- ☑ Informal information sharing of WASH and nutrition programme activities, successes or challenges between sections.
- ☑ Participate and capitalize on efforts of multisectoral groups such as SUN and Zero Hunger to further bring WASH and nutrition together.
- ☑ Use your position to establish and build a working relationship between nutrition and WASH actors

Case Study 1 – The early childhood development umbrella in UNICEF Cambodia

Case Study 1: Under the early childhood development umbrella (Cambodia)

In Cambodia, the UNICEF WASH, Nutrition, Health and Education team have been gathered under the direction of an Integrated Early Childhood Development umbrella, all working together for improved early childhood outcomes. Working with the same target groups now it is easier to have workplan linkages, share information, and work together on joint programming. They have quarterly meetings where they share results and challenges of their projects with each other with an effort to better understand what the complementary sectors are doing and build synergies. Informal working relationships have also developed which help with information sharing and building commitment to the common objective.

NATIONAL SECTOR COORDINATION

Coordination amongst stakeholders at the national level is crucial for moving the WASH and nutrition integration agenda forward. Coordination should occur through existing structures, but where this is not possible, new working groups need to be established. Partners at the national level contribute through:

- ☑ establish/improve a joint WASH and nutrition taskforce,
- ☑ participation in sector meetings,
- ☑ share information between sectors,
- ☑ include standing meetings with WASH/nutrition agenda in multisectoral working groups,
- ☑ convene joint working groups and task forces by an independent ministry with authority to lead,
- ☑ ensure a defined ToR for the working group which state (as a minimum):
 - 1 the purpose of the working group
 - 2 activities
 - 3 roles and responsibilities for members
 - 4 the process for nominating a chairperson
 - 5 meeting schedules.

Cambodia WASH and Nutrition Sub-working Group ToR http://www.unicef.org/eapro/12205_25007.htm

WASH and Nutrition Working Group ToR Template http://www.unicef.org/eapro/12205_25007.htm

Contact List Template http://www.unicef.org/eapro/12205_25007.htm

Global Nutrition Cluster Coordinators Handbook Chapter 2.3 Coordination Skills http://nutritioncluster.net/nutrition/wp-content/uploads/sites/4/2013/09/GNC_Handbook_v1_FINAL_no_links.pdf

Case Study 2 on lessons learned in national coordination in Bangladesh

Case Study 3 on the Cambodia WASH and Nutrition Sub-working Group

Table 2: Tips for effective coordination

Good facilitation

Clarify

- ✓ Restate or paraphrase an idea or thought to make it clearer. This can involve asking, for example: “So, just to be clear, you are saying...?” or “What example might illustrate your point?”
- ✓ Check that others have understood.
- ✓ Limit over-detailed explanations.

Summarize

- ✓ Regularly summarize key points in the discussion, agreements, action points, etc. For example: “To summarize, your main points are...” or “These seem to be the key ideas expressed...”
- ✓ Arrange for a volunteer to record key points as they arise, which helps the group stay focused, avoids repetition and helps to reach consensus.

Ensure participation

- ✓ Create opportunities for everyone to participate and feel that they are listened to and their contribution valued.
- ✓ Encourage wide participation, and ask for information and opinions.
- ✓ Prevent side conversations, which can be distracting.
- ✓ Avoid strong characters dominating.

Build consensus

1. Agree on your objectives as well as expectations and rules.
2. Define the problem or decision to be reached by consensus.
3. Brainstorm possible solutions.
4. Discuss pros and cons of the narrowed-down list of ideas/solutions.
5. Adjust, compromise and fine-tune the agreed upon idea/solution so that all members of the group can accept the result. This will include testing for agreement. Groups can waste a lot of time talking around ideas that they largely agree on. It is worth presenting the group with the ideas you are hearing and asking for some sign of agreement or disagreement.
6. Make your decision.

Handle conflict

1. Recognize symptoms: Overt symptoms include anger, disengagement, being quiet, body language, formation of cliques and arguments. Hidden symptoms include low energy, non-attendance, lateness/leaving early, mistakes, not socializing.
2. Tackle it early: Left alone, conflict grows and spreads.
3. Identify the causes: Sources of conflict can include: lack of clarity, no common vision, division of responsibilities, personalities, styles of working.
4. Focus on core issues or problems: Avoid focusing on previous negative interactions or issues.
5. Consider each point of view: Use active listening.
6. Invite suggestions on the way forward: Focus on solutions and on building consensus.
7. Check agreement of all stakeholders: Check back that everyone accepts the resolution.

Case Study 2: Lessons learned in national coordination (Bangladesh)

*The Bangladesh National Nutrition Council (BNNC) was set up in the 1970s as a typical multisectoral nutrition planning cell to coordinate policy, similar to others introduced in many countries and supported by USAID and FAO as part of a global push for multisectoral nutrition planning. However, like other cells, the BNNC had no significant impact as it lacked the authority and resources to coordinate the relevant sectors effectively or to introduce incentives to promote cross-sectoral coordination. A more realistic and workable institutional arrangement suggested is to equip different sectors with the required latitude and resources to carry out their own programmes. The nutrition coordination agency should define overall policies and guide allocation of resources, while the coordination agency incentivizes sector agencies to prioritize nutrition, to carry out their nutrition functions accountably, and to engage in sectoral policy design and implementation to ensure that undernutrition remains a priority (Mahmud, Iffat, and Nkosinathi Mbuya, *Water, Sanitation, Hygiene, and Nutrition in Bangladesh: Can Building Toilets Affect Children's Growth?*, International Bank for Reconstruction and Development/The World Bank, Washington D.C., 2016 <<http://documents.worldbank.org/curated/en/405591468188371458/pdf/100531-PUB-Box393232B-PUBLIC-PUBDATE-10-28-15-DOI-10-1596978-1-4648-0698-8-EPI-210698.pdf>>).*

Case Study 3: WASH and Nutrition Sub-working Group (Cambodia)

To optimize nutrition sensitive elements, such as WASH, into nutrition programming, Cambodia has established a new WASH and nutrition sub-working technical group. The WASH and Nutrition Sub-Working Group is linked to the existing Technical Working Group for Rural Water Supply, Sanitation and Hygiene (TWG-RWSSH), and the Technical Working Group for Social Protection, Food Security and Nutrition (TWG-SP and FSN) through representative membership on the Sub-Working Group and by reporting back to the separate TWGs on a regular basis. The TWG-RWSSH is chaired by the Ministry of Rural Development (MRD), and TWG-SP and FSN is chaired by the Council for Agricultural and Rural Development (CARD).

The purpose of this group is to bring together WASH, food security and nutrition sector actors to develop a shared vision for the future, improve learning and sharing experiences on WASH and nutrition integration, and establish synergy between the sectors to improve quality of programming and services in tackling undernutrition.

Representatives to the Sub-Working Group include rural development and food security, WASH and health staff from government agencies; development partners and NGOs working on WASH and nutrition programmes, the convener of the SUN civil society network; and other ministries such as education and youth, women's affairs, and agriculture, forestry and fisheries as required. The Sub-Working Group is chaired by CARD with Save the Children as co-chair representing development partners/NGOs (Save is also implementing the USAID NOURISH programme which combines WASH, agriculture and nutrition).

The national coordination mechanisms cannot be easily replicated at provincial level because the separate WASH and nutrition TWGs have no structure at provincial level, and although MRD has tried to establish provincial coordination, CARD also has no structure at the provincial level. New Provincial Technical Reference Groups need to be set up to ensure effective coordination of integrated nutrition programmes between provincial departments, civil society, development partners and the private sector.

SUBNATIONAL COORDINATION

Coordination amongst stakeholders at the subnational level can be a critical step for facilitation of integrated implementation of programming and to ensure that there is a translation of national policy. In large countries where subnational governments hold great authority it is even more crucial that subnational coordination is established/strengthened. Partners at the subnational level can contribute through:

- ☑ Working within existing provincial coordination structures rather than setting up a new task force or steering committee.
- ☑ Establishing a schedule of meetings that both nutrition and WASH stakeholders have an opportunity to participate – make sure the meetings do not clash with any other standing commitments of the sector partners.
- ☑ Linking coordination to capacity building through workshops, field visits and learning events.
- ☑ Discussing and disseminating national policy and guidance on integrating WASH and nutrition programming.
- ☑ Making it clear that work done at the subnational level can contribute to a national evidence base which will help influence and steer national actions.
- ☑ Ensuring a defined terms of reference (ToR) for a subnational working group if relevant, which state (as a minimum):
 1. the purpose of the working group
 2. activities
 3. roles and responsibilities for members
 4. the process for nominating a chairperson
 5. meeting schedules.

Case Study 4 on Lao multisectoral coordination

Case Study 5 on the importance of decentralized governments in the Philippines

WASH and Nutrition Sub-working Group ToR Template
http://www.unicef.org/eapro/12205_25007.htm

Case Study 4: Coordination (Lao PDR)

In Lao PDR, due to a lack of coherence in establishment of multisectoral WASH mechanisms and multisectoral nutrition mechanisms competing for the same resources, the approach has been to develop one message and approach to multisectoral mechanisms at subnational level.

UNICEF Lao to Draft a WASH/Nutrition TWG ToR

Case Study 5: Working with local governments (Philippines)

In the Philippines, government structure the National Department of Health does not have responsibility at the subnational level. Local government units therefore become the practical focal points for coordinating WASH and nutrition joint actions. It is at the local government unit (LGU) level where advocacy, capacity building, implementation planning, budgeting and monitoring are most needed.

5.3 Analysis

Sound joint analysis is core to recognizing critical challenges that impacts on WASH and nutrition and is the cornerstone for subsequent evidence based and data drive analysis and advocacy and policy. It also contributes to the development of new UNICEF country programmes of cooperation, especially in development of strategy notes.

ANALYSIS

The situation analysis will serve as the basic reference for advocacy and strategy design purposes. Analysis should be a joint activity with plans and results regularly shared with government and other stakeholders to build ownership of the findings.

- ☑ Conduct analysis of existing information to examine and document correlations between WASH and nutrition in the country (Figure 20). Doing a nutrition casual analysis or using a Knowledge Attitudes and Practices assessment focusing on both WASH and nutrition practices are useful methods for drawing a link between the two sectors (see resource box).
- ☑ Collect, compile and analyse information on the nutritional and WASH status of populations broken down by gender, age categories, income, disadvantaged groups, geography and other locally relevant dimensions of equity. Even if there is separate sector specific analysis, the results of that analysis can still be brought together to obtain a more comprehensive picture.
- ☑ Reflect the numbers of people affected, not just the prevalence rates of different types of malnutrition, particularly in certain countries in the EAP region where prevalence may be relatively lower but numbers large.
- ☑ Map which government policies, legislative frameworks and programmes exist across the WASH and nutrition sectors and try to see where linkages exist or can be built.
- ☑ Identify the type of institutional systems in which nutrition and WASH are delivered and note where there are synergies.
- ☑ Identify which donors are supporting which programmes and where with the aim of identifying opportunities for joint proposals and easier synchronization of programme cycles and funds.
- ☑ Ascertain the resource envelope available for both nutrition and WASH in the country across all stakeholders and try to determine natural opportunities for collaboration.
- ☑ Map the existence and functioning of coordination mechanisms at national and subnational level.
- ☑ Include WASH specific questions into nutrition assessments so as to capture WASH conditions that might have an effect on nutrition outcomes and to enable data analysis to examine correlations.
- ☑ Identify overlapping geographic work areas. Both WASH and nutrition programmes typically focus on the most vulnerable populations including geographies with high poverty rates, households without sanitation facilities and regions with high percentages of stunting.
- ☑ Recognize interventions that affect both WASH and nutrition. For example, both WASH and nutrition programmes require social and behaviour change to achieve impact.
- ☑ Use bottleneck analysis tools to analyse the sector bottlenecks for WASH and/or nutrition to understand where there are obstacles to joint service delivery.

Key WASH question to Include in a nutrition assessment http://www.unicef.org/eapro/12205_25007.htm

Key Standard Nutrition Indicators, Global Nutrition Cluster Registry http://www.unicef.org/eapro/12205_25007.htm

WASH in Health Care Facilities: Annex D WASH Indicators WHO/UNICEF 2015 http://www.who.int/water_sanitation_health/publications/wash-health-care-facilities/en/

Nutrition casual analysis <http://www.linknca.org/>

UNICEF WASH KAP Assessment Myanmar 2014 http://www.unicef.org/eapro/12205_25007.htm

State of the World's Children 2015 Country Statistical Information http://www.unicef.org/eapro/12205_25007.htm

Country examples of WASH and nutrition analysis (Cambodia, Philippines) http://www.unicef.org/eapro/12205_25007.htm

Case Study 6 on analysis in Myanmar on correlation between WASH and stunting

Case Study 7 on joint analysis in Indonesia and link to the accompanying PowerPoint http://www.unicef.org/eapro/12205_25007.htm

Box 8 Bottleneck analysis tools http://www.unicef.org/eapro/12205_25007.htm

Case Study 6: Joint analysis (Myanmar)

Curious about unusual results coming out of knowledge, attitude and practice (KAP) studies, UNICEF WASH and nutrition staff in Myanmar are digging a little deeper on the issue of WASH and nutrition to understand why sanitation rates are similar to other countries in the EAP region but by comparison maternal mortality and stunting are high in Myanmar. The analysis, using available data sets from the EAP region, is looking for correlations and patterns to help explain the differences, in particular between Cambodia and Myanmar. The analysis is intended to draw attention to the issue of WASH and stunting in Myanmar and in the region.

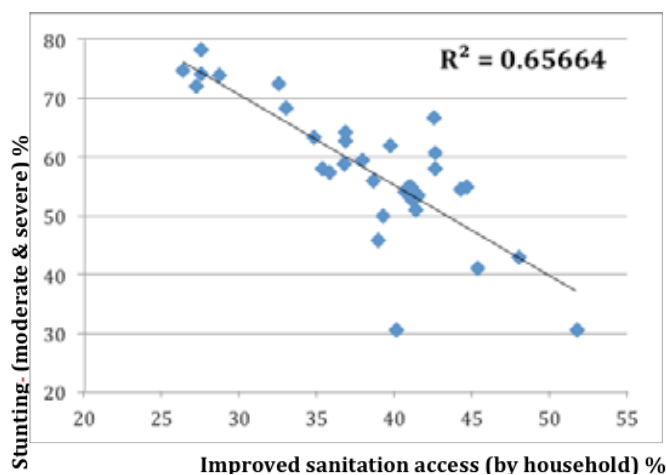
Case Study 7: Joint analysis for advocacy and influence (Indonesia)

UNICEF WASH and nutrition staff in Indonesia have worked together to gather and analyse data and present it in a way which resonates with government. With access to country nutrition indicators lacking, UNICEF used baseline data from a European Union multi-country data set to look at stunting and WASH linkages, and safety of child faeces disposal. The data show correlation in areas of high open defecation with high stunting rates. The results are presented in PowerPoint, which include suggestions about how to integrate WASH in nutrition programmes.

