



REPUBLIC OF YEMEN

YEMEN MULTISECTORAL NUTRITION ACTION PLAN

2020–2023



March 2020



Acknowledgements

The development of the Yemen Multisectoral Nutrition Action Plan (MSNAP) and its associated updated common results framework (CRF), monitoring and evaluation (M&E) plan and advocacy strategy was led by the government of the Republic of Yemen. The work builds upon a nutrition situation analysis, a CRF and a costing exercise conducted in 2018. The process was led by the Scaling Up Nutrition (SUN) Yemen Secretariat under the Ministry of Planning and International Cooperation (MOPIC).

We are sincerely indebted to the entire SUN Movement Secretariat, its team and the Sectoral Focal Points for continually working to develop the MSNAP to improve the food and nutrition situation of the people of the Republic of Yemen, in particular mothers and children. We are especially grateful to the SUN Movement Secretariat and the SUN National Steering Committee for the tireless efforts in ensuring contributions and ownership across multiple sectors and stakeholders.

Special gratitude goes to Dr Nazar Basuhaib, MOPIC's Vice Minister, and the SUN Coordinator for providing general oversight and facilitating the entire process. We are greatly indebted to Abdulkarim Nasser, Head of the SUN Yemen Secretariat, Karima Al-Hada'a, Planning and Liaison Specialist, and Ahlam Al-Bashiri, M&E Specialist, for their professional guidance and enormous dedication towards driving the development of this MSNAP and its associated documents. Our gratitude is also owed to Ali Alhadheri and Dr Ali Mudhwahi, national consultants, for their tireless efforts, including their work on preparations, consolidation and finalisation of sectors and partners input, being a crucial link across various tasks.

Our special thanks to all the ministries and their Focal Points that came together to work on this plan—particularly, the Ministry of Agriculture and Irrigation, Ministry of Public Health and Populations, Ministry of Education, Ministry of Fish Wealth and the Ministry of Water and Environment.

Our special appreciation goes to the United Nations Children's Fund (UNICEF) for providing the technical assistance and funding the entire range of national activities. Our gratitude is owed to Mr. Nagib Abdulbaqi, nutrition specialist at UNICEF, and the consecutive international staff in the Nutrition Section, as well as Dr Karanveer Singh and Vivienne Forsythe, for their efforts.

Our special appreciation goes to the Maximising the Quality of Scaling Up Nutrition Plus (MQSUN⁺) project, funded by the UK Department for International Development, for supporting the development of this plan, as well as the SUN Movement Secretariat for mobilising the technical assistance. We would like to particularly acknowledge the MQSUN⁺ consulting team, whose expertise and hard work were instrumental in the preparation of the MSNAP and the associated CRF, M&E plan and advocacy plan.

We would like to acknowledge the United Nations agencies involved—UNICEF, the World Food Programme, the World Health Organization and the Food and Agriculture Organization, plus their developmental as well as humanitarian focal points—for their technical contributions and assistance in providing local expertise. Our gratitude also to all other development partners, including the World Bank and the UK Department for International Development, for funding important contributions, as well as partners of the civil society organisations and the business sector for providing their input and feedback at various stages of the work. *Cover photos (left to right): World Food Programme; Food and Agriculture Organization of the UN; UNICEF.*

Contents

Acknowledgements	ii
Contents	iii
Abbreviations	vii
Executive Summary	viii
Contextual analysis	viii
Background.....	viii
Nutrition situation	viii
Services	viii
Food security	viii
Food production.....	ix
Poverty	ix
Gender.....	ix
Policy frameworks.....	ix
The Multisectoral Nutrition Action Plan (MSNAP)	ix
Process.....	ix
Partners	x
MSNAP strategic framework	x
Institutional arrangement	xi
National	xi
Subnational.....	xi
Monitoring, Evaluation, Accountability and Learning	xi
Capacity development.....	xii
Advocacy	xii
Costs	xii
THE NUTRITION SITUATION IN YEMEN	1
Introduction	2
Background	2
The Multisectoral Nutrition Action Plan (MSNAP)	2
Accompanying strategies and plans	3
Process of developing the MSNAP	3
Phase 1	3
Phase 2	4

Alignment with global frameworks and best practice for nutrition	4
Contextual Analysis	7
Nutritional status and mortality	7
Child malnutrition	7
Low birth weight	8
Maternal malnutrition	8
Micronutrient situation	8
Child and maternal mortality	9
Immediate causes	9
Food consumption	9
IYCF practices	10
Infectious diseases and health services	11
Reproductive health	11
Underlying and basic causes	12
Food availability and access	12
Agriculture and food production	13
Healthy environment and health services	14
Humanitarian situation and needs	16
Governance and Policy Context	16
Governance structures and alignment	16
Policy context	17
Nutrition-specific strategies and programmes	19
Yemen National Strategy for Social and Behaviour Change in Nutrition 2018–2021	19
Yemen Nutrition Cluster Advocacy Strategy	20
Nutrition-sensitive strategies and programmes	20
Health	20
Food security	21
WASH	22
Education	23
Social safety nets	23
National Strategy for Women Development	24
Partners' frameworks	24
UN Strategic Framework for Yemen	24
Humanitarian Support Cluster and Call to Action	24

THE MSNAP FRAMEWORKS	26
The MSNAP Strategic Framework	27
Guiding principles and approach	27
Enhancing coordination and cooperation amongst stakeholders.....	27
Ensuring services converge on the neediest and most vulnerable	27
Bridging the divide across humanitarian and nonhumanitarian programming.....	27
Ensuring accountability for the measurement and achievement of results	28
Mobilising communities for improving nutrition outcomes.....	28
Considering and addressing differing gender needs and inequalities.....	28
Results Framework.....	29
Overview	29
Priority Area 1: Increase access to and utilisation of essential maternal and child health and nutrition services	31
Goal 1. Improved IYCF practices	31
Goal 2. Scaled-up quality and coverage of nutrition-specific services	32
Goal 3. Scaled-up quality and quantity of available nutrition-related health services	33
Priority Area 2: Increase coordinated nutrition-sensitive action across relevant sectors.....	34
Goal 4. Increased agricultural productivity, incomes and quantity/quality of food consumed	35
Goal 5. Increased fish catch, processing, preservation and consumption.....	37
Goal 6. Improved access to safe and adequate water and sanitation services, clean environments and improved hygiene practices	38
Goal 7. Increased support of good nutrition and health of pupils and their families through school-based interventions	39
Priority Area 3: Strengthen government leadership, national policies and capacities	40
Goal 8. Strengthened enabling policy and legislative environment for nutrition	40
Goal 9. Strengthened enabling institutional architecture and mechanisms for nutrition	41
IMPLEMENTING THE FRAMEWORKS	43
Institutional Arrangements	44
Coordination structure	44
NSC composition.....	44
Leveraging of existing mechanisms and institutional arrangements.....	46
Key roles and responsibilities	48
Monitoring, Evaluation, Accountability and Learning	49
General approach to MEAL	50

MEAL ‘architecture’	50
Use of evidence to foster accountability and facilitate learning	52
Capacity Development	53
Capacity needs.....	53
Future capacity development.....	54
Illustrative capacity-building priorities at the national level.....	55
Illustrative capacity-building priorities at the governorate level	55
Illustrative capacity-building priorities at the frontline/community level	56
Advocacy Strategy and Action Plan	56
Financial Overview (Costing)	57
Process of the costing exercise	57
Methodology of the costing	58
Results of the costing exercise	59
LOOKING FORWARD	61
Way Forward and Inception Phase	62
Engaging partners	62
Rolling out the MSNAP and CRF	62
Promoting social and behaviour change communication	62
Developing a financing plan.....	62
Elaborating on a nutrition budget advocacy plan	63
Establishing the M&E system	63
References	64

Abbreviations

ANC	antenatal care
BMI	Body Mass Index
CMAM	community-based management of acute malnutrition
CRF	common results framework
CSO	civil society organisation
DHS	Demographic and Health Survey
ECRP	Emergency Crisis Response Project
EHNP	Emergency Health and Nutrition Project
EU	European Union
FAO	Food and Agriculture Organization [of the United Nations]
GOY	Government of Yemen
HDI	Human Development Index
IYCF	infant and young child feeding
LBW	low birth weight
M&E	monitoring and evaluation
MAD	Minimum Acceptable Diet
MAM	moderate acute malnutrition
MDD	Minimum Dietary Diversity
MEAL	Monitoring, Evaluation, Accountability and Learning
MOAI	Ministry of Agriculture and Irrigation
MOE	Ministry of Education
MOF	Ministry of Finance
MOFW	Ministry of Fish Wealth
MOPHP	Ministry of Public Health and Population
MOPIC	Ministry of Planning and International Cooperation
MOSAL	Ministry of Social Affairs and Labour
MOTI	Ministry of Trade and Industry
MOWE	Ministry of Water and Environment
MQSUN⁺	Maximising the Quality of Scaling Up Nutrition Plus
MSNAP	Multisectoral Nutrition Action Plan
NGO	nongovernmental organisation
NSC	National Steering Committee
LW	pregnant and lactating women
SAM	severe acute malnutrition
SMART	Standardized Monitoring and Assessment of Relief and Transitions
SUN	Scaling Up Nutrition
SWF	Social Welfare Fund
TOC	Theory of Change
UN	United Nations
UNICEF	United Nations Children's Fund
USAID	US Agency for International Development
WASH	water, sanitation and hygiene
WB	World Bank
WFP	World Food Programme
WHO	World Health Organization
YHRP	Yemen Humanitarian Response Plan
YNHDS	Yemen National Health and Demographic Survey

Executive Summary

Contextual analysis

Background

Yemen has experienced major political changes and civil unrest that first began in 2011. Since 2015, this has escalated into a widespread civil conflict accompanied by increasingly severe economic instability and unemployment, contributing to the rise in food and nutrition insecurity. An estimated 17 million people depended on humanitarian assistance in 2019—thus, Yemen presently constitutes the largest humanitarian crisis globally.

Nutrition situation

In 2013 almost half of the children were chronically malnourished (46.5 percent), and national rates for acute malnutrition (16.3 percent) exceeded the World Health Organization's (WHO's) emergency threshold; and in 2019, 5 out of 22 governorates and almost one-third of all districts showed critical levels of acute malnutrition exceeding the WHO emergency threshold of 15 percent (OCHA, 2019). Causes of malnutrition are multidimensional. The most common direct causes of malnutrition are poor infant and young child feeding practices, inadequate food intake and high rates of infectious diseases, including respiratory and diarrhoeal infections. The recent cholera outbreak in Yemen was the largest ever recorded, and risks have remained high since then (Independent Expert Group of the Global Nutrition Report, 2018).

Services

Health services have seriously deteriorated since 2015, and in 2019 only about half of the health facilities were functional, and they were still facing difficulties in providing basic services. Depletion of government funding resulted in a discontinuation of many public services, including health and education. About two-thirds of the schools are affected by the crisis, education services have been interrupted, and net enrolment rates have declined in recent years.

Food security

Levels of food insecurity in Yemen remain high, with more than half (56 percent) of Yemen's population experiencing severe levels of food insecurity—classified as either a crisis, emergency or famine. Those most affected are households in rural and conflict-affected areas, displaced populations, small or female-headed households and families with illiterate heads of household (WFP, FAO, UNICEF, Food Security Cluster and GOY, 2017). Food insecurity is driven by high food prices, unemployment and disrupted livelihoods, which are exacerbated by the economic crisis.

Food production

Domestic agriculture, livestock and fish production has the potential to contribute to improvements, but Yemen's actual domestic production only covers around 25 to 30 percent of its actual food needs, and there is a high reliance on imports where, for example, 90 percent of the wheat consumed is imported.

Poverty

Poverty can be both a cause and a consequence of malnutrition, with poverty rates in Yemen increasing in recent years. In 2018 the country ranked 178th out of 188 countries in the global Human Development Index ranking.

Gender

Women's social and economic empowerment also has a strong impact on family and child welfare, and the low status of women and poor maternal reproductive health continues to impact malnutrition. In addition, early, frequent and closely spaced pregnancies affect maternal health, as well as pregnancy outcomes (maternal and early neonatal mortality, low birth weights) (Molitoris, Barclay and Kolk, 2019).

Policy frameworks

The Government of Yemen's Strategic Vision 2025—as well as a number of sectoral policies, strategies and plans covering food security, agriculture, fisheries, water and sanitation and health—all play a supportive role in addressing underlying causes of malnutrition. Yet they neither have nutritional objectives nor do they address nutrition through their designs. More recently, international partners have been playing an increasingly supportive role in preventing a further deterioration of the nutritional situation—in particular, through their humanitarian cluster mechanisms.

The Multisectoral Nutrition Action Plan (MSNAP)

Process

In 2012 the Government of Yemen joined the global Scaling Up Nutrition (SUN) Movement, and by that became committed to its principles and to an effort to systematic SUN actions. Since then it has taken significant steps to address the nutrition situation in Yemen. These steps have included forming the required governance structure, engaging with stakeholders, conducting contextual and situational analyses, mapping actions, developing a common results framework and conducting a costing exercise for the development of the here-presented MSNAP, plus the accompanying monitoring and evaluation (M&E) plan and advocacy strategy.

Partners

The process is being led by the SUN National Steering Committee (NSC), supported by the SUN Movement Secretariat and hosted at the Ministry of Planning and International Cooperation (MOPIC). Sectoral governmental partners comprise, but are not limited to, the Ministry of Public Health and Population, the Ministry of Agriculture and Irrigation, the Ministry of Fish Wealth, the Ministry of Education and the Ministry of Water and Environment. Main international partners supporting the efforts either through development or humanitarian, technical, programmatic or financial assistances are the United Nations Children's Fund, World Food Programme, Food and Agriculture Organization and WHO, as well as the US Agency for International Development, UK Department for International Development and World Bank.

MSNAP strategic framework

Overall objective

The MSNAP aims to reduce all forms of malnutrition, ensuring that all Yemeni children reach their full potential to live a healthy life that allows them to contribute to the socioeconomic development of their families, communities and country.

Approach and principles

Reduction of malnutrition will be achieved through a multisectoral approach, addressing immediate and underlying causes and bringing multiple sectors and actors together to closely collaborate to enhance synergies and complementarities. Close alignments between developmental programming and humanitarian responses will allow for more efficient use of resources whilst at the same time address immediate needs and provide longer-term programmatic support. A focus on the nutritionally most vulnerable and food insecure populations will be the main criteria for targeting and prioritisation. Empowering and mobilising communities for an uptake of services, as well as a gender-sensitive planning and implementation approach responding to the needs of women, men, girls and boys, is essential to achieve and sustain the intended results effectively.

Results framework

The overall impact of reducing all forms of malnutrition is the common and a joint responsibility of all concerned sectors and actors. Measuring of impact focuses predominantly on indicators of child and maternal malnutrition, including the reduction of chronic and acute malnutrition (stunting and wasting) and low birth weight, as well as the reduction of iron-deficiency anaemia, overweight and obesity amongst women, complemented by indicators measuring improvement in dietary diversity of women and children and access to critical nutrition services.

Aiming to address direct, underlying and basic causes of malnutrition, the MSNAP is structured around three main priority areas:

- i) Increase in access and utilisation of nutrition-specific services and interventions. This includes improving infant and young child feeding practices, preventative and curative nutrition, maternal and child health and nutrition interventions.
- ii) Increase in access to nutrition-sensitive activities. This comprises goals, objectives and activities, including in the areas of social protection; food production; processing and retail; fisheries; water, sanitation and hygiene; and education and school-based interventions.
- iii) Strengthening government leadership, national policies and capacities. Besides improving sectoral policies and capacities of sectors involved, this also includes strengthening multisectoral platforms, multisectoral coordination and collaboration across sectors and ensuring accountability of governmental and partner organisations, as well as developmental and humanitarian actors.

Each priority area comprises goals, objectives and a corresponding set of activities organised by sectoral responsibilities. Indicators and targets are defined and established at each level of the framework. This allows for measurement of progress and target achievements in a timely manner. This also provides the basis for the establishment of a solid approach to M&E to hold actors and partners accountable for their commitments and to open up opportunities to learn from the process and improve implementation gradually.

Institutional arrangement

National

The SUN NSC in Yemen, which is organised under MOPIC and supported by the SUN Movement Secretariat, provides oversight and coordinates nutrition matters in general and anything relating to the MSNAP in particular. It comprises representatives of relevant government entities, academia and the private sector, as well as representatives of the different *national SUN networks*. To strengthen linkages between developmental and humanitarian responses, the emergency clusters will be represented at the NSC as well, whilst the government's line ministries will continue to cochair the humanitarian clusters where appropriate. Specialised technical working groups will support the function of the NSC.

Subnational

Existing structures at the governorate level will be leveraged to serve as the foundation to improve the multisectoral as well as the multi-stakeholder coordination for nutrition. Line ministries directly involved in service implementation will have designated units/departments to coordinate nutrition-related activities across different levels (e.g. central, governorate).

Monitoring, Evaluation, Accountability and Learning

A streamlined, user-friendly approach to monitoring, evaluation, accountability and learning, closely aligned to the CRF, supports synthesising, use and sharing of information arising from implementation or as evidence from evaluations; and research creates transparency and accountability for results. An accompanying document to the MSNAP, the Nutrition M&E plan, outlines specific details and operational issues to monitor progress and target achievements, as

set in accordance to the CRF. The M&E plan outlines a research and evaluation agenda that identifies priority data gaps that can be filled through sound research and/or evaluations. The MOPIC's online tool for monitoring food security and nutrition, called MAP Yemen, which provides a possible foundation upon which to establish the MSNAP's M&E data management system.

Capacity development

The humanitarian crisis has tested the limits of individual, community, institutional and system capacities in Yemen. To address the emerging gaps, substantial capacity-development support is thus required to strengthen institutions at the central, governorate and community levels to effectively address the needs of the population, build resilience and respond to shocks. Opportunities exist and should be better explored to leverage also short-term humanitarian support to strengthen capacities for long-term services. The main section titled 'Capacity Development' provides more details.

Advocacy

An accompanying Advocacy Strategy and Action Plan support the implementation of the MSNAP. It aims to inform, raise awareness and sensitise politicians, policymakers and national, subnational and international partner organisations to prioritise nutrition, leverage government and international humanitarian and development support and invest in building capacities to scale up multisectoral interventions. The advocacy, further, aims to empower citizens to demand services and hold service providers accountable to their commitments.

Costs

The financial overview presents the costs to achieve the set targets. Results are presented as total costs, costs by priority area and costs by goals (total cost is almost US\$1.9 billion, nutrition-specific almost \$676 million; nutrition-sensitive \$1.2 billion; governance \$1.636 million). Results are derived from a detailed costing of the activities, using unit costs and target coverage. Costs by activities are available in the CRF matrix.



THE NUTRITION SITUATION IN YEMEN

Introduction

Background

Healthy nutrition is essential to allow for a prosperous human (i.e. social and economic development). Malnutrition—especially from conception to two years of age, the so-called ‘first 1,000 days’—can lead to life-long and irreversible damage to the individual, community and nation.

In Yemen, even previous to the current crisis, the nutrition situation was already very concerning, meeting the criteria of a country experiencing a nutritional emergency. The impacts of malnutrition on current and future generations of the Yemeni population are stark. The deterioration in conditions has, in turn, led to deterioration of the nutritional situation, with its underlying and basic causes of malnutrition—namely, increased levels of poverty and food insecurity and decreased access to healthcare—increasingly problematic for the most vulnerable. The escalation of the conflict in Yemen since 2015 has exacerbated an already critical nutrition emergency. The Yemen Humanitarian Needs Overview estimates that some 24.1 million people (i.e. approximately 80 percent of the population) were in need of humanitarian assistance in December 2018, 14.3 million of whom were in acute need. This constitutes the largest humanitarian crisis globally, as measured by the number of people in need (OCHA, 2019).

The Government of Yemen (GOY), committed to the principles of scaling up a multisectoral approach to reduce all forms of malnutrition, had joined the Scaling Up Nutrition (SUN) Movement already in 2012, established the governance structure and took solid steps in addressing the dire emergency. Alerted to the worsening situation’s being due to the escalation of the crisis and the changing institutional context, the GOY committed to accelerating efforts in addressing the rising needs through applying concerted multisector and multi-stakeholder actions that encompass the developmental and humanitarian actors and embarking on a new phase to maintain and regain its human capital and, thus, the capacities of the nation.

In this regard, the GOY, with supportive technical assistance by Maximising the Quality of Scaling Up Nutrition Plus (MQSUN⁺), brought multisectoral government and nongovernment, humanitarian and developmental actors together to update and accelerate the scale-up of nutrition actions. The process of analysing the context, mapping the existing efforts, assessing needs and agreeing on actions formed the basis to the development of the common results framework (CRF), complementing the here-presented Multisectoral Nutrition Action Plan (MSNAP).

The Multisectoral Nutrition Action Plan (MSNAP)

The MSNAP outlines the GOY’s plans to reduce malnutrition through a multisector and multi-stakeholder approach over the next three years. Its development has been informed by the GOY’s CRF for improving nutrition outcomes.

The MSNAP outlines the underlying logic and justification for the goals, objectives, activities and related indicators contained in the CRF. Furthermore, it outlines the wider set of principles underlying their development and planned implementation. Additional chapters outline planned

institutional arrangements and capacity development, as well as chapters summarising two key accompanying documents: the Nutrition Monitoring and Evaluation (M&E) Plan and the Advocacy Strategy and Action Plan.

Accompanying strategies and plans

The M&E plan complements the MSNAP, presenting the approach of tracking, measuring, monitoring and evaluating the progress and achievements of targets as presented at the CRF. The M&E plan presents specific and operational issues, reporting templates, data flow and mechanisms of the M&E, including reporting as a basis. The plan also identified priorities and data gaps and presents a solid evaluation and research agenda that can help to address data gaps. Measuring accountabilities and fostering learning are part of the objectives of the defined M&E plan, and they provide the basis for the wider concept of Monitoring, Evaluation, Accountability and Learning (MEAL).

