Scaling-up nutrition and immunisation

Child Health Days in East and Southern Africa

Case study: Madagascar, Tanzania and Zambia

November 2017

Anthrologica

Acknowledgements

We extend sincere gratitude to the stakeholders who participated in this research, for sharing their experiences and insights and for giving their time so willingly. Particularly thanks are extended to the health workers and caregivers who were engaged during the Child Health Days in Madagascar, Tanzania and Zambia.

From the UNICEF Eastern and Southern Africa Regional Office, we would like to thank Julia Untoro, Deepa Risal Pokharel and Archana Dwivedi who have overseen the documentation exercise and provided guidance throughout, and Eric Ribaira. From the UNICEF Madagascar Country Office, we thank Simeon Nanama, Andre Yameogo, Dennis Larsen, Sylvie Chamois, Virginie Razanantsoa, Smaila Gnegne and Luke Freeman. From the UNICEF Tanzania Country Office, we thank Abraham Sanga, Mauro Brero, Biram Ndiaye, Pamphil Silayo and Fikiri Mazige, and from the Tanzania Food and Nutrition Centre we thank Francis Modaha. From the UNICEF Zambia Country Office, we thank Hermann Ouedraogo, Ruth Siyandi, Paul Ngwakum, Ngawa Ngoma, and Givas Kalangu.

From Anthrologica, the documentation exercise was led by Katie Moore and Juliet Bedford. We would like to thank our national research assistants for their contributions to qualitative data collection and transcription: Glomark Tanzania, partiucarly Gloria Mosha (Tanzania); Tina Kaonga (Zambia); and Angele Randrianaivo (Madagascar). We also extend thanks to Jonathan Polonsky from Epidemos for his analysis of the secondary quantitative data.

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Background

The Eastern and Southern Africa Region (ESAR) has had tremendous success in reducing child mortality rates – from an under-five mortality rate of 167 per 1,000 live births in 1990, to 67 in 2015 (UN-IGME 2015). With an annual rate of reduction of 4% between 1990 and 2015, ESAR has seen a spectacular decline in under-five mortality rate. In part, this success has been due to the region's focus on delivering key high impact child survival interventions such as immunisation and the provision of Vitamin A Supplementation (VAS). Child Health Days (CHDs) have been successfully used by many countries in the region to boost the routine health system and attain high levels of coverage for key interventions.

Today, CHDs are large-scale, mass mobilisation outreach events that are undertaken biannually to deliver a set of integrated interventions to children under-five years old (Fiedler et al. 2012). Much of the success of CHDs comes from the fact that they offer a 'one-stop-shop' for caregivers: they provide access to multiple services and interventions for children, thereby reducing the cost associated with obtaining several services separately (Fiedler et al. 2012).

Throughout sub-Saharan Africa, the CHD package has been rolled out in countries with strong service delivery systems, and countries with weaker health system infrastructure. In recent years, the package of interventions has expanded but remains primarily preventive. In addition to VAS, the package often includes deworming, nutrition screening, immunisation, water and sanitation interventions, distribution of insecticide-treated bed nets, and health promotion activities (Doherty et al. 2010; UNICEF 2011). The package of interventions is determined by need and country context (Fiedler and Chuko 2008) and existing in-country health service delivery structures (health facilities, outreach posts and mobile units) are supported by designated financial and technical inputs from other partners (Oliphant et al. 2010).

Evolution of CHD programmes

Madagascar

Began to implement *Semaine de la Santé de la Mère* et de l'Enfant (SSME) in 2006. Held in April and October, the package of interventions has been adapted by the Ministry of Public Health to suit different health priorities across the country. In addition to VAS and deworming, immunisation was originally included as a means to 'mop-up' children who had missed vaccinations in the routine system. As part of the country's measles elimination plan, a measles campaign was integrated with the SSME in October 2007, 2010, 2013 and 2016. MUAC screening was incorporated in 2009 and other SSME rounds have also included distribution of mosquito nets to pregnant women and children under five, family planning services, antenatal care and HIV testing. The SSME is held in tandem with African Vaccination Week every April and in April 2017, the UNFPA implemented its fistula screening programme during the campaign.

Tanzania

Began to implement biannual VAS for children aged between six and 59 months in 2001. Between 2001 and 2016, the campaign was implemented for one week every June. In 2016 the country changed its approach to CHDs and formalised two month-long interventions in June and December, known as Child Health and Nutrition Month (CHNM) providing VAS, deworming, screening for acute malnutrition using mid upper arm circumference (MUAC) measurements and 'catch up' immunisation for children who missed immunisations during routine services. The programme was scaled across the country to provide a longer-window of opportunity for caregivers to access services and, at the time of the documentation exercise, was organised across all districts to deliver a package of preventative interventions that were integrated with, and in turn, reinforced existing routine services.

Zambia

Began to implement Child Health Week (CHWk) in 1999. Held biannually in June and December, the campaign first included VAS and growth monitoring and promotion for children aged between six and 59 months. Since then, the programme has offered a number of interventions at different times. In 2003, deworming with Mebendazole was added, then intermittent treatment of insecticide-treated mosquito nets and their promotion in 2004. The Ministry of Health removed mop-up immunisation from the package of services in 2013, but reintroduced it in 2015 as it was recognised to be an effective means to catch children who missed opportunities for vaccination in the routine system. In 2016, growth monitoring and promotion was also reintroduced, and in addition to the core package, there is scope for districts to add additional interventions according to local priorities tailored to the needs of the community.

Key CHD interventions per country

			Core Interventions					
	Year	Months	VAS	Deworming	Mop-up immunisation	MUAC screening	GMP	Other*
Tanzania	2001	June /Dec	✓	✓	✓	✓		
Zambia	1999	June/Dec	✓	✓	✓		✓	
Madagascar	2006	April/Oct	✓	✓	✓	✓		✓

* Other interventions include antenatal care, screening for HIV and screening for fistula, as offered in Madagascar

Objectives

UNICEF has provided support for CHSs in the ESAR for over two decades. UNICEF works with countries to deliver evidence-based interventions for children under-five by increasing coverage and effectiveness of the biannual CHDs, and to better integrate nutrition and immunisation activities. The CHD programme is important, as in many countries, it provides the only way to reach children with key interventions. UNICEF sought to document CHDs in ESAR to capture challenges, lessons learnt and good practice, and to provide recommendations for accelerated action. The documentation exercise focused on:

- Madagascar – *Semaine de la Santé de la Mère et de l'Enfant* (SSME)
- Tanzania – Child Health and Nutrition Month (CHNM)
- Zambia – Child Health Week (CHWk)

Using existing quantitative data and newly gathered primary qualitative data, the documentation exercise addressed seven key themes: the CHD programme including core interventions and coverage; decentralisation and ownership; coordination, supervision and training; supply and provision of services; community experiences; issues of equity; and sustainability. This report synthesises the lessons learnt and good practices from across three countries in the EASR.