UNICEF has also developed a colourful infographic on the impact of open defecation on child nutrition which has been used in the media and with national government to highlight the issue in a simple and clear way. An indicator of the success of advocacy is when senior people in government and ministries use the information in their own work. The Planning Ministry (Bappenas) has picked up on mapping of stunting and open defecation, while others have mentioned the risk between open defecation and stunting multiple times.

For provincial-level advocacy and information, Bappenas, UNICEF and World Bank have prepared provincial sanitation profiles to highlight to provincial governments their access to sanitation (by province and district), diarrhea incidence and stunting levels. Provincial data is compared with national results and targets, including rankings of stunting relative to other provinces. Data is presented succinctly in easy to follow graphics.

Figure 20: Correlation between improved sanitation and nutrition outcomes (Indonesia, 2013)



Source: Indonesia National Basic Health Research survey (RISKESDAS), 2013

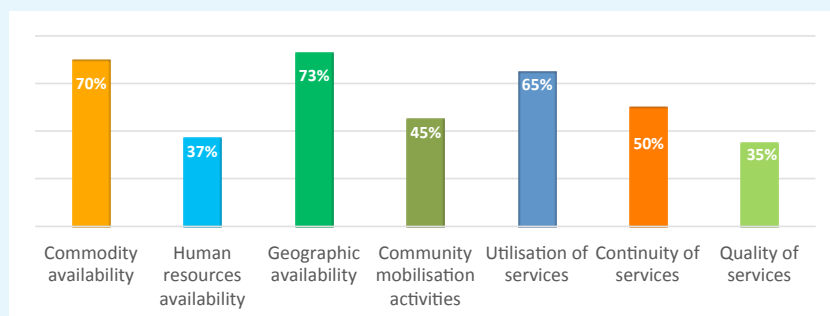
Box 8: Bottleneck analysis

Bottleneck analysis is a tool for:

- identifying obstacles in service delivery
- determining the root causes of the bottlenecks and planning solutions
- monitoring of bottlenecks to determine whether the corrective actions are effective.

The method uses a structured participatory process with key stakeholders at national, subnational and local levels. A series of indicators is scored using data from routine collection methods, surveys, special data collection tools, and knowledge of the participating stakeholders. The scoring system identifies where there are bottlenecks in the delivery of services. UNICEF has developed tools for conducting bottleneck analyses for health services delivery, and WASH, and is currently developing a toolkit on bottleneck analysis for severe acute malnutrition.

The **SAM bottleneck tool** will have four domains influencing effective service coverage: the enabling environment, supply, demand and quality. Within each domain there are specific determinants which directly affect coverage and which are analysed and monitored. This framework can be applied to each delivery platform (e.g., health facility, community, campaign). The SAM bottleneck tool will use a core set of indicators and will be based on data that are already collected monthly through routine SAM monitoring systems. More in-depth understanding of bottlenecks can be gained where there is other data, e.g., surveys and in contexts with more well-developed information systems. The indicators fall within seven determinants, based on an approach developed by the World Health Organization (WHO) to measure coverage: commodity availability, human resources availability, geographic availability, community mobilisation activities, utilisation of services, continuity of services and quality of services. (*Bottleneck Analysis for SAM; SAM Bottleneck Monitoring Toolkit Summary in Dropbox*)



The WASH Bottleneck Analysis Tool (WASH BAT) is a tool for comprehensive evaluation of the enabling factors that determine WASH sector efficiency, equity and sustainability. The aim of the tool is to bring greater focus to aspects that have received inadequate attention in the past. Among these aspects are equity, hardware maintenance, programme delivery mechanisms, 'software' spending, and underlying determinants of programme performance such as working with or changing social norms. WASH can be analysed by water supply or sanitation/hygiene; rural/urban; national/subnational/service provider/community and household level. (WASH BAT Methodology in Dropbox)

5.4 Advocacy

Nourishing an enabling environment is one of the key underlying factors that will facilitate and contribute to the success of joint planning and programming. While advocacy strategies are being designed, it is important to have a clear sense of how the change process may be expected to occur. Having and understanding a specific ToC for WASH and nutrition developed in the context you are working within can help organizations more effectively choose advocacy strategies. Advocacy progress can be monitored (see Section 5.10 Monitoring) and as such can often be one of the first concrete indicators towards progress in advancing integrated WASH and nutrition planning and programming.

Fundamentally, advocacy is a set of organized activities aimed at influencing the policies and actions of those in power to achieve positive outcomes. While there can be many different definitions of advocacy, some of its key elements are as follows:

- It is about influencing policies, practice, attitudes and the political enabling environment
- It aims to achieve lasting and positive outcomes in peoples' lives
- It is a long-term process rather than a one-off event
- It is strategic and planned
- It is not an end in itself
- It draws legitimacy and credibility from knowledge and experience (evidence-base)

Important frameworks in which advocacy can sit are the SDGs for WASH (goal 6) and Nutrition (goal 2), country WASH and nutrition policies, and national development plans and strategies.

ADVOCACY

Advocacy can occur on a continual basis but requires sound evidence and clear arguments. Ways to advocate include:

- ☑ Leverage existing policies and strategies to advocate for greater integration and inform joint planning, objective setting and monitoring.
- ☑ Identify champions and advocates for WASH and nutrition integration. These could be at the national level, subnational and community level.
- ☑ Prepare a short briefing document or PowerPoint that presents key messages on the evidence base for integrating WASH and nutrition. Use these messages consistently.
- ☑ Analyse existing secondary data on WASH and nutrition to advocate for greater focus on and investment in WASH as a component of stunting reduction efforts.
- ☑ Organize informal sessions or marketplace information booths at national conferences that tackle nutrition or WASH issues at the national level in order to practically advocate for the inclusion of an integrated approach.
- ☑ Pilot projects that integrate WASH and nutrition programming and use that evidence to highlight the opportunities for application within the local context. Nationally generated evidence is often a successful component for scaling up.
- ☑ Establish an advocacy technical working group, e.g., within a working group on WASH and nutrition, to lead on the development of an advocacy plan and common advocacy messages that are specifically targeted to the changes required in the country context.
- ☑ Use multisectorial platforms such as the SUN initiative to advance the WASH and nutrition agenda.
- ☑ Include economic arguments and implementation cost information where possible when advocating to politicians.
- ☑ Work closely with Communications for Development (C4D) staff for developing actions and monitoring effectiveness.

UNICEF Advocacy Toolkit http://www.unicef.org/evaluation/files/Advocacy_Toolkit.pdf

UNICEF Advocacy Toolkit Tool 18 Advocacy Strategy Planning Worksheet p. 68

UNICEF/WHO/USAID WASH and Nutrition: 5 Key Facts http://www.who.int/water_sanitation_health/publications/washandnutrition-5-key-facts.pdf?ua=1

WASH in Nutrition Factsheet, SuSanA 2015 <http://www.susana.org/en/resources/library/details/2163>

Linkage between WASH and Nutrition: Generic PowerPoint http://www.unicef.org/eapro/12205_25007.htm

WASH & Child Under-Nutrition: the global evidence base with a focus on South Asia and India – A literature review, UNICEF, 2014

Velleman, Y., and I. Pugh, Under-nutrition and water, sanitation and hygiene. WaterAid and SHARE, 2015, www.susana.org/en/resources/library/details/1794

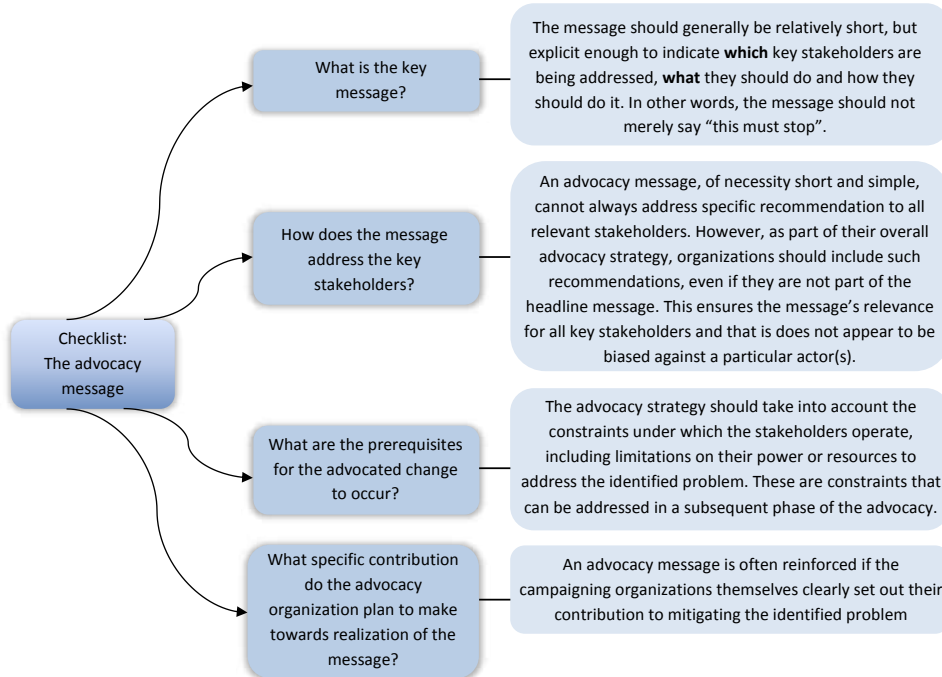
World Bank Economics of Sanitation Initiative <https://www.wsp.org/content/economic-impacts-sanitation>

Case Study 7 on Analysis in Indonesia for advocacy purposes

Case Study 12 on the Stop-Stunting Conference

Box 9 on Choosing how to communicate your message

Figure 21: The advocacy message



Source: ACF, The Human Right to WASH in Emergencies, 2009

Box 9: Choosing the best format to communicate your message

The choice of format to deliver the message depends on who you are speaking to, what you want to say, your purpose and your ability to work with that format.

Some of the many different formats* for delivering a message include:

- Person to person (one-on-one lobbying visits, group or community meetings, conferences and workshops, public hearings, protests, public demonstrations)
- Print (newspapers, magazines, journals, newsletters, posters, leaflets, pamphlets, reports, studies, letters to decision makers)
- Electronic (radio, television, video and film, Internet, e.g., blogs, social media websites, YouTube, mobile phone technology)
- Drama and folk art (street theatre, songs, music, poems, dance).

Here are some question** to guide the selection:

- What are the audience’s primary sources of information? Who or what do they listen to? What do they read? What do they watch? What appeals to them?
- What are the audience’s characteristics (age, gender, class, employment, race, etc)? Where do they live? Work? What languages do they speak? Do they read? Do they have access to television and Internet? Do they listen to radio?
- What are the internal skills, capacities and resources required to work with the selected medium? If they are not available internally, how can they be resourced***

* Adapted from: Advocacy Learning Initiative, vol. II, Oxfam and the Advocacy Institute, 1999, Kumarian Press.

** Adapted from: Owens, Becky, and Kraig Klautdt, ‘TB Advocacy: A practical guide 1999’, WHO GlobalTuberculosis Programme, Geneva, 1998, p. 15.

*** Adapted from: Veneklasen, Lisa, and Valerie Miller, A New Weave of Power, People, and Politics: The action guide for advocacy and citizen participation, Just Associates, Washington, DC, 2002. Source: UNICEF Advocacy Toolkit

Source: UNICEF Advocacy Toolkit

5.5 Policy

The political will and frameworks need to be in place, or in progress, so that national and local governments can commit to furthering this work. How advanced this state is will vary greatly from country to country and even from local government to local government. Developing national policies, translating those policies down to the local government level, goes hand in hand with good advocacy work.

POLICY

Political will and frameworks need to be in place, or in progress, so that national and local governments can commit to furthering this work. Support governments in their development or strengthening of nutrition and/or WASH policies that have an appropriate focus on integrating WASH and nutrition. This could be through:

- ☑ Sharing the evidence base.
- ☑ Building cooperation and relationships between the governmental bodies who are responsible for WASH and for nutrition (usually they are located within different ministries who may have limited contact with one another).
- ☑ Supporting the crafting of policies.
- ☑ Translating/incorporating national policies relevant to integrating WASH and nutrition into action at the local level; or in extremely decentralized countries with strong local governments develop/implement policies for the integration of WASH and nutrition programming.
- ☑ Utilizing the momentum from other campaigns for new legislation, such as the 1,000 Day Initiative, to help champion the importance of a multisectoral issue such as WASH and nutrition integration.
- ☑ Nutrition actors can support the government in strengthening the national accountability on nutrition and creating political will. This can have a spill-over factor to advancing the integrated WASH and nutrition agenda.

Box 10 on strong political commitment

Box 10: Strong political commitment is key towards reducing undernutrition

For the three World Health Assembly targets relating to reducing malnutrition in children under 5—stunting, wasting and overweight—the share of countries that are on course increased between 2014 and 2015. Progress on stunting is particularly noteworthy: the share of countries on course to meet the target rose from one-fifth (22%) to one-third (34%). How did these countries do it? We don't know definitively, but the common denominators were strong political commitment; a supportive context with notable poverty reduction; improvements in women's empowerment; improved food supply; greater access to improved health, water, and sanitation facilities; and improved performance of specific nutrition practices and programmes.

Global Nutrition Report 2015: Actions and Accountability to Advance Nutrition and Sustainable Development, International Food Policy Research Institute, Washington, D.C., 2015 <http://www.fao.org/fileadmin/user_upload/raf/uploads/files/129654.pdf>

5.6 Planning

Joint or shared planning is grounded in and facilitated by the joint analysis and coordination within an enabling policy environment. The planning phase is the optimal time to consolidate the learning and evidence on the positive nutritional and health outcomes of integrated WASH and nutrition programming.

Box 11: Convergence or integration? Available programming modalities

Work done by UNICEF and the Government of Indonesia shows that there are two primary modalities for WASH and nutrition intervention delivery. In convergent programming there is overlapping delivery of WASH and nutrition programmes in the same geographic area. They work towards a common nutrition interest such as reducing stunting but they are implemented separately with limited communication between WASH and nutrition actors.

In integrated programming, WASH and nutrition unify programme components for a common nutrition interest such as stunting. There is joint delivery of WASH and nutrition interventions targeting the same population and there is significant communication and coordination between the actors.

