

Assessment of the Sustainability of the Tanzania National Vitamin A Supplementation Program



2008



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LIST OF ACCRONYMS

A2Z	The USAID Micronutrient and Child Blindness Project
CCHP	Comprehensive Council Health Development Plan
CHMT	Council Health Management Team
APOC	African Program for Onchocerciasis Control
CMT	Council Management Team
DCCO	District Cold Chain Officer
DHO	District Health Officer
DMO	District Medical Officer
DRCHCO	District Reproductive and Child Health Coordinator
EDP	Essential Drugs Program
EPI	Expanded Program on Immunization
HKI	Helen Keller International
MOHSW	Ministry of Health and Social Welfare
MOST	The USAID Micronutrient Project
MSD	Medical Stores Department
NBS	National Bureau of Statistics
PHC	Primary Health Care
RAS	Regional Administrative Secretary
RMO	Regional Medical Officer
TFNC	Tanzania Food and Nutrition Centre
UNICEF	United Nations Children's Fund
USAID	United States Agency for International Development
VAC	Vitamin A Capsule
VAD	Vitamin A Deficiency
VAS	Vitamin A Supplementation
WVT	World Vision Tanzania
WHO	World Health Organization

EXECUTIVE SUMMARY

Introduction

Vitamin A deficiency (VAD) and anemia are significant public health concerns in Tanzania. Diet quantity, quality, and diversity are limited in Tanzania, which, along with high rates of infection in children, contribute to high rates of vitamin A deficiency. Soil-transmitted helminths are ubiquitous among young children with prevalence ranging from 40% to 100% in different areas of the country. Integrated vitamin A supplementation (VAS) and deworming programs will result in health benefits, including reduced morbidity and mortality and improved iron status among anemic children.

Nationally targeted VAS started in 1987 with the inclusion of vitamin A capsules (VACs) in kits distributed through the Essential Drugs Program (EDP) to government owned primary health facilities. To increase coverage, VAS was introduced into routine services of the Expanded Program on Immunization (EPI) in 1997 and the sub-national measles immunization campaigns in 1999 and 2000. Another approach—twice-yearly distribution during commemorative days—was inaugurated in 2001 during the Day of African Child in June and World AIDS Day in December. While all of these supplementation approaches are still being practiced, most VAS service to children aged 6-59 months occurs during the two commemorative events. In the previous 12 VAS rounds, more than 90%, on average, of the targeted children in Tanzania mainland were reached with the service. Since December 2004, deworming for children aged 12-59 months has been integrated with the VAS events to improve their cost-effectiveness, and deworming coverage has been equally high.

Funding for VAS programs has depended mainly on UNICEF support, complemented by district funding sources. Concern has been expressed that districts may find it difficult to maintain high levels of vitamin A coverage as donors increasingly provide funds for health “baskets” and general budget support rather than for specific programs such as VAS. In October 2006 the Government of Tanzania (Tanzania Food and Nutrition Centre and the Ministry of Health and Social Welfare), in collaboration with UNICEF, A2Z: The USAID Micronutrient and Child Blindness Project, and representatives of district councils reached a national consensus to help districts undertake a self-assessment on the likelihood of

sustaining the preventative VAS and deworming program in light of this decentralization and shifting of funds. The main objective of the assessment was to sustain high coverage of the vitamin A and deworming program by identifying weak program components that might impair stability, and devising measures to improve them.

Study design and methods

In October 2006, the Tanzania Food and Nutrition Centre, Helen Keller International (HKI), and the A2Z project organized a 2-day national workshop in Dar es Salaam to deliberate on the assessment methodology and the type and content of the assessment tools. The 21 workshop participants represented national government and donor stakeholders in VAS and deworming programs and one regional and four district health management teams.

The participants identified eight program components to assess sustainability. They developed a set of objective and subjective indicators for each program component, drafted data collection and scoring tools, and agreed on an advocacy activity to be used during the assessment. This advocacy activity involved a talk by knowledgeable staff to district councils on the health impact of VAS, the rationale for increased district ownership in the VAS/deworming program, and the importance of prioritizing the program in their annual health plans. The draft assessment tools and the advocacy activity were pretested in two districts in different zones.

