



Evaluation of the In-Service National Training Programme for Nutrition Officers in Tanzania, 2014/15

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Evaluation of the 2014/15 National In-service Training Programme for Nutrition Officers in Tanzania

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ABBREVIATIONS

CBOs Community Based Organizations

COUNSENUTH The Centre for Counseling, Nutrition and Health Care

CHMT Community Health Management Team

CRS Catholic Relief Services
CSOs Civil Society Organizations

CUAM International College for Health Cooperation in Developing Countries

CSPRo Census and Surveys Program
DED District Executive Director

DFID Department for International Development

DMO District Medical Officer

DNSCs District Nutrition Steering Committees

DNuO District Nutrition Officer
DP Development Partner

DPNuT Development Partners Nutrition

DRCHC District Reproductive and Child Health Coordinator

FAO Food and Agriculture Organization FYDP Five Year Development Plan

FY Financial Year

FONATA Food and Nutrition Association of Tanzania
GEROS Global Evaluation Report Oversight System

GoT Government of Tanzania
HCW Health Care Workers

HIV/AIDS Human Immunodeficiency Virus/Acquired Immune Deficiency

Syndrome

HMIS Health Management Information System

IMA Interchurch Medical Assistance

JMNR Joint Multisectoral Nutrition Review

KII Key Informant Interview IST In-service Training

LGAs Local Government Authorities

MDAs Ministries, Departments and Agencies

MoAFC Ministry of Agriculture Food and Cooperatives

MoAg Ministry of Agriculture MoW Ministry of Water

MoEVT Ministry of Education and Vocational Training

MoHCDGEC Ministry of Health Community Development Gender Elderly and

Children

MTEF Medium -Term Expenditure Framework

NBS National Bureau of Statistics
NF&NP National Food and Nutrition Policy

NFP Nutrition Focal Persons

NGOs Non-Governmental Organizations
NIMR National Institute for Medical Research
NMNAP National Multisectoral Nutrition Action Plan

NNP National Nutrition Plan
NNS National Nutrition Strategy

NUDEC Nutrition, Health and Sustainable Development Centre

OECD-DAC Organization for European Economic Cooperation and Development

(OECD)-Development Assistance Committee

PER Public Expenditure Review

PMO-RALG Prime Minister's Office - Regional Administration and Local Authority

PO-RALG President Office - Regional Administration and Local Authority

RAS Regional Administrative Secretary
RCH Reproductive and Child Health

RMO Regional Medical Officer

RNSCs Regional Nutrition Steering Committees

RNuO Regional Nutrition Officer

SBCC Social Behaviour Change Communication SPSS Statistical Package for the Social Science

SUN Scaling - Up Nutrition

SUA Sokoine University of Agriculture

SoS Scheme of Service

TAHEA Tanzania Home Economics Association

TASAF Tanzania Social Action Fund

TDHS Tanzania Demographic and Health Survey

TFNC Tanzania Food and Nutrition Centre

TNA Training Needs Assessment

TOC Theory of Change
TOR Terms of Reference
ToT Training of Trainers
TZS/Tsh Tanzanian Shilling
UN United Nations

UNICEF United Nations Evaluation Group
UNICEF United Nations Children's Fund

USA United State of America VEO Village Extension Officer

VFM Value for Money
WEO Ward Extension Officer
WHO World Health Organization

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EXECUTIVE SUMMARY

A. Object of the Evaluation

This report is an endline evaluation of the In-service Training (IST) programme for Nutrition Officers (NuOs) in Tanzania. The IST follows the establishment of a Scheme of Service and Job Descriptions for a new cadre of nutritionists in 2009 by the Government of Tanzania (GoT) under the Ministry of Health Community Development Gender Elderly and Children (MoHCDGEC). Subsequently new graduates from institutions offering a basic degree in nutrition and related subjects were deployed as nutrition officers (NuOs) at the Regional and District levels. Their main role was to provide coordination, planning and budgeting, programme management, and monitoring and evaluation of nutrition services within their respective regions/ districts of operation. It was then realised that the newly graduated nutritionists lacked the requisite coordination and management capacities and skills to advocate for prioritization of nutrition activities and allocation of funds by Regional and District Council Management teams.

Efforts were inevitably required to close this gap and the Prime Minister's Office (PMO) made a call for efforts to train and empower the NuOs in post to enhance their expertise and performance. This was also intended to enhance the implementation of the National Nutrition Strategy. UNICEF responded by providing support in the development and implementation of the first national IST programme for regional and district nutrition officers (RNuOs and DNuOs) between 2012 and 2016.

A1: Goal, objectives and expected outputs of the IST

The overall goal of the first IST for NUOs was to equip them with knowledge, skills, and capacity to manage and provide oversight for scaling-up nutrition activities at district, regional and national levels.

The specific objectives of the training were for the participants to be able to:

- 1. Articulate the nutrition situation in Tanzania/their geographical areas.
- 2. Integrate national nutrition strategy into district plans, budgeting and procurement.
- 3. Monitor the nutrition situation.
- 4. Mobilize resource, advocate and build capacity of nutrition frontline workers in their area of jurisdiction.

The expected outputs of the IST were three, namely: **Output 1:** Training programme for regional and district nutrition officers designed, and training packages developed; **Output 2:** Regional and district nutrition officers in all regions have completed the training course; and **Output 3:** Planning and budgeting guidelines and tools on nutrition rolled out to respective districts in all regions of Tanzania mainland for preparation of plans and budgets.

A2: Structure and institutional organization of the the IST programme

The IST programme was implemented through a series of well researched steps for an effective IST programme consisting of: 1) a Training Needs Assessment (TNA); 2) development of theory-based IST Strategic Plan; 3) development of syllabus and training materials; 4) implementation of the training intervention; and 5) carrying out an end-line evaluation.

The TFNC was the main custodian of the IST programme and supported its development, roll-out in regions, quality assurance, mentoring and coaching. UNICEF provided technical advice in the design and delivery of the IST. Irish AID provided UNICEF a grant amounting to USD 874,811. SUA was contracted by UNICEF to conduct a TNA, develop a Training Strategy and Costed Implementation Plan 2013-2017, prepare a Syllabus and Training Materials and deliver the (ToT). The government, through ministerial nutrition-related departments and Civil Society Organizations (CSOs) participated in the validation of the training curriculum and modules.

The roll-out of the training courses covered all the 25 regions of mainland Tanzania and 5 regions in Zanzibar. A zonal approach was used, comprised of five zones namely Lake zone, Southern zone (Lindi, Mtwara & Ruvuma), Eastern zone, (DSM, Pwani, Morogoro, Tanga & Zanzibar) Southern high lands (Iringa, Njombe, Mbeya, Rukwa & Katavi) Northern zone (Arusha, Manyara, Kilimanjaro), Central zone (Dodoma, Singida, Simiyu & Shinyanga).

B. Purpose and Scope of the Evaluation

UNICEF commissioned the end line evaluation which covered the period from mid-2012 to 2016 and whose main purposes were firstly, to assess the contribution of the first IST programme in enhancing the capacity of NuOs to coordinate, plan and budget, manage programmes, monitor and evaluate the delivery of nutrition services and secondly, to assess the need for scaling-up IST activities among nutrition officers. The study was jointly conducted by two institutions, namely JIMAT Development Consultants of Zimbabwe and the Nutrition, Health and Sustainable Development Centre (NUDEC) of Tanzania.

C. Approach and Methodology

The evaluation approach was a cross-sectional study that used a mixed method design to collect both quantitative and qualitative data from March 2018 to June 2018 and adhered to the UNICEF-Adapted United Nations Evaluation Group (UNEG) Evaluation Reports Standards and key evaluation criteria of relevance, efficiency, effectiveness, impact and sustainability. A minimum sample size of 85 nutrition officers was estimated to be adequate at 95 percent confidence level and 5.8 percent precision while a combination of multi-stage, stratified random sampling and purposive sampling was utilised. The primary study population for the quantitative component comprised of 78 regional and district nutrition officers largely due to movement of some of the trainees from original duty stations which made it difficult for the evaluation team to locate them. The relocation was not systematically recorded by the health service. The sample size difference of 7 was not significant to change the findings and conclusions of the evaluation.

The qualitative component included interviews with key informants comprised of policy makers, facilitators of Training of Trainers (ToT), the Trainers, supervisors/managers, United Nations Organizations; Donors, CSOs and Ward level nutrition related extension workers. Data entry, cleaning and analysis was conducted through use of Microsoft Excel and Census and Surveys Program (CSPRo) as well as the Statistical Package for Social Science (SPSS).

D. Main findings

The evaluation findings mainly focused on the Organization for European Economic Cooperation and Development (OECD) criteria of relevance, efficiency, effectiveness, impact and sustainability of the IST programme with regards to the four evaluation themes of 1) coordination;2) planning and budgeting; 3) programme management and 4) monitoring and supervision.

D1: Relevance

The IST programme design was rated relevant by key informants and IST trainees given the intensive background work that went into the project design process. It was in line with the requirements spelt out in the National Nutrition Strategy and the Scaling-Up Nutrition (SUN) movement. These two policies required capacity strengthening of the NuOs within the Health Sector to enable them to play their role in multi-sector coordination, data collection, data analysis and dissemination to relevant sectors. The project design was also sufficiently supported by all stakeholders interviewed despite the differences in issues such as curriculum, limited diversity in the target group trained, lack of supportive supervision and not vividly showing how gender mainstreaming would be addressed by IST.

D2: Efficiency

With regards to efficiency, key informants believed the involvement of TFNC strategically increased the technical efficiency of the IST as they have a mandate of fostering Nutrition Training, Education and Communication in Tanzania. The technical key informants concurred that IST was efficiently done. They indicated that the drivers of efficiency included the recruitment of facilitators through open and competitive process, evaluation of trainers and pre-training ToT course with final selection of competent trainers who went on to implement the training. The program was also efficient in its use of human and material resources. Efficiency was given an overall rating of 3.8 out of a possible highest score of 5. The gap was attributed to inadequacies in supervision of the application of the knowledge and skills by trainees.

D3: Effectiveness

According to the TOR provided to the evaluation team, the effectiveness of the IST programme was to be assessed using the three expected outputs of the IST programme.

Designing and development of curriculum and training packages was fully attained. The factors that contributed to this achievement included the TNA that was comprehensively done involving nutrition related ministries, participation of regional and district nutrition officers, commissioning of SUA (an academic institution) and the central role played by TFNC as the lead nutrition agency in the country. The IST

programme was in response to the findings of the needs of NuOs that were reported in the TNA.

All regions and districts with R/DNuOs in post were covered. However, the coverage of RNuOs and DNuOs was less satisfactory. Only 136 out of 156 DNuOs (87 per cent) and 15 out of 25 RNuOs (60 per cent) were trained in mainland Tanzania. In Zanzibar, only 8 out of 10 district nutrition focal persons (80 per cent) were trained. Failure to reach the remaining officers included vacant posts in some districts and regions and failure by some NuOs to meet the course criteria of having a basic degree in nutrition.

The trainers and all KIIs interviewed also indicated that the IST programme responded to the gaps and needs that were identified in the TNA. Improvement in knowledge and skills gaps on key aspects of nutrition management among the RNuOs and DNuOs were ascertained by comparison of the NuOs rating on pre- and post-training evaluation. These were rated on a scale of 1 for very low and 5 for very high. The mean rating before training ranged from 2.1 for Coordination to 2.5 for Programme management, and Monitoring and Supervision. The rating after training ranged from 3.9 for "Coordination" to 4.2 for "Planning and Budgeting for Nutrition". A rating of 4.1 was given for "Programme Management and Monitoring and Supervision". The mean rating after training was high for all 4 key result areas with a p-value of 0.000 from the paired t-test. This shows that the differences in rating before and after training for all key result areas were highly significant.

Regarding improvement in skills, the 78 responding NuOs used a rating scale of 1 to 5 where 1 is "very low" and 5 is "high/very high", on the extent to which they could apply what they had learnt to improve their work. Many, 64.4% gave a high rating and 18.6% gave a very high rating. Only 15.3% and 1.7% rated as medium and low respectively. The factors that contributed to their improved skills were mostly system based. An enabling system that allowed utilization of the knowledge gained from training was rated by 57% while availability of funds for supportive supervision and organisation of nutrition steering committee meetings was rated by 28.6%. Support of nutrition issues from other sectors was rated lowest by 14.3% of NuOs.

The NuOs reported further that several factors contributed to reduced effectiveness of knowledge and skills acquired during the IST. About half (48.4%) reported that nutrition activities were not prioritised and had low budgetary allocation. Even when their planned activities were approved at planning stage, sometimes the approved budget was cut. Monitoring and supervision of nutrition related extension workers were hampered by the lack of a Nutrition Supervision Guide incorporated into the joint Regional/District supervisory guides. It is important to note that the Evaluation Team made further enquiry about this guide and was informed by the TFNC and PO-RALG that the Supervision Guide was in its final stages and will be used in the next financial year.

D4. Gender mainstreaming

There was no specific section titled "gender" in the IST course according to most trainers and trainees although there were gender issues embedded in some of the topics that were covered. The Evaluation noted that the training curriculum for IST included gender issues under Module 1, especially as they related to the nutrition

situation in Tanzania. However, the Summary Training Reports on the IST Programme did not articulate any gender issues in any topics covering the TNA, the design, the delivery, results, challenges and lessons. At the implementation level the trained NuOs were conversant with nutrition related gender issues in their districts. Some of the issues raised by NuOs that are being addressed by other programmes included land ownership, education, division of labour and decision making. Both NuOs and key informants confirmed that in their opinion senior officials working for gender mainstreaming in nutrition were aware of gender issues. In some districts local authorities had established bylaws whereby pregnant women and lactating mothers were required to attend health clinics with their spouses or partners.

D5. Sustainability

The evaluation found that IST had a big potential of sustainability. Using the same rating of 1 to 5 applied to the other evaluation criteria, the Evaluation Team gave "sustainability" an overall rating of 4 as the findings showed that the achievements of IST program of NuOs are likely going to be sustained to a good level. This was based on availability of a training curriculum that can be modified and used in future, the highly qualified professional pool (ToT graduates) who could continue to provide training to other officers in future and the new National Action Plan for Nutrition that would continue to channel resources to capacity building initiatives. According to NuOs and key informants there is a dire need for rolling out a second phase of the IST for nutrition officers and focal persons and the evaluation findings corroborates this need. This should be preceded by another TNA, a revision of both the curriculum and a variety of course delivery approaches. The cooperation between the GoT, UNICEF and other nutrition-oriented organizations would be a key component of this initiative.

E. Conclusions

The main conclusions emerging from the findings of the evaluation are presented by evaluation criterion and framed to address the initial evaluation questions.

E1: Relevance

The evaluation concludes that the IST program approach was and continues to be highly relevant for addressing GoT commitments for food and nutrition security. It also remains relevant to UNICEF's mandate of fostering effective nutrition programs through building relevant partnerships. The IST largely addresses the needs of beneficiaries especially about training on theoretical aspects of nutrition, but practical work was not fully responsive to expectations of beneficiaries because time for this was inadequate.

E2: Efficiency

The program was efficiently implemented in terms of use of human and material resources with key drivers being recruitment of facilitators and trainers through an open and competitive process and the involvement of PMO, Agriculture, other universities, etc. which was useful in validating training materials. The knowledge and skills of facilitators, course delivery approaches and availability of important training facilities and adequacy of training materials enabled timely implementation. Funds for the program were timely received from UNICEF and used as planned.

E3: Effectiveness

All three program outputs were fully achieved. A TNA was conducted, and Training Strategy formulated, and these guided the development of the curriculum and production of four training modules. Geographical coverage of training was high as all the 25 regions of mainland Tanzania and 5 regions in Zanzibar were covered.

The levels of understanding of key concepts and application after training were high for all four key result areas of the IST program. The IST improved the capacity of NuOs in all the four specific dimensions of coordination, planning and budgeting, program management and monitoring and evaluation resulting in increased recognition of their work and a significant increase in budget allocation. Attributing the impact of this IST was a challenge since UNICEF and other partners supported continuous capacity building initiatives using other sources of funding.

Though gender was mentioned in the curriculum it did not feature adequately in the training packages and subsequently there was no specific session for gender in the timetables. This was a weakness that will need to be addressed in future IST.

E4: Sustainability

Achievements of the IST program are likely to be sustained to a good level due to commitment of GoT to increase budget allocation to nutrition activities; the existence of a training curriculum and related training materials, a pool of potential trainers and the national multisectoral action plan for nutrition; the existence of the Multi-sectoral Nutrition Steering Committees; continued leadership of UNICEF; willingness of the donor community, NGOs and CSOs to continue providing financial and technical assistance; availability of additional academic institutions that have incorporated nutritional sciences in their training program; and the fact that the IST of this nature is the first of its kind in Tanzania and has shown positive outcomes.

E5: Looking forward

The evaluation confirms the strong need for further in-service training, as a continuous programme imbedded in institutions providing tertiary education on nutrition, including in modular form and complemented with on-the-job mentorship and coaching. Thus the absence of a PlanRep cost centre for nutrition activities with the Council Management Team (CMT) and CHMT system was a big challenge to utilization of the improved capacities in program management and coordination. The incorporation of nutrition activities under the District and Regional Reproductive and Child Health budget line should be re-viewed by authorities so that it becomes a stand-alone budget.

F. Lessons Learnt and Best Practices

The broad lessons learned from the review raise key issues that require further consideration.

The IST program achieved its 3 expected outputs, including a fully geographical coverage of the program. However, the evaluation team observed that conducting

IST training across the whole country within a very short duration was a bold undertaking. There are lessons-based on the key factors that contributed to the successful implementation of this initiative. Foremost was the availability of adequate funds with no interruption of disbursement in between zonal training. The funds were availed to TFNC following timely retirement of each zonal disbursement. The other equally important factor was the choice of SUA which is more into academic training, and the giving to TFNC the coordination role for cascading the training. Hard work, motivation and team spirit among the trainers enabled them to complete the activity timely, effectively and according to the IST plan.

Through the IST programme, standardized Planning and Budgeting Guidelines were developed and rolled out in all the regions. This has resulted in a high level of competency programme implementation among RNUs/DNuOs as exemplified in the annual Bottleneck Assessments preceding PO-RALG, UNICEF and TFNC supported Joint Review and Planning Meetings. However, attributing the impact of the IST programme on enhanced capacity should acknowledge that there were other capacity building programmes by UNICEF and other partners in the same regions.