When planning either convergent or integrated interventions some challenges in site selection and targeting should be kept in mind. Rural WASH interventions are often community-wide; health impacts derived from sanitation inputs require that communities are 100 per cent open defecation free and water supply interventions are designed as communal facilities. Nutrition interventions, however, often seek to target the most vulnerable households – where children are the most at risk and in need of services. (Bery et al.)

Case Study 8: Planning (Indonesia)

In the past Indonesia has had nutrition and WASH programmes working in different districts within the same province, or even within the same district but with little or no coordination, for example, a Gates Foundation WASH programme and European Union Nutrition programme. With limited budget for each programme it was not possible to add WASH to the nutrition programme or vice versa. Indonesia has found that new programmes provide the greatest opportunity for joint design and integration of WASH and nutrition.

PLANNING

Whichever way is chosen, both integrated and convergent programmes can still contribute to a common shared outcome. When a programme is designed at the outset with indicators for both WASH and nutrition equally emphasized, results can be clearly targeted and measured. New programs provide a fresh opportunity for joint planning during which it is possible to:

- ☑ Engage with stakeholders early to facilitate programming synergies.
- ☑ Utilize both WASH and nutrition targeting priorities (or use the joint analysis if it has been conducted) to co-locate nutrition and WASH programmes in the same geographic area.
- ☑ Develop a ToC, either for an individual organization such as UNICEF or for national planning. See Section 4 for more information on ToC and additional resources.
- ☑ Identify a common outcome that both WASH and nutrition interventions should contribute to.
- ☑ Use established coordination platforms to engage with stakeholders in joint planning to ensure that there will not be any on-going programming which might have a confounding effect on your intended results.
- ☑ Identify what hinders action and include plans to minimize or work around those barriers.
- ☑ Develop a common monitoring framework with clearly agreed upon indicators that maps the progress towards the agreed outcomes using indicators relevant to both WASH and nutrition.
- ☑ Plan and evaluate pilot projects that integrate WASH and nutrition programming and use that evidence to highlight the opportunities for application within the local context. Locally created evidence is often a successful component for scaling up.

Box 11 on convergence or integration

UNICEF ToC Package for Integrating WASH and Nutrition
http://www.unicef.org/eapro/12205_25007.htm

Box 12: Examples of integrated WASH and nutrition outcomes

Case Study 8 on joint planning in Indonesia

Case Study 9 on Multi-sector nutrition plan in Nepal http://www.unicef.org/eapro/12205_25007.htm

Case Study 10 on Integrated programme design in Mali

Case Study 11 on planning using ToC

Case Study 9: Multi-sector nutrition plan (Nepal)

The Government of Nepal has developed a national plan for accelerating the reduction of maternal and child under-nutrition in Nepal. The plan was prepared by five government sectors: Ministry of Agriculture and Development, Ministry of Education, Ministry of Federal Affairs and Local Development, Ministry of Health and Population, and Ministry of Urban Development, with leadership by the National Planning Commission, and support from development partners. The plan analyses the current nutrition situation in Nepal and is situated within the national policy framework including Nepal's SUN Initiative. The plan has a clear goal of over the next five years to improve maternal and child malnutrition, which will result in the reduction of maternal infant and young child undernutrition in terms of maternal Body Mass Index (BMI) and child stunting by one third. WASH is identified as an important contributor to reduction of under-nutrition; the country's low sanitation access rate is highlighted; the plan links with WASH policy and targets, e.g., sanitation to achieve 100 per cent access by 2017 and improved handwashing. Specific WASH outputs and activities are linked to the nutrition goal and outcomes. Budgets, a timeline, and roles and responsibilities are outlined for each output and activity including for WASH.

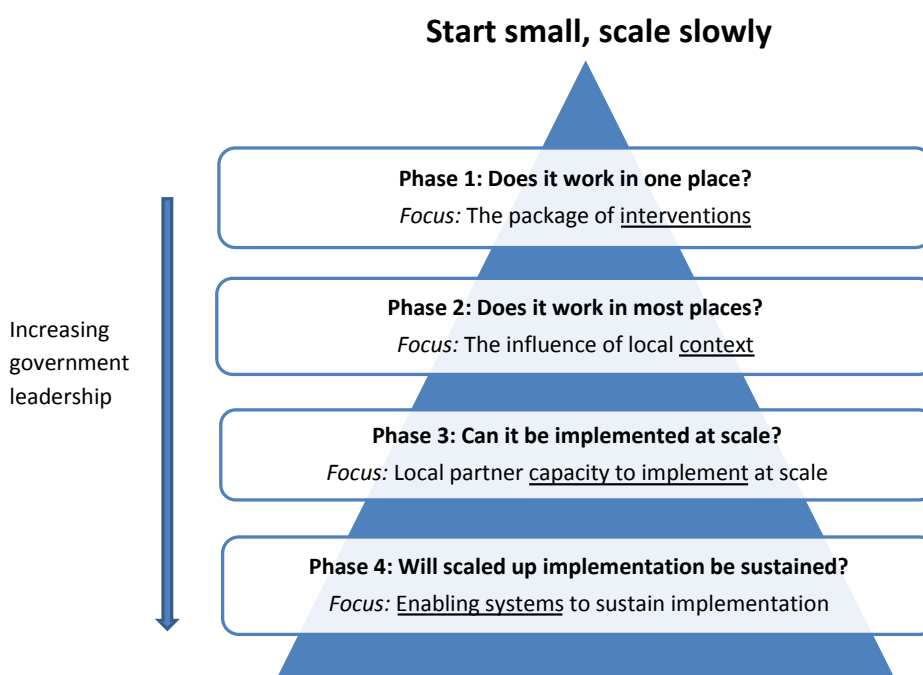
Case Study 10: Integrated programme design (Mali)

The two-year WASHplus programme in Mali was designed as an integrated WASH and nutrition programme from the start. District officials from the Ministry of Health identified the 180 intervention communities as areas with high rates of stunting and extremely poor access to and use of sanitation facilities. In addition to traditional nutrition-specific interventions such as the management of MAM, WASHplus is using ‘small doable actions’ to negotiate integrated WASH and nutrition messages targeting mothers with infants.

Case Study 11: Pilot testing of joint WASH and nutrition (Philippines)

The Philippines is planning the implementation of a pilot for an integrated approach to nutrition and WASH in two municipal or local government unit areas: Mapanas and Bobon (the municipal level is the key level of coordination in the Philippines). Because the pilot areas will be important case studies and evidence to the national Department of Health, other municipalities and stakeholders for influencing national-level policy discussions, good planning is critical. A ToC workshop was held to help refine the thinking on the pilot programme and identify how to integrate and complement WASH and nutrition at different levels, e.g., families, community volunteer workers, municipal level government and national level government. Participants at the workshop included municipal-level health officers, nutrition advisers and sanitary inspectors. The workshop process created a shared understanding of the common goal and main steps to get there, with further work needed to develop the detailed activities and indicators to operationalize the broad plan.

Figure 22: Pilot to programme model



Source: Adapted from Grieve, H., and D. Green, ‘Cross sector programming in sentinel sites to improve nutrition outcomes- could this be a possibility?’ PowerPoint, Australian Embassy

Box 12: Examples of integrated WASH and nutrition outcomes

- Pregnant and lactating women and caregivers adopt optimal WASH and nutrition behaviours and practices for themselves and the young children in their care.
- Families are empowered to be responsible and accountable in providing improved feeding, care, sanitation and hygiene practices.
- Community leaders, religious leaders and others act as role models. They empower women in the community, facilitate and demonstrate healthy practices that contribute to healthier pregnancy and healthier young children.
- Community based workers are formalized and provided with sufficient capacity and resources to work in collaboration towards common WASH and Nutrition outcomes.
- Health and WASH service providers at all levels provide quality services for pregnant and lactating women, young children and their caregivers and support them to sustain hygienic and healthy practices.
- Communes and districts have clear mandates for nutrition and WASH to ensure that communities have access to sustainable WASH and nutrition services. They advocate to higher government for funds and capacity development.
- Local governments prioritize WASH and Nutrition services for pregnant and lactating women and children under 2 years of age in the lowest quintile and/or most vulnerable populations, in their planning, budgeting, and expenditure.
- Line ministries formulate appropriate policies, equitably allocate resources, and put in place effective implementation mechanisms for WASH and Nutrition programmes.
- Line ministries provide clear policies, strategies, funded action plans and guidelines to support WASH and nutrition programming. They have joint performance monitoring frameworks on WASH and nutrition.
- Private investors and business increase their corporate social responsibility and/or invest in efficient and affordable initiatives and/or innovation which benefit pregnancy and lactating women and young children.

Source: ToC workshops in Cambodia and Philippines

5.7 Leveraging resources

BUDGETING

Dedicated funding for integrated programming needs to be made available, in a sufficient amount and with a long enough implementation time frame to show results that can be used to take programme components to scale. Showing results will in turn generate more funding.

- ☑ Use evidence to influence donors and governments to increase funding for integrated programming (see Advocacy section).
- ☑ Support the government on developing joint WASH and nutrition costing plans.
- ☑ Align funding cycles and timelines so that programmes can run on the same cycle, thereby promoting synergies. In many cases funding streams for WASH and nutrition programs come separately from donors with different goals and restrictions and are administered in a siloed fashion.
- ☑ Trial different funding arrangements such as pooled funds, or matching equity grants so that there is shared buy-in from nutrition and WASH funding sources.
- ☑ Advocate with donors for longer funding cycles so that results, especially those that take a longer time to realize such as behaviour change components, can be consolidated for full evidence of impact.
- ☑ Use shared WASH/nutrition M&E frameworks to report on programme results to donors. This will show that even if the funding streams have come separately the programming and results belong to both sectors thereby encouraging future consolidated funding.
- ☑ Include funding requests into proposals for impact assessment and provision of technical support to design of impact assessments.
- ☑ Budget in person-time in order to synthesis results and lessons learned through development of case studies, peer-reviewed articles, etc.
- ☑ Leverage additional resources for knowledge management and dissemination to contribute to the evidence base for action at country office level.
- ☑ Document costs of initiatives that represent a good collaboration and integration between the WASH and nutrition sectors. This information can be the basis for better cost estimation for future programs and as a tool for effective advocacy to governments and donors.

Example of UNICEF Philippines and UNICEF Laos WASH and Nutrition Joint Proposals http://www.unicef.org/eapro/12205_25007.htm

Example: Of Australia's investment in nutrition sensitive interventions in 2012 only 1% went to the water and sanitation sector.

UNICEF proposal improved West and Central Africa Region coordination and support to the nutrition response http://www.unicef.org/eapro/12205_25007.htm

5.8 Capacity development

INCREASE CAPACITY OF UNICEF STAFF

WASH and nutrition staff typically know little about the technical aspects of each other's work that is a barrier to progressing with integrated programming. A basic level of understanding of nutrition concepts for WASH staff and vice versa is needed.

- ☑ Identify the capacity development needs of WASH sector staff in nutrition programming and vice versa.
- ☑ Develop a capacity development plan based on those needs. The plan does not have to be complex – instead make sure that it is practical, realistic and actionable. Examples of capacity development activities include:
 - ☒ Attend conferences, workshops, trainings, or meetings that the other sector holds which might be relevant to integrated programming. For example, a nutrition specialist joins a CLTS workshop to better understand the WASH principles and the delivery platform.
 - ☒ Undertake online professional development training courses (see Box 13).
 - ☒ Review research reports and guidance documents from others active in WASH and nutrition, e.g., ACF, FHI360, WaterAid, WEDC.
 - ☒ Subscribe to list-servers and online technical forums, e.g., SUN networks, SuSanA Forum, WASHplus.
 - ☒ Participate in webinars organized by UNICEF HQ or RO, SUN initiative or other development partners on nutrition and/or WASH.
 - ☒ Look up past UNICEF HQ/RO webinar recordings and materials available on the Intranet.
 - ☒ Organize webinars for staff in sub-offices. Ensure interactive questioning during the webinar and make materials available off line.
 - ☒ Hold mini reciprocal internal training sessions on the basics of WASH and nutrition sector. These could be formal lunch time training sessions targeting particular individuals or departments; or 'brown bag' open forum seminars that anyone in the organization can attend.
 - ☒ Implement a semi-formal mentoring or 'buddy' programme by pairing nutrition and WASH staff.

UNICEF Webex Training WASH, Child Survival and Development, 2012 http://www.unicef.org/eapro/12205_25007.htm

Box 13: Open access educational resources

Technical online forums:
<http://scalingupnutrition.org>
[thesun-network](http://thesun-network.com)
www.susana.org
www.washplus.org

EAPRO and HQ webinars on the Intranet

Case Study 12: UNICEF ROSA Stop Stunting Conference Webinars on WASH, nutrition and early childhood development
www.washplus.org

UNICEF Results-based management (RBM) e-learning (in final stage of development, launch in June 2016 expected)

WASH Enabling Environment Guidance "Enabling Environment: UNICEF Guidance Note to Support WASH Governance" under finalization at UNICEF Headquarter

Case Study 12: ROSA Stop Stunting Conference

In November 2014 UNICEF South Asia Region held a regional Stop Stunting Conference in Delhi to highlight the issue of nutrition and WASH linkages to stunting and share learnings and best practice. Contributors included experts in the fields of nutrition and WASH and stunting, with participation by governments, donors, NGOs and UNICEF staff from within and outside the region. UNICEF played a key role at bringing countries together to discuss the issue. This conference increased knowledge of both UNICEF WASH and nutrition staff but also the governments they work with. Other capacity building activities arose out of this conference including webinars. Further details at: www.stopstunting.org

Box 13: Free open access educational resources for WASH and nutrition

The following are a selection of relevant courses that are offered as professional development unaccredited courses and can increase the capacities of UNICEF staff and counterparts.

Programming for Nutrition Outcomes: *The London School of Hygiene and Tropical Medicine (LSHTM) with support from UK DFID has developed an online course to explain the complex causes of undernutrition and identify possible programming solutions. <<https://ble.lshtm.ac.uk/course/view.php?id=26>>*

Programming for Infant and Young Child Feeding: *Cornell University and UNICEF have developed an online course to enhance the competencies and build capacity of UNICEF staff and counterparts who are involved in IYCF programmes in developing countries. <<https://www.nutritionworks.cornell.edu/features/index.cfm?Action=Course&CourseID=259>>*

WASH 101: *The International Water Centre and Australian Department of Foreign Affairs and Trade have developed an online training package which provides comprehensive entry-level training on key aspects of WASH through easy-to-follow modules. <<https://www.youtube.com/playlist?list=PLicI2IfKDSZ2HjIDn5d39IX3svgpukX2z>>*

Rural Sanitation at Scale: *Loughborough University's Water, Engineering and Development Centre (WEDC) and the World Bank Water and Sanitation Programme have developed a three part online module examining key issues around scaling up sanitation in rural areas of developing countries. <<https://wedc-knowledge.lboro.ac.uk/my-courses/rss.html>>*

INCREASE CAPACITY OF RELEVANT STAKEHOLDERS

Train health and nutrition staff to promote and demonstrate key WASH practices in ongoing nutrition work.