To improve the reliability and timeliness of the exercise, 21 national facilitators (one per region) were selected from TFNC and other health-related institutions to guide the process. They received training on the tools and the advocacy activity. Each national facilitator was assigned a regional counterpart, often a field coordinator for VAS and deworming program who is a coordinator for reproductive and child health or immunization services. The national and regional counterparts facilitated the district self-assessment for their assigned region. Over a one-month period, the 21 teams visited all districts in their assigned regions.

During their visit, the facilitators held a series of interviews and meetings with different stakeholders including health facility staff, district council members, and community members. During these meetings, the facilitators discussed different program components, following the outline of the tool, recorded the responses to the questionnaire, and ensured that records from reviewed reports, plans, and minutes were accurate. The facilitators also recorded their own impression of the strength of each component based on all interviews and meetings.

The assessment process resulted in completed annotated questionnaires capturing programmatic areas of strength and weakness. A scoring process was included to provide some objectivity to comparison across districts. Scores were generated from the district self-assessment teams and from the facilitators for all 119 districts in Tanzania mainland, using two scoring methods:

- *District self-assessment scores.* Facilitators assisted district teams in completing the questionnaire with sustainability indicators for eight program components. The maximum ideal score for the eight components was 88. Cut-off points for each program component were established to enable judgment on which districts were vulnerable. Overall vulnerability scores were developed by creating dummy variables on sustainability scores for each component (1=vulnerable, 0=not vulnerable or relatively less vulnerable) and summing them up to obtain the overall vulnerability score, with 8 points indicating the highest level of vulnerability.
- *Facilitators' judgment scores.* To complement the impressions of district staff doing their own assessment, national facilitators also provided their impression of the strength of each component. The facilitators did not score each indicator. Instead, they looked at each program component as a whole and assigned a value ranging from 0=not sustainable to 4=sustainable.

Summary of Results and Recommendations

The self-assessment process stimulated discussion and reflection and provided findings that can be used to prompt action at the district and national levels to sustain high coverage and to apply corrective measures where needed. The assessment demonstrated some strengths

and weaknesses that were present across all districts, but also highlighted a number of differences between districts, providing opportunities for improvement. The findings of the assessment are summarized below for the eight program components along with recommendations based on the findings.

1. Planning

For an activity to be sustained, it must be considered part of the district's regular activities, and thus must be included in the annual planning process.

About 89% of the 119 districts assessed included the VAS and deworming program in their 2006/07 comprehensive council health development plans (CCHPs). Districts have a variety of funding sources, including government block grants, donor basket funds, council grants (from council/district's own revenue), cost sharing funds (limited to some districts), receipt in kind (drugs and other supplies purchased by the central government and allocated to districts), UNICEF (before joining the team of basket fund donors) and other funding. Funds budgeted in the annual CCHP should include support for every activity for which the district has prior assurance of funding, and the district should be ready to implement that activity. Some districts included UNICEF funding in the CCHP, but the majority did not, though all the councils had been receiving the fund. The districts that included UNICEF funding in their CCHPs specified the source of fund in the budget, and some put it under other funding sources. The most secure source of funds is the 'basket' fund since once planned, there is no flexibility for re-allocation. Basket funds are provided by government and donor sources for general district use, and are considered reliable. Only 8% of districts reported that funding for the December 2006 round was provided by council grants. In June 2007, only 46% of the districts had more than 50% of planned funds for VAS/deworming from the basket fund component, and only 43% had more than 50% of estimated funds needed planned in their CCHP. In only 13% of the districts was the VAS/deworming program a priority in community plans. Overall, 34 (29%) of the districts appeared to be vulnerable in the planning component of VAS/deworming.

Recommendation: Districts should be encouraged to budget for the program in their own CCHP budget including the basket fund which is considered the most reliable source of funds. Once basket funds are planned, they cannot be reallocated.

