



Government of Malawi  
Ministry of Health

# NATIONAL NUTRITION CARE, SUPPORT, AND TREATMENT OPERATIONAL PLAN 2018–2022



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## Preface

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Malnutrition remains a major public health problem in Malawi and is compounded by the high prevalence of infections, such as HIV and tuberculosis (TB). The Government of Malawi (GOM) recognises the important role that food and nutrition interventions play in the care and treatment of these diseases and is therefore committed to delivering effective food and nutrition interventions.

The GOM developed the 2<sup>nd</sup> Edition of the National Guidelines on Nutrition Care, Support, and Treatment (NCST) for Adolescents and Adults in 2014. In 2017, the guidelines were updated to include lessons learned and align with the 2<sup>nd</sup> Edition (2016) of the Guidelines for Community-Based Management of Acute Malnutrition (CMAM) and the 3<sup>rd</sup> Edition (2016) of the Malawi Guidelines for Clinical Management of HIV in Children and Adults.

NCST services provide a comprehensive set of nutrition interventions aimed at preventing and managing undernutrition and overnutrition in adolescents and adults at various service delivery points in health facilities and communities. In addition, NCST services promote the linkage and referral of clients between the health facility and community-based health, nutrition, economic strengthening, livelihoods, and food security interventions.

This National NCST Operational Plan 2018-2022 outlines an overarching implementation framework for improving access and coverage of quality nutrition services for adolescent (15-18 years) and adult (19 years and older) people living with HIV (PLHIV) and TB clients in Malawi. The operational plan was developed through a consultative process with local and external technical experts.

Under the leadership of the MOH, all nutrition partners will be instrumental in supporting the implementation of the outlined priority actions over the five-year period of this plan. The National NCST Operational Plan 2018–2022 will be implemented alongside the National Multi-Sector Nutrition Policy 2017–2021, the National Multi-Sector Nutrition Strategic Plan 2017–2021, the Health Sector Strategic Plan II 2017-2022 and the National HIV Strategic Plan 2015-2020. It is envisaged that these concerted efforts will contribute to improvements in national nutrition and health outcomes.



**Dr. Charles Mwansambo**  
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## Abbreviations and Acronyms

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ABC	Activity-based Costing
CMAM	Community-based Management of Acute Malnutrition
CMED	Central Monitoring and Evaluation Division
CSB+	Corn Soya Blend Plus
DHS	Demographic and Health Survey
DHIS-2	District Health Information Software – Version 2
DHMT	District Health Management Teams
DNHA	Department of Nutrition, HIV and AIDS
DIP	District Implementation Plan
FANTA	Food and Nutrition Technical Assistance III Project
HMIS	Health Management Information System
HSA	Health Surveillance Assistant
HSSP II	Health Sector Strategic Plan II 2017-2022
LOE	Level of Effort
MAM	Moderate Acute Malnutrition
MICS	Multiple Indicator Cluster Survey
MUAC	Mid-Upper Arm Circumference
M&E	Monitoring and Evaluation
NCST	Nutrition Care Support and Treatment
NECS	Nutrition Education and Communication Strategy
NGO	Non-governmental Organization
MOH	Ministry of Health
OP	Operational Plan
P&C	Planning and Costing
PLW	Pregnant and Lactating Women
RUTF	Ready-to-Use Therapeutic Food
SAM	Severe Acute Malnutrition
SFP	Supplementary Feeding Programme
SUN	Scaling Up Nutrition
TNP	Targeted Nutrition Program
TOT	Training of Trainers
TOR	Terms of Reference
USAID	United States Agency for International Development
US\$	U.S. dollar
WFP	World Food Programme
WHO	World Health Organization

# 1 Introduction

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## 1.1 Background

Malnutrition remains a major public health problem in Malawi and is compounded by the high prevalence of infectious diseases, such as HIV and tuberculosis (TB). HIV infection causes progressive destruction of the immune system and predisposes people to opportunistic infections and malnutrition. Infection also increases nutritional needs while at the same time increasing nutrient losses and reducing intake and absorption. The subsequent deterioration of nutritional status affects the immune system and continues the cycle of disease progression and further worsening of nutrition status (Katona 2008).

According to a World Health Organisation (WHO) technical consultation on nutrient requirements for people living with HIV (PLHIV), energy requirements increase by 10 percent to maintain body weight and physical activity in asymptomatic HIV-infected adults and for growth in asymptomatic children. During the symptomatic stage, however, the energy requirements increase by approximately 20 to 30 percent to maintain the adult body weight and by 50 to 100 percent over normal requirements in children to prevent weight loss. Adequate nutrition is therefore critical to maximise the chances of slowing disease progression, especially as nutrition builds and maintains optimal immune function (WHO, Geneva 2003).

The 2015-2016 Malawi Demographic and Health Survey estimated the prevalence of HIV among adolescents and adults 15 to 64 years at 8.8 percent (National Statistics Office, Malawi and ICF 2017). The survey showed that there are variations in the prevalence among women and men (10.8 percent in women and 6.4 percent in men), and across the three geographic regions of the country (5.1 percent in the North, 5.6 percent in the Central and 12.8 percent in the South). The prevalence is also twice as high in urban areas as compared to rural areas (14.6 and 7.4 percent, respectively). The Government of Malawi (GOM) recognises the important role that food and nutrition play in the care and treatment of infectious diseases and it is therefore committed to delivering effective food and nutrition interventions to those in need.

## 1.2 Rationale for the Operational Plan

Recognising the critical role that nutrition plays in the care and treatment of infectious diseases, such as HIV and TB, the Ministry of Health (MOH) developed the National Guidelines on Nutrition Care, Support, and Treatment (NCST) for Adolescents and Adults. The NCST guidelines instruct service providers on how to improve the quality of nutrition services through the integration of a set of client-centred, priority nutrition interventions as part of routine health service delivery.

As of September 2017, NCST services were provided in 211 out of total 726 health facilities across the country, which represents a 29 percent geographical coverage of service delivery. The absence of a costed national NCST operational plan has hampered efforts to advocate and mobilise resources for the scale-up of services to additional facilities and districts. The MOH has therefore developed this 5-year national NCST operational plan to guide the government and its partners to effectively plan and implement activities; accelerate the institutionalization and integration of service delivery within the health system; and provide a monitoring and evaluation (M&E) framework for implementation over the next five years. The operational plan is grounded in evidence from past achievements, lessons learned, and analysis of implementation gaps. It is aligned with the National Multi-Sector Nutrition Policy 2017-2021 and the Health Sector Strategic Plan II (HSSP II) 2017-2022.

### 1.3 Scope of the Operational Plan

The NCST operational plan guides overall operations at the national, district, and facility levels and sets priorities for the next five years. The plan is designed to resolve existing challenges identified through a situational analysis and consultation with stakeholders. The plan recognises the practical realities of delivering nutrition services to adolescent and adult PLHIV and TB clients in Malawi. It takes into consideration issues of coordination, supply chain management, financing, governance, sustainability, and advocacy. It also emphasises the use of measurable indicators with set targets to determine progress and ensures that those most in need of services have access. Lastly, the operational plan outlines the costs needed to implement each of the prioritised actions.

### 1.4 Goal

To increase access and coverage of quality nutrition services for adolescent (15-18 years) and adult (19 years and older) PLHIV and TB clients as well as other patients presenting at health facilities with various forms of illness.

### 1.5 Objectives

The following seven objectives will help to increase access and coverage of quality nutrition services to adolescents and adults. Each of the objectives presented below has a corresponding strategic action area outlined in section 3 and an M&E plan detailed in section 4 of the operational plan.

1. Improve availability and access to NCST supplies and equipment
2. Increase competence and responsiveness of NCST workforce
3. Increase the quality and geographical coverage of NCST service delivery
4. Improve monitoring, evaluation, and information management
5. Strengthen leadership and governance of NCST services
6. Increase resource mobilization and financing of NCST services
7. Intensify NCST services to respond to emergency and humanitarian situations

### 1.6 Guiding Principles

The implementation of the National NCST Operational Plan 2018–2022 will be guided by a set of principles that are relevant to all strategic action areas. These principles are:

- **Equity:** NCST services shall be provided to all vulnerable adolescents and adults in need regardless of gender, class, caste, ethnicity, or sexual orientation. Service delivery shall ensure adequate and effective coverage in poor and hard-to-reach locations.
- **Gender equality and empowerment:** The design and implementation of NCST services shall be non-discriminatory in addressing the nutritional needs of girls, boys, women, and men. The design and implementation of services shall have a gender lens and shall promote male involvement and female empowerment for improved nutritional outcomes.
- **Health systems strengthening:** NCST services will be provided in an integrated manner that links facility and community-based health and nutrition services along a continuum of care. The integrated health systems strengthening approach will involve human resources, health financing, governance, health information systems, supply chains, and service delivery.
- **Effective coordination and partnerships:** All NCST activities pertaining to policy and coordination will be coordinated through the Department of Nutrition, HIV and AIDS (DNHA) whilst the MOH Nutrition Unit shall facilitate program implementation and scale up. Effective

inter- and multi-sectoral linkages will be created not just within health but also with other sectors, such as education, health, agriculture, and social welfare. The government will also endeavour to build and strengthen partnerships with multiple stakeholders, including the private sector and development partners.

- **Evidenced-based interventions:** NCST service delivery will be informed by scientifically tested strategies and best practices that are most likely to lead to optimal outcomes.
- **Community empowerment and participation:** Partnering with and empowering communities with knowledge and skills to address undernutrition and overnutrition, particularly within the context of infectious diseases, will result in better outcomes and engender community acceptance and ownership of NCST services.
- **Sustainability:** NCST service delivery is designed to be sustainable. The government, health institutions, and the domestic private sector will be pro-actively engaged in ensuring the sustainability of service delivery.
- **Emergency preparedness and response.** During emergency and humanitarian situations, delivery of NCST services will be integrated within the humanitarian response plans and efforts so that services are intensified to meet the nutrition needs of the affected populations through early case identification, referral, and provision of quality, life-saving treatment, care, and support.

## 2 Process of Developing the Operational Plan

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This National NCST Operational Plan 2018–2022 was developed through a participatory process involving national-, zonal-, district-, and facility-level stakeholders. To develop the operational plan, three main steps were undertaken: a situational analysis of NCST service delivery, development of the operational plan, and costing of the operational plan. Each of the three steps is described below.

### 2.1 Situational Analysis of NCST Service Delivery

The initial step in developing the NCST operational plan involved conducting a situational analysis that included document review, key informant interviews and consultations with facility-based service providers as well as district and national level service providers and managers. The overall goal of the situational analysis was to identify and document strengths, bottlenecks, opportunities, and lessons learned from the initial phase of NCST implementation.