Methodology

Data collection occurred during CHDs in each in Tanzania, Zambia and Madagascar between December 2016 and April 2017 and engaged national- and district-level stakeholders, including representatives from government and non-governmental agencies. At the community level, participants included health workers and community members accessing services during the CHD programme. In each country, fieldwork was conducted in two districts: Morogoro and Iringa (Tanzania); Luangwa and Katete (Zambia); and Toliara I and Ambatolampy (Madagascar). Primary data was gathered through key informant interviews and focus group discussions. Overall, 226 participants were engaged in the documentation exercise across the three countries (76 in Tanzania; 94 in Zambia and 56 in Madagascar). The full analysis of qualitative data used thematic analysis developed specifically for analysing data generated through applied research.

Quantitative data was extracted from existing sources including the most recent Demographic Health Survey in each country and monitoring data from the CHDs. Key performance indicators were identified and the analysis explored key measures of success, including regional and country trends.

Report structure and outputs

Substantive reports were produced for the three countries included in the documentation exercise, and key learning synthesised at the regional level. In addition a series of brochures were produced to highlight good practice. The report is structured according to the main themes of the documentation exercise and has been designed to be of operational use to UNICEF and partners in the region.

Key CHDs interventions

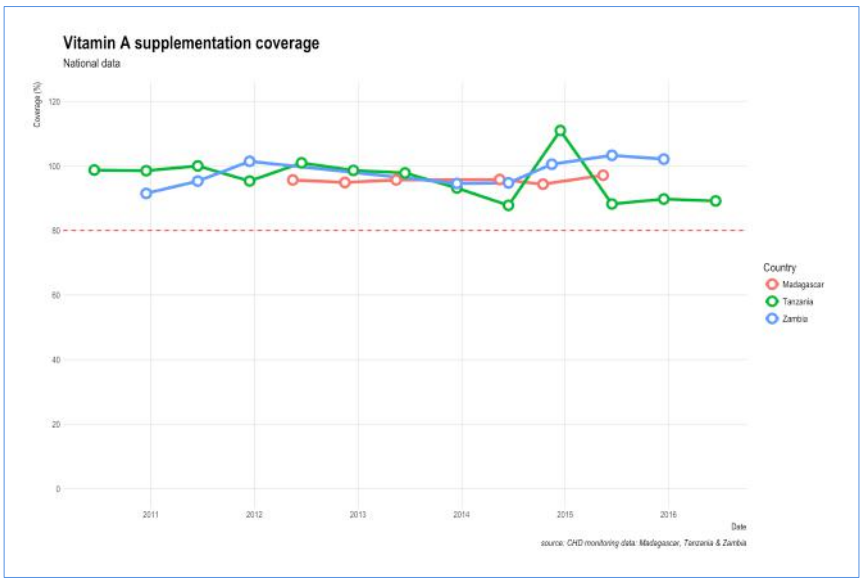
Vitamin A Supplementation

Vitamin A, is usually acquired through a nutritious diet and is essential for the healthy growth of children and the development of a functioning immune system. In low-resource settings, children under five years of age are increasingly affected by vitamin A deficiencyand globally, it is estimated that 190 million children under five years of age will suffer an increased risk of visual impairment, illness and death from childhood infections. Despite the potential benefits of VAS, current estimates (2014) indicate that across the 82 priority countries worldwide, only 69% of children between the ages of six and 59 months are fully protected with two high-dose of VAS (UNICEF 2016a). ESAR achieved 62% two-dose coverage, and trends across the region in the percentage of children fully protected by VAS have almost reached a level of coverage (80%) referred to as effective coverage (UNICEF 2016a).

VAS was considered by many stakeholders to be the primary intervention in the CHD programme and in Tanzania, for example, VAS was often used as a proxy to refer to the total package of services offered in the campaign (i.e deworming, MUAC screening and immunisation for missed opportunities). All three countries reported significant increases in VAS coverage since the inception of the CHDs programmes and coverage rates have been consistently high in recent years, only dropping below 90% in Tanzania in four rounds since 2014 (see graph 1 below). In Zambia, coverage increased from 28% prior to the start of the CHD programme to coverage rates above 90% for all CHDs implemented between December 2010 and December 2015. Madagascar and Tanzania reported similar experiences with coverage rates of over 95% (Oct 2015) and 91% (December 2016) respectively.

In Tanzania and Zambia, DHS data (which reports VAS over the previous 6 months) indicated that national coverage of VAS was lower than that captured in CHDs monitoring data (calculated from administration data collected at the facility level during each round of CHDs). This was attributed to the fact that DHS and other survey data is subject to recall bias and may underestimate vitamin A coverage relative to the coverage reported through routine monitoring data.

Graph 1 – VAS, national coverage according to CHD monitoring data



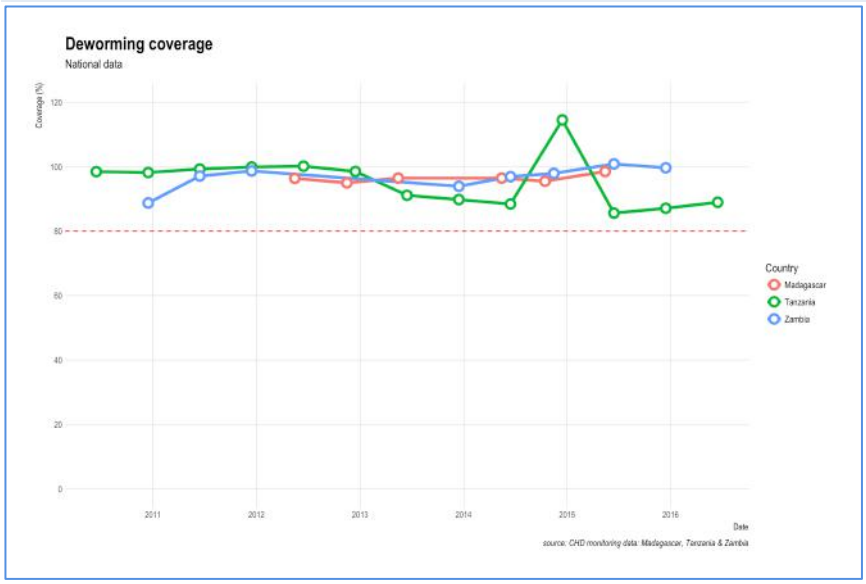
Deworming

Deworming is an essential intervention for protection against soil-transmitted helminthes that contribute to anaemia, stunting and childhood illness and morbidity. Deworming is part of all CHD programmes, and similar to VAS coverage, rates have remained consistently high, above 85% since 2011 (see Graph 2 below). According to the monitoring data in Zambia, all CHDs between 2010 and 2015 attained over 90% coverage nationally, with a mean of 98%. In Madagascar, CHDs between 2012 and May 2015 attained over 90% coverage nationally, with a mean of 96%, and in Tanzania, CHDs between 2010-2016 attained over 80% coverage nationally, with a mean of 95%.