- ☑ Within the implementation platforms your programmes will be operating through, identify the points of contact that could be agents of change, e.g., health and nutrition workers or teachers.
- ☑ Engage with the national councils and ministries that are responsible for in-service training for those professions and support them in developing basic nutrition and sanitation training.
- ☑ Support the main national academic institutions that provide pre-service training for those relevant professions to develop and implement basic nutrition and sanitation trainings.
- ☑ Support curriculum development for WASH and nutrition tracks at national institutes through, for example, reviewing materials, advocating for modules focusing on integrated modalities of programming, guest lecturing or taking in interns.
- ☑ Review and improve job aids, for example, of implementing partners.
- ☑ Facilitate capacity assessment and coaching meetings to enhance the confidence and skills of relevant stakeholders with attention to local partners and implementing partners.

Essential Nutrition Actions and Essential Hygiene Action Training Package (for (1) health workers/ nutrition managers (2) community workers) <http://www.coregroup.org/resources/488-essential-nutrition-actions-and-essential-hygiene-actions-framework>

NOURISH Integrated Nutrition Training Syllabus for (1) care giver groups (2) community agents http://www.unicef.org/eapro/12205_25007.htm

Training Package for the Prevention of Diarrhoeal Disease, USAID <http://www.hip.fhi360.org/page/3396.html>

See Case Study 13 on NGO capacity building Cambodia

See Case Study 14: Training package in Uganda <http://www.washplus.org/sites/default/files/uganda-washnutrition.pdf>

Box 14: Building capacity amongst health and community workers

The Essential Nutrition Actions (ENA) and Essential Hygiene Actions (EHA) Training Package aims to provide skills on how to effectively implement nutrition specific ENA & EHA interventions during the first 1,000 days, as well as emphasizes how to integrate these into a range of nutrition-sensitive programmes including health services and community-level interventions in other sectors. It is comprised of four separate but interlinked resources: i) Reference Manual and ii) Training Guide for Health Workers and Nutrition Managers, iii) Reference Materials on Key Practices, and iv) Training Guide for Community Workers. They provide messages and information on each of the recommended ENA and EHA practices, identifying “who is doing the action”, “what is the action”, and “the benefit of the intended action” as well as adult-based training materials.

Implementing the ENA framework entails building the widest possible network of partnerships across the health, nutrition, and WASH sectors so that interventions, practices and messages are harmonized and all groups use similar materials and job aids. Ideally, ministries and partners are brought together at the regional and/or national levels to agree on these harmonized approaches. Such forums can also serve as a platform for advocacy with policy leaders on the importance of nutrition to the nation’s economic as well as social development.

The packages can be found in the toolkit resources (see above) or online. <http://www.jsi.com/JSIInternet/IntlHealth/techexpertise/display.cfm?tid=1000&id=83&xid=160>

Case Study 13: Targeted capacity building for local NGOs (Cambodia)

In preparation for implementation of the USAID WASH, Nutrition and Agriculture NOURISH programme, an Organizational Capacity Assessment (OCA) was undertaken of three local NGO implementing partners. The OCA covered self-assessment of eight capacity areas including: 1) Management and Leadership, 2) Organizational Policy, 3) Human Resources Management, 4) Administrative Management, 5) Financial Management, 6) Technical Skills, 7) Communication and Public Relations, and 8) Programme Management and Planning. All three local NGOs were found to have low technical skills. All data points serve as a baseline prior to the introduction of targeted capacity-building activities that will be implemented with NOURISH support and by local NGOs on their own. Capacity-building activities for the local NGOs were identified based on the implementation schedule of key NOURISH activities. Each local NGO has developed a plan of action to address improvement areas selected by its staff. Technical skills building efforts will be addressed primarily through focused mini-trainings and day-to-day coaching and joint implementation by NOURISH international NGOs.

Case Study 14: Training package for integrating WASH and nutrition (Uganda)

In Uganda the Ministry of Health in collaboration with WASHplus and funding from USAID, developed a modular WASH-nutrition capacity-building training package which aims to guide village health teams, community knowledge workers, peer support groups and other outreach workers on how they can help household and community members to overcome, or change, the many daily obstacles to improved WASH practices in the home. It is based on the principle that new practices can be adopted and current practices can be modified or changed in small ways that are acceptable to the householder. The resource pack is broken into three modules.

Module I is a two-day training designed for training sub-county level health workers who conduct health education at the facility (health assistant, clinical officer, nurse, midwife), community development officers and staff of nutrition projects.

Module II is a one-day supplement to Module I. It is a three-day training designed for community-level resource persons, including village health teams, community workers, drama groups and community volunteers. Module II includes all the material of Module I plus the essential sessions on the methods for treating water to make it safe for drinking and food hygiene.

Module III is a half-day orientation on WASH and nutrition targeting various decision and policymakers at district and sub-county level.

Participation in the training by 'mixed' groups of health, education, sanitation, water and sub-county leadership (both male and female) is considered vital to the success of the training because this interaction by various stakeholders begins the integration of WASH into nutrition. The learning and planning sessions should happen together, so that each group understands its role and the interdependent nature of integrated WASH and nutrition behaviour change.

USAID/WASHplus Project, Integrating Safe Water, Sanitation, and Hygiene into Infant and Child Nutrition Programmes: A Training and Resource Pack for Uganda, Washington, D.C.: FHI360, 2014, <<http://www.washplus.org/sites/default/files/uganda-washnutrition.pdf>>

5.9 Implementation platforms

National nutrition strategies are by necessity multisectoral, however, it is essential to implement sectorally. The World Bank experience and guidance in this regard recognizes that while it is logical to think and plan multisectorally, sector by sector actions must follow, tailored to the specific context, objectives, and operating environment of each sector.²¹ Key implementation platforms identified for integration of nutrition and WASH are: health care facilities (physical facilities, engagement and outreach); education facilities such as schools and early childhood centres; communities/households; and communication via mass and social media. These platforms are important because they are core ways of directly contacting and influencing the target beneficiaries of joint WASH and nutrition programming. Other implementation platforms may exist in some contexts however these are considered universal for countries in EAPRO.

The breadth and depth of integration of WASH and nutrition at the implementation level will depend on many local context factors such as the roles and mandates of service providers, budgets and many of the enabling environment factors identified in this toolkit. Also, it is possible that joint WASH and nutrition approaches may begin as convergent activities initially and become more integrated over time, or always be delivered in parallel. The following sets out some key activities that can improve integration.

HEALTH CARE FACILITIES

Health care facilities are a critical platform for the delivery of nutrition interventions and messages and are therefore a prime focus area for integrated programming. Health facilities programme delivery primarily encompasses the mother-child unit and the contact point opportunities are:

- At antenatal care clinics
- At delivery and post delivery
- During postpartum/family planning sessions
- During well-baby clinic sessions
- In immunization clinics
- During growth monitoring and promotion
- During infant and young child counselling sessions
- At sick-child visits
- At in-patient stabilization centres and therapeutic feeding programmes
- During outpatient care for malnutrition
- At feeding programmes

In order to move forward with integrating WASH and nutrition programming within the health sector the following can be done:

WHO Job Aid on Investigating Causes of Undernutrition
<http://www.who.int/childgrowth/training/en>

Essential Nutrition Actions and Essential Hygiene Actions for Health Workers and Nutrition Managers <http://www.coregroup.org/resources/488-essential-nutrition-actions-and-essential-hygiene-actions-framework>

UNICEF Infant and Young Child Feeding Counselling package
http://www.unicef.org/nutrition/index_58362.html

WHO/UNICEF Integrated IYCF counselling course <http://www.who.int/nutrition/publications/infantfeeding/9789241594745/en/>

WASH in Health Care Facilities: Status and Way Forward. WHO/UNICEF, 2015 http://www.who.int/water_sanitation_health/publications/wash-health-care-facilities/en/

21 UNICEF EAP Nutrition Strategy, p. 49.

Appropriate facilities

- ☑ Use health care facilities as a positive demonstration site with clean latrines and handwashing with soap facilities.
- ☑ Provide safe water in health facilities especially where there is a high prevalence of young children such as in facilities where children are being treated for severe acute malnutrition.
- ☑ Ensure a WASH minimum package (hygiene kit, water treatment kit, pictures and messages to support hygiene promotion) at nutrition/health centres.
- ☑ Ensure that soap is included in the clean birthing kit.
- ☑ Establish and train management committees at health centres to improve use and management of WASH facilities.
- ☑ Initiate a competition between health centres for the cleanest/best health centre (based on cleanliness of yard and treatment rooms, management of handwashing facilities, clean latrines, maintenance of water point).

Staff-client interaction

- ☑ Identify the contact points within your programming models and use those as a framework for situating integrated programming.
- ☑ Prioritize the mother-child unit and integrate hygiene messages at critical contact points.
- ☑ Develop a session on handwashing to include in all birth counselling courses.
- ☑ Use the clinic health care providers with status and knowledge as effective change agents.
- ☑ Encourage health care providers to model WASH behaviours and demonstrate WASH practices in clinic waiting rooms.
- ☑ Lead demonstration sessions on hygiene behaviours while mothers wait for appointments or for services and when drugs or foods are distributed. These can be delivered through health care volunteers, outreach workers, peer group leaders or other auxiliary personnel.
- ☑ Use routine health services that require repeated visits to promote behaviours and assist in finding ways to achieve them. Health care providers can check adherence in follow-up visits and reinforce behaviours through repeated messaging.
- ☑ Engage families to assess current WASH practices in the family, reinforce existing positive actions and help identify one or two actions to be improved. These can be monitored and reinforced by health care workers in subsequent visits.
- ☑ Modify common phrases used in health/nutrition counselling such as 'practice hygiene' and 'use clean water' to more specific and actionable guidance that provide small concrete actions such as 'wash hands with soap before breast feeding', or 'boil water before drinking it'.

The Handwashing Handbook
<http://documents.worldbank.org/curated/en/681501468141299225/The-handwashing-handbook-a-guide-for-developing-a-hygiene-promotion-program-to-increase-handwashing-with-soap>

WHO Guidelines on Hand Hygiene in Health Care <http://www.who.int/gpsc/5may/tools/9789241597906/en/>

Hand hygiene in health care facilities. WaterAid http://www.wateraid.org/~media/Publications/Hand_hygiene_in_health_care_facilities.pdf

WASH and Nut Programme implementation of minimum WASH package in under nutrition treatment programmes – Burkina Faso http://www.actioncontrelafaim.org/sites/default/files/publications/fichiers/acf_casestudies_burkinafaso_gb.pdf

Design and Construction Manual for water supply and sanitation facilities in health institutions – Ethiopia http://www.unicef.org/wash/schools/files/WASH_in_Health_Facilities_-_Design_Manual.pdf

Case Study 15: Counselling for better hygiene in Uganda

Case Study 15: Counselling for better hygiene (Uganda)

In Uganda, WASHplus works in the districts of Kisoro, Kabale and Kanungu to strengthen the capacity of USAID implementing partners to integrate WASH into both nutrition and HIV activities. At the national level WASHplus works with USAID's FANTA project to integrate WASH into Nutrition Assessment, Counselling and Support policy and training, and with SPRING and others to roll out the guidance to the local level. Handwashing is seen as an "essential nutrition action" and incorporated into all counselling and promotional materials. Counsellors work with mothers and others being counselled to negotiate "small doable actions" for families to take to improve drinking water, handwashing, sanitation and food hygiene. The counsellor assesses current practice and can reinforce existing good practices and help identify a few improvements that can be made that are feasible and effective incremental steps toward reaching an ideal WASH practice. Counsellors can discuss with caregivers what might make it easier or more difficult to try a new practice and help them to find possible solutions. Counsellors usually choose one or two focus areas that families feel they could improve upon successfully. This approach of small doable actions is appropriate in resource constrained environments.

Table 3: WHO standards on WASH in health care facilities

Item	Recommendation	Explanation
Water quantity	5-400 litres/person/day.	Outpatient services require less water, while operating theatres and delivery rooms require more water. The upper limit is for viral haemorrhagic fever (e.g. Ebola) isolation centres.
Water access	On-site supplies.	Water should be available within all treatment wards and in waiting areas.
Water quality	Less than 1 <i>Escherichia coli</i> thermotolerant total coliforms per 100 ml. Presence of residual disinfectant. Water safety plans in place.	Drinking-water should comply with WHO Guidelines for Drinking-water Quality for microbial, chemical and physical aspects. Facilities should adopt a risk management approach to ensure drinking-water is safe.
Sanitation quantity	1 toilet for every 20 users for inpatient setting. At least 4 toilets per outpatient setting. Separate toilets for patients and staff	Sufficient number of toilets should be available for patients, staff and visitors.
Sanitation access	On-site facilities.	Sanitation number of toilets should be available for patients, staff and visitors.
Sanitation quality	Appropriate for local technical and financial conditions, safe, clean, accessible to all users including those with reduced mobility.	Toilets should be built according to technical specifications to ensure excreta are safely managed.
Hygiene	A reliable water point with soap or alcohol based hand rubs available in all treatment areas, waiting rooms and near latrines for patients and staff.	Water and soap (or alcohol based hand rubs) should available in all key areas of the facility for ensuring safe hand hygiene practices.

Source: WASH in Health Care Facilities: Status and Way Forward, WHO and UNICEF, 2015

EDUCATION FACILITIES

Actions for schools will vary depending on the age of children ranging from early child development (ECD) through to high school for future mothers. Contact point opportunities in schools and ECD centres are:

- during health classes
- during extra curricula activities
- at school feeding times/lunch breaks
- visits by health staff for health checks/deworming/ immunization
- at parent-teacher association activities
- at parenting support programmes/activities.