### 2.2 Development of the Operational Plan

Following the situational analysis, recommendations were synthesised and used to develop priority strategic actions for implementation over the next five years, organised under the seven strategic action areas. Six of the seven prioritised strategic action areas are founded on the WHO health system strengthening framework; it is envisioned that implementation of the actions will lead to an improvement in quality nutrition service delivery to adolescents and adults, and also contribute to strengthening the broader health system.

### 2.3 Costing the Operational Plan

Finally, the Nutrition Assessment, Counselling, and Support (NACS) Planning and Costing (P&C) Tool developed by FANTA was used to cost the operational plan. The Microsoft Excel-based NACS P&C Tool assists program managers and implementers responsible for designing, financing, and managing NACS (referred to as NCST in Malawi) at national and sub-national levels with estimating the human, material, and financial resources to establish and maintain NACS services. Estimates of inputs and costs are generated using the activity-based costing approach (Baker 1998) in which NCST services were divided into seven activity categories (service delivery, training, supervision, commodities, logistics, start-up governance, and routine governance).

In the costing step, a series of activities were undertaken including: collection and analysis of programmatic and epidemiological data; stakeholder participation to reach consensus on the costs and assumptions used; and, training of national, zonal, and district nutrition managers on the costing process.

Several assumptions were made, including scope and scale of health facilities delivering NCST services; epidemiological assumptions including estimated annual caseload of clients who are severely and moderately undernourished, normal nutritional status, overweight and obese; and programmatic assumptions including the number of years NCST will be implemented; geographical scope; distances; prices of commodities and equipment; and roles and responsibilities of providers at the different levels of the health system.

Stakeholders agreed that costing should be done in U.S. dollars due to the current instability of the Malawi Kwacha. Costs presented cover the direct cost of implementing NCST at the facility, district, zonal, and national levels. They do not include the cost of partner staff level of effort needed to support service delivery.

### 3 Operational Plan Strategic Action Areas

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This section describes the prioritised seven strategic action areas which are: improve availability and access to NCST commodities; increase competence and responsiveness of NCST workforce; improve quality and geographical access to NCST service delivery; improve monitoring, evaluation and information management; strengthen leadership and governance of NCST services; increase resource mobilisation and financing of NCST services; and intensify NCST services to respond to emergency and humanitarian situations. Under each of the strategic action areas, key actions and their cost estimates are presented.

It is envisioned that district health management teams (DHMTs) will adapt and prioritize the key activities to be included in the district implementation plans based on their district-specific needs.

#### 3.1 Improve Availability and Access to NCST Supplies and Equipment

An effective and efficient NCST commodity management system is essential for quality of service delivery. Health facilities providing NCST services should have a consistent supply of the necessary equipment, supplies, and food commodities such as ready-to-use therapeutic food (RUTF), supplementary food including corn soya blend plus (CSB+), and vegetable oil. In addition, equipment and supplies such as weighing scales, height measuring equipment, mid-upper arm circumference (MUAC) tapes, technical reference materials, and job aids should be available for service delivery. According to the situational analysis, the majority of health facilities delivering NCST services reported having the necessary equipment, though widespread stock outs of RUTF, CSB+, and vegetable oil were reported.

Therapeutic and supplementary food commodities have been incorporated into the MOH essential drugs and supplies list, allowing for procurement and distribution by government departments and agencies; however, the commodities are not currently prioritised in planning or budgetary allocation. All therapeutic and supplementary food commodities are procured and distributed by partners. There are also challenges with the capacity of the Central Medical Stores (CMS) to procure and distribute therapeutic and supplementary food commodities along the supply chain.

There is local capacity to produce RUTF and CSB+ that can help meet the increased national demand to support NCST and community-based management of acute malnutrition (CMAM) service delivery. However, local therapeutic and supplementary food producers face challenges including the long turnaround time for quality control approval and the lack of a local, internationally certified laboratory to conduct quality control checks. In addition, there is little harmonisation and integration of the RUTF supply chain management systems, with different stakeholders involved in procuring and distributing NCST and CMAM commodities and running parallel RUTF pipelines. Also, government service providers, pharmacists, and managers are not empowered to forecast their commodity needs at the various levels as this is usually done by partner organisations.

Based on the identified challenges and in line with the recommendations set out in the national NCST guidelines, this operational plan aims to establish and strengthen systems that will improve availability and access to NCST supplies and equipment. Prioritised actions towards achieving this goal are listed in Table 3.1.

Table 3.1: Prioritised Actions to Improve Availability and Access to NCST Supplies and Equipment

1. Coordinate NCST with CMAM therapeutic and supplementary food commodity management
2. Procure therapeutic food commodities for adolescent and adult PLHIV and TB clients
3. Procure supplementary food commodities for adolescent and adult PLHIV and TB clients
4. Procure NCST supplies and equipment
5. Conduct annual planning and quantification of NCST supplies and equipment with all stakeholders
6. Train facility-based service providers, pharmacists and managers on NCST supply chain management
7. Establish sufficient and safe storage of therapeutic and supplementary food commodities at central, district and facility levels
8. Improve efficiency of delivery of therapeutic and supplementary food commodities by ensuring last mile delivery to the beneficiary

Table 3.2: Cost of Prioritised Actions: Supplies and Equipment

	Year 1 (US\$)	Year 2 (US\$)	Year 3 (US\$)	Year 4 (US\$)	Year 5 (US\$)
<b>Action 1</b>					
Coordination meetings for NCST and CMAM commodity management	2,316	2,316	2,316	2,316	2,316
<b>Action 2</b>					
Therapeutic food commodities – adolescents (15-18)	8,364	11,472	13,953	13,275	14,019
Therapeutic food commodities – adults (19 years and above)	2,379,678	3,265,568	3,973,134	3,772,690	3,983,402
<b>Action 3</b>					
Supplementary food commodities – adolescents (15-18)	17,288	23,720	28,856	23,907	25,245
Supplementary food commodities – adults (19 years and above)	4,918,187	6,749,089	8,211,427	6,801,766	7,181,660
Supplementary food commodities – pregnant women and lactating women (up to 6 months post-partum)*	869,887	1,193,717	1,452,362	1,206,688	1,274,086
<b>Action 4</b>					
NCST supplies and equipment	1,430,328	1,504,031	1,756,060	2,014,738	1,935,192
<b>Action 5</b>					
Annual national planning and quantification workshop	7,590	7,590	7,590	7,590	7,590
<b>Action 6</b>					
Logistics management training for facility-based service providers and pharmacists	606,998	301,398	261,173	207,641	167,187
Logistics management training for managers	92,458	92,458	92,458	92,458	92,458
<b>Action 7</b>					
Storage of therapeutic food—cost of renting space	6,952	9,540	11,607	11,021	11,637
Storage of supplementary food—cost of renting space	71,647	98,319	119,622	99,223	104,765
<b>Action 8</b>					
Transport of therapeutic food	240,204	329,624	401,044	380,814	402,084
Transport of supplementary food	2,185,810	2,999,522	3,649,436	3,026,420	3,195,453
<b>Total Cost</b>	<b>12,837,707</b>	<b>16,588,364</b>	<b>19,981,038</b>	<b>17,660,547</b>	<b>18,397,094</b>

\* Note that supplementary food commodities for pregnant women and lactating women (up to 6 months post-partum) are also planned and costed for in the National CMAM Operational Plan 2017-2021.

### 3.2 Increase Competence and Responsiveness of NCST Workforce

A responsive, sufficient, competent and productive workforce that is equitably distributed and given necessary resources is critical to obtaining optimal health and nutrition outcomes. Achieving this goal requires addressing multiple factors: availability of adequate numbers of well-trained and equitably distributed health care providers, such as medical officers, clinical officers, medical assistants, nurses/midwives, health surveillance assistants (HSAs), nutritionists, and dieticians; and availability of treatment protocols and technical reference materials.

The situational analysis revealed several challenges concerning human resources responsible for delivering NCST services. Most of the districts and health facilities visited had a limited number of service providers trained in NCST. Health facilities supported by implementing partners were more likely to receive training and frequent mentorship and supervision compared to those without partner support. Lack of trained service providers, limited mentoring and supervision, and the high staff attrition were considered to be the main limiting factors to quality NCST service delivery. District managers also indicated lack of supervision tools, financial resources, and inadequate transport as the major deterrent to conducting frequent mentoring and supervision to health facilities and communities.

The prioritised activities listed in Table 3.3 aim at strengthening the competence and responsiveness of service providers in delivering NCST services. The activities also include continued mentoring and supportive supervision to reinforce knowledge and skills acquired through pre-service and in-service training.

*Table 3.3: Prioritised Actions to Increase the Competence and Responsiveness of NCST Workforce*

1. Review the current pre-service training curricula for health professionals (doctors, nurses, clinicians, and HSAs) to understand gaps and recommend areas to be updated
2. Provide technical updates to the pre-service training curricula for doctors, nurses, clinicians, and HSAs to include NCST theory and practice
3. Conduct NCST training for pre-service tutors and lecturers teaching in the medical, nursing and HSA training institutions
4. Conduct NCST in-service training for service providers at the health facilities
5. Conduct NCST training for national, zonal, and district coaches and managers
6. Train National Association for People Living with HIV/AIDS in Malawi (NAPHAM) national and district caretakers on NCST
7. Train community-based support group leaders and facilitators on NCST
8. Document NCST district, facility, and community-based training information in TrainSMART
9. Conduct mentorship and supportive supervision visits for NCST
10. Hold quarterly district coordination meetings with support group leaders and facilitators

Table 3.4: Cost of Prioritised Actions: Competence and Responsiveness of NCST Workforce

Item	Year 1 (US\$)	Year 2 (US\$)	Year 3 (US\$)	Year 4 (US\$)	Year 5 (US\$)
<b>Action 1</b>					
Review of the pre-service training curricula for health professionals*	22,953	--	--	--	22,953
<b>Action 2</b>					
NCST technical update workshops with medical, nursing, HSAs and other health professional training schools*	6,995	--	6,995	--	6,995
<b>Action 3</b>					
NCST training for lecturers and tutors in medical, nursing, HSA, and other health professional training schools	30,655	30,655	30,655	30,655	30,655
<b>Actions 4-7</b>					
NCST in-service training for service providers at the health facilities	790,613	1,013,284	1,177,407	1,251,082	1,262,615
NCST training for district coaches and managers	166,989	159,531	159,531	159,531	159,531
NCST training for national and zonal coaches and managers	28,024	13,010	28,024	13,010	28,024
NCST training for NAPHAM national and district care takers	37,031	--	--	--	--
NCST training for community-based support group leaders and facilitators	141,577	141,577	141,577	141,577	141,577
<b>Action 8</b>					
No additional cost required. Included in national level routine governance and training costs.					
<b>Action 9</b>					
Mentoring and supportive supervision from district to facilities	35,502	44,317	51,123	53,710	53,553
Mentoring and supervision from national to the district level	4,515	3,810	3,810	3,810	3,810
Mentoring and supervision for community-based support groups	120,269	120,269	120,269	120,269	120,269
<b>Action 10</b>					
Quarterly district coordination meetings with community-based support group leaders and facilitators	44,791	44,791	44,791	44,791	44,791
<b>Total Cost</b>	<b>1,429,914</b>	<b>1,571,244</b>	<b>1,764,182</b>	<b>1,818,435</b>	<b>1,874,773</b>

\* Note that costs for the nutrition pre-service technical update are also included in the CMAM Operational Plan. Total costs for the pre-service update should be shared across CMAM and NCST.