In Tanzania, deworming is not offered to children under five years of age during routine services, although Mebendazole could be administered to treat specific cases and in Zambia the use of deworming during routine clinics is also primarily for treatment purposes. In both countries, outside of CHDs districts did not tend to procure Mebendazole, and instead opted to utilise surplus from the campaigns. In contrast, in Madagascar, deworming was encouraged by health workers during routine services and was therefore frequently sought out by caregivers during routine services. A number of participants in Madagascar suggested that caregivers were very familiar with the deworming process, suggesting '*It is almost a habit for mothers to take the children to the CSB* [Centre de santé de base du district (health facility)] *to get the deworming*'.

Graph 2 – Deworming, national coverage according to CHD monitoring data

Coverage rates have remained consistently high, above 85% since 2011 in all countries.



Malnutrition Screening

Screening for malnutrition using MUAC measurements was introduced into the CHD in Madagascar in 2009 and by 2016 was being implemented in 56 of the country's 113 districts. In December 2015, MUAC screening was also integrated into the national CHD package in Tanzania. In both settings, the campaigns provided a valuable opportunity to identify children who were acutely malnourished, although ensuring their referral and uptake of treatment in routine services remained challenging. To overcome this, UNICEF in Madagascar invested resources to track and collect data on children who had been referred and required follow up.

'In 2013 when we looked at data we could not see how many of the children went to the health facility. How many of them received the treatment? We didn't have that information. The issue here is not just to assess the situation of people; it is to provide them with services. In 2014, we set up a system whereby a week after the CHD, community workers would follow-up to find those children who have been referred and see how many of them actually got the services'

UNICEF officer, Madagascar

Immunisation

Immunisation, is offered in all three countries to 'mop-up' children who missed their routine vaccinations. In Tanzania and Zambia, participants confirmed that the majority of children were vaccinated during routine delivery and the strong demand for vaccination had helped facilitate the integration of immunisation into routine programming rather than delivering it through vertical campaigns. Similarly, in Madagascar, immunisation through routine services was the norm, although some national-level stakeholders expressed residual concern that because of the convenience of CHD, some caregivers may wait to receive immunisations during the campaign rather than adhere to the prescribed schedule.

Social Mobilisation

Social mobilisation has been a core component of CHDs since its inception with the objective to raise awareness about key interventions and help mobilise communities attend the campaign and utilise its services. Social mobilisation efforts in each of the three countries have been critical to the success of the campaigns and multiple strategies have been employed, particularly to engage communities in remote and hard-to-reach areas.

In Madagascar, social mobilisation activities were seen to be most successful when delivered by CHWs because they were trusted by their communities. Leveraging social mobilisation efforts were also emphasised in Tanzania where engaging community and religious leaders and community health workers in social mobilisation activities had proved effective as they were perceived to be 'close' to and trusted by the communities they served. Similarly, in Zambia, participants identified CHWs as the primary drivers of social mobilisation for CHDs across the country, because of their proximity to caregivers within the community and their local knowledge of children who should attend campaign services.

In addition to interpersonal communication in the community, churches were found to be an effective mobilisation mechanism in Tanzania and Zambia, and in Zambia schools were also identified an effective platform for engaging children and the broader community. There, district-level staff and health workers *'sit and plan with school children, so that they take the messages* [about CHDs] *to their parents so everybody in the community helps to make the campaign successful'*. Other methods for disseminating messages that were highlighted included posters and information education materials (all three countries) and radio (Madagascar and Zambia).

	Lessons learnt and good practice
Package of interventions	The key nutrition-sensitive interventions offered during CHDs are mutually supportive. In Madagascar and Tanzania, VAS and deworming are provided in conjunction with MUAC screening, thereby maximising the opportunity presented by the campaigns to identify children with acute malnutrition. Similarly, CHDs in all three countries provide an important platform to 'mop-up' children who missed routine vaccinations. District-level microplanning in all three countries enabled the key package of interventions to be adjusted to meet local priorities.
Outreach	In all three countries, the CHD programmes offers a 'one-stop-shop' of service provision and bringing interventions closer to communities through outreach and mobile services has helped maintain high coverage and mitigated access, transport and financial barriers, making it easier for caregivers to attend the service with their children. In Tanzania, extending the timeframe of the campaign from one week (as in Madagascar and Zambia) to one month provided caregivers with a longer opportunity to access campaign services and health workers were able to stagger services across the month.
Social mobilisation	Social mobilisation and community engagement have been critical in all three countries in terms of raising awareness of CHDs and encouraging the utilisation of services offered, particularly in relation to hard-to-reach and remote communities. Multiple methods have been successfully deployed including inter-personal communication, channelling messaging through religious institutions and schools, and through local radio. Actively engaging community and religious leaders and community health workers in social mobilisation activities is effective as they are perceived to be 'close' to and trusted by the communities they serve.

Decentralisation and ownership

The health system in both Tanzania and Zambia is decentralised with strong infrastructure that provides high quality routine services through primary health care facilities (see Case Study 1 below). The success of the CHDs programmes in both countries were regarded to be largely dependent on the strength of the district health system (UNICEF 2008). The decentralised systems facilitated greater planning and ownership of CHDs at a district level, and government funds were allocated directly to districts according to their microplans that scheduled activities tailored to the needs of their target population. The increased role of Council Health Management Teams (CHMTs) in Tanzania, and the District Medical Office (DMO) in Zambia facilitated greater planning at the district level and enabled interventions to be tailored to the local context and receptive to the needs of the target population.

In Tanzania, decentralisation has shifted even closer to the community-level in recent years and health facilities and dispensaries have assumed greater control over budgeting and planning tailored to the needs of their local communities. In turn, this has led to increased ownership at the community level as members of the community are involved and engaged in planning and problem solving for CHD. In Zambia, stakeholders agreed that decentralisation had facilitated increased involvement of the DMO in budgeting and planning tailored to their local needs.

Countries with more mature CHD programmes have demonstrated greater levels of government ownership, consistent high coverage over multiple years and increasing budget support. Although political will for the CHDs programmes was reported in both the Tanzania and Zambian settings, both countries remain reliant of external financial support and limited budgetary commitment from central- and district-level government often resulted in important components of their programmes being scaled back or removed, despite these activities having been planned and budgeted for in the district micro-plans.