The Advocacy Strategy and Action Plan formulates objectives and actions to inform, raise awareness and sensitise politicians, policymakers and national and international partner organisations to prioritise nutrition and to leverage government and international humanitarian and development support and resources for a scale-up of multisectoral interventions. The Advocacy Strategy and Action Plan is closely aligned with existing advocacy strategies—in particular, the Yemen Nutrition Cluster Advocacy Strategy 2018–2020 (Yemen Nutrition Cluster, 2018) and the Yemen Call to Action (Global Nutrition Cluster, WFP, WHO, UNICEF, 2018).

Across all documents (i.e. the MSNAP, CRF, M&E plan and Advocacy Strategy and Action Plan) a number of crosscutting issues are addressed throughout: (I) the differing nutritional requirements and socioeconomic positions across genders, age groups, but also the situation among displaced and conflict-affected populations and (II) the differing roles, capacities and institutional mandates of government institutions and both national and international partner organisations in working through humanitarian and developmental approaches to improve nutrition outcomes in Yemen.

Process of developing the MSNAP

Soon after the GOY joined the SUN Movement in 2012, a national SUN Secretariat was established in the Ministry of Planning and International Cooperation (MOPIIC), and a SUN National Steering Committee (NSC) was formed to advance the SUN agenda in the country. The NSC brings together representatives from relevant ministries, mainly the Ministry of Public Health and Population (MOPHP), Ministry of Agriculture and Irrigation (MOAI), Ministry of Fish Wealth (MOFW), Ministry of Education (MOE) and the Ministry of Water and Environment (MOWE), as well as representatives from the SUN Civil Society Organisation (CSO) and Business Networks.

Phase 1

In late 2013, the GOY began preparing a national framework for coordinating planning around nutrition-related activities across sectors. Steps included additional analytical work on the nutrition situation in the country and the preparation of a nutrition causal and trend analysis, as well as the drafting of a set of key priority interventions expected to be most impactful in improving nutrition

outcomes. With the onset of the current crisis in 2015 and a worsening nutrition situation in the country, the analysis and priority interventions were updated to further inform the government's and partners' actions.

In April 2017, a further analysis and a stocktake of planning across ministries was undertaken to update key interventions and to conduct a preliminary assessment to determine the required funding needs for implementation of the planned actions. By 2019, due to reduced government resources and changes in capacity and governance structures, it was noted that international partners were playing an increasingly significant role in efforts to improve nutrition in the country, in particular through the humanitarian response. Hence, there was a need to also reflect this development in the emerging national nutrition plans.

Phase 2

Subsequently, it was decided by the GOY that the ongoing crisis, including the worsened nutrition situation and changing institutional context, called for a fully developed results framework and action plan for the GOY and partner organisations to improve nutrition outcomes through a multisector and multi-stakeholder approach linking developmental and humanitarian efforts. In 2019, under the leadership of the GOY's MOPIC and SUN Secretariat and with support of MQSUN+ the process of updating the CRF and developing the MSNAP and the accompanying documents started. A partners and programme mapping was the first step to gather programmatic details to revise the CRF, update the costing and prepare the MSNAP presented here.

Workshops and both multisectoral and bilateral round table meetings were held to compile partner input and discuss priorities and details for the revision of the CRF. In addition to the consultations, planning and programme documents from relevant sectors and actors were compiled, reviewed and mapped. The list of actors included selected sectoral ministries (namely, the MOPHP, MOAI, MOFW, MOE and MOWE); United Nations (UN) organisations, such as United Nations Children's Fund (UNICEF), World Food Programme (WFP), World Health Organization (WHO) and Food and Agriculture Organization (FAO); and humanitarian clusters and their representatives from international partner organisations and the GOY (namely, the Nutrition; Health; Water, Sanitation and Hygiene [WASH]; Food Security and Agriculture; and Education Clusters).

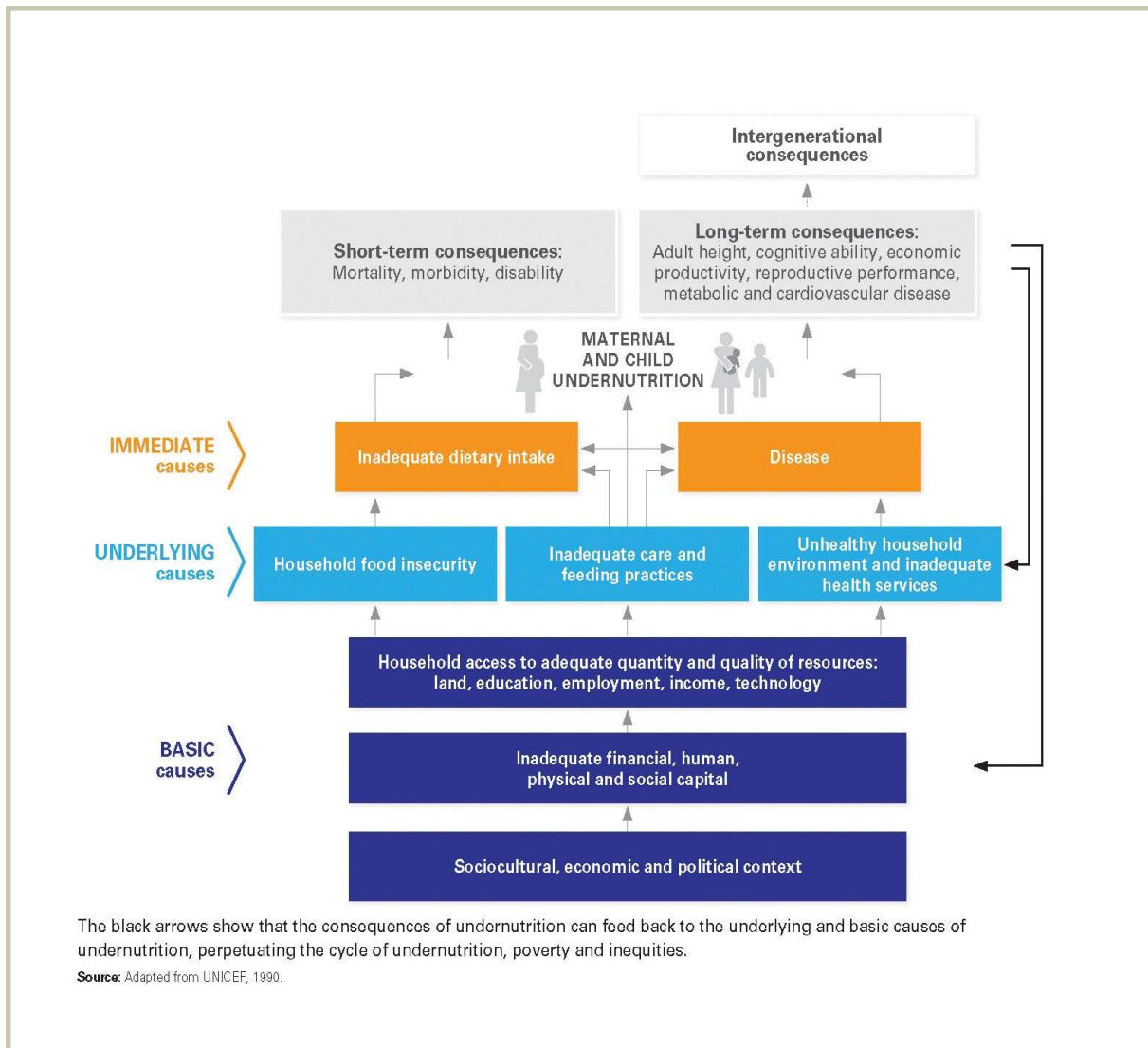
Alignment with global frameworks and best practice for nutrition

The logic which underlies the MSNAP aligns with the UNICEF conceptual framework on the determinants of child undernutrition (Figure 1) and UNICEF's approach to scaling up nutrition (UNICEF, 2015), encompassing actions to address undernutrition in children, adolescents and pregnant and lactating women (PLW). The conceptual framework identifies immediate, underlying and basic causes of malnutrition. As outlined in UNICEF'S approach to scaling up nutrition (UNICEF, 2015), the immediate causes of malnutrition are most clearly addressed through nutrition-specific interventions, whilst nutrition-sensitive approaches across a broader set of sectors can address underlying and basic causes through more general development interventions.

The primary purpose of the MSNAP is to increase and maximise the impact of government's and stakeholders' joint efforts to reduce undernutrition amongst the most vulnerable populations in

Yemen (i.e. children under 5 years of age, with special emphasis on the first 1,000 days of life, PLWs and adolescent girls). However, it is envisioned that implementation of the MSNAP will also have beneficial impacts in reducing overweight and obesity and improving nutrition amongst the wider population, primarily through improving dietary intake and infant and young child feeding (IYCF) practices.

Figure 1. UNICEF conceptual framework of determinants of child undernutrition.



Source: UNICEF: https://www.unicef.org/nutrition/files/Unicef_Nutrition_Strategy.pdf.

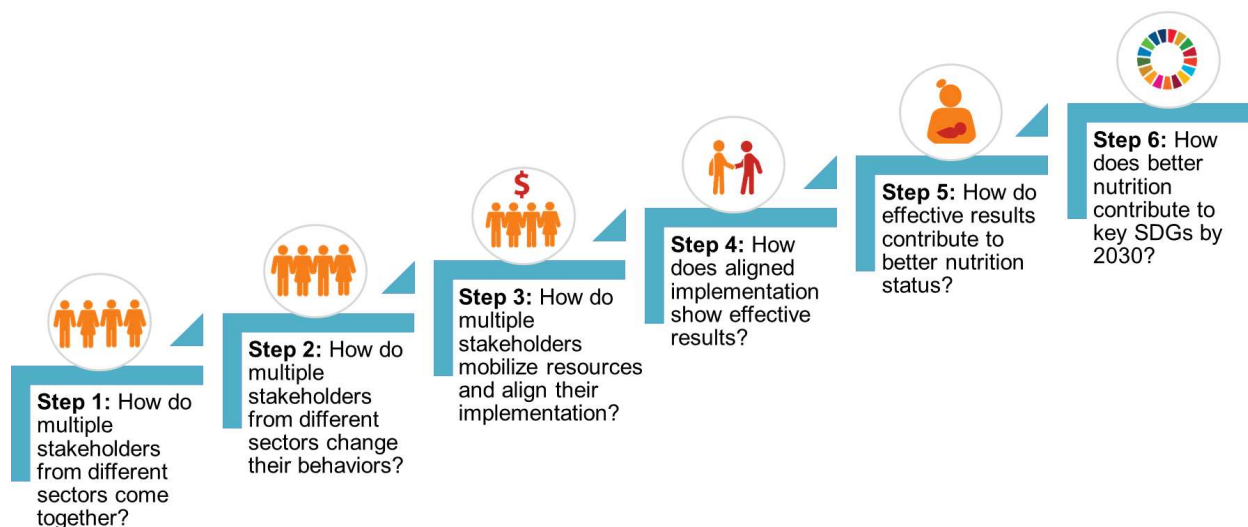
Nutrition-specific interventions, focusing on immediate causes of malnutrition, can significantly reduce wasting, stunting and micronutrient deficiencies (Bhutta et al, 2013). These interventions tend to focus on the immediate causes of malnutrition (i.e. inadequate dietary intake and disease) and tend to be targeted towards disadvantaged and vulnerable populations, in particular children under 2 years of age and PLW.

Nutrition-sensitive approaches address the underlying and, to some extent, basic causes of undernutrition and can also facilitate and strengthen the delivery of nutrition-specific interventions. Examples of nutrition-sensitive approaches should explicitly include an ‘impact pathway’ to improved nutrition, target nutrition-vulnerable populations, measure impacts on nutrition or integrate nutrition messaging (UNICEF, 2015).

The objectives, goals, principles and approaches underlying the MSNAP are informed by global ‘best practices’ in multisectoral nutrition programming, as evidenced in global guidance documents such as the SUN Checklist on criteria and characteristics of ‘good’ national nutrition plans (Scaling Up Nutrition, 2018) the WHO Nutrition Landscape Information System country profile indicators, WHO’s *Reducing Stunting in Children: Equity Considerations for Achieving the Global Nutrition Targets 2025* (WHO, 2018) and the *Lancet* series on Maternal and Child Undernutrition (Bhutta, Hurrell and Rosenberg, 2012) as well as other relevant scientific literature, guidelines and recommendations. Hence, the MSNAP builds upon global evidence and best practices addressing the needs and priorities arising from the contextual analysis using Yemen’s most recent survey and routine programme data.

The institutional arrangements and overall framework for action adopted in the formulation of the MSNAP were guided by the global SUN Movement Theory of Change (TOC), or TOC (Figure 2). The TOC presents a logical flow, showing how bringing actors together—including government, civil society and the private sector—shifting behaviours, aligning their efforts, ensuring complementarity and measuring impact can together maximise impact on nutrition outcomes and mobilise resources that, together, lead to increased impact on nutrition outcomes and, in turn, contribute to achieving the Sustainable Development Goals more broadly.

Figure 2. Scaling Up Nutrition Movement Theory of Change.



Source: Scaling up Nutrition. Theory of Change_new. Available at: https://scalingupnutrition.org/progress-impact/monitoring-evaluation-accountability-and-learning-meal/theory-of-change_new/ -

Contextual Analysis

The following contextual analysis explores indicators of nutrition status and determinants of undernutrition in Yemen. The analysis is structured in accordance with the UNICEF conceptual framework of the determinants of undernutrition (UNICEF, 2015), analysing the nutritional situation of children and women and immediate, underlying and basic causes of undernutrition. The chapter uses information available from previous situation and contextual analyses, in addition to most recent survey results and programme information.

Nutritional status and mortality

Child malnutrition

Previous to the current crisis in Yemen, the nutrition situation in-country was already very concerning. In 2013 the Yemen National Health and Demographic Survey (YNHDS) found that 16.3 percent of children under 5 years of age in Yemen were wasted (which refers to acute malnutrition in children, or those too thin for their height), and 5.2 percent were severely wasted (i.e. had severe acute malnutrition [SAM]). Thus, even in 2013 Yemen met the criteria of a country experiencing a critical nutrition emergency. Boys showed higher wasting rates than girls (17.8 percent and 14.4 percent, respectively), and children from rural areas showed higher rates than their peers from urban areas (GOY MOPHP and CSO and PAPFAM, 2013).

Due to the current crisis, more recent representative data on nutrition indicators are limited. However, some 37 publicly available Standardized Monitoring and Assessment of Relief and Transitions (SMART) surveys, referred throughout this analysis, have been conducted across various locations between March 2015 and September 2019 that variously provide information on prevalence of wasting, stunting, crude mortality rates and determinants of undernutrition such as IYCF practices, food consumption and security and access to improved sources of water, as well as sanitation and hygiene practices. The Yemen Humanitarian Response Plan (YHRP) for 2019 reported that 5 out of 22 governorates and almost 30 percent of all districts showed critical levels of acute malnutrition exceeding the WHO emergency threshold of 15 percent (OCHA, 2019).

Stunting (which refers to chronic malnutrition in children, or those too short for their age) is also endemic in the country. In 2013 almost half (46.5 percent) of all children under 5 years of age in Yemen were stunted. Though rates were extremely high amongst the youngest age group (19.2 percent for children under 6 months of age), they increased substantially with age (57.8 percent amongst children 36 to 47 months of age) (GOY MOPHP and CSO and PAPFAM, 2013). Similar rates of stunting were confirmed by the Comprehensive Food Security Survey conducted in 2012 (WFP, 2012), and more recent SMART surveys have shown little improvement. An analysis of causality is not available, but the high rates are associated with high levels of low birth weight (LBW), as well as with being a consequence of inadequate breastfeeding practices at early ages, inadequate complementary feeding practices and inappropriate child health and care practices at the later ages (MQSUN⁺, 2018).

Further, there was a notably large difference in the rate of stunting between urban and rural areas (33.7 percent and 51.4 percent, respectively) (Independent Expert Group of the Global Nutrition Report, 2018). In 2016, stunting rates were found to be higher than 50 percent in 12 out of the 18

governorates, with stunting rates exceeding 60 percent in 4 governorates (WFP, FAO, UNICEF, Food Security Cluster and GOY, 2017).

Low birth weight

Yemen has consistently been found to have very high rates of LBW, averaging 32 percent of births for the period from 2000 to 2008 according to World Health Organization (WHO) estimates (Yemen Nutrition Cluster, 2018). The rate reached an extremely high level of 45 percent in 2009; as such, one-third of Yemeni infants were born underweight. Reliable recent data are not available (Government of Yemen, 2014). However, there has been an increase in a number of risk factors, including maternal malnutrition, continued high numbers of teenage pregnancies and poor access to adequate pre- and postnatal care services in a number of governorates.

Maternal malnutrition

Studies of factors associated with stunting in Yemen (WFP and World Bank, 2019; Katona and Katona-Apte, 2008) have shown children whose biological mothers were 'thin' (i.e. Body Mass Index [BMI] below 18.5 kg/m²) were much more likely than other children to be stunted. However, a high burden of chronic undernutrition amongst children with overweight mothers also points to a substantial double burden of malnutrition within the same family.

The 2013 YNHDS found that maternal malnutrition remained a significant issue in Yemen. Only half of all women between 15 and 49 years of age had a BMI classified as normal (51 percent, with a BMI of 18.5 to 25.0), whilst overweight and obesity affected about one-quarter of all women (24 percent), with the highest rates in Aden and Al-Mahrah, showing rates of up to 40 percent. Rates were significantly higher in urban areas compared to rural areas (36 percent and 17 percent, respectively) (GOY MOPHP and CSO and PAPFAM, 2013).

One quarter of all women were classified as underweight (25 percent were too thin, with a BMI below 18.5); out of those, 14 percent were classified as mildly thin (17.0 to 18.5 BMI), and 11 percent were classified as moderately or severely thin (below 17.0 BMI). Rates were significantly higher for women in rural areas compared to their peers in urban areas (29 percent and 17 percent, respectively) (GOY MOPHP and CSO and PAPFAM, 2013). More recent SMART surveys conducted between 2015 and 2019 have found similarly high levels of undernutrition amongst women.

Micronutrient situation

Up-to-date data on the micronutrient status of the population in Yemen are sparse. The 2013 YNHDS found alarmingly high rates of anaemia amongst both children under 5 years of age (86 percent) and women of reproductive age (70 percent). Meanwhile, coverage of iron folate supplementation for pregnant women and age-appropriate vitamin A supplementation in children were both found to be very low (31 percent and 47 percent, respectively) (GOY MOPHP and CSO and PAPFAM, 2013). Amongst 37 surveys conducted in selected livelihood zones and governorates from 2015 to 2019, none found coverage of vitamin A supplementation that met the WHO standard recommendation of 95 percent coverage and, in fact, found coverage that was less than half this.

Whilst interpreting the above presented results, it should be noted that access to the most vulnerable is increasingly problematic; therefore, many surveys thus report being unable to reach some portion of the population due to conflict and insecurity, meaning true levels of malnutrition amongst women and children may be even higher.

Child and maternal mortality

Child malnutrition causes about 40 percent of childhood mortality globally (Independent Expert Group of the Global Nutrition Report, 2018). The United Nations Inter-agency Group for Child Mortality Estimation put the figures for child mortality per 1,000 live births in Yemen at 55.4, 43.2 and 27.0 for children under five years of age, infants and neonates, respectively, in mid-2017 (World Bank, 2016). However, it should be noted these figures are 'modelled' estimates, as data sparsity in Yemen makes producing reliable estimates challenging. Uncertainty intervals for under-5 mortality range from 38 to 79 deaths per 1,000 live births (World Bank, 2016). Child mortality was roughly twice as high amongst mothers with no education compared to children of mothers with higher education (GOY MOPHP and CSO and PAPFAM, 2013). As of November 2018, an estimated 85,000 child deaths from malnutrition and associated diseases had occurred since the conflict escalated (Dyer, 2018).

Maternal mortality is often closely associated with mother's nutritional status, in particular iron deficiency anaemia. The YNHDS in 2013 estimated 148 maternal deaths per 100,000 births (with a confidence interval of 105 to 190), less than half of the ratio measured in 2003 (GOY MOPHP and CSO and PAPFAM, 2013).

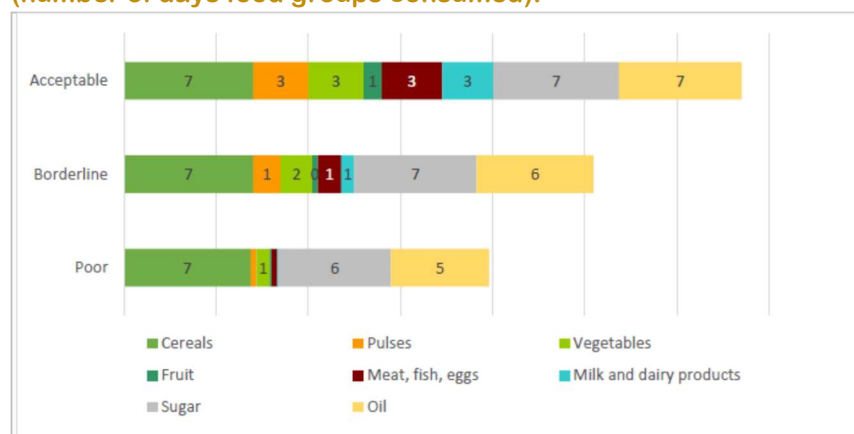
Immediate causes

Food consumption

Household food consumption

Inadequate food consumption, referring to an inadequate quality and quantity of the daily diet, is one of the key drivers/causes of child and maternal undernutrition. Hunger and inadequate food intake are widespread in Yemen. The percentage of households experiencing hunger, at least for one night over the month prior to the survey, increased dramatically from 13.5 percent in 2014 to 43.0 percent in 2016. Only 37 percent of the households consumed an acceptable diet in 2016. This indicates a steady decline in the quality of the diet from 2014, 2011 and 2009, when 59, 66 and 68 percent of households, respectively, were found to consume an acceptable diet (WFP, FAO, UNICEF, Food Security Cluster and GOY, 2017).