### 3.3 Increase Quality and Geographical Coverage of NCST Service Delivery

To ensure universal provision of high quality NCST services to adolescent and adult clients, it is essential that services are safe, accessible and patient-centered. In Malawi, NCST services are primarily designed to be integrated within HIV and TB care and treatment. Over the past four years, the MOH and partners have focused on improving quality of nutrition services through application of modern quality assurance (QA) and quality improvement (QI) methods. This has resulted in improved use of data for programming and decision making; improved patient care and outcomes; better team work among service providers; and integration of nutrition services at ART, ANC/PMTCT and TB service delivery points.

While the application of QI and QA methods at facility level has contributed to successful implementation of NCST, there is limited referral and linkage of clients to community-based interventions including livelihoods, food security, economic strengthening, and psychosocial support. Additionally, the geographic coverage of NCST services is limited and the pace of scale up is slow. By September 2017, NCST services were implemented in a total of 211 out of 726 health facilities, in 21 out of 29 districts of Malawi. Table 3.5 shows a summary of current NCST implementation and the plan for scaling up service delivery over the next five years:

Table 3.5: NCST Scale-up Plan

Year	2018	2019	2020	2021	2022
No. Health Facilities	403	547	652	707	726
No. of Districts	29	29	29	29	29

The operational plan has prioritised the implementation of actions listed in Table 3.6 to increase the quality and geographic coverage of NCST service delivery.

Table 3.6: Prioritised Actions to Increase the Quality and Geographic Coverage of NCST Service Delivery

1. Scale-up NCST to 726 health facilities within 29 districts of Malawi
2. Establish district and facility QI teams
3. Mentor and coach district and facility QI teams on a quarterly basis
4. Conduct QI learning sessions and forums for implementing facilities every six months
5. Link NCST clients with social protection, livelihood, food security & economic strengthening interventions

Table 3.7: Cost of Prioritised Actions: Quality and Geographic Coverage of Service Delivery

Item	Year 1 (US\$)	Year 2 (US\$)	Year 3 (US\$)	Year 4 (US\$)	Year 5 (US\$)
Action 1	No additional cost required. The cost of scaling up NCST is captured in all strategic action areas				
Action 2	No additional cost required. QI training is part of the standard 10 day NCST training. See section 3.2.				
Action 3	No additional cost required. The cost of quarterly QI mentoring and coaching is already accounted for in the cost of mentoring and supervision. See Action 9 section 3.2.				
Action 4	QI learning sessions				
	355,145	481,885	574,300	622,708	639,430
Action 5	No additional cost required. Cost is part of staff LOE for time spent linking clients with social protection, livelihood, food security, and economic strengthening interventions				
<b>Total Cost</b>	<b>355,145</b>	<b>481,885</b>	<b>574,300</b>	<b>622,708</b>	<b>639,430</b>

### 3.4 Improve NCST Monitoring, Evaluation, and Information Management

Timely, accurate, and reliable NCST data and information is vital for programming and decision making. NCST data and indicators are reported and managed through the MOH District Health Information System – Version 2 (DHIS-2) software.

The situational analysis indicated that NCST data transmission from facility to district, zonal and national levels is untimely. The data quality is also poor with many facilities having inaccurate and inconsistent data. Over the past year, the MOH and partners invested in improving the quality of data capture and reporting at the facility and district level through the institutionalization of monthly and quarterly data quality assessments and audits. These data quality assurance efforts targeted districts in South East and South West Zones of Malawi. For consistent availability of quality NCST data, a robust knowledge management system, with significant investment in routine data quality assurance, needs to be put in place and supported across all health facilities in the country.

This operational plan aims to improve the monitoring, evaluation and information management of NCST by implementing actions listed in Table 3.8.

*Table 3.8: Prioritised Actions to Improve NCST Monitoring, Evaluation, and Information Management*

1. Identify operational research needs to address NCST knowledge and implementation gaps
2. Hold annual national program learning and knowledge sharing conference
3. Conduct annual national review of NCST operational plan
4. Conduct midterm and end-line evaluations of the NCST operational plan implementation
5. Conduct quarterly data quality assessments & audits (DQA) with implementing facilities and districts
6. Establish the use of mobile DHIS-2 in NCST implementing facilities
7. Provide logistical and technical support (trouble shooting) to districts and facilities in the use of DHIS-2

*Table 3.9: Cost of Prioritised Actions: Monitoring, Evaluation and Information Management*

Item	Year 1 (US\$)	Year 2 (US\$)	Year 3 (US\$)	Year 4 (US\$)	Year 5 (US\$)
<b>Action 1</b>					
Meeting to identify operational research needs	7,590	--	--	--	--
<b>Action 2</b>					
Annual learning and knowledge sharing conference	21,006	21,006	21,006	21,006	21,006
<b>Action 3</b>					
Annual national review of the NCST OP	24,914	24,914	24,914	24,914	24,914
<b>Action 4</b>					
Midterm evaluation of NCST operational plan	--	--	38,514	--	--
Endline evaluation of CMAM operational plan	--	--	--	--	38,514
<b>Action 5</b>					
Quarterly facility & district DQA	426,116	426,116	426,116	426,116	426,116
<b>Action 6</b>					
Establish the use of mobile DHIS-2 at facility level	50,000	60,000	65,000	70,000	75,000
<b>Action 7</b>					
There is no budget included for logistical support. Cost of internet access and other logistical support to operation of DHIS-2 is provided by the Central Monitoring and Evaluation Division (CMED).					
<b>Total</b>	<b>529,626</b>	<b>532,036</b>	<b>575,550</b>	<b>542,036</b>	<b>585,550</b>

### 3.5 Strengthen Leadership and Governance of NCST Services

The National Multi-Sector Nutrition Policy 2017 -2021 (DNHA 2017) and the Health Sector Strategic Plan (HSSP) II (MOH 2017) create the enabling environment for NCST service delivery. The DNHA is responsible for the coordination of NCST service delivery, while the nutrition unit of the MOH is responsible for technical oversight of NCST activities at the national and sub-national levels. At the district level, NCST activities are managed by the DHMT and coordinated by the district nutritionists/coordinators in collaboration with the ART, TB, ANC/PMTCT, HMIS and Health Promotion coordinators. At health facility level, quality improvement teams under the leadership of the health facility in-charge ensure delivery of NCST services to PLHIV and TB clients.

There are three main nutrition coordination mechanisms through which NCST activities are discussed: the National Nutrition Committee (NNC), the Targeted Nutrition Program (TNP) technical working group and the Emergency Nutrition Cluster. NCST is not well-defined in non-nutrition coordination mechanisms such as HIV, TB, agriculture, gender, and social protection. To ensure effective integration, it is essential that NCST is prominent and coordinated in other sector plans.

This operational plan has prioritised actions listed on Table 3.10 to strengthen leadership and governance of NCST services.

*Table 3.10: Prioritised Actions to Strengthen Leadership and Governance of NCST Services*

1. Update NCST guidelines and technical tools to align with new evidence including CMAM, TB, and HIV care and treatment guidelines
2. Integrate implementation of NCST with other health and non-health services including HIV, TB, reproductive health, PMTCT, health promotion, agriculture, food security and social protection
3. Strengthen coordination of NCST through the TNP and other nutrition coordination mechanisms at national, district and community levels
4. Develop quarterly NCST policy and technical briefs to share data, best practices, and lessons learned
5. Provide financial and logistical support for the NCST focal persons at national and district levels

*Table 3.11: Cost of Prioritised Actions: Leadership and Governance*

Item	Year 1 (US\$)	Year 2 (US\$)	Year 3 (US\$)	Year 4 (US\$)	Year 5 (US\$)
<b>Action 1</b>					
Update of national NCST guidelines	25,138	--	--	25,138	--
<b>Actions 2-3</b>					
Quarterly TNP technical working group meetings	3,931	3,931	3,931	3,931	3,931
<b>Action 4</b>					
Development and printing of quarterly NCST policy and technical briefs	22,000	22,000	22,000	22,000	22,000
<b>Action 5</b>					
These costs are captured in other activity budgets (e.g., training, supportive supervision, mentoring)					
<b>Total</b>	<b>51,069</b>	<b>25,931</b>	<b>25,931</b>	<b>51,069</b>	<b>25,931</b>

### 3.6 Increase Resource Mobilisation and Financing of NCST Services

NCST is primarily funded through external donor and non-government resources. The GOM provides the infrastructure used in delivering services and pays salaries for majority of the NCST workforce. Partners and donors including USAID/PEPFAR, DFID, Irish Aid, GIZ, and other private donors finance NCST equipment and supplies, in-service and pre-service training, and service delivery including quality improvement and development of technical reference materials. This funding is usually short-term, ranging between 1-3 years. There is potential for mobilising additional resources and funding from the government and other donors such as the World Bank, European Union and the Global Fund.

This operational plan has prioritised actions listed on table 3.12 to increase resource mobilisation and financing of NCST services.

*Table 3.12: Prioritised Actions to Increase Resource Mobilisation and Financing of NCST*

1. Conduct a funding gap analysis using the finalised National NCST Operational Plan 2018-2022
2. Conduct advocacy and resource mobilisation campaigns for increased awareness of NCST among national level policymakers
3. Advocate for prioritisation and allocation of funding for NCST by the government
4. Advocate for increased NCST funding from development partners

*Table 3.13: Cost of Prioritised Actions: Resource Mobilisation and Financing*

Item	Year 1 (US\$)	Year 2 (US\$)	Year 3 (US\$)	Year 4 (US\$)	Year 5 (US\$)
Actions 1-4					
Advocacy campaigns (3 per year)	31,521	31,521	31,521	31,521	31,521
<b>Total</b>	<b>31,521</b>	<b>31,521</b>	<b>31,521</b>	<b>31,521</b>	<b>31,521</b>

### 3.7 Intensifying NCST Services to Respond to Emergency and Humanitarian Situations

Climate change has had an impact on Malawi’s weather patterns, affecting agricultural productivity, household food security, and the general resilience of households to shocks. The operational plan includes estimated expenses that will be required beyond regular NCST operating costs to respond to emergencies and associated increases in NCST caseloads.