The placement of the NuOs within the Health sector without a specific budget-line has a negative impact on efficiency. The RNuOs/DNuOs reported challenges in coordinating the heads of other departments because NuOs are just line officers within the health sector. This evaluation also learnt that efforts to address this are at an advanced stage and the PORALG has issued "Contract" guidance with all Regional authorities to support both nutrition specific and sensitive interventions.

On relevance, programme design and framework, the evaluation noted that the project design processes were spelt in line with the country's strategies and policies which facilitated sufficient support from stakeholders. However, the training modules disproportionately favoured theoretical content at the expense of practical issues. A better balance between theory and practical content and time allocation would have enhanced effectiveness of the IST.

With respect to efficiency, the IST was preceded by a comprehensive Training Needs Assessment. Its findings were used in the design and development of training packages that were relevant to the work of NuOs. In addition, UNICEF supported two capacity building projects (IST and Joint Multisectoral Nutrition Review [JMNR]) two concurrently. This further contributed to the observed impact.

The evaluation noted that high-level authorities such as PO-RALG and PMO were engaged in the IST programme through all the stages and this has enhanced the sustainability of capacity building initiatives such as the annual JMNR for RNOs/DnOs and all nutrition-relevant sectors. The lesson learned is that if the same continual engagement trickles down to districts, more nutrition activities will be incorporated into Comprehensive Council Plans,

A lot of changes on nutrition can be made if GoT uses lessons from the experience of the first IST programme to inform its decision-making on coordination of planning and budgeting for nutrition program/interventions. Interdependence and synergy will be achieved through operationalization of multisectoral committees at regional and district levels accompanied by follow-up, feedback and accountability.

G. Main recommendations

Based on the evidence gathered during the evaluation, the evaluation team developed the recommendations and way forward which were validated through a stakeholder workshop. Since this is the end line evaluation, these recommendations are those possible for UNICEF in collaboration with the Government to accelerate and sustain the impact of the IST program.

No.	Recommendation	Responsibility	Timeframe	
Effe	ctiveness and sustainability			
1.	UNICEF and the GoT in collaboration with relevant stakeholders should integrate nutrition indicators into the existing supportive supervision tools.	UNICEF, PORALG, MOH, TFNC	2018 - 2019	
2.	UNICEF and the Government of Tanzania (GoT) should establish a post IST funding mechanism for supportive supervision, to further the impact of the IST program across national and subnational levels.	UNICEF, TFNC, PORALG	2018 - 2019	
3.	UNICEF and the GOT, should enhance coordination capacity of the trained Nutrition Officers, such as through nutrition coordination forums and facilitating subnational nutrition steering committees in providing capacity strengthening.	UNICEF, PORALG, TFNC, MOH, LGAs	2018 - 2020	
4.	UNICEF and the GoT should review the nutrition program periodically to adapt emerging nutrition scientific evidence and innovations from time to time for the sustainability of relevance and impact of the IST program.	UNICEF, PMO, PORALG, TFNC, MOH	2018 - 2020	
Gen	der mainstreaming	l		
5.	UNICEF and GoT should take deliberate efforts to mainstream gender in nutrition program. A special focus should be on adolescent nutrition, improving male involvement in infant and child care, spousal support for pregnant and lactating women, women economic empowerment and enhancing their access to, and decision-making over the use of household income, and improving gender relations in the home to improve the health and nutrition of women, children and other family members.	UNICEF, TFNC	2018 - 2019	
	Enabling environment			
6.	An enabling environment for nutrition officers, such as availability of offices equipment, computers and transport for program	UNICEF, PORALG, LGAs	2019 - 2020	

No.	Recommendation	Responsibility	Timeframe
	monitoring and supportive supervision, needs		
	to be strengthened.		
7.	UNICEF should provide technical support to	UNICEF,	2019 -
	the PORALG and MOFP to ensure that	PORALG,	2020
	nutrition is allocated adequate resources in	MOFP	
	Councils' Planning and Budgeting Tool		
	(PLANREP), and timely disbursement of		
	funds for implementation of nutrition activities.		
Mult	Multisectoral approach		
8.	Follow – actions to the IST program should	UNICEF,	2018 -
	advance a multi-sectoral approach embarked	PORALG,	2020
	by the NMNAP that opens significant	TFNC, LGAs	
	opportunities for trained nutrition officers to		
	provide training to nutrition sensitive officers		
	who are supporting health, nutrition and food		
	security interventions on the ground.		

1. PROJECT BACKGROUND AND CONTEXT

1.1 Global Nutrition Situation

According to the 2017 World Nutrition report¹, globally, malnutrition affects 1 in every 3 people. The report estimates that out of 667 million children aged below 5 years, 159 million are stunted and 50 million are underweight. Malnutrition has grave consequences on the health status and development of a nation. Undernutrition accounts for 45 percent of childhood deaths². Nutrition deficiencies during the first 1,000 days (from conception up to age two years) are associated with significant morbidity, mortality and delayed mental and physical development in children. Over the long term, these deficiencies could impair body immunity, intellectual performance, reproductive outcomes and productivity of individuals which may negatively affect overall national development.³

1.2 Nutrition Situation in Tanzania

In Tanzania, the major nutritional problems in children aged below five years are stunting, underweight, wasting and micronutrient deficiencies. There has been some progress in addressing malnutrition. The prevalence of stunting among children 0-59 months declined from about 50percent in 1992 (Demographic and Health Survey 1992)⁴ to 42 percent in 2010 (Demographic and Health Survey 2010)⁵ to 34 percent in 2015 (TDHS-MIS 2015/16). Wasting declined from 8percent in 1992 to 4.5percent in 2010 while severe acute malnutrition was reduced from 5percent in 2010 to 4 percent in the Tanzania Demographic Health Survey and Malaria Indicator Survey 2015/16 respectively⁶. Although the percentages have declined, the absolute numbers of those malnourished are still high. According to the 2015-16 TDHS-MIS more than 2.7 million children were estimated to suffer from stunting. Additionally, when disaggregated by sex, male children had higher stunting prevalence than females, standing at 36.7 and 32.4 percent respectively. Children from rural locations had higher stunting prevalence (37.8 percent) as compared to urban ones (24.7percent). Children of mothers with secondary education were less stunted than those whose mothers had no education, 26.1 percent and 39.3 percent, respectively.

⁴¹URT; The National Nutrition Strategy (NNS) 2011/12-2015/16 and its Implementation Plan

¹URT-MoHCDGEC, TBS, Tanzania Demographic and Health Survey (DHS) 1992

²URT-MoHCDGEC, TBS, ICF. Tanzania Demographic and Health Survey and Malaria Indicator Survey (TDHS-MIS) 2015-16.

³URT, the National Nutrition Policy 1992. 0743001021

⁵International Food Policy Research Institute. 2016. Global Nutrition Report 2016: From Promise to Impact: Ending Malnutrition by 2030. Washington, DC. Global nutrition

²Black R, E; et al, Maternal and Child Undernutrition Study Group; Maternal and child under nutrition: global and regional exposures and health consequences." The Lancet, 371 (9608), 243-260

³UNICEF, WHO, and World Bank (United Nations Children's Fund, World Health Organization, and World Bank). 2015. Joint Child Malnutrition Estimates. Global Database on Child Growth and Malnutrition. http://www.who.int

⁴URT-MoHCDGEC, TBS, Tanzania Demographic and Health Survey (DHS) 1992

⁵URT-MoHCDGEC, TBS, ICF. Tanzania Demographic and Health Survey (DHS) 2010

⁶MoHCDGEC, TBS, ICF. Tanzania Demographic and Health Survey and Malaria Indicator Survey (TDHS-MIS) 2015-16.

This may be an indication of the benefits of having some basic nutrition education/knowledge as opposed to none.

The micronutrient deficiencies of public health significance in Tanzania are vitamin A deficiency, iron deficiency as well as anaemia and iodine deficiency disorders. The most recent assessment of Vitamin A deficiency was during the 2010 TDHS that had a detailed laboratory component. The prevalence of vitamin A deficiency using the criteria of serum retinol <0.70µmol/l among children aged 6-59 months was 33 percent while it was 37percent among women of reproductive age. The most recent population-based assessments of iodine deficiency and anaemia were made during the 2015/16 TDHS-MIS. Approximately 58 percent of children aged 0-59 months had some anaemia (haemoglobin <11gm/dl) while 45 percent of women of reproductive age had some anaemia (haemoglobin <11 for pregnant and <12gm/dl for nonpregnant women)⁷. According to WHO criteria, Tanzania has a severe problem of anaemia as the prevalence exceeds 40% in all the 25 regions except two. The median urinary iodine concentration among women aged 15-49 years was 180 micrograms per decilitre which, according to WHO criteria, is within the optimal level of 150 to 300 µg/L. Approximately 22.8 percent of women had optimal urinary iodine concentration while 33.5 percent had very low urinary iodine concentration, below 50 micrograms per decilitre.

1.3 Tanzania's Efforts in Scaling up Nutrition Interventions

1.3.1 Policy Context

Tanzania has made great strides in addressing the major nutritional problems and the human resource constraints to address nutrition challenges. These efforts have been catalysed by the high-level political commitment and a clear vision fostering a strong multi-sectoral approach that is articulated in several policy frameworks and programmes. Key policies include the National Nutrition Policy (NNP)⁸ that was approved in 1992, the National Nutrition Strategy (NNS) 2011/12-2015/2016⁹ that was developed to guide the implementation of the NNP; the National Nutrition Social and Behaviour Change Communication Strategy¹⁰, the National Multisectoral Nutrition Action Plan (NMNAP)¹¹ was developed to guide the implementation of the 2016 National Food and Nutrition Policy (NF&NP). The NMNAP is closely aligned to the Government's Five-Year Development Plan II (FYDP II) 2016/17-2020/21¹².

Among the factors that have contributed to the reduction in the prevalence of malnutrition in Tanzania is the high level of political commitment. Former President

⁷MoHCDGEC, TBS, ICF. Tanzania Demographic and Health Survey (DHS) 2010

⁸URT, the National Nutrition Policy 1992.

⁹URT; The National Nutrition Strategy (NNS) 2011/12-2015/16 and its Implementation Plan

¹⁰National Nutrition Social and Behaviour Change Communication Strategy July 2013 – June 2018

¹¹Tanzania National Multisectoral Nutrition Action Plan (NMNAP) for the period July 2016 – June 2021: Strategic Plan: From Evidence to Policy to Action.

¹²URT; The Second National Five Year Development Plan 2016/17 – 2020/21. "Nurturing Industrialization for Economic Transformation and Human Development". 30 March 2016

Jakaya Mrisho Kikwete (2005 to 2015) actively promoted the nutrition agenda, including Tanzania's participation in the international Scaling-Up Nutrition (SUN) Movement that targets the critical 1,000 days (from conception to the age of two years) for optimal child growth and development. Furthermore, the GoT has adopted a clear vision fostering a strong multi-sectoral approach, and great strides have been made in this regard. A High-Level Steering Committee for Nutrition was established in the PMO to coordinate a wide range of nutrition interventions implemented by various stakeholders. Regional and District Multisectoral Nutrition Steering committees have also been established. Since 2016, the responsibility of accelerating scaling-up of high impact multisectoral nutrition-specific and nutrition-sensitive interventions and an enabling environment is in place at the PO-RALG.

1.3.2 Human Resources for Nutrition Context

The implementation of all the above policies requires a strong human resource base However, policy implementation has always been challenged by a great shortage of skilled and motivated human resources with specific specialization in nutrition.

The SUA is the main institution that has been providing training for a basic nutrition degree. The degrees that are being offered are a Bachelor of Science in Family and Consumer Studies, a Bachelor of Science Degree in Human Nutrition and post-graduate degrees in Food Science and Human Nutrition. The average yearly output of nutritionists at SUA is estimated to be over fifty. Given the establishment of a minimum of 5 nutritionists per district, there still remains a human resource gap for nutrition officers ¹⁴. The Ministry of Agriculture's centres at llonga in Morogoro region and Uyole in Mbeya region also offer Certificate and Diploma courses in nutrition. The other sources of professionals engaged in nutrition services in Tanzania are those whose basic degrees are health/science related and those who pursued nutrition at postgraduate level, many of them from institutions outside the country.

In 2012, with the World Health Organization's (WHO's) support, the TFNC conducted a landscape analysis to accelerate actions in nutrition which formed the benchmark for the in-service training of nutrition officers ¹⁵. The report showed that a mapping of nutrition officers by the UNICEF and TFNC revealed a total of 244 trained nutritionists in 21 regions. All regions had at least one nutritionist employed in each of the district councils who had various educational backgrounds from certificate to master's degree levels, thus given the establishment of a minimum of 5 nutritionists per district, there still remains a human resource gap for nutrition officers.

Among the main recommendations from the landscape analysis was to use the report to advocate for recruitment/re-categorization of nutrition officers and to develop a harmonized in-service training package linked to follow-up and post-training evaluation tailored to specific service providers.

¹³<u>SUN movement for Scaling up Nutrition during the first 1000 days</u>, initiated in 2010 and comprises of about 60 country members

¹⁴Professor Joyce Kinabo, Personal communication, September 2017.

¹⁵TFNC): Landscape Analysis of country's readiness to accelerate action in nutrition: Tanzania assessment for scaling up nutrition 2012 -Supported by WHO

1.4 UNICEF's Role in Nutrition in Tanzania

In partnership with the government, United Nations (UN) agencies and other actors, UNICEF aims to scale-up proven, high impact, cost effective nutrition interventions to reduce under nutrition. These interventions include the promotion of breastfeeding and complementary feeding, vitamin and mineral supplementation, and the treatment of severe acute malnutrition, amongst others. UNICEF's top priority is to ensure that Local Government Authorities (LGAs) genuinely own and effectively lead their work to improve nutrition status. This is critical if actions are to be sustained. UNICEF advocates with district health departments to ensure they prioritize evidence-based nutrition interventions and approaches and works with them to build their skills in planning, budgeting and coordinating the delivery of nutrition services for children and women.

UNICEF also engaged significantly in nutrition programme coordination, leading, or, supporting, depending on the capacity of governmental institutions and other partners and on particular contexts. However, according to global evaluation of nutrition projects, only 9 of the 26 reports that evaluated coordination of nutrition activities found such coordination to be adequate ¹⁶.

UNICEF's investment in the areas of planning, budgeting, monitoring and reporting enabled 15 focal districts in Mbeya, Njombe and Iringa to have clear annual targets for addressing children's issues and empowered districts to report progress against the targets. The majority of the districts produced evidence-based reports. The quality of reports has been gradually improving as a result of a series of training sessions by government institutions and regular field visits by UNICEF and President's Office - Regional Administration and Local Authority (PMO-RALGs), which provided technical support in many areas¹⁷. The following were among the key enabling environment interventions in the annual LGA nutrition regional planning and budgeting training supported by UNICEF and other partners:

- Strengthening the National Multisectoral Nutrition Information System through support to Nutrition surveys and support to routine nutrition information systems and reporting; and
- Continuous support to national monitoring capacity, particularly through engagement with the National Bureau of Statistics/Office of the Chief Government Statistician (Zanzibar) under the umbrella of the Tanzania Statistical Master Plan.

1.5 Statement of the Problem

The GoT in 2009 established a Scheme of Service and Job Descriptions for a new cadre of nutritionists. They were deployed as NuOs at Regional and District levels under the then Ministry of Health and Social Welfare (MoHSW). Their main role was

17 https://www.unicef.org/about/annualreport/files/United_Republic_of_Tanzania_2015_COAR.pdf

¹⁶Learning from Nutrition Programme Evaluations: A Thematic Evaluation Synthesis Report, 2014

to coordinate, manage, plan and budget for the delivery and scaling-up of nutrition services. However, it was soon realised that the regional and district authorities did not prioritize nutrition services in their annual plans and budgets. This was because the newly graduated nutritionists had inadequate coordination and management capacities to advocate for prioritization of nutrition activities and adequate allocation of funds at the regional and district levels.

Subsequently, the PMO made a call on May 11, 2011, that there should be concerted effort to train and empower the NuOs in post, to enhance their performance. The Prime Minister's call was further augmented by a key recommendation of the WHO supported Landscape Analysis cited in section 1.3.2 above. UNICEF responded to this call by supporting the government in the development and implementation of the first national IST programme for regional and district nutrition officers that was implemented between 2012 and 2015.

Additionally, UNICEF supported the PMO to develop the Nutrition Planning and Budgeting guidelines and tools that were rolled out to all the then 21 regions and districts of Tanzania. These were used to support nutrition officers in conducting annual planning and budgeting workshops in FY2013/14, 2014/15, 2015/16 and 2016/17.

UNICEF thus, commissioned this evaluation study whose main purpose waste assess the contribution of the first IST in enhancing the capacity of NuOs to firstly, coordinate and manage programmes as well as plan and budget for the delivery of nutrition services and secondly, to assess the need for further IST. The study was jointly conducted by two institutions namely JIMAT Development Consultants of Zimbabwe and NUDEC of Tanzania.

1.6 Description of the National In-Service Training Programme for Nutrition Officers

1.6.1 Goals and objectives

The first formal IST programme for NuOs was carried out between 2012 and 2016 with an overall goal of equipping NuOs with knowledge, skills, and capacity to manage and provide oversight for scaling-up nutrition at district, regional and national levels.

The specific objectives of the training were for participants to be able to:

- 1. Articulate the nutrition situation in Tanzania/their geographical areas.
- 2. Integrate national nutrition strategy into district plans, budgeting and procurement.
- 3. Monitor the nutrition situation.
- 4. Mobilize resource, advocate and build capacity of nutrition frontline workers in their area of jurisdiction.

1.6.2 Expected Outputs and outcomes

The expected outputs of the IST programme which were to be achieved by June 2015 were:

Output 1: Training programme for regional and district nutrition officers designed, and training packages developed; **Output 2:** Regional and district nutrition officers in all regions have completed the training course; and

Output 3: Planning and budgeting guidelines and tools on nutrition rolled out to respective districts in all regions of Tanzania mainland for preparation of plans and budgets.

The expected outcome of the IST programme was as follows:

Outcome: Capacity of Region and District Nutrition Services (Coordination, Management, Planning and Budgeting) Enhanced.

The IST programme was implemented through a series of well researched steps for an effective IST programme. These included:

- 1) Training Needs Assessment;
- 2) Development of theory-based IST Strategic Plan;
- 3) Development of Syllabus and Training Materials;
- 4) Implementation of the training intervention; and
- 5) End-Line Evaluation.