In order to move forward with integrating WASH and nutrition programming within the education sector the following is suggested:

- ☑ Involve children in planning and design of WASH facilities.
- ☑ Provide safe water for drinking, water treatment and/or safe water storage facilities, and provide sufficient water for cleaning and handwashing.
- ☑ Build age-appropriate child-friendly latrines in sufficient quantity and segregated by gender.
- ☑ Promote appropriate use of latrines.
- ☑ Ensure handwashing facilities with soap and water near latrines and encourage handwashing after using latrine.
- ☑ Organize group handwashing with soap before eating on the school premises, e.g., at lunch break, and routinely demonstrate and reinforce appropriate techniques.
- ☑ Use the space in feeding rooms/areas to display printed messages on nutrition and hygiene/handwashing.
- ☑ Present and discuss hygiene and nutrition messages while children are eating.
- ☑ Ensure food hygiene for school feeding programs and with food sellers within and outside the school grounds.
- ☑ Provide information on healthy foods to parents, food sellers and feeding programs.
- ☑ Provide guidelines to preschools for minimum standards for messages on health, nutrition and WASH to include into the curriculum and activity plan for preschool children and for parenting-support sessions held by the preschool teacher.
- ☑ Include WASH and nutrition messages in school health curriculum, or introduce activities to highlight and reinforce existing curricula (e.g., through peer to peer learning and games).
- ☑ Train teachers and school health staff to improve knowledge in links between nutrition and WASH.
- ☑ Ask visiting health staff to give talks, presentations and demonstrations (e.g., handwashing) to children (and teachers).
- ☑ Assist schools to plan and budget for WASH maintenance including latrine maintenance, faecal waste disposal and treatment, soap supplies, and water supply maintenance.
- ☑ Use the parent-teacher associations to disseminate the nutrition and hygiene messages being promoted by the teachers and the school so that reinforcement and application of messaging occurs in the home environment as well.
- ☑ Involve parents and wider community in WASH and nutrition actions, e.g., School Led Total Sanitation.

UNICEF EAPRO Holistic Early Childhood Development Toolkit Integrating Health, Nutrition, WASH, and Early Learning Services, 2015 http://www.unicef.org/eapro/12205_25007.htm

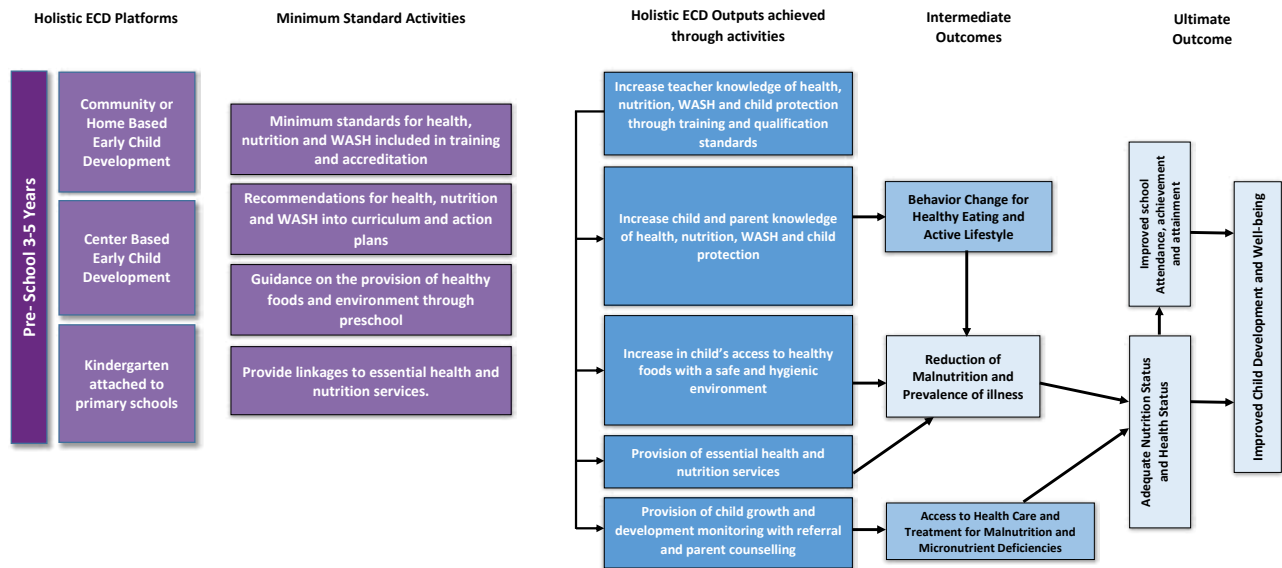
UNICEF/GIZ Field Guide: The Three Star Approach for WASH in Schools, 2013 http://www.unicef.org/wash/schools/files/UNICEF_Field_Guide-3_Star-Guide.pdf

WASH in Schools. UNICEF http://www.unicef.org/publications/files/CFS_WASH_E_web.pdf

The Power of Primary Schools to change and sustain handwashing with Soap among children – Vietnam and Peru, World Bank WSP <http://documents.worldbank.org/curated/en/442401468322131293/pdf/660010WSP00PUB0schools0vietnam0peru.pdf>

UNICEF. Raising even more Clean Hands [http://www.unicef.org/wash/schools/files/Raising_Even_More_Clean_Hands_Web_17_October_2012\(1\).pdf](http://www.unicef.org/wash/schools/files/Raising_Even_More_Clean_Hands_Web_17_October_2012(1).pdf)

Figure 23: Minimum standards for nutrition, health and WASH service delivery through preschool platforms for children 3–5 years of age



Source: Holistic Early Childhood Development Toolkit EAPRO

HOUSEHOLD/COMMUNITY LEVEL

At the community level there are many already existing opportunities which nutrition and WASH programming can work with to reinforce awareness and behaviour change. Contact points for opportunities at the community level are:

- During home visits by health, nutrition and/or hygiene workers/volunteers
- During outreach for immunization
- During nutrition screening
- During market days
- While fetching water from communal sources
- During visits to neighbours
- Around traditional religious, cultural and social gatherings for men and/or women (e.g., festivals, family celebrations, literacy groups, talks by religious leaders)
- During business-related gatherings (e.g., savings and loan meetings, social welfare/conditional cash transfer beneficiary meetings)
- Through support groups, e.g., mothers groups
- During formal neighbourhood cluster or community meetings.

In order to move forward with integrating WASH and nutrition programming within the community the following actions can be taken:

- ☑ Work with community leaders as agents of change so that they promote and encourage optimal nutrition and hygiene practices within their community.
- ☑ Create and reinforce new community social norms such as ending open defecation and handwashing with soap at key times.

UNICEF Infant and Young Child Feeding Counselling
http://www.unicef.org/nutrition/index_58362.html

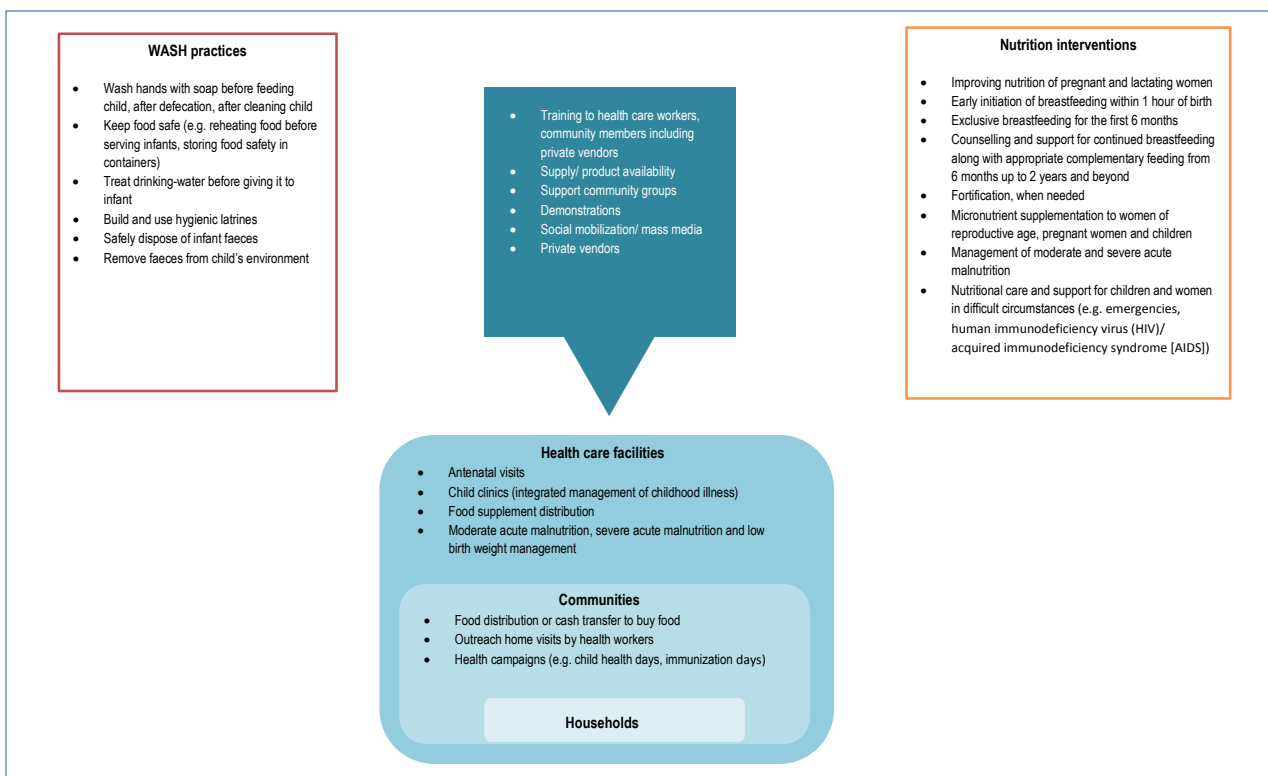
CLTS Handbook <http://www.communityledtotalsanitation.org/sites/communityledtotalsanitation.org/files/cltshandbook.pdf>

Handwashing Handbook
<http://documents.worldbank.org/curated/en/681501468141299225/The-handwashing-handbook-a-guide-for-developing-a-hygiene-promotion-program-to-increase-handwashing-with-soap>

- ☑ Promote community-wide WASH improvements that encompass villages, schools and health centres, as well as markets and other public places.
- ☑ Support sanitation campaigns using social mobilization strategies, such as CLTS or sanitation marketing approaches targeting both household- and community-level improvements.
- ☑ Encourage households to set up a designated place for handwashing with soap where food is prepared and where young children are fed.
- ☑ Use community-based feeding programmes (supplementary and/or outpatient) to display, discuss and reinforce nutrition and hygiene messages.
- ☑ Use mother peer groups as a venue to discuss and practice optimal nutrition and hygiene behaviours. Volunteers from within this group can be coached to disseminate the messages wider within the community, e.g., through discussions during market days and visits to neighbours.
- ☑ Include handwashing information and education in all community approaches to newborn health.
- ☑ Combine household visits by nutrition and WASH motivators, either as a modality of integrating programming, or to reinforce the complementarity of certain behaviour change components. Discuss optimal nutrition and hygiene practices and promote behaviour change within the household and community, e.g., proper disposal of baby and young child faeces.
- ☑ Demonstrate food preparation and cooking at market days while demonstrating food safety, safe water storage and use, and handwashing with soap.
- ☑ Include activities and messages on WASH and nutrition during immunization days or other related health days in the community.

Nepal's health volunteers improve nutrition and WASH http://www.unicef.org/infobycountry/nepal_82683.html

Figure 24: Example of implementation of integrated WASH and nutrition interventions



Source: WHO, UNICEF, USAID, Improving Nutrition Outcomes with Better, Sanitation and Hygiene, 2015

SOCIAL AND MASS MEDIA COMMUNICATION

The use of social media and mass media can be powerful tools for influencing attitudes, knowledge and practices of individuals and social groups. These methods may be more effective at reaching certain target audiences, but can also reinforce messages from interpersonal communication with health workers and contribute to a multifaceted behaviour change communication strategy. These media can be used creatively for integrated messages on the relationships between nutrition and WASH practices.

The main opportunities within these multimedia platforms are:

- Radio
- Television
- Social media (Facebook, Twitter, etc.)
- Direct mobile phone messaging.

In order to move forward with integrating WASH and nutrition programming through media platforms you can:

- ☑ Consult with UNICEF C4D staff for ideas, examples, resources and guidelines.
- ☑ Identify key influencers of WASH and nutrition behaviour and carry out formative research such as in-depth interviews, observations and focus group discussions to gain a better understanding of existing practices, beliefs, and facilitating and constraining factors.
- ☑ Using formative research findings, develop appropriate and effective messages and materials for target audiences.
- ☑ Use mass media to reinforce and build on interpersonal messages received at household and community level or when visiting schools and health care facilities. This requires attention to consistent application of key messages.
- ☑ Monitor and evaluate reach and effectiveness of multimedia campaigns.

Case Study 16 on nutrition behaviour change campaign using mass and social media, Indonesia

Lifebuoy Help a Child Reach 5 campaign

www.lifebuoy.com/socialmission/help-childreach5

UNICEF Indonesia Tinju Tinja (Pass the poo) Facebook page to end open defecation http://www.unicef.org/eapro/12205_25007.htm

Case Study 17 for an innovative example of combining a strong handwashing message directly linked to eating, and leveraged through a religious event in India

Social media campaign for breastfeeding in China http://www.unicef.org/infobycountry/china_62387.html

UNICEF Strategic Communication for Behaviour and Social Change in South Asia http://www.unicef.org/cbsc/files/Strategic_Communication_for_Behaviour_and_Social_Change.pdf



Box 15: UNICEF social media guidelines

UNICEF has developed social media guidelines to provide guidance to UNICEF staff who use social media platforms to promote UNICEF's work. These guidelines encourage staff to navigate social media ethically and strategically, while minimizing potential risks to themselves and the organization.

Case Study 16: Gerakan Rumpi Sehat (The Healthy Gossip Movement) (Indonesia)

The London School of Hygiene and Tropical Medicine (LSHTM) designed and evaluated a behaviour change communication campaign which is being scaled up across several provinces in East Java, Indonesia. The campaign, called Gerakan Rumpi Sehat (The Healthy Gossip Movement) is aiming to reach 50 million mothers over 18 months, with the long-term aim of reducing stunting and undernutrition.

LSHTM worked with the Global Alliance for Improved Nutrition (GAIN), the Government of Indonesia, a creative agency and an implementing partner to design a behavior change campaign based on the formative research findings. The final intervention targeted four key behavioral areas: exclusive breastfeeding, complementary feeding, healthy snacking and maternal nutrition. Rather than imparting knowledge, it employed emotional drivers of behaviour change, such as affiliation, nurture and disgust and used television commercials, community activations and house-to-house visits as delivery channels.



The concept for the campaign was The Healthy Gossip Movement. Emblematic of the campaign was the character of Ibu Rumpi (Mrs Gossip), who was always gossiping and judging the feeding practices of others before realizing, to her great embarrassment, that she was the one who had actually been doing the wrong thing. The ToC behind the intervention was that the target audience would implicitly sense that maternal and child-feeding practices were being watched and judged by peers, so practicing the wrong behaviour would be embarrassing and damaging to one's reputation.