Figure 3. Dietary diversity by food consumption group (number of days food groups consumed).



Source: Emergency Food Security and Nutrition Assessment 2017 (p. 24).

A national survey conducted in 2016 found the food types consumed on a daily basis and most frequently in Yemen were staples such as rice, bread and pasta, as well as sugar and fats. Other food items that are highly recommended and important sources of essential vitamins, minerals and proteins—such as pulses, vegetables, fruits or animal-sourced foods—were

found to be eaten less frequently. Eggs were reported not to be part of the diet. Households of poorer or borderline consumption consumed bread, sugar and fats equally often but other nutritionally valuable items less frequently (see Figure 3 above). Approximately half of households did not meet their energy requirements, and almost two-thirds of the households (62 percent) reported reducing the number or meals and portion sizes as a consequence of the rising food shortage (WFP, FAO, UNICEF, Food Security Cluster and GOY, 2017).

Maternal food consumption

Data on food consumption in Yemen disaggregated by gender is sparse. The Minimum Acceptable Diet for Women was assessed by the WFP’s regular Vulnerability Analysis and Mapping exercise amongst a relatively small sample of 432 women in May 2019. Results showed that more than 90 percent of the women surveyed did not reach the minimum requirements of consuming at least five out of the ten food groups, and 75 percent consumed only three food groups, indicating serious shortcoming in the quality of women’s diets (WFP and World Bank, 2019).

IYCF practices

Two major national surveys (GOY MOPHP and CSO and PAPFAM, 2013) (MOPIC, UNICEF, International Policy Center for International Growth, Interaction in Development, 2014) conducted in 2013 found very weak IYCF practices in Yemen. The YNHDS found that only 10.3 percent of infants were exclusively breastfed for the first 6 months of life, and less than half (43 percent) of children of breastfeeding age (6 to 23 months) were breastfed the day prior to the survey. Only one-fifth of children between 6 and 24 months of age met the recommended Minimum Dietary Diversity, and introduction of complementary foods before 6 months of age is commonplace. Urban children (26.6 percent) were more than twice as likely as rural children (11.5 percent) to be fed according to IYCF guidelines. Gender differences were not large, although girls were more likely than boys to be fed in accordance with all three IYCF practices (16.9 percent and 14.0 percent, respectively) (GOY MOPHP and CSO and PAPFAM, 2013).

SMART surveys conducted more recently have found that rates of both exclusive breastfeeding of children up to 6 months of age and the percentage of children receiving the Minimum Dietary Diversity have remained very low.

Infectious diseases and health services

Malnutrition and infectious diseases are closely linked in a bidirectional cycle. Malnutrition increases the frequency, severity and fatality of common infections, whilst, at the same time, infections reduce appetite, nutrient intake, absorption and utilisation and impair metabolic processes. The most common infectious diseases which are closely related to malnutrition include not only diarrhoeal diseases and acute respiratory infections but also measles, malaria and HIV/AIDS, accounting for more than half of all child deaths around the world (Katona and Katona-Apte, 2008).

The YNHDS found a little over one-third of children under 5 years of age had diarrhoea in the two weeks prior to being surveyed, and over half showed symptoms of acute respiratory infection and unspecified fever in 2013 (GOY MOPHP and CSO and PPFAM, 2013). Substantially higher levels of all childhood morbidities measured (diarrhoea, acute respiratory infections, unspecified fever) have consistently been reported across SMART surveys conducted in Yemen from 2015 to 2019.

Cholera is an acute gastrointestinal infection and a waterborne disease characterised by vomiting and diarrhoea. Without adequate treatment, it can lead to severe dehydration and death. Contamination usually occurs through untreated sewage coming in contact with public places, waterways and groundwater reservoirs. People who are malnourished are more likely to develop cholera infection, and cholera is more likely to flourish in places where malnutrition is common (Rodriguez, Cervantes and Ortiz, 2011). Exclusive breastfeeding has been found to significantly reduce the risk of cholera in children across a range of settings (Colombara, Cowgill and Faruque, 2013).

The recent cholera outbreak in Yemen was the largest recorded since epidemiological records began, with immense consequences to human life and well-being. Rates of infection remain high. The cumulative total number of suspected cholera cases between January 2018 and 1 September 2019 only was almost a million (991,674), with a fatality rate of 0.14 percent, accounting for 1,350 deaths. One-quarter of those cases were children under 5 years of age. The outbreak is widespread, having affected 305 of 333 districts in Yemen by September 2019 (WHO, 2019).

Reproductive health

Whereas the current crisis has exacerbated the immediate and underlying causes of malnutrition, the low status of women and poor maternal reproductive health likely contribute greatly to the longer-term intergenerational cycles of malnutrition in Yemen. The total fertility rate of women in Yemen dropped from 7.7 children born per woman from 1990 to 1995 to 4.4 in 2013. Whilst this constitutes a significant cost reduction, the rate remains high and varies widely by socioeconomic group, and rates remain higher in rural compared to urban areas (5.1 and 4.4, respectively) (GOY MOPHP and CSO and PPFAM, 2013).

Child marriage has long been a common practice in Yemen. In 2013, about half of the women in Yemen were married by the age of 18 (GOY MOPHP and CSO and PAPFAM, 2013), and evidence suggests the current crisis may have led to an increase in child marriage in some areas, with serious implications for the health and well-being of both mothers and children. About one-third of the women use family planning methods, whilst one-third of the women report an unmet need for family planning (34 percent and 29 percent, respectively) (GOY MOPHP, Yemen Nutrition Cluster, WHO and UNICEF, 2018).

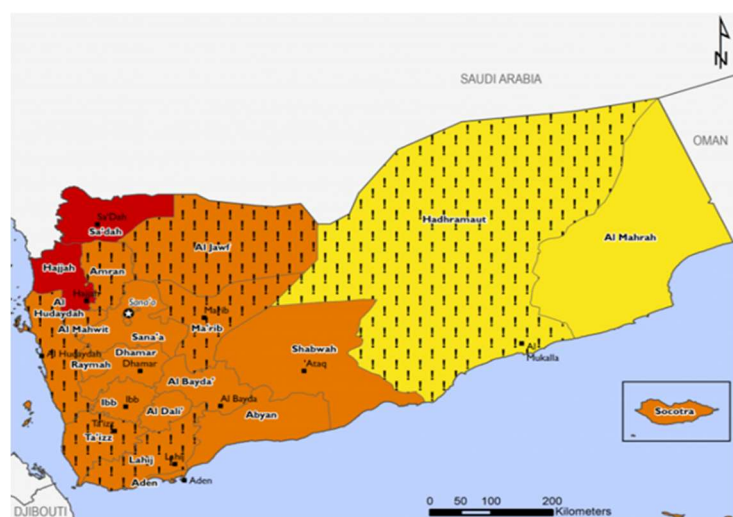
Antenatal care improved over the decades prior to conflict, from one-third (34 percent) of the women reached in 1997 to just under two-thirds (60 percent) reached in 2013 (GOY MOPHP and CSO and PAPFAM, 2013). Reproductive health services, including the promotion of improved birth spacing and quality pre- and postnatal care, had insufficient coverage before the current crisis and have deteriorated further in recent years (Morris, 2019)

Underlying and basic causes

Food availability and access

Situation and food sources

Figure 4. Food security outlook, Oct. 2019 – Jan. 2020.



- 1: Minimal
- 2: Stressed
- 3: Crisis
- 4: Emergency
- 5: Famine
- Not mapped

Source: Famine Early Warning System Network:
<https://fews.net/east-africa/yemen/food-security-outlook/october-2019>.

Levels of food insecurity in Yemen remain alarmingly high (see Figure 4). Those most affected by food insecurity in Yemen have been found to be households in rural and conflict-affected areas, displaced populations, small households, female-headed households and families with illiterate heads of household (OCHA, 2018). Food insecurity is driven by high food prices, unemployment and disrupted livelihoods, exacerbated by economic crisis.

The majority of food for household consumption in Yemen is either purchased from markets, using household income and cash-based payments or credits, or received through community or local support networks. Humanitarian food

assistance has also become increasingly important, reaching about one-third of the population in 2019, or approximately 6 to 7 million people, on a monthly basis. The Social Welfare Fund (SWF) supports approximately 9 million most vulnerable households with payments covering about one-third of the cost of a minimum food basket. About nine out of ten beneficiaries use those transfers to purchase basic foods. Since the rise of the crisis, transfers from remittances are reported to

have increased significantly. Recent policy and tax law changes in Saudi Arabia might impact Yemenis' options for sending remittances back home (FEWSNET, 2019a).

Food imports and prices

The high levels of dependence on food imports leave Yemen vulnerable to reduced international trade and global price spikes. The crisis has led to a severe restriction in imports as major land, airports and seaports have faced access issues. Currency fluctuations, fuel shortages and an increase in national prices provide an additional burden on the economy and increase households' expenses, hence jeopardising households' access to foods (FEWSNET, 2019b).

Agriculture and food production

Agriculture, as well as livestock and fish production, is an important contributor to national and household food security in Yemen. Agriculture impacts food security mainly through two pathways: (i) making foods available to the local population and (ii) providing an important source of income and livelihood opportunities.

Agriculture production

Though agriculture provides a relatively minor contribution to the country's Gross Domestic Product (17.5 percent), it is a major source of livelihood for many rural households, providing direct employment for over half (54 percent) of the workforce in 2014 (FAO, IFAD, UNICEF, WFP, 2017). Nearly two-thirds of Yemenis derive their livelihoods from agriculture-related activities. A disproportionate number of the poor in Yemen are engaged in agriculture as a livelihood. Due to very low productivity, only a small proportion of food consumed is produced domestically. In 2016, domestic production covered around 25 to 30 percent of needs, with 90 percent of the wheat consumed being imported (WFP, FAO, UNICEF, Food Security Cluster and GOY, 2017). The sector is also highly vulnerable to climate hazards due to an increasing overreliance on rapidly depleting groundwater reserves (FAO, 2019a). Estimates for cereal production in 2019 show 30 percent lower yields compared to the previous five-year average (FAO, 2019b).

Livestock production

Livestock production provides a significant contribution to households' food security situation, covering more than 60 percent of the country's needs in 2016, whilst the poultry sector covers nearly 100 percent of the country's egg consumption. Livestock also plays an important role as a source of income for the poor and most vulnerable. In 2016, 88 percent of households engaged in agriculture were involved in livestock production. Forty-five percent of households with livestock reported having reduced their herd sizes from pre-crisis years (OCHA, 2018).

Fish production

The fisheries sector is seen as important economically by the GOY due to its contribution to exports and provision of employment in coastal regions. The sector is suffering from dwindling stocks due to poor management and poor processing systems. Since the onset of the current crisis in 2015, the issues facing the sector have been compounded further by a widespread lack

of fuel and electricity; these have impacts across the entire supply chain, from declining catch to a reduced capacity for cold storage and the ability to reach export markets (FAO, 2018). Domestic fish consumption has seen a 50 percent decline due to the impacts of the current crisis on the sector and associated price increases. In addition, coastal communities reliant on fisheries have been especially affected by the crisis (OCHA, 2018).

Healthy environment and health services

Water and sanitation

Lack of access to safe drinking water and clean living environments is a key driver of infections and malnutrition. Previous to the current conflict, 41 percent of the population had no access to an improved source of drinking water. Since 2015, Yemen's water and sanitation infrastructure has been severely damaged (OCHA, 2018). In 2016 it was found that, amongst all governorates surveyed, less than half of (48.6 percent) of households used an improved source of drinking water (OCHA, 2018). SMART surveys conducted between 2015 and 2019 show that large sections of the population rely on unimproved drinking water and have an increasing reliance on water trucking, especially in urban areas (WFP, FAO, UNICEF, Food Security Cluster, Government of Yemen, 2017).

The 2013 YNHDS found that over half of the population (51.2 percent) used unimproved sanitation facilities (GOY MOPHP and CSO and PAPFAM, 2013). Findings from more recent SMART surveys conducted between 2015 and 2019 have shown similar or lower levels in the use of flush latrines.

Health services

Healthcare provision in Yemen underwent significant decentralisation at the turn of the millennium, with financial and decision powers devolved to governorates (Government of Yemen, 2010). Between 2000 and 2014, government health expenditure as a percentage of general government expenditure declined from 8.0 percent in 2000 to 4.2 percent in 2014, and out-of-pocket expenditure increased from 43 to 76 percent (World Bank, 2018). Health services have seriously deteriorated since the conflict began in 2015. As of 2019, over half of all health facilities in the country are no longer operational, whilst those still functioning are lacking access to basic medical supplies and trained health workers (IOM, 2019).

Immunisation is a vital way of protecting children from serious diseases and also providing a good indicator for the functionality, in particular coverage, of a health system. In Yemen, immunisation rates have been variable in recent years. Immunisation campaigns through the MOPHP and UNICEF have seen some success in increasing immunisation levels. However, according to the 2013 YNHDS, only 42.6 percent of children aged 12 to 23 months have received all basic vaccinations (GOY MOPHP, CSO, PAPFAM, 2013). WHO and UNICEF estimates of immunisation in 2018 show declines from 2013 in coverage of all major vaccines (WHO, UNICEF, 2018)

Education services

The GOY has placed a high priority on increasing primary education enrolment, especially girls' enrolment, in rural areas. Prior to 2015 Yemen was already struggling with low education indicators, both in terms of access and quality. Net primary school enrolment worsened considerably between 2013 and 2016. Net enrolment increased between 2005 and 2013, from 67 percent to 88 percent. This figure has since declined to only 81 percent in 2016 (World Bank, 2016).

The crisis has had a deleterious effect on schooling in the country. Sixty-four percent of schools and 79 percent of students have been affected by the conflict, with over half (51 percent) of teachers having no or irregular payment of salary (World Bank, 2016).

The crisis has depleted already low levels of government funding. Salaries of many state social service providers—such as doctors, nurses, teachers and technicians—have been cut or delayed or have remained unpaid. A lack of funds for wages and for general operational costs across government departments has caused the cessation of public service provision in many sectors and in many geographical areas.

Poverty and employment

The percentage of the population living below the national poverty line in the country had declined from 40.1 percent in 1998 to 34.8 percent in 2005/2006. In rural Yemen, poverty declined far slower during this period, decreasing from 42.4 percent to 40.1 percent (World Bank, 2016) (UNDP, 2017). According to the 2018 Human Development Index (HDI), between 2002 and 2012 (the latest year for which data are reported), 18.8 percent of the population were living on less than US\$1.90 a day. The HDI score decreased from 0.498 in 2015 to 0.452 in 2018. The country currently ranks 178th out of 188 countries in the global HDI ranking, down from 160th in 2015 (UNDP, 2017).

Prior to the conflict, the public sector was an important employment provider in Yemen: one-third of urban and about one-fifth of rural households benefited from some kind of government employment. However, in September 2016 monthly salary payments of government employees were suspended, affecting more than 7 million employees. Private-sector employees were comparatively better off yet also have been facing difficulties more recently.

The highest incidence of poverty is amongst households that depend on assistance or begging for their main income source, followed by households that mainly rely on casual labour and the support from relatives and friends (OCHA, 2018). In other words, the situation for those who were already poor has become even more desperate.

Women's employment and decision-making power

Women's social and economic empowerment has a strong impact on family and child welfare. In 2013 only one out of ten married women was employed in Yemen. Amongst employed women, about two-thirds reported earning less than their husbands. Nine out of the ten women with employment have decision-making power over the use of their incomes either alone or jointly with their husbands. However, most women in Yemen do not participate in important household

decisions; about half of them participate only in decisions about major household purchases or in decisions about their own health (GOY MOPHP, CSO, PAPFAM, 2013).

Humanitarian situation and needs

Situation

Beginning in 2011, Yemen has experienced major political changes and civil unrest. Since 2015, this has escalated into a widespread civil conflict accompanied by increasingly severe economic instability and unemployment, contributing to the rise in food and nutrition insecurity.

The crisis has led to increased unemployment, disruptions in the supply of production input, higher prices, currency devaluation, decreases in agricultural production and reduced access to essential services such as water and health services and essential medical supplies and other input for essential state functions across all sectors. A serious shortfall of electricity and natural gas is an additional burden, impacting daily life in general; irregularity in availability of supplies is a major constraint, making food preparation and cooking of daily meals difficult (OCHA, 2018).

The deterioration in conditions has, in turn, led to deterioration of the nutritional situation, impacting its underlying and basic causes of malnutrition—namely, increased levels of poverty and food insecurity and decreased access to healthcare.

Humanitarian needs

The 2019 Yemen Humanitarian Needs Overview estimates that some 24.1 million people (i.e. approximately 80 percent of the population) were in need of humanitarian assistance in December 2018, 14.3 million of whom were in acute need. This constitutes the largest humanitarian crisis globally, as measured by the number of people in need. The Integrated Phase Classification analysis from December 2018 to January 2019 (see Figure 4) (FEWSNET, 2019b) reported that over half the population, a total of 15.9 million people, were severely food insecure, despite ongoing humanitarian food assistance.

Women and children are disproportionately affected by humanitarian crisis in the country and constitute over 75 percent of the internally displaced persons in Yemen (Mason et al, 2012). In December 2018, out of 22 governorates of Yemen, the highest numbers of people in need were concentrated in Hodeidah, Hajjah, Amanat al Asimah, Sa'ada, Taizz, Ibb, Dhamar, Hadramaut, Lahj and Aden (OCHA, 2018).

Governance and Policy Context

Governance structures and alignment

The GOY implemented a number of important reforms towards decentralisation over the past decades. The Local Authority Law, instituted in 1999 along with a number of related legislations, devolved the decision-making powers to decentralised administrative units. Governorates and districts have since been mandated to have an elected local council, with governors indirectly

elected by the governorate's local council. Local Governorate and District Councils are elected by citizens. The executive body of these councils hold administrative, technical and executive responsibility and develop and oversee all development- and services-related projects included in the approved annual plan and budget. The minister of local administration is nominated by a political process and approved by the Council of Ministers. The director general of a district is nominated by the minister of local administration and appointed by the prime minister. The local Governorate Councils and District Councils are supported by specialist committees, including the (i) Planning, Development and Finance Committee; (ii) Service Committee; and (iii) Social Affairs Committee (Awlaqi, 2018)

The crisis has depleted already low levels of government funding. As such, a large proportion of support to ministries at the national and subnational levels comes from international partner organisations and donors. Despite the complexities of the current governance context, there is still strong vertical alignment in decision-making between national and subnational offices in most sectors, with varying degrees of ministerial presence across governorates and sectors.

Policy context

The GOY outlined its vision for the country in its document, *Yemen's Strategic Vision 2025*, developed and adopted in 2002, and it is still considered as giving important and valid strategic directions. The document provides an overarching plan to address poverty and drive human and economic development in-country. The document does not contain specific, measurable nutrition indicators, such as a reduction in malnutrition as measured by anthropometric indicators, but it does contain a number of targets that are likely to impact and be linked to nutrition outcomes, including:

- Halve food poverty by 2015 and decrease poverty to 10 percent by 2025.
- Improve health services spending and management and increase coverage to 90 percent by 2025.
- Reduce illiteracy to less than 10 percent of the population by 2025.

Whilst a range of sectoral strategies highly relevant to nutrition outcomes are in place (Figure 5), such as agriculture, fisheries, water and sanitation and health, the GOY has not formally adopted a national multisectoral nutrition strategy that would give coherence to government actions across nutrition-relevant sectors. Nor do individual sector strategies contain nutrition-specific objectives, such as reductions in acute and chronic child malnutrition.

Figure 5. Main nutrition-relevant strategies, programmes and plans in Yemen.

Government							
National Vision 2002–2025							
National Nutrition Strategy 2009							
Yemen National Strategy for Social and Behaviour Change in Nutrition 2018–2021							
National Health Strategy 2010–2025							
National Agriculture Sector Strategy 2012–2016							
National Fisheries Strategy 2012–2025							
Yemen Food Security Strategy 2011–2015 (targets set up to 2020)							
The National Water Sector Strategy and Investment Programme II (2008) and Policy Note 2011							
National Integrated Education Vision for Yemen 2015 (draft) and Yemen Education Sector Plan 2013–2015							
Yemen Social Welfare Fund 2015							
National Women Development Strategy 2006–2015							
Partners							
2015	2016	2017	2018	2019	2020	2021	2022
YHRP	YHRP	YHRP	YHRP	YHRP	YHRP	YHRP	YHRP
		UN Strategic Framework 2017–2019					
			Yemen Call to Action				
			FAO Country Strategy 2018–2020				
				WFP's Yemen Interim Country Strategic Plan 2019–2020			
			Yemen Nutrition Cluster Advocacy Strategy 2018–2020				
		WB Smallholder Agricultural Production Restoration and Enhancement					
		WB Emergency Health and Nutrition Project (EHNP)					
		WB and Partners' Yemen Emergency Crisis Response Project (ECRP)					

Note: YHRPs are published on an annual basis.

Abbreviations: FAO, Food and Agriculture Organization; UN, United Nations; WB, World Bank; WFP, World Food Programme; YHRP, Yemen Humanitarian Response Plan.

The GOY has a range of policies in sectors highly relevant to nutrition. However, due to the ongoing humanitarian crisis affecting the country, implementation has stalled or been severely limited across sectors. New policy or strategy development has also largely ceased. In many areas of programming, the scope of action has shifted markedly, as the current crisis facing the country has led to an increasing focus on providing immediate and life-saving humanitarian assistance to the population. As such, present and immediate ministerial priorities can be seen to be best expressed through both (i) more recent internal ministerial plans and (ii) the annual YHRPs.

