Part 2: ANNEXES

Final report

External Evaluation of UNICEF's "Scaling Up Nutrition and Immunization implemented in 13 sub-Saharan African countries over the course of 2013-2016" - RFPS-USA-2014-501895

KIT Health Knowledge Unit

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Annex I Statement of Work and Terms of Reference

1. INTRODUCTION OF THE SECTION

Improving the health and nutrition of the world's children are core UNICEF objectives. The Nutrition Section provides evidence, guidance, tools and other resources on the four major Programming Areas in Nutrition that UNICEF supports – infant and young child feeding, micronutrients, management of acute malnutrition and nutrition in emergencies, and HIV and nutrition. UNICEF also leads work related to nutrition policies, strategies and partnerships, SUN, REACH, the MTSP, the MDGs and others. UNICEF is concerned with the survival and development of young children and mothers. It also works to ensure that children, particularly poor children, have access to health interventions at the household and community level, and the outreach that supports them, as well as the facility-based system. Eliminating barriers to accessing care requires the development of sustainable health systems, including financing mechanisms. UNICEF works with UN agencies and development partners to this end in order to ensure that healthy children become healthy adults.

2. BACKGROUND INFORMATION

"Scaling up Nutrition and Immunization" is a project funded by the Government of Canada's Department of Foreign Affairs, Trade and Development (GAC) to enable UNICEF to provide in-depth technical support and resources to several countries in sub-Saharan Africa from March 2013 to March 2016. UNICEF is coordinating the project in collaboration with country governments and global partners such as Helen Keller International (HKI) and the Micronutrients Initiative (MI).

This project aims to strengthen investment in Child Health Days (CHDs) and immunisation by taking a new and innovative approach to the positioning, delivery and sustainability of CHDs and immunization services. The co-delivery of immunization, nutrition and other child survival interventions such as insecticide-treated bed nets (ITNs) and deworming through CHDs, while at the same time strengthening health systems facilitates the delivery of integrated packages to children facing multiple risks for mortality and morbidity. For this reason the project will work to institutionalize CHDs where health systems are weak and/or children hard-to-reach. The CHDs approach in this project focuses on assisting country governments to transition to greater national ownership both upstream through developing policy and institutions and downstream through enhancing operational capacity and supporting immunization and health systems strengthening. Countries currently have limited experience in delivering immunization and nutrition interventions together as part of a comprehensive approach – this project presents further opportunity to advance the integrated scale up of nutrition with other key child survival interventions. These opportunities, combined with UNICEF's expertise and innovations around equity-focused service delivery mechanisms, communications, and monitoring and evaluation tools, present a unique opportunity to achieve integration of key child survival and development interventions as standard.

The objectives of the project are:

1. To support national governments of select Scaling Up Nutrition (SUN) countries and fragile states in their efforts to deliver integrated nutrition, immunisation and other health interventions to their populations; and support the SUN movement through proactive advocacy and communications at community, national, regional and global levels to increase awareness for nutrition, and its centrality to the broader development agenda;

2. To tailor approaches for the institutionalisation of CHD activities into health systems, based on the existing capacity of health systems and country-specific needs, with an aim of supporting the transition of CHD activities to national ownership and stewardship (i.e., late transitioning countries); and to foster innovation in
the scale up of nutrition, immunisation and other health interventions through CHDs, together with promoting synergies between child survival and development interventions;
3. To maintain high-coverage of current child survival and nutrition interventions, and scale up of other priority nutrition interventions, as appropriate;
4. To scale-up efforts to reach the poorest and most vulnerable populations with key child survival and development interventions;
5. To support the inclusion of CHD activities and child survival and development within countries' health and nutrition strategies.

3. PURPOSE AND OBJECTIVES & SCOPE OF WORK

Considerable resources are supporting the Scaling up Nutrition and Immunization project, and the implications of the effects of and experiences in the project are of relevance to a broad number of countries and stakeholders. As such, it is of critical importance to undertake an external evaluation so that other in-country or regional efforts can benefit from its learnings. In addition, an external evaluation findings and recommendations will help contribute to program and policy decisions, and ensure accountability on expected results set out in the Canada-GAC – UNICEF grant[1].

The **purpose** of this external evaluation is two-fold:

1. *accountability*: to determine to what extent and how the Scaling Up Nutrition and Immunization Project has achieved its goal of increasing the coverage and effectiveness of semi-annual outreach events ("Child Health Days") in 13 countries in sub-Saharan Africa and
2. *to enable evidence-based decision-making*: to inform program and policy decisions in the targeted countries and regionally. The specific objectives of the evaluation are a) to assess the extent to which the project was able to achieve expected results (indicated below), and b) to provide findings, conclusions, recommendations and lessons learned.

The expected results to be considered are:

- increase in coverage of vitamin A supplementation and measles and DTP immunizations (or Pentavalent, where relevant);
- support to national and sub-national governments in planning, technical support procurement (where needed), logistics, and delivery;
- testing of innovative approaches to maximize impact, including intensifying efforts to reach underserved populations and ensuring the right package of essential child health and nutrition services is delivered in different environments; and
- improvement in integration of child nutrition and immunization services and linkages between outreach and treatment services; and
- ensuring continued delivery of interventions in fragile states while ensuring lessons are learned on how best to engage in these environments
- In addition, consideration of the extent to which gender equality has been integrated into the project should be described in the evaluation

[1]Canada-GAC pursuant to the terms of the grant agreement of the "Scaling up Nutrition and Immunization" project set forth in the Schedule A of the Master Agreement signed between Canada-GAC and UNICEF Headquarters on 22 March 2013.

Specific targets within performance monitoring frameworks created in each country will be provided to the consultant team. Please note that along with targets, these performance monitoring frameworks also indicate specific indicators, baseline estimates, different data sources that the project team are using to measure estimates of coverage (e.g., various surveys) and project activities, planned data collection methods and reporting frequency.

We have set up an online dropbox folder that applicants are welcome to peruse to obtain more information about the project background and planned activities. This folder includes a 2011 background paper on CHDs prepared by UNICEF New York, the global logic model and Performance Monitoring Frameworks for the grant, and the first annual progress report that UNICEF submitted to Canada DFATD in March 2014. We hope that these will be helpful as you prepare your proposal. The folder is located at:
https://www.dropbox.com/sh/qcc1tba4vtqlshn/AAACbm-_6etEcvJqJ76jzuIia?dl=0
Please note that you may be required to open a dropbox account to access this folder. (Joining dropbox is free.)

4. SCOPE OF WORK

The target countries have been broadly classified into three categories based on the expected ability to achieve institutionalization of CHDs activities within existing health systems, with strong national ownership, during the project lifecycle:

1. *fragile states* (Central African Republic, Chad, Democratic Republic of Congo, Madagascar, South Sudan)
2. *late transitioning countries*, that will start to transition within the 5 year project lifecycle (Benin, Burundi, Mauritania, Sierra Leone, Uganda)
3. *early transitioning countries*, that will start to transition within 1 to 2 years of the start of the project lifecycle (Senegal, Tanzania, Zambia)

Given the heterogeneity in these contexts, the evaluation will need to consider the enabling environment for implementation in each country, as well as other key determinants of coverage such as health system supply and demand factors (including issues such as human resources, infrastructure, commodities, care-seeking behaviour and quality of care).

It is anticipated that the evaluation will encompass an overall evaluation of the project across 13 countries using a mixed methods approach; i.e., one that utilizes quantitative data (especially to reflect the extent to which coverage and related targets have been met) as well as qualitative data (such as document reviews and key informant interviews to determine some of the more descriptive results such as those relating to processes used to implement activities). In addition, it is proposed that in-depth case studies be conducted in one country of each type of categorization (fragile, early transitioning and late transitioning) to provide more details about the project service delivery strategies and activities, including key challenges, best practices and lessons learned. Implications for policy, programs and future research will be considered as well.

We anticipate that the evaluation will need to be carried out in three phases encompassing approximately 300 days over a 2-year time period.

Phase 1 (inception) will involve document review, conception of the evaluation methodology and plans, and technical guidance to the UNICEF project team, particularly pertaining to data and information that needs to be made available. This will commence immediately after the contract with the evaluation team is finalized and will continue on an ongoing basis throughout the project implementation period. The intent of Phase 1 activities is to ensure that the monitoring and evaluation activities undertaken during the project period are appropriate and available to

the contracted evaluation team as needed to conduct the evaluation.

Phase 2 (data collection and analysis) will commence at the end of the project implementation period and will involve execution of the evaluation, particularly the in-depth data review and 3 country visits (the specific countries will be chosen in collaboration with UNICEF) to collect primary data such as key informant interviews.

Phase 3 is the product delivery (reporting and dissemination) phase and will involve drafting, review and finalization of project deliverables such as the evaluation report including case studies and PowerPoint presentations. During Phase 3, a report of preliminary findings should be developed and shared with UNICEF and government partners, which will provide the implementers an opportunity to provide additional information and feedback to the evaluation team. Subsequent to that, the final evaluation report will be completed. The primary audiences of the evaluation report are the governments of the countries implementing the CHDs program, UNICEF and DFATD as the main supporting partner. However the results will also be shared with other UNICEF regional and country offices, as well as other government partners who may gain insight for the optimal implementation of their CHD-related programmes. Finally, through intended publication of papers of peer review quality, the international community will also be a key target audience.

Interested offerors are expected to propose specific details for how each Phase of the evaluation will be conducted in their proposals.

Evaluation criteria

The scope of the evaluation should focus on the expected results as outlined under Section 3 (Purpose and Objectives & Scope of Work) of this Request for Proposals. However, all evaluations of UNICEF programmatic activities should also describe the broader context within which the activities have been implemented. As such, the evaluators should describe, as possible within the confines of each specific project, issues such as those outlined by the Organization for Economic Cooperation and Development definitions:[2]

Relevance represents "The extent to which the aid activity is suited to the priorities and policies of the target group, recipient and donor."

Effectiveness represents "A measure of the extent to which an aid activity attains its objectives."

Impact is "The positive and negative changes produced by a development intervention, directly or indirectly, intended or unintended. This involves the main impacts and effects resulting from the activity on the local social, economic, environmental and other development indicators. The examination should be concerned with both intended and unintended results and must also include positive and negative impact of external factors, such as changes in terms of trade and financial conditions."

Sustainability "is concerned with measuring whether the benefits of an activity are likely to continue after donor funding has been withdrawn. Projects need to be environmentally as well as financially sustainable."

We recognize that not all of these criteria are relevant for all evaluations, particularly on projects with a limited timeframe. Any specific evaluation questions based on these broader criteria should be developed by the evaluation team and reviewed in collaboration with UNICEF prior to the start of the evaluation activities.

2 OECD. Glossary of Evaluation and Results Based Management (RBM) Terms, OECD (2000).

5. UNICEF RESPONSIBILITIES

An evaluation steering committee comprised of UNICEF Headquarters and Regional Office staff, will be responsible for the following:

1. Selection and orientation of the evaluation team
2. Liaison with the evaluation team
3. Collection of relevant internal materials
4. Facilitation of logistics for data collection; e.g. admin support for arranging country visits and video/teleconferences
5. Coordination of stakeholders
6. Securing agreement of country and regional offices for field visits
7. Review and acceptance of intermediate and final products
8. Authorizing payment

Important note: UNICEF may elect to designate a project manager for the evaluation. The project manager may share or have direct accountability for some or all of the steering committee items. In addition, focal points from the Government of Canada DFATD will be provided an opportunity to review a draft version of evaluation reports submitted by the evaluation team.

UNICEF Country Offices

1. Designation of a focal point for the evaluators
2. Liaison with and introduction of evaluators to national counterparts and other partners
3. Organization of administrative and logistical support to evaluation team, including accompanying them on trips
4. Provision of documents for review; being key informants
5. Review of reports for factual errors and omissions.

6. EXPECTED DELIVERABLES

Phase 1: Inception

1. A detailed overall evaluation work plan (with country-specific work plans, as applicable), protocol and timeline including:
   a. review of the evaluability of the initiative
   b. an evaluation design matrix
   c. plans for stakeholder involvement
   d. evaluation questions and sub-questions
   e. plans for collection of data (existing program documentation, administrative data, survey data, and contextual data, and new data such as via key informant interviews)
   f. plans for assessment of quality of existing data (particularly household survey data on coverage in transitioning countries, and available data in fragile states)
   g. plans for synthesis of existing data

Phase 2: Data collection and analysis

2. Maintain ongoing communication with UNICEF headquarters to provide input on the project monitoring and evaluation activities, as well as monthly updates on progress and challenges; PowerPoint summaries may be needed for meetings with GAC or other partners (this activity will be maintained throughout the 3 phases of the evaluation).
3. Draft tools for primary data collection activities.
4. Data collection and analysis, including 3 in-country visits to develop case studies.
5. Records of routines devised and executed for data collection, data processing, quality assessment, data analysis and other activities, if requested.

Phase 3: Reporting and dissemination

6. An initial evaluation report including methods, limitations, findings, discussion and implications will be presented to UNICEF and government partners for feedback to the evaluation team. The three case studies should be embedded in this evaluation report. In addition, please note that the report must conform to the UNICEF-Adapted UNEG Evaluation Reports Standards (see Annex 2 which is also available in the dropbox folder: https://www.dropbox.com/sh/gcc1tba4vtqlshn/AAACbm-_6etEcvJqJ76jzuIia?dl=0).
6. A final evaluation report based on feedback received from UNICEF and DFATD on the initial report. The consultant team will carry out the evaluation in conformity with the "OECD/DAC (2010) Quality Standards for Development Evaluation" (available online at:
7. http://www.oecd.org/development/evaluation/qualitystandards.pdf or in the dropbox folder mentioned above) and best practices in evaluation.
7. Four self-contained PowerPoint presentations (1 for each case study country and 1 summarizing all 13 countries.)
8. Presentation at a one day feedback meeting in New York to summarize the evaluation report.

7. KEY SKILLS, TECHNICAL BACKGROUND, AND EXPERIENCE REQUIRED

The selected offeror should adequately demonstrate the availability of high calibre experts in the evaluation of large-scale child health programs in developing countries. The team leader must be an experienced evaluator with a solid understanding of OECD/DAC Standards for Development Evaluation. In addition, the institution should preferably provide professionals with:

- a Masters or Advanced Degree (Ph.D. desirable) in monitoring and evaluation, epidemiology, statistics, or demography
- at least 10 years of progressively responsible professional work experience at national and international levels in conceptualizing, designing and implementing evaluations and/or research of large-scale child health-related programs in developing countries
- strong or proven (at least 5 years) experience with nutrition and or child health programs in low and middle income countries
- demonstrated experience in evaluating the integration of Gender Equality in development projects
- proven publication record, preferably in peer reviewed journals
- demonstrated ability to produce high quality evaluation and/or analytical research reports
- familiarity with the Lives Saved Tool (http://www.jhsph.edu/departments/international-health/centers-andinstitutes/institute-for-international-programs/list/)
- familiarity with UNICEF's work and the countries included in the evaluation · excellent spoken and written fluency in English and French
- proficiency in various MS Office © applications (Excel, Word and PowerPoint)

Other responsibilities of the contractor

The contractor will provide its own computers. On an as-needed basis, the contractor's staff will be granted access to UNICEF data bases and necessary software to utilize them.

The contractor will be expected to handle the following responsibilities during country visits:

- Accommodation, food, travel and appropriate insurance of the contractor's workers, both international and local. This includes life and health insurance.
- Copying of information in hard copy or electronic form.
- Hiring and travel of local translators, interviewers, drivers, watchmen, etc.
- Renting of office space, information technology, outside of what UNICEF will make available at sites where it has existing offices
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8. ESTIMATED DURATION & TIMELINE

2 February 2015 to 31 August 2016 (but representing approximately 300 days of work). Almost all of this work will be conducted following the completion of the project implementation period (scheduled for March 2016). However, based on our experience with other project evaluations, we have found that it is helpful to have an evaluation team on board early to ensure that we understand all the data needs of the evaluation team up front, and are able to incorporate those into our programme monitoring activities (if they are not already incorporated). Therefore we have indicated in the timeline below that approximately 50 days of document review, and work plan, protocol and data collection tool development (Phase 1) should happen within a few months following selection of the evaluation team.

Please note that as per the grant agreement between UNICEF and the Government of Canada, the final report on the External Evaluation is due to UNICEF on 31 August 2016 and to DFATD on 30 September 2016.

Table I: deliverables and timeline

Outputs/ Deliverables	Days	Date Due	Days Sub-total	Payment Schedule
Phase 1: Inception				
Review of available documentation and development of a detailed evaluation work plan, protocol, and timeline	20	27 Feb 2015	20	
Following feedback, modify and finalize the work plan, protocol, and timeline	5	9 Mar 2015	25	1st
Communication and technical support to the project monitoring and evaluation team (this activity will span across the period of project implementation)	20	Ongoing	45	
Development of tools for primary data collection activities	5	16 Mar 2015	50	
Phase 2: Data collection and analysis				
Conduct review and analysis of existing documentation and data.	60	TBD	110	
Carry out new in-country data collection to inform 3 in-country case studies and overall cross-country evaluation findings.	120	TBD	230	
Finalize analysis of existing and new data	35	TBD	265	
Prepare records of routines devised and executed for data collection, data processing, quality assessment, data analysis and other activities	5	TBD	270	2nd
Phase 3: Reporting and dissemination				
Prepare initial evaluation report including methods, limitations, findings, discussion and implications	20		290	
Prepare final evaluation report based on feedback received on initial report	7	31 Aug 2016	297	
Four self-contained PowerPoint presentations (1 for each case study country and 1 summary of all countries) including speaking notes	2	3 Sept 2016	299	
Presentation of the evaluation report and findings in New York	1	TBD	300	3rd
TOTAL	300		300	

**Note that this timeline may include weekend days for some in-country travel.*

9. EVALUATION OF THE PROPOSAL

In making the final offeror selection decision, UNICEF considers both technical and financial aspects. An Evaluation Team first reviews the technical aspect of the offer followed by the review of the financial offer of the technically compliant vendors.
Proposals will be evaluated against the following:

a. Technical Proposal:
The technical proposal should address all aspects and criteria outlined in this Request for Proposal.

Table II: evaluation technical proposal

The Technical Proposals will be evaluated against the following:		
REF	**CATEGORY**	**Maximum Points**
1	Sound methodology and data analysis plan likely to deliver on data requested	**20**
2	How objectives and required data elements/evaluation indicators will be measured	**15**
3	Competence and CV of the lead investigator(s)	**10**
4	Competence of the evaluation team	**10**
5	Proposal covers evaluation foci: relevance, effectiveness, impact, efficiency, impact and sustainability	**10**
6	Work plan and time line expected to complete deliverables within expected project duration	**5**
Total Technical		**70**
Only proposals which receive a minimum of 50 points will be considered further.		

b. Price Proposal
The price should be broken down for each phase of the proposed work in the technical proposal, based on an estimate of time taken which needs to be stated. In addition, the following level of detail is requested:

Personnel costs to include: Classification (i.e. job title/function) and rates for team members; duration of work for each. A separate table showing expected level of effort per team member, by project phase, is expected. If it is proposed to hire local researchers or other affiliated institutions, the costs and level of effort must be specifically identifiable in the proposal.

The following destinations may be designated for travel costs: Benin, Burundi, Central African Republic, Chad, Democratic Republic of Congo, Madagascar, Mauritania, Senegal, Sierra Leone, South Sudan, Tanzania, Uganda Zambia and New York, USA. Prevailing UN rates can be found on this link http://icsc.un.org/ (all countries and destinations can be found by navigating on the map).

Additional sub-headings within the categories may be done at offeror's discretion.

The total amount of points allocated for the price component is 30. The maximum number of points will be allotted to the lowest price proposal that is opened and compared among those invited firms/institutions which obtain the threshold points in the evaluation of the technical component. All other price proposals will receive points in inverse proportion to the lowest price; e.g.:

$$\text{Score for price proposal X} = \frac{\text{Max. Score for price proposal} * \text{Price of lowest priced proposal}}{\text{rice of proposal X}}$$

The format shown below is suggested for use as a guide in preparing the Financial Proposal. The format includes specific expenditures, which may or may not be required or applicable but are indicated to serve as examples.

Travel and per diems will not be noted, as this will later be determined and finalized by UNICEF and the chosen contractor.

Table III: indicative breakdown of staff per diem

Description of Activity/ Item	Proposed Person & Job Title/Function	All-inclusive daily rate (USD)	No. of days proposed	Total Cost in US$
1. Phase 1				
1.1 Personnel				
1.2 Reimbursable expenses				
Subtotal Expenses				
2. Phase2				
2.1 Personnel				
2.2 Reimbursable expenses				
Subtotal				
Country visit (1)				
2.3 Personnel				
2.4 Reimbursable expenses				
Subtotal				
Country visit (2)				
2.5 Personnel				
2.6 Reimbursable expenses				
Subtotal				
Country visit (3)				
2.7 Personnel				
2.8 Reimbursable expenses				
Subtotal				
3. Phase 3				
3.1 Personnel				
3.2 Reimbursable expenses				
Subtotal				
Grand Total:				
Pro bono (if applicable)				

*Payment Provisions

UNICEF's policy is to pay for the performance of contractual services rendered or to effect payment upon the achievement of specific milestones described in the contract. UNICEF's policy is not to grant advance payments except in unusual situations where the potential contractor specifies in the bid that there are special circumstances warranting an advance payment. UNICEF will normally require a bank guarantee or other suitable security arrangement.