1.6.3 Institutional organization of the IST programme

The TFNC was the main custodian of the IST programme and supported its development, roll-out in 21 regions, quality assurance, mentoring and coaching. UNICEF provided technical advice in the design and delivery of the IST. Irish AID provided UNICEF a grant amounting to USD 874,811. SUA was contracted by UNICEF to conduct a TNA, develop a Training Strategy and Costed Implementation Plan 2013-2017, prepare a Syllabus and Training Materials and deliver a ToT initiative. The government through ministerial nutrition related departments and CSOs participated in the validation of the training curriculum and modules.

1.6.4 The Training Needs Assessment

The TNA was among the first steps in the planning and development of the IST programme. UNICEF contracted SUA to coordinate this activity. The overall purpose of the TNA was to establish the prevailing situation of NuOs in terms of knowledge, skills, performance, requirements and working environment. The TNA was carried out between November 2012 and March 2013. The assessment methodology included desk reviews of nutrition-relevant documents at national, regional and district levels including the 2011 Capacity Assessment of Mid-level Human Resource Personnel Working in Nutrition in Tanzania, District Profiles, District Development Plans, previous managers training packages for nutrition and other workshop/taskforce documentations. Consultations were held with nutrition focal persons ministries/departments namely PMO-RALG, the then MoHSW, the then MoAFC, MoHCDEGC, MoEVT, MoW and TFNC. Approximately 80 nutrition officers in post were identified through the then Ministry of Health and Social Welfare (MoHSW) and self-administered questionnaires were sent to them with instructions to fill and send

back to the SUA investigators. Only 60 (seventy five percent) returned the completed questionnaires.

Additionally, five regions were visited (Coast, Dar es Salaam, Dodoma, Morogoro, and Tanga). Key Informant Interviews were held with the Nutrition Focal Persons and officials responsible for the technical oversight of nutrition-specific and nutrition-sensitive interventions and /or for recruiting, employing and supporting the NuOs. Focus group discussions were carried out in Morogoro with a group of NuOs from Coast, Dar es Salaam, Dodoma, Morogoro and Tanga.

The main findings of the TNA were that most of the NuOs were new in their respective positions and they had not been properly oriented into their new roles and responsibilities. Majority of NuOs lacked skills in advocacy and negotiation, planning and budgeting, data collection and interpretation, as well as handling data collection equipment. It was further noted that the supervisors of NuOs were not aware of the roles and responsibilities of the NuOs and how they could engage them to successfully perform nutrition activities. This limited their effectiveness and performance in implementing nutrition activities in the prevailing nutrition scenario in Tanzania.

The TNA report was validated at a stakeholders' meeting who included representatives from TFNC, PMO, PO-RALG, and MoHCDGEC, Ministry of Agriculture, Fisheries and Cooperatives (MoAFC), Ministry of Education and Vocational Training (MoEVT) and Ministry of Water (MoW).

1.6.5 Development of theory-based IST Strategic Plan – Theory of Change In 2013, SUA developed a National Strategy and Costed Implementation Plan to provide competency-based IST to NuOs and focal persons. However, the original IST strategy did not have a TOC or a logical framework and the evaluation team developed the project TOC retroactively (see Figure 1).

The TOC stipulated that if nutrition enabling systems are in place, if inputs for capacity building of nutrition officers and focal persons are availed, then the trained nutrition officers would have strengthened capacity to coordinate, manage, plan and budget for nutrition activities. This would eventually improve the implementation of nutrition interventions at various levels leading to the improvement in nutritional status of Tanzanians.

¹⁸Sokoine University of Agriculture; In-service Training Strategy and Costed Implementation Plan for Nutrition: 2012-2017

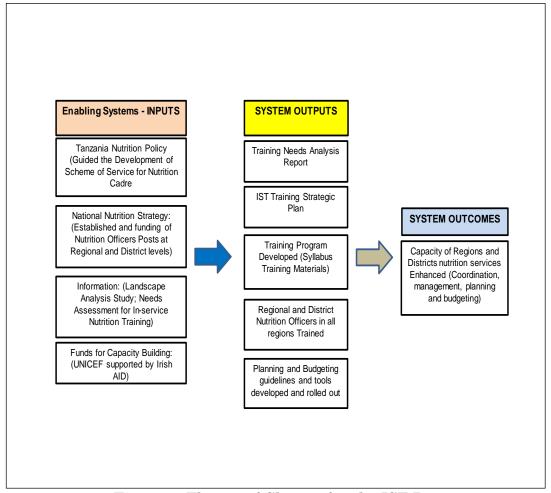


Figure 1: Theory of Change for the IST Programme

1.6.6 Development of Curriculum and training Materials

The curriculum for the IST of NuOs was developed by SUA in collaboration with Wageningen University, the Netherlands and TFNC. There was participation of other nutrition stakeholders namely MoHSW, MOHCDGEC, PMO, Centre for Counselling, Nutrition, and Health Care COUNSENUTH and Muhimbili Hospital. Subsequently, training materials were developed as modules based on key focus areas of the National Nutrition Strategy (NNS 2011/12-2015/16) and its Implementation Plan. An Advocacy Strategy to promote the role of NuOs and lobby for recruitment to fill vacant positions was also developed.

1.6.7 Implementation of the training intervention

Training of Trainers

TFNC advertised the posts of Training of Trainers. Candidates were shortlisted and participated in oral and written interviews. TFNC and SUA staff members were also eligible for recruitment as trainers. Those with the best performance were selected as trainers. The Evaluation Team observed that the duration of the master training course of five days was adequate given that the trainees were all highly qualified nutritionists from the TFNC, SUA, Dodoma University, Nelson Mandela Institute of Technology Arusha, COUNSENUTH and experienced NUOS from Iringa, Bukoba and Temeke.

Piloting of the IST training programme

Piloting of the developed training course was conducted in Kahama district in Shinyanga region. There were15 participants in total. Participants from Kigoma, Tabora and Geita regions represented the Western zone while those from Mwanza, Kagera and Mara represented the Lake Zone. The 15 participants included 13 DNuOs, one RNuO, and one Community Development Officer. The evaluation team's observation on the Pilot report was that it was managed like any other training with no tools for collection of weaknesses and strengths of the course curriculum and content. In addition to the pre-test, post-test and the daily evaluation of proceedings, the pilot should have included a content review tool that could have been useful during subsequent revision of the training manuals.

Roll out of Training of Nutrition Officers- pedagogical approach

TFNC coordinated the training of all NuOs. The then MoHSW provided the list of recruited NuOs with their contact details. Self-administered questionnaires were sent to the NuOs for them to complete and return. Those who met the entry criteria, namely having attained a qualification in Nutrition were invited to attend the course.

The roll-out of the training courses was conducted in five zones namely Lake zone, Southern zone (Lindi, Mtwara & Ruvuma), Eastern zone, (DSM, Pwani, Morogoro, Tanga & Zanzibar), Southern Highlands (Iringa, Njombe, Mbeya, Rukwa & Katavi) Northern Zone (Arusha, Manyara, Kilimanjaro), Central zone (Dodoma, Singida, Simiyu & Shinyanga). The Evaluaton team found the zonal approach an efficient approach that kept most of the participants close to the regions where they work except for the few who had missed a course and had to attend a course in other zones e.g. from Sumbawangwa to Moshi. The duration of the training was 10 days. Some of the NUOs reported that the course duration was short and congested. The evaluation team observed that it would have been adequate if some of the detailed contents in particular on procurement were summarized and the session been provided using an on-the job training format. Alternatively, a modular approach that does not entail staff being out of duty station for two weeks should be considered in future ISTs.

The course organizers used a course content that had been summarized in a curriculum that had four modules namely: 1) Nutrition situation in Tanzania; 2) Integrating the national nutrition strategy into district plans, budgeting and

procurement; 3) Monitoring of nutrition situation; and 4) Resource mobilization, advocacy and capacity building skills.

Well-researched pedagogical approaches for adult learners were used to deliver the contents guided by the Trainers' Guide while the participants were guided by the participants manual. These included: interactive lectures; brainstorming group discussions; experiential learning; practical exercises; role plays and case studies. Participants also collected anthropometrical data of under-five children and socio-economic data of their mothers and were guided on data management, analysis, interpretation and reporting using ENA for smart, Excel and SPSS computer softwares.

The formal course evaluation was done by administering a pre-and post-test using the same questions. Participants also filled a daily evaluation form which guided the facilitators on the progress of the course. Each participant was given a take home package of resource materials that consisted of participant's guides, computer software for data analysis (ENA for SMART and SPSS) various publications, job aids and sample data for self-practice on data management once in their duty stations.

A notable observation during the Evaluation Team's field encounters was that the NUOs reported not being able to practice some of the nutrition assessments as they had no height/length boards. In addition, they received little on the job follow-up and mentoring from their Trainers.

1.6.6 The IST programme expected outputs and outcomes

The expected outputs of the IST programme which were to be achieved by June 2015 were:

Output 1: Training programme for regional and district nutrition officers designed and training packages developed;

Output 2: Regional and district nutrition officers in all regions have completed the training course; and

Output 3: Planning and budgeting guidelines and tools on nutrition rolled out to respective districts in all regions of Tanzania mainland for preparation of plans and budgets.

The expected outcome of the IST programme was as follows:

Outcome: Capacity of Region and District Nutrition Services (Coordination, Management, Planning and Budgeting) Enhanced.

1.7 Rationale for the Evaluation Study

A review of literature on nutrition IST showed a dearth of published evaluations on nutrition IST in Tanzania and other countries in the region. The few that were accessed were mostly on the impact of nutrition IST on improving child health and maternal nutrition. The study team found no published studies that evaluated the effectiveness or impact of IST of NuOs or health care workers on programme management, budgeting, advocacy, and lobbying skills in Tanzania. Hence the necessity for this evaluation.

The other urgent need for this evaluation was that in 2017 the Tanzania NMNAP, 2016-2021 was launched. NMNAPs broad goal is to accelerate scaling-up of high impact multisectoral nutrition specific ¹⁹ and nutrition sensitive ²⁰ interventions and an enabling environment ²¹. The NMNAP underscores the crucial need to invest in human resources for nutrition, including ensuring that all NuOs in post, have the basic proficiencies and competencies to enable them to be effective in managing the implementation of all aspects of the NMNAP.

It is therefore anticipated that the findings and lessons learnt through this evaluation will provide some guidance for developing models for evaluating nutrition IST programmes that may be shared in Tanzania and other countries.

1.8 Purpose and Scope of the evaluation study

1.8.1 Purpose and Scope

The Terms of Reference guided the evaluation. The main purpose of the evaluation was to assess the four specific dimensions of the work of nutrition officers, which were supposed to improve because of the IST as well as to explore the need for re-instating nutrition IST. The four dimensions are:

- Coordination: In this area, the evaluation assessed the capacities of NuOs to coordinate with other LGAs through the Regional and District Nutrition Steering Committees (R/DNSCs) and CSOs. In addition, capacities of NuOs to coordinate at national level with the PO-RALG, nutrition line ministries and the TFNC.
- Planning and budgeting: The evaluation assessed the capacities of Nutrition Officers to prepare relevant annual work-plans, obtain sufficient funds for the implementation of these plans and use of innovative ideas to design potential interventions.
- Programme management: The evaluation assessed the capacities of Nutrition Officers to implement activities timely according to the annual work-plans and their provision of guidance and technical support to stakeholders.
- Monitoring and supervision: The evaluation focussed on the capacities of NuOs to:
 - Collect, analyse and report on relevant data and information related to nutrition programmes;
 - Share data with regional and national level institutions; and
 - Conduct regular supportive supervision at various levels.

-

¹⁹Explanation: Nutrition specific interventions address the immediate causes of undernutrition, like inadequate dietary intake, disease management and some of the underlying causes like feeding and care practices and access to food. They are usually implemented through the Ministry responsible for health.

Explanation: Nutrition sensitive interventions address some of the underlying and basic causes of malnutrition by incorporating nutrition goals and actions from a wide range of sectors such as agriculture, water, sanitation, infrastructure, education social safety nets, early child development, and education.

²¹Explanation: Enabling environment implies Strengthening Decentralized Multisectoral Nutrition Planning and Coordination including advocacy for increased budget allocation and capacity building of district nutrition officers to improve coordination of nutrition response at sub-national level.

1.8.2 Use of the United Nations Evaluation Group evaluation standards

The evaluation further followed the UNICEF-Adapted United Nations Evaluation Group(UNEG) Evaluation Reports Standards (updated June 2017)²², focusing on the following key areas:

<u>Relevance:</u> Was the approach used by the Project relevance within the context of Tanzania? Was it relevant to address the needs of NuOs and Focal Points?

Assess efficiency: Was the partnership established to assess the needs, design and roll-out of the training efficient? Were activities carried out timely and at reasonable cost. However, Value for Money (VFM) including costs was not assessed in this evaluation. A comprehensive VFM analysis would have required systematic capturing of costs and benefits throughout the project cycle. Additional methods and resources would be required for this, hence such an exercise could in future be commissioned as a separate activity.

Effectiveness: To what extent were the outputs achieved? What were the major factors influencing the achievement, or, non-achievement of the outputs?

<u>Impact</u>: To what extent has the IST improved the capacities of NuOs and focal points to coordinate, manage, plan and budget for the delivery of nutrition services? What has been the project's impact on the expected deliverables?

<u>Sustainability</u>: To what extent are the achievements of the IST on NuOs and focal persons sustainable? Will it be necessary to rollout a second phase of the IST for NuOs and Focal Points?

1.9Targeted users of the IST Evaluation Findings

The primary intended users of the evaluation findings and lessons learnt include UNICEF, TFNC, MoHCDGEC, and PO-RALG. The other users are shown (Table 1).

Table 1: The potential target users of the evaluation report

Level of	Potential Target Stakeholders		
Engagement			
Overall	TFNC, UNICEF, Irish AID, PO-RALG and selected nutrition officers,		
	MoHCDGEC, other members of the Technical Reference Group from		
	UNICEF (Nutrition, Planning, Resources Mobilization, Monitoring &		
	Evaluation sections)		
National	Line Ministries for Nutrition (Agriculture, Education, Livestock and		
	Fisheries, Trade and Industry), High-Level Nutrition Steering Committee;		
	NMNAP thematic working groups; Multisectoral Nutrition Technical		
	working groups; national NGOs; Academia e.g. SUA, Muhimbili University		
	College of Health Sciences (MUHAS), University of Dodoma, Nelson		
	Mandela University-Arusha, NIMRI		
Regional/District	Nutrition Steering Committee members of all regions/districts participating		
and Community	in the evaluation, implementing partners, Non-Governmental		
	Organisations (NGOs)/ Community Based Organisations (CBOs) working		
	on nutrition, Local Government Authorities, community leaders		
International	Irish AID, UN agencies, Development Partners and Nutrition Group		
Agencies			

-

 $^{^{22}}$ UNICEF Evaluation Office (2017). UNICEF - Adapted UNEG Evaluation Reports Standards. Updated June 2017

2. APPROACH AND METHODOLOGY

2.1 Approach

This was an end-line evaluation that employed both quantitative and qualitative research methods. The evaluation followed the UNEG Norms, Standards and Ethical Guidelines for Evaluations.

2.2 Methodology

2.2.1 Study design

This was a cross-sectional study that used a mixed-methods design to collect both quantitative and qualitative data was conducted from March 2018 to June 2018. The reference period for the IST programme was 2012 to 2016.

2.2.2 Study sites

The study sites were organized in two categories namely:

- Sites comprising of eight regions of Tanzania Mainland and Zanzibar were preselected for the in-depth component of the evaluation (see section 2.6 for the sampling strategy used); and
- Sites comprising of all the 25 regions in Tanzania where all the nutrition officers that had attended the 2014/2015 IST training were contacted before emailing them the self-filled questionnaires for nutrition officers.

2.2.3 Study population

The primary study population for the quantitative component of the evaluation comprised of NuOs and Nutrition Focal Persons at national, regional and district levels.

The qualitative component of the study included the following categories of Key Informants: Policy Makers, Facilitators of ToT, the Trainers, Supervisors/Managers, United Nations Organizations; Donors, CSOs and Ward level nutrition related extension workers.

2.2.4 Sample size

Assuming 80percent of NuOs participated in the IST programme, a minimum sample size of 85 NuOs was estimated to be adequate at 95percent confidence level and 5.8percent precision. However, the evaluation team reached 79 NuOs which was 93percent of team's target.

2.2.5 Sampling strategy

The evaluation study used a combination of multistage, stratified random sampling for the in-depth component of the evaluation. In addition, purposive sampling was used to include all NuOs that had attended the 2014/ 2015 IST programme for the email based self-filled questionnaires.

Stage 1: Sampling for the in-depth study

Eight (8) regions were pre-selected to participate in the in-depth evaluation component. The following criteria were used:

- UNICEF supported regions: Iringa region was selected from the two regions (Iringa and Njombe) with long duration of UNICEF support (nearly 35 years). This was done by tossing a coin. Similarly, Mbeya region was selected from the two UNICEF regions that had received UNICEF funding for a short duration (about 6 years).
- Regions with nutrition interventions funded by other partners: Kagera, Morogoro, and Mtwara regions were randomly selected from the regions that are funded by other partners by writing names on pieces of paper and randomly picking 3 pieces.
- Regions with nutrition interventions primarily funded by the Government namely Tanga, Dodoma and Zanzibar South were purposively selected.

Stage 2: Sampling of districts

In each sampled region, one district was randomly selected (by writing the names of all the districts on pieces of paper and randomly picking one paper) districts for the indepth survey (Table 2 and Map 1 in Annex 2).

Table 2: Sampled Regions and Districts for the In-depth Study

Region	District	Ward
Iringa	Iringa District Council	Kalenga
Mbeya	Rungwe district	Kiwira
Kagera	Misenyi District	Mtukula
Morogoro	Morogoro Municipality	SabaSaba
Mtwara	Mtwara District Council	Ziwani
Tanga	Korogwe Council	Magoma
Dodoma	Chamwino District Council	Chilonwa
Zanzibar South	Kati District	Shehia ya Magaharibi

Purposive sampling for all trained nutrition officers

All the 25 administrative regions from Tanzania Mainland and 5 regions from Zanzibar were included for purposive inclusion of all IST trained nutrition officers.