The YHRP constitutes the main planning document for humanitarian actors in Yemen and provides a clear set of activities and outcomes to which the GOY and partner organisations align

their efforts and support. In addition to individual cluster activities—referring to the Nutrition, Food Security and Agriculture, Health and WASH Clusters—support to multisectoral programming is also delivered through the integrated programming for famine risk reduction.

Partners' planning is further spread across a range of strategic and programme documents—from the United Nations Strategic Framework to individual humanitarian cluster, UN agency, nongovernmental organisation (NGO) and donor strategies—in the country. Due to the diverse range of organisations working in Yemen, some level of fragmentation in policy and planning is inevitable but provides a degree of flexibility when and where required. However, there remain further opportunities for coherence across nutrition-related planning.

Nutrition-specific strategies and programmes

Facility and community-based nutrition activities are implemented by the MOPHP in cooperation with Nutrition Cluster partners and in line with the Global Nutrition Cluster mandate and MOPHP guidelines and protocols. The MOPHP is also working with international partners to agree a key set of nutrition activities for scale-up. IYCF guidelines are in place, and an IYCF strategy is currently under development. National legislation is in place on the marketing of breast milk substitutes but continues to face issues regarding popularisation and enforcement.

A National Nutrition Strategy was drafted by the MOPHP in 2009. It sets forth government priorities on addressing child undernutrition, LBW and maternal undernutrition, including targets for micronutrient deficiencies, and furthermore supports school nutrition, household food security and nutrition in emergency situations, including management of acute malnutrition and promotion of IYCF and, in particular, breastfeeding, as well as other essential measures. Dissemination, implementation, monitoring and evaluation of the strategy has, however, been limited (GOY MOPHP, Yemen Nutrition Cluster, WHO and UNICEF, 2018).

The Emergency Health and Nutrition Project is implemented through cooperation with UNICEF, state service providers and NGO partners. The project is supporting the delivery and expansion of health and nutrition services, as well as water and sanitation services, to the most vulnerable and invests in building implementation capacity and local structures.

Since 2009 the Yemen Nutrition Cluster has been supporting the GOY in providing life-saving nutrition services for the people of Yemen (OCHA, 2009). The objective of the cluster response is to prevent and reduce the prevalence of malnutrition in children, PLW and other vulnerable groups and expand coverage and utilisation of nutrition services (OCHA, 2019).

Yemen National Strategy for Social and Behaviour Change in Nutrition 2018–2021

The National Strategy for Social and Behaviour Change (GOY MOPHP, Yemen Nutrition Cluster, WHO and UNICEF, 2018) was developed by the Technical Rapid Response Team in support of the Nutrition Cluster and the MOPHP. The strategy aims to reduce undernutrition and reduce mortality and morbidity amongst children 0 to 2 years of age through optimal IYCF. It provides guidance to the national- and district-level health and nutrition actors, complements the national

IYCF strategy 2017–2021 (unpublished) and the global strategy on IYCF in emergencies and is aligned with other relevant global and national guiding policies.

Yemen Nutrition Cluster Advocacy Strategy

The Yemen Nutrition Cluster Advocacy Strategy (Yemen Nutrition Cluster, 2018) sets forth a plan for advocacy supporting Yemen Nutrition Cluster objectives in addressing nutritional needs of the emergency-affected population in Yemen. The strategy advocates for the scale-up of a comprehensive package of nutrition-specific interventions through the MOPHP and the Nutrition Cluster. The strategy, further, advocates for the effective implementation of nutrition-sensitive interventions through health, food security, agriculture, fisheries, WASH and education sectors and clusters, addressing malnutrition in a coordinated and synergistic way.

Nutrition-sensitive strategies and programmes

Health

Healthcare in Yemen is guaranteed as a right to all citizens by the GOY under the constitution.

Yemen National Health Strategy

The Yemen National Health Strategy 2010–2025 (GOY, 2010) key objectives are decreasing maternal, neonatal, infant and under-5 mortality; addressing communicable and noncommunicable diseases; developing the national health system; promoting health; improving quality of care; and encouraging cross-sectoral collaboration. Nutrition is neither explicitly referenced in the National Health Strategy 2010–2025 nor in the Fourth Health Strategic Plan 2011–2015. Health services are organised at the levels of primary, secondary and tertiary healthcare. Services are delivered through the district health system and complemented by nationwide disease-control programmes (GOY, 2010).

An Essential Package of Health Services is in place in the country. However, even prior to the current crisis, the package remained poorly defined with limited implementation. Whilst inpatient care for SAM, vitamin A supplementation and nutrition counselling are included in the package, community management of acute malnutrition is not (Wright, 2015). In terms of accreditation and training of the nutrition and health workforce, a range of nutrition-relevant guidelines and training modules are in place in the country, including for community management of acute malnutrition, IYCF and inpatient care.

Support from partners

Due to the current crisis and its impacts on the health system, the MOPHP and international partners are focusing on delivering a more limited package of health services, the Minimum Service Package. It consists of eight key components, which include reproductive/maternal and newborn health, childcare, nutrition, noncommunicable and communicable diseases and environmental health in health facilities (IOM, 2019)

Food security

Overview

Food security includes availability and access, utilisation and stability of a sufficiently diversified and healthy diet, a necessity to achieve better nutrition. Within the context of Yemen, the agriculture, livestock and fishery sectors play a key role in improving food security in a sustainable manner, either directly through increasing availability or indirectly by providing livelihood and income opportunities and, thus, improving poor households' access to food. Strategies related to food production and food security exist for the agriculture and fishery sectors. No livestock strategy or policy is currently in place. Whilst policies in the area are outdated, they continue to provide guidance to ministries and partners alongside more recent large-scale programmes operating in an emergency mode.

National Agriculture Sector Strategy

The National Agriculture Sector Strategy (2012–2016) (GOY, 2012a) objectives are to increase growth, sustainability and equity by raising agricultural output and domestic food production and increasing rural incomes and employment, particularly for the poor; improve sustainability of the environment and natural resources; and strengthen climate resilience. The strategy gives particular attention to improving food security and nutritional status through increased availability of and access to adequate nutritious food and nutrition advice.

National Fisheries Strategy

The National Fisheries Strategy (2012–2025) (GOY, 2012b), under responsibility of the MOFW, has an overall goal of enhancing the sector's contribution to economic growth, improving community livelihoods, empowering women and youth and strengthening food security. The strategy sets forth plans for the sector for the following: (i) efficient use of fishery and aquaculture resources; (ii) economically and environmentally viable solutions; (iii) good governance and management; (iv) close collaboration with related sectors and strong public-private partnerships as committed principles; (v) improvement in stock management; (vi) value chain developments and additions; and (vii) domestic marketing and promotion of alternative livelihood systems, with a particular focus on strengthening food security.

National Food Security Strategy

The National Food Security Strategy 2011–2015 (GOY, 2011) was developed to address food insecurity and malnutrition. It was a collaborative effort led by MOPIC in consultation with several ministries, such as MOALI and MOPHP. It has three key objectives: (1) to reduce food insecurity by one-third by 2015; (2) to ensure 90 percent of the population is food secure by 2020; and (3) to reduce child malnutrition by 1 percent annually. To achieve these objectives, the strategy sets out a seven-point action plan to achieve food security at both macro and micro levels, including empowerment of women, improvements in nutrition and family planning, improvements in crop production, leveraging of fuel subsidy reforms to promote food security and promotion of private-sector investments in the food industry.

Support from partners

Since the onset of the current crisis, international partners and donors have been supporting the GOY in delivering support to agriculture, fishery and rural and peri-urban livelihood development. A range of NGOs provide support to smallholders through the Food Security and Agriculture Cluster. The UN FAO strategy in Yemen for 2018-2020 sets forth the agency priorities in alignment, predominantly, with the MOAI and the Agriculture and Food Security Cluster, aiming to improve food security and nutrition, restore agriculture production and strengthen resilience, in particular in rural and peri-urban locations (FAO, 2018). WFP's Strategic Plan contributes to humanitarian and resilience objectives in alignment with national plans and the efforts of the humanitarian and development partners (WFP, 2019).

The Smallholder Agricultural Production Restoration and Enhancement programme (2017–2021), funded by the World Bank (WB), aims to increase productivity and nutrition-enhancing agriculture practices of smallholders. In addition, short-term employment and access to selected services for vulnerable populations are provided through the WB-funded Emergency Crisis Response Project (ECRP), including farm, fishery and animal production-based wage employment (presented under social safety nets).

WASH

Health implications

Access to adequate sanitation and safe drinking water and use of appropriate hygiene practices are closely related to nutrition outcomes through a range of pathways. Improving WASH can reduce the incidence of infectious diseases and parasite infections, which cause damage to the intestines, and hence contribute to better nutritional status (Rodriguez, 2011).

National Water Sector Strategy

The National Water Sector Strategy and Investment Programme II (2008) (GOY, 2008) remains the most recent and strategic guidance to the sector. It was updated by a brief policy note released in 2011, supporting the previous objectives. The strategy focuses on integrated water resources, irrigation and water shed management, and urban and rural water supply and sanitation (GOY, 2008). In recent years the MOWE implemented activities in close cooperation with international partners, particularly the Yemen WASH Cluster.

Support from partners

The WASH Cluster's objective is to provide emergency WASH services to the most vulnerable and restore and maintain water and sanitation systems in high-risk areas (OCHA, 2019). The cluster and its partners provide support in implementation and provision of technical support and resources for governorate water corporations.

The Emergency Health and Nutrition Project and the ECRP include WASH-based components, assisting the GOY with the support of WASH Cluster partners.

Education

Vision

Up until 2015 the GOY had been developing a National Integrated Education Vision for Yemen, which sought to bring together and harmonise a range of various government-endorsed strategies and commitments in relation to education. The finalisation of the vision was postponed with the onset of the current crisis.

Yemen Education Sector Plan

The priorities of the MOE are documented in the Yemen Education Sector Plan (GOY, 2013). In alignment with the global movement 'Education for All' leadership, the plan prioritises activities to improve the quality of public education, close gender and social disparity gaps, expand preschool and literacy and adult education and strengthen capacities of the MOE, governorate and district offices.

Support from partners

In supporting the GOY's priorities, the Education Cluster's objectives are to help maintain basic education services, particularly in areas where schools are damaged, closed or unable to fully operate because of budget, payroll and other conflict-related constraints. Hence, partners provide supplies and capacity support, including trainings and promotion of hygiene and sanitation in schools, in addition to more general support to the education system (OCHA, 2019). The education sector also benefits from the ECRP, which supports the reconstruction and rehabilitation of education facilities.

Social safety nets

Given the spread and depth of multidimensional poverty, food insecurity and malnutrition in Yemen, social safety nets are vital to protecting the lives and livelihoods of the most vulnerable.

Social Welfare Fund:

The Yemen SWF, led by the Ministry of Social Affairs and Labour (MOSAL), is an unconditional cash transfer programme that was established in 1996. It was estimated to reach half of the poor in the country prior to 2015 (Bagash, 2012). The programme ceased operating in 2015 but was reinstated in 2017 in a limited number of areas by MOSAL with the support of the WB and partners under the Yemen ECRP (OCHA, 2018).

Social Fund for Development

The Yemen Social Fund for Development was established in 1997 with the aim of combating poverty and strengthening the social safety net in the country and is currently supported by the WB. It focuses on creating income-generating opportunities and supporting community development, capacity building and microfinance programmes.

Support from partners

The ECRP (World Bank, 2019) aims to provide social protection to the most vulnerable households and communities by providing a quarterly unconditional cash transfer to about 1.5 million poor and vulnerable households. A second component includes labour-intensive work and community services, in partnership with the United Nations Development Programme and two national institutions, the Social Fund for Development and the Public Works Project. It is highly relevant to address root causes of food insecurity and nutrition, as it supports the construction of communal infrastructure, including agriculture, and also provides support to home gardens, health facilities, water harvesting tanks, drinking water facilities and sanitation and education facilities. It covers large population groups and engages a wide network of partners in implementation support.

National Strategy for Women Development

The National Strategy for Women Development (2006–2015) (GOY, 2006) outlines the steps of the GOY to meet its commitments under the Convention on the Elimination of All Forms of Discrimination against Women, corresponding to the Millennium Development Goals and the Beijing Platform for Action. It includes six objectives relating to access to education; healthcare; poverty reduction; participation in social, political and economic decision-making; achievement of human rights as guaranteed under Yemen's commitments to relevant international conventions; and expansion of women's participation and their role in media and information technology. The strategy also includes the expansion of services to improve women's health and nutrition situation.

Partners' frameworks

UN Strategic Framework for Yemen

The UN Strategic Framework for Yemen (2017–2019) outlines joint UN efforts to address population needs and to prevent the collapse of the national institutions and the deterioration of the humanitarian crisis by supporting the ongoing efforts to build peace and security in the country. Aiming to mitigate the effects of the actual conflict, it supports basic social services, socioeconomic resilience, social cohesion and protection and peacebuilding. Priorities outlined include nutrition- and health-related activities, such as provision of primary and maternal healthcare, immunisation and community-based nutrition programming.

Humanitarian Support Cluster and Call to Action

A humanitarian funding appeal has been in place for Yemen on a continuous annual basis since 2008. In 2010, when political instability exacerbated pre-existing food and nutrition insecurity in the country, an annual YHRP and appeal was put in place in Yemen. Funding and humanitarian presence began to increase considerably from 2015 onwards as the humanitarian situation deteriorated in the country. The subsequent increase in humanitarian needs and response has been accompanied by a reorientation of development funding towards humanitarian activities (OCHA, 2018), although the 2019 YHRP has tried to rebalance funding to ensure both humanitarian and longer-term developmental activities are supported where possible.

As of 2020, humanitarian efforts are implemented through one national and five subnational clusters. Ministries cochair relevant clusters; however, delivery of emergency relief is complicated by the conflict, and in some cases ministries are engaged directly at the level of the governorate and local authorities rather than at the national level. Thus, despite the strains on state institutions across the country, a significant proportion of humanitarian assistance continues to be delivered through state service providers.

In 2018, the international community agreed to a series of commitments, under the Yemen Call to Action, to support the Yemen authorities to do the following: (1) reduce global acute malnutrition to pre-crisis levels in all governorates and, in the long term, aim for rates to be reduced to below the serious threshold of 10 percent in all governorates and (2) reverse chronic malnutrition (stunting) prevalence to pre-crisis levels and, in the long term, aim for a national 1 percent annual rate of reduction. To achieve these commitments a range of nutrition-specific and nutrition-sensitive priority interventions have been identified, in accordance with global evidence and recommendations (Global Nutrition Cluster, WHO, WFP, UNICEF, 2018).

The institutional arrangements between government, humanitarian and nonhumanitarian partner organisations are explored in subsequent chapters of this plan. The current governance arrangements, as they relate to this plan, are discussed in more detail in the chapter on institutional arrangements.

THE MSNAP FRAMEWORKS



The MSNAP Strategic Framework

Guiding principles and approach

The implementation of the MSNAP will be guided by a set of key guiding principles. Multisectoral and multi-stakeholder collaboration is vital to addressing the varied and numerous drivers of malnutrition in Yemen. Bringing relevant sectors and stakeholders together to address these drivers to improve nutrition outcomes, especially amongst the most vulnerable and neediest populations, is at the core of SUN Yemen's and the wider GOY's vision. The following set of guiding principles reflect the GOY's vision towards this end.

Enhancing coordination and cooperation amongst stakeholders

This will be facilitated through the SUN NSC, as well as through other existing platforms, such as the Yemen humanitarian cluster system, SUN networks and sectoral bilateral and multilateral platforms for collaboration. Where stakeholders do not communicate, there is a risk of duplicating efforts and missing potential synergies in their efforts. Resources in Yemen are limited. Multi-stakeholder collaboration will help in making the best use of the human and financial resources that are available and making best use of stakeholders' and sectors' presence within communities.

Ensuring services converge on the neediest and most vulnerable

The causes of malnutrition are varied and span multiple sectors. A key underlying principle of the MSNAP is that all relevant sectors will work together to ensure that populations vulnerable to malnutrition have access to necessary services and are furthermore empowered, mobilised and supported to take action to address the causes of malnutrition themselves.

Stakeholders will plan and monitor implementation through developing shared work plans, measuring common nutrition-related targeting criteria at the governorate, district, community and household levels as feasible and appropriate. They will likewise work to ensure that eligible populations are referred to appropriate services within and across actors and sectors.

Bridging the divide across humanitarian and nonhumanitarian programming

The GOY recognises that maintaining some level of distinction between the roles of humanitarian actors and government is both valid and necessary. Nonetheless, the need for better complementarity between efforts in both domains is also noted. This includes, for example, ensuring that the supportive efforts of humanitarian partners strengthen government institutions and systems, leading to sustainable improvements in nutrition outcomes.

The GOY will thus ensure that government strategies, planning and results frameworks will be properly aligned with humanitarian response planning, and vice versa, especially with respect to multiyear humanitarian response strategies. The GOY will work with relevant partners to develop collective outcomes for humanitarian partners that include, where appropriate, an explicit focus on impacting pathways to improved nutrition or otherwise reducing prevalence and risk of

undernutrition. The GOY will ensure that the roles and responsibilities of stakeholders towards meeting the common goals and objectives as laid out in this plan are disseminated, acted upon and monitored, thereby ensuring the accountability of all.

Ensuring accountability for the measurement and achievement of results

As Yemen embarks on a new phase of rebuilding and restoring systems, a major guiding principle will be ensuring a robust approach to MEAL for all nutrition-related activities in-country. In this regard, ministries will integrate nutrition indicators or indicators which explicitly address proximate steps on an impact pathway to improved nutrition within both joint and sector-specific monitoring and evaluation systems.

Different sectors' and stakeholders' activities will be tracked towards key outcomes that are known determinants and are expected to ultimately contribute to better nutrition. Relevant indicators to be used for measurement of outcomes across sectors are detailed in the M&E plan accompanying the MSNAP.

Mobilising communities for improving nutrition outcomes

The people of Yemen continue to show incredible reserves of strength in the face of adversity. This strength and resourcefulness constitute the greatest resource available for improving the health, nutrition and well-being of the people of Yemen.

The GOY will work with partners to support, mobilise and empower communities to address malnutrition through increasing uptake of available services. Communities will be encouraged and supported in holding both the GOY and partner organisations to account as duty bearers to their rights to access relevant services. Furthermore, the communities' role will be activated in shifting social and behavioural norms towards improving child feeding and caring practices, caring for and providing adequate and clean environments and education for children and ensuring the health and participation of women in the social, political and economic life of the country.

Considering and addressing differing gender needs and inequalities

Addressing the different nutritional needs of men/women and boys/girls is vital to achieving meaningful and sustainable improvements in nutrition outcomes. Boys 6 to 59 months of age tend to have higher levels of wasting than girls of the same age in Yemen (GOY MOPHP, CSO, PAPFAM, 2013). Conversely, micronutrient needs, especially for micronutrients such as iron, are greater amongst PLW and adolescent girls (Institute of Medicine, 2001).

Women and girls are also disproportionately impacted by issues associated with protracted displacement, such as lack of access to services and civil documentation (OCHA, 2018). The GOY will take into account the differential effects of undernutrition on genders and the importance of gender equity to improving nutrition outcomes in implementing the MSNAP. Gender sensitivity and responsiveness will ensure that the needs of women, men, girls and boys are met in an equitable manner.

Results Framework

Overview

The following chapter describes the set of goals, objectives and expected outcomes which will guide action over the life cycle of the MSNAP in Yemen. The goals and objectives reflect exactly those set forth in the CRF which accompanies this document, where they are described in a matrix alongside a set of activities and associated implementation, MEAL and costing information.

The CRF is a tool primarily designed to provide strategic clarity on the efforts across sectors and stakeholders towards reducing malnutrition and as a means to measuring collective progress. It provides a framework for action, defines accountability amongst key actors (government as well as nongovernment) and allows tracking of progress against agreed targets, objectives and goals. It is a living document and is presented in a spreadsheet, allowing for updates as deemed necessary by the NSC, its partners and the SUN Yemen Secretariat.

The underlying logic of the SUN Yemen CRF draws upon the UNICEF conceptual framework on the determinants of child undernutrition. The CRF seeks to address the immediate and underlying causes of malnutrition. Addressing the basic causes of malnutrition are vital in Yemen, especially in areas such as peacebuilding. However, activities to ensure conceptual clarity activities towards this end are largely considered outside the scope of the CRF. The framework is organised by a logical hierarchy of expected outcomes, goals, objectives and output.