Any request for an advance payment is to be justified and documented, and must be submitted with the financial bid. The justification shall explain the need for the advance payment, itemize the amount requested and provide a time schedule for utilization of said amount. Information about your financial status must be submitted, such as audited financial statements at 31 December of the previous year and include this documentation with your financial bid. Further information may be requested by UNICEF at the time of finalizing contract negotiations with the awarded bidder.

Annex II Work schedule

		2015				2016												2017				
	Activities of the Evaluation Team	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	June	Jul	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May
1.	**Phase 1 - inception**																					
a.	Liason with UNICEF (on data/reports to be received)																					
b.	Development evaluation matrix in consultation ESC and UNICEF																					
c.	Development of theory of change																					
d.	Review available qualitative data per country on key CHD activities																					
e.	Review of M&E data (technical support) and plan for (additional) M&E data collection																					
f.	Assessment of evaluability of the initiative per country																					
g.	Sampling case study countries																					
h.	Development and **submission of detailed evaluation work plan, protocol and time-line**																					
i.	Developing database with key CHD indicators																					
j.	Development of data quality assessment tool																					
k.	Development of primary data collection tools																					
l	Modification and finalization of workplan, protocol; and timeline based on feed-back																					
m	Further development and **submission of inception report** (evaluation matrix; theory of change; evaluation workplan and time line; draft data base with CHD indicators; M&E plan; sampling of case studies; protocol for case studies; draft tools)																					
l	Feedback on **inception report** to UNICEF HQ and External Steering Committee																					
m	countries)																					
2.	**Phase 2 - data collection and analysis**																					
a.	Preparation for country case visits																					
b.	In-depth desk review																					
c.	Further data compiliation (until following implementation completion) and entering CHD data base																					
d.	Assessment of data quality																					
e.	Country case study visit - 1																					
f	Country case study visit - 2																					
g	Country case study visit - 3																					
h	Data base analysis; synthesis case study analysis - resulting in preliminary findings																					
3.	**Phase 3 - Product delivery**																					
a.	Development and **submission of draft evaluation report**																					
b.	Workshop to validate findings and conclusions and develop recommendations in a participatory manner UNICEF NY, External Steering Committee and key country stakeholders																					
c.	Survey Monkey consultation key stakeholders in 13 countries for validation of preliminary findings and conclusions;																					
d.	Development and **submission of final evaluation report**																					
e.	Development and **submission of 4 self contained PPT presentations**																					
f	**Virtual presentation of final report**																					

Annex III The evaluation team

For this evaluation, a multidisciplinary team was brought together with complementary skills. The core team included an experienced evaluator as team leader who also is a qualitative researcher and has extensive UNICEF experience; a nutritionist/ epidemiologist with broad experience on the subject, with UNICEF and with evaluation; an epidemiologist (PhD) with a master's in nutrition, and experience in data modelling; an epidemiologist/statistician also with data modelling experience; and a medical doctor/public health expert with broad knowledge on comprehensive primary child care.

In addition to the core team, and in line with our common practice, national experts were recruited for each of the case study countries. These national experts assisted with contextualizing information, collecting information, as well as to assist with making logistical arrangements.

Furthermore, we also made use of the KIT resource team for additional analysis as well as quality assurance purposes. An overview of the multi-disciplinary evaluation team has been provided below.

Background information on team members

Pam Baatsen, **M.A**. is a Senior Advisor at KIT in Amsterdam, with a background in cultural anthropology. During her study, she also obtained teaching degrees on societal sciences and research methodologies. Over the last 24 years she has gained expertise in evaluation, mixed methods research, HIV prevention, and sexual and reproductive health and rights. Pam, as Country Director for Family Health International, has managed a large programme for key populations in Bangladesh with USAID funding. Prior to that, she worked as Programme Officer for UNFPA in Ethiopia and for UNICEF EAPRO. At KIT Pam has also led a range of large and complex evaluations, assessments and reviews, including in relation to SRHR, children, adolescents and youth, and gender for amongst others Cordaid, the Netherlands Red Cross, the World Bank, the Global Fund and the Children's Investment Fund. For the latter she led a comprehensive concurrent impact evaluation focused on children in and affected by HIV in India (2009 – 2012). Pam has helped develop and implement the HIV track within KIT's Master of Public Health Programme, with priority focus on epidemic dynamics as well as virtual learning

courses on Health Systems Strengthening and HIV and Sexual and Reproductive Health and Rights. Currently Pam is – amongst others - working on a Sexual Reproductive Health and Rights Intervention for young MSM in Bangladesh and young men in Kenya through an innovative Motivational Intervention Approach targeting service providers and young MSM/men. Pam is particularly skilled at developing methodologies and methods, at tool development and capacity strengthening activities with in-country partners.

As the team leader, she was responsible for overseeing the entire evaluation and the different products delivered. She also functioned as the main contact person for UNICEF. She was jointly with the team responsible for data collection for the case studies in line with the evaluation methodology detailed in this report, as well as the final write up of these case studies and the reports. She also led and facilitated the participatory stakeholder processes.

Dr Ankie van den Broek has over 30 years' experience in international health programmes, twelve of which she spent living and working in Angola, Tanzania and Zambia. Her work included the management of hospitals and health districts, with a strong focus on the integration of community health needs in the design of primary health care programmes and service delivery

Ankie is currently a senior advisor with KIT Health, working on Health Systems Strengthening, Integrated Service Delivery and Human Resources for Health. She is an experienced lecturer; currently she is involved in curriculum development of a bachelors and masters track on Public Health Nutrition at the Lurio University in Mozambique. This curriculum aims to bring the various curricula in line with the latest (clinical, promotion, community engagement and nutrition) developments.

She performed a high number of monitoring and evaluation missions with a strong focus on primary health care and community based health services and developed two monitoring and evaluation frameworks, one to monitor the integration of Sexual and Reproductive Health Services in District Health Services and one to monitor the effect of community health insurance schemes. She visited in the last two years several times South Sudan to perform monitoring missions on Primary Health Care Services. In 2012-2013 she lead a study regarding the interface between Clinicians and Laboratory Workers in Moshi, Tanzania which ended in 2 peer reviewed publications In close cooperation with the Amsterdam Institute of Global Health and the African Society for Laboratory Medicine a an analysis of policy and practice regarding Medical Laboratory Services in Sub Saharan Africa (ANALABS) was performed

She has lead several trajectories of complicated studies such as WHO studies on Migration of Health Professionals from Moldova to EU countries (2013-2014), and the " Policies and Practices of Countries that are experiencing a crisis in Human Resources for Health: tracking survey (2010)".

As core team member, she provided leadership in relation to all medical related aspects of the evaluation. Having lived and worked as District Medical Officer in Tanzania, she also provided leadership to the Tanzania case study in combination with the Team Leader and the National Consultant for Tanzania, and contributed to all products delivered.

Albertien van der Veen, MSc, is a Public health nutritionist and epidemiologist with over 25 years of experience in humanitarian assistance and development aid, for a wide range of organisations including the EC and other donors, UN agencies (UNICEF, UNHCR, WHO and WHO among others) and NGOs. She has a track record in monitoring and evaluation of nutrition, health, food security and livelihood programmes, needs assessments and designing programmes. Among others, she drafted the Mother and Child Health component of World Food Programme Country Programme in Sierra Leone and Ghana, which included the development of indicators and an M&E system. Her experience also involves designing and conducting livelihood and nutrition surveys in countries in Africa and Asia including Rwanda, Liberia, Sudan, Thailand and OPT and training teams in a variety of health and nutrition issues (doing surveys, set up M & E systems etc.). During the last three years Albertien has in particularly focused on programmes

to improve health and nutrition among children aged 0-2 years. Her work has consisted of research among the urban poor with a focus on reducing stunting by improving access to nutritious food through multi-sectoral approaches, improved maternal and child nutrition, nutrition sensitive programming etc. Recently (2013) Ms. van der Veen was involved in the mid-term review of UNICEF's multi-country, multi-layered programmes to reduce child malnutrition (ANSP in Africa and MYCNSIA in Asia); this year, she provided technical assistance to UNICEF and the Government of Rwanda in setting up a country wide system for monitoring length for age among children under five (involving among others the development of training materials for health staff at all levels and reviewing relevant literature).

As core team member, Albertien provided leadership in relation to all nutrition related matters. She also headed the country case studies in Madagascar and Sierra Leone where she worked with the national consultants, she headed the evaluability review and furthermore contributed to all products delivered.

Mirjam Bakker, MSc, PhD, is a senior epidemiologist at KIT Biomedical Research, with a background in human nutrition. After her work as nutrition consulatant in Ghana, she joined KIT in 2000. She has extensive experience in monitoring and evaluation of health interventions, in operational/field research of tuberculosis, HIV and leprosy care and prevention, statistical data analysis and in the use of geographic information systems (GIS) in disease control. She obtained her PhD at the University of Amsterdam on the epidemiology of leprosy in Indonesia. For this longitudinal intervention study she was responsible for the epidemiological design, data collection, data analyses, and reporting. In 2007 she was seconded for one year to the London School of Hygiene and Tropical Medicine to work in Malawi where she was responsible for the implementation of several field studies relating to tuberculosis and HIV. She has extensive field experience in developing countries gained through numerous long and short-term stays. She supervised the evaluation of Provider Initiated HIV Testing and Counselling in Rwanda in terms of acceptability by health care workers and attendees, HIV test uptake and linkage to care using both quantitative and qualitative data. From the start in 2010 she is involved as core team member in the external monitoring and evaluation of the TB REACH initiative of the Stop TB Partnership and was engaged in the development of the M&E framework. She supervises MSc and PhD students and was responsible for developing the course "Using GIS in disease control programmes".

As core team member, she worked on the review of secondary data, the development of a data base, data quality review, as well as producing the various maps.

Sandra Alba, MSc, PhD, is an epidemiologist at KIT Biomedical Research with a background in medical statistics. She obtained an MSc in Medical Statistics at the London School of Hygiene and Tropical Medicine in 2006, and soon after joined the Swiss Tropical and Public Health Institute (Swiss TPH) to work on a programme aimed at improving and understanding access to malaria treatment in rural Tanzania. She was responsible for the monitoring and evaluation of the programme and therefore contributed to the epidemiological design, data collection, data analyses, and reporting of the study. Data for the evaluation of consisted of cross-sectional treatment seeking surveys as well as secondary analysis of demographic surveillance systems (DSS) data and health management and information systems (HMIS) data. During this period she developed specific expertise in the analysis of morbidity and mortality data to assess the impact of health interventions. At the end of 2012 she joined the KIT as an epidemiologist, where she continues to be involved in epidemiological studies and works on the evaluation of health interventions focusing on tuberculosis and water and sanitation. Her responsibilities include teaching statistical and epidemiological methods to post-graduate students as well as supervising MSc students.

As core team member, she provided leadership to identifying and gathering secondary data, the development of the data base, quality assessment of the data, as well as data analysis.

Gloria Mosha, MA. Gloria holds a Masters of Arts degree in Economics from the University of Dar es Salaam, Tanzania. For the last 8 years she has built up experience in social and market research and has been involved in the design of several complex studies. Her research experience spreads across different sectors including public health, nutrition, water and sanitation, education, and finance. Gloria is experienced in conducting baselines, and monitoring and evaluation, but also in brand health studies, feasibility studies, and employee and customer satisfaction studies. She is conversant in both qualitative and quantitative research methodologies and is familiar with different analysis software packages.

Angele Randrianaivo, MSc. is a public health nutritionist with a Master's degree from the Institute of tropical Agriculture in Leipzig, Germany with more than 30 years of experience. Starting her career in Madagascar as a project officer with the Ministry of Agriculture and other agencies, she took on assignments as nutrition specialist / consultant in other countries in Africa from 2005 onwards. Over the last ten years she conducted work for UNICEF in among others Rwanda, Niger and Benin. She is an expert in conducting evaluations, designing/supervising surveys and providing technical support in program implementation as well as in developing policies and protocols. She also has extensive knowledge on CHDs, among others through her work in Benin where she supported UNICEF in the organization of CHDs.

Mohamed Sankoh, MSc. holds a Master of Science in Public Health from Njala University, Sierra Leone. He has been an associate consultant with Dalan Development Consultants since 2011. In that capacity he has conducted evaluations, mid-term reviews, surveys, rapid assessments for amongst others the EC, JICA, the Tony Blair Faith Foundation, etc. including in relation to supportive supervision and data quality of the HMIS/MoHS system. Since 2012 he also works as a Regional Community Participation and Hygiene Education Officer, with the Ministry of Water Resources. He also worked as a Health Project Officer for Concern World Wide, an Assistant Health Project Officer for ADRA, and as intern for the Ministry of Health & Sanitation.

Resource and quality assurance team

Liezel Wolmarans, **MSc,** is Senior Health Advisor with a background in medical statistics. Over the last 20 years she has gained expertise in assisting researchers, programmers, project managers and students in design and analysis of bio/medical research, programme monitoring and evaluation and health management and information systems.

Before joining the Royal Tropical Institute (KIT), Liezel managed the research and development department of the Social Marketing Association in Namibia. Here she built capacity over a five year period to conduct qualitative and quantitative research studies in house. She also led all statistical analysis of large household surveys. Findings of these studies were presented at a number of international conferences.

Since joining KIT at the end of 2009, Liezel has been involved in the development (and lecturing) of an Epidemiology and Statistics module within KIT's Master of Public Health Programme and is currently the coordinator of the Masters in International Health (MIH) course. She has also been project leader on a number of studies, including a large 10 country baseline study on HIV workplace programs. She has been team member providing technical assistance on a large range of Health studies, programme evaluations, action research, and capacity development projects. Recently (2014) she was involved in a large impact evaluation for UNICEF Nigeria's WASH intervention. She is particularly skilled with re-analysis of large scale quantitative data bases such as DHS data, and will assist the team with this if required. Liezel has extensive experience, but not limited to, in Sub Saharan Africa.

As resource person, she provided input for the analysis of secondary data around the child vulnerability framework.

Table IV: Responsibilities of the team members

Tasks/responsibilities	PB	AvdB	AvdV	MB	SA	GM	AR	MS	LW
Liaising and consultation with UNICEF	XX	X	X	X	X	X	X	X	
Development evaluation matrix and reconstruction of Theory of Change in consultation with UNICEF	XX	X	X						
Review available qualitative data per country on key CHD activities.	X		XX						
Review of M&E data (technical support) and plan for (additional) M&E data collection	X			XX	X				
Assessment of evaluability of the initiative per country	X		XX	XX	X				
Sampling case study countries	XX	X	X	X	X				
Development and submission of detailed evaluation work plan, protocol, including sampling and time-line	XX	X	X	X	X				
Developing database with key CHD indicators	X			X	XX				
Development of data quality assessment tool	X			X	XX				
Development of primary data collection tools	X	X	X						
Modification and finalization of work plan, protocol; and timeline based on feed-back from UNICEF	XX	X	X	X	X				
Further development and submission of inception report (evaluation matrix; theory of change; evaluation workplan and time line; draft data base with CHD indicators; M&E plan; sampling of case studies; protocol for case studies; draft tools)	XX	X	X	X	X				
Presentation (e-mail/Skype/phone) of inception report to UNICEF HQ and External Steering Committee	XX	X	X	X	X				
Clearance of plan by UNICEF HQ and External Steering Committee	XX								
Phase 2 - Data collection and analysis									
Preparation for country case visits	X	XX	XX						
In-dept desk review	X	XX	XX						
Further data compilation (until following implementation completion) and entering CHD data base				X	XX				
Assessment of data quality	X			X	XX				
Country case study visit - 1	X	XX				XX			
Country case study visit - 2	X		XX				XX		
Country case study visit - 3	X		XX					XX	
Data base analysis; synthesis case study analysis - resulting in preliminary findings	X	XX	XX	XX	XX	XX	XX	XX	X
Virtual consultation key stakeholders in 13 countries (divided over three different meetings) for validation of preliminary findings and conclusions;	XX	X	X	X	X				
Virtual consultation with UNICEF NY and External Steering Committee on preliminary findings and conclusions	XX	X	X	X	X				
Phase 3 - Product delivery									
Development and submission of draft evaluation report	XX	X	X	X	X	X	X	X	
Consultation on draft evaluation report with UNICEF NY, External Steering Committee and key country stakeholders	XX	X	X	X	X				
Development and submission of final evaluation report	XX	X	X	X	X	X	X	X	X
Development and submission of 4 self-contained PPT presentations	XX	X	X	X	X	X	X	X	
Presentation of final report to NY	XX	X	X	X	X				

Annex IV Overview selection criteria case-study countries

	Country	CHD day or Polio NID			Vitamin A coverage	National DPT3 coverage > 80 %[3]	ITN use	Stunting children 0-59 months	Equity geographic coverage (percentage of districts with DPT3 above 80%)	Improved nutrition plan in place[4]	Recognition of IMAM[5]	LQAS in place	PECS in place	Collaboration HKI	Opportunity learning from success?
		2014	2015	2016											
Fragile states															
1	Central African Republic	CHD?	CHD?	CHD?	78.0	No	60.1	41	6	No (?)	yes	No	No	No	***
2	Chad	Polio NID	Polio NID	Polio NID	97.5	No	12.6	38.7	43	yes	yes	No	No	No	*
3	Democratic Republic of Congo	Moving toward CHDs	Moving towards CHDs	CHD planned	70.4	No	57.0	42.6	62	draft[6]	yes	No	No	Yes	***
4	Madagascar	CHD	CHD	CHD	72.2	Yes	65.2	49.2	29	yes	no	Yes	No	No	***
5	South Sudan	CHD	CHD	CHD	3.9	No	25	31.1	19	no	yes	No	No	No	*
Late transitioning															
6	Benin	Polio NID	Polio NID	Polio NID?	48.6	No	74.9	45	51	yes	yes	Yes	Yes	No	***
7	Mauritania	Polio NID	Polio NID	Polio NID"	79.4	No	27.3	22.0	36	yes	yes	No	No	No	*
8	Sierra Leone		CHD (post ebola)	CHD	83.2	No	49.5	37.9	N/A	yes	yes	No	No	Yes	***
9	Burundi	CHD	CHD	CHD	80.7	Yes	54.2	57.5	42	yes	yes	No	No	No	***
10	Uganda	CHD	CHD	CHD	56.8	Yes	77.5	33.7	71	yes	yes	No	No	No	*
Early transitioning															
11	Senegal	CHD & other	CHD & other	CHD	88.6	No	33.2	19.2	34	yes	yes	No	Yes	Yes	*
12	Tanzania	CHD	CHD	CHD	60.8	Yes	77.7	34.7	N/A	yes	no	No	Yes	Yes	***
13	Zambia	CHD	CHD	CHD	76.5	Yes	43.3	40.1	75	yes	no	No	No	No	*

West Central African Countries

East South African Countries

[3] Three doses of diphtheria, pertussis (whooping cough) and tetanus vaccine.

[4] Improved nutrition plans are multi-sectoral nutrition plans (plans that take the health, agriculture, WASH, social protection, education and other sectors also into account)

[5] Integrated Management of Acute Malnutrition (IMAM) as part of the minimum core package of nutrition interventions/ guidelines (protocol) established (sources: http://www.cmamforum.org/countries.

[6] Draft: final, only awaiting signature.