> *"I think the ownership is there, because that plan is coming from the community itself and so the community plans according to their needs. If they feel that they have this problem in the community, therefore they plan for this problem. It is their plan, so they own it."*
>
> Government official, Zambia

> *"For ownership, the CHDs should give flexibility to regions or districts to plan. Why not leave the flexibility to each district to organise the CHD by saying now, you can organise the CHD based on your agenda, the staff that you have, and then the duration can be based on that."*
>
> National stakeholder, Madagascar

Since the inception of CHD in Madagascar in 2006, 80% or more of funding for the campaign has been provided by external partners. The limited degree of government ownership at central and district levels is reflective of the overall health system that was negatively effected by the 2009 political crises and ongoing issues with weak infrastructure and resources. Despite the lack of domestic resources and budget cuts for social sectors, CHD remains one of the best strategies to keep health service coverage high for selected interventions, and Madagascar has made several positive advances over recent years. Each of the country's 113 districts now develop microplans for every round of CHDs which has facilitated greater planning and input at the district level, and in 2014 a revised national budget was developed that included resources specifically for CHDs, and budged lines for supervision, social mobilisation, transport and logistics.

	Lessons learnt and good practice
Decentralisation	Decentralisation is a strength. In both Tanzania and Zambia decentralisation has contributed to a high degree of ownership of the CHD programme at sub-national levels. Even when decentralisation is limited, as in Madagascar where there is a persistent lack of domestic resources and budget cuts for social sectors, the CHD programme remains one of the best strategies to keep health service coverage high for selected interventions.
Microplans	The development of district-level microplans in all three countries have helped to foster a positive sense of responsibility for the CHD programme. Microplans enable interventions to be tailored to the local context and be responsive to community needs.

Case Study 1
District-level ownership in Tanzania

Decentralisation has played a fundamental role in the greater ownership of the CHD programming in Tanzania. The increased role of Council Health Management Team and the inclusion of a budget line for CHD in the Comprehensive Council Health Plan has facilitated greater planning at the district level and enabled interventions to be tailored to the local context and receptive to the needs of the target population. In Tanzania, decentralisation has shifted even closer to the community-level in recent years and health facilities and dispensaries have assumed greater control over budgeting and planning tailored to the needs of their local communities. In turn, this has led to increased ownership at the community level as members of the community are involved and engaged in planning and problem solving for CHD. Decentralisation of CHD in Tanzania had also enabled nutrition activities to be prioritised at regional and district level, and it was reported that the deployment of nutritionists as part of the government's decentralised capacity building efforts, also supported by the Scaling-Up Nutrition (SUN) movement, had generated significant political will to sustain the CHD initiative as a nutrition sensitive campaign.

Coordination, supervision & training

Coordination

The need for strong coordination was emphasised, and all three countries have made significant efforts to improve coordination mechanisms in recent years. In Madagascar, planning for the CHD is coordinated by a technical committee in the Ministry of Public Health that focused on central-level organisation of specific SMME activities. In Zambia, the CHD is coordinated by the nutrition department at the Ministry of Health, and is managed by one cross-sectoral focal point (see Case Study 2).

Case Study 2
Coordination and supervision in Zambia

CHD is coordinated through the nutrition department at the Ministry of Health, and is managed by one focal point who leads a technical working group that, through frequent coordination meetings, oversees the coordination of CHDs and is responsible for implementing policy; developing procedures; mobilising national-level resources; collaborating with data management personnel and partner organisations to order supplies; coordinating monitoring and evaluation activities; and providing feedback to districts. There is also positive collaboration between the Ministry of Health and the National Food and Nutrition Commission. The Commission supported the development of the CHDs programme and have successfully raised the profile of nutrition across government. The hierarchical monitoring and supervision mechanisms implemented in Zambia were effective and the involvement of national representatives in local-level monitoring visits and exit surveys instilled a grounded understanding of community perspectives. Central government review and feedback on provincial- and district-level reporting has increased accountability and ownership at sub-national levels and has generated positive motivation for the biannual campaign.

In contrast, a number of national partners were engaged in the coordination of the CHD in Tanzania. The Tanzania Food and Nutrition Centre (TFNC) coordinated nutrition activities and have driven the Scaling Up Nutrition movement within the country. In recent years, nutrition units have been embedded in both the Ministry of Health Community Development, Gender, Elderly and Children (MoHCDGEC) and the President's Office Regional Administration and Local Governments (PORALG). In order to consolidate the various CHD focal points within the MoHCDGEC, TFNC and PORALG, and coordinate with other actors, the government developed its first National Multi-Sectorial Nutritional Action Plan (NMNAP) in 2016. This was an action oriented strategy that clearly defined the responsibilities of each of the agencies involved and outlined how they should be organised in relation to nutrition activities, including those aligned with the CHD.

Training

Training for the implementation of CHDs is an important component of the programme. Although training varies in content and intensity, in all three countries it is cascaded from the central level down to the regional level, districts, health facilities and communities. Participants at all levels and across all three countries highlighted a lack of training as posing a significant challenge for the implementation of their CHD's programmes. In Tanzania, it was reported that, despite the release of new guidelines in 2016, training was not effectively cascaded from the district to local levels due to human resource, logistical and financial constraints, and

"We do not have a training schedule per se. When funds are available, we do the trainings based on the tools and the data collection methods. When we have extra money we try to do more, but we don't have a plan to say we are going to train twice a year."

Government officer, Zambia

CHWs and other community-level actors did not benefit. The 2016 national bottleneck analysis on VAS concluded that only 36% of health service providers reported to have been adequately trained on VAS (UNICEF 2016). In Zambia, although all CHWs engaged in the documentation exercise reported to have received a degree of training or orientation for CHDs, they suggested that they were not sufficiently informed about each intervention offered through CHD or their health benefits. A budget for training for the CHDs had been incorporated into district microplans to facilitate training and support to be cascaded from the district to the local level. However, limited training at community levels continued to pose challenges, particularly for reliable reporting as many community health workers had not been adequately trained to collect accurate data.

Supervision

The structure for the monitoring and supervision for CHDs in Tanzania and Zambia is organised through a cascade approach, from the national down to the regional and district levels. Governmental review and feedback in both countries was found to increase accountability and ownership at lower levels and generated positive motivation for CHDs. In Madagascar, stakeholders reported that supervision activities at the community level were frequently restricted by the late release of funds for the SMME. It was notable that in all three countries, UNICEF provided direct support for districts to conduct monitoring and supportive supervision through an equity lens, particularly to help stimulate action to reach marginalised groups in poorly performing districts.