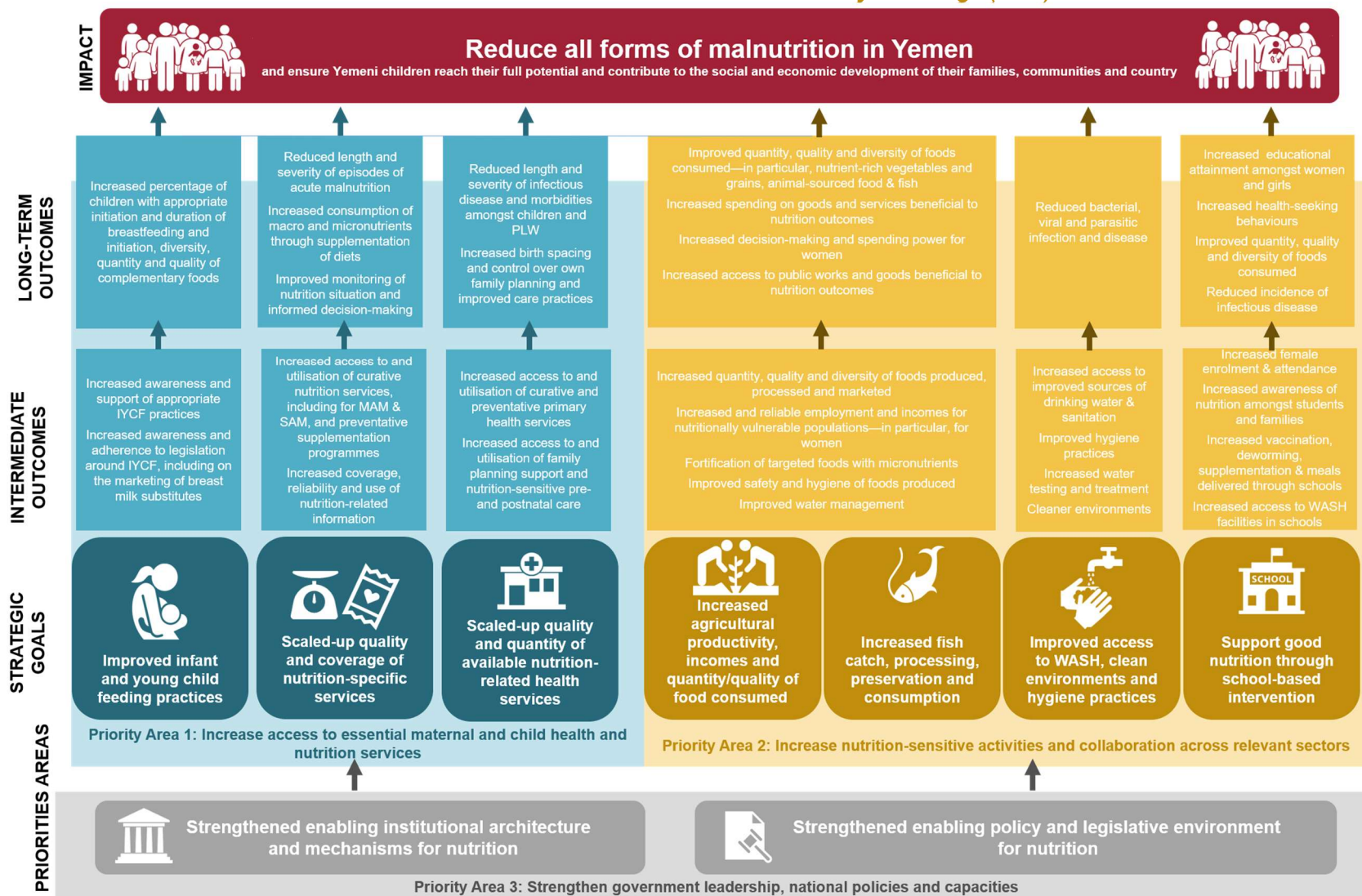
The MSNAP aims to **reduce all forms of malnutrition** and thus *ensure that all Yemeni children reach their full potential and contribute to the social and economic development of their families, communities and country as a whole*. This impact will be achieved primarily through three priority areas:

- Priority Area 1: Increase access to and utilisation of essential maternal and child health and nutrition services.
- Priority Area 2: Increase coordinated nutrition-sensitive action across relevant sectors.
- Priority Area 3: Strengthen government leadership, national policies and capacities.

The three priority areas comprise nine goals and associated actionable objectives. Each objective in turn comprises a set of activities, where each activity includes information on expected output, targeted groups, priority (geographic focus) areas and targets. Indicators are established to monitor progress and target achievements. The CRF specifies the means of verification of results, lead and support agency by activity and cost estimate for each activity.

The TOC for the CRF is outlined in Figure 6. It is not comprehensive, as there is a range of additional potential impact pathways to nutrition outcomes associated with the stated goals and associated objectives and activities. Nonetheless, it provides an overview of the GOY's vision for achieving improved nutrition in the country, outlining how stakeholders in Yemen will work together over the coming three years to reduce undernutrition and ensure that Yemeni children reach their full potential and contribute to the social and economic development of their families, communities and country.

Figure 6. Multisectoral Nutrition Action Plan and Common Results Framework: Theory of Change (TOC).



Abbreviations: IYCF, infant and young child feeding; MAM, moderate acute malnutrition; MEAL, Monitoring, Evaluation, Accountability and Learning; MOPHP, Ministry of Public Health and Population; PLW, pregnant and lactating women; SAM, severe acute malnutrition; SUN, Scaling Up Nutrition; WASH, water, sanitation and hygiene.

Priority Area 1: Increase access to and utilisation of essential maternal and child health and nutrition services

The GOY's MOPHP, in cooperation with partner organisations, has identified a set of proven and cost-effective priority maternal and child health and nutrition interventions to be scaled up in the country. The goals under this priority area relate to achieving the following: (1) improved IYCF practices, (2) increased access to preventative and curative nutrition-specific services and (3) increased access to preventative and curative nutrition-related health services.

The MOPHP will have primary responsibility for ensuring that activities included in the plan are operationalised and implemented and that objectives and goals are met. Specific goals and related objectives, justification and expected outcomes are outlined below. Goals, objectives and activities in the accompanying CRF are aligned with national priorities in the areas, as outlined in the National Health Strategy of Yemen 2010–2025, and the proposed nutrition interventions will be provided as part of the national Essential Package of Health Services.

However, given the current grave nutrition and health situation and severe resource and capacity constraints in Yemen, interventions have been limited to those considered to be most impactful, feasible and cost-effective within the current context.

Goal 1. Improved IYCF practices

Objectives

- 1.1 Update guidance on appropriate IYCF and oversee its implementation.
- 1.2 Increase awareness and understanding of the importance of appropriate IYCF practices.
- 1.3 Increase supervision, monitoring and evaluation of compliance with IYCF legislation and policy.
- 1.4 Update and expand the Baby-Friendly Hospital Initiative.

Justification

Amongst preventive health and nutrition interventions, improving IYCF has been identified as having the single greatest potential impact on child survival (Jones, 2003). IYCF indicators in Yemen remain unacceptably poor. As such, IYCF is given particularly high priority within wider health and nutrition programming by the GOY. Of particular focus is the training of health facility and community-based health workers on providing support and nutrition messaging within communities and delivering social and behaviour change communication messaging at the community level.

Furthermore, a renewed focus on enforcement of the Code of Marketing of Breast-milk Substitutes (the Code) for improved IYCF practices is envisioned working across service providers, private-sector actors and the media. In order to increase the support for appropriate IYCF practices through healthcare facilities, the GOY will seek to update and expand the Baby-Friendly Hospital Initiative in the country.

Intermediate outcomes

- Increased awareness and support of appropriate IYCF practices.
- Increased awareness and adherence to legislation around IYCF, including on the marketing of breast milk substitutes.

Long-term outcomes

- Increased percentage of children with appropriate initiation and duration of breastfeeding and initiation, diversity, quantity and quality of complementary foods

Goal 2. Scaled-up quality and coverage of nutrition-specific services

Objectives

- 2.1 Scale up coverage and quality of blanket supplementary feeding programmes.
- 2.2 Scale up coverage and quality of services for management of acute malnutrition, SAM and moderate acute malnutrition.
- 2.3 Scale up quantity and quality of nutrition services for PLW.
- 2.4 Provide multiple micronutrient supplementation to populations vulnerable to deficiencies.
- 2.5 Ensure adequate human, financial and physical resources for the Nutrition Department at the national and governorate levels.
- 2.6 Increase coverage, timeliness, reliability and availability of nutrition-related data in Yemen.
- 2.7 Ensure that adequate dietetic support is provided through health services.

Justification

There is a range of proven effective interventions for the prevention and treatment of acute malnutrition and micronutrient deficiencies, including through community-managed acute malnutrition therapeutic feeding, vitamin A capsule supplementation, multiple micronutrient supplementation and provision of balanced supplementary foods (Bhutta et al, 2013).

These life-saving nutrition interventions will be delivered by the GOY, with the support of partner organisations, in an integrated manner through wider MOPHP-, NGO- and UN-supported services. Where the MOPHP Nutrition Department does not directly implement activities, they will provide technical, administrative and coordination support to these efforts. Additional areas of focus will be the institutionalisation of nutrition services within health facilities and community-based programmes and the development of nutrition information systems.

The GOY has identified a particular need for targeted support to the Nutrition Department of the MOPHP to ensure the sustainable scale-up of nutrition-related activities in Yemen. Given the consistently high rates of malnutrition in the country, the GOY is committed to institutionalising an emergency nutrition response in the country—transitioning from a humanitarian-led approach to

an integrated model of care situated within the wider national health services and scalable in size to respond to changing population needs. Towards this end, the Nutrition Department has been mandated with a renewed and expanded role managing nutrition in emergencies.

A multipronged approach is being undertaken to increase the coverage, timeliness, reliability and availability of nutrition-related data in Yemen. The Nutrient Department in the MOPHP will work to establish an Information Management Unit, and nutrition surveillance will be scaled up through surveys, mass screening and sentinel site monitoring.

Intermediate outcomes

- Increased access and utilisation of curative nutrition services, including for moderate acute malnutrition and SAM.
- Increased access and utilisation of preventative supplementation programmes.
- Increased coverage, reliability and use of nutrition-related information.

Long-term outcomes

- Reduced length and severity of episodes of acute malnutrition.
- Increased consumption of macro- and micronutrients through supplementation of diets.
- Improved monitoring of the nutrition situation and informed decision-making.

Goal 3. Scaled-up quality and quantity of available nutrition-related health services

Objectives

- 3.1 Increase numbers, capacity, supervision and support of community health volunteers.
- 3.2 Scale up availability of primary healthcare services.
- 3.3 Increase immunisation coverage.
- 3.4 Scale up quality and quantity of sexual and reproductive health and family planning services with special emphasis on reducing teenage pregnancies and LBW.

Justification

Shortages in human resources in the health workforce are severe in Yemen at present. In order to deliver nutrition and health programmes, an expanded cadre of health workers and volunteers is of paramount importance to improve the nutrition status of women and children and save lives.

Infections and undernutrition are closely linked through a bidirectional relationship, where undernutrition can make a person more susceptible to infection and infection, in turn, causes reduced nutrient intake and absorption, contributing to malnutrition (Muller, 2018)(Katona, 2008).

In Yemen, infectious diseases remain widespread and exert a heavy toll in terms of child morbidity and mortality. There is a pressing need for infectious disease control through multisectoral preventative interventions and treatment. Increasing access to primary healthcare services and disease-prevention programmes are thus a central element in improving nutrition outcomes.

There is good evidence that delaying and spacing births and increasing women's control over their family planning can have a range of impacts on the nutrition and health status of both mothers and children (Kozuki, 2013) (Dewey, 2007). As such, relevant efforts in the areas of sexual and reproductive health are vital to reducing rates of malnutrition, especially stunting, in the long term. Pre- and postnatal and obstetric services are also vital to child and maternal health, directly as well as indirectly, for supporting good IYCF, hygiene and care practices.

Intermediate outcomes

- Increased access and utilisation of curative and preventative primary health services.
- Increased access and utilisation of family planning support and nutrition-sensitive pre- and postnatal care

Long-term outcomes

- Reduced length and severity of infectious disease and morbidities amongst children and PLW.
- Increased birth spacing and control over own family planning and improved care practices.

Priority Area 2: Increase coordinated nutrition-sensitive action across relevant sectors

Whilst access to and utilisation of nutrition-specific and related health services are vital to improving nutrition outcomes, they are not sufficient to achieve sustainable improvements in nutrition outcomes at scale. Effective, large-scale nutrition-sensitive interventions and approaches in other sectors that address key underlying and basic determinants of nutrition, especially when delivered in tandem with nutrition-specific interventions, are also vital to achieving results (Ruel, 2013)(Haddad, 2015). Priority Area 2 of this plan thus relates to programming in sectors other than health and health-based nutrition. Nutrition-sensitive sectors working to address the underlying causes of undernutrition will increase the nutrition 'sensitivity' of their efforts. There are a number of ways this will be achieved (Olney, 2017)(Field Exchange Editors, 2016). Examples include:

- Including nutrition indicators in policies and programmes, from targeting of criteria to monitoring and evaluation, or explicitly including targets on an impact pathway to improved nutrition.
- Prioritising interventions known to have a positive impact on nutrition outcomes in the current context.

- Undertaking formative and operations research and results arising from the associated M&E plan to better understand and design programmatic approaches that can contribute to improved nutrition outcomes.
- Ensuring households accessing nutrition services are also eligible and referred to other relevant social programmes, and vice versa.
- Integrating nutrition messaging in programmes.
- Focusing on the empowerment and well-being of women and girls, especially PLW and adolescent women.

Goals within this priority area are divided across social protection, food production, processing and retail, fisheries, WASH and education and school-based interventions. Individual sectors have articulated priority interventions, which in their view are most likely to positively impact nutrition outcomes and for which coordinated implementation and a coordinated MEAL system—through the SUN NSC—is feasible and likely to result in a synergistic effect in improving nutrition outcomes.

Goal 4. Increased agricultural productivity, incomes and quantity/quality of food consumed

Objectives

- 4.1 Increase the quantity, capacity and supervision of staff providing nutrition-sensitive agricultural services.
- 4.2 Increase production, productivity and quality of crop production.
- 4.3 Increase production, health and quality of livestock.
- 4.4 Increase sustainable irrigation and on-site farm water management where these factors are significant determinants of malnutrition.
- 4.5 Support and scale up small-scale food production, processing and retail.
- 4.6 Increase understanding and awareness around good dietary, food safety and hygiene practices.
- 4.7 Increase incomes and consumption through cash assistance and provision of temporary employment opportunities.
- 4.8 Increase production and consumption of iodine-, iron- and folate-fortified foods.
- 4.9 Establish and operationalise the Department of Food Safety.

Justification

Agriculture is linked to nutrition outcomes in a number of ways. Food produced can supply food for farming households as well as for the wider population through the domestic market. It can

also provide an important source of income, especially for poor rural populations who are often especially vulnerable to undernutrition.

Where caregivers are engaged in agricultural production, this can interact with child health and nutrition in a number of, often complex, ways. For example, demands on the time of caregivers can affect care practices and quality, as can exposure to environmental hazards such as animal waste, pesticides and disease vectors.

Where women are engaged in agriculture, there is also the potential for women's economic empowerment within households and communities, with knock-on effects on increased household spending beneficial to nutrition (IFPRI, 2011). Furthermore, food production is a key driving force of wider economic growth and is linked to micro and macro food security, nutrition security and health outcomes within populations (Mejerink, 2007).

The agriculture-related activities in this plan take into account a range of potential impact pathways with nutrition, including production and productivity of crops and livestock and the targeting of nutritionally vulnerable groups, as well as support of activities along the value chain for production and consumption of nutritious foods, with a focus on targeting programmes towards women where appropriate and feasible. Given the complexity of these linkages, it will be particularly important to pursue strong links between the design and implementation of these activities through the MEAL system to build local capacity of and experience in ensuring that agriculture- and food production-related programmes and activities have a maximum potential for positive impact on nutrition outcomes.

It is envisioned that increasing food safety standards—both through a newly established department within the MOPHP and through MOAI activities—will increase the quality of foods consumed and increase employment opportunities through expanding domestic and export markets. The MOPHP will further strengthen its efforts in food fortification, in particular iodisation of salt and fortification of wheat flour with iron and folate, as well as support for the fortification of edible oil with vitamins A and D.

Objectives are also included under this goal which relate to increasing incomes and strengthening livelihoods. These include expanding the coverage of the wage employment and support to livelihoods emphasising nutrition-sensitive approaches. Yet another avenue that will be explored further is the promotion of female income-generating activities based on women's groups.

Prior to the current crisis, the GOY provided social nets through social protection programmes for the neediest and most vulnerable populations in the country—notably, the Social Fund for Development, which delivered labour-intensive works and public work programmes, and the SWF, which supported vulnerable households with targeted cash transfers. These programmes will continue to play a vital role in building livelihoods and increasing spending power and consumption amongst some of the populations most vulnerable to undernutrition in Yemen.

Intermediate outcomes

- Increased quantity, quality and diversity of foods produced, processed and marketed.
- Fortified selected foods, using an array of micronutrients.

- Improved safety and hygiene of foods produced.
- Increased and reliable employment and incomes for nutritionally vulnerable populations, in particular for women.
- Improved water availability and quality through improved water management.

Long-term outcomes

- Improved quantity, quality and diversity of foods consumed, in particular nutrient-rich vegetables and grains, fish, animal-sourced foods and fortified foods.
- Increased spending on goods and services beneficial to nutrition outcomes.
- Increased decision-making and spending power for women.
- Increased access to public works and goods beneficial to nutrition outcomes.

Goal 5. Increased fish catch, processing, preservation and consumption

Objectives

- 5.1 Expand nutrition-sensitive programming within the MOFW.
- 5.2 Scale up promotion of fatty fish consumption.
- 5.3 Improve market infrastructure for fish.
- 5.4 Increase sustainability and resilience of livelihoods for small-scale fishing communities.
- 5.5 Increase small-scale private-sector fish farming.

Justification

Fisheries have a large untapped potential for improving nutrition outcomes in Yemen. One major pathway to improved nutrition is through increasing availability, affordability and consumption of fish, which are rich in a range of both micro- and macronutrients. Fisheries can also have an impact on nutrition through providing incomes for households engaged in fishing, fish product processing and retail. Increased incomes can, in turn, have knock-on effects on the spending power of households and the economies of coastal communities. It is hoped that targeting women for support in small-scale processing and retail of fish products will further increase the potential impact of on gender dynamics and nutrition outcomes.

A majority of the fish caught in Yemen is through small-scale fisheries, making the potential for a positive impact on livelihoods especially significant. In addition, coastal governorates have been found to have some of the highest relative prevalence of undernutrition in the country. They have also been particularly affected by the current crisis in the country, further compounding the potential of the fisheries sector for contributing to nutrition outcomes.

The MOFW will hold primary responsibility for ensuring activities included in the plan are conducted and objectives and goals met with support from partner organisations. The goals,

objectives and activities outlined in the CRF align with the National Fisheries Strategy (2012–2025), which outlined the government’s priorities in supporting the development of the sector, as well as humanitarian and partner organisations’ activities.

Intermediate outcomes

- Improved quantity, quality and diversity of foods consumed, in particular fish.
- Increased and reliable employment and incomes for nutritionally vulnerable populations, in particular for women.
- Improved water availability and quality through improved water management.

Long-term outcomes

- Improved quantity, quality and diversity of foods consumed, in particular nutrient-rich vegetables and grains, fish, animal-sourced foods and fortified foods.
- Increased spending on goods and services beneficial to nutrition outcomes.
- Increased decision-making and spending power for women.
- Increased access to public goods beneficial nutrition outcomes.

Goal 6. Improved access to safe and adequate water and sanitation services, clean environments and improved hygiene practices

Objectives

- 6.1 Improve WASH-sector capacity for multisectoral coordination and emergency response, with special reference to improved nutrition outcomes.
- 6.2 Increase availability of non-piped potable water at the household level with priority for nutritionally vulnerable populations
- 6.3 Increase access to improved sanitation and safe and hygienic environments.
- 6.4 Ensure ability to conduct regular water testing.
- 6.5 Improve hygiene awareness and practices.

Justification

Increasing access to improved sources of drinking water and sanitation facilities, antibacterial and microbial agents, clean environments and good hygiene practices are likely to reduce bacterial, viral and parasitic infections in early childhood, which in turn are known to be a significant causal factor in the global burden of malnutrition (Humphrey, 2009). Yemen is facing deteriorating WASH infrastructure and severely reduced access to improved sources of water and sanitation. The poor conditions for WASH are a major contributing factor to undernutrition and infectious disease.

The activities outlined in the plan here are set forth by the GOY in alignment with national priorities as outlined in the National Water Sector Strategy, the National Fisheries Strategy (2012–2025) and the YHRP. The MOWE will have primary responsibility for ensuring activities included in the plan are operationalised and implemented and that objectives and goals are met with support from partner organisations.

Intermediate outcomes

- Increased access to improved sources of safe drinking water and sanitation.
- Improved hygiene practices.
- Increased water testing and treatment.
- Improved cleanliness of environments, including safe disposal of solid waste.

Long-term outcomes

- Reduced bacterial, viral and parasitic infection and disease.

Goal 7. Increased support of good nutrition and health of pupils and their families through school-based interventions

Objectives

- 7.1 Deliver key nutrition and health interventions for children and adolescents through schools.
- 7.2 Provide students with nutritious food and/or nutrient supplements.
- 7.3 Improve WASH in schools.
- 7.4 Activate the role of health supervisors and volunteers in improving the nutritional and health status of mothers and children through school-based activities.
- 7.5 Activate the role of society in improving the nutritional and health status of mothers and children through school-based activities.
- 7.6 Improve enrolment and retention of girls in primary and (increasingly) secondary education.

Studies have found increases in girls' education to be associated with reduced child and maternal deaths, improved child health and lower fertility. Educated mothers are more likely to ensure that their children receive a nutritious diet, know more about appropriate health and hygiene practices and have more power in the home to ensure children's nutritional needs are met. Schools will also provide an important means for delivery of nutrition, health and WASH services for children and adolescents, as well as nutrition-related education and messaging.

The MOE will have primary responsibility for ensuring activities included in the plan are operationalised and implemented and objectives and goals are met, with support from the MOPHP, MOEW, MOAI and MOPIC for relevant activities. This will entail the inclusion of relevant data within both ministerial and interministerial multisectoral MEAL systems.

Intermediate outcomes

- Increased female enrolment, attendance and retention.
- Increased awareness of nutrition amongst students and families.
- Increased vaccination, deworming, supplementation and meals, delivered through schools.
- Increased access to adequate WASH facilities in schools.

Long-term outcomes

- Increased educational attainment amongst women and girls.
- Increased health-seeking behaviours.
- Improved quantity, quality and diversity of foods consumed as school meals and in families.
- Reduced incidence of infectious disease.