Annex V Evaluation Framework

Key evaluation questions	Specific evaluation questions	Data Collection and sources of information	Data analysis
A Relevance			
A1 To what extent is the initiative appropriate? **A2 Does the initiative focus on increasing coverage (in particular of underserved populations)?** **A3 Has equity including gender equality been mainstreamed?**	1. Are programme activities in line with the overall needs as expressed in relevant Government plans? 2. Are the programme activities in line with UNICEF policies and international best/promising practices and evidence-informed? 3. Is the package of health and nutrition services and its scale the most appropriate in view of the needs, and in view of the context in which the programme is implemented? 4. Are Child Health Days being included in health sector plans and budgets, or efforts made hereto? And what adaptations are being made to make them suitable for the country specific context? 5. Does the design of the programme has an explicit focus on reaching under-served populations and low performing districts in terms of child health and nutrition? 6. To what extent is inequity addressed in the design and implementation of the interventions? 7. Are data systematically disaggregated? 8. To what extent were mothers and fathers involved in the development of the programme? And in the implementation of activities?	• Document review of UNICEF program documents, monitoring reports and any existing evaluations of CHD initiatives at global, regional and country level. • Document review of national policies, strategies, plans, annual reports and contextual studies • In-depth and semi-structured interviews with key informants (i) at UNICEF HQ ; Regional offices, (ii) with international partners (UN, International CSOs/NGOs), by phone and (iii) in Case Countries (MoH, other relevant ministries UN, development partners, CSO/NGOs), and service providers • Focus group discussions (FGDs) involving: CSO representatives, caregivers (female and male) of children under five, including vulnerable and marginalized children. and key informants, etc. in case study countries	• Document & Literature Review through a desk review tool • Consultation with stakeholders • Case study analysis • Context analysis • Contribution mapping • Equity analysis • Reconstruction Theory of Change • Triangulation between different sources of information
B Efficiency			
B1 Have inputs resulted in the outputs targeted?	1. Were activities implemented as planned? 2. Were resources (financial, expertise, time) available in time and sufficiently?	• Document review of UNICEF program documents, monitoring reports, financial data and reports, and any existing evaluations of CHD initiatives at global, regional and country level.	• Document & Literature Review through a desk review tool

B2 Have stakeholders worked together towards the common goal of increased and sustained well-being and survival of children?	3. Were administrative data and supervision reports used in planning for the next CHD/RI/ integrated event (in support of planning and execution of CHDs)? 4. Has timely support been provided to national and sub-national governments in planning, technical support procurement (where needed), logistics, and delivery? 5. How was timely and appropriate support ensured in fragile environments? 6. Were there Improvements in the integration of child nutrition and immunization services through strengthened linkages between outreach and treatment services? 7. What were the coordination mechanisms (of all agencies involved in CHDs) and did they help? 8. Have agencies developed common strategies and approaches to increase coverage? 9. Have agencies jointly identified and addressed gaps in geographic or vulnerable/at risk group coverage? 10. Are interventions sufficiently complementary to the work done by other stakeholders? 11. To what extent has programme governance and coordination been efficient (cost-effective) in terms of attaining results	• Document review of plans, annual reports and contextual studies • In-depth and semi-structured interviews with key informants (i) at UNICEF HQ ; Regional offices, (ii) with international partners (UN, International CSOs/NGOs), by phone and (iii) in Case Countries (MoH, other relevant ministries, UN, development partners, CSO/NGOs), and service providers in person • Focus group discussions (FGDs) involving: CSO representatives, caregivers (female and male) of children under five, including vulnerable and marginalized children and key informants, etc. in case study countries	• Consultation with stakeholders • Case study analysis • Context analysis • Contribution mapping • Equity analysis • Analysis against Theory of Change • Triangulation between different sources of information
C Effectiveness			
C1 Are planned program outputs and outcomes being achieved?	1. How many children were reached with the intervention? 2. Has the number of children receiving the vitamin A and immunizations[7] increased? 3. What were the annual caseloads? 4. How many (%) districts have <50% coverage of (DPT3 vaccinations? 5. How many (%) districts have >90% coverage of DPT3 vaccinations? 6. How many (%) districts have <50% coverage for VAS? 7. How many (%) districts have >80% coverage of VAS?	• Secondary data sources for example DHS MICS, HMIS, PEC, VAC study • Document review of UNICEF program documents, monitoring reports, and any existing evaluations of CHD initiatives at global, regional and country level. • Document review of plans, annual reports and contextual studies	• Construction of data base • Re-analysis of relevant secondary data, including wealth / district and rural-urban comparisons, using mapping techniques and spatial overlays etc. • Cross country comparison among countries in same

[7]Immunizations to be broken down by type

C2 How does the initiative contribute to increased coverage (in particular of underserved populations)? **C3 What were the effects of supportive supervision?**	8. Has the programme reached the most vulnerable and/ or marginalized children and communities in the targeted districts? 9. What approaches have proven to work, including for reaching underserved populations? Are there new / innovative ways of increasing coverage that increase coverage? Use of MIS data for increasing effectiveness? Types and results of training for health workers, community systems and others. Type of supportive supervision? 10. Has supportive supervision increased access and coverage? How many of the districts where supportive supervision took place are delivering health and nutrition services to 100% of the communities? (Through routine, outreach or both)? 11. Has the coverage of vitamin A supplementation and immunizations increased in these districts? 12. What are the trends (base-line plus annual data) in these districts of • VAS coverage among children 6-11 months through CHD or other integrated events at baseline • VAS coverage among children 12-59 months through VAS CHD or integrated event • Coverage of DPT1 and DTP3 among children <12 • Coverage of measles among children 9-12 months	• In-depth and semi-structured interviews with key informants (i) at UNICEF HQ ; Regional offices, (ii) with international partners (UN, International CSOs/NGOs), by phone and (iii) in Case Countries (MoH, other relevant ministries, UN, development partners, CSO/NGOs), and service providers in person • Focus group discussions (FGDs) involving: CSO representatives, caregivers (female and male) of children under five, including vulnerable and marginalized children. and key informants etc. in case study countries	category and adjustment of estimates • Document & Literature Review through a desk review tool • Consultation with stakeholders • Case study analysis • Context analysis • Equity analysis • Analysis against Theory of Change • Triangulation between different sources of information
D Sustainability			
D1 To what extent will the response achievements be sustained after the withdrawal of external support?	1. To what extent does the initiative identify and build on existing national, local, civil society, government capacities and activities? 2. Has a budget to deliver CHD to children under 5 years been incorporated within the national budget? 3. Is a work-plan developed at districts level and approved which is inclusive of a strategy to provide 4 annual contacts for children under 5 years for nutrition and immunization interventions?	• Document review of UNICEF program documents, monitoring reports and any existing evaluations of CHD initiatives at global, regional and country level. • Document review of , plans, annual reports and contextual studies • In-depth and semi-structured interviews with key informants (i) at UNICEF HQ/ Regional offices, (ii) from	• Document & Literature Review through a desk review tool • Consultation with stakeholders • Case study analysis • Context analysis

D2 What are best practices and lessons learned in terms of supporting governments in their efforts to deliver integrated nutrition, health and immunisation services?	4. Does this work plan include training of health staff and supportive supervision to increase child health and nutrition services? In how many districts (proportion of total)? 5. Does the work plan include training of other stakeholders (village health communities, CBOs etc)? 6. What factors contributed to success or failure increasing integrated child health and nutrition services? 7. Did any negative changes result from programming? How could these be avoided? 8. What were the success stories regarding capacity development of partners and communities and how can these be replicated in an effective, efficient and sustainable manner? 9. What are examples of the use of local resources/ capacities and /or networks that are (or can be) effectively used to sustain the achievements of the response?	international partners (UN, INGOs/ CSOs) by phone, (iii) in case countries (MoH, other relevant ministries, UN, development partners, CSO/NGOs), and service providers in person • Focus group discussions (FGDs) involving: CSO representaives, caregivers (female and male) of children under five, including vulnerable and marginalized children. and key informants, etc in case study countries	• Equity analysis • Analysis against Theory of Change • Triangulation between different sources of information

Annex VI Tools

A. Informed consent (Focus group discussions community members and family members)

Share two copies of the informed consent form with all participants and ask them to read and sign one copy, the other copy is for them to keep.

Informed consent: *Hello, my name is ……. and I am working with the Tropical Institute evaluation team. We have been asked by UNICEF to evaluate how helpful its activities and those of its partners regarding child health days are to help improve the health and nutrition status for small children. We will ask parents / caretakers of small children and the staff of the programme some questions about this. Would you be willing to participate in a focus group discussion? It will take approximately one hour. There are no right or wrong answers. You may also decide not to answer a particular question or stop the interview at any moment. This would not affect your or your child's access to health services, nor to Child Health Day activities at all. We will ask all the participants to keep the information discussed here confidential, however, as this is a group discussion, we cannot guarantee that some participants share information outside this group.*

We cannot give you anything for taking part other than a small refreshment but we would greatly value your time and responses. To help us to remember your answers better, we would like to record the interview if you agree.

Would you like to be interviewed/take place to this activity? Number responding YES: ……..

Participant signature
_____ Date: _____

Facilitator(s) signature(s):
_____ Date: _____

Name and contact details of national researcher:

Name	Contact details

B. TOOL FOR FOCUS GROUP DISCUSSIONS WITH PARENTS/ CARETAKERS

Aim: The aim of this activity is to assess how Child Health Days activities have affected the access to services as well as the nutritional and health status of children

Participants: parents/ caretakers

Group size: 6- 8 adults

Facilitators: At least 1 facilitator and 1 person to record responses

Materials required: Tape recorder to record discussion / notebook and pen

Time: 1 hour-1 hour 30 minutes

Instructions: The facilitator(s) should follow the schedule given below, probing for further information where necessary and refining the language as appropriate to the local context. Read the informed consent statement and agree on group norms and confidentiality issues.

A) Introduction questions: Let's start getting to know each other a bit.

1. Can you share your name, how far you live from the health facility (check if all are from same area), and how many children you have and their ages.

B) Main health and nutrition concerns: Now I'd like to talk a bit about the health and nutrition problems of children under two years of age

Question nr	Question/topic	Evaluation framework ref
2	What do you think are main child health and nutrition problems/ risks in this area? What is causing these problems/risks? Why? (probe for examples)	A1.1
3	What do you think are the biggest risks? Why? (probe for examples)	A1.1

C) Availability, access and awareness of services and formal/informal community based mechanisms: I would like to talk about the services available here and what resources are available to prevent and to respond to the health and nutritional problems you mentioned just now.

4	What type of **health** and **nutrition services** for children under five are available in this area? (Probe for **facility** (including non-public facilities) and **community** level services (probe also for what is provided by CBOs, NGOs, etc.)	A2.3
5	How far (what distance) are these services?	A2.3
6	Do all families make use of the health and nutrition services at **facility level**? a) What type of families don't make use of these services? b) Why not? (probe distance, and vulnerability) c) Is this the same as two years ago? Any changes?	C2.8
7	Do all families make use of the health and nutrition services at **community level**? a) What type of families don't make use of these services? b) Why not? c) Is this the same as two years ago? Any changes?	C2.8
8	Have any changes taken place in the availability of these services during the last two years? If yes, what?	C2.9

9	Have any changes taken place in the accessibility of these services during the last two years? If yes, what?	C2.9

D) Coverage and awareness on CHDs: We would also like to talk a little about the last CHDs

Question nr	Question/topic	Evaluation framework ref
10	Can you tell me what a Child Health Day/Vitamin A Supplementary Days is?	B1.1 (&ToC)
11	Can you tell me when the last Child Health Day/Vitamin A Supplementary Day was ? Where did it take place?	A3.1
12	How were you informed about the CHD's?	A3.1 (&ToC)
13	Was the staff of the Health Facility/CHW involved in informing you? How did you experience this?	
14	What made you decide to participate in the CHDs? (probe for other options of health and nutrition support instead of CHDs)	B2.9 (&ToC)
15	Which children were supposed to attend?	A2.5/b2.9
16	What services were provided? (probe for Vitamin A supplementation, deworming, immunization, growth monitoring, mosquito nets, wash, nutrition screening (MUAC)	B1.1
17	What information was provided? (probe for info around VAS, Immunisation, deworming, ITN, GMP, MUC, WASH, Breastfeeding,	B1.1
18	Can you share whether this info helped you to do things differently? (probe around examples of what is been done differently related to health and nutritional info obtained)	B1.9 & ToC
19	What did you think of the mix of services and information provided at the Child Health Day?	A1.1 (&ToC)
20	How much time did it take to attend?	B1.6
21	What were the costs (direct in terms of paying for the services or indirect, for instance the cost of transport)	B1.6
22	Did all families with children under five in your communities attend the Child Health Days? a) What type of families didn't attend the Child Health Days? b) Why not? c) What would make it easier to attend? d) Is this the same as two years ago? Any changes?	C2.8
23	How did you experience how you were assisted by the health facility staff on the day of the service delivery? Do you have suggestions for improvement?	D2.6
24	During the CHDs do your husbands/male partners sometimes take your children to the services? If yes, how often, and under which circumstances? (probe for reasons why not)	
25	Were any of your children treated for nutrition problems and or referred during any of the previous CHDs? If yes, for what reason(s)?(to go to questions for health staff	B1.6/D2.6
26	Are extra services delivered after referral? Which? (to go to questions for health staff	B1.6

27	Are the CHDs adding something to the health of your child? Examples?	C1 (and ToC)
28	Do you feel that the CHDs should be a continued in the coming years? Why. Can you think about (better) alternatives to make your child healthier?	D2.7/D2.8
29	Are there activities not done which you think should be part of the CHD's	D2.6
30	What should you like to change on the CHDs? (May be this should be the last question)	D2.6
31	What do you like or dislike about the CHDs?	D2.7/D2.8

THANK YOU FOR TAKING THE TIME TO HELP US WITH THIS EVALUATION!

Note to facilitator:

1) Ask further questions for more details.
2) Keep all notes- to make sure to remember all details.
3) Check whether participants they have signed the informed consent form

Data to be collected

DATE:

LOCATION:

EVALUATORS' NAME(S):

Parents / care-takers attending (do not record name)

Gender …….. Male and ……. Female

C. TOOL FOR FOCUS GROUP DISCUSSIONS WITH COMMUNITY MEMBERS

Aim: The aim of this activity is to assess community involvement and perspectives on Child Health Days
Participants: community elders/representatives, CSO representatives, members of village health (or development) committees etc.
Group size: 6- 8 adults
Facilitators: At least 1 facilitator and 1 person to record responses
Materials required: Tape recorder to record discussion / notebook and pen
Time: 1 hour-1 hour 30 minutes
Instructions: The facilitator(s) should follow the schedule given below, probing for further information where necessary and refining the language as appropriate to the local context. Read the informed consent statement and agree on group norms and confidentiality issues.

Introduction questions: Let's start getting to know each other a bit.

1. Can you share your name, your function, since when have you been involved in Child Health Days (CHDs))?
2. Have you received any training/orientation regarding CHDs? If yes, what kind of training/ orientation? On what? By whom? When? Was it useful and did it help you to do things differently?

A) Main health and nutrition concerns: Now I'd like to talk about health and nutrition problems of children under two years of age

Question nr	**Question/topic**	**Evaluation framework ref**
3	What do you think are main child health and nutrition problems/ risks in this area? What is causing these problems/risks? Why? (probe for examples)	A1.1
4	What do you think are the biggest risks? Why? (probe for examples)	A1.1

B) Availability, access and awareness of services and formal/informal community based mechanisms: I would like you to think about the services available here and what resources are available to prevent and to respond to the health and nutritional problems you mentioned just now.

Question nr	Question/topic	Evaluation framework ref
5	What type of **health** and **nutrition services** for children under two are available in this area? (probe for **facility** and **community** level services)?	A2.3
6	How far (what distance) are these services?	A2.3
7	Do all families make use of the health and nutrition services at **facility level**? a) What type of families don't make use of these services? b) Why not? c) Is this the same as two years ago? Any changes?	C2.8
8	Do all families make use of the health and nutrition services at **community level**? a) What type of families don't make use of these services?	C2.8

	b) Why not? c) Is this the same as two years ago? Any changes?	
9	Have any changes taken place in the **availability** of these services during the last two years? If yes, what?	C2.9
10	Have any changes taken place in the **accessibility** of these services during the last two years? If yes, what? And why has this changed (probe also for activities undertaken to motivate parents to take children to health and nutrition services)	C2.9

C) Coverage and awareness on CHDs: We would also like to ask about the most recent CHDs

Question nr	Question/topic	Evaluation framework ref
11	Can you tell me what a Child Health Day is?	B1.1 (&ToC)
12	Can you tell me when the last Child Health Days were? Where did they take place?	A3.1
13	What was your involvement in the last Child Health Day? If involved in the organization of CHD: Have you been involved by UNICEF/MoH and/or other partners? What made you decide to become involved?	A3.1 (&ToC) B2.7
14	Have you undertaken any activities to motivate parents to take their children to CHDs? What was the result of this?	ToC
15	Have you undertaken any activities to facilitate parents to take their children to CHDs? If so, what activities? What was the result of this?	ToC
16	Was there any supervisory system in place to see how you were doing? And whether you needed any support? If so, what was the effect of that?	C3.10
17	What services were provided during the CHDs? (probe for Vitamin A supplementation, de worming, immunization, growth monitoring, mosquito nets, wash, nutrition screening (MUAC)	B1.1
18	What information was provided during the CHDs? (probe for info around VAS, Immunisation, deworming, ITN, GMP, MUC, WASH, Breastfeeding,	B1.1
19	What did you think of the mix of services and information provided at the Child Health Day?	A1.1 (&ToC)
20	Which immunization is giving during CHDs? Is this recorded on the personal card of the card?	
21	Which children were supposed to attend?	A2.5/b2.9
22	Did all families with children under two attend the Child Health Days? a) What type of families didn't attend the Child Health Days? b) Why not? c) What would make it easier to attend? d) Is this the same as two years ago? Any changes?	C2.8
23	During the CHDs do fathers sometimes take their children to the services? If yes, how often, and under which circumstances? Are fathers encouraged to come?	
24	Were children referred? If yes, for what reason(s)? *(not relevant to ask to community leaders)*	B1.6/D2.6
25	Can you share whether the CHDs helped parents to do things	B1.9 & ToC

	differently? (probe around examples of what is been done differently related to health and nutritional info obtained)	
26	Are the CHDs adding something to the health of children in your community? Examples?	C1 (and ToC)
27	What factors contributed to success or failure of CHDs?	D2.7/D2.8
28	Do you feel that the CHD should be continued in the coming years? Why? Can you think about (better) alternatives to make children in your community healthier?	D2.7/D2.8
29	What local resources, capacities, networks can be used to improve coverage through all the activities during the CHDs?	D2.9; D1.1
30	Did any negative changes result from the CHD interventions? How could these be avoided?	D2.7
31	Were there also unexpected / wider effects (of the CHDs/and or capacity development activities)?	D2.6
32	What should you like to change in relation to the CHD?	D2.6

THANK YOU FOR TAKING THE TIME TO HELP US WITH THIS EVALUATION!

Note to facilitator:

1) Ask further questions for more details.

2) Keep all notes- to make sure to remember all details.

3) Check whether participants they have signed the informed consent form

Data to be collected

DATE:

LOCATION:

EVALUATORS' NAME(S):

Community members attending (do not record name)

Gender ……. Male and ……. Female

Role in the community

Training / orientation received (who provided it /when/on what subject)

D. SEMI-STRUCTURED INTERVIEWS FOR STAKEHOLDERS AT HEALTH FACILITY LEVEL

Interviewer:	
Interviewee(s) name(s) / function(s):	
Translator:	
Location:	
Date /Time:	

I General introduction /Preliminary questions

- **Introduction of the evaluators and short summary of the project:**
  (i) KIT and local partners: identity and roles and responsibilities in the project
  (ii) short introduction to the programme
- **Explanation of the purpose of the interview:**
  (i) to determine to what extent the UNICEF Scaling Up Nutrition and Immunization project has contributed to increased coverage and effectiveness of the CHDs and how this was realized;
  (ii) to enable evidence-based and policy decision making by gathering evidence on what works well, and through which mechanisms and what are challenges.
- **Explanation of confidentiality:** the information shared by participants will stay within the KIT evaluation team. The findings will be reported globally, but without personal identifying information.

II Specific questions (the box provides the topic, the detailed questions are included for guidance)

Each question corresponds to a topic which will be probed with further questions, depending on the interviewee. These questions will be compared with other sources of information including interviews with other informants to identify possible discrepancies and/or analogies in perceptions and expectations.

A. Relevance and appropriateness: to what extent is the strategy and approach of the CHDs acceptable (socially, financially) and relevant to respond to the needs of caretakers and children to improve nutrition practices for children U5?

1. What would you identify as the main child health needs (problems) in the catchment area of your Health facility? Which health needs addressed through CHDs? Successes, challenges and gaps?	A 1.3
2. Are activities during the CDs implemented in an acceptable manner for the community and care takers in your catchments area? Examples success stories?	A 1.3
3. Does the design of the planning and implementation CHD allows the poorest and most marginalized children and care takers) such as women headed households, minority groups, IDPs etc. to access the service? Examples? Challenges?	A2.5 A3.6
4. Do you think that parents/care-takers consider the interventions as relevant? Examples?	A 1.3
5. What related (nutrition, immunization, BCC) services are not included in the CHD? What could be easily integrated during these days in your catchment area?	A 1.3
6. Was the health staff of this facility involved in defining and planning of the activities in the catchment area of this health facility? Examples, changes made?	
7. Were the community and caretakers involved in defining and planning of the activities and do they participate in the organization of the implementation? Examples?	A3.8
8. Specific for the health staff at health centre level: Do you think that CHDs are well integrated in national and district / health centre activity plans? Is it a relevant extra effort on top of the regular services?	A1.4

B. **Coverage:** Has the project reached all geographical areas targeted? Have potentially vulnerable or marginalized children and communities been reached?	

9. Was the staff of the health facility involved in determining the geographical areas and communities where CHD needs extra attention to improve the coverage? How are these geographical areas/ communities decided on? (Statistics, health needs, availability of qualified staff etc.)? Has this choice improved equity in access to CHD services? And for service delivery in general?	A 3.6
10. In how many outreach areas are regular child health services conducted? Andin how many areas for CHD? Distance to the health facility from these areas?	
11. Are staff of the health facilities analysing and interpreting CHD data themselves? If yes, can the results be used to plan the CHDs? If no, are analysed date by national/ regional level made available for planning.	B2.3
12. Have other findings (such as DHS) and HMIS data and supervision reports been used to plan for increase of coverage and equity for specific geographical areas / communities for the CHDs? Examples? What approaches have worked (and what not) in reaching the hard to reach? Innovative approaches? Bottlenecks?	B2.3 A2.5 C2.8 C2.9
13. Are there any mechanisms used to reach under-served populations and vulnerable children in planning and during the CHD? Which ones and how do they work? Examples? Success stories?	
14. Do you know if the most vulnerable groups (disabled, poorest of the poor) attend the CHDs? What data are available about this? Trends? Are data systematically disaggregated (by e.g. wealth quintile)? Examples?	C 2.8 A 3.7
15. How is gender equality promoted? By whom and how? (Examples: are data systematically disaggregated by sex? Are boys and girls equally accessing the CHD? Are male and female caretakers free to go? Are both male and female human resources involved and how?). Are men and women equally involved in announcing and decision making around organization of CHD	A 3.6 A 3.7

C. **Efficiency:** Have inputs resulted in planned outputs? To what extent are stakeholders working together towards the common goal of increased and sustained well-being and survival of children?	