To estimate additional supply requirements during an emergency, we estimated an increased prevalence of 3.0% for severe undernutrition and 12.0% for moderate undernutrition among adolescent and adult PLHIV and TB clients in Malawi. The estimates are specific to the Malawi context and taken from routine MOH data on the highest prevalence levels recorded during the most recent humanitarian crisis experienced in 2015/2016.

*Table 3.14: Prioritised Actions to Intensify NCST Services to Respond to Emergency and Humanitarian Situations*

1. Intensify case finding through community-based groups
2. Advocate for increased resources for undernourished adolescent and adult clients
3. Procure additional therapeutic food supplies and equipment to meet the increased severe undernourished caseload
4. Procure additional supplementary food supplies and equipment to meet the increased moderate undernourished caseload
5. Conduct refresher trainings of service providers and community-based groups on NCST
6. Intensify the frequency of government and NCST partner coordination meetings
7. Intensify real-time monitoring and reporting of NCST service delivery through DHIS-2

*Table 3.15: Cost of Prioritised Actions: Illustrative Annual Emergency Budget*

Item	Annual Budget (US\$)
<b>Action 1</b>	
NCST training for NAPHAM national and district care takers	37,031
Mentoring and supervision for community-based groups	120,269
Quarterly district coordination meetings with support group leaders and facilitators	44,791
<b>Action 2</b>	
Advocacy meetings for resource mobilisation	1,966
<b>Actions 3-4</b>	
Emergency therapeutic food, storage, and transport	2,714,254
Emergency supplementary food, storage, and transport	9,030,357
<b>Action 5</b>	
Refresher training of NCST service providers	1,262,615
Refresher training of NCST community-based groups leaders and facilitators	141,577
<b>Action 6</b>	
Monthly government and NCST partner coordination meetings	11,794
<b>Action 7</b>	
Intensified real-time monitoring and reporting data through DHIS-2	60,000
<b>Total</b>	<b>13,424,654</b>

## 4 National NCST Monitoring and Evaluation Plan

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Effective and efficient implementation of the NCST operational plan depends on accurately tracking progress and performance, evaluating impact, and ensuring accountability at all operational levels. To ensure that the goal, outcomes, and objectives of the operational plan are achieved, indicators and annual targets have been identified for each prioritised activity. These indicators are included in the M&E framework presented in the tables below.

Data for the indicators detailed below should be collected per the schedules indicated in the tables and compiled by MOH on an annual basis. Each district should consolidate its NCST data, which will then be aggregated at the national level. National and district level stakeholders should use this data to review progress towards operational plan objectives and targets on an annual basis. In addition, a midterm (Year 3) and end-line (Year 5) evaluation of the operation plan shall be conducted. Guidance to districts on NCST data collection is provided in Section 6 of this plan.

Table 4.1: National NCST Monitoring and Evaluation Plan: Objective 1

Objective 1: Improve availability and access to NCST supplies and equipment													
Priority Action	Indicator	Indicator Definition	Means of Verification	Frequency	Total Target	Annual Targets					Cost (\$)	Lead Agency	Supporting Agency
						Year 1	Year 2	Year 3	Year 4	Year 5			
1. Coordinate NCST and CMAM therapeutic and supplementary food commodity management	Number of NCST and CMAM commodity management coordination meetings conducted	Measure of the number of meetings conducted, including number of people who participate in the NCST and CMAM commodity management coordination meetings.	Minutes of Meetings	Annually	10	2	2	2	2	2	11,580	MOH	Nutrition partners
2. Procure therapeutic food commodities for adolescent and adult PLHIV and TB clients	Percentage of therapeutic food commodities procured annually	Measure of the quantity of NCST therapeutic food commodities procured compared to the national need. See <b>Annexes 1</b> for the list of essential supplies and equipment.	CMS, MOH, WFP and NGO record of procured commodities	Quarterly	100%	100%	100%	100%	100%	100%	17,435,555	MOH	CMS, and nutrition partners
3. Procure supplementary food commodities for adolescent and adult PLHIV and TB clients	Percentage of supplementary food commodities procured annually	Measure of the quantity of NCST supplementary food commodities procured compared to the national need. See <b>Annexes 1</b> for the list of essential supplies and equipment.	CMS, MOH, WFP and NGO record of procured commodities	Quarterly	100%	100%	100%	100%	100%	100%	39,977,885	MOH	CMS, and nutrition partners
4. Procure NCST supplies and equipment	Percentage of essential NCST supplies and equipment procured annually	Measure of the quantity of NCST supplies and equipment procured compared to the national need. See <b>Annexes 1</b> for the list of essential supplies and equipment.	CMS, MOH, WFP and NGO record of procured commodities	Quarterly	100%	100%	100%	100%	100%	100%	8,640,349	MOH	CMS, and nutrition partners
5. Conduct annual national planning and quantification of NCST supplies and equipment with all stakeholders	Annual quantification workshops held within each MOH fiscal year, and annual NCST supplies and equipment report produced following the workshop.	Measures the number of annual quantification workshops conducted, and availability of annual NCST supplies and equipment quantification report prepared in consultation with all stakeholders (MOH, national, and district representatives, NCST partners, RUTF and CSB+/CSB+ manufacturers). See Annexes 3 and 4 for the list of supplies and equipment to be quantified annually.	Annual NCST supplies and equipment quantification report	Annually	5	1	1	1	1	1	37,950	MOH	CMS, and nutrition partners

Objective 1: Improve availability and access to NCST supplies and equipment													
Priority Action	Indicator	Indicator Definition	Means of Verification	Frequency	Total Target	Annual Targets					Cost (\$)	Lead Agency	Supporting Agency
						Year 1	Year 2	Year 3	Year 4	Year 5			
6. Train managers and service providers on NCST supplies and logistics management	Number of service providers trained on NCST supplies and logistics management	Measure of the number of facility-based service providers trained on NCST supplies and logistics management, disaggregated by sex	MOH and partner training records	Annually	2,314	1,209	444	343	209	109	1,544,397	MOH	Nutrition partners
	Number of managers trained on NCST supplies and logistics management	Measure of the number of district-, zonal-, and national-level managers trained on NCST supplies and logistics management, disaggregated by sex	MOH training records	Annually	725	145	145	145	145	145	462,290	MOH	Nutrition partners
7. Establish sufficient and safe storage facilities at central, district, and facility levels	Percentage of health facilities and districts with adequate storage space for therapeutic and supplementary food supplies	Measure of health facilities and districts with sufficient storage space to accommodate at least 2-month supply of therapeutic and supplementary food for estimated caseload	MOH national and district records	Quarterly	100%	50%	100%	100%	100%	100%	544,333	MOH	Nutrition partners
8. Improve efficiency of delivery of therapeutic and supplementary food commodities by ensuring last mile delivery to the beneficiary	Percentage of severely and moderately undernourished clients who receive therapeutic and supplementary food	Proportion of clients who receive nutrition assessment and classified as severely and moderately undernourished, who receive therapeutic and supplementary food commodities during the reporting period.	MOH – DHIS-2, NCST reports	Quarterly	100%	100%	100%	100%	100%	100%	16,810,411	MOH	CMS and Nutrition partners

Table 4.2: National NCST Monitoring and Evaluation Plan: Objective 2

Objective 2: Increase competence and responsiveness of NCST workforce													
Priority Action	Indicator	Indicator Definition	Means of Verification	Frequency	Total Target	Timeframe					Cost (\$)	Lead Agency	Supporting Agency
						Year 1	Year 2	Year 3	Year 4	Year 5			
1. Review the current pre-service training curricula for health professionals to understand gaps and recommend areas for update	Assessment conducted	Measures the number of assessments conducted	Assessment report	Year 1 (baseline) and Year 5 (post-intervention)	2	1	--	--	--	1	45,906	MOH	Universities, Training Institutions and other partners
2. Provide technical update to the pre-service training curricula for nurses, clinicians and HSAs to include NCST theory and practice	Number of pre-service training curricula updated	Measure of the pre-service training curricula that have been updated for frontline workers (medical officers, clinical officers, medical assistants, nurses/midwives, HSAs)	Pre-service training curricula	Bi-annually	5 frontline workers curricula	5	--	5	--	5	20,985	MOH	Universities, Training Institutions and other partners
3. Conduct NCST training for tutors and lecturers teaching in medical and nursing training institutions	Number of tutors and lectures trained per year	Measure of the number of tutors and lecturers trained on NCST, disaggregated by sex	MOH and partner training records	Annually	150	30	30	30	30	30	153,275	MOH	Universities and training institutions
4. Conduct NCST training for all service providers	Number trained on NCST	Measure of the number of facility-based service providers trained on NCST, disaggregated by sex	MOH and partner training records - TrainSMART	Quarterly	9,620	1,401	1,785	2,061	2,176	2,197	5,495,001	MOH	Nutrition partners
5. Conduct NCST training for national, zonal, and district coaches and managers	Number of coaches and managers trained on NCST	Measure of the number of national, zonal and district coaches and managers trained on NCST, disaggregated by sex	MOH and partner training records – TrainSMART	Annually	805	165	155	165	155	165	915,205	MOH	Nutrition partners
6. Train National Association for People Living with HIV/AIDS in Malawi (NAPHAM) national and district caretakers on NCST	Number of national and district caretakers trained on NCST	Measure of the number of national and district caretakers trained on NCST, disaggregated by sex	MOH and partner training records – TrainSMART	Annually	100	100	--	--	--	--	37,031	MOH	Nutrition partners

Objective 2: Increase competence and responsiveness of NCST workforce													
Priority Action	Indicator	Indicator Definition	Means of Verification	Frequency	Total Target	Timeframe					Cost (\$)	Lead Agency	Supporting Agency
						Year 1	Year 2	Year 3	Year 4	Year 5			
7. Train community-based support group leaders and facilitators	Number of support group leaders and facilitators trained on NCST	Measure of the number of support group leaders and facilitators trained on NCST, disaggregated by sex	MOH and partner training records – TrainSMART	Annually	7,250	1,450	1,450	1,450	1,450	1,450	707,885	MOH	Nutrition partners
8. Conduct mentorship and supportive supervision visits	Number of mentorship and supportive supervision visits	A measure of the number of mentorship and supportive supervision visits conducted to each facility and community using the NCST standard guide/tool	MOH and partner records	Quarterly	12,140	1,612	2,188	2,608	2,828	2,904	859,305	MOH	Nutrition partners
9. Hold quarterly district coordination meetings with support group leaders and facilitators	Number of coordination meetings conducted with support group leaders and facilitators	A measure of the number of district level meetings conducted with PLHIV support group leaders and facilitators	MOH and partner records	Quarterly	580	116	116	116	116	116	223,955	MOH	NAPHAM and nutrition partners