Priority Area 3: Strengthen government leadership, national policies and capacities

The goals, objectives, activities and related indicators under this priority area relate to further strengthening of nutrition governance in Yemen through developing and implementing an advocacy strategy for the CRF and MSNAP, strengthening policy and legislation, establishing a system for MEAL, strengthening the capacity of the multisectoral coordinating SUN NSC in Yemen and ensuring accountability of both governmental and partner organisations.

Goal 8. Strengthened enabling policy and legislative environment for nutrition

Objectives

8.1 Carry out SUN Yemen activities in line with mandate and responsibilities.

8.2 Validate, launch, disseminate and advocate for the MSNAP at international, national and subnational levels.

8.3 Develop and operationalise nutrition-relevant policies and programmes.

Justification

The scale-up in humanitarian action and developmental nutrition programming in Yemen takes place within a pre-existing body of GOY legislative and policy frameworks. The GOY recognises that, given the changed operational context in-country, there is a need for a review and updating of national legislation relevant to nutrition. Thus, there is a range of pre-existing institutions and legislations in place in Yemen tasked with monitoring the safety and marketing of foods, food production and water pollutants and the environment. The GOY will work to further strengthen this enabling policy and legislative environment and ensure that it will be able to address 'new'

challenges arising both from the crisis situation and from other social, economic, demographic and technological developments, as well as from climate change.

Goal 9. Strengthened enabling institutional architecture and mechanisms for nutrition

Objectives

9.1 Strengthen multi-stakeholder coordination platforms and processes.

9.2 Establish and orient SUN-Yemen alliances and networks.

9.3 Strengthen the nutrition and food security MEAL system.

Justification

Implementation of the MSNAP will require a set of appropriate coordination and management structures across relevant administrative levels where critical decisions are taken regarding the operationalisation, planning, implementation, monitoring and evaluation of activities included within the document. A high-level SUN Yemen NSC is established in the country but has faced challenges, as the humanitarian crisis demanded an increased attention to the humanitarian response and associated management structures and mechanisms.

Systematic efforts towards sustainable scale-up of nutrition-related actions in Yemen require a transition towards a greater role for the SUN NSC, as outlined in the description of 'Institutional Arrangements' below. The SUN NSC will likely require support from the global SUN Movement Secretariat and partners. The establishment of subcommittees is envisaged in key technical areas where Sector Focal Points involved in the NSC have limited capacities.

Similar nutrition Steering Committees and corresponding Secretariat support capacities will be established at the governorate level and—ultimately—at the direct-service-delivery level, where needed and feasible. Defining and systematically putting in place these multisectoral nutrition-coordinating arrangements, including their technical support capacities, will be a process during the implementation of the new MSNAP.

Implementation of the M&E plan, which was developed to accompany this plan, will constitute an important step towards the realisation of the goals and objectives outlined in the preceding subsections of this chapter. Efforts to strengthen the GOY's role in coordination and implementation of nutrition-related actions require a clear framework in which government and humanitarian partners can situate accountability, build capacity and measure progress.

The 'learning' aspect of the M&E plan will be of critical importance, as actors need to better understand what aspects of their activities are most impactful. This will be particularly important with regard to nutrition-sensitive programmes, as such programmes can have both net-positive and net-negative nutrition outcomes depending on local conditions and circumstances. Decision-makers in Yemen thus need further learning on which activities should be scaled up and in what manner to achieve the greatest positive impacts on nutrition outcomes.

Intermediate outcomes

- Strengthened legal and policy environment.
- Improved capacity for MEAL.
- Improved nutrition information available and utilised for decision-making.
- Increased awareness around nutrition and nutrition-related policy, plans and strategies.

Long-term outcomes

- Improved coordination, targeting and reaching of nutritionally vulnerable populations.
- Improved information sharing.
- Improved stakeholder understanding, knowledge and awareness of nutrition issues and willingness and capacity to work together to address malnutrition in a coordinated way.

IMPLEMENTING THE FRAMEWORKS



Institutional Arrangements

Nutrition governance in Yemen is complex, given the impact of the current political and humanitarian crisis on government systems, as well as the many organisations involved in nutrition-related activities. Full implementation of the GOY's national policies related to nutrition will, therefore, require formalised institutional arrangements that support coordinated action and information sharing through a multi-stakeholder platform (MSP). This section provides an overview of those institutional arrangements.

Coordination structure

Yemen's MSP for nutrition is the SUN Yemen NSC, which has existed since 2014. The SUN Yemen NSC is supported by the SUN Yemen Secretariat, which is housed within the Development Plans and Programmes Sector of MOPIC (the convening GOY body for SUN Yemen). The vice minister of Planning and International Cooperation, who is also the SUN Government Focal Point, acts as the convener of the NSC. MOPIC's deputy minister of Development Plans and Programmes is SUN Yemen's vice national coordinator.

Prior to the current humanitarian crisis that emerged in 2015, the SUN Yemen NSC convened at least twice per year, in line with its mandate from the GOY. However, in the midst of the humanitarian crisis, the NSC has been less active due to a shift towards humanitarian programming and coordination in the governorates, combined with substantially reduced ministerial budgets and capacity. For MSNAP implementation, the SUN Yemen NSC will remain the focal entity for national nutrition coordination and governance. In implementing the MSNAP, the NSC will be the primary forum to do the following: (1) identify programmatic and funding gaps related to CRF activities that can be addressed through cross-sectoral, multi-stakeholder cooperation; (2) enhance the targeting and quality of interventions implemented by different stakeholders; (3) optimise information sharing and data use for action (see next section on MEAL); and (4) hold government and nongovernment actors accountable against their commitments, as envisioned in more detail within the CRF.

As described in the earlier narrative on Priority Area 3, there is a vision to establish multisectoral nutrition coordination platforms in selected governorates. This mechanism does not yet exist at a subnational level. Activities related to CRF objective 9.1 also reflect a vision to establish four SUN Yemen hubs in Aden, Sa'ada, Hodeidah and Ibb, with four multi-stakeholder Steering Committees operational in those locations.

The subsection below titled 'Leveraging of Existing Mechanisms and Institutional Arrangements' describes existing subnational structures and working arrangements within and across sectors. Those structures and arrangements will serve as a foundation for improved multi-stakeholder coordination at the subnational level.

NSC composition

Currently, the SUN Yemen NSC consists of 21 representatives from GOY entities and development partners. The following nine line ministries are currently represented on the committee: the MOAI, MOE, Ministry of Finance, MOFW, Ministry of Trade and Industry, Ministry

of Information, MOPHP, MOSAL and MOWE. Other GOY institutions, such as the Central Authority for Statistics, Prime Minister's General Secretaries, Sana'a University and the SWF, are also represented. As shown in Figure 7, a subset of ministries—the MOAI, MOE, MOFW, MOPHP and MOWE—will be directly involved in GOY implementation of the MSNAP's nutrition technical activities. The other GOY entities shown in Figure 7 will not be directly involved in technical implementation but will provide crucial inputs to support evidence-informed, adequately resourced, high-impact nutrition interventions that reach targeted beneficiaries.

In addition to GOY representation, the NSC includes individual donor, UN, CSO and private-/business-sector stakeholders. Because the NSC has a mandate to coordinate efforts across all nutrition actors within Yemen, not just across the organisations that currently sit on the NSC, the SUN Yemen Secretariat and partners have identified the establishment of national SUN stakeholder networks as a crucial element in facilitating coordination across different nutrition stakeholders. Each network will have a designated individual/organisation for representation of the network at the NSC. The following is a concise description of the key SUN networks that will contribute to MSNAP implementation:

- **SUN Yemen Civil Society (CS) Network:** Given the increasing number and diversity of CSOs working in the emergency response in Yemen, bringing these actors together for increased alignment and clearer communication with a more cohesive voice is of vital importance if the role of civil society and NGOs in achieving CRF goals and objectives is to be realised. The Civil Society Network includes both Yemeni and international CSOs and NGOs engaged in humanitarian and/or nonhumanitarian efforts related to nutrition.
- **SUN Donor Network:** This network will be critical for coordination and harmonisation of donor resources earmarked and used for nutrition-specific and nutrition-sensitive programming (humanitarian and nonhumanitarian) at national and subnational levels. The costed CRF outlines financial requirements for implementing planned activities. Financial resources will be generated via domestic and donor sources. Thus, the Donor Network is a key forum to align external (i.e. nondomestic) funding with CRF/MSNAP strategic priorities and activities.
- **UN Network for SUN:** Consisting of UN agencies that are supporting nutrition action in the country, this network will be the umbrella network for all UN-supported nutrition-related efforts (humanitarian and nonhumanitarian). As the country transitions from a predominantly humanitarian response to a national nutrition response with a development focus, there will still be residual humanitarian needs that must be addressed. The country will eventually transition out of a humanitarian cluster-based coordination mechanism, and the SUN UN Network, like the Donor Network, will be a platform for harmonised, synergistic nutrition-related support by various UN agencies in alignment with the CRF/MSNAP.
- **SUN Yemen Business Network:** The humanitarian crisis has overextended state capacity, and the private sector is playing an increasingly important role in Yemen. The SUN Business Network, established in 2019, will bring private-sector actors together to ensure that their positive contributions are maximised and any areas of potential harm are minimised. A representative from the Federation of Yemen Chambers of Commerce and Industry is already a member of the NSC. Through the formalised SUN Business Network structure, a broader set of private-sector players will be engaged in the national nutrition response.

As shown in Figure 7, stakeholder groups will be represented by designated Focal Points on the SUN Yemen NSC. Line ministries directly involved in service implementation will have designated units/departments to coordinate nutrition-related activities across different levels (e.g. central, governorate). The MOPHP already has several departments engaged in nutrition-related action at different levels. There is a vision for all ministries involved in direct implementation of nutrition programmes and interventions to establish designated units or departments at central and governorate levels, which will serve as focal entities for coordination.

Leveraging of existing mechanisms and institutional arrangements

The NSC will build upon past and ongoing bilateral and multilateral cooperation between nutrition stakeholders. Yemen's humanitarian response provides opportunities to leverage strong working relationships between key actors. Current interagency coordination and cooperation are largely dependent on the humanitarian cluster system. Key humanitarian clusters are reflected in Figure 7. Ministries such as the MOPHP are co-leads of some clusters; this leadership and convening responsibility will be leveraged to facilitate the sharing of nutrition evidence, joint planning and learning to strengthen the humanitarian-development nexus. Also, the SUN Yemen team members have been actively participating in several nutrition-relevant clusters (e.g. the WASH, Nutrition and Agriculture and Food Security Clusters, as well as the Integrated Phase Classification Technical Committee), and it will continue to do so as long as the cluster system remains activated.

Ministries will continue to act as cluster co-leads. The earlier-described SUN networks that will support MSNAP implementation (and multi-stakeholder nutrition governance in general) will also be represented on the NSC. Stakeholder support will transition from a humanitarian-focused arrangement (clusters) to a development-oriented, longer-term institutional arrangement that extends the breadth and depth of stakeholders involved in a coordinated national nutrition response.

Beyond humanitarian programming, individual line ministries have had a good track record of interministerial cooperation. The NSC will be the forum to revitalise any interministerial cooperation that was disrupted by the humanitarian crisis, to cultivate new synergies and coordination arrangements (e.g. between the MOE and MOWE on WASH in schools activities) and to pursue joint planning, progress review and mutual accountability related to sectoral contributions to the key goals and objectives of the MSNAP. The next section on MEAL, as well as the accompanying M&E plan, highlights that arrangements related to the collection, reporting and use of data will build on existing capacities, institutional arrangements and/or information systems.

At the subnational level, there already exist mechanisms and working relationships that can be leveraged to implement the MSNAP. Each of the key implementing ministries for the MSNAP (MOAI, MOE, MOFW, MOPHP, MOWE) has its own organisational structure that extends from the central level to the local implementation level. All of those ministries have suboffices at the governorate level and local authorities or branches at the district level.

At the subnational level, there is need to strengthen both (1) planning or administrative coordination and (2) technical coordination in the delivery of services or interventions. Regardless of the structure within each sector/ministry, the focus under the MSNAP will be on improving

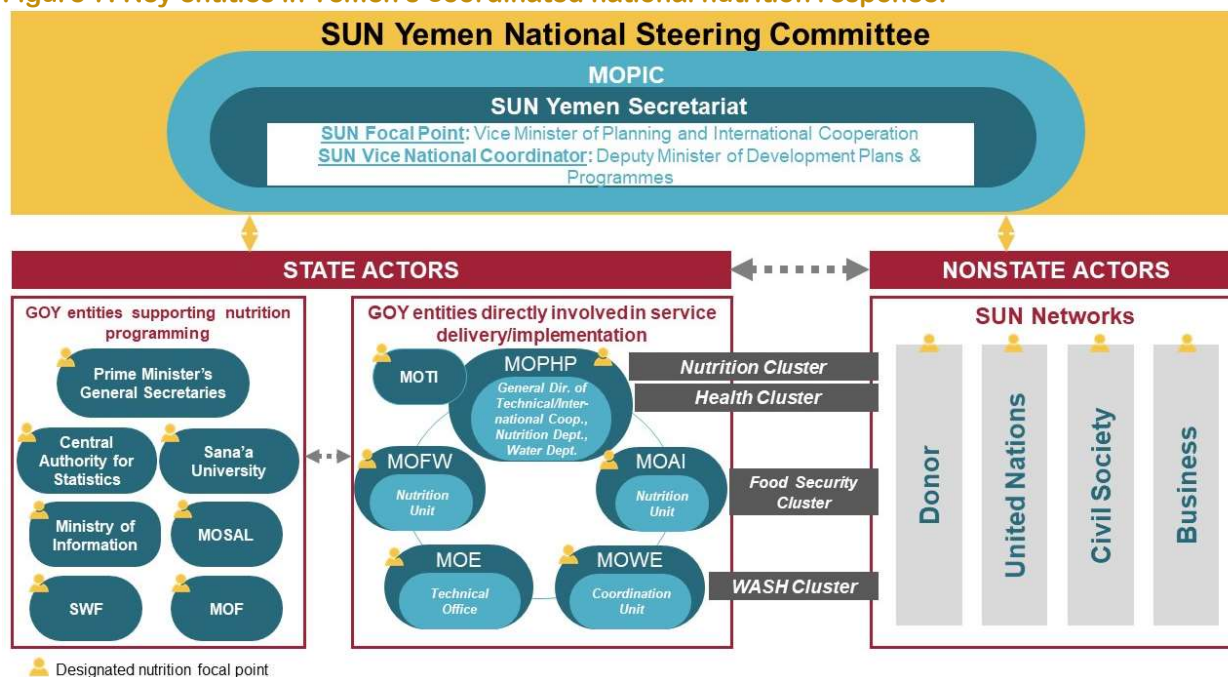
communication and coordination across constituencies in governorates. Given its cross-sectoral focus, MOPIC, which also has a presence at the subnational level, will play an important role in consolidating planning and reporting on nutrition work in the governorates. Individual ministries already interface with MOPIC at the governorate level. There is also some coordination between ministries (e.g. between MOAI's Agricultural Cooperative Union branches and the MOWE at the local level; MOE general managers who coordinate planning and budgeting and who will play a role in coordinating with the MOPHP and MOWE for school-based interventions).

Individual ministries also have functional linkages to UN agencies, the private sector and civil society at the subnational level. The following are illustrations:

- *Linkages to UN agencies* (e.g. the MOE and United Nations Educational, Scientific and Cultural Organization; the MOAI and FAO; the MOPHP via humanitarian clusters on nutrition and health).
- *Linkages to the private sector* (e.g. collaboration—through the MOFW's General Departments for Planning and Investment and local fishery bodies affiliated with the MOFW—with private-sector entities on studies, technical consultations and investment projects). The Federation of Yemen Chambers of Commerce and Industry, which is already a member of the NSC, will be an integral player in making the Yemen's SUN Business Network operational and, thus, in strengthening the platform for the business sector to engage with other constituencies. The Chamber of Commerce has a main branch in Sana'a, as well as branches in the governorates.
- *Linkages to civil society* (e.g. MOFW engagement with civil society organisations that work in the fish sector).

Hence, whilst there is scope to make the above engagements more systematic, there is already a culture of cooperation and coordination at the subnational level. Those arrangements and working relationships will be important strengths for MSNAP implementation.

Figure 7. Key entities in Yemen's coordinated national nutrition response.



Abbreviations: ANC, antenatal care; GOY, Government of Yemen; IYCF, infant and young child feeding; MAD, Minimum Acceptable Diet; MDD, Minimum Dietary Diversity; MEAL, Monitoring, Evaluation, Accountability and Learning; MOAI, Ministry of Agriculture and Irrigation; MOE, Ministry of Education; MOF, Ministry of Finance; MOFW, Ministry of Fish Wealth; MOPHP, Ministry of Public Health and Population; MOPIC, Ministry of Planning and International Cooperation; MOSAL, Ministry of Social Affairs and Labour; MOTI, Ministry of Trade and Industry; MOWE, Ministry of Water and Environment; SUN, Scaling Up Nutrition; SWF, Social Welfare Fund; WASH, water, sanitation and hygiene.

Key roles and responsibilities

The CRF outlines several activities that will be led by specific government line ministries, with focused input from other actors/sectors, clearly indicating which activities will be implemented with the support of partners and what form that support will take (included in the CRF as separate column on 'Role of ministry and partners' for each activity). Upon finalisation of the MSNAP, the SUN Yemen Secretariat will work closely with MOPIC's International Cooperation Sector and Projects Sector on MSNAP implementation. This institutional arrangement has not played out during the humanitarian crisis, which resulted in fragmented implementation of activities across stakeholders and sectors. However, this is the envisioned approach for the future. With a fully costed CRF and an agreed set of MEAL indicators in place (see M&E plan), the SUN NSC will hold meetings at least twice per year, with additional multi- and bilateral meetings scheduled, as necessary, to assess implementation progress and to forge new avenues for cooperation in implementation. SUN Yemen networks will hold network meetings more regularly (at least quarterly) to coordinate targeting of resources, programmatic work and data sharing/use across network members. Network meetings will also be important forums to raise, review and synthesise issues and evidence for further action by the NSC, and meeting minutes and joint plans from the SUN Networks will be reviewed by the NSC.

In the midst of Yemen's humanitarian crisis, the SUN Secretariat has maintained ad hoc bilateral communication and cooperation with line ministries. In implementing the MSNAP, the SUN Secretariat/MOPIC will (1) assist line ministries in planning, budgeting and coordination of nutrition-specific and nutrition-sensitive programming; (2) provide leadership in reporting and M&E; and (3) serve as the focal entity for cooperation with international partners.

Yemen's SUN Movement Secretariat has encouraged ministries with the potentially highest nutrition impact to adopt an institutional structure with nutrition units to improve coordination and oversight of nutrition-sensitive interventions, especially those included in the MSNAP. They will also advocate for nutrition issues in these sectors and facilitate the development of appropriate policies. The Secretariat will also promote the linkage between the public sector as supervisory, coordinating bodies and the business sector, especially the promotion of food and nutrition-related small- and medium-sized enterprises, through encouraging linkages in the implementation of some interventions in the multisectoral nutrition plan.

Line ministries already have bilateral arrangements with MOPIC on sector-specific strategic plans and annual plans. However, on an annual basis, the SUN Yemen NSC will review CRF progress and ensure that agreed nutrition activities and results are being reflected in annual sectoral plans and budgets. Governorate representatives will be part of that CRF review and planning process to facilitate subnational planning. The NSC will also keep track of nutrition-relevant activities that appear in other plans (e.g. the YHRP, WB-funded programming, UN agency or other development programmes).

In implementing the MSNAP, individual line ministries will maintain vertical planning, implementation, oversight and reporting mechanisms that already exist between central-level (national) and governorate-level departments, offices and/or units. Partners (UN agencies, CSOs and the business sector) will provide funding support, technical assistance and capacity-building support, data reporting, research, and an evaluation process through a development mechanism. Before embarking on any projects/programmes, development partners coordinate with the relevant line ministry or ministries to (1) ensure complete alignment with the ministry's programmatic priorities and approaches (as reflected in the CRF) and (2) establish an agreed protocol for performance monitoring, quality assurance and reporting in a transparent manner.

Monitoring, Evaluation, Accountability and Learning

The SUN Secretariat/MOPIC will manage a streamlined, user-friendly nutrition MEAL system that will synthesise nutrition-relevant administrative data shared by different sectors and stakeholders, integrate emerging evidence (e.g. from evaluations and research) and promote data use to create transparency and accountability for results. This section of the MSNAP outlines general elements of Yemen's nutrition MEAL approach. An accompanying document to the MSNAP, the M&E plan, outlines specific details and operational issues related to establishing a functional, user-driven MEAL system that empowers stakeholders to monitor progress, create transparency and foster accountability for meaningful, sustainable nutrition results.

General approach to MEAL

A key guiding principle in implementing Yemen's nutrition MEAL system will be to build on existing systems and reporting arrangements, rather than to introduce parallel systems and processes that either cannot be sustained or are too complex given local capacities and resources. The Secretariat will also work closely with GOY entities such as the Central Authority for Statistics to integrate different forms of evidence, not just administrative data, into the MEAL system.