16. Are activities implemented as planned?	B 1.1
17. How is are the activities of CHD planned and coordinated with the various stakeholders at district and at community level in your catchment area? How are gaps identified and addressed? Strengths and weaknesses? Are there programmes in the public health sector, by NGO or of other sectors that are complementary or duplicating the activities of CHD? Are agencies working together in developing common strategies/procedures for nutrition and health programmes for children under five years? Examples? Challenges in coordination?	B 2.7 B2.8 B2.9 B2.10
18. What resources for the CHD are provided to the health facility? Are these available in time? Sufficient? Gaps or problems?	B 1.2 B 1.4
19. What kind of monitoring and reporting mechanisms/ registers are in place at the health facility? Can you explain how these are used? Any examples of agencies using the data jointly? Challenges? Gaps?	B 1.3 B 2.9

20. Are there any effects of CHDs on the use on the use of general health services in the district? Has integration of preventive and treatment services and/or the linkages between outreach and facility-based services been strengthened? Examples?	B 1.6
21. Do the health facilities received technical support to implement the CHD? By whom and how?	B2.4

D. Effectiveness: Have planned program outputs and outcomes been achieved?
What difference has the project made in terms of coverage?
Has competences of national and local staff to plan and implement child nutrition activities increased? What factors contributed to success or failure with regard to service delivery?

22. Have project activities had any effect on parents' use of and demand for child health and nutrition at your health facility? Utilization Rates, Vaccination Coverages, Distribution of Vitamin A during regular Child Health Services? etc. (HMIS).	Complements quantitative data C 1-7
23. Are the number of treatment/referrals or nutrition conditions increasing since CHD is implemented? Is the MUAC intervention during CHD resulting in more referrals of children?	C1-7 and coverage of referrals
24. Which stakeholders are trained to be involved in the planning and implementation and monitoring of the CHD in your catchment area? (Health Staff/ CHW, NGOs/ CBO's etc.? What was the outcome? How was the training conducted? During a special course or was it on the job training?	D1.4
25. How are Health facility staff trained (e.g. courses, supportive supervision, on the job training) to improve on a) the management of the supply chain? b) to addresses inequities in use of CHD services? c) in the organization and service delivery of CHD services? d) monitoring of the CHD services? Examples/ evidence that the capacity is increased?	
26. Who supervises the health facility staff for the CHD? Frequency? Is this supervision integrated in the regular supervision of the health facilities or are extra supervision visits planned for the CHD? How is supportive supervision done? Approaches? Did supportive supervision assisted to increase the coverage of activities delivered during the CHD? And other Child nutrition and health indicators eg DPT 3? Any effect observed of the supportive supervision? Examples	C 3.10 C 3.11
27. Have the activities (planning, implementation, supportive supervision, training) for the CHDs had any effect on the capacity of health workers for the delivery of general health and nutrition services?	Complements quantitative data C 1-7

E. Sustainability
To what extent will the response achievements be sustained after the withdrawal of external support?

28. Which competencies and capacities are now available in the catchment area of this health facility to continue these CHD services (planning, implementation and monitoring) and/ or to integrate them further in the regular service delivery? To what extent are these capacities and skills actively used in the delivery of regular health and nutrition services? Examples? Success stories?	D 1.1

F. **Best and lesser practices:** What are best practices and lessons learned in terms of increasing the delivery of integrated child health and nutrition services in an effective, efficient and sustainable way?	

29. What factors contributed to success or failure to the CHDs?	D 2.6
30. Did any negative changes result from the interventions? How could these be avoided?	D 2.7
31. Any unexpected / wider effects which are key in terms of success or failure?	
32. What were the success stories regarding capacity development of the health centre staff?	D 2.8
33. What are examples of the use of local resources/ capacities and /or networks that are (or can be) effectively used to sustain the achievements of the response?	D 2.9

E. Checklist for actions to observe and information to obtain at the Health Facility:

- Observation of administration of vitamin A and mebendazol
- Observation of weighing of children and MUAC (when both is done).
- Observation of an education/ information session. How is it done? Is it interactive? Are learning materials available for the information session? Are posters and other information materials visible in the health facility?
- Sitting arrangement/ flow of CHD activities; well organized?
- Child Health Card/ Road to Health Card: available? Attendance of CHD marked on the card? Has the child regularly attended the child clinic for weighing and vaccination or other activities? Frequency of attendance? Check around 10 cards.
- How are the tally sheets filled during the CHD? Please make photograph
- The referral register for nutritional cases or the treatment register for acute and chronic malnourished children

F. SEMI-STRUCTURED INTERVIEW: STAKEHOLDERS AT NATIONAL LEVEL (OPERATIONAL PARTNERS)

Interviewer:	
Interviewee(s) name(s) / function(s):	
Translator:	
Location:	
Date /Time:	

I General introduction /Preliminary questions

- **Introduction of the evaluators and short summary of the project:**
  (i) KIT and local partners: identity roles and responsibilities respondents have in the project, and the time they have been involved
  (ii) short introduction to the evaluation

- **Explanation of the purpose of the interview:**
  (i) to determine to what extent the UNICEF Scaling Up Nutrition and Immunization project has contributed to increased coverage and effectiveness of the CHDs and how this was realized;
  (ii) to enable evidence-based and policy decision making by gathering evidence on what works well, and through which mechanisms and what are challenges.

- **Explanation of confidentiality:** the information shared by participants will stay within the KIT evaluation team. The findings will be reported globally, but without personal identifying information.

II Specific questions (the box provides the topic, the detailed questions are included for guidance)

Each question corresponds to a topic which will be probed with further questions, depending on the interviewee. These questions will be compared with other sources of information including interviews with other informants to identify possible discrepancies and/or analogies in perceptions and expectations.

A. Relevance and appropriateness: To what extent is the strategy and approach of CHD, acceptable (socially, financially) and relevant for meeting the needs of caretakers and children to improve nutrition practices for children U5?

1. What would you identify as the main child health needs that can be addressed through CHDs?	A 1.1
2. Are the interventions in line with UNICEF and international best/promising practices and evidence-informed?	A 1.2
3. How do CHD interventions relate to needs as expressed in relevant governmental policies/ strategies (NHSP, National Mother and Child Strategy, National Nutrition policies etc.)?	A 1.1
4. How appropriate is the package of activities that is included in the CHDs and its scale in relation to the nutritional/health needs of children under 5 in the country/region/ district? What would be the ideal mix of services? Why?	A1.3
5. Are CHDs being included in the health sector plans and budgets, or efforts made hereto? What adaptions have been made to make CHDs suitable for the country context	A1.4

B. **Coverage:** Has the project reached all geographical areas targeted? Have potentially vulnerable or marginalized children and communities been reached? Approaches to increase coverage?

Please ask for data (HMIS, Surveys, etc.) through which you can do the following checks	
VAS coverage (Children 6-11 months and 12 to 59 months), DPT1 and DPT3 (Children < 12 months) Measles (Children 9-12 months)	C1.7
Number children reached (statistics)	C1.1

6. Have CHDs reached all planned geographical areas and all groups of beneficiaries? Why/why not?	C 2.8
7. Have assessment / survey findings (such as DHS) and HMIS data been used to(re)design CHDs with a view to reduce inequity and increase coverage? Examples?	A 3.6
8. Are there mechanisms to select/ include/focus more on districts which perform below average in meeting child health and nutrition needs?	A 2.5
9. Are there mechanisms used to reach under-served populations? Which ones and how do they work? (for national choices and for choices at district /community level) (explore besides geographical under-served populations, also specific vulnerable groups (children living with HIV, orphaned children, children not living with their biological parents, disabled children, etc.)	A 2.5 A 3.6
10. Are there strategies to promote gender equality? If so, are these used? By whom and how? (Examples: are data systematically disaggregated by sex? Are boys and girls equally accessing the CHD? Are male and female caretakers free to go/and or male encouraged to go? Are both male and female human resources involved (including as community leaders) and how?)	A 3.6 A 3.7
11. What approaches have worked (and what not) in reaching the hard to reach? Innovative approaches? Bottlenecks?	C 2.9
12. What difference has the project made in terms of coverage? Challenges? Success stories?	C2.9

C. **Efficiency:** Have inputs resulted in planned outputs? To what extent are stakeholders working together towards the common goal of increased and sustained well-being and survival of children?

13. What resources are provided? Are these available in time? Sufficient? At all levels (national, district and community)? Gaps or problems?	B 1.2 B 1.4
14. What kind of monitoring and reporting mechanisms are in place? Examples of how they are used? Any examples of agencies using data jointly? Challenges? Gaps?	B 1.3 B 2.9
15. How are CHDs planned and activities coordinated? Role of Govt bodies at national, regional, district level? Role of UNICEF? Role of other stakeholders? How are gaps identified and addressed?	B 2.7
16. Has coordination been cost effective (efficient)? Challenges in coordination?	B 2.11, B 2.7

17. Are agencies working together in developing common strategies/procedures? Examples?	B 2.8

D. <u>Effectiveness</u> (Other than the coverage issues explored under B.): _Have planned program outputs and outcomes been achieved?
What difference has the project made in terms of coverage?
Has competences of national and local staff to plan and implement child nutrition activities increased? What factors contributed to success or failure with regard to service delivery?

18. Have planned program outputs and outcomes been achieved?	
19. Has competences of national and local staff to plan and implement child nutrition activities increased? How? Examples?	
20. What factors contributed to success or failure with regard to service delivery?	
21. Any observations on opportunities missed (in terms of activities/ interventions, and or optimizing effectiveness)? On complementarity of stakeholders?	B 2.10

E. <u>Sustainability</u>
To what extent will the response achievements be sustained after the withdrawal of external support?

22. Have CHDs been integrated in national strategies/national, regional and or district plans? How and in what form? If yes, have these national strategies/plans been costed?	A 1.4, D 1.2
23. How has the budget for integrated health and nutrition service delivery including CHDs (or other integrated events) evolved over the last five years? Plans for the future?	D 1.2
24. Is there a clear exit strategy? If so, does this exit strategy build on local resources and capacities?	

F. <u>Best and lesser practices:</u> What are best practices and lessons learned in terms of increasing the delivery of integrated child health and nutrition services in an effective, efficient and sustainable way?

25. What factors contributed to success or failure to the CHDs?	D 2.6
26. Did any negative changes result from the interventions? How could these be avoided?	D 2.7
27. Any unexpected / wider effects which are key in terms of success or failure?	
28. How would you position UNICEF and what could be its main role? What do you see as the pre-conditions to achieve this?	

G Semi-structured interview for stakeholders at district level

Interviewer:	
Interviewee(s) name(s) / function(s):	
Translator:	
Location:	
Date /Time:	

I General introduction /Preliminary questions

- **Introduction of the evaluators and short summary of the project:**
  (i) KIT and local partners: identity and roles and responsibilities in the project
  (ii) short introduction to the programme

- **Explanation of the purpose of the interview:**
  (i) to determine to what extent the UNICEF Scaling Up Nutrition and Immunization project has contributed to increased coverage and effectiveness of the CHDs and how this was realized;
  (ii) to enable evidence-based and policy decision making by gathering evidence on what works well, and through which mechanisms and what are challenges.

- **Explanation of confidentiality:** the information shared by participants will stay within the KIT evaluation team. The findings will be reported globally, but without personal identifying information.

II Specific questions (the box provides the topic, the detailed questions are included for guidance)

Each question corresponds to a topic which will be probed with further questions, depending on the interviewee. These questions will be compared with other sources of information including interviews with other informants to identify possible discrepancies and/or analogies in perceptions and expectations.

A. **Relevance and appropriateness:** to what extent is the strategy and approach of CHDs acceptable (socially, financially) and relevant to respond to the needs of caretakers and children to improve nutrition practices for children U5?

1. What would you identify as the main child health needs (problems) in your district? Which health needs addressed through CHDs? Successes, challenges and gaps?	A 1.3
2. Are the CHD activities implemented in an acceptable manner for the community and care takers in your district? Examples success stories?	A 1.3
3. Does the design of the planning and implementation of CHD allows the poorest and most marginalized children and care takers) such as women headed households, minority groups, IDPs etc. to access the service? Examples? Challenges?	A2.5 A3.6
4. Do you think that parents/care-takers consider the interventions as relevant? Examples?	A 1.3
5. What related services (immunisation, nutrition, BCC) are not included in the CHDs what could be easily integrated during these days in your district?	A 1.3
6. Was the health staff of the health facilities involved in the planning of the CHD? Examples of their involvement?	
7. Were the community and caretakers involved in defining and planning of the activities and do they participate in the organization of the implementation? Examples?	A3.8
8. Is there an (annual) district health plan (CCHP) Are CHD integrated in this plan? Did the district/ council have the power to decide if and how CHDs are integrated in the district annual plan? And are these activities budget for? How much?	D1.4

B. Coverage: Has the project reached all geographical areas targeted? Have potentially vulnerable or marginalized children and communities been reached?	

9. Was the district involved in determining the geographical areas/ communities where CHD needs extra attention to improve the coverage? How are these geographical areas/ communities decided on? (statistics, health needs, availability of qualified staff etc.)? Has this choice improved equity in access to CHD services? And for service delivery in general?	A 3.6
10. In how many outreach areas are regular child health services conducted in the district? And in how many areas for the CHD?	
11. Is the district analysing and interpreting VAS/CHD data themselves? If yes, can the results be used to plan the CHDs? If no, are analysed date by national/ regional level made available for planning.	B2.3
12. Have other findings (such as DHS) and HMIS data and supervision reports been used to plan for increase of coverage and equity for specific geographical areas / communities for the CHDs? Examples? What approaches have worked (and what not) in reaching the hard to reach? Innovative approaches? Bottlenecks?	B2.3 A2.5 C2.8 C2.9
13. Are there any mechanisms used to reach under-served populations and vulnerable children in planning and during the CHD? Which ones and how do they work? Examples? Success stories?	
14. Do you know if the most vulnerable groups (disabled, poorest of the poor) attend the CHDs? What data are available about this? trends? Are data systematically disaggregated (by e.g. wealth quintile)? Examples?	C 2.8 A 3.7
15. How is gender equality promoted? By whom and how? (Examples: are data systematically disaggregated by sex? Are boys and girls equally accessing the CHD? Are male and female caretakers free to go? Are both male and female human resources involved and how?). Are men and women equally involved in announcing and decision making around organization of CHD	A 3.6 A 3.7

C. Efficiency: Have inputs resulted in planned outputs? To what extent are stakeholders working together towards the common goal of increased and sustained well-being and survival of children?	

16. Are activities implemented as planned?	B 1.1
17. How is are the activities of the CHD planned and coordinated with the various stakeholders at district and community level)? How are gaps identified and addressed? Strengths and weaknesses? Are there programmes in the public health sector, by NGO or of other sectors that are complementary or duplicating the activities of the CHD? Are agencies working together in developing common strategies/procedures for nutrition and health programmes for children under five years? Examples? Challenges in coordination?	B 2.7 B2.8 B2.9 B2.10
18. What resources for the CHD are provided to the district? And how do you divide them to the health facilities? Specific criteria for distribution to health facilities? Are the resources available in time? Sufficient? Gaps or problems?	B 1.2 B 1.4
19. What kind of monitoring and reporting mechanisms/ registers are in place (at the district and at the health facility) ? Examples of how they are used? Any examples of agencies using the data jointly? Challenges? Gaps?	B 1.3 B 2.9
20. Are there any effects of the CHDs on the use of general health services in the district? Has integration of preventive and treatment services and/or the linkages between outreach and facility-based services strengthened? Examples?	B 1.6

21. Does the district and the health facilities received technical support to implement the CHD? By whom and how?	B2.4

D. Effectiveness: Have planned program outputs and outcomes been achieved?
What difference has the project made in terms of coverage? Has competences of national and local staff to plan and implement child nutrition activities increased? What factors contributed to success or failure with regard to service delivery?

22. Have project activities had any effect on parents' use of and demand for child health and nutrition services in the district? ? Utilization Rates, Vaccination Coverages, Distribution of Vitamin A during regular Child Health Services? etc. (according HMIS, examples?).	Complements quantitative data C 1-7
23. Are the number of treatment/referrals for nutrition conditions increasing since CHD are implemented? Has the newly adopted MUAC intervention during CHD resulted in more referrals of children?	C1-7 and coverage of referrals
24. Which stakeholders are trained to be involved in the planning, implementation and monitoring of the CHD in the district? (Health Staff/ CHW, NGOs/ CBO's etc.?) What was the outcome? How was the training conducted? During a special course or was it on the job training?	D1.4
25. Are and how are district staff / Health facility staff) trained (courses, supportive supervision, on the job training) to improve on a) the management of the supply chain? b) to addresses inequities in use of CHD services? c) in the organization and service delivery of CHD services? d) monitoring of the CHD services? Examples/ evidence that the capacity is increased?	
26. Who supervises the district/ council staff for the CHD? Frequency? Is this supervision integrated in the regular supervision of the health facilities or are extra supervision visits planned for the CHD? How is supportive supervision done? Approaches? Did supportive supervision assisted to increase the coverage of activities delivered during the CHD? And other Child nutrition and health indicators eg DPT 3? Any effect observed of the supportive supervision? Examples	C 3.10 C 3.11
27. Have the activities (planning, implementation, supportive supervision, training) for the CHDs had any effect on the capacity of health workers for the delivery of general health and nutrition services?	Complements quantitative data C 1-7

E. Sustainability
To what extent will the response achievements be sustained after the withdrawal of external support?

28. Which competencies and capacities are now available in the district to continue these CHD services (planning, implementation and monitoring) and/ or to integrate them further in the regular service delivery? To what extent are these capacities and skills actively used in the delivery of regular health and nutrition services? Examples? Success stories?	D 1.1

F. **Best and lesser practices:** What are best practices and lessons learned in terms of increasing the delivery of integrated child health and nutrition services in an effective, efficient and sustainable way?	

29. What factors contributed to success or failure to the CHDs?	D 2.6
30. Did any negative changes result from the interventions? How could these be avoided?	D 2.7
31. Any unexpected / wider effects which are key in terms of success or failure?	
32. What were the success stories regarding capacity development of district and health centre staff and how can these be replicated	D 2.8
33. What are examples of the use of local resources/ capacities and /or networks that are (or can be) effectively used to sustain the achievements of the response?	D 2.9

H. Checklist for information to obtain at the district / council:

To assess the coverage of important preventive health and nutrition indicators at the district please check:

The district population figures from 2010- 2011-2012-2014-2015 -2016 divided into

- Total population male/female

- Children below < 1 year m/f
- Children between 1-2 y m/f
- Children between 2-3 y m/f
- Children between 3-4 y m/f
- Children between 4-5 y m/f

The HMIS/ DIHS2 data from 2010- 2011-2012-2014-2015 -2016:

- Vit A distribution (regular services): for children 6-11 Mont, 1-2 years and 3-5 years

- Children below < 1 year
- Children between 1-2 y
- Children between 2-3 y
- Children between 3-4 y
- Children between 4-5 y

severe underweight/ moderate underweight/ healthy weight according to Road to Health Card. (red , grey and green zone)

HMIS/ DIHS2 data from 2010- 2011-2012-2014-2015 -2016:

- Infant Mortality Rate
- Child Mortality Rate
- Utilization of Services (not preventive but curative services) of Children <1 y/ Children < 5 y

To assess the planning please look into the:

District annual health plan (CCHP) on the budget for CHD (please make photograph)

I Semi-structured interview for Stakeholders at national level (strategic partners)

Interviewer:	
Interviewee(s) name(s) / function(s):	
Translator:	
Location:	
Date /Time:	

I General introduction /Preliminary questions

- **Introduction of the evaluators and short summary of the project:**
  (i) KIT and local partners: identity roles and responsibilities respondents have in the project, and the time they have been involved
  (ii) short introduction to the evaluation

- **Explanation of the purpose of the interview:**
  (i) to determine to what extent the UNICEF Scaling Up Nutrition and Immunization project has contributed to increased coverage and effectiveness of the CHDs and how this was realized;
  (ii) to enable evidence-based and policy decision making by gathering evidence on what works well, and through which mechanisms and what are challenges.

- **Explanation of confidentiality:** the information shared by participants will stay within the KIT evaluation team. The findings will be reported globally, but without personal identifying information.

II Specific questions (the box provides the topic, the detailed questions are included for guidance)

Each question corresponds to a topic which will be probed with further questions, depending on the interviewee. These questions will be compared with other sources of information including interviews with other informants to identify possible discrepancies and/or analogies in perceptions and expectations.

A. Relevance and appropriateness: to what extent is the strategy and approach of CHD, acceptable (socially, financially) and relevant for meeting the needs of caretakers and children to improve nutrition practices for children U5?