Sampling of key informants

Convenient sampling of Key Informants from nutrition related Ministries Departments and Agencies (MDAs), Development Group-Nutrition, UN agencies, and donors was conducted.

2.2.6 Sampling of Key Informants

2.2.6.1 Questionnaire for Nutrition Officers

For the in-depth evaluation

A structured questionnaire was designed for capturing background variables of each nutrition officer as well as quantitative and qualitative data. The key areas assessed were the capacity of nutrition officers to coordinate, manage, plan and budget for the delivery of nutrition services as well as views on relevance, effectiveness, efficiency, impact and sustainability of the training programme. In the sampled regions, all the nutrition officers were invited to a one-day working meeting at the regional headquarters where they administered the questionnaires under the guidance of a member of the evaluation team.

For the email-based self-filling

Questionnaires were emailed to nutrition officers in 17 regions through the Nutrition Office, PO-RALG for filling of questionnaires. The evaluation team actively followed up the submission of the individual self-filled questionnaires through telephone and email reminders.

2.2.6.2 Key informant interview guides

The designed interview guides for each of the key informant target groups were based on the evaluation matrix framework (Annex 1). The scoring technique was used. The key informant interview (KII) guides also contained questions that solicited information on recommendations for future IST.

2.2.7 Organization of Fieldwork

2.2.7.1 The survey teams

The survey teams comprised of four teams each with one expert and one research assistant. The research assistants had experience in qualitative and quantitative data collection and extraction. Collectively, the experts included nutritionists, nutrition trainers, nutrition economists, public health and social scientists.

2.2.7.2 Training of survey team

All members of the survey team (the principal/co-investigators/experts, research assistants and data entry persons) attended a 2-day training workshop in Dar es Salaam prior to field work for orientation on tools, sampling strategy and fieldwork procedures. The training covered the following topics: Objectives of the evaluation and methodology; data collection tools; sampling strategy and procedures; fieldwork ethics and code of conduct; pre-testing of tools; data quality assurance; communication channels for technical and administrative issues and the fieldwork timetable.

2.2.7.3 Pilot Testing of survey instruments

Survey instruments and methods were pilot-tested in Ilea district in Dar esSalaam Region. The main objective of the pilot testing exercise was to familiarise enumerators with the survey protocol, entry into the regions and districts, testing of the main research tools and ethics observance.

2.2.7.4 Introductory letters from PO-RALG

PO-RALG was requested to send introductory letters to all selected Regional Administrative Secretaries (RAS). The RAS wrote letters to the District Executive Directors (DEDs) in the sampled districts. The Regional and District NuOs made prior appointments with all sampled participants prior to visits to the respective districts.

2.2.8 Data Collection

2.2.8.1 Data collection

Data was collected using both qualitative and quantitative techniques. The primary data was collected through questionnaires administered to trained nutrition officers at regional and district levels. Secondary data was collected through literature review and from project documents. The KIIs at national, regional and district levels were conducted using interview guides.

2.2.8.2 Data Quality Assurance

Quality of data collected was ensured through checking the filled questionnaires for completeness and consistency in the field by the experts. The statistical team ensured that all questionnaires received from the field are accurately documented and captured into an electronic data template. Data cleaning was carried out before the production of dummy tables for data analysis.

2.2.9 Data Entry and Analysis

2.2.9.1 Data Entry and Cleaning

Primary quantitative data was entered into the computer using the data entry package called CSPRo. Secondary data was entered into Microsoft Excel. After entry, data was cleaned in CSPRo to verify validity of data and completeness. Qualitative data was entered into the computer using Microsoft Excel.

2.2.9.2 Data analysis

After data cleaning, the dataset(s) were exported from CSPRo to SPSS version 23 for analysis. Specific indicators were generated in SPSS in line with the list of indicators that were identified at study design stage. Statistical tests were used to enhance interpretation of quantitative data where necessary. Effectiveness was assessed through comparison between values of indicators after project implementation and target values.

Data matrices in Excel were used to analyse qualitative data from key informants and Focus Group Discussions (FGDs). Thematic interpretation of responses from key informants and FGD participants in line with selected project components was used in qualitative data analysis.

2.2.9.3 Validation of Study Findings by Stakeholders

Key evaluation findings were presented at a one-day validation workshop for key stakeholders. The comments from the stakeholders were incorporated into the final report. The dissemination/publications of findings will be undertaken by UNICEF.



File Photo: Stakeholder Validation Workshop Participants.

2.2.10 Ethical Considerations

The study team ensured that the evaluation was conducted in compliance with UN Ethical Standards in Research, Evaluation and Data Collection and Analysis. The final evaluation protocol was submitted to the National Institute for Medical Research (NIMRI) for ethical review and approval was granted (NIMRI/HQ/R.8a/Vol.IX/2704 dated March 1,2018) see (Annex 7). In the participating regions, courtesy meetings were held with regional, district and ward authorities to inform them about the evaluation and obtain their buy-in.

Each interviewee was briefed on the aims, objectives, expected outcomes and use of findings of the study. The ethical clearance form contained a clause that sought permission to take photos that would be used in the report. The interviewees were assured of the confidentiality of the study and they were given freedom of choice to either participate, or, not to participate in the study. Those who agreed to participate were given the written consent form to sign as an indication of their willingness to participate in the evaluation.

2.2.11Challenges and limitations of the evaluation

The main challenges and limitations of the evaluation and how they were mitigated are presented below:

- The evaluation of the IST programme was conducted almost 3 years after the training was conducted in 2015, making the recall period very long. Some officials could not recall the specific details of the training(s) they had participated in. This was minimized by spending more time with each respondent.
- Staff turnover has been high in the public sector/local government. In some regions/districts the trained nutrition officers had been replaced by non-trained nutrition officers. The staff turnover also included managers and members of the Multisectoral Food and Nutrition Committees at the district and regional levels. This resulted in loss of institutional memory.
- Many of the government key informants at regional and district levels had not been involved in the planning and implementation of the IST training programme. They only received letters from TFNC through the PMO-RALG instructing them to release their staff to attend the training. Hence, they could not give their views to some of the questions.
- The timing of the evaluation, especially the field visits, coincided with annual planning and budgeting processes in the capital city, Dodoma. This resulted in the non-availability of some senior government officials for the KIIs at regional and district levels. These meetings that resulted in NuOs unavailability were ad-hoc and unplanned and as such overlapped with the evaluation schedule. Where the Evaluation Team encountered this, it managed to replace with the next person in charge in order to get the information. The evaluation also received support from the regional offices, where a nutrition officer was deployed to accompany the team and assist in getting respondents. Thus, the planned one week for data collection was extended beyond the planned period. To accommodate some key respondents that had prior commitments some of the interviews were conducted through telephone and skype interviews to reach out. Using these mixed methods, the Evaluation Team managed to increase the reach and got more results.
- The ethical clearance process took about two months, which was longer than the expected time for expedited ethical clearance. The evaluation team had expected the clearance to take one month as it had used an "expedited process" approach, but in reality, it took 2 months. This was because the documents were submitted in January when some key officials were on the long Christmas leave.
- In spite of follow-up reminder emails and calls, the evaluation team could not obtain self-administered questionnaires from some of the NuOs.
- Periodic nutrition monitoring reports were not available at the time of the field work. In fact, the evaluation team did not get any reports from the districts, as these are computerized within the HMIS department of health and the officials were in Dodoma during the week of field work. The team however got most of the other information needed from UNICEF including the annual Joint Multisectoral Review Reports from 2013/2014 to 2016/2017.

3. MAIN FINDINGS

In this section the main evaluation findings are presented according to the key questions namely: - relevance, efficiency, effectiveness and sustainability of the IST programme. The findings are further presented according to the four evaluation themes on: coordination, programme management, monitoring and supervision.

3.1 Coverage of the study population

Table 3: Study Respondents by category

Category	Target Group	Achievement	Tool
UNICEF	One-on-one interviews Roundtable discussions	3	KII guide
Policy makers (including HLSC members	P0-RALG, PMO, TFNC-3 MoH-3, MoA-1	9 (12)	KII guide
Trainers	6 TFNC, 3 SUA 1 Regional. 1 District. 1 Dodoma University	12 (5)	KII guide
Nutrition Officers	(4 were focal Persons from Zanzibar and 4 from Pemba	78(85)	Self-completed semi- structured Questionnaire 27 on site with guidance and 51 by E-mail
Ward Level	LGA leaders &Extension workers	5 wards in sampled districts 20 KII	KII/ roundtable discussions
Donors	WB, Irish Aid, USAID, WHO, FAO,	5 (4)	KII guide

Notes: Figures in brackets = Team's original target

3.1.2 Characteristics of surveyed nutrition officers

3.1.2.1 Distribution of surveyed nutrition officers by sex and age group

All the 78 nutrition officers had complete gender records. There were more females (68 percent) than males (32 percent) (Figure 2). In terms of gender equity in participation the difference between men and women might not be an issue, however when you consider gender equality it poses a problem, to have a training that empowers more women than men. There is need to encourage more men to participate in child development, dietary diversity, supporting women in accessing health care, and for them to support the women that are trained.

The ages of surveyed NuOs ranged from 24to above 50 years. The difference in male to female ratio was highest in the age group 30-34 years in which 90 percent were females and 10 percent were males.

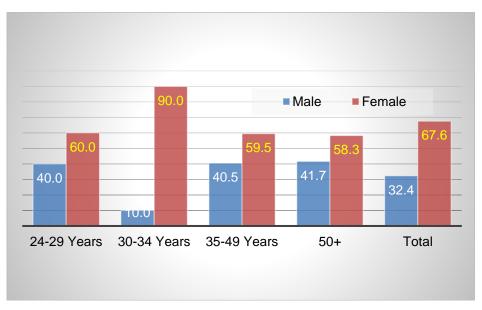


Figure 2: Percent Distribution of surveyed nutrition officers by sex and age group(n=78)

3.1.2.2 Distribution of nutrition officers by highest level of education and gender

The surveyed NuOs were asked to state their highest level of education. Out of the 78NuOs with complete education records, 67.6% had a first degree, 28.4% had a Master's degree and 4% had a diploma/certificate (Figure 3). The distribution of NuOs by the highest level of education attained shows that all diploma holders were female.

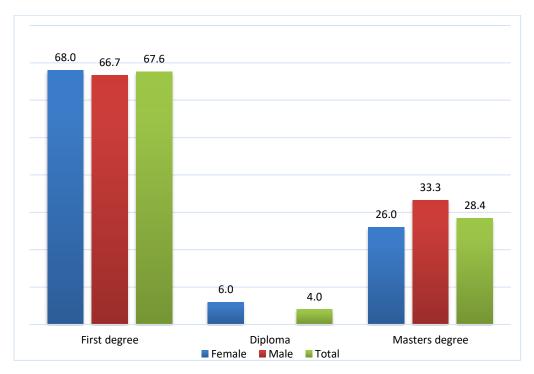


Figure 3: Percentage distribution of NuOs by highest level of education(n=78)

3.1.2.3 Distribution of surveyed nutrition officers by job title

Most (80.3%) of the surveyed NuOs were district NuOs, 7.6% were Nutrition Focal Persons, 7.6% were agriculture nutrition officers and 1.5% were regional NuOs (see Figure 4).

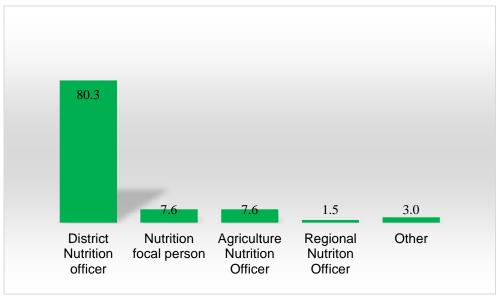


Figure 4: Percent Distribution of nutrition officers by job title(n=78)

3.1.2.4 Nutrition officers' years in current position

Analysis of the duration of NuOs in their current positions showed that the majority of the district NuOs were relatively new in the job with about half of the NuOs (51%) having been in that position for a period of 3-5 years while 11% of the NuOs had been in that position for a period of 1-3 years (Figure 5). At least38% of NuOs had been in their current position for over 5 years. Most (80%) of nutrition focal persons had been in their present position for over 5 years while 20% had been in that position for 3-5 years. Sixty percent of agriculture nutrition officers had been in that position for over 5 years and 40% had been in that position for 3-5 years. All regional NuOs had been in that position for over 5 years. Thus, the overall nutrition workforce in Tanzania is relatively new on the job, hence the call for building on a system that continuously supports their professional growth through IST, on site supervision and mentorship.

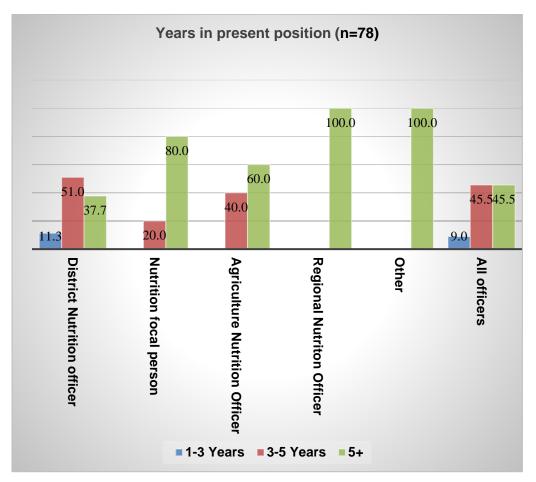


Figure 5: Years in present position

3.2 Relevance of the IST Programme

This section presents findings on relevance of the IST as given by the respondents from various groupings. In line with the Terms of Reference (TORs), two aspects of relevance of the IST programme were assessed:

- 1) Whether the approach used by the Project was relevant within the context of Tanzania: and
- 2) Whether the approach was relevant to address the needs of NuOs and focal points.

3.2.1 Relevance of the IST Programme within the context of Tanzania

The evaluation team used a rating scale of 1-5 whereby 1 represents "very low" and 5 represents "very high" and gave an overall rating of 4.5 for relevance of the IST programme.

The high relevance rating of the IST programme is directly linked to the IST's response to the human resource requirements for the implementation of the NNS 2011/12-2015/2016 that was launched in September 2011. Through the NSS, the GoT had adopted a clear vision fostering a strong multi-sectoral approach between a wide

range of stakeholders for nutrition specific and nutrition sensitive interventions and an enabling environment. The GoT had also committed to the SUN Movement, which had a precondition of investing in the nutrition workforce. As explained in the IST project description in section 1.5, nutrition officers were deployed in most of the regions and districts. However, it was soon noted that NuOs had limited skills and experiences in coordination, planning and budgeting, programme management and monitoring and evaluation. NuOs also had suboptimal advocacy skills. These skills were urgently needed for the effective and efficient implementation of the NNS and related policies. The PMO made a call for capacity building of the newly deployed nutrition officers.

The IST design was also relevant to UNICEF's mandate of fostering effective nutrition programmes through building partnerships with the GoT and other stakeholders. Hence, UNICEF through an Irish AID grant responded to the call for strengthening the capacity of NuOs and supported the government to develop and implement the IST programme.

The relevance of the IST programme design was rated as quite relevant by KIIs, given the intensive background work that went into the project design process. The project design was sufficiently supported by all stakeholders interviewed despite the differences on issues such as curriculum, limited diversity in the target group trained, lack of supportive supervision and expectations from different stakeholders. This was because some stakeholders did not participate in all the different stages of the programme design.

3.2.2Relevance of the IST programme to the Needs of Nutrition Officers and Focal Points

The relevance of the IST programme to the needs of the NuOs was based on the fact that it equipped NuOs to face not just current issues but prepared them to creatively come up with approaches to face future issues as well²³. Responses from the trainee NuOs and Nutrition Focal Persons on the relevance and appropriateness of the IST were positive. The relevance of the IST programme approach was rated "high" by 32 (41%) to "very high" by 35(45%) of the NuOs (Figure 6). The NuOs said that the course objectives were clear and met their expectations, and that topics covered during the course were relevant to their needs and improved their technical proficiency.

However, 10 NuOs (13%) gave a relevance rating of medium and 1% of NuOs gave a relevance rating of low. The reasons for low or medium rating were that the course had few practical sessions and did not cover all the important nutrition topics.

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²³www.yourtrainingedge.com/relevance-of-learning-of training-development. Bryant Nielson, 10/17/2016 (searched 19 May 2018)

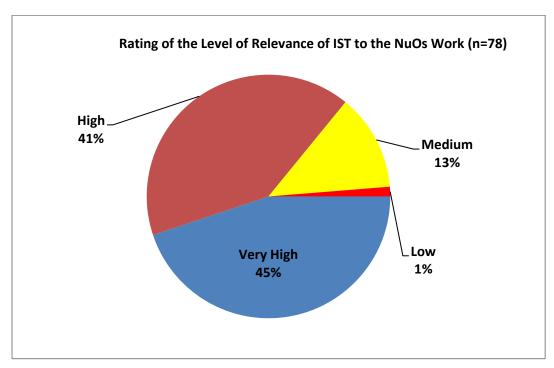


Figure 6: Rating of the Level of Relevance of IST to the NuOs Work

One NuO was quoted saying "The training was helpful but things are changing everyday so we need to be updated".

The trainers and all KIIs interviewed also indicated that the IST programme responded to the gaps and needs that were identified in the TNA.

Quote from a trainer/ policy maker

"The training was extremely important to Nutrition Officers. NuOs had a knowledge gap in planning, budgeting, procurement, implementation, reporting and monitoring and evaluation. The IST training filled this gap. The impact of the training is evident in the increased confidence of NuOs to speak up for their plans and ensure nutrition activities are included in the council plans and are funded. They ensure nutrition activities are implemented and reported. They are also more active in leading the nutrition steering committee in their respective districts and regions. There is a big difference in performance of regions and districts with trained NuOs compared to those with untrained NuOs. In short the training moved them to another level"

On a negative side, some key informants were of the opinion that the training packages were designed after the TNA was conducted. Consequently, there was not much linking of the training curriculum to the multisectoral role on the TORs of the NuOs who are inclined more to the health sector. Some NuOs failed to coordinate different stakeholders. The stakeholders suggested that the TORs for NuOs should be revisited because the TORs should be the ones to guide the training package.

3.2.3 Factors Contributing to Relevance

3.2.3.1 Needs Assessment and Training Strategy

The IST programme was implemented through a series of intensive well-researched steps/processes that led to an effective IST programme (see section 1.5). The TNA guided the development of the training strategy. Key informants found the TNA to be a highly appropriate strategy as it resulted in a training curriculum that was developed from needs identified by the participants themselves. This resulted in a training package that contained topics that are highly relevant for day-to-day roles and responsibilities of a nutrition officer.