Table 4.3: National NCST Monitoring and Evaluation Plan: Objective 3

Objective 3: Increase Quality and Geographical Coverage of NCST Service Delivery													
Priority Action	Indicator	Indicator Definition	Means of Verification	Frequency	Total Target	Timeframe					Cost (\$)	Lead Agency	Supporting Agency
						Year 1	Year 2	Year 3	Year 4	Year 5			
1. Scale-up NCST to 726 health facilities within 29 districts of Malawi	Number of health facilities delivering NCST services	Measure of the number of health facilities delivering NCST services at ART, ANC/PMTCT, TB or OPD service delivery points	MOH and partner records	Annually	726 health facilities in 29 districts	403	547	652	707	726	No additional cost required	MOH	Nutrition partners
2. Establish district and facility QI teams	Number of NCST implementing facilities with established QI teams	Measure of the number of NCST implementing facilities with established QI teams with a plan of action and meeting at least once every month to review data and progress of implementation	MOH and partner records including QI plans and documentation journals	Quarterly	726	403	547	652	707	726	No additional cost required	MOH	Nutrition partners
3. Mentor and coach district and facility QI teams on a quarterly basis.	Number of mentorship and coaching visits per year	A measure of the number of mentorship and coaching visits conducted using the standard QI guide/tools at the district and facility level	MOH and partner records	Quarterly	12,140	1,612	2,188	2,608	2,828	2,904	No additional cost required	MOH	Nutrition partners
4. Conduct QI learning sessions and forums for implementing facilities every six months.	Number of QI learning sessions per year	A measure of the number of QI learning sessions per year	MOH and partner records	Annually	6,070	806	1,094	1,304	1,414	1,452	2,673,468	MOH	Nutrition partners
5. Link NCST clients with social protection, livelihood, food security and economic strengthening	Percentage of NCST clients who are linked to social protection, livelihood, food security and economic strengthening	A measure of the number of clients who received nutrition assessment and classification and were referred for social protection, livelihood, food security and economic strengthening.	MOH records, DHIS-2	Quarterly							No additional cost required	MOH	Nutrition partners

Table 4.4: National NCST Monitoring and Evaluation Plan: Objective 4

Objective 4: Improve monitoring, evaluation, and information management													
Priority Action	Indicator	Indicator Definition	Means of Verification	Frequency	Total Target	Timeframe					Cost (\$)	Lead Agency	Supporting Agency
						Year 1	Year 2	Year 3	Year 4	Year 5			
1. Identify operational research questions that address NCST knowledge and implementation gaps	Operational research questions identified	Meeting held with stakeholders to identify and document NCST operations research questions	Operational research meeting report	Year 1	1	1	--	--	--	--	7,590	MOH	Universities and partners
2. Hold annual program learning and knowledge sharing conference	NCST dissemination conference held	A measure of the number of annual NCST conferences conducted	Conference report	Annually	5	1	1	1	1	1	105,030	MOH	Nutrition partners
3. Conduct annual national review of implementation of the NCST operational plan	NCST operational plan annual review meeting held	A measure of the number of annual NCST review meetings conducted annually	Annual meeting report/brief	Annually	5	1	1	1	1	1	124,570	MOH	Nutrition partners
4. Conduct midterm and endline evaluations of implementing NCST operational plan	Midterm evaluation conducted	Midterm evaluation conducted	Midterm report	Year 3	Midterm evaluation	--	--	1	--	--	38,514	MOH	Nutrition partners
	Endline evaluation conducted	Endline evaluation conducted	Endline report	Year 5	Endline evaluation	--	--	--	--	1	38,514	MOH	Nutrition partners
5. Conduct quarterly DQA with implementing districts and facilities	Number of DQA conducted	A measure of the number of DQA exercises conducted, disaggregated by district and facility	MOH and partner records	Quarterly	580	116	116	116	116	116	2,130,580	MOH	Nutrition partners
6. Establish the use of mobile DHIS-2 in NCST implementing facilities	Number of facilities and districts using mobile DHIS-2	Mobile DHIS-2 implemented	MOH records	Quarterly	726	403	547	652	707	726	320,000	MOH	Nutrition partners
7. Provide logistical and technical support to districts and facilities in the use of DHIS-2	Percentage of districts with reliable internet access	Reliable: without outages of more than 1 week within the quarter	DHOs, CMED	Quarterly	100%	100%	100%	100%	100%	100%	No additional cost required	MOH	Nutrition partners

Table 4.5: National NCST Monitoring and Evaluation Plan: Objective 5

Objective 5: Strengthen the leadership and governance of NCST services													
Priority Action	Indicator	Indicator Definition	Means of Verification	Frequency	Total Target	Timeframe					Cost (\$)	Lead Agency	Supporting Agency
						Year 1	Year 2	Year 3	Year 4	Year 5			
1. Update the national NCST guidelines and tools to align with new evidence including CMAM, TB, HIV care and treatment guidelines	National NCST guidelines updated	National NCST guidelines that are aligned with CMAM, TB and HIV care and treatment	MOH and partner records	Year 1 and Year 4	Guidelines reviewed and updated in years 1 and 4	1	--	--	1	--	50,276	MOH	Nutrition partners
2. Integrate implementation of NCST with other health and non-health services including HIV, TB, reproductive health, PMTCT, health promotion, agriculture, food security and social protection.	Percentage of health facilities that implement NCST integrated with health and non-health services and interventions	A measure of the number of health facilities that integrate NCST service delivery with health and non-health services and interventions such as; HIV, TB, reproductive health, PMTCT, health promotion, agriculture, food security and social protection.	MOH records	Annually	100%	100%	100%	100%	100%	100%	19,655	MOH	Nutrition partners
3. Strengthen coordination of NCST through the TNP and other coordination mechanisms at the national, district and community levels	Number of TNP technical working group meetings held per year	A measure of the number of TNP technical working group meetings held annually	Meeting minutes	Annually	20	4	4	4	4	4		MOH	Nutrition partners
4. Develop quarterly NCST policy and technical briefs to share data, best practices, and lessons learnt	Number of quarterly NCST policy and technical briefs produced and delivered	Measures the number of NCST briefs developed and disseminated to policymakers and implementers on a quarterly basis	MOH records	Annually	20	4	4	4	4	4	110,000	MOH	Nutrition partners
5. Provide financial and logistical support for the NCST focal person at national and district levels	Percentage of national and district level NCST focal persons supported	Measure of the number of national and district level NCST focal persons supported out of the total number of focal persons	MOH records	Annually	100%	100%	100%	100%	100%	100%	No additional cost required	MOH	Nutrition partners

Table 4.6: National NCST Monitoring and Evaluation Plan: Objective 6

Objective 6: Increase Resource Mobilisation and Financing of NCST Services													
Priority Action	Indicator	Indicator Definition	Means of Verification	Frequency	Total Target	Timeframe					Cost (\$)	Lead Agency	Supporting Agency
						Year 1	Year 2	Year 3	Year 4	Year 5			
1. Conduct a funding gap analysis using the finalised operational plan	Annual NCST funding gap analysis	Measure of the existence of a document providing a funding gap analysis on an annual basis	NCST funding gap analysis report	Annually	5	1	1	1	1	1	157,605	MOH	Nutrition partners
2. Conduct advocacy and resource mobilisation campaigns to increase awareness of NCST among national level policy makers	Number of advocacy campaigns conducted per year	A measure of the number of advocacy campaigns conducted and attended by policymakers and development partners annually	MOH and partner records	Annually	5	1	1	1	1	1		MOH	Nutrition partners
3. Advocate for prioritisation and allocation of funding for NCST by the government	Percentage increase in funding allocation by government per year	Measure of the percentage increase in NCST funding allocated by the government	Government (MOH) budget	Annually	0.05%	0.04%	0.04%	0.05%	0.05%	0.05%		MOH	DNHA and Nutrition partners
4. Advocate for increased NCST funding from development partners	Percentage increase in funding allocation by development partners per year	Measure of the percentage increase in NCST funding allocated by the development partners	Government (MOH) and development partner budgets	Annually	X%							MOH	Nutrition partners

Table 4.7: National NCST Monitoring and Evaluation Plan: Objective 7

Objective 7: Intensify NCST Services to Respond to Emergency and Humanitarian Situations												
Priority Action	Indicator	Indicator Definition	Means of Verification	Frequency	Total Annual Target	Quarterly Targets				Cost (\$)	Lead Agency	Supporting Agency
						Q1	Q2	Q3	Q4			
1. Intensify case finding through community-based groups	Number of support NAPHAM national and district caretakers trained	Measure of the number of NAPHAM national and district care takers trained on NCST, disaggregated by sex	MOH and partner training records – TrainSMART	Quarterly	100	1	--	--	--	37,031	MOH	NAPHAM and nutrition partners
	Number of mentorship and supportive supervision visits conducted	A measure of the number of mentorship and supportive supervision visits conducted using the NCST standard guide/tool at the community level	MOH and partner records	Quarterly						120,269	MOH	NAPHAM and nutrition partners
	Number of coordination meetings conducted with support group leaders and facilitators	A measure of the number of meetings conducted with PLHIV support group leaders and facilitators	MOH and partner records	Quarterly	116	29	29	29	29	44,791	MOH	NAPHAM and nutrition partners
2. Advocate for increased resources for undernourished adolescent and adult clients	Number of advocacy campaigns conducted	A measure of the number of advocacy campaigns conducted and attended by policymakers and development partners	MOH and partner records	Quarters 1 and 2	2	1	1	--	--	1,966	MOH	Nutrition partners
3. Procure additional therapeutic food supplies and equipment to meet the increased severe undernourished caseload	Percentage of additional therapeutic food supplies and equipment procured	Measure of the quantity of additional therapeutic food supplies and equipment procured compared to the national need. See Annexes 1 for the list of essential supplies and equipment.	CMS, MOH, WFP and NGO record of procured commodities	Quarterly	100%	100%	100%	100%	100%	2,714,254	MOH	Nutrition partners
4. Procure additional supplementary food supplies and equipment to meet the increased moderate undernourished caseload	Percentage of additional supplementary food supplies and equipment procured	Measure of additional supplementary food supplies and equipment procured compared to the national need. See Annexes 1 for the list of essential supplies and equipment.	CMS, MOH, WFP and NGO record of procured commodities	Quarterly	100%	100%	100%	100%	100%	9,030,357	MOH	Nutrition partners