2. Management and leadership

The VAS program requires clear management for effective and efficient implementation, and thoughtful management also reflects the value placed on the program. Poor management may make the program vulnerable, and less likely to be sustained in an effective fashion.

Only 44 of the 119 districts assessed (37%) indicated that they had adequate distribution sites for the December 2006 round. Thirteen districts (11%) reported difficulties in delivery of VAS and deworming services mainly due to late availability of supplies and funds for implementation. Similarly, the district self-assessment scores indicated that only 16% of the districts were considered vulnerable in program management and leadership.

Recommendation: Efforts should be made to protect the current best practices in management and leadership reported in most of the districts.

3. Logistics supply

The VAS program depends on effective logistics, and capsule and promotional materials must reach distribution sites on time and in adequate quantities for the program to be effective. Poor logistics supply management makes the program vulnerable.

Adequate communication between programs and departments within district councils facilitated effective use of available resources in 117 (98%) of the districts assessed. Most districts (>83%) reported that key health managers were aware of and had access to tools for estimating requirements for VAS and deworming supplies and for informing and educating the public. Late delivery of supplies to the districts from the national level for the twice-yearly events resulted in higher district costs for local distribution. Only about 55%

of the districts reported reliable transportation of VAS and deworming supplies within their districts. Overall, 21 districts (18%) were judged to be vulnerable in logistics supply.

Recommendation: Key actors at the national level need to ensure timely procurement and delivery of supplies to the districts.

4. Supervision and monitoring

Given the twice-yearly nature of the VAS program as well as its historic evolution from immunization campaigns, it is easy for district staff to see the program as separate from their regular day-to-day work. Considering the program to be part of the routine work for the district is critical for sustainability, and is reflected in both attitudes and the support provided to the program.

Ninety-one (76%) of the 119 districts regarded implementation of the twice-yearly VAS and deworming program to be a routine activity. About 84% considered VAS and deworming a very important service, and 99% thought the service should continue. Although the majority of the districts viewed VAS/deworming as a routine activity, more than half (55%) had not yet included VAS/deworming services in their routine supervision checklist. Moreover, payment of allowances to staff for VAS/deworming while at their normal duty stations implies that these services were viewed as special rather than routine. The allowance scheme in particular, with an excessive number of supervisors at some distribution sites and inadequate supervision at other sites, may increase a district's vulnerability to a decline in coverage. Overall, 11 districts (9%) were judged vulnerable with low sustainability related to supervision and monitoring.

Recommendation: Districts should determine the appropriate number of site supervisors to contain costs and include VAS/deworming in the routine supervision checklist to ensure that children missed during the twice-yearly events are reached through “mop up” actions.

5. Advocacy and community ownership

The program is more likely to continue effectively if it is understood and valued by community members who are involved with planning and implementation.

More than 90% of districts reported that both their council health management teams (CHMTs) and council management teams (CMTs) were aware of the twice-yearly VAS and deworming program, its impact on child mortality, and its cost-effectiveness. Most districts (>87) scored well on questions related to the sustainability of community ownership. However, only 39% of the districts mentioned involving the community in planning for VAS/deworming events. About 59% of the districts indicated that communities would be ready to contribute food for service providers during the twice-yearly events, and most districts (92%) said that communities would protest if the program stopped.

Recommendation: The successful efforts to date should continue to build community ownership of the program through well-designed, regular sensitization meetings and advocacy to engage the community, mobilize participation, and raise the profile of VAS/deworming events.

6. Availability of financial resources

In addition to inclusion of funds in the planning process, the details of financial management and *actual expenditure* for the VAS distribution are critical. Districts that do not take into consideration the VAS program needs as they manage the difficult task of allocation of limited funds from different sources to different programs are more vulnerable.

Nearly all (94%) of the districts included the VAS and deworming program at least once in the past 5 years in their comprehensive council health development plans. For the round immediately prior to the assessment, about 68% of the districts budgeted secure basket funds for VAS/deworming. However, for the five distribution rounds prior to the survey, the basket fund portion of the CCHPs only met between 16% and 29% of the districts' estimated financial requirements. There was inadequate inclusion of the program in CCHP,

particularly limited utilization of the basket fund, which provided less than 30% of the estimated need.