3.2.3.2 Use of Training of Trainer/ Training of Trainers Approach

The IST programme adopted a ToT approach. These included 5 trainers from TFNC; 3 from Sokoine University of Agriculture; 2 from the Regional Secretariats of Iringa and Kagera Centre for Counselling and 1 each from COUNSENUTH; Nelson Mandela Institute of Science and Technology and Temeke Municipal Council. These trainers formed a pool of readily available and dedicated trainers who, under the coordination of TFNC, cascaded the training to all the regions in six zones including Zanzibar. The TOT approach is usually adopted for its greater resource use efficiency and this was one of the reasons for its adoption.

The nutrition officers indicated that the use of Tots was relevant and appropriate. On a scale of 1 for "very low" to 5 for "very high", nutrition officers gave a rating of 4.4 for the adequacy of the trainers 'knowledge and skills.

3.3 Efficiency of the IST Programme

The assessment of the efficiency of the IST programme was guided by the TOR's two aspects namely:

- 1) The partnership established to assess the needs, design and roll-out of the training; and
- 2) Whether activities were carried out timely and at reasonable costs. Value for Money (VFM) including costs was not assessed in this evaluation.

3.3.1 Institutional partnerships of the IST programme

The IST was implemented through partnership between GoT, UNICEF, Irish AID, Academia, CSOs and representatives of NuOs from the regions. A Reference Technical Committee was established. The TFNC was the main custodian of the IST programme and supported its development, roll-out in 21 regions, quality assurance, mentoring and coaching. The TFNC also had the role of validating all the deliverables from SUA before the stakeholders' validation meetings. Key informants were of the opinion that the involvement of TFNC strategically increased the technical efficiency of the IST as they have a mandate of fostering Nutrition Training, Education and Communication in Tanzania.

The GoT, through the nutrition related ministerial departments and CSOs participated in the validation of the training curriculum and modules. The government further

ensured that the NuOs were released from their work stations to attend the training sessions.

UNICEF provided technical advice on the design and delivery of the IST programme. Irish AID provided UNICEF a grant amounting to USD 874,811 for this activity. This funding was adequate to the level that there was no additional funding contribution from the GoT. Having adequate funding contributed highly to the efficiency of the IST programme as once the courses were started they ran non-stop.

SUA was contracted by UNICEF to conduct a training needs assessment, develop the IST Strategy, curriculum and training materials. SUA also conducted the ToT activities.

There were some concerns from some key informants, trainers and some NuOs with regard to the selection of SUA to lead all these assignments. They noted that nearly all the NuOs were SUA graduates and the weaknesses observed after their deployment were inherent in their pre-service curriculum. They suggested that any future revision of the IST programme should include more academic institutions for technical inputs and people who are already working in the districts and regions. Moreover, there is a need for SUA and the upcoming nutrition institutes to revise the curriculum and include the IST programme.

There were also some concerns from some regional and district key informants, that as supervisors of the NuOs they had not received prior information about the IST programme. They first learnt about this programme through the letters of invitation from MOHCD-TFNC requesting them to release the trainees. One of the key informants was quoted saying, "the planning for employees' professional development from "elsewhere" without prior engagement of their supervisors sometimes leads to non-release to attend the intended training because of conflicting priorities".

3.3.2 Was the implementation of IST for NuOs and FPs efficient?

The technical (SUA, TFNC, MOHCDGEC and other institutions) and financial inputs (UNICEF and Irish AID) were sufficient. Furthermore, there was a multisectoral involvement which was useful in validation of training materials and curriculum. Quantity of training materials was reported to have been adequate and was timeously availed. SUA's financial system ensured high accountability while expenditure and replenishment depended on timely submission of deliverables.

The technical key informants concurred that IST was efficiently done. They said the drivers of efficiency included the recruitment of facilitators through an open and competitive process of advertising in local tabloids, evaluation of trainers, pre-training and a ToT course with final selection of competent trainers who went on to implement the training.

3.3.2.1Efficient Use of Resources

Overall, the project was efficient in its use of human and material resources. The evaluation found it difficult to assess efficiency on financial resources because the relevant data was not availed. However, TFNC management as the recipient of the funds from UNICEF, informed the evaluation team that,

"All the funds provided by UNICEF for the IST were used efficiently. UNICEF used a reimbursement system whereby we received funds for one training episode. We had to liquidate funds for the preceding Zonal training before we were provided funds for the next Zone."

Some of key informants (stakeholders) including policy makers indicated that they were not aware of the IST budget/financial part and the cost for training. The adoption of the ToT approach for the IST increased the efficient use of financial and human resources. One key informant mentioned that "for ToTs it was efficient. The ToTs were readily available and willing to participate in any zonal training episode".

3.3.2.2 Efficiency of Management of the Training Courses

The recruitment of SUA for conducting the TNA and developing the IST Training Strategy was widely advertised. Several institutions applied, rigorous screening was conducted and SUA qualified. Therefore, when SUA was selected it was the best among the applicants. The same approach was followed for the recruitment of ToTs.TFNC advertised for the post of ToTs. Candidates were shortlisted and underwent a rigorous selection process (interviews and written tests). TFNC and SUAstaff members were also eligible for recruitment as trainers. Those with best performance were selected. The ToTs' training took five days onsite at SUA. The minimum criterion for trainees to be selected for the IST programme was a basic degree in nutrition.

The IST was conducted in six zones and was completed in ten days. Both the trainees and trainers pointed out that the course was compressed as it covered five modules within a short period of time. The trainees were asked to rate the management aspects of the course using a scale of 1 for "very low" to 5 for "very high" (see Table 4). The facilitators' knowledge and skills of the concepts was rated highest (4.4) followed by 4.3 for course delivery approaches (pedagogical aspects). Trainees gave the venue and facilities for theory and practical a rating of 3.8. Field practice was rated 3.4 while the course duration was rated lowest (3.2– medium). Some of the trainers were of the opinion that in some zones some classes had too many participants and this compromised the quality of content delivery. Inadequate training aids such as computers and weighing scales contributed to some trainees finding related topics difficult to grasp.

The evaluation team concurred with the above observations. These observations could have been minimized by having a pilot that is objectively thorough including a content review mechanism. Inclusion of other selected ToTs, and not academics alone, could have been beneficial.

Table 4: Aspects of the IST programme that affected efficiency

Assessment aspects	Rating (n=78)
Duration of the course	3.2
Field practice	3.4
Facilitator (s)' knowledge and skills of the concepts	4.4
Course delivery approaches (pedagogical)	4.3
Venue and facilities for theory and practical's (comfortable, provided everything needed to learn	3.8
Important facilities needed for the training	4.1

3.3.3 Post training follow-up and mentorship

According to the Training Strategy, the ToTs who received training or the responsible sectors (TFNC, MOH) should have conducted programme follow-ups and monitoring (mentoring and coaching) to strengthen confidence and skills among the trainees. The trainees rated follow up and supportive supervision as average ranging from 3.1 for DNSCs and PO-RALG to 3.2 for Regional Nutrition Steering committees (RNSCs) and TFNC (The ratings ranged from 2.9 for "Level of feedback received from R/NSCs" to 3.0 for "Level of feedback received from PO-RALG." PO-RALG was rated highest due to the nature of their mandate of being in-charge of the NuOs. Thus, the trainees' responses indicated a moderate level of satisfaction with the level of supportive supervision and feedback received after the IST programme according to the assessment aspects presented in Table 5. However, according to key informants from TFNC, TFNC made a follow-up on the training and visited some of the districts during the annual planning sessions to provide coaching and mentorship to NuOs on how to plan and budget nutrition activities.

The evaluation team observed that the design of the Training Strategy did not include a post training follow-up and mentorship component and as a result there was no documented feedback mechanism.

Table 5: Trainees' Rating on Level of Supportive supervision and feedback

Supportive Supervision conducted	Rating(n=78)
Level of supportive supervision conducted by TFNC	3.2
Level of supportive supervision conducted by PO-RALG	3.1
Level of supportive supervision conducted by RNSCs	3.2
Level of supportive supervision conducted by DNSCs	3.1
Feedback	Rating(N=78)
Level of feedback received from – TFNC	2.9
Level of feedback received from - PO-RALG	3.0
Level of feedback received from Regional Nutrition Steering committees(R/NSCs)	2.9

3.3.4 Trainers' views on the efficiency of the training programme

Trainers reported that the practical sessions, though few, were the most valuable components of the training programme. They suggested that since these practical sessions have great value in building skills, revision of the training curriculum and materials need to be undertaken in a programmatic context rather than an academic context.

"The training contains a lot of needed information which requires more practical skills e.g. proposal writing, planning and budgeting, advocacy, data management, nutrition assessment, etc. There is need to add information on how the council and regional systems work. Analysis of the working systems at these levels is important before the training" commented a trainee.

and

"The trainees will be very confident if they would change the timetable to have more practical sessions. For us, practicing amongst themselves through role-plays was somehow easy. However, the trainees need to gain experience in real life situations such as measuring height and weight of children in health facilities or in the community," wrote several nutrition officers in the open-ended questionnaires.

3.4 Effectiveness of the IST programme

In order to determine the effectiveness of the first IST, the evaluation team was guided by the TORs:

- To what extent were the three outputs achieved?
- What were the major factors influencing the achievement, or, non-achievement of the outputs?

The Evaluation Team used a scale of 1 for "very low" to 5 for "very high" for rating the effectiveness of the IST programme. The overall score for effectiveness was 4.5. This rating was supported by the trainees' evaluation of the three outputs and the findings from KIIs at national, regional and district levels, in addition to reviews of the monitoring reports provided by UNICEF by the Evaluation Team.

3.4.1 Output One: The training programme for district and regional nutrition officers designed, and training packages developed.

Output one was a key step in the implementation of the IST programme and using the scale of 1 for "very low" to 5 for "very high", the evaluation team gave effectiveness an overall rating of 4.5.

Prior to the design of the training programme, UNICEF commissioned the SUA, through competitive bidding to conduct the Tanzania Nutrition TNA, between 2012 and January 2013.

The evaluation team reviewed the TNA report and observed that it was done using participatory approaches that engaged key nutrition related stakeholders. The primary targets for the TNA were the regional and district NuOs who participated through a self-completed questionnaire. The response rate was fairly good given that 75% (60 out of 80) of questionnaires that were sent out were returned for analysis. The approach of emailing questionnaires and not going to collect data from the field could have introduced some bias. Firstly, these were students being followed up by their immediate trainers. Some respondents felt that the SUA lecturers were not on the ground, and therefore were not aware of the real programmatic issues and challenges when designing and implementing the TNA.

In addition to the questionnaires, the TNA had a qualitative component in the format of FGDs. The participants for the FGDs were invited from the Eastern Zone (Dar es Salaam, Coast, Tanga, Morogoro and Dodoma). The evaluation team however observed that only one zone was selected for the FGDs. This zone had 3 regions that had well-established on-going nutrition projects which could have introduced some biased responses to the FGD questions.

The evaluation team observed that a sampling procedure that includes the hard to reach Western, South Western and Southern regions that have the highest stunting levels among under-fives and a smaller nutrition workforce than the Eastern Zone could have been more ideal.

Basing on the TNA findings, the IST Training Strategy was developed followed by the development of the training curriculum, the design and production of four training modules and associated teaching materials through a series of stakeholder meetings. The training modules are summarised in Table 6.

Table 6: Products of Output 1

Document	Description
Training Needs Assessment	See section 1.5 on IST programme description
and Training strategy	
Training Module 1: Nutrition	This module was subdivided into 5 sessions:
Situation in Tanzania - 13 hours	Overview of nutrition initiatives, Commitments
	to scale-up nutrition in Tanzania, Nutrition
	relevant interventions at district level, National
	policy and strategies governing nutrition
	activities in Tanzania and Management and
	coordination of nutrition activities
Module 2: Integrating National	This module covered:- key concepts of the
Nutrition Strategy into District	National Nutrition Strategy, integrating the
Plans, Budgeting and	national nutrition strategy -implementation plan
Procurement - 24 hours and	into regional and district plans, planning and
	budgeting for nutrition, procurement of nutrition
	supplies for public use including logistics for
	nutrition

Document	Description
Module 3: Monitoring of Nutrition	This module was spread to over 5 sessions
Situation - 32 hours	namely Overview of nutrition assessment systems, Nutrition assessment methods,
	Designing and planning of nutrition activities,
	Data management, analysis and interpretation
	and Monitoring and evaluation of nutrition
	programmes and projects
Module 4: Resource	This module was sub-grouped into resource
Mobilization, Advocacy and	mobilization, nutrition advocacy, lobbying and
Capacity Building Skills -32	negotiation, training and facilitation, mentoring
hours	and coaching, nutrition counselling, Social and
	Behaviour Change Communication (SBCC),
	supportive supervision and team work.

The evaluation team collected views about the training packages and training timetables from the NuOs, the trainers and the key informants. The main observation from most of the trainee interviews was that some topics were too theoretical and academic with little time allocated for practical sessions. In addition, some topics were found to be too difficult to grasp in a short period of time. For example, among the 75 nutrition officers interviewed, data analysis (22%) and procurement of nutrition equipment and logistics (18%) were the most difficult topics to grasp.

The trainers also commented that some of the difficult topics, notably procurement, were rather congested for one training event.

"There were some challenges with presentations like procurement. The targeted trainees wondered as to where they were going to apply such knowledge. Moreover, it was allocated few hours though it had several sub-topics "said one facilitator from TFNC.

Discussions with key informants revealed similar findings. Those who had participated in the TNA and the stakeholder consultative workshops reported that they had made some written comments and suggested some modifications of content in the modules. Some of these comments were incorporated but others were not incorporated by SUA in the final modules (UNICEF, MOA, and TFNC).

The evaluation team also observed that there was a problem of content and time allocation arising from inadequate focus on identified gaps. For example, according to the TNA report, procurement was not among the variables studied. However, the TNA team felt the need to include logistics and supplies, but instead they included all aspects of procurement. NuOs only needed knowledge that will support them in appreciating the procurement process and how to make requests for procuring supplies needed for the work they are doing. This session had all aspects of procurement to be covered within a tight schedule.

3.4.2Output 2: District and regional nutrition officers in all regions have completed the training course.

This output was assessed using two components:

- 1) The geographical coverage; and
- 2) The coverage of training for nutrition officers in post.

The evaluation used a rating scale of 1 for "very low" to 5 for "very high" and gave geographical coverage an overall rating of 5. All the 25 regions of Tanzania Mainland and 5 regions in Zanzibar were covered. However, the evaluation team gave a rating of 4 for coverage of NuOs trained as only 136 out of 156 district NuOs in post (87 per cent) and 15 out of 25 regional NuOs (60 per cent) were trained in mainland Tanzania. In Zanzibar, 8 out of 10 district nutrition focal persons (80 per cent) and 4 out of 4(100 per cent) targeted NuOs at the Nutrition Unit, Ministry of Health were trained.

The failure to reach 100% coverage for NuOs was due to vacant posts in some districts and regions at the time of the first IST training. Furthermore, among the qualifying criteria for applicants for the in-service training course was possession of a basic degree in nutrition which all NuOs did not have at the time of the first IST training programme.

3.4.2.1 Nutrition officers' views on the effectiveness of the IST programme

The successful implementation of any training programme is linked to the satisfaction of the trainees. The evaluation solicited and ranked the views of the trained NuOs on IST effectiveness before and after training on a scale of 1 for "very low" to 5 for "very high". The variables assessed were capacity improvement in understanding of the key concepts of food and nutrition, the most valuable, the most difficult aspects/components and appropriateness of the training in relation to their current responsibilities of coordination, planning and budgeting, programme management, and monitoring and evaluation.

3.4.2.2 Understanding of the key concepts of food and nutrition and NuOs ability to apply concepts before and after training

The NuOs' mean rating before training ranged from 2.1 for "Coordination" to 2.5 for "Programme management" and "Monitoring and Supervision". The mean rating before training therefore ranged from low for 2 out of 4 key result areas to medium for 2 out of 4 key result areas. The mean rating after training ranged from 3.9 for "Coordination" to 4.2 for "Planning and Budgeting for Nutrition", see Table 7. The mean rating after training therefore was high for all 4 key result areas. A p-value of 0.000 from the paired t-test for all key result areas shows that the differences in rating before and after training for all key result areas were highly significant.

It can be concluded that the IST programme had a highly significant impact on the level of understanding of the key concepts of food and nutrition and the ability of NuOs to apply the concepts.

Table 7: Perceived level of understanding of key concepts and application before and after training (N=78)

Evaluation Area	Mean rating before training	Mean rating after training	Change in rating (points)	P-value from the paired t- test
Coordination	2.1	3.9	1.8	0.000
Planning and Budgeting for Nutrition	2.2	4.2	2.0	0.000
Ed Programme management	2.5	4.1	1.6	0.000
Monitoring and supervision	2.5	4.1	1.6	0.000

3.4.2.3 Successes experienced by NuOs that are attributable to the IST

When the NuOs were asked about the success in their responsibilities that they attributed to the IST training, the highest rated outcome was in coordination (by 30%) of trainees). This was followed by planning and budgeting (22.7%) for nutrition activities and incorporating these into the council Medium Term Expenditure Framework (MTEF).²⁴Programme management was rated by 18.1% while monitoring and evaluation was the least rated outcome at 15.1%, see Table8.

Table 8: Perceived outcomes as being attributable to the programme

Outcome	%
	(n=78)
Coordination	30.0
Planning and budgeting	22.7
Programme management	18.1
Monitoring and evaluation	15.1
Other	14.1

3.4.2.4 Factors that influenced achievement or non-achievement of the outcomes of Output two.

Conducting IST training across the whole country within a short duration was a bold undertaking. Among the key factors that contributed to the successful implementation of this initiative was the availability of adequate funds with no interruption of disbursement in between zonal training. The funds were availed to TFNC following timely retirement of each zonal disbursement. The other equally important factor was the choice of SUA which is more into academic training, and the giving to TFNC the coordination role for cascading the training. Hard work and team spirit among the trainers enabled them to complete the activity according to the IST Strategic plan.

²⁴Explanation: Medium-Term Expenditure Framework was launched in 1998 by the Ministry of Finance. Provides guidance for 3 yearly government planning and budgeting based on itemized needs and priorities across the country and sectors.