Objective 7: Intensify NCST Services to Respond to Emergency and Humanitarian Situations												
Priority Action	Indicator	Indicator Definition	Means of Verification	Frequency	Total Annual Target	Quarterly Targets				Cost (\$)	Lead Agency	Supporting Agency
						Q1	Q2	Q3	Q4			
5. Conduct refresher trainings of service providers and community-based groups on NCST	Number of service providers trained on NCST	Measure of the number of facility-based service providers trained on NCST, disaggregated by sex	MOH and partner training records - TrainSMART	Quarterly	2,197	2,197	--	--	--	1,262,615	MOH	Nutrition partners
	Number of community group leaders and facilitators trained	Measure of the number of community-based group leaders and facilitators trained on NCST, disaggregated by sex	MOH and partner training records - TrainSMART	Quarterly	1,450	1,450	--	--	--	141,577	MOH	Nutrition partners
6. Intensify the frequency of government and NCST partner coordination meetings	Number of government-partner coordination meetings held	A measure of the number of government-partner coordination meetings held	Meeting minutes	Monthly	12	3	3	3	3	11,794	MOH	Nutrition partners
7. Intensify real-time monitoring and reporting of NCST service delivery through DHIS-2	Number of facilities and districts using mobile DHIS-2	Mobile DHIS-2 implemented	MOH records	Quarterly	726	726	--	--	--	60,000	MOH	Nutrition partners
	Percentage of districts with reliable internet access	Reliable: without outages of more than 1 week within the quarter	DHOs, CMED	Quarterly	100%	100%	100%	100%	100%		MOH	Nutrition partners

## 5 Summary of the National NCST Costs

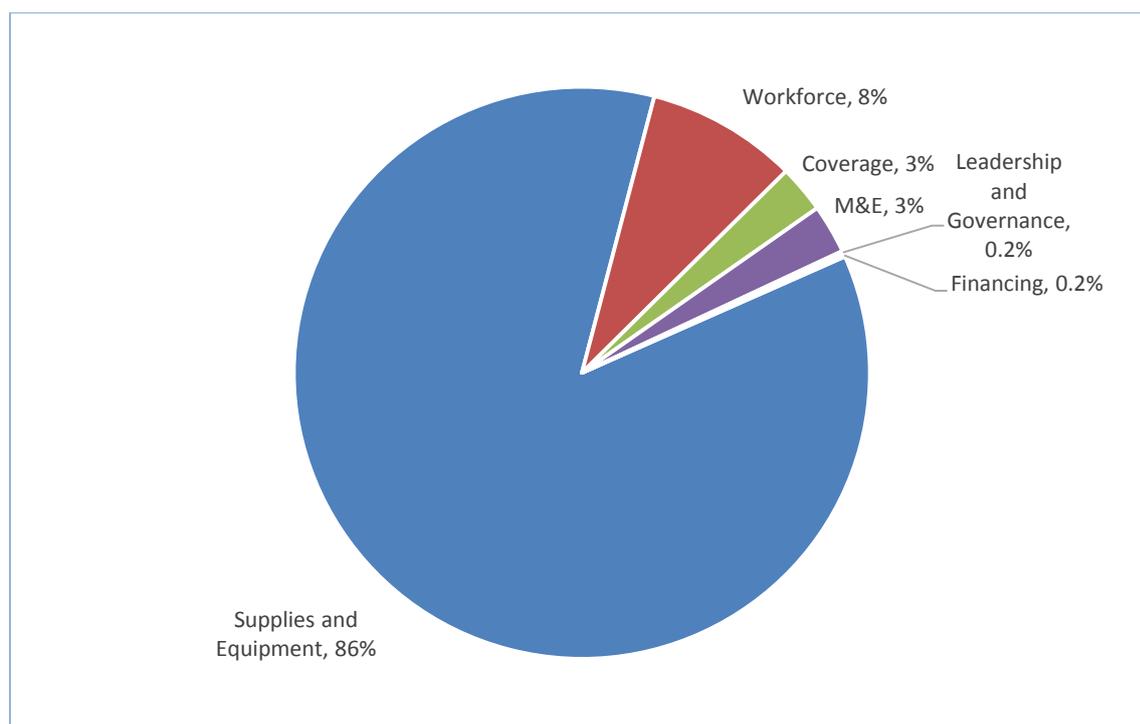
### 5.1. Total Cost of Implementing NCST by Strategic Action Area

The total cost of the operational plan’s prioritised actions is presented in Table 5.1, summarised by strategic action area. Note that Strategic Action Area 7, strengthen emergency preparedness and response, is not included in the costs below, as these are not part of routine NCST operational costs.

Table 5.1: Total Cost of NCST by Objective

	Year 1	Year 2	Year 3	Year 4	Year 5
Improve Availability and Access to NCST Supplies and Equipment	12,837,707	16,588,364	19,981,038	17,660,547	18,397,094
Increase the competence and responsiveness of NCST workforce	1,429,914	1,571,244	1,764,182	1,818,435	1,874,773
increase the quality and geographic coverage of NCST Service Delivery	355,145	481,885	574,300	622,708	639,430
Improve NCST Monitoring, Evaluation, and Information Management	529,626	532,036	575,550	542,036	585,550
Strengthen Leadership and Governance of NCST Services	51,069	25,931	25,931	51,069	25,931
Increase Resource Mobilisation and Financing of NCST	31,521	31,521	31,521	31,521	31,521
<b>Total</b>	<b>15,234,982</b>	<b>19,230,981</b>	<b>22,952,522</b>	<b>20,726,316</b>	<b>21,554,299</b>

Figure 1: Percentage of Total Cost for Each Strategic Action Area



## 5.2. Cost of Treatment per Severely and Moderately Undernourished Adolescent or Adult

Figure 2, 3 and 4 below shows the cost of treating an individual severely and moderately undernourished adolescent, adult or pregnant and lactating woman (up-to 6 months postpartum). These costs include:

- Human resource time and space at the facility level
- Therapeutic and supplementary food supplies
- Medicines and other equipment
- Storage and transport of food supplies

Note: The cost of treatment of an individual severely or moderately undernourished adolescent, adult or pregnant and lactating woman (up-to 6 months postpartum) does not include health systems strengthening costs such as: workforce development; monitoring, evaluation, and information management; leadership and governance; and resource mobilisation.

**Figure 2: Average Cost of Treating a Severely Undernourished Adolescent or Adult**



Note: The red line is the average cost of treatment per person for the 5-year period, which is \$64.45

	Year 1	Year 2	Year 3	Year 4	Year 5
Total treatment cost for Severe Undernutrition	\$2,659,507	\$3,645,341	\$4,434,559	\$4,211,109	\$4,444,816
Targeted number of Severely Undernourished Adolescent and Adults	\$40,215	\$56,261	\$69,105	\$66,168	\$69,975

**Figure 3: Average Cost of Treating a Moderately Undernourished Adolescent or Adult**



*Note: The red line is the average cost of treatment per person for the 5-year period, which is \$39.39*

	Year 1	Year 2	Year 3	Year 4	Year 5
Total treatment cost for Moderate Undernutrition	\$6,920,737	\$9,479,036	\$11,530,175	\$9,538,503	\$10,065,770
Targeted number of Moderately Undernourished Adolescent and Adults	172,347	241,118	296,160	242,612	256,570

**Figure 4: Average Cost of Treating an Undernourished Pregnant and Lactating Woman (up-to 6 month postpartum)**



*Note: The red line is the average cost of treatment per person for the 5-year period, which is \$38.55*

	Year 1	Year 2	Year 3	Year 4	Year 5
Total treatment cost for Undernutrition	\$1,378,805	\$1,869,076	\$2,270,618	\$1,901,413	\$2,000,439
Targeted number of Undernourished pregnant and lactating women (up-to 6 month postpartum)	34,484	48,244	59,257	50,096	52,978

## 6 Guide for Developing District Plan of Action

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Following the launch of the national NCST operational plan, all DHMTs teams will be required to draft and implement specific annual action plans that will be integrated within their district implementation plans. The plans will be revised on a yearly basis. The following components should be included in developing the annual action plan.

### 6.1. Facility Level NCST Resource Mapping

This section should document health facilities that provide NCST services; those that do not provide services; service delivery points where NCST is provided including ART, ANC/PMTCT, TB and OPD; and proportion of clients who receive nutrition assessment and classification, nutrition counselling, and therapeutic and supplementary food support. The analysis should also highlight QI activities including functionality of QI teams and progress made in achieving set QI targets. Finally, the section should summarise resources available to effectively deliver NCST services, including:

- Proportion of staff trained on all 6 NCST training modules in the past 2 years
- NCST stock-out history over the last 3 months
- Space available for storage of therapeutic and supplementary food supplies
- Availability of NCST monitoring and reporting tools, job aids, guidelines, and protocols
- Availability and functionality of NCST equipment (see **Annex 1** for a list of essential supplies and equipment)

Additionally, the resource mapping should highlight the number of community-based peer support groups in the district and those actively implementing nutrition interventions such as assessment, counselling, and referral of clients.

### 6.2. Stakeholder Mapping

This section should provide an updated list of all NCST stakeholders, including NGOs in the district and their role in NCST. The list should provide a corresponding documentation of the NCST resources that the stakeholders are contributing to NCST service delivery.

### 6.3. Costing of District Operational Plan

Each district should use the NCST operational plan to review the annual costs generated through the national costing exercise and review costing assumptions used to ensure that they are still valid. The DHMT should then update the annual projected costs for their districts and include them in the district implementation plan.

### 6.4. District Operational Plan

The annual district plan should be presented in table format and include activities aligned to the national strategic action areas: 1) improving availability and access to NCST supplies and equipment; 2) increasing competence and responsiveness of NCST workforce; 3) increasing the quality and geographical coverage of NCST service delivery; 4) improving monitoring, evaluation, and information management; 5) strengthening leadership and governance of NCST services; 6) increasing resource mobilization and financing of NCST services; and 7) intensifying NCST services to respond to emergency and humanitarian situations. **Table 6.1** shows a template for developing a district NCST operational plan.

Activity	Indicator	Indicator Definition	Means of verification	Frequency	Annual District Target	Timeframe				Cost (\$)	Lead Agency	Supporting Agency
						Q1	Q2	Q3	Q4			
<b>Objective 1: Improve availability and access to NCST supplies and equipment</b>												
1.												
2.												
<b>Objective 2: Increase the competence and responsiveness of NCST workforce</b>												
1.												
2.												
<b>Objective 3: Increase quality and geographical coverage of NCST service delivery</b>												
1.												
2.												
<b>Objective 4: Improve monitoring, evaluation, and information management</b>												
1.												
2.												
<b>Objective 5: Strengthen leadership and governance of NCST services</b>												
1.												
2.												
<b>Objective 6: Increase resource mobilization and financing of NCST services</b>												
1.												
2.												
<b>Objective 7: Intensify NCST services to respond to emergency and humanitarian situations</b>												
1.												
2.												