1. What would you identify as the main child health needs that can be addressed through CHDs?	A 1.1
2. Are the interventions in line with UNICEF and international best/promising practices and evidence-informed?	A 1.2
3. How do CHD interventions relate to needs as expressed in relevant governmental policies/ strategies (NHSP, National Mother and Child Strategy, National Nutrition policies etc.)?	A 1.1
4. How appropriate is the package of activities that is included in the CHDs and its scale in relation to the nutritional/health needs of children under 5 in the country/region/ district? What would be the ideal mix of services? Why?	A1.3
5. Are CHDs being included in the health sector plans and budgets, or efforts made hereto? What adaptions have been made to make CHDs suitable for the country context	A1.4

B. **Coverage:** Has the project reached all geographical areas targeted? Have potentially vulnerable or marginalized children and communities been reached? Approaches to increase coverage?	
6. Please ask for data (HMIS, Surveys, etc) through which you can do the following checks	
7. VAS coverage (Children 6-11 months and 12 to 59 months), DPT1 and DPT3 (Children < 12 months) Measles (Children 9-12 months)	C1 1.7
8. Number children reached (statistics)	C1.1
9. Have CHDs reached all planned geographical areas and all groups of beneficiaries? Why/why not?	C 2.8
10. Have assessment / survey findings (such as DHS) and HMIS data been used to (re)design CHDs with a view to reduce inequity and increase coverage? Examples?	A 3.6
11. Are there mechanisms to select/ include/focus more on districts which perform below average in meeting child health and nutrition needs?	A 2.5
12. Are there mechanisms used to reach under-served populations? Which ones and how do they work? (for national choices and for choices at district /community level) (explore besides geographical under-served populations, also specific vulnerable groups (children living with HIV, orphaned children, children not living with their biological parents, disabled children, etc)	A 2.5 A 3.6
13. Are there strategies to promote gender equality? If so, are these used? By whom and how? (Examples: are data systematically disaggregated by sex? Are boys and girls equally accessing the CHD? Are male and female caretakers free to go/and or male encouraged to go? Are both male and female human resources involved (including as community leaders) and how?)	A 3.6 A 3.7
14. What approaches have worked (and what not) in reaching the hard to reach? Innovative approaches? Bottlenecks?	C 2.9
15. What difference has the project made in terms of coverage? Challenges? Success stories?	C2.9

C. **Efficiency:** Have inputs resulted in planned outputs? To what extent are stakeholders working together towards the common goal of increased and sustained well-being and survival of children?	
16. What resources are provided? Are these available in time? Sufficient? At all levels (national, district and community)? Gaps or problems?	B 1.2 B 1.4
17. What kind of monitoring and reporting mechanisms are in place? Examples of how they are used? Any examples of agencies using data jointly? Challenges? Gaps?	B 1.3 B 2.9
18. How are CHDs planned and activities coordinated? Role of Govt bodies at national, regional, district level? Role of UNICEF? Role of other stakeholders? How are gaps identified and addressed?	B 2.7
19. Has coordination been cost effective (efficient)? Challenges in coordination?	B 2.11, B 2.7
20. Are agencies working together in developing common strategies/procedures? Examples?	B 2.8

D. <u>Effectiveness</u> (Other than the coverage issues explored under B.) Have planned program outputs and outcomes been achieved? What difference has the project made in terms of coverage? Has competences of national and local staff to plan and implement child nutrition activities increased? What factors contributed to success or failure with regard to service delivery?

21. Have planned program outputs and outcomes been achieved?	
22. Has competences of national and local staff to plan and implement child nutrition activities increased? How? Examples?	
23. What factors contributed to success or failure with regard to service delivery?	
24. Any observations on opportunities missed (in terms of activities/ interventions, and or optimizing effectiveness)? On complementarity of stakeholders?	B 2.10

E. <u>Sustainability</u>
To what extent will the response achievements be sustained after the withdrawal of external support?

25. Have CHDs been integrated in national strategies/national, regional and or district plans? How and in what form? If yes, have these national strategies/plans been costed?	A 1.4, D 1.2
26. How has the budget for integrated health and nutrition service delivery including CHDs (or other integrated events) evolved over the last five years? Plans for the future?	D 1.2
27. Is there a clear exit strategy? If so, does this exit strategy build on local resources and capacities?	

F. <u>Best and lesser practices:</u> What are best practices and lessons learned in terms of increasing the delivery of integrated child health and nutrition services in an effective, efficient and sustainable way?

28. What factors contributed to success or failure to the CHDs?	D 2.6
29. Did any negative changes result from the interventions? How could these be avoided?	D 2.7
30. Any unexpected / wider effects which are key in terms of success or failure?	
31. How would you position UNICEF and what could be its main role? What do you see as the pre-conditions to achieve this?	

Annex VII Case Study Respondents

Tanzania case study respondents			
Name	**Title**	**Organisation**	**Place**
Maniza Zaman	Country Director	UNICEF	Dar es Salaam
Paul Edwards	Deputy Representative	UNICEF	Dar es Salaam
Biram Ndiaye	Nutrition Manager	UNICEF	Dar es Salaam
Abraham Sanga	Nutrition Officer, Micronutrients	UNICEF	Dar es Salaam
Pamfill Silayo	Immunization Specialist	UNICEF	Dar es Salaam
Roselinda Lugina	Logistics Specialist (Health & Nutrition)	UNICEF	Dar es Salaam
Dr. Jocelyne Kagana	Managing Director (acting)	TFNC	Dar es Salaam
Francis Modaha	Team Leader CHNM	TFNC	Dar es Salaam
Dr Elitatio Towo	Food Biotechnology	TFNC	Dar es Salaam
Wessy P. Meghji	Senior Research Officer	TFNC	Dar es Salaam
Mary V. Kibone	SRO - Nutrition	TFNC	Dar es Salaam
Bupe A. Ntoga	SRO - Nutrition	TFNC	Dar es Salaam
Anna Swilla	CCHP Cordinator	MoH	Dar es Salaam
Dafrossa Lyimo	EPI Program Manager	MoH	Dar es Salaam
Gwao Omary Gwao	Micronutrients Coordinator	MoH	Dar es Salaam
Peter Kaswahili	Nutrition Officer	MoHCDGEC	Dar es Salaam
Madani Thiami	Health Sector Team Leader	High Commission of Canada	Dar es Salaam
Erin Smith	Country Director	HKI	Dar es Salaam
Athuman Tawakal	Program Officer	HKI	Dar es Salaam
Hellen J. Chisanga	District Health Secretary	Kilolo	Kilolo District
Fanuel Nyadwike	Acting DIVO	Kilolo	Kilolo District
Michael Simwanza	District Pharmacist	Kilolo	Kilolo Distict
Benedict Haule	Acting HMIS FP	Kilolo	Kilolo District
Alexander Sagaya	District Nutritionist	Kilolo	Kilolo District
Ahimidiwe Mtengela	Religious Leader	Kising'a Facility community	Kilolo District
Adam A. Mwilafi	Prominent Elder	Kising'a Facility community	Kilolo Distict
Visise Mtengela	Primary Health Care Provider	Kising'a Facility	Kilolo District
Anthony Mpessa	Primary Health Care Provider	Kising'a Facility	Kilolo District
Hamadi Msigala	Village Executive Officer	Kising'a Facility community	Kilolo District
Thomas Ngasakwa	Village Chairman	Kising'a Facility community	Kilolo Distict
Simon Ndelwa	Assistant Nurse Officer	Kising'a Facility	Kilolo District
Devota Mwilonga	Clinical Officer	Kising'a Facility	Kilolo District
Joyce Chunga	Enrolled Nurse	Kising'a Facility	Kilolo District
Janeth Mwisaka	Medical Attendent	Kising'a Facility	Kilolo Distict
Eva, 33 yrs	Mother 4 children	Kising's Facility	Kilolo District
Zaina, 35 yrs	Mother 1 child	Kising's Facility	Kilolo District
Noela, 22 yrs	Mother 1 child	Kinsing's Facility	Kilolo District
Achila, 27 yrs	Mother 2 children	Kising's Facility	Kilolo Distict
Theresia, 34 yrs	Mother 4 children	Kising's Facility	Kilolo District
Sarah, 35 yrs	Mother 4 children	Kising's Facility	Kilolo District

Emma, 33 yrs	Mother 4 children	Kising's Facility	Kilolo District
Angel, 21 yrs	Mother 1 child	Kising's Facility	Kilolo Distict
Asha, 22 yrs	Mother 1 child	Kising's Facility	Kilolo District
Credita Chuwilo	Health Officer	Lukani Facility	Kilolo District
Gasper Kasimba	Member Village Health Committee	Lukani Facility	Kilolo District
Nicodemas Kadindi	Village Excecutive Officer	Lukani Facility	Kilolo Distict
Maria Chesambili	Sub Village Leader	Lukani Facility	Kilolo District
Anjila Changa	Medical Attendant	Lukani Facility	Kilolo District
Zena Ngalika	Nurse Midewife	Lukani Facility	Kilolo District
Carolina Nduguru	Medical Attendant	Lukani Facility	Kilolo Distict
Sabas M. Haule	Clinical Officer	Lukani Facility	Kilolo District
Lucy	Mother 3 children	Lukani Facility	Kilolo District
Felista	Mother 1 child	Lukani Facility	Kilolo District
Catherin	Mother 1 child	Lukani Facility	Kilolo Distict
Theodora	Mother 2 children	Lukani Facility	Kilolo District
Imakulata	Mother 5 children	Lukani Facility	Kilolo Distict
Devotha	Mother 3 children	Lukani Facility	Kilolo District
Tehordora	Mother 4 children	Lukani Facility	Kilolo District
Dr Bakar Salum	City Medical Officer of Health	Arusha City Council	Arusha Distric
Fauster. C. Kambange	City Reproductive Child Health Coordinator	Arusha City Council	Arusha District
Optat. S. Ismail	City Health Secretary	Arusha City Council	Arusha Distric
Rose Manya	City Nutrition Officer	Arusha City Council	Arusha District
Majid A. Lukida	City Immunization & Vaccination Officer	Arusha City Council	Arusha Distric
Miji Nyaindi	City Pharmacist	Arusha City Council	Arusha District
Lucy Godfrey	Health Officer	Daraja Mbili Facility	Arusha Distric
Jafet	Local Government Leader	Daraja Mbili Facility	Arusha District
Suzan	Village Executive Officer	Daraja Mbili Facility	Arusha Distric
Max	Sub Village Leader	Daraja Mbili Facility	Arusha District
Omar	Sub Village Leader	Daraja Mbili Facility	Arusha Distric
Hussein	Sub Village Leader	Daraja Mbili Facility	Arusha District
Masound	Sub Village Leader	Daraja Mbili Facility	Arusha Distric
David Manyanya	Doctor/Facility in Charge	Daraja Mbili Facility	Arusha District
Noel Sumari	Matron	Daraja Mbili Facility	Arusha Distric
Suzan Nrema	Enrolled nurse/In charge of vaccines	Daraja Mbili Facility	Arusha District
Zulfa	Mother 3 children	Daraja Mbili Facility	Arusha Distric
Teddy	Mother 1 child	Daraja Mbili Facility	Arusha District
Khadija	Mother 1 child	Daraja Mbili Facility	Arusha Distric
Sada	Mother 1 child	Daraja Mbili Facility	Arusha District
Jamine	Mother 1 child	Daraja Mbili Facility	Arusha Distric
LIghtness	Mother 3 children	Daraja Mbili Facility	Arusha District
Emmanuel Mollel	Ward Executive Officer	Kaloleni Facility	Arusha Distric
Haasan S. Ali	Sub Village Leader	Kaloleni Facility	Arusha District
Abdallah Nassor	Sub Village Leader	Kaloleni Facility	Arusha Distric

Sarah	Health Officer	Kaloleni Facility	Arusha District
xx	Registered Nurse	Kaloleni Facility	Arusha Distric
xx	Enrolled Nurse	Kaloleni Facility	Arusha Distric
Mwajuma, 23 yr	Mother 1 child	Kaloleni Facility	Arusha District
Kahdija, 20 yr	Mother 1 child	Kaloleni Facility	Arusha Distric
Johari, 23 yr	Mother 1 child	Kaloleni Facility	Arusha District
Festo S. Tilia	Acting District Nutrition Officer	Meru District CHMT	Meru District
Asha Msangi	Nutrition Officer	Meru District CHMT	Meru District
Lameck Pallangyo	Assistant District Immune & Vaccination Officer	Meru District CHMT	Meru District
Restituta Ngowi	District Reproductive Child Health Coordinator	Meru District CHMT	Meru District
Dr Wicklif S. Sango	District AIDS Counselling Coordinator	Meru District CHMT	Meru District
Mensad Ngowi	District Dental Officer	Meru District CHMT	Meru District
Dr Abdallah Mvungi	District Neglected Tropical Disease's Coordinator	Meru District CHMT	Meru District
Masedavia Mbise	Village Chairperson	Maji ya Chai facility	Meru District
Ndewario Kaaya	Village Executive Officer	Maji ya Chai facility	Meru District
Elsante Nicolas	Sub Village Leader	Maji ya Chai facility	Meru District
Jackson Emanuel	Retired Chairman	Maji ya Chai facility	Meru District
Afrael Soori Mbise	Religious Leader	Maji ya Chai facility	Meru District
Kuwawehael Amani Sumari	Village Chairman	Maji ya Chai facility	Meru District
Nicholas O. Akyoo	Religious Leader	Maji ya Chai facility	Meru District
Nkiwa E. Pallangyo	Health Committee Member	Maji ya Chai facility	Meru District
Samson A. Mungure	Health Committee Member	Maji ya Chai facility	Meru District
Frank M. Titus	Assistant Laboratory Technician	Maji ya Chai facility	Meru District
Elizabert Shirima	Registered Nurse	Maji ya Chai facility	Meru District
Emmanuel Samson	Clinical Officer	Maji ya Chai facility	Meru District
Nuru M. salum	Medical Attendant	Maji ya Chai facility	Meru District
Scholar	Mother four children	Maji ya Chai facility	Meru District
Lilian	Mother 6 children	Maji ya Chai facility	Meru District
Tausi	Mother 1 child	Maji ya Chai facility	Meru District
Rehema	Mother 5 children	Maji ya Chai facility	Meru District
Rehema	Mother 3 children	Maji ya Chai facility	Meru District
Elias M. Mbise	Health Committee Chairman	Njarenanyuki Faclity	Meru District
Felix Naiman	Village Chairman	Njarenanyuki Faclity	Meru District
Terevaeli. R. Ayo	Subvillage Leader	Njarenanyuki Faclity	Meru District
Verael Luka Kyungai	Farmer	Njarenanyuki Faclity	Meru District
Dauson A. Masana	Farmer	Njarenanyuki Faclity	Meru District
Christopher M. Nuko	Farmer	Njarenanyuki Faclity	Meru District
Zakayo M. Kitomary	Farmer	Njarenanyuki Faclity	Meru District
A.G. Yowa	Village Executive Officer	Njarenanyuki Faclity	Meru District
Zahara S. Mwanga	Assistant Nurse	Njarenanyuki Faclity	Meru District
Puleria A. Senya	Enrolled Nurse	Njarenanyuki Faclity	Meru District
Elizabeth M. Nanyaro	Medical Attendant	Njarenanyuki Faclity	Meru District

Agness Lameck	Laboratory Assistant	Njarenanyuki Faclity	Meru District
Daniel T. Gitile	Clinical Officer	Njarenanyuki Faclity	Meru District
Julius Mrutu	In Charge	Njarenanyuki Faclity	Meru District
Mary A. Senkunde	Enrolled Nurse	Njarenanyuki Faclity	Meru District
Theresia A. Mchau	Enrolled Nurse	Njarenanyuki Faclity	Meru District
Nderambikiwa S. Nnko	Medical Attendant	Njarenanyuki Faclity	Meru District
Ester M. Kahema	Enrolled Nurse	Njarenanyuki Faclity	Meru District
Alexander Eriyo	Driver	Njarenanyuki Faclity	Meru District
Agness	Mother 3 children	Njarenanyuki Faclity	Meru District
Mariam	Mother 2 children	Njarenanyuki Faclity	Meru District

Sierra Leone case study respondents			
Name	**Title**	**Organisation**	**Place**
Kajali Paintal, PhD	Nutrition Manager	UNICEF	Freetown
Sandra Lattouf	Deputy Country Director	UNICEF	Freetown
Dr Alison Jenkins	Chief Child Survival and Development	UNICEF	Freetown
Aminata Karama	Director Food & Nutrition	MoHS	Freetown
Hannah Yankson	Nutrition Manager	WHO	Freetown
Michael Alusine N'Dolie	EPI surveillance Officer	WHO	Freetown
Maryam Onyinoyi Abdu	Chief Social Planning M & E	UNICEF	Freetown
Victor Sule	Immunization Specialist	UNICEF	Freetown
Dr Mary Hodges	Country Director	HKI	Freetown
Dr Dennis H. Marke	Programme Manager Child Health/EPI	MoHS	Freetown
James Moriba	National Nutrition Surveillance Offices	MoHS	Freetown
Fallah Kamara	Coutry Director	Restless Development	Freetown
Sister Kadie Suluku Burreh	District Health Sister	DHMT	Magburaka
Community Members	FGD		Mototoka
Care takers	FGD		Mototoka
Mohammed Saleh	in charge, CHO	PHU	Mototoka
Paul A. Kargbo	M&E Officer	PACE	Magburaka
Aiah Sam	District Social Mobilisation Officer	DHMT	Magburaka
Aiah Lot Jimmy	District Operations Officer	DHMT	Magburaka
Care takers	FGD		Magburaka
Community Members	FGD		Magburaka
Adama Sesay	In charge	PHU	Magburaka
Rahim A Kamara	M&E Officer	DHMT	Magburaka
Angela Rodgers	District Health Sister	DHMT	Kabala
Francis Kaneyh	District Social Mobilisation Officer	DHMT	Kabala
Harold Steven	Project Manager	SILPA	Kabala
Sharka Abdulai	In-charge	PHU	Mobai
Francis Giama	Nutrition Focal Point	SILPA	Kailahun

Care takers	FGD		Kailahun
Community Members	FGD		Kailahun
Idrissa Bangura	District Operations Officer	DHMT	Kabala
Community Members	FGD		Kabala
Care takers	FGD		Kabala
Fouday Sesay	District Nutrition Officer	DHMT	Kabala
Sao Nebieu	In-charge under 5	PHU	Kailahun
Francis Giama	Nutrition Focal Point	SILPA	Kailahun
Community Members	FGD		Folosaba
Care takers	FGD		Folosaba
Edith Mansaray	In-charge, nurse	PHU	Folosaba
Morley Kamara	M&E Officer	DHMT	Kailahun
James Kanneh	District Operations Officer	DHMT	Kailahun
Mr Folleh	District Social Mobilisation Officer	DHMT	Kailahun
Community Leaders	FGD		Mobai
Care takers	FGD		Mobai

Madagascar case study respondents			
Name	**Title**	**Organisation**	**Place**
Dr Célestin Rakontondrazaka	National Coordinator of SSME	Service Vaccination Mahamasina	Antananarivo
Dr Harinelina Ramasiharijaona,	Chief Nutrition Department/MOH - National Coordinator of SSME	Service de la Nutrition	Antananarivo
Dr Monique Andrianjafimasy	Chief M&E Sub-Committee for SSME	Service Vaccination Mahamasina	Antananarivo
Dr Voahangy Leonardis	Chief Technical Sub-Committees for SSME	Service Vaccination Mahamasina	Antananarivo
Mrs. Danielle Rahaingonjatovo	Deputy director	TELMA	Antananarivo
Dr Jocelyn Andriamiadana	MCH expert	USAID	Antananarivo
Dr Edwige Ramanana	MCH expert	UNFPA	Antananarivo
Dr Angeline Rzazanatsoa	Nutrition expert	WHO	Antananarivo
Dr. Rakotonirina Simon Christophe	Deopty country director	PSI	Antananarivo
Dr André Yameogo	Chief Immunization	UNICEF	Antananarivo
Jean-Benoit Manhes	Deputy Country Director	UNICEF	Antananarivo
Siméon Nanama	Chief Nutrition	UNICEF	Antananarivo
Dennis Larssen	Chief C4D	UNICEF	Antananarivo
Cheikh Toure	Coordinator C4D	UNICEF	Antananarivo
Mr James HazenR	Country Director	CRS	Antananarivo
Rakoto Armand	Project Officer	CRS	Antananarivo
Andriananarivo Andriamisaina	Project Officer	CRs	Antananarivo
Dr Manitra Rakotoarivon	Regional Director Health	DRSP Analamanga	Nanisana
Dr Manitra Razanajatovo	District Health Manager		Andramasina

Dr Jeanine Rasoarimalala	District Responsible for Nutrition & Immunization		Andramasina
Alice Leandrine	Nurse, Urban CSB	CSB	Andramasina
Parents, Care givers	FGD		Andramasina
Community Health Workers and COSAN	FGD		Andramasina
Dr Viviane Yollande Hajavololon	Chief CSB	CSB ANEPOKA	Andramasina
Parents, Care givers	FGD		Andramasina
CHW and Cosan	FGD		Andramasina
Joachim Ratsimandresy	Nurse Chief CSB	CSB Ankorina	Andramasina
???	Regional Director Health		Majunga
Dr René Rasamoelinjatovo	District Health Manager		Majunga
Dr Volatiana Emma JAOFENO	Responsible for Nutrition $ Immunization		Majunga
Parents, care givers	FGD		CSB Antanimasaja
Community Health Workers and COSAN	FGD		CSB Antanimasaja
Dr Rasidamanana Tsirisoa Miakamampiandre	Chief CSB Antanimasaja		CSB Antanimasaja
Parents, Care givers	FGD		Antanambao Sotema
Community Health Workers	FGD		Antanambao Sotema
Dr Lydia Ramiandavola	Chief	CSB Antanambao Sotema	Antanambao Sotema
Parents, Care givers	FGD		Urbain Mahabibo
Community Health Workers and COSAN	FGD		Urbain Mahabibo
Dr Pascal Rakotozanany	Chief	CSB	Urbain Mahabibo
Community Health Workers and COSAN	FG		CSB Mahavoky
Dr Pauline RAZAMASY	Chief	CSB Mahavoky	CSB Mahavoky
Parents, Care givers	FGD		CSB Mahavoky