Despite such initiatives, management for CHDs programmes was reported to challenging in all settings, and issues with monitoring, supervision and reporting were frequently highlighted at district, regional and national levels. Stakeholders noted the late delivery and poor quality of data collected at the lower levels. In Madagascar, the 'heavy' reporting requirements of the expanded package of interventions implemented during the CHD meant that quality was often lost because of the quantity of reporting demanded by different actors.

Data management

Participants in Madagascar and Zambia highlighted that reporting and data management was a challenge due to the lack of training at community levels, particularly where CHWs and health workers had not been adequately orientated by their supervisors on the importance of collecting accurate data and did not *'know the importance of collecting information'*. On the job training had been instigated, but in Madagascar for example, it was suggested that community health workers '*Did not have time to learn about paperwork*', because of their increased workload and continual pressure due to human resource shortages. The lack of technical expertise at the local level exacerbated challenges in the national-level collation and analysis of data in all countries.

Lessons can be learnt, however, from the Tanzania experience, where the deployment of nutritionists to regional and district councils alongside the development of new guidelines had strengthened national and regional support mechanisms for data collection and contributed to significant improvements in reporting structures, with an average feedback time of one month post-CHD.

	Lessons learnt and good practice
Coordination	National technical committees for CHDs benefit from active representation of both health and nutrition sectors. The raised profile of nutrition across governments (e.g. by the nutrition units in the MoHCDGEC and PORALG working with the TFNC in Tanzania; and between the MoH and NFNC in Zambia) have contributed to CHDs being positioned as a nutrition-sensitive campaign that helped foster commitment for the biannual events.
Supervision	Central government review and feedback on district-level reporting increases accountability and ownership at sub-national levels and generates positive motivation. Hierarchical monitoring and supervision mechanisms are effective and, as in Zambia, the involvement of national-level stakeholders in local-level monitoring visits and exit surveys gives a greater understanding of community perspectives. In Tanzania, the deployment of nutritionists to regional and district councils, alongside the development of new guidelines, had strengthened national and regional support mechanisms for data collection and contributed to significant improvements in reporting structures, with an average feedback time of one month post-CHD.
Training	Following the national bottleneck analysis of VAS in Tanzania, training on data management and supportive supervision at the district level sought to help CHMT members collect and analyse quality data for evidence-based decision making regarding the identification and targeting of children at risk of missing out on CHD services.

Supply & provision of services

Supply and distribution of commodities

National governments manage supplies for CHDs and are responsible for the distribution of commodities from the central level to the districts and on to local sites. UNICEF supports the governments of Madagascar, Tanzania and Zambia to procure both vitamin A capsules and deworming tablets (Mebendazole and Albendazole) for CHD programmes. Although commodities for CHD reach the remotest areas, the distribution of supplies for CHDs in each country pose significant challenges. Stakeholders in Tanzania and Zambia highlighted that supply management had improved in recent years, but noted on-going challenges with the late delivery of commodities to the district level. This puts additional pressure on already strained resources, leaving little time to distribute supplies to the furthest CHDs service delivery points and could exacerbate underlying challenges with human and logistical resources, particularly in servicing remote and hard-to-reach communities. In Madagascar, mechanisms for the timely distribution of commodities were in place for the CHD, but there remained a chronic problem with the quantity of supplies (VAC and Albendazole). Weak population data in all countries was seen to adversely effect district-level calculations for supply needs.

Human resource management

Shortages with human resources for health and low levels of capacity and competency amongst existing health staff persist across primary health services in the region. Stakeholders in all three countries emphasised challenges that health facilities faced in providing routine services, immunisations and outreach during CHDs, and there were no clear strategies in any country for districts to overcome or at least minimise the impact of campaigns on routine practice. National-level participants in Madagascar proposed that limited human resources during CHDs jeopardised the quality of data collected and compounded national reporting issues for both CHDs and routine services.

Across all countries included in the documentation exercise, community health workers were identified as playing a critical role in the successful implementation of CHDs programmes. In Madagascar this was linked to the close relationship between community members and community health workers who were heavily invested in the health of their communities and encouraged positive engagement. In Tanzania and Zambia community health workers performed non-technical services including the administering of VAS and deworming tablets. Although it was frequently emphasised that community-level service providers have a 'big role' to play, high rates of attrition and the lack of adequate training and incentivsation were problematic. Although human resources were budgeted and managed as part of district-level microplans, it was evident in all countries that more robust staffing strategies were needed to ensure the provision of quality services during the CHD campaigns.

"The volunteers know what activities will be taking place, in which areas and on which days. They are the ones who sensitise the mothers. They do this work out of their love for the community but they don't get any money and have limited training, but without their contribution the programme could become paralysed.

District level stakeholder, Zambia

	Lessons learnt and good practice
Commodities supply	There has been recognition of the need to improve supply chain management across all three countries. Although mechanisms for the clearance of commodities have been strengthened over recent years. There remains a need to ensure the timely distribution commodities (e.g. VAC and Mebendazole) for CHDs from the national to the district level.
Human resources	Community health workers play a critical role in the successful implementation of CHDs and because they are largely recruited from the communities which they service, they provide a trusted link between caregivers and frontline service providers. In both Zambia and Tanzania, community health workers played an important role in delivering 'non-technical' services including the administering of VAS and Mebendazole, and in Madagascar were the driving force behind CHD implementation, encouraging positive engagement with campaign services. Whilst the deployment of CHWs is essential, their work should be underpinned by strong human resource management in order to be able to provide high quality CHD services.

Community perceptions of CHDs

Attendance at CHDs

Caregivers in all three countries acknowledged the importance of regular attendance at CHDs. They appreciated the package of interventions, and perceived that the services were improving the health of children in their communities. The majority of caregiver experiences with CHDs were broadly positive: the distance from their home to the point of service delivery was often much shorter than to a static facility; waiting times were less than for routine services; health workers received them positively; and the overall quality of care was perceived to be high.

CHWk is a week for children up to five years old to go for vitamin A and deworming, immunisations and injections. They are important because they help children to survive. There are many temporary health posts where you can get the services, so the people don't have to go very far. The health clinic is a long distance from here, so when they come close with the services, this helps the people. It saves time and energy. We can just walk to the health post. They organise the CHWk service to be in a central place, so that's where we go.

Mother attending CHWk in Zambia

Gender and caregiving

Nowadays at least the men care about us, but in the past you will find them saying "It is your child, take her to the hospital by yourself, I don't have money to send her to the hospital". So you see, its mothers who take more responsibility than fathers. But right now, it's a bit easier because we are being educated, and even in the clinics when we are pregnant they tell us to come with the fathers. When they come, the fathers are being told to help mothers, so by the time you get a child they understand. It is a good thing because nowadays they have been enlightened on how to help the mother and the family.