A three month pilot of the intervention was conducted and evaluated by LSHTM. Initial findings found that even though the pilot did not reach as many mothers as was anticipated, the campaign was successful in improving dietary diversity of children under two, and data suggested a positive trend towards breastfeeding. The evaluation enabled GAIN to revise and improve elements of the campaign so that they could be effectively delivered at scale.

The scale up of the campaign has already been received very positively by mothers in East Java. The Facebook page associated with the campaign reached more than 500,000 women and attracted 7,000 likes in the first 48 hours.

Case Study 17: Branded bread spreads handwashing message (India)

Kumbh Mela is a mass Hindu pilgrimage held in India every three years attracting 100 million people. Lifebuoy partnered with more than 100 restaurants and cafés at the festival, as part of its ongoing campaign to raise awareness about good handwashing habits.

For every food order placed, the first roti carried the branded message “Lifebuoy se haath dhoye kya?” (Did you wash your hands with Lifebuoy?). The words were heat stamped onto the baked roti, without the use of ink, to ensure it was completely edible.

Washing hands with soap at the right time

“The ‘Roti Reminder’ gets a consumer’s attention at the exact time when handwashing is critical to help stop the spread of germs carrying preventable diseases. That is, right when consumers sit down to eat roti with their hands,” says Sudhir Sitapati, General Manager, Skin Cleansing, Hindustan Unilever Limited.

“The Kumbh Mela provides a unique opportunity to communicate this message to a large, predominantly small-town and rural population. In effect, this simple, clutter-breaking idea will help us reach out to a massive audience, at a fraction of the cost.”

Watch the [Roti Reminder video on YouTube](#) to find out more.

The importance of handwashing



More than 2.5 million branded rotis were eaten by the end of the month-long campaign. Lifebuoy also placed soap in the wash rooms of each of the eateries and used banners and billboards to reach millions more people with its handwashing message.

The reach of the campaign has gone far beyond the festival. The novelty of branding food has generated a huge amount of media coverage and discussion across India, helping to spread the message of the importance of washing hands with soap before eating.

5.10 Monitoring

When delivering multisectoral programming it is critical to measure the contribution and results through a multisectoral lens. Without indicators or baseline metrics to track implementation and contribution to the wider intervention package, it is hard to quantify and justify the inclusion of WASH components. A baseline measurement taking into account both WASH and nutrition components allows one to measure and quantify progress towards achieving the end goal. Developing specific M&E indicators on integrated activities makes it easier to deliver results on activities and serves as an incentive for staff and senior management, as well as providing evidence to justify and advocate for support to scaling up.

MONITORING OF INTEGRATION

- ☑ Develop a ToC to establish a framework for monitoring short- and long-term goals and expected pathway.
- ☑ Use integrated logframes as a framework for detailed monitoring and to fully maximize capturing the outcomes of integrated programming.
- ☑ Identify and use context and programme-specific indicators in order to quantify contribution of both WASH and nutrition towards jointly identified outcomes. Coordination forums/working groups can be used to develop indicators in relation to the overarching goal.
- ☑ Align indicators to be collected in integrated programming initiatives with indicators and data that are routinely collected, e.g., monthly routine SAM monitoring data.
- ☑ Develop targets and indicators which are aligned with SDGs 2 and 6.
- ☑ Use standard international indicators and benchmarks for easier data comparison over time, e.g., UNICEF/WHO JMP indicators for water and sanitation, Demographic and Health Surveys (DHS) indicators.
- ☑ Conduct a joint bottleneck analysis to identify ongoing blockages in WASH-nutrition integration. This analysis could be a follow up of an early bottleneck analysis exercise or a new opportunity for joint reflection.
- ☑ Ensure data disaggregation to the service level platform.
- ☑ Use your country specific ToC to regularly test assumptions and expected pathways, monitor achievements towards change, and adjust programming as necessary.
- ☑ Use quarterly and annual reflections/reviews to adjust operational or personnel related issues that may have an effect on the success of integration.
- ☑ Keep a tally of working hours spent on integrating WASH and nutrition in order to draw a correlation between effort invested and results achieved. This can be extremely useful qualitative information for advocacy and fundraising purposes.
- ☑ Capture information on all the modalities where the integration of nutrition and WASH can occur such as the creation of policy or coordination groups. Do not only focus on programme implementation results.
- ☑ Conduct joint KAP surveys to capture both WASH and nutrition information which leads to easier joint analysis and monitoring.
- ☑ Consider the use of e-data systems such as mobile phone technology and apps for improved accuracy and faster data collection.

UNICEF Toolkit and YCSD Indicators http://www.unicef.org/eapro/12205_25007.htm

UNICEF NutriDASH http://www.sightandlife.org/fileadmin/data/News/2015/2_Feb/UNICEF_Global_NutriDash_report_2013.pdf

Minimum nutrition-related indicators at health facility and community level including WASH/ nutrition sensitive http://www.unicef.org/eapro/12205_25007.htm

UNICEF/WHO JMP indicators <http://www.wssinfo.org/definitions-methods/>

Nutritional status of women and children update using WASH indicators, DHS, 2014 <https://dhsprogram.com/pubs/pdf/NUT6/NUT6.pdf>

See ToC Chapter 4 for resources using method for reflection and learning

Table 4 for examples of monitoring indicators.

UNICEF Lao PDR example of WASH and nutrition programme logframe http://www.unicef.org/eapro/12205_25007.htm

See Case Study 18 on monitoring upstream impacts in Indonesia

Measuring indirect (upstream) results presentation http://www.unicef.org/eapro/12205_25007.htm

See Box 8 on Bottleneck Analysis Monitoring Results for Equity System (MoRES) Toolkit: Indicator Guidance on Health, HIV and Nutrition http://www.unicef.org/eapro/12205_25007.htm

Table 4: Examples of indicators

Integration modality	Indicator
Coordination	<ul style="list-style-type: none"> Working group for WASH and nutrition has been established WASH and nutrition sectoral working group have systematic engagement with each other (e.g., joint work plan, system established for routine sharing of minutes)
Advocacy	<ul style="list-style-type: none"> Advocacy champions identified who adopt and support an issue or position Citations of key messages on integrating WASH and nutrition by decision makers in policy debates Government officials/key stakeholders publicly supporting the advocacy effort Advocacy plans developed/updated as part of integrated planning processes Financial and human resources made available for advocacy around integrating WASH and nutrition
Policy	<ul style="list-style-type: none"> Country has developed a national nutrition plan that includes WASH National WASH plans include explicit targeting of areas with high rates of malnutrition New policy proposal developed Number of strategies or initiatives advocating for integrating WASH and nutrition programmes National policies concerning the integration of WASH and nutrition programming has been translated down to the local governments
Analysis	<ul style="list-style-type: none"> Proportion of WASH and nutrition data shared with each respective sector Priority WASH and nutrition indicators are identified for use in analysis and monitoring Annual or programme-based joint situational analysis conducted using at minimum both WASH and nutrition indicators
Planning	<ul style="list-style-type: none"> Proportion of targeted institutions reporting collaboration between nutrition and WASH programmes (e.g., joint documents, decisions/policies, work plans) Proportion of geographic implementation areas with both WASH and nutrition interventions Proportion or number of villages/areas with high prevalence of acute malnutrition targeted by WASH activities Proportion or number of villages/areas with high prevalence of stunting targeted by WASH activities
Budgeting	<ul style="list-style-type: none"> Number of partnerships/agreements with integrated WASH and nutrition intervention components Proportion of targeted institutions with (increased) expenditures for integrated WASH-nutrition programming Funding levels increased/sustained for relevant policies and programmes

Implementation	<ul style="list-style-type: none"> • Proportion or number of villages/areas where nutrition programmes that are implemented include a WASH element • Proportion of households with children enrolled in acute malnutrition treatment programmes receiving minimum package of services that include a WASH element • Proportion of households in target areas participating in activities where both nutrition and WASH messages were delivered • Number of children under 5 years of age reached by joint nutrition and WASH programmes • Proportion of mothers of children 0–5 months who have received counselling, support or messages on optimal breastfeeding and handwashing with soap before breastfeeding • Percentage of health care facilities with a handwashing facility with soap and water in or near sanitation facilities, food preparation areas and patient care areas • Percentage of health care facilities with a private place for washing hands, private parts and clothes; drying reusable materials; and safe disposal of used menstrual materials
Capacity development	<ul style="list-style-type: none"> • Number of national/local workshops/trainings on joint WASH-nutrition programming • Number of nutrition/health professionals/community workers trained in relevant WASH elements per 100,000 population • Proportion of community health centres that provide essential WASH messaging in their counselling • Proportion of community workers that provide essential WASH messaging in their counselling • Number of webinars that UNICEF staff have participated in which cover the corresponding sector of interest (e.g., WASH staff participating in nutrition webinars)
Monitoring	<ul style="list-style-type: none"> • Proportion of targeted organizations that have modified follow-up supervision and monitoring to include WASH elements • An agreed minimum set of WASH indicators are included in the national health information system • Percentage of WASH partners who are aware of key nutrition indicators • Percentage of WASH partners who know how to access key nutrition indicators at the country level • Percentage of nutrition actors who are aware of key WASH indicators • Percentage of nutrition partners who know how to access key WASH indicators at the country level
Knowledge management	<ul style="list-style-type: none"> • Number of documentation (e.g., lessons learned, case studies, articles) developed and shared

Adapted and expanded from WHO, UNICEF, USAID, Improving Nutrition Outcomes with Better, Sanitation and Hygiene, 2015

Case Study 18: Monitoring upstream impacts (Indonesia)

Indonesia has an innovative method of systematic monitoring of proxy indicators to assess results from interventions to strengthen enabling environment by measuring the 'indirect' contribution of 'upstream' work to access the contribution towards improving access to WASH. The idea is that UNICEF (and most partners involved in implementation) already measures results through direct beneficiary estimates (e.g., number of people benefitting from water, sanitation, WASH in schools) but there is a need to also reflect the results of upstream work, which is an increasingly important part of UNICEF's work. Creating an enabling environment through policies, standards, guidelines, capacity building, sector coordination and M&E systems is an essential part of improving the delivery of programmes but not always well captured in results. Measuring 'indirect results' is likewise key for documenting the contribution of WASH efforts towards nutrition outcomes and this practical example provides a concrete model. The evaluation requires that at least 4 (of 8) substantiated 'yes' responses to consider the positive contribution of upstream efforts to improving the enabling environment.

Advantages of this model are:

- Use of consistent and objectively verifiable indicators to assess upstream programming results
- Works within the UNICEF corporate monitoring framework – is straightforward and thus easily made transparent for donors and other stakeholders
- Incorporates both an internal and an external quality assurance process
- Has simple enough indicators and quality assurance procedures to be carried out annually.

No.	Category	Indicator question text	Progress in Indonesia in 2014	Traffic light
1	Policy development	Has a major new national WASH policy, strategy, operational guideline or equivalent that was developed as a result of UNICEF advocacy and/or support been issued by Government in the reporting year? If yes, provide details in the 'remarks' field.	Incorporation of WinS into the new Govt Five year Plan (RPJMN); Sub-national advocacy on the Water Law and Bottleneck Analyses also	National Impact
2	Leveraging resources	Was significant new funding that was the result of UNICEF advocacy and/or support released for scaling up national WASH programmes in the reporting year? If yes, provide details in the 'remarks' field.	Yes at District and Province level	Sub-national Impact
3	Innovation and diffusion	Has an innovation or new programming approach promoted by UNICEF been adopted by Government on a significant scale during the reporting year? If yes, provide details in the 'remarks' field.	Innovative social media campaign launched but this was by UNICEF only – currently hit rate has exceeded expectation with the purpose to raise discourse on open defecation	National Impact
4	Capacity building	Has the capacity of the national WASH sector to deliver WASH services at scale been substantially improved in the reporting year as a result of UNICEF support? If yes, provide details in the 'remarks' field.	At district level yes but not as big as impact at national level; However support provided at national level to the STBM standard core module development	Sub-national Impact
5	Sector coordination	Did UNICEF have a leadership role in a national sectoral coordination mechanism during the reporting year? If yes, provide details in the 'remarks' field.	Yes in terms of the WASH Emergency Cluster which UNICEF coordinates – the Cluster tools and plan was updated in Sept 2014; UNICEF also supported STBM National coordination meeting	Sub-national Impact
6	Sustainability promotion	Was the sustainability of national WASH services substantially improved during the reporting year through UNICE support? If yes, provide details in the 'remarks' field.	N/A	No Impact
7	Knowledge creation and dissemination	Did a UNICEF-supported study, evaluation, review or similar exercise substantially contribute to the national WASH evidence base within the reporting year? If yes, provide details and on the dissemination process in the 'remarks' field.	- Indonesia National WASH Lit review - Eastern Indonesia KAP survey - Secondary Analysis on WASH & Stunting and WASH & diarrhoea - WASH Evidence base – sharing with Govt - Major WinS sustainability survey underway	National Impact
8	Equity focus, including gender	Did Govt, with UNICEF support, either look for ways to reach or measure reach for the most vulnerable or work through a renewed gender lens; example may include dedicated funding for vulnerable, new data presented on WASH and vulnerable groups, specific policy in place around equity and gender in WASH etc	- MHM formative research on-going in 4 provinces. - DRR mapping on-going looking at the most marginalised and vulnerable	Sub-national Impact

5.11 Knowledge management

Knowledge management

It is crucial to ensure that the practical lessons and programmatic learning from integrated programming efforts is shared more widely so that the field-level evidence of what works well, or what doesn't work well, complements the research and contributes to learning. Knowledge generation, knowledge products and knowledge sharing are three key elements to address.

- ☑ Hold regular joint reviews of WASH and nutrition integration journey to maximize 'learning and doing'.
- ☑ Present findings of integrated WASH/nutrition programming experience – positive and negative at conferences:
 - SUN network meetings and conferences
 - International conferences in main presentations and side events, e.g., WEDC, Brisbane WASH Conference, Bonn WASH Nutrition Forum, World Water Week in Stockholm, International Conference on Nutrition and Growth, World Nutrition Conference
 - Regional conferences, e.g., Stop Stunting conferences, FAO regional conferences
 - National conferences, e.g., annual country planning or sector review meetings on WASH and/or nutrition.
- ☑ Share findings through sector talks and discussions using a range of formats, e.g., 'TED Talk' presentations, expert interviews, fishbowls, chat shows.
- ☑ Disseminate findings through peer reviewed journal and research publications, e.g., Waterlines, Lancet, Journal of Water Sanitation and Hygiene for Development, Environmental Health Perspectives.
- ☑ Document findings in case studies, learning notes, field reports, technical publications, research reports. Disseminate through industry networks and host documents in publications/library section of organizational websites.
- ☑ Write blog posts to disseminate lessons learned and findings either as a guest blogger on established forums such WASHplus, SuSanA or create your own independent blog with regular postings.
- ☑ Write blog posts for UNICEF website or UNICEF Facebook page.
- ☑ Produce videos for dissemination at workshops or via YouTube and Facebook, etc.
- ☑ Facilitate online meetings and webinars to interactively share findings and respond to questions.
- ☑ Facilitate learning exchanges, seminars or training events and workshops to share your experience in WASH and nutrition integration.