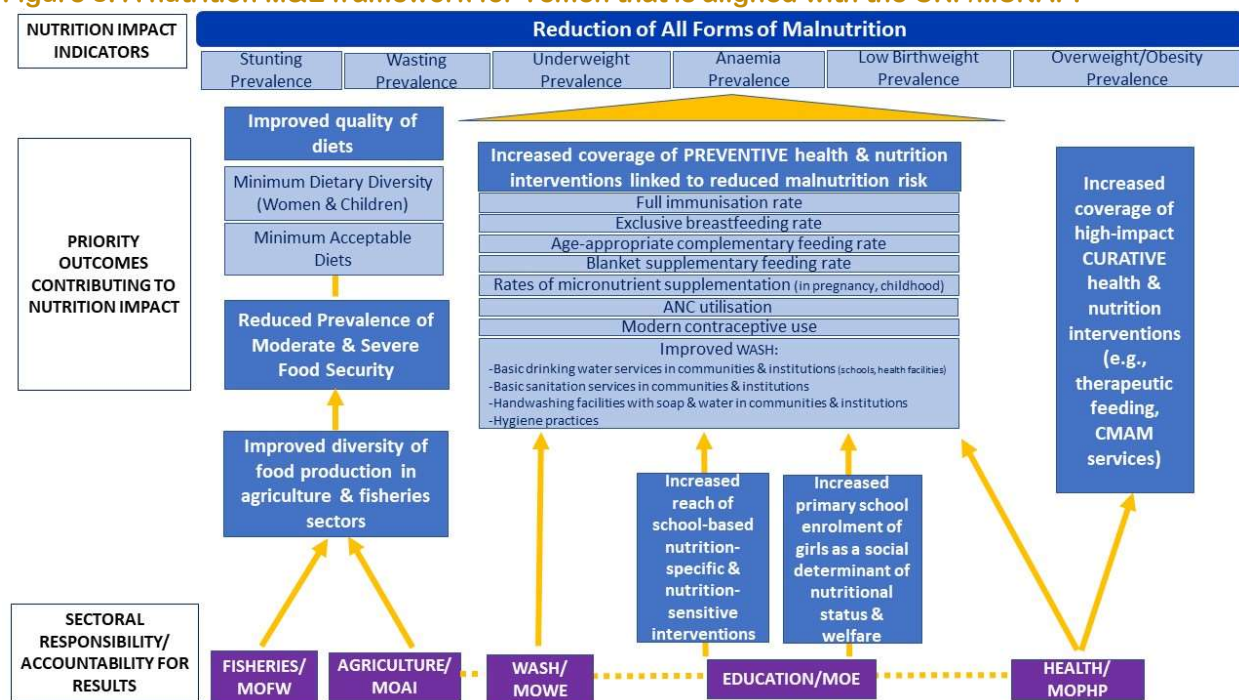
Yemen's nutrition MEAL system will be closely aligned with the CRF. As shown in Figure 8, the nutrition TOC for Yemen (Figure 6) reflects a mix of different streams of work and activities. Those activities yield a series of results that ultimately lead to the reduction of all forms of malnutrition. Figure 8 simplifies the TOC to reflect priority results linked to specific ministries and sectors. It reflects the logical sequence of results. M&E tools, systems and processes will be strengthened to enable SUN Yemen stakeholders to track progress along each pathway from what different stakeholders are doing to the output their work is yielding and to key outcomes that are known determinants of nutrition improvement (as highlighted in the UNICEF conceptual framework presented earlier in this document) and, eventually, improved nutritional status.

MEAL 'architecture'

MOPIC currently manages an online tool for monitoring food security and nutrition, called MAP Yemen. MAP Yemen exists to track agricultural, food security, health and nutrition development projects, as well as their locations, objectives and reach, and improve planning, coordination and effectiveness. MAP Yemen is, therefore, a possible foundation on which to build upon when strengthening MEAL for a multi-stakeholder nutrition response. However, there is also a need to 'meet stakeholders where they are' in terms of data gathering, data reporting and data management. Several ministries do not have automated systems for routine data and rely largely on logbooks or Microsoft Excel-based spreadsheets to track data that are either emailed or faxed from governorates to the central level or whose contents are communicated on a routine basis over the phone.

Acknowledging that data have limited utility if people and institutions are not capacitated in M&E, part of strengthening the nutrition MEAL 'architecture' will include training Secretariat staff, line ministry Nutrition Focal Points and SUN network members in core MEAL concepts, standardised tools and processes.

Figure 8. A nutrition M&E framework for Yemen that is aligned with the CRF/MSNAP.



Abbreviations: ANC, antenatal care; GOY, Government of Yemen; CMAM, community-based management of acute malnutrition; IYCF, infant and young child feeding; M&E, monitoring and evaluation; MEAL, Monitoring, Evaluation, Accountability and Learning; MOAI, Ministry of Agriculture and Irrigation; MOE, Ministry of Education; MOF, Ministry of Finance; MOFW, Ministry of Fish Wealth; MOPHP, Ministry of Public Health and Population; MOPIC, Ministry of Planning and International Cooperation; MOSAL, Ministry of Social Affairs and Labour; MOTI, Ministry of Trade and Industry; MOWE, Ministry of Water and Environment; SUN, Scaling Up Nutrition; SWF, Social Welfare Fund; WASH, water, sanitation and hygiene.

Administrative data / routine information systems will form the backbone of nutrition monitoring. As a result, the MEAL approach will involve working with line ministries and sectors to strengthen the completeness, availability, accessibility and quality of nutrition-related information within their own administrative data sources (e.g. Education Management Information System, Health Management Information System, surveillance and early warning systems). Because the humanitarian-development nexus is a major focus in Yemen as the country transitions out of a humanitarian crisis, MEAL system strengthening will also involve working with humanitarian actors (using platforms such as the cluster system) to integrate data from humanitarian efforts into nutrition reporting and data use. Institutional arrangements will need to be explored to support data sharing and reporting between stakeholders.

It is also recognised that data on several high-level outcomes are often generated from population-based/household surveys such as the Demographic and Health Surveys, Multiple Indicator Cluster Surveys, Micronutrient Surveys, etc. Several years elapse between rounds of those surveys. The M&E plan outlines a research and evaluation agenda that identifies priority data gaps that can be filled through sound research and/or evaluations. This creates an opportunity for engagement of academic and research institutions, not just nutrition programme implementers, in Yemen’s national nutrition response. Sana’a University already participates in

the NSC, and the MEAL system will establish clear contributions for the university and other academic/research institutions. As described in the MEAL plan (a separate document), line ministries have identified priority data gaps. Linkages to academic and research institutions will be strengthened/formalised, as feasible and appropriate, to bolster the evidence base that can support policy and programme processes. A research and evaluation agenda is not a static concept. Forums such as network meetings, cluster meetings and Steering Committee meetings will be important in identifying emerging data needs as MSNAP implementation progresses over time.

Use of evidence to foster accountability and facilitate learning

Linking planned stakeholder activities (as outlined in the CRF) to expected output and outcomes is an important first step in fostering accountability. Through quarterly reporting of agreed output-level indicators and participatory data review processes to periodically assess progress and identify challenges or bottlenecks, data will be used to foster accountability by sector and by stakeholder group (e.g. GOY, UN, civil society, donor, business sector). Reporting and reviewing disaggregated data (e.g. by governorate; place of residence, such as urban or rural; gender; and humanitarian status, such as internally displaced persons) will also foster accountability across stakeholders in ensuring that no one is being left behind. Surveys will also provide opportunities to identify issues that should inform targeting (e.g. differences by household wealth quintile).

Timely data flow and/or results reporting between various implementers and central-level line ministries will be strengthened during MSNAP implementation. Institutional arrangements will be pursued in relation to data sharing and results reporting. Within the government sector, MOPIIC and line ministries already have institutional arrangements in place for sector-specific data reporting and planning. To systematically integrate evidence from nonstate actors, data reporting and data review will be agenda items for SUN Yemen network meetings, cluster meetings (as long as the humanitarian cluster system is activated) and NSC meetings. Secretariat and NSC members will also be capacitated on data collection, data quality assurance, data interpretation and data use.

To inform the replication and/or scale-up of effective nutrition-specific and nutrition-sensitive strategies, Yemen's nutrition MEAL system will consist of mechanisms and tools to package evidence on best practices and lessons learnt for direct application in ongoing policy, planning and programme processes. Learning activities will be both in-person (e.g. through annual learning exchanges) and virtual. Data access will be a key requirement to facilitate learning. A Yemen-specific nutrition dashboard that can be accessed by on-boarded members of SUN Yemen will serve as a platform for accessing up-to-date and complete data on CRF indicators and efforts in the country.

Capacity Development

Capacity needs

The humanitarian crisis has tested the limits of individual, community, institutional and systems capacity in Yemen. International development partners are providing substantial support to ministries in carrying out and coordinating nutrition-related activities. Due to constraints related to physical, human and financial resources within central line ministries, it is envisioned that nonstate actors such as international organisations and development partners will continue to support the GOY's efforts. The CRF clearly delineates which activities are to be implemented with the support of partners and what form that support will take.

Taking a longer-term view, it will be important for all forms of external support for MSNAP implementation to enhance the capacity of Yemeni institutions to (1) address the needs of the population of Yemen and (2) both respond to and rebound from future shocks such as those experienced during the current humanitarian crisis. There are opportunities to leverage existing structures and efforts (e.g. related to the humanitarian response) for longer-term capacity strengthening, as described below. A critical first step will be to orient development and humanitarian partners on the MSNAP and encourage them to provide support to meet all the operational requirements (governance structures / mechanisms, HR training, M&E, technical implementation capacity of frontline workers) to ensure full implementation of the MSNAP. The following actions are of particular importance:

- Through the participation and/or leadership of key ministries in the humanitarian clusters, coordinate with humanitarian programmes and stakeholders in different thematic clusters (e.g. Nutrition, Health, Food Security, WASH) to integrate nutrition-related modules into current and future capacity-strengthening efforts (e.g. trainings, accreditation and networking of frontline workers, such as community health workers).
- Align multi-stakeholder nutrition coordination and governance with broader plans and efforts related to national postcrisis recovery and resilience. In implementing the MSNAP, attention will need to be paid to strengthening national leadership, with a clear role for GOY ministries in multisectoral governance. In the interest of sustainability, the NSC, with support from the SUN Yemen Secretariat, should examine existing institutional arrangements and plans for data sharing, joint planning, quality assurance, performance improvement and M&E to identify opportunities to integrate nutrition-specific and nutrition-sensitive elements.
- Formalise knowledge management and skills transfer arrangements with development partners to support the systematic transfer of knowledge, tools and capacities to Yemeni institutions. Build the above into the terms of reference for the various SUN Yemen networks to foster accountability in enhancing the ability of in-country stakeholders to provide the necessary leadership and oversight of a multisectoral nutrition response at all levels.

Table 1 provides an overview of key capacities and capacity gaps related to MSNAP implementation, based on preliminary consultations with key line ministries that will be directly involved in MSNAP technical implementation and a review of planned CRF activities related to

different forms of capacity development. The limited availability of financial resources is the most prominent constraint in developing capacities within and across line ministries.

Table 1. Basic assessment of key aspects of capacity amongst line ministries that will be direct implementers of MSNAP activities.

TYPE OF CAPACITY (Y = yes; N = no)	GOY LINE MINISTRY				
	MOAI	MOE	MOFW	MOPHP	MOWE
1. Existence of a focal unit/department/team for nutrition-related coordination and programming at both central and governorate levels	N	Y	N	Y	N
2. Existence of required physical infrastructure for nutrition-related programming , with little/no need for rehabilitation	N	N	N	N	N
3. Existence of all necessary technical (e.g. hygiene kits, cold-chain equipment) and/or managerial equipment/supplies (e.g. laptop computers for governorate-level managers) at both central and governorate levels	N	N	N	N	N
4. Updated, standardised guidance, training materials and/or job aids related to all planned CRF/MSNAP activities	N	N	N	N	N
5. Cadre of master trainers in competency areas related to MSNAP interventions	N	N	N	N	N
6. Sufficient numbers of trained personnel / human resources in institutions and in communities with required nutrition-related competencies / skill sets to implement MSNAP activities	N	N	Y	N	N
7. Sufficient operational budget (public financing) at central level to support national coordination, M&E and quality assurance	N	N	N	N	N
8. Existence of an automated information system that can be adapted to easily collect, collate and analyse nutrition-related data within the sector	Y	Y	N	N	N
9. Sectoral research and surveillance capacity related to nutrition	N	N	N	Y	Y

Abbreviations: CRF, common results framework; GOY, Government of Yemen; M&E, monitoring and evaluation; MOAI, Ministry of Agriculture and Irrigation; MOE, Ministry of Education; MOPHP, Ministry of Public Health and Population; MOFW, Ministry of Fish Wealth; MOWE, Ministry of Water and Environment; MSNAP, Multisectoral Nutrition Action Plan.

Future capacity development

In the inception phase of MSNAP implementation, clear plans will need to be made to address capacity gaps at three main levels: national, governorate and frontline/community. During the inception phase of MSNAP implementation, there will be a need for the NSC (with support from the SUN Yemen Secretariat) to do the following: (1) conduct a formal capacity assessment and

skills mapping exercise and (2) develop a comprehensive capacity-development plan based on identified capacity gaps. The plan should include a timeline for capacity development over the next three years, as well as identify priority capacity-development outcomes, key activities and entities responsible for capacity-development activities.

Below are illustrative capacity-building priorities at those three levels.

Illustrative capacity-building priorities at the national level

The CRF addresses capacity building measures at the national level prioritising the following:

- Addressing of organisational development issues related to:
 - The humanitarian-development nexus (e.g. integration of nutrition in disaster preparedness, disaster management and resilience-building strategies and plans).
 - Operationalisation of new SUN Yemen governance structures (e.g. SUN Business Network, SUN Civil Society Network), including on-boarding of new members.
 - Strengthening of MEAL capacity within the SUN Secretariat.
 - Creation of institutional arrangements and agreements that facilitate capacity strengthening of Yemeni governmental and nongovernmental institutions.
- Central line ministry leadership/stewardship related to managing and addressing the humanitarian-development nexus as the country transitions out of an emergency focus to more of a development focus.
- Evidence-informed scale-up and/or replication of best practices.
- Review of CRF/MSNAP monitoring data to identify and respond to gaps and bottlenecks related to capacity.
- Use of learning activities (see M&E plan) as forums for transfer of knowledge, skills, tools and approaches between nutrition stakeholders.

Illustrative capacity-building priorities at the governorate level

The CRF addresses capacity building measures at the governorate level prioritising the following:

- Both intrasectoral (e.g. between the ministry and international organisations/development partners working within the same sector in each governorate) and intersectoral coordination (e.g. joint work in areas of synergy, such as WASH and nutrition in schools), including the formal structures (e.g. Nutrition Units/Focal Points) to support coordination related to microplanning, targeting, data reporting, performance improvement and programme/project evaluation. As stated in the chapter on Institutional Arrangements, there already exist structures and mechanisms at a subnational level that can be enhanced to support multi-stakeholder nutrition action at the lowest implementation level (see subsection on ‘Leveraging of Existing Mechanisms and Institutional Arrangements’).

- Strengthening of technical capacities related to nutrition-specific and nutrition-sensitive service delivery / programme implementation (including but not limited to the numbers and competency of human resources and the availability of essential commodities and equipment for nutrition programming and service delivery).
- Supervisory and quality assurance / quality improvement capacities.

Illustrative capacity-building priorities at the frontline/community level

The CRF mentions strengthening frontline service provision in different ways, including:

- Expansion of the numbers of trained frontline workers (e.g. community health workers, school health supervisors, community outreach teams).
- Strengthening of capacities of existing cadres of frontline workers.
- Strengthening of community capacity (e.g. through awareness raising and behaviour change interventions).

Advocacy Strategy and Action Plan

The Advocacy Strategy and Action Plan, accompanying the MSNAP, has been developed in close consultation with all relevant stakeholders that potentially engage in policy-level advocacy work related to nutrition in Yemen. These include representatives of the main government sectors covered in the MSNAP (Health, Education, Water, Agriculture, Livestock, Fisheries) and relevant development partners, as well as representatives of the CSO network. They all contributed to the strategic and programmatic content and details for the strategy and work plan.

The overall goal of the Advocacy Strategy and Action Plan is to change policy, priorities and decision-making practices to support a cost-effective and multisector approach to reduce all forms of malnutrition in Yemen.

The advocacy strategy promotes the establishment of an enabling policy and operational environment and the institutional architecture for a multisectoral platform to engage actors of key sectors—mainly health, water and environment, agriculture, livestock, fisheries and education—to contribute effectively to achieve the commonly agreed nutrition targets. It prioritises, sensitises and raises awareness on the importance of addressing malnutrition. It lays the foundations to transition from a predominantly humanitarian, short-term approach to nutrition to a nationally driven, midterm and longer-term effort to scale up nutrition interventions with a development focus.

The advocacy strategy contributes to (i) increasing access to essential maternal and newborn health and nutrition services, predominantly defined under the MSNAP Priority Area 1; (ii) increasing coverage of coordinated nutrition-sensitive interventions across all sectors, as formulated under the MSNAP Priority Area 2; and (iii) strengthening government leadership, national policies and capacities, as well as strengthening the institutional architecture for multisectoral nutrition, as defined under Priority Area 3 of the MSNAP.

The advocacy strategy will support the creation of an enabling environment for the implementation of the MSNAP by pursuing the following specific objectives:¹¹

1. **Foster buy-in and leadership for a multisector approach to nutrition** by raising awareness amongst policymakers and decision-makers within relevant planning and technical institutions on the importance of alleviating malnutrition. This is to allow decision-makers to recognise their opportunities and roles as well as challenges to effective contribution. This is to (a) prioritise nutrition amongst the many competing priorities brought on by the development and humanitarian challenges and (b) establish an environment that supports the scale-up of high-impact interventions.
2. **Promote a supportive policy, regulatory and operational environment**, with particular attention to the nutrition-specific environment.
3. **Support the creation of a governance structure that effectively supports a multisector approach** by advocating for the establishment of a multisector governance body to coordinate priority nutrition interventions, multisector platforms at the governorate level and strengthened cross-sector and multi-stakeholder information management to enable actors at governorate and national levels to make informed decisions.
4. **Advocate for mobilising resources** by securing government's human, technical and financial resources required to implement the MSNAP and address gaps as needed; advocating for medium- and long-term investments for nutrition; and hence, support incorporation of nutrition into the relevant resource and budget mobilisation plans.
5. **Create accountability and generate demand for nutrition services** by empowering communities, media and civil society organisations to hold stakeholders accountable for their commitment to increasing nutrition services for women and children. This focuses on direct nutrition interventions, which are mainly under the domain of the MOPHP and partners and, to some extent, the MOE but could be expanded to other sectors. It includes raising public awareness on matters related to maternal and child nutrition and governmental and partner efforts and commitments to services addressing those needs.

The time frame for this advocacy strategy is three years, in line with the implementation of the MSNAP. It, however, lays the ground for a longer-term continued coordination and engagement of the health, education, agriculture, fisheries and WASH partners for the implementation of multi-stakeholder efforts to combat malnutrition in Yemen.

Financial Overview (Costing)

Process of the costing exercise

The updated costing of the MSNAP and its CRF builds on the new cost-readiness assessment, methodology and costing exercise conducted in 2018. This second phase applies the same methodology as the previous one and estimates the costs of the newly added or updated activities presented in the updated CRF, developed over the second half of 2019.

This second phase of the costing exercise, implemented between July 2019 and January 2020, included the following steps:

1. Orientation workshop involving stakeholders from all sectors presenting and discussing the updated CRF, the objectives of the Multisectoral Plan and the Costing Exercise, and presenting again the methodology that will be used to generate the costs of the activities.
2. In-depth sectoral and bilateral consultations with Government focal points and representatives of partner organisations in order to finalise the targets, estimated unit and total costs.

Information and results were gathered using templates that listed goals, objectives, intermediate output, activities, subactivities and targets per year and requested estimated unit costs of activities or subactivities. After finalisation of the detailed costs, subactivity-level costs were totalled to present the aggregated costs at the activity level.

In total, about 15 round table discussions were held. About three of these sessions were conducted on average with each ministry (MOE, MOFW, MOWE, MOAI and MOPHP) to review, discuss and agree the subactivity costs. This was followed by eight additional consultations to finalise the aggregated costs. A workshop was held to obtain more in-depth background data and get information on activities to be added by a Department of Food Safety, a newly established Department under the MOPHP. After the workshop, more bilateral consultations took place.

The main stakeholders in the costing process involved were the MOAI, MOE, MOFW, MOPHP, MOWE and UNICEF, WHO, WFP and FAO, as well as development and humanitarian focal points. The process was coordinated and led by MOPIC, its SUN team and consultants supported by the international consultants of MQSUN⁺.

Methodology of the costing

The main method used to calculate the estimated costs was the microcosting or ingredient approach. This is the preferred approach and can be used when details, such as the cost per unit, beneficiary or activity, are available. The unit cost is multiplied by the number of units of the resource. The unit cost includes the costs incurred to produce or deliver one unit of a particular product or service. Unit costs include the value of labour for the activity (e.g. management and/or consultants), commodities, supplies such as material production (e.g. sign boards) and other overhead costs (e.g. maintenance, utilities). For example, the cost per rehabilitated well is estimated to be \$3,000; this unit cost is then multiplied by the number of wells to be rehabilitated.

Methodological steps taken to estimate costs are as follows:

- 1) Unit costs were multiplied by the number of beneficiaries for each activity.
- 2) Costs of subactivities were aggregated to present costs of activities. Total and annual costs by priority areas, goals, objectives and activities are presented in the CRF matrix. The annual and total costs, as well as costs per priority area, as well as the goal and disaggregation between nutrition-specific and nutrition-sensitive activities, is presented below.

Results of the costing exercise

The total costs of the MSNAP to reach the set targets within three years are estimated to be \$1.9 billion. The costliest priority area is #2 (Increase coordinated nutrition-sensitive action across relevant sectors), and the least costly is #3 (Strengthen government leadership, national policies and capacities). Table 2 presents the annual costs by priority area.