Annex VIII VAS coverage and maps by age-group

Figure i: VAS coverage (6-11 months) in fragile countries

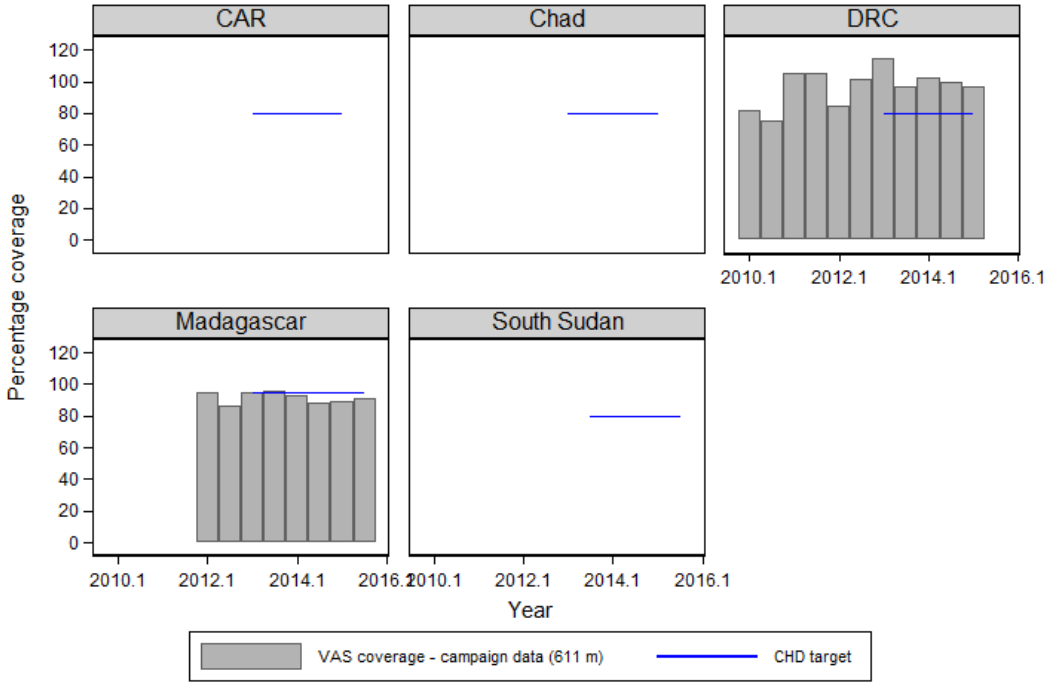


Figure ii: VAS coverage (6-11 months) in late transitioning countries

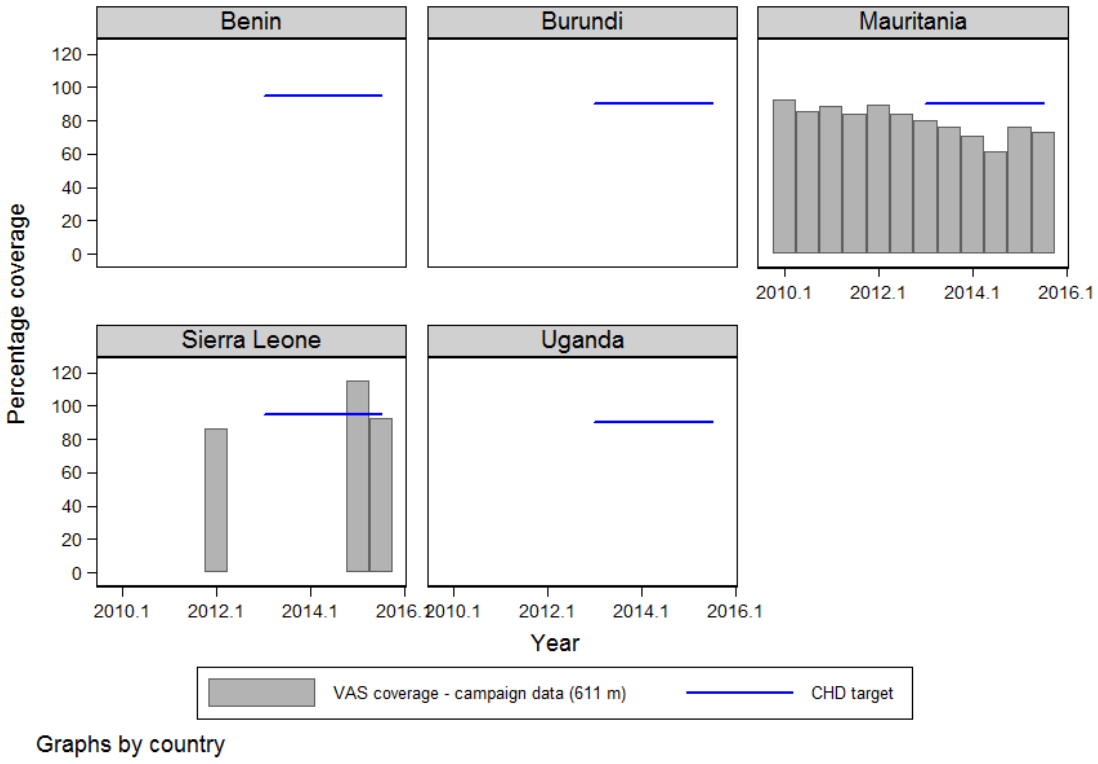


Figure iii: VAS coverage (6-11 months) in early transitioning countries

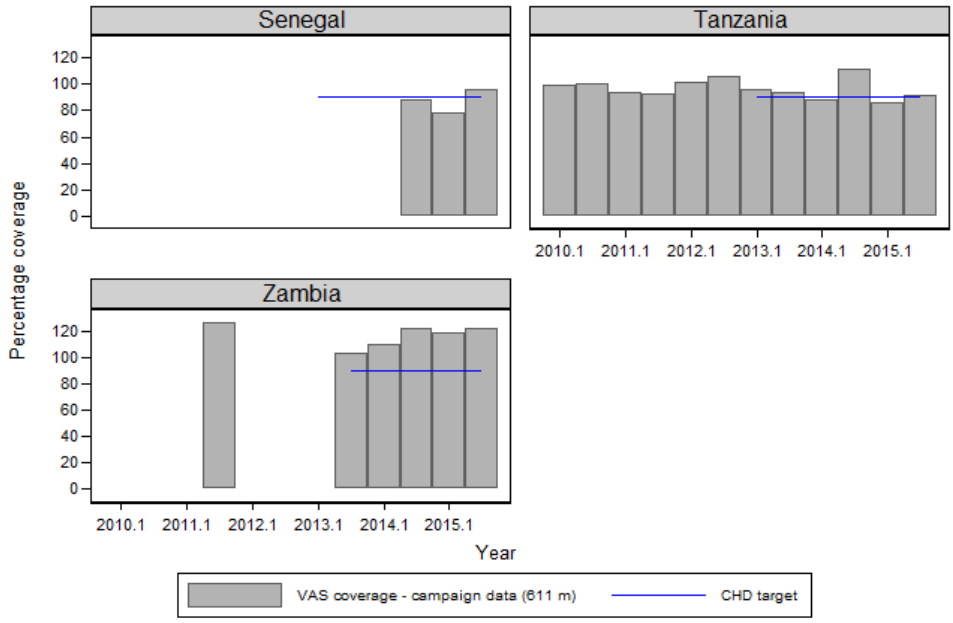


Figure iv: VAS coverage (12-59 months) in fragile countries

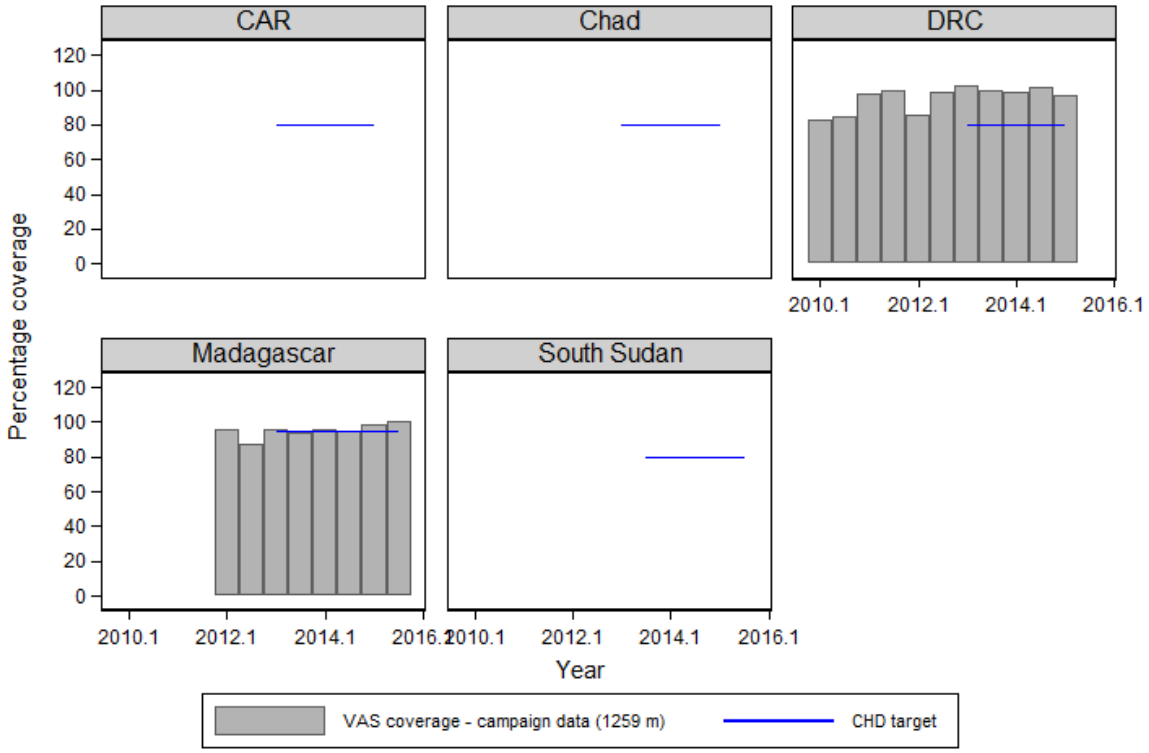


Figure v: VAS coverage (12-59 months) in late transitioning countries

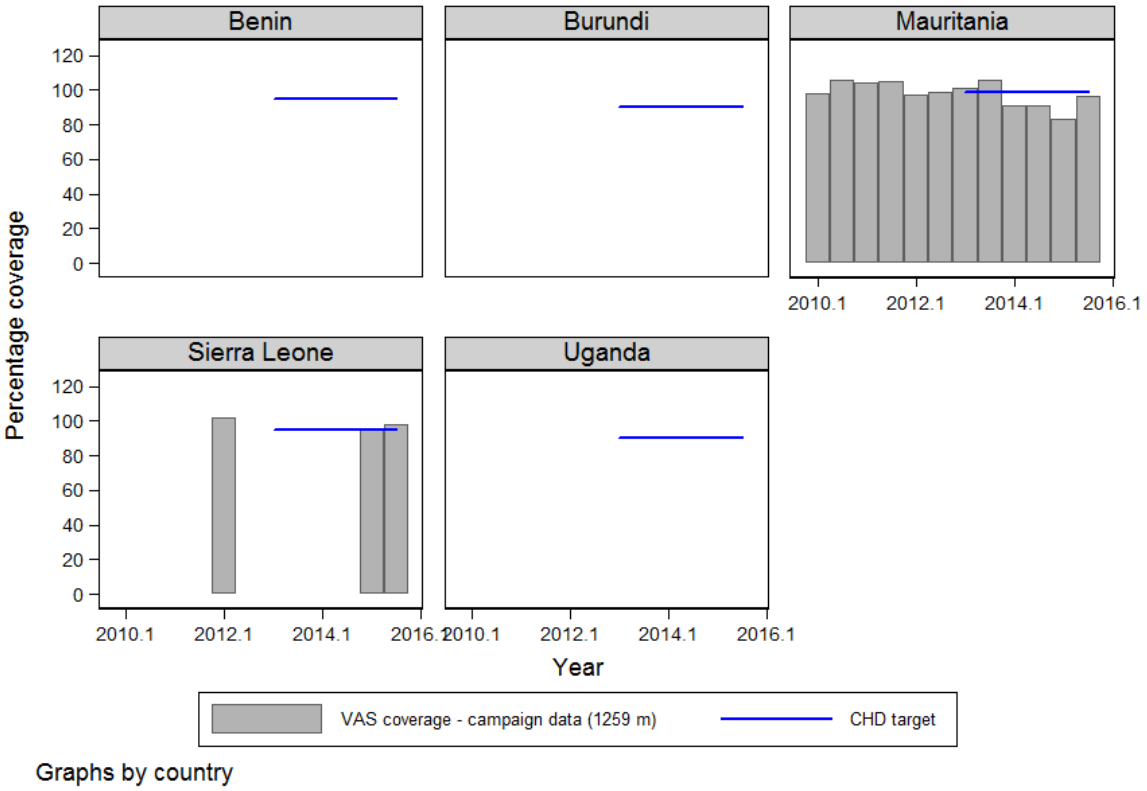
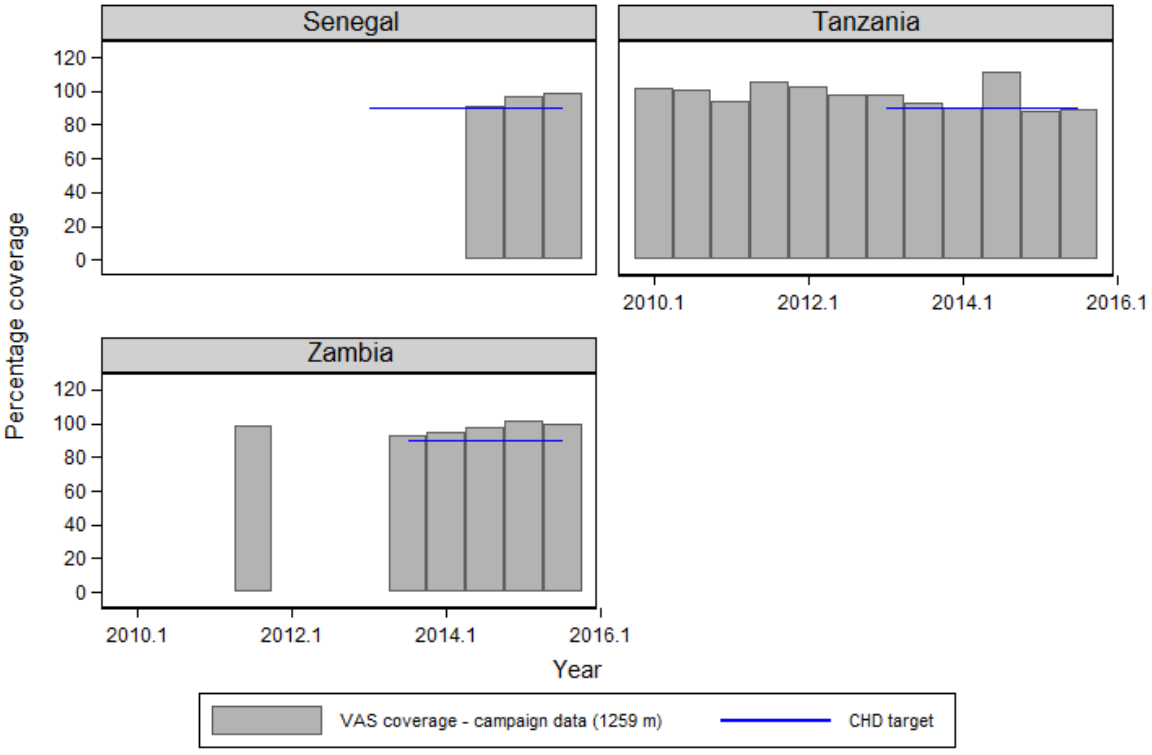