UNICEF Knowledge Exchange Toolbox
http://www.unicef.org/knowledge-exchange/index_82053.html

UNICEF WASH Knowledge Management Strategic Framework (2014–2015) http://www.unicef.org/eapro/12205_25007.htm

UNICEF WASH and nutrition case study template http://www.unicef.org/eapro/12205_25007.htm

Example of where to guest blog:

UNICEF EAPRO blog <https://blogs.unicef.org/east-asia-pacific>

UNICEF blog <https://blogs.unicef.org>

WASHplus www.washplus.org

CommunityLedTotalSanitation (CLTS)
www.communityledtotalsanitation.org

Healthy Newborn Network
www.HealthyNewbornNetwork.org

Examples of blog software to create own blog:

1. [WordPress](#)
2. [Blogger](#)
3. [Tumblr](#)
4. [Medium](#)
5. [Svbtle](#)
6. [Quora](#)

6 In a humanitarian context

Key resources

UNICEF Core Commitments for Children in Humanitarian Action <http://www.unicef.org/emergencies/index_68710.html>

Global Nutrition Cluster website <<http://nutritioncluster.net/>>

Global WASH Cluster website <<http://washcluster.net/>>

Sphere Handbook <<http://www.sphereproject.org/handbook/>>

An emergency is a situation that threatens the lives and well-being of large numbers of a population and requires extraordinary action to ensure their survival, care and protection.²² During an emergency, lives are disrupted and access to adequate sanitation, clean water and hygiene products can be severely compromised, and the damage caused to infrastructure can increase the risk of disease including diarrhoea and cholera. The ways in which people access food is often disrupted, especially if they have to leave their homes due to conflict or sudden flooding or an earthquake. Additionally, crops and food stocks are often destroyed in emergencies such as floods or drought. The risk of malnutrition depends on factors such the underlying levels of wasting, infant feeding practices, access to safe water and health services.

The risks to feeding and caring practices for infants, young children and their mothers/carers are high, alongside increased vulnerability to diarrhoea and other diseases due to situations of poor sanitation, reduced access to food and deterioration in living conditions. Infants less than six months old who are not breastfed in non-emergency situations are already more than 14 times more likely to die from all causes than exclusively breastfed children. These risks are amplified in emergency situations where water and sanitation conditions become even more of a challenge.

Consequently, undernutrition and mortality risks increase. The underlying causes of malnutrition are critical factors of nutritional status for populations in a humanitarian context. Appropriate and coordinated attention to WASH conditions and services can have a direct impact on the nutrition outcomes for the vulnerable populations in crisis.

The following sections briefly outline some of the key actions to take in humanitarian contexts in order to protect nutritional status and prevent malnutrition or a further deterioration of status.

22 UNICEF, Programme Policy and Procedure Manual: Programme Operations, UNICEF, New York, 22 January 2009.

Coordination

Whatever coordination structure exists, or is adopted by the response actors, it must be flexible enough to suit all stages of the emergency response and meet the needs and requirements of a variety of stakeholders. In general, the coordination body should be responsible for the following activities:

- ☑ Jointly develop and/or agree on WASH in nutrition standards (including defining indicators and targets), assessment methodologies, analysis of results and identification of priority actions.
- ☑ Mapping of WASH and nutrition interventions 4Ws (who, what, where, when) to see areas of overlap and where the gaps are.
- ☑ Monitor the quality and progress of the WASH in nutrition emergency overall response.
- ☑ Share and update external partners and organizations on the quality and progress of the WASH in nutrition emergency response.
- ☑ Conduct cross-sectoral information sharing on the top WASH and nutrition concerns in an emergency and the common interventions to address them. This can be done within UNICEF to build the capacity of sectoral staff and/or through coordination forums so that nutrition stakeholders are aware of the most common WASH challenges in an emergency context and vice versa. Ideally use the context-specific scenario planning to shape those conversations.
- ☑ Establish TWGs to produce guidance integrating WASH and nutrition in the emergency response. TWGs are task focused with specific ToR with clearly defined outputs. They are an effective way of bringing together multiples stakeholders (agency and sector) to work concretely on addressing specific concerns.
- ☑ Familiarize UNICEF staff on UNICEF's commitments as global cluster leader in both WASH and nutrition, and the responsibilities that places on UNICEF at the national level.

UNICEF Core Commitments for Children (Box 16) http://www.unicef.org/publications/files/CCC_042010.pdf

Cluster Coordination Guidance for Country Offices, UNICEF, 2015 <http://cpwg.net/wp-content/uploads/sites/2/2015/05/Cluster-Guidance-Eng-5-June.pdf>

WASH Cluster Coordinators Handbook, 2009 <http://washcluster.net/wp-content/uploads/sites/5/2014/04/WASH-Cluster-Coordinator-Handbook.pdf>

Nutrition Cluster Handbook, 2013 http://nutritioncluster.net/nutrition/wp-content/uploads/sites/4/2013/09/GNC_Handbook_v1_FINAL_no_links.pdf

Global Nutrition Cluster (GNC) Orientation http://www.unicef.org/eapro/12205_25007.htm

Global WASH Cluster Inter-cluster Matrices of Roles and Responsibilities, 2009 http://www.themimu.info/sites/themimu.info/files/documents/Checklist_Inter-Cluster_Matrices_of_Roles_Accountabilities.pdf

Box 16: The UNICEF Core Commitments for Children (CCCs) in Humanitarian Action

The Core Commitments for Children in Humanitarian Action are a global framework for humanitarian action for children undertaken by UNICEF and its partners. The CCCs constitute a global framework, developed by UNICEF in collaboration with its partners, for protecting the rights of children affected by humanitarian crisis. They cover programme and operational commitments and include interventions for nutrition, health, water and sanitation, HIV and AIDS, education, and child protection. Programme commitments of the CCCs in humanitarian action are premised on corresponding benchmarks derived from global standards in the respective programme areas. They are designed to allow UNICEF and its partners to flexibly contribute to reaching the benchmarks collectively, depending on their capacities. The benchmarks in the CCCs are the globally accepted performance levels for humanitarian response, drawn from inter-agency standards, including Inter-Agency Network for Education in Emergencies (INEE) Minimum Standards and the Sphere Standards, and the outcomes of discussions in inter-agency and cluster forums.

WASH Commitment 1: <i>Effective leadership is established for WASH cluster/inter-agency coordination, with links to other cluster/sector coordination mechanisms on critical intersectoral issues.</i>	Nutrition Commitment 1: <i>Effective leadership is established for nutrition cluster inter-agency coordination, with links to other cluster/sector coordination mechanisms on critical intersectoral issues.</i>
WASH Commitment 2: <i>Children and women access sufficient water of appropriate quality and quantity for drinking, cooking and maintaining personal hygiene.</i>	Nutrition Commitment 2: <i>Timely nutritional assessment and surveillance systems are established and/or reinforced.</i>
WASH Commitment 3: <i>Children and women access toilets and washing facilities that are culturally appropriate, secure, sanitary, user-friendly and gender-appropriate.</i>	Nutrition Commitment 3: <i>Support for appropriate IYCF is accessed by affected women and children.</i>
WASH Commitment 4: <i>Children and women receive critical WASH-related information to prevent child illness, especially diarrhoea.</i>	Nutrition Commitment 4: <i>Children and women with acute malnutrition access appropriate management services.</i>
WASH Commitment 5: <i>Children access safe water, sanitation and hygiene facilities in their learning environment and in child-friendly spaces.</i>	Nutrition Commitment 5: <i>Children and women access micronutrients from fortified foods, supplements or multiple-micronutrient preparations.</i>
	Nutrition Commitment 6: <i>Children and women access relevant information about nutrition programme activities.</i>

Source: UNICEF, Core Commitments for Children in Humanitarian Action, UNICEF, New York City, 2010, <http://www.unicef.org/publications/files/CCC_042010.pdf>

Policy – using standards

In an emergency setting there are existing international standards for WASH and nutrition interventions. Likewise, there may be existing national policies and standards for emergency response within the sectors. Finally, individual organizations have their own guidance, e.g., UNICEF has a key set of commitments and benchmarks for both operational and technical response, which the specific agency needs to take into account.

- ☑ Familiarize UNICEF and key stakeholders with the minimum standards for humanitarian response as laid out by the Sphere Project.
- ☑ Familiarize UNICEF staff with UNICEF's CCCs with specific focus on the WASH and nutrition components.
- ☑ Work through/with the coordinating groups and the national government to develop or update policies and recommendations concerning appropriate and context specific ways for integrating WASH and nutrition interventions in the response.
- ☑ Develop specific national or subnational emergency WASH minimum standards that are relevant to nutrition programming in an emergency response.

ACF Emergency Nutrition Response Handbook <http://blog.actioncontrelafaim.org/wp-content/uploads/2013/06/ACF-Emergency-Nutrition-Handbook-EN-FV.pdf>

WHO: Nutrition in emergencies – documents and publications <http://www.who.int/topics/nutrition/publications/emergencies/en/>

Sphere Handbook minimum standards in: (1) water supply, sanitation and hygiene promotion; (2) food security and nutrition http://www.unicef.org/cholera/Annexes/Supporting_Resources/Annex_9/Sphere_Handbook_English_2011_web.pdf

WASH in Health Care Facilities in Emergencies, WHO, 2012 http://www.washclustermali.org/sites/default/files/wash_in_health_facilities_in_emergencies_who.pdf

UNICEF Core Commitments for Children in Humanitarian Action (CCCs) http://www.unicef.org/publications/files/CCC_042010.pdf

IYCF in Emergencies, ECHO, 2014 https://ec.europa.eu/echo/files/media/publications/2014/toolkit_nutrition_en.pdf

Analysis – emergency assessment

- ☑ Put in place arrangements for assessment, including accessing and collating relevant pre-crisis information on WASH and nutrition. Pre-crisis data should be disaggregated by age, including categories of under 5 years and under 2 years, and sex for better understanding of the situation of the various groups when a crisis arises.
- ☑ Identify key WASH and nutrition questions that can be included in initial assessments or for inclusion in sectoral assessments.
- ☑ Pick or modify an assessment tool so that WASH and nutrition information are collated from the same areas/populations in order to ease joint analysis and promote an integrated response (see Box 17).
- ☑ Rapidly assess WASH in nutrition/health facilities in emergency situations including the extent to which facilities may fall short of standards.

MIRA Guidance <https://www.humanitarianresponse.info/en/programme-cycle/space/document/multi-sector-initial-rapid-assessment-guidance-revision-july-2015>

Global WASH Cluster (GWC) Guide to Capacity Mapping and Assessment of WASH Emergency Response, 2008 <http://www.bvsde.paho.org/texcom/desastres/washgcm.pdf>

WASH in Health Care Facilities in Emergencies, WHO, 2012 http://www.washclustermali.org/sites/default/files/wash_in_health_facilities_in_emergencies_who.pdf

Box 17: Assessment of WASH and nutrition in emergencies

Depending upon the scale of the emergency, assessment may entail preparing and obtaining consensus around a common assessment tool, determining an appropriate assessment methodology, and coordinating emergency actors (identifying who assesses what, where, when and how). In disaster prone regions, assessment tools and methodologies may already have been defined as part of emergency preparedness activities. The type of assessment to be carried out generally depends on the level of time available and the level of detail required. Two assessment tools have been prepared to help with the assessment phase as part of this document.

The **WASH in health care facilities Rapid Assessment Tool (RAT)** is a short, two-page, survey tool that can be used by a non-WASH specialist to quickly assess health care facility related WASH services and sanitary hazards. The tool can also be used to survey multiple facilities at the same time and the hazard scoring system can help coordinating bodies and emergency WASH actors decide which health care facilities contain the most severe hazards and should be prioritized.

The **WASH in health care facilities Comprehensive Assessment Tool (CAT)** is a comprehensive assessment tool and is a longer, more detailed, 18 page survey tool that can be used as an aide memoire to help a WASH specialist systematically assess WASH services and hazards in a single health care facility.

The **Multiple Sector Initial Rapid Assessment (MIRA) Tool** is a joint needs assessment tool that can be used in sudden onset emergencies. The MIRA is an inter-agency process enabling actors to reach, from the outset, a common understanding of the situation and its likely evolution. Based on its findings, humanitarian actors can develop a joint plan, mobilize resources and monitor the situation.

Implementation platforms – the response

Humanitarian response occurs in a changed operational environment where there is a disturbance or destruction of existing services often coupled with the need to increase services or offer new services entirely. Each of these presents a specific option for ensuring that WASH components are integrated into the programming or at least that WASH services converge in the same geographic location. Plan emergency WASH interventions²³ to correspond with the:

- ☑ Establishment of temporary or mobile clinics.
- ☑ Establishment or increase in nutritional rehabilitation services for the management of acute malnutrition, both centre and community based.
- ☑ Establishment of supplementary feeding programmes for vulnerable groups and/or the moderately malnourished.
- ☑ Setting up of temporary feeding centres and community kitchens.
- ☑ Establishment of baby/child friendly spaces for integrated services for infants and children.
- ☑ Establishment, re-establishment or enhancement of community outreach structures (community health, nutrition, WASH workers).
- ☑ Setting up of temporary water supply options (such as water trucking).
- ☑ Improvements to existing permanent health care/nutrition facilities affected by the emergency.

WASH in Health Care Facilities in Emergencies, WHO, 2012 http://www.washclustermali.org/sites/default/files/wash_in_health_facilities_in_emergencies_who.pdf

Baby Friendly Spaces Chapter 4 Hygiene Practices, ACF, 2014 <http://www.actionagainsthunger.org/publication/2014/12/baby-friendly-spaces-technical-manual>

A Practical Guide for Developing Child Friendly Spaces, UNICEF, 2011 <http://cpwg.net/resources/a-practical-guide-to-developing-child-friendly-spaces-unicef-eng/>

GWC WASH Emergency Capacity Mapping Tool <http://www.bvsde.paho.org/texcom/desastres/washgcma.pdf>

Nutrition Capacity Mapping Tools GNC <http://nutritioncluster.net/resources/capacity-mapping-tool-2/>

23 Emergency WASH interventions consist of the distribution of safe water, sanitation and hygiene emergency supplies such as jerry cans, soap, water treatment tablets, insecticide-treated bed nets (ITNs) and oral rehydration salts (ORS) sachets.