Mother attending CHD, Tanzania

The social norm across all three countries is for mothers to be responsible for their children's health. A mother is the most likely person to seek preventative care and identify symptoms in a child. If treatment is required, a mother would often need to seek permission from the child's father to attend a health facility, particularly if this involves financial expenditure, although it is normally the mother who presents the child at the facility. During the documentation exercise, it was notable that no male caregiver was observed at a CHD service delivery point in Tanzania, and only one male caregiver was observed in Zambia. There, mothers suggested that women are increasingly gaining agency to make care-related decisions for their families. Men are deemed responsible for the provision of finance and transport for attending a clinic or CHD, but decision-making power is more likely to lie with the mother, or is a joint-decision. Although caregiving remains the domain of women in Tanzania, some mothers suggested that the role of men and their knowledge of and involvement in the health of their family was changing a result of health education given at health facilities and by community health workers in the community. Their attendance at CHDs was being actively encouraged through positive incentivisation (e.g. reduced waiting times offered for families with a male caregiver present). In Madagascar, the role of men is also shifting and there, many fathers were observed presenting their children at CHD (see Case Study 3 below).

Case Study 3
Male attendance at CHD in Madagascar

In Madagascar mothers were responsible for decision-making, taking the child to a health facility and, in terms of preventative care, mothers were primarily responsible for attending routine services for vaccination and attending CHDs. Despite this, a number of male caregivers brought their children to CHD service delivery points in Toliara I and Ambatolampy, and were engaged in in the documentation exercise in April 2017. They explained that due to high rates of unemployment amongst men in the community, fathers were increasingly available to assist with, and were taking greater responsibility for, attending routine services and CHDs with their children. Although caregiving remained the domain of women, it was increasingly common for men not engaged in 'economic activities' to be involved in practical healthcare seeking for their families. From an equity perspective, increased male involvement in CHDs could be regarded as positive progress, yet this does not necessarily represent a shift in social norms. Rather, male caregivers suggested that their availability to attend CHDs was a direct result of the complex political and economic situation in Madagascar, and was associated with shifts in livelihoods and high unemployment rates since the political crisis.

Overcoming misperceptions and rumours

In all three countries, high coverage during CHDs has been attained, yet to there remains a small but critical percentage of children (5-10%) who do not receive the services. Rumours and misconceptions are a contributing factor in why some caregivers do not attend CHDs and were reported in all three countries. Caregivers suggested that some people took the active decision not to attend services: '*They don't come because they have negative thoughts about it*'; *'In the community, there are people who are not convinced'.* In Tanzania, rumours were linked to the risk of 'foreigners' wanting to control fertility and conduct medical experiments. It was also reported that some Muslim communities perceived the oil used in vitamin A capsules was non-halal and therefore would not attend CHD. In Zambia, religious beliefs were also associated with barriers preventing uptake of services as certain churches prohibited their congregations from using allopathic medicine. It was noted by caregivers, however, that members of such churches often attended health services '*in secret*'. In Madagascar, stakeholders emphasised that the polio campaigns that were scaled-up in 2016 and 2017 had generated new rumours and that all health campaigns had become associated with the threat of illness, infertility and potential death. Health workers reported that such misconceptions coupled with general campaign fatigue resulted in community members being resistant to campaign interventions.

> *The majority of the population is very sensitive to rumours and it can really affect the next campaign. But when the awareness is done well, several times, its helps to smooth the rumours.*
>
> Community health worker, Madagascar

> *People want to come but in some areas, there may reasons stopping them. They knew the importance of the CHD, but it is just about finding a social mobilisation strategy for engaging them. With the community health workers, we have identified a strategy and most of them are coming now*.
>
> District stakeholder, Zambia

Overcoming misconceptions and rumours is therefore a critical element of social mobilisation efforts to encourage attendance at CHDs and the utilisation of services, and local health workers play an important role in building community trust for interventions. As caregivers in Tanzania suggested '*When the community health workers speak about the importance* [of CHDs] *it helps with the rumours and encourages more people to come'*. National-level stakeholders in Zambia concluded that the CHD programme become 'institutionalised' at the community level, because caregivers have '*Become so use to the service'* and targeted messaging has led to effective demand generation.

	Lessons learnt and good practice
Overcoming rumours and encouraging attendance	Multiple methods of social mobilisation and community engagement, including inter-personal communication, channelling messages through institutions and schools, and actively engaging community and religious leaders and community health workers, has helped to dispel rumours associated with CHDs and build community trust for the interventions. Such positive community engagement encouraged uptake of services and facilitated acceptance of CHDs in the community, particularly where caregivers had positives experiences with the quality of care received, short waiting times, and a welcoming reception by health staff.
Male caregiver involvement	In Madagascar, fathers and male caregivers were increasingly involved in healthcare seeking for their children. Although this was attributed to shifts in livelihoods and the socio-economic environment as a consequence of the political crises, the fact that men are now presenting for services provides a valuable opportunity for positive engagement and sustained social mobilisation. In Tanzania, expanded health education for male caregivers had improved men's knowledge and involvement with the heath of their families. In parallel, incentivisation was beginning to increase male engagement in care-seeking behaviour, and their active support of CHD attendance.

Equity

In all three countries, ensuring equitable access to services is critical and CHDs had prioritised an equity-focused approach to ensure services reach the most vulnerable children in the hardest-to-reach areas.

In order to explore the issue of equitable delivery of and access to services, an analysis of VAS by wealth quintile at the household level was undertaken using the most recent DHS datasets for each country (Tanzania 2015-2016; Zambia 2013-2014; Madagascar 2008-2009). Overall, there was little variation by wealth quintile, although in general, there was a decrease in coverage from the wealthiest to the poorest quintiles (see graph 3). In Madagascar the overall pattern was one in which there was high VAS coverage across quintiles. In Tanzania the richest three quintiles had marginally better access to VAS than the poorer two quintiles, and similarly in Zambia, the pattern was one in which there was highest coverage among the richest two quintiles, slightly lower among the middle and poorer quintiles, and lowest among the poorest quintile. It was notable that poverty was not raised in the qualitative data as a determinant for reduced coverage.