## 7 References

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- National Statistics Office, Malawi and ICF. 2017. *Malawi Demographic and Health Survey 2015-16*. Zomba, Malawi: NSO and ICF.
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## Annex 1: NCST Equipment, Supplies, and Materials

	Item	Minimum per health facility
Equipment and nutrition supplies	Height board (measures up to 0.1 cm)	4 (one at each contact point)
	Tape stuck to the wall, for height measure (measures up to 0.1 cm)	4 (if height board is not available)
	Adolescent/adult MUAC tape (measures to nearest 1 mm or 0.1 cm)	8 (two at each contact point)
	Adolescent/adult weighing scale (measures up to 100 g/0.1 kg)	4 (one at each contact point)
	RUTF	2 months' supplies for the total number of severely undernourished clients
	Supplementary food, e.g., CSB+ ( <i>likuni phala</i> ), Vitameal, vegetable oil	2 months' supply for the total number of severely and moderately undernourished clients
	Iron/folic acid supplements	2 months' supply for the total pregnant and lactating women
Technical reference materials	NCST/Nutrition Register for Adolescent and Adults	1 at each contact point providing NCST services
	NCST/Nutrition Client Management Forms	1 booklet with 100 forms
	NCST report forms	1 booklet with 50 sheets
	NCST District Mentoring and Coaching Checklists	at least 3 checklists
	NCST Competencies, Standards, and Verification Criteria Checklist	1
	NCST guidelines	At least 1 copy
	NCST job aids	At least 1 set
	BMI reference charts or BMI wheels	At least 4 charts or BMI wheels
	BMI-for-age reference charts or wheels	
Nutrition counselling materials for adolescents, adults, and pregnant and lactating women	4 (one at each contact point)	

## Annex 2: Detailed Budgets: Supplies and Equipment

Table 7.1: Action 1: Coordination meetings for NCST and CMAM commodity management

	Year 1	Year 2	Year 3	Year 4	Year 5
Venue	166	166	166	166	166
Lunch/refreshments	1,750	1,750	1,750	1,750	1,750
Stationary	400	400	400	400	400

Table 7.2: Action 2: Therapeutic food commodities - adolescents (15-18)

Item	Unit	Unit Cost	Year 1		Year 2		Year 3		Year 4		Year 5	
			Annual Requirement	Annual Cost								
RUTF	kg	3.26	2,566	8,364	3,518	11,472	4,278	13,953	4,071	13,275	4,300	14,019

Table 7.3: Action 2: Therapeutic food commodities - adults

Item	Unit	Unit Cost	Year 1		Year 2		Year 3		Year 4		Year 5	
			Annual Requirement	Annual Cost								
RUTF	kg	3.26	729,963	2,379,678	1,001,709	3,265,568	1,218,752	3,973,134	1,157,267	3,772,690	1,221,902	3,983,402

Table 7.4: Action 3: Supplementary food commodities - adolescents (15-18)

Item	Unit	Unit Cost	Year 1		Year 2		Year 3		Year 4		Year 5	
			Annual Requirement	Annual Cost								
CSB+	kg	0.72	20,718	14,917	28,426	20,467	34,582	24,899	28,739	20,692	30,346	21,850
Vegetable Oil	Litre	1.19	1,992	2,371	2,733	3,253	3,326	3,957	2,704	3,215	2,854	3,395

Table 7.5: Action 3: Supplementary food commodities - adults

Item	Unit	Unit Cost	Year 1		Year 2		Year 3		Year 4		Year 5	
			Annual Requirement	Annual Cost								
CSB+	kg	0.72	5,894,117	4,243,764	8,088,328	5,823,597	9,840,846	7,085,408	8,176,377	5,886,990	8,633,046	6,215,791
Vegetable Oil	Litre	1.19	566,742	674,423	777,721	925,492	946,237	1,126,019	768,722	914,776	811,657	965,869

Table 7.6: Action 3: Supplementary food commodities - PLW

Item	Unit	Unit Cost	Year 1		Year 2		Year 3		Year 4		Year 5	
			Annual Requirement	Annual Cost								
CSB+	kg	0.72	959,551	690,877	1,316,764	948,068	1,602,066	1,153,487	1,331,072	958,370	1,405,416	1,011,898
Vegetable Oil	Litre	1.19	106,617	126,874	146,307	174,105	178,009	211,829	147,894	175,997	156,155	185,827
Iron and folic acid	Package	1.63	31,985	52,136	43,892	71,544	53,402	87,046	44,369	72,321	46,847	76,361

Table 7.7: Action 4: Other supplies and equipment

Item	Unit	Unit Cost	Year 1		Year 2		Year 3		Year 4		Year 5	
			Annual Requirement	Annual Cost								
<b>Equipment</b>												
Adult height boards	each	100.00	2,149	214,933	769	76,800	561	56,000	294	29,333	102	10,133
Adult MUAC tapes	each	0.50	4,299	2,149	5,836	2,917	6,955	3,477	7,541	3,771	7,745	3,872
Adult scales	each	100.00	2,149	214,933	769	76,800	561	56,000	2,442	244,267	871	86,933
Blood glucose test strips	each	0.44	14,466	6,365	19,898	8,754	24,202	10,648	26,809	11,794	28,306	12,452
BMI wheels	each	3.00	2,149	6,448	2,916	8,752	3,477	10,432	3,771	11,312	3,871	11,616
Food demonstration equipment	set	10.00	363	3,627	141	1,296	102	945	420	4,122	159	1,467
Glucometer	each	11.57	403	4,663	547	6,329	652	7,544	707	8,180	726	8,400
haemoglobin tests	each	2.78	202,836	563,884	278,991	775,576	339,656	944,229	363,283	1,009,913	383,842	1,067,071
Health facility documentation packet	set	102.00	1,209	361,460	1,691	512,678	2,078	632,103	2,321	659,735	2,454	703,442
Haemoglobin machines	each	38.70	403	15,596	547	21,169	652	25,232	707	27,361	726	28,096
Pallets	each	10.00	3,627	36,270	1,296	12,960	945	9,450	495	4,950	171	1,710

Table 7.8: Action 5: Annual national review and quantification workshop

	Year 1	Year 2	Year 3	Year 4	Year 5
Accommodation	5,124	5,124	5,124	5,124	5,124
Venue	166	166	166	166	166
Lunch/refreshments	1,400	1,400	1,400	1,400	1,400
Stationary	200	200	200	200	200
Printing	700	700	700	700	700

Table 7.9: Action 6: Logistics management training

Training Type	Year 1	Year 2	Year 3	Year 4	Year 5
<b>Logistics management training for service providers</b>					
Accommodation (B&B) for trainers	101,894	101,894	101,894	101,894	101,894
Transport for trainees	12,983	5,091	4,170	2,786	1,248
Refreshments for trainees	72,540	26,640	20,580	12,540	6,540
Per diem for trainees	353,995	130,003	100,430	61,195	31,915
Hall hire for training	21,626	21,626	21,626	21,626	21,626
Training materials sets	43,959	16,144	12,471	7,599	3,963
<b>Logistics management training for managers</b>					
Accommodation (B&B) for trainers	25,474	25,474	25,474	25,474	25,474
Transport for trainees	3,347	3,347	3,347	3,347	3,347
Refreshments for trainees	8,700	8,700	8,700	8,700	8,700
Per diem for trainees	42,456	42,456	42,456	42,456	42,456
Hall hire for training	7,209	7,209	7,209	7,209	7,209
Training materials sets	5,272	5,272	5,272	5,272	5,272

Table 7.10: Action 7: Storage of therapeutic and supplementary food commodities

	Year 1	Year 2	Year 3	Year 4	Year 5
<b>Storage of therapeutic foods</b>					
RUTF	6,952	9,540	11,607	11,021	11,637
<b>Storage of supplementary foods</b>					
CSB+	65,238	89,524	108,921	90,498	95,553
Vegetable oil	6,409	8,795	10,701	8,724	9,212

Table 7.11: Action 8: Transport of therapeutic and supplementary food commodities

	Year 1	Year 2	Year 3	Year 4	Year 5
<b>Transport of therapeutic foods</b>					
RUTF	240,204	329,624	401,044	380,814	402,084
<b>Transport of supplementary foods</b>					
CSB+	1,964,356	2,695,628	3,279,694	2,724,966	2,877,162
Vegetable oil	221,454	303,894	369,742	301,454	318,291

### Annex 3: Detailed Budgets: Competence and Responsiveness of NCST Workforce

Table 7.12: Action 1: Review of the pre-service training curricula for health professionals

	Year 1	Year 2	Year 3	Year 4	Year 5
Accommodation	5,124	--	--	--	5,124
Venue	829	--	--	--	829
Lunch/refreshments	1,400	--	--	--	1,400
Stationary	400	--	--	--	400
Printing	1,200	--	--	--	1,200
International Consultant	9,000	--	--	--	9,000
National consultant	5,000	--	--	--	5,000
Accommodation for data collection	3,587	--	--	--	3,587
Per diem for data collection	2,310	--	--	--	2,310

Table 7.13: Action 2: NCST Technical update workshops

	Year 1	Year 2	Year 3	Year 4	Year 5
Accommodation	5,124	--	5,124	--	5,124
Venue	166	--	166	--	166
Lunch/refreshments	1,400	--	1,400	--	1,400
Stationary	200	--	200	--	200
Printing	105	--	105	--	105

Table 7.14: Action 3: NCST training for lecturers and tutors

	Year 1	Year 2	Year 3	Year 4	Year 5
Accommodation for trainers	2,196	2,196	2,196	2,196	2,196
Transport	3,421	3,421	3,421	3,421	3,421
Lunch/refreshments	5,000	5,000	5,000	5,000	5,000
Per diem for trainees	18,300	18,300	18,300	18,300	18,300
Venue	829	829	829	829	829
Training materials	909	909	909	909	909

Table 7.15: Actions 4-7 NCST training

Training Type	Year 1	Year 2	Year 3	Year 4	Year 5
<b>NCST training for service providers</b>					
Facilitator Guides	9,954	14,742	19,502	23,151	23,408
Per diem	512,766	653,310	754,326	796,416	804,102
Refreshments	176,600	227,058	264,686	282,225	284,674
Trainee materials	50,940	64,903	74,938	79,119	79,883
Transport for trainers and trainees	10,109	13,036	15,410	16,623	16,710
Venue	30,244	40,235	48,545	53,548	53,838
<b>NCST training for district coaches and managers</b>					
Facilitator Guides	1,606	1,606	1,606	1,606	1,606
Per diem	106,140	106,140	106,140	106,140	106,140
Refreshments	42,750	42,750	42,750	42,750	42,750
Trainee materials	5,272	5,272	5,272	5,272	5,272
Transport for trainers and trainees	2,106	2,106	2,106	2,106	2,106
Venue	9,115	1,657	1,657	1,657	1,657