Extent to which NuOs were able to apply what they learnt to improve work

The extent to which the NuOs had been able to apply what they had learnt to improve their work was solicited using a rating scale of 1 to 5 where 1 is "very low" and 5 is "high/very high" (see Figure 7). The majority (83%) of NuOs rated the extent to which they could apply what they had learnt to improve their work as high or very high.

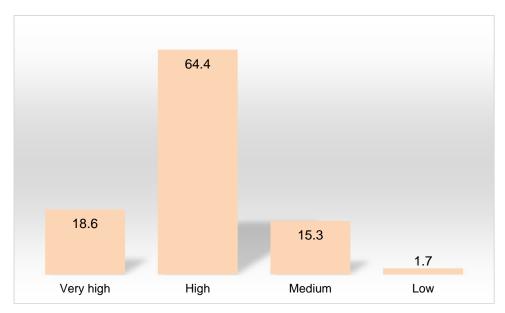


Figure 7: Percent Distribution of NuOs who were able to apply what they learnt to improve work (n=78)

3.4.2.5 Factors that facilitated the application of newly attained skills.

There were factors that facilitated the application of newly attained skills by NuOs. These factors can be summarized as follows:

Enabling environment

Among the anticipated motivational factors for any IST for skills building initiative is for the trainees to perceive that their organization and their immediate work environment supports them after participation in the training. The NuOs were asked about factors they perceived to have facilitated the application of newly attained skills following the IST. The responses they gave are listed in Table 9. These are interlinked and are anchored on "systems" that allowed them to utilize the knowledge they gained but also availed them with funds for implementing their annual work plans. The availability of good cooperation from other sectors also motivated the application of newly attained skills.

Table 9: Percent Distribution of NuOs by factors that facilitated utilization of the knowledge gained.

Factor	Percent (n= 76)
Availability of funds for supportive supervision and organisation of	
nutrition steering committee meetings	28.6
Management system is very supportive in nutrition issues and provides	
advice on how to tackle challenges	14.3
The system allows utilization of the knowledge gained from training	42.9
The system enables NuOs to work efficiently due to good cooperation	
from other sectors	14.3

3.4.2.6 Factors that inhibited nutrition officers from applying newly acquired skills

Nutrition officers were asked to state the factors that inhibited them from applying their newly acquired skills. Each respondent was allowed to state more than one factor. The most frequently cited factors that inhibited the NuOs from applying the newly acquired skills were closely related as shown in Table 10. The other factors are related to low decision making as this was done at the higher levels.

Table 10: Factors that inhibited nutrition officers from applying newly acquired skills

Factor	Percent (n=78)
All plans are coordinated at central level hence hindering planning and implementation at district level	21.4
The system underutilises skills gained as nutrition activities are not prioritised in the NuOs department	21.4
Goals are not achieved due to budget constraints	
Unavailability of nutritional guidelines/lack of uniform reporting tools/templates	14.3
The system does not support or work up to community level	7.4
Other	21.4

The limited decentralization of decision making may lead to reduced motivation and vigour to institute new initiatives as amplified by following statements:

[&]quot;All plans are coordinated at central level hence hindering planning and implementation at district level" reported several NuOs.

Another District NuO raised the concern that:

"You know in this district, like most others, the nutrition officer has no budget line. The nutrition activities are budgeted within the District Reproductive and Child Health Coordinator vote. I can plan my activities according to the needs I identify from the nutrition monitoring data. However, my activities are included under the DRCHC's vote. As I am not a member of the district budget prioritization committee, sometimes when the Committee meets to prioritize district plans they cut some nutrition activities."

The NuOs reported further that they lack a Nutrition Supervision Guide that they could use during joint Regional/District supervisory visits. It is important to note that the Evaluation Team made further enquiry about this guide and was informed by the TFNC and PO-RALG that the Supervision Guide was in its final stages of being developed.

The other impediment for NuOs to apply their newly acquired knowledge is that the system for implementation of the NNS had not trickled down beyond the district level. There are no formal Division or Ward Nutrition Coordinating Committees that the NuOs could work with, with the exception of districts that have community-based nutrition programmes such as the Mwanzo Bora Nutrition Project and UNICEF supported districts. The evaluation team was informed that not much funding was allocated for nutrition activities beyond the district level. This impedes the work of NuOs in communities where nutrition interventions have been proven to contribute to improved health.

The Evaluation Team's findings when interacting with Ward Development Committees and extension workers during the in-depth assessments revealed that the NuOs visited the wards very infrequently, mostly when they accompany visitors to the wards. Communities have been receiving nutrition education through health and agriculture extension workers and not NuOs. During these roundtable sessions in the eight wards that were visited, useful suggestions were made including:

"There is no nutrition officer in our ward. Nutrition activities are coordinated either by Village Extension Officer, Ward Extension Officer or Community Development Officer by assistance/instructions from the district nutrition officer. To solve this challenge. The ward has arranged for quarterly village nutrition days where the following services are provided: Reproductive and Child Health, nutrition education and provision of nutritious porridge for all under-fives attending. Also, there is a school nutrition programme whereby the Ward Health Officer and teacher responsible for nutrition provide nutrition education to pupils on arranged days".

"Coordination is enhanced by good communication between district NuO and ward leaders and presence of partners who support nutrition interventions".

Thus, at community level there are many non-health players involved in nutrition activities. It would therefore be important to ensure that any revision of the IST programme should engage local leadership and extension workers in the needs assessment and planning process to identify their nutrition priorities.

3.4.2.7 The views of the KII on the effectiveness of the IST

The findings from the interviews with all the regional and district key informants revealed that there was marked improvement in all capabilities among the NuOs following the IST. NuOs were able to advocate for integration of nutrition activities into the district plans as stated in the quotes below:

"In the years before the IST, nutrition was "invisible" to us as planners as well as to other sectors. It was not featuring in any of our regional plans. Even the nutrition officers were "shying" away from bringing their agenda to planning meetings. After training they gained substantial confidence and ensured their activities are included in the budget. The other strength of the IST is that it was accompanied by an advocacy seminar for most regional planners. It was an eye opener which motivated me to support nutrition issues in my region" said one Regional Administrative Secretary.

"The impact of the training is evident in the increased confidence of NuOs to speak up for their plans and ensure nutrition activities are included in the council plans and are funded. They ensure nutrition activities are implemented and reported. They are also more active in coordinating the nutrition steering committee meetings in their respective districts and regions" quoted a trainer/policy maker.

"The capacity of the nutrition officers to initiate and manage nutrition activities improved a lot after the IST training. This has had both positive and negative effects in the district. For example, the DNuO in our district who was very good has been recruited to a higher post. However, before leaving, the DNuO had written a winning proposal which is now being implemented by the successor" - said one district supervisor.

3.4.3Output 3: Planning and budgeting guidelines and tools on nutrition developed and rolled out

3.4.3.1Development of planning and budgeting guidelines and tools on nutrition

Planning and budgeting guidelines and tools for districts were developed in 2012²⁵using UNICEF funding from other sources. These guidelines were disseminated in all the regions and districts. They have been used to support NuOs in preparing their annual work plans for FY 2013/14, 2014/15 2015/16 and 2016/17. Interviews with the PMO, MoHCDGEC, TFNC, and UNICEF revealed that since financial year 2013/14 they have provided technical support to the regions and districts during JMNR meetings.

During field visits, the Evaluation Team members could not retrieve the records of the districts' annual work plans because the in-depth interviews with the DNuOs were held at central venues away from the district headquarters. In addition, the budget and planning data is stored electronically and the responsible officials were attending the PO-RALG coordinated budget sessions in the capital city, Dodoma. Thus the Evaluation Team's main evidence on effectiveness of output 3 was obtained from

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²⁵United Republic of Tanzania (2012), Guideline for councils for the preparation of plan and budget for nutrition, Prime Minister's Office, Dar es Salaam, Tanzania., 24 pp

reviewing some district reports availed by UNICEF. The Evaluation Team observed that planned budgets for nutrition activities in the district and municipal councils have increased from Tsh 58 million in 2011/12 to Tsh 199 million in 2015/16 while actual spending increased from Tsh 65 million to Tsh 125 million (see Figure 8).

The other commendable observation about the effectiveness of the nutrition capacity building initiatives was the sustenance of high level recognition of nutrition among key politicians in the country. During field work all districts reported that the Prime Minister's call for investing more on nutrition when launching the NMNAP in September 2017 had yielded fruits. The PO-RALG had given a directive that for the 2017/2018 budget each district had to allocate Tsh 1,000 for every under-five child. This was higher than the preceding financial year's Vice President's call for allocating Tsh 500 per child.

Basing on the Bureau of Statistics projected population tables for 2018 (NBS 2018)²⁶, the evaluation team recorded that in Tanzania there are approximately 9,408,348 children aged 0-4 years. Thus, approximately Tsh 9,408,348,000.00 (or US\$4,276,521.82based on exchange rate of Tsh 2,200) are to be allocated for all children under-five years of age.

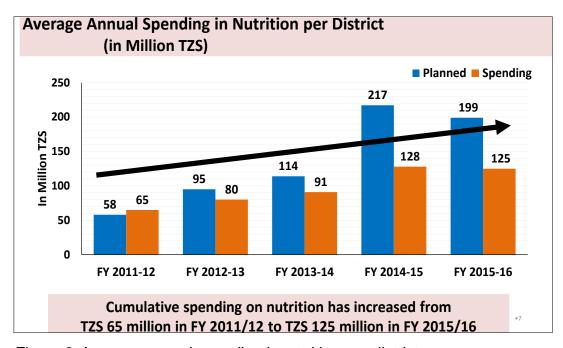


Figure 8: Average annual spending in nutrition per district

Source: JMNR Joint Multisectoral Nutrition Review 2016.

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 $^{^{26}\}underline{\text{http://www.nbs.go.tz/nbs/takwimu/census}}2012/\underline{\text{Projection-Report}}\ 2018$

3.5 The impact of IST on NuOS key roles and responsibilities

The other main component of the TOR for this evaluation was to assess the improvement of the capacity of NuOs in four specific dimensions of the work of nutrition officers namely coordination, planning and budgeting, programme management and monitoring and evaluation.

3.5.1 Coordination

Coordination and collaboration are core values of a multisectoral approach and for UNICEF programming. These are catalysts for stakeholders to share information and work together towards improving the health and nutritional status of communities. The evaluation reviewed the capacities of NuOs in coordination at national, regional and district levels.

3.5.1.1 National level Coordination

At the national level, coordination of nutrition programming is done by two high level offices, namely the nutrition unit at the PO-RALG and at the PMO. While the PMO coordinates all the nutrition line ministries, the PO-RALG coordinates the implementation of nutrition interventions in all regions and districts. Both offices have a key role in ensuring that food and nutrition interventions are planned and budgeted for. TFNC oversees overall technical coordination.

3.5.1.2 Regional and District level Coordination

One of the main roles of the NuOs is coordination of the Regional/Council Multisectoral Nutrition Steering Committees. Many of the NuOs reported that their capacity in this role had improved after the IST as stated by one DNuO during a one on one interview;

"Following the IST course I attained some skills on coordination and I was able to run the meetings of the Council Multisectoral Nutrition Steering Committees. All sectors relevant to nutrition play their role as required". This statement was echoed in similar written statements from several DNuOs.

On the contrary, some of the NuOs expressed concern that even after attending the IST their role of coordinating the multisectoral committees was still difficult and gave several reasons for this including: having insufficient funds for coordination; inadequate support from Council Management Teams where some senior officials from other sectors were not attending the meetings and instead were sending subordinates who could not make substantive decisions. Some NuOs recommended that the role of coordinating these multisectoral committees should be given to the District Medical Officers (DMOs) and Regional Medical Officers (RMOs) themselves with NuOs as secretaries. Examples of the statements given to support this recommendation included;

"It is a big challenge to coordinate Heads of Departments while being an ordinary or a subordinate officer; sometimes they need a coordinator to be of a higher authority than them because of existing government hierarchy".

"It is hard for the RNuO to coordinate supervisors from other sectors because the RNuO is under the RMO."

While several DNuOs simply said, "It is difficult to coordinate the steering committee in the council".

3.5.1.3 Nutrition sensitive activities in the district/ regional Annual Plans

During the field trips, partners and CSOs working on food and nutrition interventions at the community level were listed by the NuOs. Partners and CSOs were supporting both nutrition specific and nutrition sensitive initiatives and are coordinated through the multi-sectoral nutrition steering committees. However, as per NMNAP guidance, there is a need for strengthened coordination, interdependence and synergy of operations of the different sectors.

The NuOs rated the extent to which sectoral plans in the districts or regions incorporate nutrition sensitive activities. On a scale of 1 for "very low" to 5 for "very high", the Health sector was rated highest (3.7) among other sectors (see Table 11). This shows that health plans in the respective districts or regions had significantly incorporated nutrition sensitive approaches. Infrastructure and community development were rated the least at 1.6 and 1.9, respectively, an indication that their plans in the respective districts or regions had not significantly incorporated nutrition sensitive approaches.

Table 11: Incorporation of Nutrition-sensitive activities in the district/ regional Annual Plans

Sector	Rating(N=78)
Health	3.7
Agriculture and Livestock	2.5
Infrastructure	1.6
Water and Sanitation	2.2
Community Development	1.9
Others nutrition related sectors	1.9

3.5.1.4 Main factors that helped Nutrition Officers to coordinate with multi-sectoral stakeholders and implement nutrition programs

Nutrition officers were asked to state the main factors that had helped them to coordinate with multisectoral stakeholders and implement nutrition programs. Some of the commonly listed factors included: advocacy and other skills, involvement of stakeholders in nutrition issues, effective communication with the nutrition steering committee, availability of funds from donors and sensitization through nutrition committees.

3.5.2Planning and budgeting for Nutrition Interventions

One of the key responsibilities of the NuOs was overseeing the planning and budgeting for nutrition interventions in their respective region or districts.

The evaluation assessed the capacities of NuOs to prepare relevant annual workplans and obtain sufficient funds for the implementation of the plans. This activity could not be done in the field due to the short stay in each district. Also, as explained earlier, the field visits were made when all the district management teams had convened in Dodoma for an emergency budget planning meeting. The assessment was therefore done using the planning and budgeting reports for all the regions and districts stored electronically at UNICEF. Based on these reports, KIIs, and the NuOs questionnaires the Evaluation Team gave a rating score of 4 (high) with regard to capacities to prepare relevant annual work plans and obtain funding. However, the Evaluation Team interpreted this rating with caution as the improvement in the NuOs capacity to plan and budget for nutrition interventions could not be attributed to the IST programme alone. There were other UNICEF supported capacity-building initiatives using other sources of funding. These complementary capacity building initiatives included the annual Nutrition Bottleneck analysis exercise that was instituted in 2014. These initiatives are coordinated by TFNC and conducted by the R/DNuOs. These precede the annual multisectoral planning and budgeting meetings that are spearheaded by PO-RALG and facilitated by TFNC, MOHCDGEC, UNICEF and DPs.

Each year the NuOs prepare annual work-plans using budget guidelines provided by central government. They also provide guidance and technical support to other departments and stakeholders to incorporate nutrition sensitive activities in their sectoral plans. However, the inclusion of nutrition sensitive activities in annual plans is highly dependent on the level of understanding of the officials in the other sectors who have their own sectoral priorities. One DNuO raised a valid concern that is quoted below:

"Coordinating heads from other departments so that they allocate funds for nutrition activities is hard. Each has own sector-specific priorities and administratively I can't hold staff from other sectors responsible"

The other widely reported hindrance to effective implementation of annual work plans was that often there was a delay or non-disbursement of funds for the budgeted activities.

"I can plan very good activities, but the problem is the low ceiling of budget for the council in nutrition activities and also the release of the funds for the planned activities by the council" commented one DNuO.

The NuOs further reported that the funds available for nutrition activities remain insufficient.

The Evaluation Team confirmed this phenomenon by reviewing the JMSR reports provided by UNICEF²⁷. In the year 2016/2017 PO – RALG had set a minimum budget allocation amounting to Tsh 500 per child under-five years of age in the council budget. However, among the 171 districts that reported on this item, only 2 districts had allocated Tsh500, while 80 districts had allocated no funds. 81 districts had allocated Tsh1-100 and 20 districts had allocated Tsh200-499. This highlights the need for more advocacy strategies by the NuOs. The Evaluation Team was also informed that the amount per child has been increased to Tsh 1,000 for years 2018/19. The PO-RALG has also directed each Regional Commissioner to develop and sign a region-specific performance contract that will be cascaded down to RMOs and DMOs.

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²⁷Joint Multisectoral Nutrition Reports, FY 2011/12 to FY2015/16

3.5.3 Programme management

Most nutrition officers reported in section 3.3.4.2that their knowledge and capacity to manage nutrition interventions had improved substantially following the IST programme. The Evaluation Team enquired on how this knowledge and capacity had been helping them in fulfilling their responsibilities and programme management.

The Evaluation Team made enquiries regarding the placement of NuOs within the existing public civil service system as this could have a bearing on their efficiency in programme management. Nationally, according to the current Scheme of Service, the NuOs are placed within the MoHCDGEC human resources structures. Information was collected on whom the surveyed NuOs report to, that is, who their supervisors were (Figure 9). Data collected revealed that the highest proportion (57.4%) of NuOs reported to the District Medical Officer on technical issues, 9.8% to the Regional Medical Officer, 13.1% to the Regional Nutrition Officer, 4.9% to the Head of Nutrition Unit, 4.9% to TFNC, 1.7% to the Head of Training and 1.7% reported to a Matron. An important observation is that a good proportion of NuOs were reporting to supervisors in a non-health sector, that is, the District Agricultural Officer (4.9%) or the Head of Agriculture Department (1.6%). The Team's recommendation would be that since the non-health sectors have substantial contribution to the pool of human resources for nutrition at regional and district levels they should also be included in future IST training programmes.

The majority of the NuOs interviewed reported that the IST had substantially improved their knowledge and skills in programme management. However, lack of funds to put knowledge and skills acquired during IST into practice was a major obstacle. Among the 67 NuOs who responded to the question on challenges affecting their capacities in programme management, 55 (82%) listed financial related responses.

The placement of the NuOs within the health sector also had some implications on their efficiency in programme management. In the absence of a budget line for nutrition it was observed that the NuOs incorporated their nutrition activities under the District and Regional Reproductive and Child Health portfolio. NuOs also had to align their supervision visits with those of the Reproductive and Child Health (RCH). Since the supervision checklist did not include nutrition issues, the NuOs reported that they engaged more in supervising the RCH component rather than the nutrition component during supervision visits.