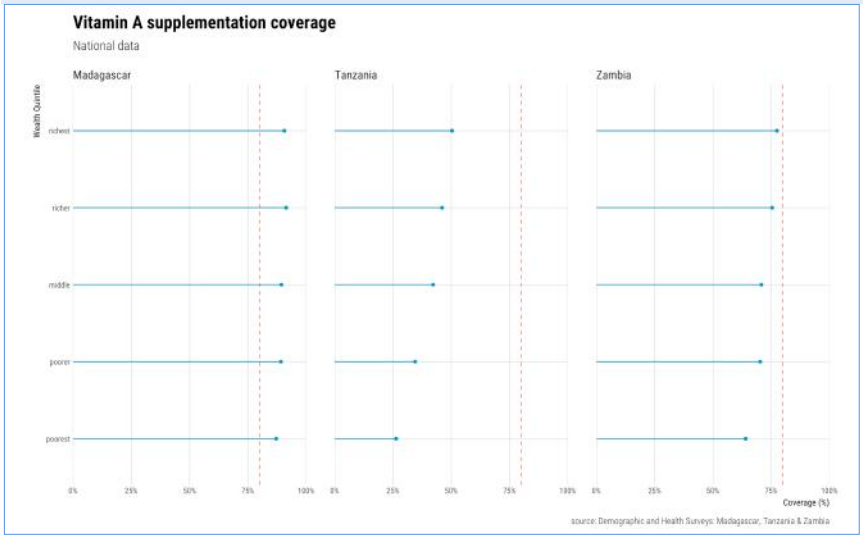
Across all three countries no pattern in VAS coverage between urban and rural settings was observable (see graph 4) although the qualitative narratives from a variety of national- and district-level stakeholders in all countries suggested that administration of CHD services was most challenging in rural areas, due to geographic and logistical issues. There was little distinction between male and female uptake of VAS services in the quantitative data (see graph 5), and in the qualitative data from each country, no link was made between a child's gender and their utilisation of CHD services

In all three countries, limitations in both the quality of data collected and local capacities to analyse and operationalise data means that it is difficult to identify children most at risk of missing essential services. Efforts were being made to overcome this and the development of district-level microplans in all three countries had enabled interventions to be better tailored towards engaging those most in need, and support the allocation of resources in poorly performing areas that required additional support and supervision.

	Lessons learnt and good practice
Equity-focused approach	An equity-focused approach to CHDs has been adopted by all three countries. This aims to ensure that services reach the most vulnerable children in the hardest to reach areas. The development of district microplans enabled interventions and resources to be tailored towards engaging those most in need at the local level, and outreach brings services closer to the community thereby mitigating access barriers.

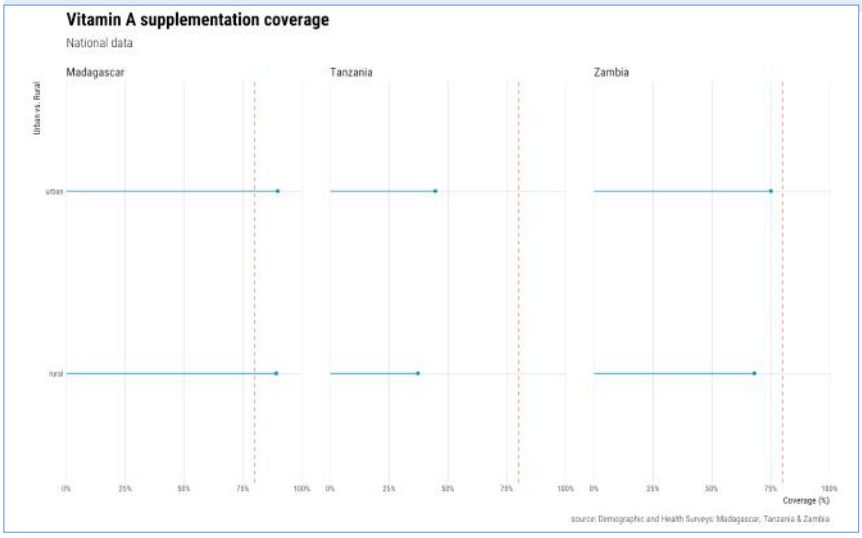
Graph 3 – Vitamin A supplementation by wealth quintile, national coverage, DHS data

Variation by wealth quintile can be seen in Tanzania and Zambia, where there is a decrease in coverage from the wealthiest to the poorest.



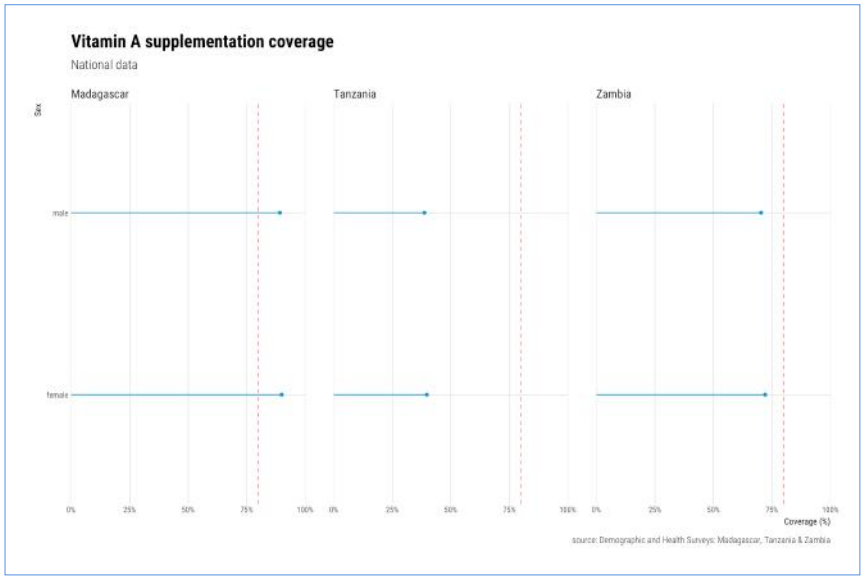
Graph 4 – Vitamin A supplementation by urban/rural location, national coverage, DHS data

Variation by place of residence was seen in Tanzania and Zambia, where coverage was lower in rural areas compared to urban areas



Graph 5 – Vitamin A supplementation by gender, national coverage, DHS data

There was little distinction between male and female uptake of VAS services in the quantitative data



Sustainability

During the documentation exercise, a number of key points emerged during stakeholder discussions about sustainability, integration of services and the future of each of the country's CHD campaigns. It was noted that campaign style interventions could effectively target populations in need, and provide care to those who did not engage in routine services. CHD campaigns were also seen to be a valuable mechanism to provide care to children who had missed routine services (e.g. for routine immunisation), and at least in theory, acted as an effective safety net for the health system.

> *Some people we just can't reach during routine services because of various problems. They live far from the site or the health centre. This SSME is the one moment they can have all the things offered for health programmes, nutrition, WASH, everything in one moment. They can be sensitised and they can have all the counselling about those many activities during the week.*
>
> National stakeholder, Madagascar

CHD programmes in ESAR remained dependent on financial and technical support from external partners, albeit to different degrees. In Zambia, the government has demonstrated commitment to the CHD programme by increasing their levels of ownership through the allocation of dedicated funding at the national level and decentralising responsibilities to the district level. Increased government ownership and financial commitment is also evident in Tanzania, although as in Zambia, the procurement of VAC and Mebendazole remained externally funded. In Madagascar, despite the institutionalisation of the programme, the government had not been able to assume a high level of ownership or safeguard its implementation due to weak national governance structures and limited resources, a operational environment that affects all programmes in the health sector and beyond.