Figure vi: VAS coverage (12-59 months) in early transitioning countries



Annex IX DTP3 coverage trends and maps

Figure vii: DTP3 coverage in late transitioning countries

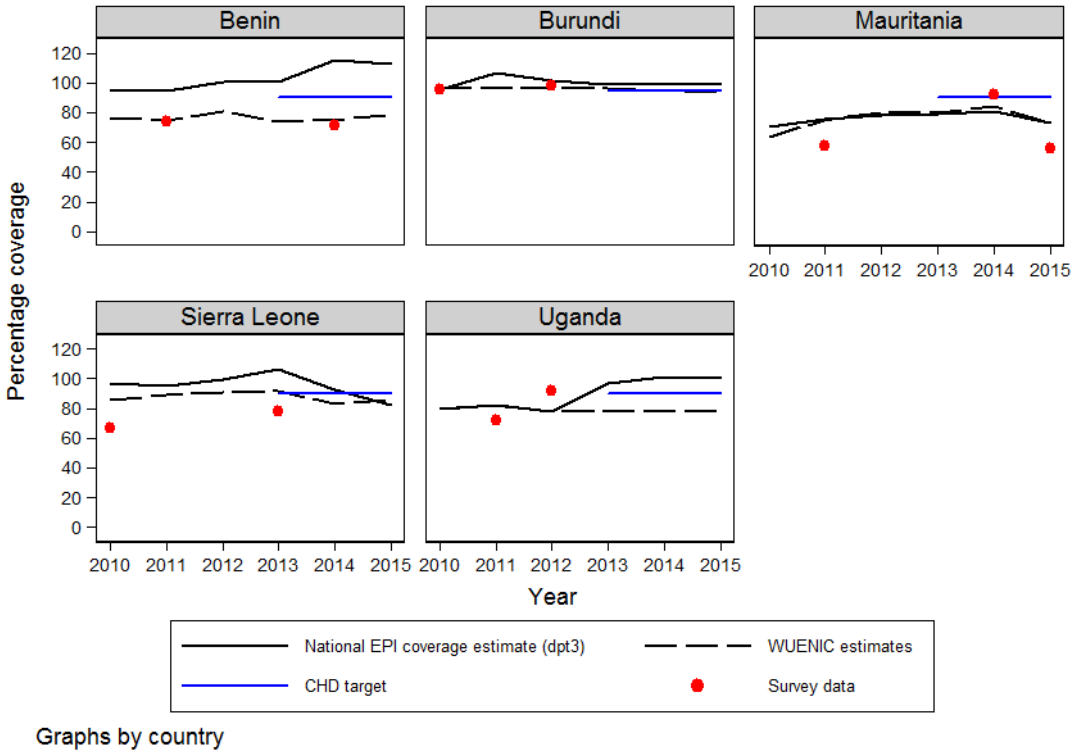


Figure viii: DTP3 coverage in early transitioning countries

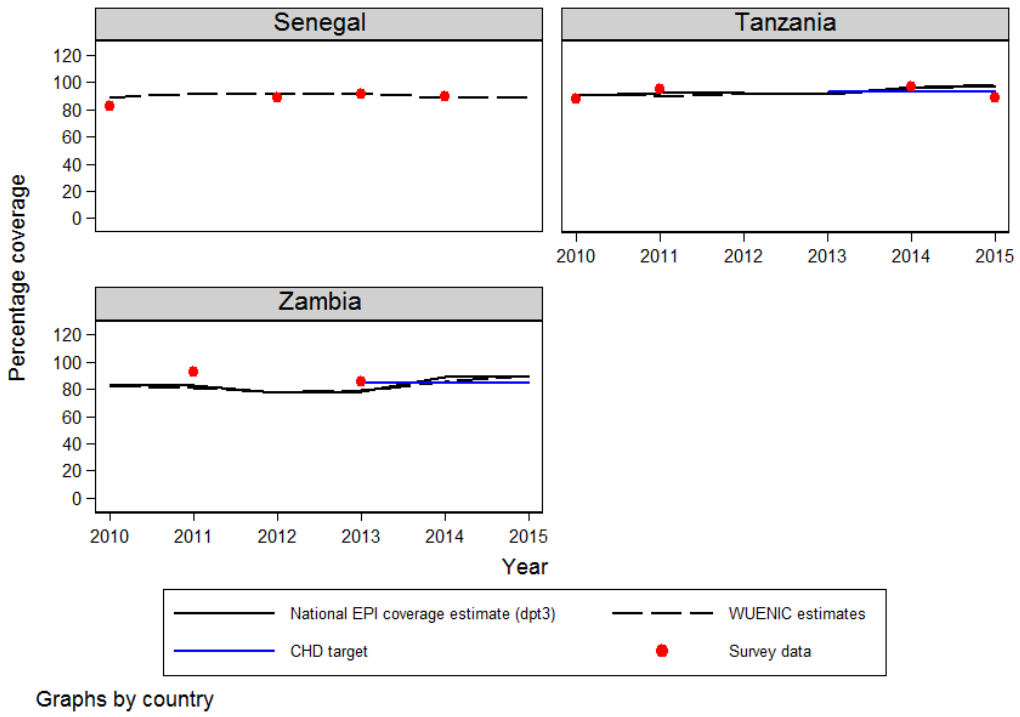


Figure ix: DTP3 coverage in fragile countries

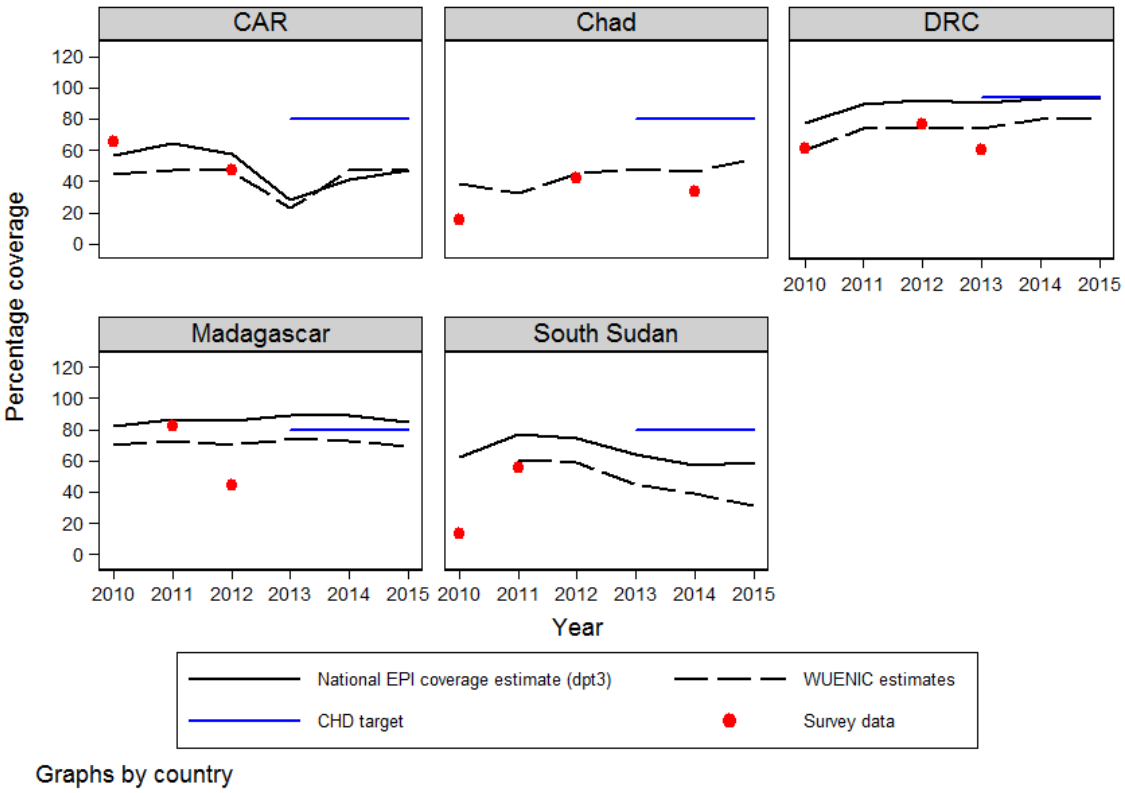


Figure x: Percentage of districts with DTP3 coverage less than 50%

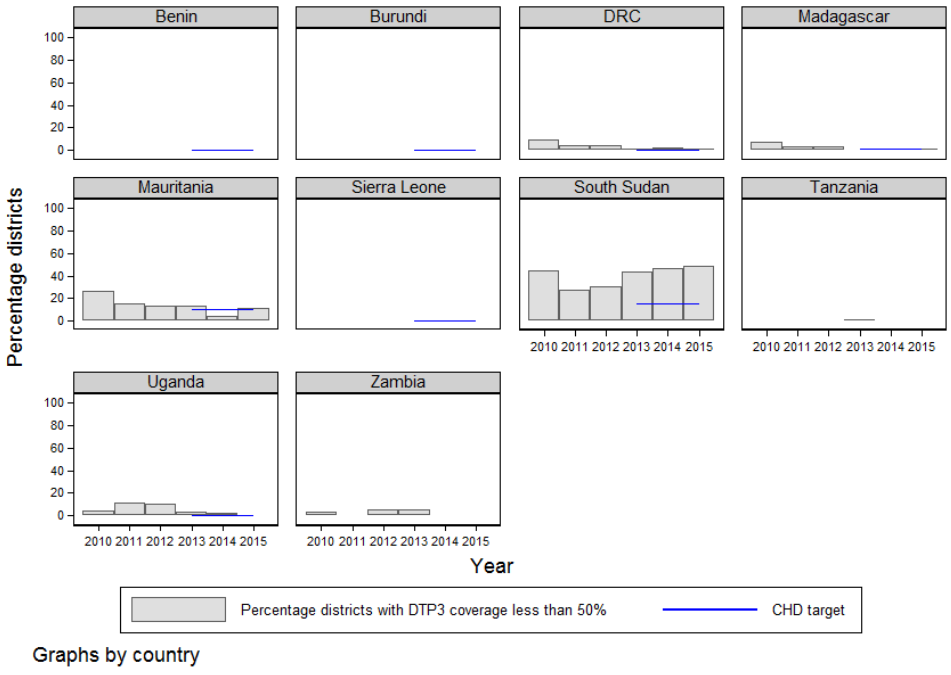


Figure xi: DTP3 coverage by lowest available administrative level for 2015, by country (for fragile states and late transitioning countries)

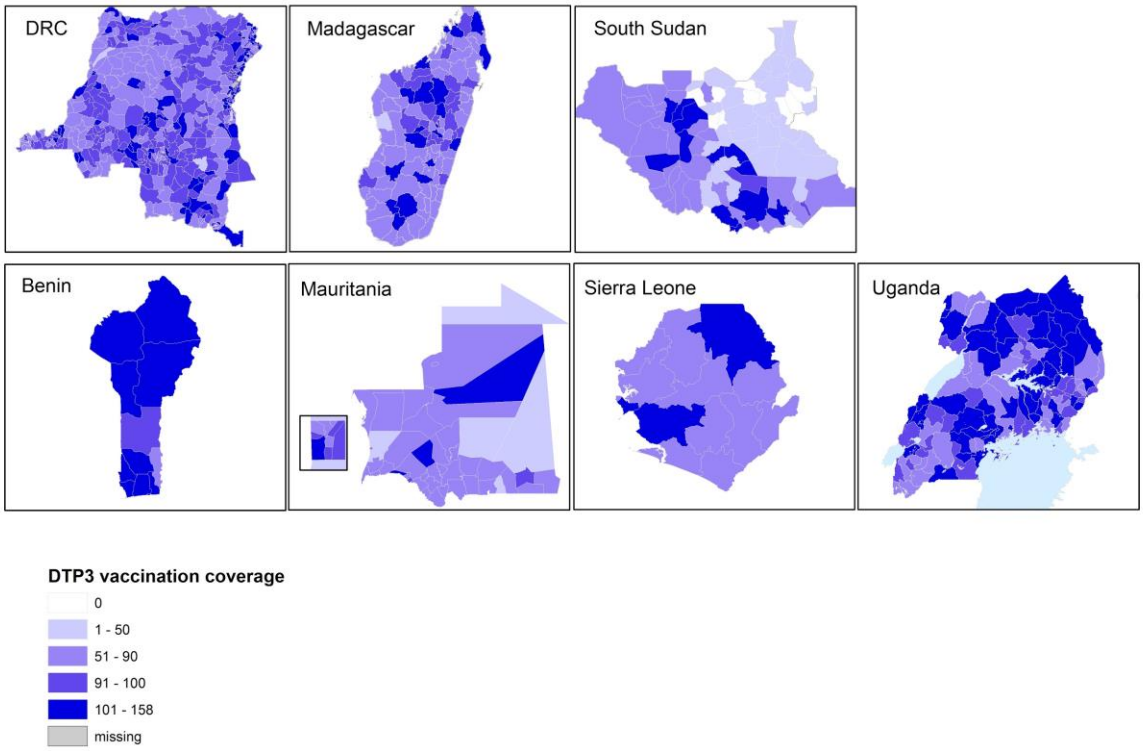
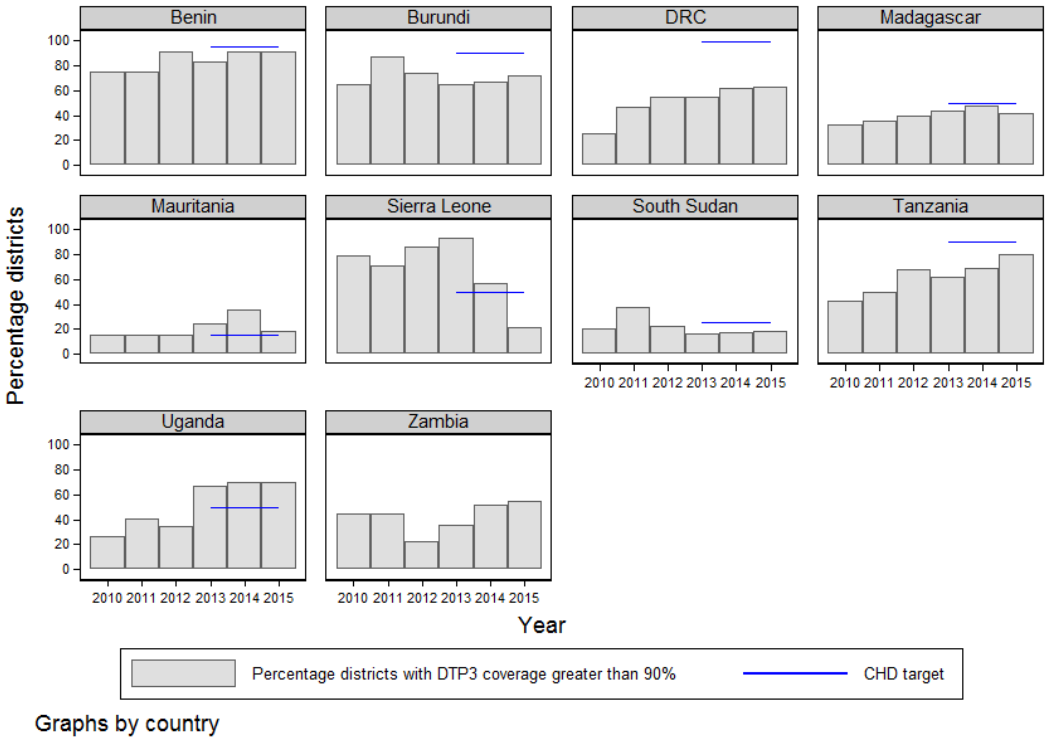


Figure xii: Percentage of districts with DTP3 coverage above 90%



Annex X: Analysis of VAS and immunisation according to the vulnerability framework

Data sources

Data from the continuous Demographic Health Surveys for Senegal (2015) and Tanzania (2015/2016) were used to determine the association of key determinants and outcome variables pertaining to immunization in children under 5 years of age, in order to improve our understanding of child vulnerability. The analysis follows a similar approach provided in the synthesis report: Measuring the determinants of childhood vulnerability. (UNICEF, March 2014), where data from 11 countries were pooled, including Tanzania using their 2007/2008 Aids Indicator Survey (AIS) data. Senegal was not included in this report. The UNICEF report builds on Akwara et al.'s 2010 work, aiming to identify key predictors of selected poor developmental outcomes for children.

Our approach included generating descriptive statistics, in SPSS, version 22. The existing wealth index variable of the DHS was used. The children under 5 DHS dataset was merged with the household dataset in order to add additional household variables needed in the analysis. Sample weights for the children data set were used in all analyses to make sample data representative of the entire population. In order to take into account the multistage sampling design and to present accurate standard errors, the complex sample analysis design in SPSS was utilized. (We however, compared a binary logistic model, adding Strata and PSU as additional analytical variables and produced almost identical values to the complex sample analysis, and opted to present the results from the binary logistic model). Outcome measures and analytical variables considered are presented in the tables 1 and 2 respectively. Descriptive statistics per outcome variables are presented in table 3. Multivariate binary logistic regressions were performed per outcome variable in order to compare odds ratios across models for each outcome at a 5 percent level of significance. ($p < 0.10$). Results are presented in table v.

Limitations of the analysis:

One major limitation of surveys such as the DHS is the exclusion of children who live outside households and therefore doesn't facilitate a comprehensive analysis or understanding of vulnerability. Never-the-less, it does provide information on vulnerable children and families within households. Another limitation is the use of the wealth index to classify the relative wealth of the survey populations as the index is often biased towards urban areas. The analyses were confined to variables available in the DHS and therefore maybe lacking certain social norms and socio economic determinants. It is important to keep in mind that this analysis further provides a snapshot or one-time view as data are cross sectional in nature. Results presented can only inform us of the associations between these outcomes and selected determinants.
Despite these limitations, the high-quality population-based data provide insights into the associations between indicators of vulnerability and vaccination outcomes.

Table v: Outcome Measures for immunization, Children under 5

Outcome Measures	Definition
DPT3	Child between the ages of 12–59 months who received DPT3 (regardless of when he or she received it)[8]
Measles1	Child between the ages of 12-59 months who received Measles1 (regardless of when

[8] DPT3 and Measles1 vaccination was identified by i) the date of vaccination on the immunization card; or ii) vaccination marked on card with no date; or iii) mother's report on card with the actual card; or 4) mother's report of vaccination with no card.

	he or she received it)[9]
Vitamin A	Child between the ages of 6-59 months who received Vitamin A in the last 6 months
Deworming	Child between the ages of 6-59 months who received deworming medications in the last 6 months

Table vi: Definitions of analytical variables, Children under 5

Analytical Variable	**Definition**
Child Characteristics	
Sex of the child	Male or Female (reference)
Age of the child	Age in months (at interview)
Household Characteristics	
Household wealth quintiles	Wealth Quintile 1 (reference) Wealth Quintile 2 Wealth Quintile 3 Wealth Quintile 4 Wealth Quintile 5
Household Dependency Ratio[10]	Low household dependency ratio <=1 (reference) High household dependency ratio (>1) or no household member aged 15-64
Number of children in household	3 or less (reference) 4 or more
Sex of Household Head	Male Headed Household (reference) Female Headed Household
Household Education	At least one adult (18 years or older) in the household has received some education (reference) None of the adults (18 years or older) in the household has received any education
Orphan Status	Both parents alive (reference) Single or double Orphan
Living Arrangement	Lives with one or both parents (reference) Does not live with one or both parents
Community Characteristics	
Residence	Urban (reference) Rural

[9] DPT3 and the first dose of the vaccine against measles should be received by the age of 12 months.
[10] The household dependency ratio is the ratio of adults over age 64 and children under age 15 to adults age 15–64.

Table vii: Descriptive statistics (column percentages[11]) of outcome and analytical variables for Senegal (DHS 2015)

Outcome variables		**Received DPT3**	**Received Measles1**	**Received Vitamin A in the last 6 months**	**Received deworming medication in the last 6 months**
Analytical variables		12-59 months	12-59 months	6-59 months	6-59 months
	Percent	89.7%	83.9%%	90.3%	76.2%
Sex of Child	Male	50.1%	50.0%	51.5%	50.3%
Age of child in months	6-11 months	-	-	10.0%	4.5%
	12-23 months	25.0%	23.8%	22.3%	21.0%
	24-35 months	25.9%	25.9%	23.8%	25.9%
	36-47 months	24.9%	25.2%	22.5%	24.6%
	48-59 months	24.1%	25.1%	21.4%	24.0%
Wealth Quintile	Poorest	22.1%	22.0%	24.1%	23.9%
	Poor	21.0%	20.7%	21.7%	21.9%
	Middle	20.9%	20.9%	20.1%	20.1%
	Richer	18.8%	18.7%	18.2%	18.0%
	Richest	17.3%	17.7%	15.9%	16.0%
Household dependency ratio	>1	57.3%	57.0%	59.4%	59.6%
	<=1	42.7%	43.0%	40.6%	40.4%
Number of children under 5 in household	4 or more	37.7%	38.1%	39.3%	39.4%
	3 or less	62.3%	61.9%	60.7%	60.6%
Sex of household head	Female	24.8%	24.7%	24.3%	23.8%
	Male	75.2%	75.3%	75.7%	76.2%
Household education	No education among all adults in hh	19.5%	19.1%	21.1%	20.6%
	At least one adult in hh with primary or higher level education	80.5%	80.9%	78.9%	79.4%
Orphan Status	Single or double Orphan	1.0%	1.0%	.9%	1.0%
	Both parents alive	99.0%	99.0%	99.1%	99.0%
Living arrangement	Elsewhere	6.5%	6.7%	1.1%	1.1%
	With parents	93.5%	93.3%	98.9%	98.9%
Residence	Rural	61.6%	61.7%	64.5%	63.6%
Number of Observations		4829	4829	5186	5186

[11] Weighted sampled percentage

Descriptive results Senegal

The distributions of variables for each of the four main outcomes in the analysis are presented in table vii. Samples are subdivided into year age bands depending on the outcome variable. For example, DPT3 and the first dose of the vaccine against measles should be received by the age of 12 months. The outcome for children who received DPT3 as well as for Measles1 therefore included children aged 12-59 months. For Vitamin A and deworming medication, children from 6-59 months were included. With regard to orphan status, given the small percentage of children falling into the category of having both parents deceased, single and double orphan hood were combined into one category. Regardless of when vaccination was received, for children 12-59 months of age, 89.7% received DPT3 vaccination and 83.9% received the first vaccine for measles. For children aged 6-59 months, 90.3% and 76.2% received Vitamin A or medication for deworming respectively in the last 6 months before the survey. Percentages on all outcomes were very similar for boys and girls. Around 6 out of 10 children receiving an outcome lived in rural area.

Table viii: Multivariate Logistic Regression odds ratio by various outcomes, Senegal (Continuous DHS, 2015)

	Outcome variables	**Received DPT3**	**Received Measles1**	**Received Vitamin A in the last 6 months**	**Received deworming medication in the last 6 months**
		12-59 months	12-59 months	6-59 months	6-59 months
Analytical variables					
Sex of Child	Male (Female reference)	0.86 (0.100)	0.86+ (0.083)	0.86 (0.097)	0.88+ (0.073)
Age of child in months	24-35 months	.98 (0.135)	1.28* (0.108)		
	36-47 months	1.08 (0.139)	1.48** (0.113)		
	48-59 months (12-23 months reference)	1.24 (0.146)	2.12*** (0.124)		
	12-23 months			3.34*** (0.138)	6.85*** (0.112)
	24-35 months			4.85*** (0.150)	16.38*** (0.123)
	36-47 months			4.44*** (0.148)	16.28*** (0.125)
	48-59 months (6-11 months reference)			4.51*** (0.151)	20.19*** (0.131)
Wealth Quintile	Poor	1.48** (0.132)	1.31* (0.113)	1.02 (0.139)	1.14 (0.109)
	Middle	1.96*** (0.155)	1.83*** (0.131)	.87 (0.150)	.89 (0.117)

	Richer	1.85** (0.189)	1.86*** (0.156)	1.37+ (0.190)	1.02 (0.139)
	Richest (Poorest reference)	4.66*** (0.280)	4.20*** (0.209)	1.12 (0.212)	1.03 (0.161)
Household dependency ratio	<=1 > 1 (reference)	1.23* (0.114)	1.23* (0.092)	1.3* (0.108)	1.09 (0.081)
Number of children under 5 in household	3 or less 4 or more (reference)	1.05 (0.106)	0.93 (0.089)	0.93 (0.104)	0.91 (0.080)
Sex of household head	Male Female (reference)	1.05 (0.127)	1.11 (0.120)	1.12 (0.115)	1.18 (0.087)
Household education	At least one adult in hh with primary or higher level education No education among all adults in hh (reference)	1.98*** (0.108)	1.77*** (0.093)	1.23+ (0.117)	1.23+ (0.090)
Living arrangement	With parents Elsewhere (reference)	0.89 (0.494)	0.91 (0.411)	1.04 (0.501)	1.36 (0.351)
Residence	Urban Rural (reference)	1.39* (0.160)	1.0 (0.125)	0.72* (0.141)	0.95 (0.108)
Number of Observations		4829	4829	5186	5186

Exponentiated coefficients (odds); and standard errors in parentheses; + p < 0.10; * p < 0.05; ** p < 0.01; ***p < 0.001
PSU and Strata variables included in the logistic regression to account for multistage sampling

Logistic regression results

Logistic regression models were run for each outcome per country. The associations between the main outcomes on immunization and the key analytical variables are described in table viii. A high statistical correlation existed between orphan status and living arrangements (p<0.001, Spearman Correlation Coefficient =1). Given that only 1% of children aged 12 to 59 months were orphaned (table v, the living arrangement variable was included in the logistic regression model instead or the orphan status variable.

Determinants of DPT3:

The odds of having received DPT3 vaccine increase with each household wealth quintile. Children living in the wealthiest households are almost 4.7 times more likely to have received the vaccination as compared with children living in the poorest households. The odds of having received the DPT3 vaccine among children who lived in households with at least one adult with any education were almost 2 times compared with the odds among children who lived in households with uneducated adults. Children from households with a fewer dependents (i.e. dependency ratio <=1) were 1.23 (or 23%) more likely to have received DPT3 than children from households with many dependents (dependency ratio >1). Children in urban areas were almost 40% more likely to have received DPT3 than children in rural areas.

Determinants of Measles1:

Boys were 14% less likely to have received measles vaccination than for girls. The odds of having received the Measles1 vaccination increased with age, i.e. children aged 48 to 59 months were 2.1 times, children aged 36 to 47 months almost 4.9 times more likely, and children 24 to 35 months 1.3 times more likely to be vaccinated against measles than children aged 12 to 23 months. The odds of having received Measles1 vaccine were 4.2 times more likely for children from the wealthiest households as compared with children living in the poorest households. All wealth quintiles had higher odds than the poorest quintile. The odds of having received the measles vaccine among children who lived in households with at least one adult with any education were almost 1.8 times compared with the odds among children who lived in households with uneducated adults. Children from households with a fewer dependents (i.e. dependency ratio <=1) were1.23 (or 23%) more likely to have received the measles vaccination than children from households with many dependents (dependency ratio >1).