Recommendation: Ensuring adequate provision for the VAS/deworming program within the basket fund can improve the financial sustainability of the program.

7. Availability of human resources

Twice yearly VAS distribution involves extended outreach to communities, and thus requires significant mobilization of both health staff and community volunteers. Failure to plan for adequate human resources is likely to place districts at risk of not sustaining their coverage achievements.

The human resources for VAS and deworming distribution were not felt to be adequate in 63 (53%) of the districts. Few (18%) of the districts had filled more than 80% of health staff positions, although these unfilled positions do not seem to affect the twice-yearly VAS and deworming events that involve mainly community volunteers. Furthermore, the ratio of the service provider to the target group for distribution was adequate in most cases, and the vast majority of districts (>94%) performed well in terms of involving social groups in distribution activities. However, mobilization of human resources for the distribution was felt to be time consuming, with no guarantee from round to round that adequate resources would be available. Thus, about 49% of the districts were considered vulnerable in ensuring the availability of human resources.

Recommendation: Local councils and the central government need to fill staff positions and find secure mechanisms to ensure mobilization of adequate human resources to sustain service delivery.

8. Program effectiveness

Tanzania has achieved stable high coverage for VAS distribution to 6-59 month old children over the past five years. This measure of program effectiveness is critical, since studies have proven that high coverage can result in reduced child mortality.

Ninety-nine districts (>83%) reported that they had consistently attained coverage in VAS of more than 80% in all of the five previous distribution rounds, and they had strategies in place to reach those not covered and to sustain services. Only nine districts (about 8%) showed inconsistency in their coverage achievement. Of the 9 districts found vulnerable in terms of program effectiveness, 8 were also found vulnerable in financial resources; 4 in advocacy and community ownership; 2 in planning; 1 in logistics supply; and 1 in monitoring and supervision. Five of the 9 vulnerable districts were urban. Therefore, inadequacies in financial resources and community ownership as well as urban settings could be important factors to consider in devising efforts to sustain high coverage in VAS and deworming.

This pattern of coverage was known prior to the sustainability assessment, and because of this stability, it is difficult to differentiate districts on the basis of coverage achievement alone. Furthermore, with such limited variation in coverage, the ability of the indicators for different program components to ‘predict’ low coverage is limited.

Recommendation: Efforts should be made to maintain the high performance of the majority of districts and help the few low performing districts improve their coverage.

9. Overall sustainability score

The application of scores to the different program components was somewhat subjective, and there was no evidence to guide what scores to assign different indicators or questions. However, scoring was added as a mechanism to help with district comparisons across the spectrum of program components.

The mean district self-assessment scores on the eight components of sustainability, expressed as the percent of the maximum ideal scores for each component, ranged from 40% on available financial resources to 92% on program effectiveness. The mean scores of the national facilitators, based on a maximum possible score of 4 for each program component, ranged from 57% on available financial resources to 80% on program

effectiveness. A comparison of the scores of the district self-assessment with those of the national facilitators indicates that the most variability (>30% deviation from mean scores) is in two of the program components: planning for VAS/deworming events and the availability of financial resources.

To facilitate comparisons across districts, the sustainability scores for each component were used to derive a vulnerability score for that component as well as an overall vulnerability rating, with 8 indicating the highest level of vulnerability. Seventeen districts (14%) were judged most vulnerable because they scored greater than or equal to 50% (4/8) of the maximum possible points on the vulnerability scale.

General conclusion and recommendations

The 17 districts identified as most vulnerable are scattered all over the regions of Tanzania mainland. Further work may be done to determine whether there are any common characteristics of these districts. Efforts to improve program sustainability should be directed to districts that are not performing well in terms of availability of financial resources, planning, logistics supply, and/or advocacy and community ownership as well as those with a higher overall vulnerability rating.