<b>NCST training for national and zonal coaches</b>					
Facilitator Guides	642	642	642	642	642
Per diem	14,640	7,320	14,640	7,320	14,640
Refreshments	5,250	2,063	5,250	2,063	5,250
Trainee materials	3,959	727	3,959	727	3,959
Transport for trainers and trainees	1,047	601	1,047	601	1,047
Venue	2,486	1,657	2,486	1,657	2,486
<b>NCST training for NAPHAM national and district care takers</b>					
Accommodation for trainers	659	--	--	--	--
Transport	4,528	--	--	--	--
Lunch/refreshments	6,000	--	--	--	--
Per diem for trainees	21,960	--	--	--	--
Venue	249	--	--	--	--
Training materials	3,636	--	--	--	--
<b>NCST training for community-based support group members</b>					
Accommodation for trainers	659	--	659	--	659
Transport for trainers	947	--	947	--	947
Lunch/refreshments	87,000	--	87,000	--	87,000
Venue	249	--	249	--	249
Training materials	52,722	--	52,722	--	52,722

Table 7.16: Action 9: Mentoring and supportive supervision

Supervision Type	Year 1	Year 2	Year 3	Year 4	Year 5
<b>Mentoring and supportive supervision from district to facilities</b>					
Lunch allowance	6,894	8,567	9,823	10,264	10,263
Supervisory checklists	16,607	20,600	23,446	24,444	24,477
Transport	12,001	15,150	17,854	19,002	18,813
<b>Mentoring and supervision from national to the district level</b>					
Per diems for overnights	3,294	2,708	2,708	2,708	2,708
Supervisory checklists and documentation	189	189	189	189	189
Lunch allowance for day trips	29	29	29	29	29
Transport	1,003	884	884	884	884
<b>Mentoring and supervision for community-based groups</b>					
Transport	101,059	101,059	101,059	101,059	101,059
Lunch allowance	19,210	19,210	19,210	19,210	19,210

Table 7.17: Action 10: Quarterly district coordination meetings with support group leaders and facilitators

	Year 1	Year 2	Year 3	Year 4	Year 5
Transport	15,791	15,791	15,791	15,791	15,791
Lunch/Refreshments	29,000	29,000	29,000	29,000	29,000
Stationary	5,800	5,800	5,800	5,800	5,800

## Annex 4: Detailed Budgets: Quality and Geographic Coverage of Service Delivery

Table 7.18: Action 4: QI Learning Sessions

	Year 1	Year 2	Year 3	Year 4	Year 5
Transport	701	952	1,134	1,230	1,263
Per diem	353,995	480,485	572,717	621,029	637,718
Venue	249	249	249	249	249
Stationary	200	200	200	200	200

## Annex 5: Detailed Budgets: Monitoring, Evaluation and Information Management

Table 7.19: Action 1: Meeting to identify operational research needs

	Year 1	Year 2	Year 3	Year 4	Year 5
Accommodation	5,124	--	--	--	--
Venue	166	--	--	--	--
Lunch/refreshments	1,400	--	--	--	--
Stationary	200	--	--	--	--
Printing	700	--	--	--	--

Table 7.20: Action 2: Annual learning & knowledge sharing conference

	Year 1	Year 2	Year 3	Year 4	Year 5
Accommodation	14,640	14,640	14,640	14,640	14,640
Venue	166	166	166	166	166
Lunch/refreshments	4,000	4,000	4,000	4,000	4,000
Stationary	200	200	200	200	200
Printing	2,000	2,000	2,000	2,000	2,000

Table 7.21: Action 3: Annual national review of the NCST Operational Plan

	Year 1	Year 2	Year 3	Year 4	Year 5
Accommodation	18,300	18,300	18,300	18,300	18,300
Venue	414	414	414	414	414
Lunch/refreshments	5,000	5,000	5,000	5,000	5,000
Stationary	200	200	200	200	200
Printing	1,000	1,000	1,000	1,000	1,000

Table 7.22: Action 4: Midterm and endline evaluations of NCST Operational Plan

	Year 1	Year 2	Year 3	Year 4	Year 5
<b>Midterm evaluation</b>					
Accommodation	--	--	18,300	--	--
Venue	--	--	414	--	--
Lunch/refreshments	--	--	5,000	--	--
Stationary	--	--	200	--	--
Printing	--	--	600	--	--
International consultant	--	--	9,000	--	--
National consultant	--	--	5,000	--	--
<b>Endline evaluation</b>					
Accommodation	--	--	--	--	18,300
Venue	--	--	--	--	414
Lunch/refreshments	--	--	--	--	5,000
Stationary	--	--	--	--	200
Printing	--	--	--	--	600
International consultant	--	--	--	--	9,000
National consultant	--	--	--	--	5,000

Table 7.23: Action 5: Quarterly facility and district DQA

	Year 1	Year 2	Year 3	Year 4	Year 5
Accommodation	308,904	308,904	308,904	308,904	308,904
Venue	9,612	9,612	9,612	9,612	9,612
Lunch/refreshments	84,400	84,400	84,400	84,400	84,400
Stationary	23,200	23,200	23,200	23,200	23,200

*Table 7.24: Action 7: Establish the use of mobile DHIS-2 at facility level*

	Year 1	Year 2	Year 3	Year 4	Year 5
Mobile DHIS-2 set up	50,000	60,000	65,000	70,000	75,000

## Annex 6: Detailed Budgets: Leadership and Governance

Table 7.25: Action 1: Update of national NCST Guidelines

	Year 1	Year 2	Year 3	Year 4	Year 5
<b>Consultants</b>					
International consultant	6,300	--	--	6,300	--
National consultant	3,500	--	--	3,500	--
<b>Technical working group meetings</b>					
Venue	249	--	--	249	--
Lunch/refreshments	900	--	--	900	--
Stationary	200	--	--	200	--
<b>Stakeholder consultation meeting</b>					
Accommodation	5,124	--	--	5,124	--
Venue	166	--	--	166	--
Lunch/refreshments	1,400	--	--	1,400	--
Stationary	200	--	--	200	--
NCST guideline	105	--	--	105	--
<b>Stakeholder consensus meeting</b>					
Accommodation	5,124	--	--	5,124	--
Venue	166	--	--	166	--
Lunch/refreshments	1,400	--	--	1,400	--
Stationary	200	--	--	200	--
NCST guideline	105	--	--	105	--

Table 7.26: Action 3: Quarterly TNP technical working group meetings

	Year 1	Year 2	Year 3	Year 4	Year 5
Venue	331	331	331	331	331
Lunch/refreshments	2,800	2,800	2,800	2,800	2,800
Stationary	800	800	800	800	800

Table 7.27: Action 4: Development and printing of quarterly NCST policy and technical briefs

	Year 1	Year 2	Year 3	Year 4	Year 5
Printing	20,000	20,000	20,000	20,000	20,000
Designer (consultant)	2,000	2,000	2,000	2,000	2,000

## Annex 7: Detailed Budgets: Resource Mobilisation and Financing

Table 7.28: Actions 1-4: Advocacy campaigns (3 per year)

	Year 1	Year 2	Year 3	Year 4	Year 5
Accommodation	26,352	26,352	26,352	26,352	26,352
Venue	249	249	249	249	249
Lunch/refreshments	3,600	3,600	3,600	3,600	3,600
Stationary	600	600	600	600	600
Printing	720	720	720	720	720

## Annex 8: Detailed Budgets: Illustrative Annual Emergency Budget

Table 7.29: Action 1: Intensify case finding through community-based groups

Activity	Annual cost
<b>NCST training for NAPHAM national and district care takers</b>	
Accommodation for trainers	659
Transport	4,528
Lunch/refreshments	6,000
Per diem for trainees	21,960
Venue	249
Training materials	3,636
<b>Mentoring and supervision for community-based groups</b>	
Transport	101,059
Lunch allowance	19,210
<b>Quarterly district coordination meetings with support group leaders and facilitators</b>	
Transport	15,791
Lunch/Refreshments	29,000
Stationary	5,800

Table 7.30: Action 2: Advocacy meetings for resource mobilisation

Activity	Annual cost
Lunch/refreshments	1,400
Venue	166
Stationary	400

Table 7.31: Action 3: Emergency therapeutic food commodities - adolescents (15-18)

Item	Unit	Unit Cost	Annual Requirement	Annual Cost
RUTF	kg	0.72	2,643	8,615

Table 7.32: Action 3: Emergency therapeutic food commodities - adults

Item	Unit	Unit Cost	Annual Requirement	Annual Cost
RUTF	kg	0.72	751,862	2,451,068

Table 7.33: Action 3: Storage and transport of emergency therapeutic food commodities

Activity	Annual Cost
<b>Transport of therapeutic foods</b>	
RUTF	247,410
<b>Storage of therapeutic foods</b>	
RUTF	7,161

Table 7.34: Action 4: Emergency supplementary food commodities - adolescents (15-18)

Item	Unit	Unit Cost	Annual Requirement	Annual Cost
CSB+	kg	0.72	23,204	16,707
Vegetable Oil	Litre	1.19	2,231	2,656

Table 7.35: Action 4: Emergency supplementary food commodities - adults

Item	Unit	Unit Cost	Annual Requirement	Annual Cost
CSB+	kg	0.72	6,601,411	4,753,016
Vegetable Oil	Litre	1.19	634,751	755,354

Table 7.36: Action 4: Emergency supplementary food commodities - PLW

Item	Unit	Unit Cost	Annual Requirement	Annual Cost
CSB+	kg	0.72	1,074,697	773,782
Vegetable Oil	Litre	1.19	119,411	142,099
Iron and folic acid	Package	1.63	35,823	58,392

Table 7.37: Action 4: Storage and transport of emergency supplementary food commodities

Activity	Annual Cost
<b>Transport of supplementary foods</b>	
CSB+	2,200,079
Vegetable oil	248,028
<b>Storage of supplementary foods</b>	
CSB+	73,067
Vegetable oil	7,178

Table 7.38: Action 5: Conduct refresher trainings of service providers and community-based groups on NCST

Training Type	Annual cost
<b>NCST training for service providers</b>	
Facilitator Guides	23,408
Per diem	804,102
Refreshments	284,674
Trainee materials	79,883
Transport for trainers and trainees	16,710
Venue	53,838
<b>NCST training for community-based support group members</b>	
Accommodation for trainers	659
Transport for trainers	947
Lunch/refreshments	87,000
Venue	249
Training materials	52,722

Table 7.39: Action 6: Monthly government and NCST partner coordination meetings

Activity	Annual cost
Lunch/refreshments	8,400
Venue	994
Stationary	2,400

Table 7.40: Action 7: Intensified real-time monitoring and reporting data through DHIS-2

Activity	Annual cost
Mobile DHIS-2 expansion	60,000