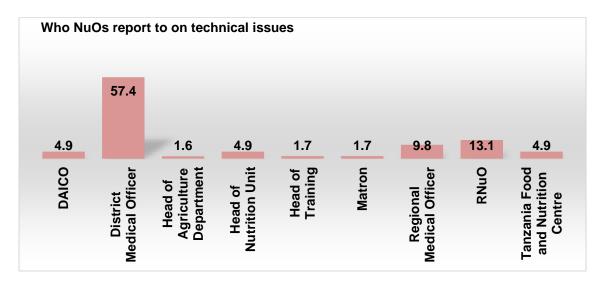


Figure 9: Who NuOs report to on technical issues

3.5.4 Monitoring and supervision.

Monitoring, supervision and evaluation aspects were considered as the most useful components of the IST by the NuOs. The Evaluation Team rated the capacities of NuOs to collect, analyse and report on relevant nutrition data and information at district, regional and national levels on a scale of 1 to 5 where 1 represents "very low" and 5 represents "very high" and gave a rating of 4 which is high. A similar rating was done for carrying out regular supportive supervision at various levels and this was given a rating of 3.5.

The high rating for monitoring is not attributed to the IST programme alone but rather to the synergy between IST and other capacity building initiatives by UNICEF that had established methods, procedures and indicators, to monitor and evaluate nutrition program performance. These initiatives included the development and institution of tools for the annual Nutrition Bottle Neck Analysis exercise, the nutrition score card in all the regions of Tanzania Mainland and Zanzibar and the annual JMNR Meetings. All these initiatives placed Tanzania as being among the leading countries in nutrition monitoring.

The low rating for the component of supervision is explainable. As mentioned earlier, the placement of the NuOs within the health sector had some implications on their efficiency in programme management. In the absence of a budget line for nutrition in the district planning guidelines, NuOs were incorporating their activities under the District and Regional Reproductive and Child Health budget line. Where the district or region had no additional partner supporting nutrition the funds availed were few. Even where the regions had a partner the timely implementation of planned activities would be affected if there was delay in the release of funds. This phenomenon is illustrated in Table 12 that was extracted from the Mbeya Regional Health Management Team (RHMT) WorkPlan for 2016/17. The region health authorities informed the Team that they receive substantial funding from several donors. The funds from these donors are centralized in the GoT's basket fund and timely implementation of the planned activities was likely affected by delay in disbursement of funds from the GoT's central "basket funding vote".

Table 12: Illustration 1 Annual Review of the Implementation of one Regional Health Management Team (RHMT) Work plan for 2016/2017

Planned activities	Implementation status	Factors contributing to the status of implementation	Possible alternatives
Two RHMT members to conduct health promotion on Breast Feeding week by August, 2016	This activity was not implemented		To be budgeted from other sources (Own Council Sources)
To conduct semi-annual meeting for 3 days to 120 RMNCH/IVD/PMTCT services performance including Scorecard by June 2017	This activity was not implemented	Funds for implementation of this activity were not released from basket fund.	To be implemented in the next quarter
Convene 1 day bi-annual Regional Multisectoral Nutrition Steering Committee meeting to 17 members by June 2017.	This activity was not conducted	Late disbursement of funds. Re-schedule to the end of March 2017	To be implemented in the next quarter
NEW additional activities for 2			
 Disseminate, advocate for, and communicate the NMNAP at various levels and with nutrition sensitive sectors and other stakeholders. Develop a performance based rewarding system for good performing on Scaling Up Nutrition for Ministries Departments and Agencies (MDA); Regional Secretariats; Local Government Authorities; private sector, media, CSOs and individuals. 			

Source: Mbeya Regional Health Management Team (RHMT)Annual Plan FY2017/2018

3.6 Gender mainstreaming into the IST Programme

3.6.1 Gender Assessment

In this section, the evaluation sought to address the question of whether the in-service training program for nutrition officers and focal persons/points contributed to promoting equity in access (including those with disability) and gender equality. The evaluators analysed how the issue of gender was mainstreamed into the selection of trainers, the design of nutrition modules, selection of trainees, service coverage, monitoring systems, and policy level actions at national level and strategies at local government level. The Evaluation Team gave this evaluation criterion an overall score of 3.7 (moderate-to-good) out of a possible maximum score of 5 (very good). The findings reveal that some gender mainstreaming was done but it could have been stronger. More details pertaining to gender mainstreaming are discussed below.

3.6.2 Gender-mainstreaming into the selection of trainers

One of the questions evaluators sought to answer was the number of trainers disaggregated by sex and age. Although the evaluation team did not have access to complete demographic data on the trainers and graduates of the ToT programme, information extracted from the summary report from TFNC to UNICEF shows that out

of the 15 ToT graduates trained to become trainers, as documented in that report, nine (60 percent) were female. The age of the ToT graduates under this programme was not available from the information received by the evaluators. The higher percentage of female trainers corresponded well to the higher percentage of females engaged as NuOs who were to be trained under the IST programme. Out of the 78 NuOs surveyed that had valid responses, 23 (%) were male, and 77% were females, thus showing that an overwhelming majority of the NuOs are female. A key recommendation stemming out of these findings is that age and sex information on ToT graduates should both be captured and reported on consistently through the M&E system of the IST programme in future.

3.6.3 Gender mainstreaming in the selection of trainees

The gender disaggregation of trainees was not through a deliberate strategy to ensure a balance in the sex composition of the NuOs enrolled for the IST programme. In any case, it was apparent from NuOs in post that more women NuOs compared to men were in service and would attend the IST programme. One of the NuOs interviewed had this to say:

"In-service nutrition trainings targeted nutrition officers and nutrition focal persons from the regions and districts, there was no consideration whatsoever of gender but mere professional background".

As indicated earlier in the description of the sample of NuOs, across all age-groups of trainees, women were the dominant group among the trained NuOs with more women in the younger age-groups compared to the older age-groups of NuOs. Women accounted for 60% of the surveyed NuOs aged between 24-29 and 35-49 years, 90% of those aged 30-34 years, and 58.3% of those aged 50 years and above. Overall, women constituted 68% of all sampled trainees and this closely mirrors the total population reached by the IST programme.

The delivery methods and other strategies for maximising gender-balance were not necessarily applied, nor were they seen as necessary in a female dominated profession. There was little mention of delivery methods that would be sensitive to the unique situations and needs of women and men.

3.6.4 Gender-mainstreaming in the design of training materials and delivery of the IST programme

SUA did well to identify "gender and nutrition" as an issue to be covered in the curriculum and the need to have the first module to cover this aspect. This was clear from the TNA Report. However, according to trainers, there was no specific section titled "gender" but, more generally, there were gender issues embedded in some of the topics that were covered.

The training curriculum for IST developed by SUA included gender issues under Module 1, especially as they related to the nutrition situation in Tanzania. In the module, the curriculum specifically stated that "distribution of malnutrition over time, geographically, by age, gender and income group will be discussed" with trainees. In this regard, under the sub-heading covering "major nutrition problems in Tanzania",

the analysis of nutrition would look at the "distribution of nutrition problems over time (seasonal variations); geographically based on climate zones and regional disparities; by age focusing on children under two years, children under five, adolescents and elderly; gender focusing on women of reproductive age and income group"²⁸.

The evaluation confirmed that indeed, in practice, this part of the curriculum was delivered during the actual training sessions. On a scale of 1 to 5 where 1 was the lowest and 5 was "highest "rating of level of satisfaction with various aspects of the IST programme, the aspect of the extent to which the programme ensured that gender, disability and equity issues were included was rated 3.7 which is "moderate-to-good".

According to a senior official in PO-RALG who was interviewed:

"The content of in-service training program for nutrition officers and focal persons indirectly contributed to the objective of promoting equity and equality as it approached nutrition holistically. Sections around maternal and child nutrition, maternity protection were discussed in infant and young child feeding sessions of which some aspects of gender appeared".

Emphasis of the content on addressing stunting made the primary target (as final beneficiaries) of the training women of child-bearing age and children under the age of two years, who would be served by the trained nutrition officers. These groups represent the key target in the window of opportunity for addressing stunting in the first 1,000 days. This focus is valuable, but nutrition problems and causal issues in Tanzania extend beyond this target group. Nutrition for adolescents in school and male involvement in infant and young child nutrition and care are emerging themes that need to be addressed with equal importance alongside issues of diet related noncommunicable diseases which need to feature more prominently in the training curriculum than hitherto achieved. It is also equally important to address nutrition education of boys as they would soon become future fathers and needed to share duties in nutrition and child care with their spouses when they get married. It is key to "catch the fathers young" when addressing stunting in the first 1,000 days window of opportunity.

In future, a gender mainstreaming strategy for new IST programmes in Tanzania should be deliberately developed and included in the overall IST strategy. This was the main gap in the evaluated IST programme. For example, in the "In-Service Training Strategy and Costed Implementation Plan for Nutrition: 2013-2017" submitted to UNICEF by SUA (December 2013), there was good articulation of the overall strategy for IST, but no specific section dealing with how gender mainstreaming would be done. Such strategy should have been included and should have articulated the approach to gender mainstreaming at each stage of the project cycle (design, resourcing, implementation, monitoring and evaluation). While the IST programme adequately addressed the diagnosis of gender issues in nutrition, it was less geared towards equipping NuOs with approaches to address these observed gender issues that affect

Agriculture (SUA) Department of Food Science & Technology, 4 August 2012.

²⁸Nutrition In-service Training Curriculum: Development of a National In-Service Training Programme for Nutrition Officers at the Regional and District Levels in Mainland Tanzania, UNICEF, LRFP-CKS-2012-9100861, submitted by Submitted by: Sokoine University of

achievement of good nutrition in the population, with special focus on women of child-bearing age and children. The future IST programme should have a more balanced approach to gender mainstreaming (that is, diagnosis of gender issues, strategies to solve the issues and tracking of gender issues during implementation of the IST programme). All reports, including the end of project summary report should include coverage of gender issues, at every stage of the project cycle. The Summary Training Report on the IST programme for Regional and District NuOs in Tanzania did not articulate any gender issues in any of the following aspects that the report covered: the TNA, the design, the delivery, results, challenges and lessons.

3.6.5. Proportion of clients served by trainees disaggregated by sex

The trained NuOs confirmed that they reached both men and women in service delivery, but messages were not necessarily tailored. These clients were in most cases those who reported to the health facilities or came to receive services in the outreach programmes at community level. Some of the officers trained were from agriculture and other sectors whose reach is beyond the confines of the health domain and more gender-balanced in client participation. The interviewed NuOs confirmed that most of their primary targets for nutrition information were women of child-bearing age and care-givers. They rarely included men in equal proportions with women except when reaching them through community level outreach meetings, depending on the nature of activity providing the anchor agenda for the meetings.

A key recommendation from this observation is that the cascading of nutrition education from trainers (TFNC, SUA, UNICEF, etc.) to ToT graduates, then to trainees (nutrition officers) and ultimately to the final target groups consisting mothers and caregivers should embrace methods that encourage male involvement. They should attract more men to receive nutrition education with their spouses at the point of service delivery. Adoption of more participatory methods of involving men should be encouraged (such as community gender dialogues on child care and nutrition).

As a further recommendation, the population reached by the trained NuOs needs to be counted and recorded in the IST M&E database so that coverage of services and impact of the programme could better be assessed in the future. To do this systematically, special data capture tools, or consolidation tools drawing from the administrative data compiled by NuOs at the point of service delivery need to be made available for continuous monitoring and recording the numbers for reporting. In addition, a tracer programme would be ideal to introduce and follow-up the trained NuOs with the view to confirm the population they are serving with the improved knowledge and skills and the types of information given to adult men and women (as well as boys and girls).M&E reports should also capture the changes in behaviour occurring in the target groups as a result of the improvement in service delivery of NuOs.

3.6.6 Evidence in progress reports on monitoring gender equality issues

In general, the comprehensiveness of coverage of gender equality issues in the progress reports could be improved. Activity reports on the training done, for example in Shinyanga, Mwanza, Lindi, Moshi and Mbeya were not rigorous in their coverage of how gender issues had been addressed during the IST Programme.

M&E reports concentrated on sex-disaggregation of statistics but did not go beyond the numbers to explain factors influencing the observed proportions, and how the training of nutrition officers had on one hand, improved services to male and female children, adolescent boys and girls, and adult women and men, and on the other hand, empowered the nutrition officers socially, and economically. The extent to which gender relations had improved in the home for married and non-married trainees was not reported. Training did not necessarily increase incomes of the trainees, except for those few that were promoted, or secured new jobs, especially out of the government sector. How gender issues that influenced the selection of venues, course duration, course delivery methods and course assessment approaches were not covered.

3.6.7 General policy approach to mainstreaming of gender equality in nutrition

Although the IST programme was not focused on addressing gender inequality as a primary concern, UNICEF has been supporting the GoT to address this issue through other interventions aimed at achieving gender-based, child and nutrition-sensitive budgeting and service delivery at regional and district levels. The IST programme was implemented in the broader context of capacity development for improved service delivery at local government level and was integral to the larger effort of addressing issues confronting women, men and children in attaining food and nutrition security.

At the implementation level the trained NuOs were conversant with nutrition related gender issues in their districts. Some of the issues raised by NuOs that are being addressed by other programmes included those listed in Table 13.

Table 13: Gender-related challenges and how they are being addressed in the districts

Challenge	How the challenge is being addressed
Land ownership	Use of laws/bylaws to enforce ownership of family land by all family
	members.
Education	Use of laws to ensure all children both boys and girls attended
	primary school and those selected to join secondary schools also
	attended secondary education.
Division of labour	Use of various stakeholders to educate communities on equal
	division of labour among both men and women to reduce women
	workload.
Decision making	Continue education on involvement of both genders in decision
	making in various levels of the community

All these issues have a bearing on nutrition outcomes. Land ownership by women empower them to control income from the produce grown and harvested from the land, while better educated women make more informed nutrition decisions. Division of labour and male involvement in child care is positively correlated with better nutrition outcomes of children. Participation of women in decision-making, especially on matters that concern their own health, and the health of their children, is known to contribute to better nutrition results.

Key informants at national level also corroborated the view that: "while all government policies and guidelines are increasingly being engendered, the main problem now lies in the non-implementation of these policies, whether those planning and implementing the various nutrition programme take care of the gender issues or not".

3.6.8 Mainstreaming of nutrition in district plans

UNICEF and other partners have been working with local authorities in the same geographical locations where NuOs that were trained are operating. Their work has been seeking to ensure that district plans include specific provisions (strategies and budgets) to solve nutrition problems of all genders within the community and the plans are prepared by multi-sectoral heads of departments, who consist of both sexes. Key informants interviewed at district level confirmed that in their opinion, senior officials working for gender mainstreaming in nutrition were aware of gender issues. As evidence of their awareness, they were insisting on requiring pregnant women and lactating mothers to attend health clinics with their spouses or partners so as to get nutrition and other forms of health education together.

3.7 Sustainability of achievements of the IST programme for NuOs

Under sustainability, the evaluation team answered two critical questions, namely:

- 1) To what extent the achievements of the IST programme for NuOs and focal persons are sustainable? and
- 2) Whether it will be necessary to roll-out a second phase of the IST programme for NuOs and focal persons?

Using a rating of 1 to 5 where 1 represents "very low" and 5 represents "very high", the evaluation team gave "sustainability" an overall rating of 4 as the findings show that the achievements of the IST programme of NuOs are likely to be sustained to a good level. The achievements of the IST programme encompassed the development of a training curriculum that could be used in the future and the training of trainers who could continue to provide training to other officers in the future. The new national action plan for nutrition would continue to channel resources to capacity building, the transfer of knowledge, skills and tools to trainees which could continue to be applied in the future. Also taken into account were nutrition benefits accruing to the final beneficiaries (comprising children – mostly under-fives, and women of child-bearing age) who then received improved services from the trained personnel and general awareness and capacity building of institutions delivering nutrition training services that participated in the programme. The improved capacity of NuOs could continue to be used in future.

These factors which support the high rating for sustainability of achievements of the IST programme are further elaborated below.

3.7.1 Existence of training curriculum and materials for future use

A significant investment was made in developing the training curriculum and related training materials with technical inputs from local and international experts.

According to a key informant interview with TFNC, "the training materials were developed through a consultative process and validated by a national stakeholder meeting".

The experience gained and skills that were acquired in the development of the curriculum could inform similar work in the future. The curriculum as well as the training materials developed shall remain an important resource for further use when programmes to capacitate NuOs are being developed and rolled out. The curriculum could be adapted by universities, local government institutions, the TFNC, the Ministry of Health and NGOs, among others, to suit their needs. In addition, content will have to be adapted from time to time in line with new scientific discoveries, technological innovations and new guidelines and treatment protocols developed and published by the WHO. These may necessitate changes in policies, guidelines and tools used at the national level. Given the performance of the short-term trainings and the need for more longer-term mentoring and guidance of NuOs, the approach of training/ or capacity development of the in-service personnel may require a significant overhaul of the way training is provided and this could entail significant revisions to the training curriculum for wider application.

3.7.2 Existence of a pool of potential trainers to continue with training after the project

The IST programme included NuOs from across the country. In Tanzania Mainland, 87% and 60% of the district and regional NuOs in post, respectively, were trained. In Zanzibar: 80% of district focal persons and 100% of NuOs at the Nutrition Unit, in the Ministry of Health were trained. To sustain this highly qualified professional pool, IST should be conducted continuously to capture those missed in the first phase as well as to replace those NuOs who would have left. This was the initial design of the IST programme as reported by the former IST coordinator of TFNC.

According to the former IST coordinator at TFNC:

"The initial design of the IST program was to be highly sustainable. The TFNC had used a ToT approach to train the RNuOs and DNuOs as Trainers. They were to cascade the training to other nutrition officers and extension workers at ward level. However, this cascading was never effected as project implementation time was over."

3.7.3 Knowledge, skills and tools acquired by trainees

According to trained NuOs cooperation between the GoT and UNICEF as well as other organisations such as Helen Keller International (HKI), created the opportunities for continuous capacity building especially for NuOs at both district and regional levels who then spread this knowledge to the community in general. The trained NuOs are being supported not only by UNICEF but the government and other organisations implementing nutrition programmes at district and community levels to continue to apply what they have learnt in enhancing service delivery to populations in their districts. However, the challenges they continue to face include outdated or obsolete equipment and occasional gaps in nutrition supplies and this is hampering continued full application of the knowledge gained by the trained officers.