Determinants of Vitamin A:

The odds of having received Vitamin A in the last 6 months increased with age, i.e. children aged 48 to 59 months were 4.5 times, children aged 36 to 47 months almost 4.4 times, children 24 to 35 months almost 4.9 times, and children 11 to 24 months 3.3 times more likely to have received Vitamin A than children aged 6 to 11 months. Household wealth quintile was not a significant determinant for Vitamin A, even though children from richer households were 37% more likely to receive Vitamin A in the last 6 months than the poorest quintile. Children from households with a fewer dependents (i.e. dependency ratio <=1) were 1.3 (or 30%) more likely to have received Vitamin A than households with more dependants than adults aged 15-64 years. The odds of having received Vitamin A among children who lived in households with at least one adult with any educated adults were 1.2 times (or 20 percent higher) compared with the odds among children who lived in households with uneducated adults. Children living in urban areas were 28% less likely to have received Vitamin A.

Determinants of deworming:

Boys were 12% less likely to have received deworming medication than girls in the past 6 months before the survey. The odds of having received deworming medication in the last 6 months increased with age. Children aged 12-23 months, 25-36 months, 37-47 months, and 48-59 months were almost 6.9, 16.4, 16.3 and 20.2 times more likely to have received deworming medication than children 6-11 months. Household wealth quintile was not a significant determinant for deworming. Children who lived in households with at least one adult with any education were 1.23 times more likely (or 23 percent higher odds) to have received deworming medication compared to children who lived in households with uneducated adults.

Table ix: Descriptive statistics (column percentages[12]) of outcome and analytical variables for Tanzania (DHS 2015/2016)

Outcome variables		**Received DPT3**	**Received Measles1**	**Received Vitamin A in the last 6 months**	**Received deworming medication in the last 6 months**
Analytical variables		12-59 months	12-59 months	6-59 months	6-59 months
	Percent	**89.1%**	**87.9%**	**40.7%**	**37.6%**
Sex of Child	Male	52.2%	52.5%	51.0%	51.7%
Age of child in months	12-23 months	54.2%	52.8%		
	>24 months	45.8%	47.2%		
	18-23 months				
	>24 months				
	6-11 months			9.8%	3.8%
	12-23 months			29.5%	25.5%
	24-35 months			21.2%	24.2%
	36-47 months			20.7%	24.3%
	48-59 months			18.8%	22.2%
Wealth Quintile	Poorest	21.2%	21.1%	17.4%	15.4%
	Poor	20.7%	20.2%	19.8%	17.7%
	Middle	20.3%	20.4%	21.1%	20.2%
	Richer	19.6%	19.6%	21.5%	21.0%
	Richest	18.3%	18.6%	20.2%	25.7%
Household dependency ratio	>1	51.4%	51.4%	51.0%	48.6%
	<=1	48.6%	48.6%	49.0%	51.4%
Number of children under 5 in household	4 or more	6.6%	6.6%	4.8%	4.0%
	3 or less	93.4%	93.4%	95.2%	96.0%
Sex of household head	Female	17.1%	17.3%	17.9%	18.0%
	Male	82.9%	82.7%	82.1%	82.0%

[12] Weighted sampled percentage

Household education	No education among all adults in hh	17.1%	17.1%	15.9%	14.4%
	At least one adult in hh with primary or higher level education	82.9%	82.9%	84.1%	85.6%
Orphan Status	Single or double Orphan	1.5%	1.7%	1.8%	1.8%
	Both parents alive	98.5%	98.3%	98.2%	98.2%
Living arrangement	Elsewhere	4.4%	4.9%	6.0%	5.7%
	With parents	95.6%	95.1%	94.0%	94.3%
Residence	Rural	71.2%	70.6%	70.0%	65.5%
Number of Observations		3951	3951	8500	8500

Descriptive results

The distributions of variables for each of the five main outcomes in the analysis are presented in table ix. Samples are subdivided into different age bands depending on the outcome variable. For example, DPT3 and the first dose of the vaccine against measles should be received by the age of 12 months. The outcome for children who received DPT3 as well as for Measles1 therefore included children aged 12-59 months. For Vitamin A and deworming medication, children from 6-59 months were included. With regard to orphan status, given the small percentage of children falling into the category of having both parents deceased, single and double orphan hood were combined into one category. Regardless of when vaccination was received, for children 12-59 months of age, 89.1% received DPT3 vaccination, 87.9% received Measles1. For children aged 6-59 months, 40.7% and 31.7% received Vitamin A or medication for deworming respectively in the last 6 months before the survey. Percentages on all outcomes were slightly higher for boys than girls. For every 3 children receiving an outcome, approximately 2 out of 3 lived in rural and 1 out of 3 in an urban area.

Table x: Multivariate Logistic Regression odds ratio by various outcomes, Tanzania (DHS, 2015-2016)

	Outcome variables	**Received DPT3**	**Received Measles1**	**Received Vitamin A in the last 6 months**	**Received deworming medication in the last 6 months**
		12-59 months	12-59 months	6-59 months	6-59 months
Sex of Child	Male (Female reference)	1.19 (0.106)	1.22* (0.101)	1.05 (0.045)	1.08 (0.048)
Age of child in months					
	>=24 months (12-23 months reference)	1 (0.107)	1.61*** (0.104)		

	>=24 months (18-23 months reference)				
	12-23 months			1.76*** (0.081)	4.79*** (0.110)
	24-35 months			1.32** (0.084)	6.17*** (0.112)
	36-47 months			1.32** (0.084)	6.54*** (0.112)
	48-59 months (6-11 months reference)			1.17+ (0.085)	5.94*** (0.113)
Wealth Quintile					
	Poor	1.39* (0.136)	1.23 (0.128)	1.39*** (0.070)	1.37*** (0.075)
	Middle	2.31*** (0.162)	2.24*** (0.154)	1.78*** (0.071)	1.85*** (0.076)
	Richer	2.69*** (0.201)	2.37*** (0.187)	2.03*** (0.080)	2.16*** (0.084)
	Richest (Poorest reference)	2.68*** (0.265)	2.99*** (0.269)	2.13*** (0.099)	4.01*** (0.104)
Household dependency ratio	<=1 > 1 (reference)	1.26* (0.265)	1.16 (0.110)	1.07 (0.049)	1.12* (0.051)
Number of children under 5 in household	3 or less 4 or more (reference)	2.44*** (0.147)	2.32*** (0.145)	1.92*** (0.095)	2.04*** (0.106)
Sex of household head	Male Female (reference)	0.91 (0.146)	.88 (0.143)	1.05 (0.045)	0.86* (0.065)
Household education	At least one adult in hh with primary or higher level education No education among all adults in hh (reference)	1.61*** (0.123)	1.48** (0.119)	1.22* (0.062)	1.28*** (0.066)
Living arrangement	With parents Elsewhere (reference)	2.62*** (0.204)	1.18 (0.244)	1.46*** (0.093)	2.06*** (0.098)
Residence	Urban Rural (reference)	0.81 (0.204)	1.15 (0.200)	0.89 (0.075)	0.83 (0.078)
Number of Observations		3951	3951	8500	8500

Exponentiated coefficients (odds); and standard errors in parentheses; + p < 0.10; * p < 0.05; ** p < 0.01;

***p < 0.001
PSU and Strata variables were included in the logistic regression to account for multistage sampling

Logistic regression results

Logistic regression models were run for each outcome. The associations between the main outcomes on immunization and the key analytical variables are described in table x. A high statistical correlation existed between orphan status and living arrangements (p<0.001, Spearman Correlation Coefficient =1). Given that only 1.5% of children aged 12 to 59 months were orphaned (table 1), the living arrangement variable was included in the logistic regression model instead or the orphan status variable.

Determinants of DPT3:

The odds of having received DPT3 vaccine increase with each household wealth quintile. Children living in the wealthiest households are 2.7 times more likely to have received the vaccination as compared with children living in the poorest households. The odds of having received the DPT3 vaccine among children who lived in households with at least one adult with any education were 1.6 times (or 60 per cent higher) compared with the odds among children who lived in households with uneducated adults. Children from households with a fewer dependents (i.e. dependency ratio <=1) were 1.3 (or 30%) more likely to have received DPT3 than children from households with many dependents (dependency ratio >1). Children from households with 3 or less children as oppose to 4 or more children under 5 were almost 2.5 as likely to have received DPT3. Furthermore, children under 5 living with their parents were 2.6 times more likely to have received DPT3 than children living elsewhere.

Determinants of Measles1:

Vaccination for boys was 24% higher than for girls. The odds of having received the Measles1 vaccination were 60% higher for children over 24 months as compared to children between 12 and 23 months. The odds of having received Measles1 vaccine were 3 times more likely for children from the wealthiest households as compared with children living in the poorest households. All wealth quintiles had higher odds than the poorest quintile although the poor quintile comparison with the poorest quintile was not statistical significant. Children from households with 3 or less children as oppose to 4 or more children under 5 were almost 2.3 as likely to have received Measles1. The odds of having received the Measles1 vaccine among children who lived in households with at least one adult with any education were almost 50% higher compared with the odds among children who lived in households with uneducated adults.

Determinants of Vitamin A:

The odds of having received Vitamin A in the last 6 months were more pronounced at ages over 11 months: at 12-23 months, the odds were 70% higher when compared to 6-11 months, and 30% higher at 24-35 and 36-47 months respectively compared to 6-11 months, and 17% higher at 48-59 months than 6-11 months.
The odds of having received Vitamin A increase with each household wealth quintile. Children living in the wealthiest households are 2.1 times more likely to have received Vitamin A as compared with children living in the poorest households. The odds of having received Vitamin A among children who lived in households with at least one adult with any educated adults were 1.2 times (or 20 percent higher) compared with the odds among children who lived in households with uneducated adults. Odds of children from households with 3 or less children as oppose to 4 or more children to have received Vitamin A were 90 percent higher. Furthermore, the odds for children under 5 living with their parents were almost 50 percent higher to have received Vitamin A than children living elsewhere.

Determinants of deworming:

The odds of having received deworming medication in the last 6 months increased with age. Children aged 12-23 months, 25-36 months, 37-47 months, and 48-59 months were 4.8, 6.2, 6.5 and 5.9 times more likely to have received deworming medication than children 6-11 months. The odds also increased with each household wealth quintile. Children living in the wealthiest households were 4 times more likely to have received deworming medication than children living in the poorest households. Children from households with a low dependency ratio (<=1) were 1.1 (or 10%) more likely to have received deworming medication. Children from households with 3 or less children under the age of 5 were 2 times more likely to have received deworming medication than children from households with 4 or more children under 5. Children from male headed households were 0.9 times less likely to have received deworming medication. Children who lived in households with at least one adult with any education were 1.3 times more likely (or 30 percent higher odds) to have received deworming medication compared to children who lived in households with uneducated adults. Furthermore, children under 5 years of age living with their parents were 2 times more likely to have received deworming medication in the last 6 months than children living elsewhere.

Annex XI: Inclusion of CHDs into national documents in case study countries

The *Health Sector Development Plan/ Plan de Développement du Secteur Santé (PDSS) 2015-2019* in **Madagascar (fragile state case study)** mentions that two Mother and Child Weeks/ *Semaine de la Santé de la Mère et de l'Enfant (SSME)* will be implemented annually to reduce infant and child morbidity and mortality. The multi-annual plan for EPI (le *Plan Pluriannuel Complet du Programme Elargi De Vaccination, 2010-2014)* refers to bi-annual CHDs for VAS and deworming as well as the possibility to integrate vaccination of children aged 0-11 months and pregnant women into the CHDs as a means to capture defaulting children and pregnant women and target the difficult to reach.

Madagascar's *National Policy for Nutrition / Politique National de Nutrition (PNN) 2005-2015,* is one of the first policies in sub-Sahara Africa adopting a multi-sectoral approach in combating malnutrition. The policy summarizes general and specific objectives as well as strategic and operational strategies to achieve the aim and objectives[13]. Activities are summarized in a complementary action plan, the *National Action Plan for Nutrition / Plan d'Action National pour la Nutrition (PNAN) 2005- 2009* and its successor *the National Action Plan for Nutrition / Plan d'Action National pour la Nutrition (PNAN) 2012-2015***.** Activities recommended for the CHDs in the PNAN 2012-2015 include: vaccination, screening for acute malnutrition, VAS (children 6-59 months and pregnant women during the first trimester of pregnancy), deworming (children aged 12-59 months and pregnant women (from 2nd trimester onwards), as well as promotion of the use of antenatal, delivery and postnatal care. The PNAN identifies the CHDs as an important delivery mechanism, in particular for population living far away from health facilities: ***"The CHDs consist of an opportunity to provide an essential health package to the population, in particular those who live in areas far away from health facilities."***

Nutrition interventions carried out during the CHDs are also in line with strategic priorities outlined in the national action plans for nutrition. *The National Plan for Community Nutrition / Plan National pour la Nutrition Communautaire (PNNC) 2005,* tasks Community Health Workers (CHWs) with providing Vitamin A and albendazole and screening for acute malnutrition using MUAC during (CHD) campaigns. CHDs are mentioned in various other policies / strategies, for example the Poverty Reduction Strategy (PPRSP) highlights the CHDs as an import bi-annual campaign. The annual progress papers frequently refer to the implementation of CHDs.

In **Sierra Leone (late transition country case study)**, the activities are in line with the *2013-2017 National Food and Nutrition Security Implementation Plan*. The plan mentions the Mother and Child Health Week (MCHW) as a priority action for scaling up nutrition. According to the Plan mass VAS to children under five and postpartum women should be implemented as a preventive measure against nutrition related diseases. The plan expresses the ambition to increase VAS coverage of children 6-59 months through mass campaigns from 91% in 2013 to 98% in 2017. The plan also recommends intensification of deworming interventions targeting children 12-59 months, primary school going children and pregnant including through biannual mass campaigns together with VAS and routine including outreach services. The target is to reduce worm infestation in children aged under five from 54% (HKI/UNICEF 2011) to 20% in 2017.

[13] The PNN was signed by the Prime-Minister, some eight Ministers, ranging from the Minister of Health and Family Planning to the Minister of Industrialisation, Commerce and Development of the Private Sector. A National Nutrition Board (Le Conceal national de la nutrition (CNN) consisting of the main Ministers and members of Parliament coordinates the PNN and supervises its implementation, in close collaboration with sectoral Ministries and UN partners, including UNICEF and the National Office for Nutrition. The PNN is aimed at: (i) ensuring the right to adequate nutrition in order to improve children's survival and allow them to develop their full physical and intellectual potential and (ii) promoting the health and well-being of mothers and adults through the combined effect of multi-sectoral interventions.

The CHDs are also referred to in the *Policy for Community Health Workers in Sierra Leone (2012),* which specifies that social mobilization for the CHDs every 6 months is one of the core activities CHW. Tasks of the CHW include among others the provision of deworming tablets and Vitamin A and conducting home-visits to promote timely utilization of immunization as well as (among others) to screen for acute malnutrition, including MUAC measurements and to trace defaulters (regarding among others immunization, VAS, deworming and treatment of Severe Acute Malnutrition).

The *Sierra Leone Nutrition Security Policy (2012-2016)* doesn't mention CHDs as delivery mechanism, but emphasizes the need for mass distribution of vitamin to children aged 6-59 months as well as postpartum women. Routine deworming of children aged 12-59 months as well as pregnant women is recommended as strategy to prevent micro-nutrient deficiencies. Per the same token, the *Reproductive Newborn and Child Health Strategy 2011-2015 (RNCHS)* mentions VAS as a live saving strategy for children 6-36 months of age and an essential intervention for women postpartum. Also in other policies such the *Comprehensive EPI multi-Year Plan 2012-2016.* CHDs are mentioned as a highly effective way of delivering of integrated packages of maternal and child health interventions, with a focus to reach as many children as possible and provide another opportunity for tracking missed children.

In **Tanzania (early transition country case study)** the Child Health and Nutrition Month are in line with the *2012-2016 Nutrition Strategy*. This strategy acknowledges malnutrition as one of the most serious health problems affecting infants, children and women of reproductive age in Tanzania. Addressing vitamin and mineral deficiencies is one of the 8 priorities in this strategy and makes reference to the fact that Local Government Authorities (LGAs) have started to include resources for VAS in their annual plans for this. The strategy also makes reference to the need to introduce active screening of acute malnutrition in children through a mechanism to be established both at the community and facility level, with referral for appropriate treatment. The strategy indicates thereby that MUAC would be an ideal initial screening tool as it is simple to perform, rapid and can be integrated into all contacts between children and health services (for example, immunization, Integrated management of childhood illness (IMCI), VAS and deworming, PMTCT and paediatric care for HIV/AIDS[14]. Furthermore, the nutrition strategy mentions iron and folic acid supplementation, de-worming, intermittent presumptive treatment of malaria, promotion of ITNs, nutrition education on appropriate diet, screening for anaemia with referral for treatment, hygiene and environmental sanitation as important activities.

The Tanzanian *Health Sector Strategic Plan (July 2015 – June 2020* (HSSP IV) states that strategies for control of micronutrient deficiencies will be integrated in the Community Health Programme. It also mentions that at health facility level, nutrition services are integrated within Reproductive Maternal Child and Adolescent Health (RMCAH) using already skilled professionals. The plan also states that routine provision of nutrition counselling and essential micronutrients to pregnant and lactating women (including IFA) and children under the age of five-years (such as VAS) will be strengthened. Furthermore, the MOHSW[15] will ensure regular provision of nutrients for supplementation, fortification and promote dietary intervention for control of micronutrient deficiencies.VAS Coverage is one of the Performance Indicators in HSSP IV[16]. Furthermore, the *Child Health Nutrition Month guidelines (2015/2016)* state "*CHNM were adopted as a national strategy for Child Survival Methodology of CHDs.*

[14] Ministry of Health and Social Welfare. National Nutrition Strategy, JULY 2011/12 – JUNE 2015/16
[15] We have used the term MOH as much as possible in this report. In fact, the MOH in Madagascar is the Ministry of Public Health (MOPH), in Sierra Leone it is the Ministry of Health and Sanitation (MOHS) and in Tanzania it was the Ministry of Health and (MOHSW), but the current name is Ministry of Health, Community Development, Gender (MOHCDEG)
[16] Tanzania, HSSP IV

Annex XII: Presence of Vitamin A (VA) programmes and Vitamin A deficiency (VAD) prevalence in 13 evaluation countries

Presence of Vitamin A (VA) programs and Vitamin A deficiency (VAD) prevalence in 13 evaluation countries (Source: Wirth et al 2017)

Country	VA Fortification, Biofortification, and MNP Programs 2	Year Most Recent Nationally-Repr. VAD Survey	Biomarker 3	VAD Prevalence (%) 4	Severity of VAD	Source
Benin	fVO (v),	1999	ROH	82	Severe	[39] *
Burundi	fVO (v), bP (v)	2005	ROH	27.9	Severe	[41]
CAR		1999	ROH	68.2	Severe	[44] *
Chad						
DRC	bC (v), bP (v)	1998/99	ROH	61.1	Severe	[46]
Madagascar	bSP (v), MNP (v)	2000	ROH	42.1	Severe	[59]
Mauritania	fVO (m)					
Senegal	fVO (m), bSP (v), MNP (v)	2010	ROH	17.7	Moderate	[75]
Sierra Leone	fVO (m), bC (v)	2013	RBP	17.4	Moderate	[76]
South Sudan						
Tanzania	fVO (m), fS (m), bSP (v), MNP (v)	2010	RBP	33.0 ††	Severe	[80]
Uganda	fVO (m), fW (m), bSP (v)	2011	RBP	32.6 ††	Severe	[82]
Zambia	fVO (v), fS (m), bSP (v), bM (v)	2003	ROH	54.1	Severe	[84]

1 VA, vitamin A; VAD, vitamin A deficiency; VAS, vitamin A supplementation; UNICEF, United Nations Children's Fund; SOWC, State of the World's Children.2 fVO = fortified vegetable oil, fMG = fortified margarine, fS = fortified sugar, fW = fortified wheat flour; bSP = biofortified sweet potato, bM = biofortified maize, bC = biofortified cassava, bP = biofortified plantain/banana; MNP = micronutrient powders. (m) = mandatory program, (v) = voluntary program; 3 ROH, serum/plasma retinol; RBP, retinol-binding protein. 4 VAD prevalence measured as proportion of children with ROH or RBP concentrations <0.7 µmol/L, unless noted otherwise. Prevalences in italics indicate that prevalence calculation accounted for inflammation in some manner (e.g., adjusting ROH or RBP concentrations, excluding children with any inflammation, etc); * Data source taken from the World Health Organization Global Database on Vitamin A Deficiency; †† VAD prevalence measured as proportion of children with RBP <0.825 µmol/L in Uganda, and Tanzania; ‡ A more recent survey was conducted, but the results were not publically available at the time of writing this manuscript.

Annex XIII: Pointers for cost calcuation

This annex does not aim to be comprehensive but just to provide some pointers for the development of a more standardized cost calculation for CHDs across countries.

a. Calculation of cost

- **Technical support related costs**
  - Development of technical guidelines, communication
  - Development of training
  - Assistance with Procurement
  - Assistance with planning, coordination, monitoring

- **Management related costs**
  - Planning, coordination, monitoring, including supportive supervision related cost (workshops; meetings; per diem; travel; incentives)

- **Implementation related costs**
  - Logistical costs: transport off-shore, central, district to health unit level
  - Supply costs of vaccines, vitamin A; albendazole; tally sheets, referral slips; gloves; aprons; stationary; training materials
  - Cost of social mobilization – training; per diem; travel; incentives
  - Cost of implementation – per diem; travel; incentives

b. Division of cost over number of children reached