> *What I am hearing more and more is that we have had enough with CHD, why don't we go back to routine? I think this may be very dangerous unless we put a system in place to ensure that routine services will really allow us to reach that kind of coverage.*
>
> National stakeholder, Zambia

In all three countries, the transition of immunisation from an intervention provided via vertical campaigns, to one integrated into routine service delivery has come to be regarded as good practice. Yet, sustaining the CHD programme for other interventions (e.g. VAS and deworming) was seen to be essential and discussions of transition premature. It was noted that whilst the transition of interventions from campaign-style delivery into routine services may happen organically, changes had to happen slowly and in parallel to longer-term broader health system strengthening. When transition was discussed, stakeholders highlighted that the allocation of sufficient budget and resources were key prerequisites for 'smooth transition'. Lessons from Tanzania and Zambia highlight that decentralisation and increased government ownership can act as catalytic factors needed for the sustainability of CHD services, although in both countries, whilst districts have increased their funding for CHDs, budgets are not yet adequate.

Conclusion

The Child Health Day programme has been successfully implemented in ESAR countries and has contributed to the region having achieved high two-dose coverage of VAS. Since the programmes were introduced in Madagascar, Tanzania and Zambia many several positive achievements were documented.

In the 11 years the campaign has been implemented in Madagascar, progress has been made through the development of district-level microplans and ensuring effective social mobilisation. High coverage rates were consistently achieved, with over 90% coverage reported for both VAS and deworming in June and December 2016.

In Tanzania, the programme shifted its approach to be a month-long campaign in 2016, providing a package of key interventions across the whole country including screening for malnutrition using MUAC measurements. National guidelines and training on CHD were developed and rolled out, and high coverage rates maintained with a 91% national coverage rate reported for VAS in December 2016.

Since its introduction, the CHD in Zambia has also documented significant progress over last 18 years and now benefits from strong political ownership, increased fiscal control, and since 2015, the reintegration of immunisation to 'mop-up' children who had missed routine vaccinations.

Through the documentation of CHDs in Madagascar, Tanzania and Zambia, certain components can be identified that have been critical to the success of the programmes:

- ***Package of interventions.*** The key nutrition-sensitive interventions provided during CHDs are mutually supportive. VAS and deworming are provided in all three countries with the addition of MUAC screening in Madagascar and Tanzania, thereby maximising the opportunity presented by the campaigns to identify children with acute malnutrition. Similarly, CHDs in all three countries provide an important platform to 'mop-up' children who missed routine vaccinations.

- ***Outreach.*** By offering a 'one-stop-shop' of service provision and bringing interventions closer to communities through outreach and mobile services, CHDs have mitigated access, transport and financial barriers, making it easier for caregivers to present their children during the campaign and therefore maintained high coverage rates of essential interventions.

- ***Social Mobilisation.*** Social mobilisation has been a fundamental component of CHDs across the region since their inception. In Madagascar, Tanzania and Zambia social mobilisation has been critical for raising awareness of CHDs and encouraging the utilisation of services offered, particularly in relation to hard-to-reach and remote communities. Deploying multiple methods of direct and interpersonal communication are particularly effective when they include the active participation of community and religious leaders and community health workers, all of whom are perceived to be 'close' to and are well trusted by the communities they serve.

- ***National coordination and ownership.*** National technical committees for CHDs benefit from active representation of both health and nutrition sectors. The raised profile of nutrition across governments through specific national agencies, the development of

nutrition units within government ministries, and the deployment of nutritionists to the district level, have all contributed to CHDs being positioned as a nutrition-sensitive campaign and has helped foster commitment for the biannual events.

- ***District Microplans.*** The development of district-level microplans in all three countries have helped to foster a positive sense of responsibility and ownership for the CHD programme at sub-national levels. Microplans enable the relevant district authorities to tailor interventions to be responsive to the local context and community needs.

- ***Equity focused approach.*** All three countries have demonstrated commitment to ensure the most vulnerable children are not left behind. At the district level the development of microplans has enabled interventions and resources to be tailored towards engaging those most in need at the local level.

Despite these substantial gains, however, an estimated 26.5 million children were left unprotected against VAS in Eastern and Southern Africa in 2014 (UNICEF 2017). There is therefore urgent need to make further progress across the region, and concerted efforts must address the remaining challenges and ensure coverage is increased and well maintained.

- ***Data management.*** The use of census data to estimate commodity needs for CHDs and for calculating coverage at local levels is problematic in all three countries. Target populations are calculated as projections based on census data but do not allow for variations across areas. This complicates planning and reporting procedures, and can lead to the overestimation of coverage. Although national census data is used for national level reporting, in all three countries, the use of local headcount data enables a more accurate estimation of CHD coverage at the district level, yet issues with denominators persist and contribute to data management challenges.

- ***Human resources.*** The management of human resources for CHDs remains challenging and there is a shortage of adequately trained staff to implement CHDs interventions in primary healthcare settings in all three countries. Due to human resource, logistical and financial constraints, training does not always cascade to community-level actors and in all three countries, to varying degrees, there is a reliance on volunteer cadres. Whilst it is clear that capacity has been enhanced over recent years, it remains imperative that support for coordination, supervision and training is reaffirmed. Sub-national actors must be empowered to assume responsibility and be accountable for CHD interventions at their operational level.

- ***Dedicated funding.*** Specific funding for CHDs remains limited, and in all settings insufficient resources have lead to less interventions and/or activities being implemented than outlined in district microplans. Madagascar is heavily dependent on support from donors for all its programmes, and in Tanzania and Zambia although national financial commitment for CHD has increased, there remains a shortfall in allocated budget. Partners must continue to support the governments of all three countries to foster increased political will for CHDs and dedicate sufficient resources for the programme.

- ***Sustainability.*** CHDs in all countries remain dependent on the financial and technical support of external partners, and unless the respective governments continue to assume greater ownership, the sustainability of the programme is not guaranteed. The health infrastructure in Tanzania and Zambia lends itself to the expansion of routine services with the eventual integration of key interventions that are currently delivered through CHD. This may be the case in Madagascar in the future, but in the short- to medium-term delivery of key interventions must continue through the CHD programme and efforts made to safeguard the compatibility and quality of services offered (focusing on core interventions rather than offering an ever-expanding package). Ensuring the equitable provision of services, and maintaining high coverage levels whilst reaching the most vulnerable children across all three countries, must happen in the context of broader health system strengthening.

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