Table 2. Total and annual costs by priority area

Priority Areas	Costs (USD 000s)			
	Year 1	Year 2	Year 3	Total
1. Increase access to and utilisation of essential maternal and child health and nutrition services	229,855	227,276	219,091	676,222
2. Increase coordinated nutrition-sensitive action across relevant sectors	443,789	404,886	348,977	1,196,661
3. Strengthen government leadership, national policies and capacities	686	521	430	1,636
Total	674,330	632,676	568,498	1,874,519

Table 3 shows the total costs of nutrition-specific activities. The total cost is \$676 million and the costliest strategic goal, or cost driver, is #2 ('Scaled-up quality and quantity of nutrition-specific services'), followed by #3 ('Scaled-up quality and quantity of health services').

Table 3. Cost of nutrition-specific activities by goal.

Priority Area 1 – Goals 1 to 3	Costs (USD 000s)			
	Year 1	Year 2	Year 3	Total
1. Improved infant and young child feeding practices	5,891	5,711	5,731	17,333
2. Scaled-up quality and quantity of nutrition-specific services	164,191	165,594	170,949	500,734
3. Scaled-up quality and quantity of available nutrition-related health services	59,773	55,971	42,411	158,155
Total	229,855	227,276	219,091	676,222

Table 4 shows that nutrition-sensitive activities are more expensive than nutrition-specific activities and are projected to cost almost \$1.2 billion. The most expensive strategic objectives (cost drivers) are #7 ('Increased support of good nutrition and health of pupils and their families through school-based interventions') and #4 ('Increased incomes, agricultural production, productivity and quantity and quality of food consumed').

Table 4. Cost of nutrition-sensitive activities by goal.

Priority Area 2 – Goals 4 to 7	Costs (USD 000s)			
	Year 1	Year 2	Year 3	Total
4. Increased incomes, agricultural production, productivity and quantity and quality of food consumed	89,908	100,374	80,560	270,842 *

5. Expanded nutrition-sensitive programming within the MOFW	89,586	58,463	52,326	200,375
6. Improved access to safe and adequate water and sanitation services, clean environments and improved hygiene practices	48,345	48,136	40,771	137,253
7. Increased support of good nutrition and health of pupils and their families through school-based interventions	214,957	197,913	175,320	588,191
Total	443,789	404,886	348,977	1,196,661

* Of which US\$200 million is dedicated to social protection programmes and is supported through the World Bank and UNICEF.

Table 5 shows the cost of the enabling environment for nutrition-specific and nutrition-sensitive activities (i.e. strengthened government leadership, national policies and capacities). The cost is projected to cost \$1.6 million.

Table 5. Cost of strengthened government leadership, national policies, capacities

Priority Area 3 – Goals 8 and 9	Costs (USD 000s)			
	Year 1	Year 2	Year 3	Total
8. Strengthened enabling policy and legislative environment for nutrition	370	285	152	807
9. Strengthened enabling institutional architecture and mechanisms for nutrition	316	235	278	829
Total	686	520	430	1,636



LOOKING FORWARD

Way Forward and Inception Phase

The MSNAP aims for a three-year implementation phase. Following the endorsement, a six-month inception phase will allow involved stakeholders to prepare remaining details, operationalise and clarify responsibilities, initiate the implementation, establish the M&E systems and start up the accelerated actions. This section presents some immediate actions following the endorsement.

Engaging partners

The primary next steps in realising this plan will be engaging all relevant stakeholders through the SUN Yemen NSC, line ministries, SUN networks and other available avenues and platforms to start, facilitate and oversee implementation of the activities in the CRF, MEAL and advocacy plans towards addressing malnutrition in Yemen.

The SUN NSC and the SUN Secretariat will also be focal players in formalising humanitarian-development linkages related to nutrition, including joint planning, report sharing between coordination platforms and joint review of evidence to inform programming and foster accountability for results.

Rolling out the MSNAP and CRF

A road map of the rolling-out process will be developed during the inception phase. The inception phase will also allow to present the MSNAP and the CRF at the decentralised and subnational levels and facilitate decentralised planning and operationalisation.

Promoting social and behaviour change communication

The MSNAP foresees a promotion of improved practices related to nutrition, hygiene, health and other factors determining maternal and child malnutrition. An accompanying Advocacy Strategy and Action Plan focuses on sensitising and influencing decision-makers and policymakers. Complementary to the advocacy efforts, MOPIC aims to facilitate the development of a multisectoral social and behaviour change communication strategy and campaign. This activity is planned for the inception phase and will support the implementation of the MSNAP and its advocacy strategy. Communication efforts should address not only behaviours related to direct causes but also underlying and basic causes of malnutrition. This could include elements of social protection, the rights and empowerment of women, the importance of girls' education, issues of early marriage and the importance of birth spacing and its link to malnutrition.

Developing a financing plan

The financial chapter presents the total costs of the CRF implementation. Information of the actual funding status and the remaining funding gaps and priorities will be assessed. The inception phase will be used to further assess the actual funding status and pipelines, as well as opportunities to leverage existing funding sources, to specify and prioritise the additional needs and present the funding gap.

The steps in developing the financial plan are as follows:

- **Estimation of funding gap.** This requires a review of the proposed activities and costs to identify the funding status and present (i) activities that are ongoing and already funded, (ii) activities or projects that are in the pipeline, (iii) opportunities to leverage funding and (iv) activities not funded, which present the actual funding gaps. This information is important to tailor advocacy and resource mobilisation accordingly.
- **Prioritisation of activities.** This is a review to help prioritise currently unfunded activities based on need. Results will allow stakeholders to use funds wisely, focusing on the most urgent actions or gaps using the resources available whilst prioritising resource mobilisation efforts with a focus on the most urgent needs.
- **Financial management.** A reliable system of financial management will be established, managing allocations as per priorities and ensuring a smooth flow and tracking of financial resources and expenditures. The financial-management structure and system will be developed at the onset of the MSNAP implementation.

Elaborating on a nutrition budget advocacy plan

One of the objectives of nutrition advocacy is to influence political decision-makers and ensure that they take actions that strengthen and improve the financing of nutrition. The updated and detailed information on existing funding status, gaps and priorities will then inform the preparation of a nutrition budget advocacy plan as an amendment to the wider Advocacy Strategy and Action Plan, accompanying and supporting the MSNAP/CRF implementation.

Establishing the M&E system

An important next step will be the establishment of the M&E system as a valid and reliable body of evidence that can yield population-based estimates of key indicators, whilst simultaneously strengthening sectoral management information systems—a longer-term endeavour that is essential to ensure that routine monitoring data are available to all sectoral and multisectoral stakeholders.

References

Anzellini V and D'Costa B, UNICEF. 30.6 million new internal displacements in 2017, children are among the most vulnerable. <https://blogs.unicef.org/evidence-for-action/30-6-million-new-internally-displaced-people-2017-children-among-vulnerable/>. Accessed December 20, 2019.

Awlaqi W al, Al-Madhaji M. Beyond the Business as Usual Approach: Local Governance in Yemen amid Conflict and Instability. Sana'a; 2018.

Bagash T, Perezniето P, Dubai K. Transforming Cash Transfers: Beneficiary and community perspectives of the Social Welfare Fund in Yemen (pp. 109). London: Overseas Development Institute. 2012.

Bhutta ZA, Das JK, Rizvi A, Gaffy MF, Walker N, Horton S, Webb P, Lartey A, Black RE, Lancet Nutrition Interventions Review Group and the Maternal and Child Nutrition Study Group. Evidence-based interventions for improvement of maternal and child nutrition: what can be done and at what cost? *Lancet*. 2013;382(9890):452-477. doi: 10.1016/S0140-6736(13)60996-4.

Bhutta ZA, Hurrell R and Rosenberg IH. Meeting Micronutrient Requirements for Health and Development. Nestlé Nutrition Institute Workshop Series: Vol 70. Karger Medical and Scientific Publishers; 2012. Available at <https://www.nestlenutrition-institute.org/docs/default-source/china-document-library/publications/secured/e245b903badf62c834432b12ec837670.pdf?sfvrsn=0>.

Colombara D V, Cowgill KD and Faruque ASG. Risk factors for severe cholera among children under five in rural and urban Bangladesh, 2000–2008: a hospital-based surveillance study. *PLoS One*. 2013;8(1):e54395. Available at <https://doi.org/10.1371/journal.pone.0054395>.

Dewey KG, Cohen RJ. Does birth spacing affect maternal or child nutritional status? A systematic literature review. *Matern Child Nutr*. 2007;3(3):151-173.

Dyer O. Yemen: Number of children under 5 who have died from malnutrition may be as high as 85,000, says Save the Children. *BMJ*. 2018;363.

Food and Agriculture Organization of the United Nations [FAO]. Yemen Plan of Action 2018–2020 Strengthening Resilient Agricultural Livelihoods.; 2018. Available at <http://www.fao.org/3/I9054EN/i9054en.pdf>.

FAO. Emergency Livelihoods Response Plan. Rome; 2019a. Available at <http://www.fao.org/3/ca3280en/CA3280EN.pdf>

FAO. Global Information and Early Warning System: Yemen.; 2019b. Available at <http://www.fao.org/gIEWS/countrybrief/country.jsp?code=YEM>.

FAO, IFAD, UNICEF, WFP. The State of Food Security and Nutrition in the World. Rome; 2017. Available at https://docs.wfp.org/api/documents/WFP-0000106760/download/?_ga=2.140889330.1704239231.1587741672-1191686927.1575375215

Famine Early Warning System Network [FEWSNET]. Yemen Food Security Outlook Update. August, 2019.; 2019a. Available at

https://fews.net/sites/default/files/documents/reports/YEMEN_Food_Security_Outlook_Update_August2019_Final.pdf.

FEWSNET. Yemen Food Security Outlook: Large-scale assistance needs and risk of Famine (IPC Phase 5) likely to persist as war nears five years. October 2019 to May 2020.; 2019b. Available at <https://fews.net/east-africa/yemen/food-security-outlook/october-2019>. Accessed January 24, 2020.

Field Exchange Editors. Introduction to the special issue. *F Exch.* 2016;(51):1. Available at www.enonline.net/fex/51/editintro.

Global Nutrition Cluster, WFP, WHO, UNICEF. Addressing Malnutrition in Yemen. 2018. Available at <http://healthdocbox.com/Nutrition/113626164-Addressing-malnutrition-in-yemen.html>

Government of Yemen [GOY], Women National Committee. Women Development Strategy (2006-2015).; 2006. Available at <http://extwprlegs1.fao.org/docs/pdf/yem152622.pdf>.

GOY. Ministry of Planning and Development. *National Health Strategy. 2010-2025.*; 2010. Available at https://extranet.who.int/countryplanningcycles/sites/default/files/planning_cycle_repository/yemen/nat_health_strategy_-_yemen_eng.pdf

GOY. Ministry of Public Health and Population (MOPHP). *Yemen National Health Statistics Report (Annual)*. Sanaa; 2014. Available at <http://moh.gov.ye/arabic/docs/Report2014.pdf>.

GOY, Ministry of Public Health and Population [MOPHP], Central Statistical Organization (CSO) [Yemen], Pan Arab Program for Family Health (PAPFAM) and II. Yemen National Health and Demographic Survey 2013.; 2013. Available at <https://dhsprogram.com/pubs/pdf/FR296/FR296.pdf>.

GOY, Ministry of Water and Environment. National Water Sector Strategy and Investment Program II.; 2008. Available at <http://extwprlegs1.fao.org/docs/pdf/yem147103.pdf>.

GOY, Ministry of Planning and Development. National Health Strategy. Available at https://extranet.who.int/countryplanningcycles/sites/default/files/planning_cycle_repository/yemen/nat_health_strategy_-_yemen_eng.pdf 2010-2025.; 2010.

GOY, Ministry of Planning and Development and International Cooperation and International Food Policy Research Institute. Yemen Food Security Strategy: Overview and Action Plan.; 2011. Available at <http://ebrary.ifpri.org/utils/getfile/collection/p15738coll2/id/124805/filename/124806.pdf>.

GOY, Ministry of Agriculture. National Agriculture Sector Strategy. 2012 - 2016. A Promising Sector for a Diversified Economy in Yemen.; 2012a. Available at <http://extwprlegs1.fao.org/docs/pdf/yem140821E.pdf>.

GOY, Ministry of Fish Wealth. National Fisheries Strategy (2012-2025).; 2012b. Available at http://www.undp.org/content/dam/yemen/PovRed/Docs/Yemen_Fisheries%20Strategy.pdf.

GOY, Ministry of Public Health and Population [MOPHP], Central Statistical Organization (CSO) [Yemen], Pan Arab Program for Family Health (PAPFAM) and II. Yemen National Health and Demographic Health Survey. Demographic Health Survey Yemen 2013. 2013. Available at <https://dhsprogram.com/pubs/pdf/FR296/FR296.pdf>.

GOY, MOPHP, Yemen Nutrition Cluster, WHO, UNICEF, Tech RRT W. Yemen National Strategy for Social and Behaviour Change in Nutrition 2018-2021.; 2018. Available at https://reliefweb.int/sites/reliefweb.int/files/resources/National-Strategy-for-SBC-for-Nutrition_Yemen%28English-version%29.pdf.

Haddad LJ, Hawkes C, Achadi E, et al. Global Nutrition Report 2015: Actions and Accountability to Advance Nutrition and Sustainable Development. Intl Food Policy Res Inst; 2015.

Humphrey JH. Child undernutrition, tropical enteropathy, toilets, and handwashing. *Lancet*. 2009;374(9694):1032-1035.

Independent Expert Group of the Global Nutrition Report. 2018 Global Nutrition Report: Shining a light to spur action on nutrition. 2018. Available at https://globalnutritionreport.org/documents/352/2018_Global_Nutrition_Report.pdf.

International Food Policy Research Institute (IFPRI). Agriculture, Nutrition, and Health: Connecting the Dots. In: *Global Food Policy Report*. Washing DC; 2011:Chapter 6.

Institute of Medicine. Dietary Reference Intakes for Vitamin A, Vitamin K, Arsenic, Boron, Chromium, Copper, Iodine, Iron, Manganese, Molybdenum, Nickel, Silicon, Vanadium, and Zinc. Washington, D.C.: National Academy Press; 2001. Available at <https://www.ncbi.nlm.nih.gov/books/NBK222310/>.

International Organization for Migration [IOM]. IOM Provides Over 1 Million Health Consultations in Yemen Since Start of 2019. <https://www.iom.int/news/iom-provides-over-1-million-health-consultations-yemen-start-2019>. Published 2019. Accessed December 9, 2019.

International Policy Centre for Inclusive Growth. Yemen National Social Protection Monitoring Survey (NSPMS): 2012-2013.; 2014. Available at https://ipcig.org/pub/eng/NSPMS_Yemen_Executive_Summary.pdf

Jones G, Steketee RW, Black RE, Bhutta ZA, Morris SS, Group BCSS. How many child deaths can we prevent this year? *Lancet*. 2003;362(9377):65-71.

Katona P and Katona-Apte J. The interaction between nutrition and infection. *Clinical Infectious Diseases*. 2008;46(10):1582-1588. doi: 10.1086/587658.

Kozuki N, Lee ACC, Silveira MF, et al. The associations of parity and maternal age with small-for-gestational-age, preterm, and neonatal and infant mortality: a meta-analysis. *BMC Public Health*. 2013;13(3):S2 .

Mason JB, White JM, Heron L, Carter J, Wilkinson C and Spiegel P. Child acute malnutrition and mortality in populations affected by displacement in the Horn of Africa, 1997–2009. *International Journal of Environmental Research and Public Health*. 2012;9(3):791-806. doi: 10.3390/ijerph9030791.

Meijerink GW, Roza P. *The Role of Agriculture in Economic Development*. Wageningen UR; 2007.

Molitoris J, Barclay K, and Kolk M. When and where birth spacing matters for child survival: an international comparison using the DHS. *Demography*. 2019;56(4):1349-1370. doi: 10.1007/s13524-019-00798-y.

Morris CN, Lopes K, Gallagher MC, Ashraf S, Ibrahim S. When political solutions for acute conflict in Yemen seem distant, demand for reproductive health services is immediate: a programme model for resilient family planning and post-abortion care services. *Sex Reprod Heal matters*. 2019;27(2):100-111. Available at <https://www.tandfonline.com/doi/pdf/10.1080/26410397.2019.1610279?needAccess=true>

Müller O, Garenne M, Kouyaté B, Becher H. The association between protein-energy malnutrition, malaria morbidity and all-cause mortality in West African children. *Trop Med Int Heal*. 2003;8(6):507-511.

MQSUN+. An Updated Contextual Analysis of the Nutrition Situation in Yemen.; 2018.

Office for the Coordination of Humanitarian Affairs [OCHA], United Nations. Consolidated Appeals Process (CAP): Humanitarian Response Plan 2010 for Yemen.; 2009. Available at <https://reliefweb.int/report/yemen/consolidated-appeals-process-cap-humanitarian-response-plan-2010-yemen>

OCHA, United Nations. Yemen Humanitarian Response Plan January - December 2019.; 2019. Available at https://reliefweb.int/sites/reliefweb.int/files/resources/2019_Yemen_HRP_V21.pdf.

Olney D, Geilli A, Bliznashka L. *Making WFP's Programmes More Nutrition-Sensitive*. Rome; 2017.

Population Reference Bureau. *The Effect of Girls' Education on Health Outcomes*. Washington, DC; 2011.

Rodríguez L, Cervantes E and Ortiz R. Malnutrition and gastrointestinal and respiratory infections in children: a public health problem. *International Journal of Environmental Research and Public Health*. 2011;8(4):1174-1205. doi: 10.3390/ijerph8041174.

Ruel MT, Alderman H, Group M and CNS. Nutrition-sensitive interventions and programmes: how can they help to accelerate progress in improving maternal and child nutrition? *Lancet*. 2013;382(9891):536-551.

Scaling Up Nutrition. Checklist on the Criteria and Characteristics of 'Good' National Nutrition Plans. Geneva; 2018. Available at: <http://scalingupnutrition.org/wp-content/uploads/2016/12/Scaling-Up-Nutrition-Quality-national-plan-checklist.pdf>

United Nations Children's Fund [UNICEF]. UNICEF's approach to scaling up nutrition for mothers and their children. Discussion Paper. 2015. Available at https://www.unicef.org/nutrition/files/Unicef_Nutrition_Strategy.pdf.

UNICEF. *Low Birthweight Data*.; 2018. Available at: <https://data.unicef.org/data/low-birthweight-sowc/>.

United Nations Development Programme [UNDP]. Human Development Index. Dataset. 2017. Available at <http://hdr.undp.org/en/data>. Published 2017. Accessed July 20, 2019.

World Bank. Primary school. Male enrollment. Databank. <http://databank.worldbank.org/data/home.aspx>. Published 2016. Accessed August 28, 2017.

World Bank. Child Mortality. Yemen. Databank. <http://databank.worldbank.org/data/home.aspx>. Published 2016. Accessed August 28, 2017.

World Bank. Health expenditure, total (% of GDP): Yemen. <https://data.worldbank.org/indicator/SH.XPD.PUBL.ZS>. Published 2018. Accessed August 2018, 2017.

World Bank. Fact Sheet May 2019, Yemen Emergency Crisis Response Project - Fourth Additional Financing.; 2019. Available at <https://www.worldbank.org/en/news/factsheet/2019/05/14/yemen-emergency-crisis-response-project-fourth-additional-financing>.

World Food Programme [WFP]. The State of Food Security and Nutrition in Yemen: Comprehensive Food Security Survey 2012. Rome; 2012. Available at <https://documents.wfp.org/stellent/groups/public/documents/ena/wfp247832.pdf?iframe>.

WFP. Yemen Interim Country Strategic Plan (2019 - 2020).; 2019. Available at <https://www.wfp.org/operations/ye01-yemen-interim-country-strategic-plan-2019-2020>.

WFP, FAO, UNICEF, Food Security Cluster and Government of Yemen. Emergency Food Security and Nutrition Assessment.; 2017. Available at https://www.humanitarianresponse.info/sites/www.humanitarianresponse.info/files/documents/files/yemen_efsna_-_full_report_final_2016.pdf.

WFP and World Bank. Yemen MVAM Bulletin No. 45, May 2019. Available at <https://docs.wfp.org/api/documents/WFP-0000106098/download/>.

World Health Organization [WHO]. Yemen. WHO Annual Report 2017.; 2017. Available at <https://www.who.int/emergencies/crises/yem/yemen-annual-report-2017.pdf?ua=1>.

World Health Organization [WHO]. Reducing Stunting in Children: Equity Considerations for Achieving the Global Nutrition Targets 2025. Geneva; 2018. Available at <https://apps.who.int/iris/bitstream/handle/10665/260202/9789241513647-eng.pdf?sequence=1>.

World Health Organization [WHO]. Outbreak Update – Cholera in Yemen, 1 September 2019; 2019. Available at <http://www.emro.who.int/pandemic-epidemic-diseases/cholera/outbreak-update-cholera-in-yemen-1-september-2019.html>.

WHO and UNICEF. Yemen: WHO and UNICEF Estimates of Immunization Coverage: 2018 Revision.; 2019. Available at https://www.who.int/immunization/monitoring_surveillance/data/yem.pdf.

WHO, UNICEF and USAID. Improving nutrition outcomes with better water, sanitation and hygiene: practical solutions for policies and programmes.; 2015. Available at https://apps.who.int/iris/bitstream/handle/10665/193991/9789241565103_eng.pdf;jsessionid=52A6E51FBE0754DB028246C533FCD52C?sequence=1.

Wright J. Essential Health Services: Yemen. Essential Health Services Snapshots Series. 2015. Washington DC; 2015. Available at <https://www.hfgproject.org/essential-package-of-health-services-country-snapshot-yemen/>.

Yemen Nutrition Cluster. Yemen Nutrition Cluster Advocacy Strategy 2018-2020.; 2018. Available at <https://reliefweb.int/sites/reliefweb.int/files/resources/Yemen%20NC%20Advocacy%20Strategy%202018-2020%20FINAL.pdf>.