Monitoring

Monitoring can be complicated in emergency settings.

- ☑ Build on existing monitoring systems where possible with the early view of transitioning into early recovery actions and bridging the divide between development and relief.
- ☑ Monitor WASH interventions and conditions in nutrition facilities throughout the course of the emergency. This feeds directly into the analysis of the emergency context and informs re(design) in a crucial feedback loop.
- ☑ Monitoring systems or frameworks need to be well thought through and should address the following questions:
 - What will be monitored?
 - How will it be monitored?
 - Where will it be monitored?
 - How often will it be monitored?
 - Who will do the monitoring?
 - Who will receive the results and where?
 - Who will implement response?

WASH in Health Care Facilities in Emergencies Chapter 3 Minimum Standards and Indicators, WHO, 2012 http://www.washclustermali.org/sites/default/files/wash_in_health_facilities_in_emergencies_who.pdf

See monitoring indicators Table 4

7 Annexes

7.1 Key resources

WASH and nutrition integration

Concern Worldwide, How to Better Link WASH and Nutrition Programmes, 2015, <https://www.concern.net/sites/default/files/media/resource/how_to_better_link_wash_and_nutrition_programmes.pdf>

UNICEF, Multi-sectoral Approaches to Nutrition: The Case for Investment by Public Health, <[Water, Sanitation, and Hygiene, <http://www.unicef.org/eapro/Brief_HealthNutrition.pdf](http://www.unicef.org/eapro/Brief_HealthNutrition.pdf)>

USAID, Integrating Water, Sanitation, and Hygiene into Infant and Child Nutrition Programmes: A Training and Resource Pack for Uganda, Washington, D.C., USAID WASHplus project, FHI 360, 2014, <<http://www.washplus.org/sites/default/files/uganda-washnutrition.pdf>>

USAID, Integrating Water, Sanitation, and Hygiene Into Nutrition Programming, Washington, D.C., USAID WASHplus project, FHI 360, 2013, <http://washplus.org/sites/default/files/wash_nutrition2013.pdf>

WASHplus, Integrating WASH and Nutrition Learning Brief, June 2015, <http://www.washplus.org/sites/default/files/wash_nutrition-brief2015.pdf>

WHO, 'Water, Sanitation and Hygiene in Health Care Facilities: Status in Low- and Middle-Income Countries and Way Forward', 2015, <http://www.who.int/water_sanitation_health/publications/wash-health-care-facilities/en/>

WHO, UNICEF, USAID, 'Improving Nutrition Outcomes With Better Water, Sanitation and Hygiene, Practical Solutions for Policies and Programmes', Geneva, 2015, <http://www.who.int/water_sanitation_health/publications/washandnutrition/en/>

WASH

FHI 360, Small Doable Actions for Improving Household Water, Sanitation, and Hygiene Practices: Job Aids for Village Health Teams, Peer Educators, and their Supervisors, Washington, D.C., USAID WASHplus project, FHI 360, 2014, <http://www.washplus.org/sites/default/files/uganda-jobaids_english2014.pdf>

Global Public-Private Partnership for Handwashing (PPPHW), <<http://globalhandwashing.org/resources>>

Jones, H., and J. Wilbur, Compendium of accessible WASH technologies, WEDC/SHARE/WaterAid, 2014, <<http://www.susana.org/en/resources/library/details/2156>>

Kar, K. Handbook on Community-Led Total Sanitation, Plan International (UK)/Institute of Development Studies at the University of Sussex, 2008, <<http://www.communityledtotalsanitation.org/sites/communityledtotalsanitation.org/files/cltshandbook.pdf>>

UNICEF WASH Strategy 2016-2030 <http://www.unicef.org/wash/3942_91538.html>

UNICEF Enabling Environment Guidance (under finalization)

WHO, Guidelines for Drinking-Water Quality, fourth edition, Geneva, WHO, 2011, <http://whqlibdoc.who.int/publications/2011/9789241548151_eng.pdf>

WHO, 'Water Safety Planning for Small Community Water Supplies: Step-by-Step Risk Management Guidance for Drinking-Water Supplies in Small Communities', Geneva, WHO, 2012, <http://www.who.int/water_sanitation_health/publications/2012/water_supplies/en/index.html>

WHO, Sanitation Safety Planning: Manual for Safe Use and Disposal of Wastewater, Greywater and Excreta', Geneva, WHO, 2015, <http://www.who.int/water_sanitation_health/publications/ssp-manual/en/>

WHO, 'PHAST Step-by-Step Guide: A Participatory Approach for the Control of Diarrhoeal Diseases, Geneva, WHO, 1998, <http://www.who.int/water_sanitation_health/hygiene/envsan/phastep/en/>

WHO and UNICEF, 'A Toolkit for Monitoring and Evaluating Household Water Treatment and Safe Storage Programmes', Geneva, WHO and UNICEF, 2012, <http://www.who.int/household_water/resources/toolkit_monitoring_evaluating/en>

World Bank, The Handwashing Handbook: A Guide to Developing a Hygiene Promotion Programme to Increase Handwashing with Soap, Washington, D.C., World Bank, 2009, <http://esa.un.org/iys/docs/san_lib_docs/Handwashing_Handbook.pdf>

Monitoring and evaluation

CORE Group, 'Essential Nutrition Actions and Essential Hygiene Actions Framework', <<http://www.coregroup.org/resources/488-essential-nutrition-actions-and-essential-hygiene-actions-framework>>

UNICEF, 'Handwashing Promotion Monitoring and Evaluation Module', New York City, UNICEF, 2015, <<http://globalhandwashing.org/resources/handwashing-promotion-monitoring-and-evaluation-module/>>

USAID, Access and Behavioral Outcome Indicators for Water, Sanitation, and Hygiene. Washington, D.C., USAID Hygiene Improvement Project, <<http://www.hip.fhi360.org/file/22581/Access%20and%20Behavioral%20Outcome%20Indicators%20for%20WASH.pdf>>

WHO, 'Child Growth Standards: Training Course and Other Tools', <<http://www.who.int/childgrowth/training/en/>>

WHO, 'NLIS Country Profile Indicators Interpretation Guide', <http://www.who.int/entity/nutrition/nlis_interpretationguide_isbn9789241599955/en/index.html>

WHO and UNICEF, 'A Toolkit for Monitoring and Evaluating Household Water Treatment and Safe Storage Programmes', Geneva, WHO and UNICEF, 2012, <http://www.who.int/household_water/resources/toolkit_monitoring_evaluating/en>

WHO and UNICEF Joint Monitoring Programme for Water Supply and Sanitation (JMP), <<http://www.wssinfo.org>>

WHO, UNICEF, IFPRI, UC Davis, FANTA2, AED and USAID, 'Indicators for Assessing Infant and Young Child Feeding Practices: Parts 1 (2008), 2 (2010), and 3 (2010)', <http://www.who.int/maternal_child_adolescent/documents/9789241596664/en/>

WSP, 'Global Scaling Up Handwashing: Practical Guidance for Measuring Handwashing Behavior', 2013 update, Washington, D.C., World Bank, WSP, 2013, <<http://www.wsp.org/sites/wsp.org/files/publications/WSP-Practical-Guidance-Measuring-Handwashing-Behavior-2013-Update.pdf>>

Nutrition

1,000 Days partnership, <http://www.thousanddays.org>

Essential Nutrition Action and Essential Hygiene Actions Training Materials, 2015

- ENA & EHA Training Guide – Health Workers and Nutrition Managers
- ENA & EHA Reference Manual – Health Workers and Nutrition Managers
- ENA & EHA Training Guide – Community Workers (all sectors)
- ENA & EHA Reference Materials on Key Practices – Community Workers (all sectors)

<http://www.coregroup.org/resources/488-essential-nutrition-actions-and-essential-hygiene-actions-framework>

Guyon, A., V. Quinn, J. Nielsen and M. Stone-Jimenez, Essential Nutrition Actions and Essential Hygiene Actions Reference Manual: Health Workers and Nutrition Managers, Washington, D.C., CORE Group; 2015, <http://www.fsnnetwork.org/sites/default/files/reference%20manual.pdf>

Infant Feeding in Emergencies (IFE) Core Group Materials, <http://www.enonline.net/ifecoregroup>

Lancet Series 1 on Maternal and Child Undernutrition (2008) 'Maternal and Child Nutrition', Series Papers, The Lancet, 16 January 2008, <http://www.thelancet.com/series/maternal-and-child-undernutrition>

Lancet Series 2 on Maternal and Child Undernutrition (2013) 'Maternal and Child Nutrition', Series Papers, The Lancet, 6 June 2013, <http://www.thelancet.com/series/maternal-and-child-nutrition>

REACH Accelerating The Scale-up of Food and Nutrition Actions, <http://www.reachpartnership.org/home>

Scaling up Nutrition Movement (SUN) movement, <http://www.scalingupnutrition.org>

UNICEF, WHO and World Bank, Group Levels and Trends in Child Malnutrition, UNICEF – WHO – World Bank Group joint child malnutrition estimates, Key findings of the 2015 edition, http://www.unicef.org/media/files/JME_2015_edition_Sept_2015.pdf

UNICEF, Improving Child Nutrition: The Achievable Imperative for Global Progress, New York City, UNICEF Nutrition Section, 2013, http://www.unicef.org/gambia/Improving_Child_Nutrition_-_the_achievable_imperative_for_global_progress.pdf

UNICEF, 'Community Based Infant and Young Child Feeding', http://www.unicef.org/nutrition/index_58362.html

UNICEF. UNICEF's Approach to Scaling up Nutrition. New York City, UNICEF Nutrition Section, 2015, http://www.unicef.org/nutrition/files/Unicef_Nutrition_Strategy.pdf

UNICEF, Management of Severe Acute Malnutrition in Children: Working to Results at Scale, New York City, UNICEF Nutrition Section, 2015, http://www.unicef.org/eapro/UNICEF_programme_guidance_on_management_of_SAM_2015.pdf

UNICEF, Strategic Approach to Nutrition Programming in the East Asia and Pacific Region 2014-2025 Vol.1-3, http://www.unicef.org/eapro/12205_22043.html

UNICEF, Programming Guide: Infant and Young Child Feeding, New York City, UNICEF Nutrition Section, 2011, http://www.unicef.org/nutrition/files/Final_YCF_programming_guide_2011.pdf

UNICEF, Nutrition: The Case for Support. New York City, UNICEF Nutrition Section, 2015, <<http://www.unicef.org/publicpartnerships/files/NutritionTheCaseForSupport.pdf>>

USAID, Integrating Water, Sanitation, and Hygiene into Infant and Child Nutrition Programmes: A Training and Resource Pack for Uganda. Washington, D.C., USAID WASHplus project, FHI 360, 2014, <<http://www.washplus.org/sites/default/files/uganda-washnutrition.pdf>>

WHO, Guiding Principles for Complementary Feeding of the Breastfed Child, 2003, <http://www.who.int/maternal_child_adolescent/documents/a85622/en/>

7.2 Glossary

Acute malnutrition – Also known as ‘wasting’, acute malnutrition is characterized by a rapid deterioration in nutritional status over a short period of time. In children, it can be measured using the weight-for-height nutritional index or mid-upper arm circumference. There are different levels of severity of acute malnutrition: MAM and SAM.

Breastfeeding – Optimal – The recommended ‘optimal breastfeeding practices’ are initiation of breastfeeding within the first hour after the baby’s birth, exclusive breastfeeding for the first six months and continued breastfeeding up to two years or beyond.

Chronic malnutrition – Chronic malnutrition, also known as ‘stunting’, is a form of growth failure, which develops over a long period of time. Inadequate nutrition over long periods of time (including poor maternal nutrition and poor IYCF practices) and/or repeated infections can lead to stunting. In children, it can be measured using the height-for-age nutritional index.

Complementary feeding –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.

Exclusive breastfeeding – An infant receives only breast milk and no other liquids or solids, not even water, with the exception of oral rehydration salts (ORS) or drops or syrups consisting of vitamins, mineral supplements or medicines. UNICEF recommends exclusive breastfeeding for infants aged 0–6 months.

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). IYCF programmes focus on the protection, promotion and support of exclusive breastfeeding for the first six months, on timely introduction of complementary feeding and on continued breastfeeding for two years or beyond. Issues of policy and legislation around the regulation of the marketing of infant formula and other breast milk substitutes are also addressed by these programmes.

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 (overnutrition).

Micronutrients – Essential vitamins and minerals required by the body in miniscule amounts throughout the life cycle.

Nutrition specific interventions and programmes – Interventions or programmes that address the immediate determinants of foetal and child nutrition and development – adequate food and nutrient intake, feeding, caregiving and parenting practices, and low burden of infectious diseases. Examples: adolescent, preconception, and maternal health and nutrition; maternal dietary or micronutrient supplementation; promotion of optimum breastfeeding; complementary feeding and responsive feeding practices and stimulation; dietary supplementation; diversification and micronutrient supplementation or fortification for children; treatment of severe acute malnutrition; disease prevention and management, nutrition in emergencies.

Nutrition sensitive interventions and programmes – Interventions and programmes that address the underlying determinants of foetal and child nutrition and development – food security; adequate caregiving resources at the maternal, household and community levels; and access to health services and a safe and hygienic environment – and incorporate specific nutritional goals and actions. Nutrition sensitive programmes can serve as delivery platforms for nutrition specific interventions, potentially increasing their scale, coverage, and effectiveness. Examples: agriculture and food security; social safety nets; early child development; maternal mental health; women’s empowerment; child protection; schooling; WASH; health and family planning services.

Severe acute malnutrition – A result of recent (short-term) deficiency of protein, energy, and minerals and vitamins leading to loss of body fats and muscle tissues. Acute malnutrition presents with wasting (low weight-for-height) and/or the presence of oedema (i.e., retention of water in body tissues). Defined for children aged 6–60 months, as a weight-for-height below – three standard deviations from the median weight-for-height for the standard reference population or a mid-upper arm circumference of less than 115 mm or the presence of nutritional oedema.

Stunting –Technically defined as below minus two standard deviations from median height-for-age of a reference population. See Chronic malnutrition.

Undernutrition – An insufficient intake and/or inadequate absorption of energy, protein or micronutrients that in turn leads to nutritional deficiency.



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