3.7.4 Nutrition benefits

The nutrition benefits already accrued to women of child bearing age and children under five years of age who have received improved services from the trained NuOs would continue to improve all aspects of their personal development in later life. Children that are prevented from stunting in the first two years would derive benefits in education, productivity and future income earnings as well as avoid non-communicable diseases associated with stunting and poor diets.

3.7.5 The "living" National Multi-sectoral Nutrition Action Plan and the Five-Year National Development Plans

The launching of the landmark NMNAP by the Prime Minister in September 2017 offered significant opportunities for intervening with nutrition-related capacity building support within the new development priorities of Tanzania as stated in the NMNAP. While the approach to training may change to longer-term mentoring and coaching, which would be more effective than short-term theoretical training, the theoretical content in the short-term nutrition modules would remain relevant to support on-the-job mentoring and coaching. The multi-sectoral approach advanced by the NMNAP opens significant opportunities for trained NuOs to provide training to other officers in other sectors, and community volunteers supporting health, nutrition and food security interventions on the ground.

3.7.6 Leveraging of funds from other donors

At the time of the evaluation there were various opportunities for on-going IST in nutrition using funds from nutrition and related partners working in the regions (see Annex 5 on who is doing what and where). The well-established DPs nutrition group could serve as a good platform for fostering this agenda. Most of the NuOs reported that partners' support in nutrition was substantial and would contribute a lot to sustainability. However, those from Katavi reported that "there are no nutrition partners or donors in our region".

Even in the regions that had partners the following statements showed NuOs reservations on the adequacy of partners' operations:

"Some stakeholders who are working for Nutrition interventions only cover a small area".

"Stakeholders do not disclose their budget on nutrition, this makes it difficult for Council to know the amount of fund invested for nutrition".

"Some development partners do not invest into nutrition sensitive interventions".

"Most stakeholders are not transparent on their budget during implementation of their activities".

According to the TNA report, the analysis of training needs was mostly done with government officials at central ministries and NuOs in post. Some donors were involved as stakeholders in the design of the first IST programme and curriculum and training packages, but donor involvement could have been stronger to increase prospects of their funding of this type of intervention in the future. Hence, the future review of the curriculum and training modules should invite more donors to participate and contribute funds.

Some NuOs expressed their limited capacity in fund-raising and proposal writing. They suggested that these topics be incorporated in the university curriculum. Their views on sustainability were mixed and included the following:

"I heard the contents of the in-service training of nutrition modules will be incorporated into the health and nutrition training syllabus of training colleges, I think in so doing, this will be sustainable."

"Training of nutrition officers and focal persons will be sustainable if planning for nutrition issues is not left to TFNC alone. Ministry of Health, PO-RALG and all nutrition related ministries should be fully involved and make sure IST funds are budgeted for and made available through Council budgets."

"There are other nutrition focussed organisations like USAID, CONSENUTH, CRS, DFID, Save the Children, IMA, World Vision - they should be sensitized to fund nutrition activities."

"Nutrition activities in our country are sorely depending on stakeholders, once they are gone the project is gone."

Multi-sectoral Nutrition Steering Committees had been formed at the PMO and regional and district levels. Currently they are under the PO-RALG. Their establishment at different levels was to have a multi-sectoral approach brining all key stakeholders to advance the nutrition agenda through which DNuOs and RNuOs incorporate nutrition sensitive activities into regional/district plans and budgets as well as monitoring the outputs of their implementation. This would help to sustain the achievements of IST. Therefore, what is required is to strengthen the regional and district nutrition committees in coordination and integration of nutrition activities to ensure that nutrition is not tugged under health but is a stand-alone district priority and that the NuOs are integrated to different key sectors and not only focus on health but work as a multi-sectoral team.

Through the IST programme guidelines on planning and budgeting tools were developed and rolled out to districts of all regions in Tanzania mainland. Tools are used to assist district NuOs in preparing nutrition plans and budgets. However, only some of the trained NuOs confirmed that they do not participate in the planning and budgeting process of district councils. Those not engaged felt that their profession is still not well recognized and there is a need to strengthen their umbrella association through which they could collectively advocate for involvement of all district NuOs to participate in the district planning and budgeting process as supported by the below quote:

"The IST will be sustainable if nutrition officers will engage themselves in planning and budgeting process for nutrition activities."

The issue of sustainability was also echoed by donors in particular the chair of the Development Partners Nutrition Group, who said:

"All other partners who use the services of DNuOs and work with them should be able to come in and contribute financially to IST and continued training. Partners have been supporting at their levels and through government. There is however the need to have a standard curriculum which will facilitate and make it easier for partners' support and participation. The multisectoral nutrition action plans and the PO-RALG annual regional planning process where regional officers can learn from others are key to sustainability and more donors should be included in the process"

3.7.7 Institution of a Nutrition budget line into district council budgets for 2018/17

According to key informants, the GoT is committed to increase budget allocation to nutrition activities. Amongst the initiatives undertaken by the GoT is the directive by the Vice President to LGA to allocate funds for nutrition activities. For the year 2016/2017 the PO–RALG set minimum budget allocation for each council amounting to Tsh 500 per child under-five years of age which was increased to Tsh 1,000 Tanzanian shillings per child in the year 2017/2018. However, very few regions adhered to this directive.

In 2018/19 the government introduced a nutrition budget line for district nutrition activities. This is an indication that the government is now confident that there is someone trained to guide nutrition budgets utilization and accountability. To start with, the districts have been directed to budget Tsh 1,000 for each under-five child. This ensures resource allocation to sustain nutrition activities. However, achievements are challenged by insufficient resources as there are many competing priorities. The system in some districts underutilizes NuOs' knowledge and skills gained as nutrition activities are not yet prioritized.

Potential also exists for strengthening the nutrition profession through FONATA, a registered association of NuOs taking care of their issues including training.

3.7.8 Additional institutions that offer basic degrees in nutrition

The Evaluation Team was informed that the University of Dodoma and Nelson Mandela University are at the final stages of incorporating an undergraduate training in nutrition into their training programmes. The Evaluation Team recommends to GoT that the pre-service training should include the areas covered by the IST.

4. LESSONS LEARNT, CONCLUSIONS, RECOMMENDATIONS

E. Conclusions

The main conclusions emerging from the findings of the evaluation are presented by evaluation criterion and framed to address the initial evaluation questions.

E1: Relevance

The evaluation concludes that the IST program approach was and continues to be highly relevant for addressing GoT commitments for food and nutrition security. It also remains relevant to UNICEF's mandate of fostering effective nutrition programs through building relevant partnerships. The IST largely addresses the needs of beneficiaries especially as regards training on theoretical aspects of nutrition, but practical work was not fully responsive to expectations of beneficiaries because time for this was inadequate.

E2: Efficiency

The program was efficiently implemented in terms of use of human and material resources with key drivers being recruitment of facilitators and trainers through an open and competitive process and the involvement of PMO, Agriculture, other universities, etc. which was useful in validating training materials. The knowledge and skills of facilitators, course delivery approaches and availability of important training facilities and adequacy of training materials enabled timely implementation. Funds for the program were timely received from UNICEF and used as planned.

E3: Effectiveness

All three program outputs were fully achieved. A TNA was conducted, and Training Strategy formulated, and these guided the development of the curriculum and production of four training modules. Geographical coverage of training was high as all the 25 regions of mainland Tanzania and 5 regions in Zanzibar were covered.

The levels of understanding of key concepts and application after training were high for all four key result areas of coordination, planning and budgeting, program management and monitoring and evaluation. The improvement in capabilities and confidence among the nutrition officers following the IST was significant. Planning and budgeting guidelines and tools for districts were developed by UNICEF and disseminated to all regions and districts to support NuOs in preparing annual workplans.

The IST improved the capacity of NuOs in all the four specific dimensions of coordination, planning and budgeting, program management and monitoring and evaluation resulting in increased recognition of their work and a significant increase in budget allocation. Attributing the impact of this IST was a challenge since UNICEF and other partners supported continuous capacity building initiatives using other sources of funding.

Though gender was mentioned in the curriculum it did not feature adequately in the training packages and subsequently there was no specific session for gender in the timetables. This was a weakness that will need to be addressed in future IST.

E4: Sustainability

Achievements of the IST program are likely to be sustained to a good level due to commitment of GoT to increase budget allocation to nutrition activities; the existence of a training curriculum and related training materials, a pool of potential trainers and the national multisectoral action plan for nutrition; the existence of the Multi-sectoral Nutrition Steering Committees; continued leadership of UNICEF; willingness of the donor community, NGOs and CSOs to continue providing financial and technical assistance; availability of additional academic institutions that have incorporated nutritional sciences in their training program; and the fact that the IST of this nature is the first of its kind in Tanzania and has shown positive outcomes.

E5: Looking Forward

The evaluation confirms the strong need for further in-service training, as a continuous programme imbedded in institutions providing tertiary education on nutrition, including in modular form and complemented with on-the-job mentorship and coaching. Thus the absence of a PlanRep cost centre for nutrition activities with the Council Management Team (CMT) and CHMT system was a big challenge to utilization of the improved capacities in program management and coordination. The incorporation of nutrition activities under the District and Regional Reproductive and Child Health budget line should be re-viewed by authorities so that it becomes a stand-alone budget.

F. Lessons Learnt and Best Practices

The broad lessons learned from the review raise key issues that require further consideration.

The Evaluation Team observed that conducting IST training across the whole country within a very short duration was a bold undertaking. There are lessons based on the key factors that contributed to the successful implementation of this initiative. Foremost was the availability of adequate funds with no interruption of disbursement in between zonal training. The funds were availed to TFNC following timely retirement of each zonal disbursement. The other equally important factor was the choice of SUA which is more into academic training and giving TFNC the coordination role for cascading the training. Hard work, motivation and team spirit among the trainers enabled them to complete the activity timely, effectively and according to the IST Strategic Plan.

Through the IST programme, standardized Planning and Budgeting Guidelines were developed and rolled out in all the regions. This has resulted in a high level of competency programme implementation among RNUs/NuOs as exemplified in the annual Bottleneck Assessments preceding PO-RALG, UNICEF and TFNC supported Joint Review and Planning Meetings. However, attributing the impact of the IST programme on enhanced capacity should acknowledge that there were other capacity building programmes by UNICEF and other partners in the same regions.

The placement of the NuOs within the Health sector without a specific budget-line has a negative impact on efficiency. The RNuOs/DNuOs reported challenges in coordinating the heads of other departments because NuOs are just line officers within

the health sector. This evaluation also learnt that efforts to address this are at an advanced stage and the PORALG has issued "Contract" guidance with all Regional authorities to support both nutrition specific and sensitive interventions.

On relevance, programme design and framework, the evaluation noted that the project design processes were spelt in line with the country's strategies and policies which facilitated sufficient support from stakeholders.

The key nutrition inclined MDAS, TFNC and academia were involved in the training needs assessment, development of training packages and rolling out of the IST and this contributed to the strengthening of the nutrition coordination systems. Having a forum for Development Partners (DP) to deliberate on nutrition issues led to strengthened coordination and richer identification of nutrition issues including capacity building.

Training modules disproportionately favoured theoretical content at the expense of practical issues. A better balance between theory and practical content and time allocation would have enhanced effectiveness of the IST.

With respect to efficiency, the IST was preceded by a comprehensive Training Needs Assessment. Its findings were used in the design and development of training packages that were relevant the work of NuOs. In addition, UNICEF supported two capacity building projects (IST and Joint Multisectoral Nutrition Review [JMNR]) concurrently. This further contributed to the observed impact.

The evaluation noted that high-level authorities such as PO-RALG and PMO were engaged in the IST programme through all the stages and this has enhanced the sustainability of capacity building initiatives such as the annual JMNR for RNOs/DnOs and all nutrition-relevant sectors. The lesson learned is that if the same continual engagement trickles down to districts more nutrition activities will be incorporated into Comprehensive Council Plans.

A lot of changes on nutrition can be made if GoT uses lessons from the experience of the first IST programme to inform its decision-making on coordination of planning and budgeting for nutrition program/interventions. Interdependence and synergy will be achieved through operationalization of multisectoral committees at regional and district levels accompanied by follow-up, feedback and accountability.

G: Recommendations

Based on the evidence gathered during the evaluation that included a question in the tools, and the identified lessons learned, the evaluation team developed the recommendations and way forward which were validated through a stakeholder workshop attended by trainers, trainee, facilitators, policy makers, academicians, nutrition-relevant line ministries, UNICEF and CSOs. Since the IST has ended, these recommendations are those possible for UNICEF in collaboration with the Government to accelerate and sustain the impact of the IST program.

No.	Recommendation	Responsibility	Timeframe		
	ctiveness and sustainability				
1.	UNICEF and the GoT in collaboration with relevant stakeholders should integrate nutrition indicators into the existing supportive supervision tools.	UNICEF, PORALG, MOH, TFNC	2018 - 2019		
2.	UNICEF and the Government of Tanzania (GoT) should establish a post IST funding mechanism for supportive supervision, to further the impact of the IST program across national and subnational levels.	UNICEF, TFNC, PORALG	2018 - 2019		
3.	UNICEF and the GOT, should enhance coordination capacity of the trained Nutrition Officers, such as through nutrition coordination forums and facilitating subnational nutrition steering committees in providing capacity strengthening.	UNICEF, PORALG, TFNC, MOH, LGAs	2018 - 2020		
4.	UNICEF and the GoT should review the nutrition program periodically to adapt emerging nutrition scientific evidence and innovations from time to time for the sustainability of relevance and impact of the IST program.	UNICEF, PMO, PORALG, TFNC, MOH	2018 - 2020		
Gender mainstreaming					
5.	UNICEF and GoT should take deliberate efforts to mainstream gender in nutrition program. A special focus should be on adolescent nutrition, improving male involvement in infant and child care, spousal support for pregnant and lactating women, women economic empowerment and enhancing their access to, and decision-making over the use of household income, and improving gender relations in the home to improve the health and nutrition of women, children and other family members.	UNICEF, TFNC	2018 - 2019		
Enabling environment					

No.	Recommendation	Responsibility	Timeframe		
6.	An enabling environment for nutrition officers, such as availability of offices equipment, computers and transport for program monitoring and supportive supervision, needs to be strengthened.	UNICEF, PORALG, LGAs	2019 - 2020		
7.	UNICEF should provide technical support to the PORALG and MOFP to ensure that nutrition is allocated adequate resources in Councils' Planning and Budgeting Tool (PLANREP), and timely disbursement of funds for implementation of nutrition activities.	UNICEF, PORALG, MOFP	2019 - 2020		
Multisectoral approach					
8.	Follow – actions to the IST program should advance a multi-sectoral approach embarked by the NMNAP that opens significant opportunities for trained nutrition officers to provide training to nutrition sensitive officers who are supporting health, nutrition and food security interventions on the ground.	UNICEF, PORALG, TFNC, LGAs	2018 - 2020		

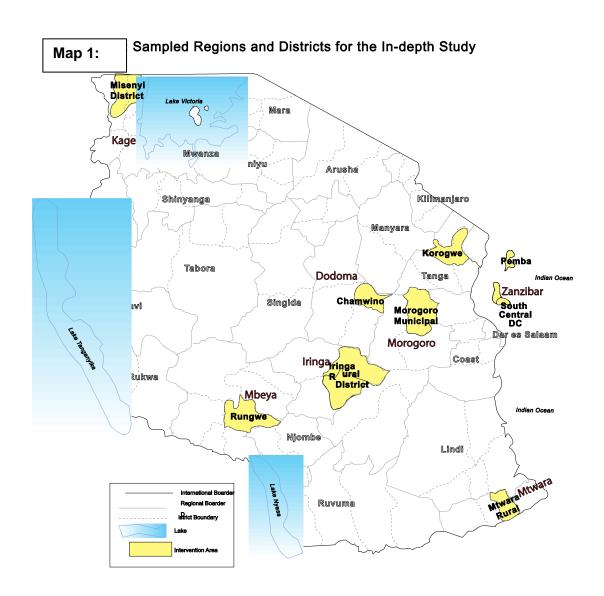
Annexes

Annexe 1: Evaluation Matrix



Evaluation Matrix - Revised.docx

Annexe 2: Map of Tanzania Showing the Districts for the Indepth Study



Annexe 3: Data Collection Tools



Tool 1 - KII for POLICY MAKERS.doc



Facilitators and Traine



Tool 3 - KII for Managers and Superv



Tool 4 - KII Development Partner



TOOL 6 Questionnaire for Nut



TOOL 6 Questionnaire for Nut

Annexe 4: Sample Timetable



Annexe 5: Additional table

Assessment of the course by evaluation specific criteria

On a scale of 1 for very low to 5 for very high, nutrition officers were asked to rate their level of satisfaction with the course according to specific assessment aspects. The ratings ranged from 2.9 for "Level of feedback received from Regional Nutrition Steering committees (R/NSCs)" to 4.4 for "Facilitator (s)" knowledge and skills of the concepts". It can be concluded that participants had a moderate satisfaction level with the course according to 9 out of 16 assessment aspects and high to very high level of satisfaction according to 7 out of 16 assessment aspects.

	Assessment aspects	Rating
34	Duration of the course	3.2
35	Relevance and appropriateness of training content aspects to your	4.3
	needs as nutrition officer/ your job	
36	Field practice	3.4
37	Facilitator (s)' knowledge and skills of the concepts	4.4
38	Course delivery approaches (pedagogical)	4.3
39	Ensure gender, disability equity are included	3.7
40	Venue and facilities for theory and practical's (comfortable, provided	3.8
	everything needed to learn	
41	Important facilities needed o the training	4.1
42	Extent to which you have been able to apply what you learnt to improve	4.0
	your work	
43	Level of supportive supervision received from TFNC	3.2
44	Level of supportive supervision received from PO-RALG	3.1
45	Level of supportive supervision received from RNSCs	3.2
46	Level of supportive supervision received from DNSCs	3.1
47	Level of feedback received from – TFNC	2.9
48	Level of feedback received from - PO-RALG	3.0
49	Level of feedback received from Regional Nutrition Steering committees	2.9
	(R/NSCs)	

Annexe 6: Nutrition Funding Stakeholders



Annexe 7: NIMRI Ethical Clearance