Government and partner efforts should be harmonized to support these districts so that they can improve and sustain the VAS/deworming program. Key actors at the national level need to ensure timely procurement and delivery of the supplies to districts. Similarly, local councils and the central government are advised to enhance efforts in addressing the issue of high staff vacancies for the betterment of all health services. An important next step is to share district experiences in acquiring and allocating funds for the VAS and deworming program and ensuring regular monitoring so that the best practices for sustainable programs are maintained and the weak ones addressed.

1.0 INTRODUCTION

Vitamin A is an essential nutrient required for enhancing the body's immunity against diseases and for fostering normal growth and development, proper functioning of the eyes particularly vision in dim light, and maintenance of epithelial cells and reproductive systems. Vitamin A deficiency (VAD) is among the micronutrient deficiencies of public health significance in Tanzania (TFNC, 1988). VAD is the leading cause of childhood blindness in many developing countries and affects children's immune systems, which increases the risk of morbidity and mortality from common childhood infections such as diarrhea disease and measles (Beaton et al, 1994; Ching et al, 2000).

Another public health concern is intestinal helminths. The World Health Organization (WHO) estimates that around 2 billion people are currently affected by helminths, resulting in enormous negative consequences for health and development (WHO, 2005). These consequences include permanent organ damage, anemia, poor physical growth, poor intellectual development and impaired cognitive function. Soil-transmitted helminthes such as hookworm and whipworm are ubiquitous among young children with a prevalence of 40% – 100% in different areas of Tanzania (Nyandindi, 2004). De-worming with albendazole or mebendazole has been found to be very beneficial for the health of pre-school children (1-5 years) (Nyandindi, 2004; Alderman et al, 2006; UNICEF, 2006). These benefits include reduced mortality and morbidity, increased iron status among anemic children, reduced VAD and greater child weight and height gain.

A nationally targeted VAD control program began in 1985 with four main approaches: dietary diversification, control of infectious diseases, nutrition education, and supplementation of groups at high risk of VAD with high dose vitamin A capsules (Ndossi, 2004; MOST, 2005). Targeted vitamin A supplementation (VAS) started in 1987 when the high dose vitamin A capsules were included in kits for the Essential Drugs Program (EDP), which focused on children aged 6-59 months who presented with active xerophthalmia and VAD precipitating diseases such as measles, persistent and acute diarrhea, lower respiratory tract infections and moderate and severe protein-energy

undernutrition. Because the EDP was confined to government owned dispensaries and health centres, coverage of sick children was low, and many children at risk of VAD were not reached.

To improve coverage, in 1997 VAS was integrated into routine services of the Expanded Program on Immunization (EPI) targeting children less than 2 years old and post-partum women. Low coverage persisted, especially for children over 9 months old since there were no routine immunization services for this age group. In another effort to expand coverage and provide universal preventive dosing, VAS was integrated into sub-national measles immunization campaigns for children aged 6–59 months. These campaigns covered 30 districts in 1999 and 52 districts in 2000 (out of the 110 districts of mainland Tanzania) and achieved overall VAS coverage of 94% in 1999 and 99% in 2000.

The high VAS coverage achieved through the sub-national immunization campaigns was the main basis for establishing in 2001 nationwide, twice-yearly VAS implemented during commemoration of the Day of African Child in June and World AIDS Day in December. The twice-yearly VAS events were integrated with deworming in December 2004. The integrated deworming and VAS program is one of the steps to rationalize existing disease/malnutrition control programs through integrated approaches that streamline service delivery and improve cost effectiveness. At the moment, the vast majority of the children aged 6-59 months who are covered with VAS and deworming services are reached through the twice-yearly events.

The integrated VAS/deworming program has been successful in reaching high (above 90%) coverage of targeted children in 10 of the 12 previous rounds (TFNC & HKI, 2006). This high coverage coincides with striking findings from the 2004/05 Demographic and Health Survey (NBS and ORC Macro, 2005) that show a decline in under-five mortality from 147 deaths per 1000 live births in 1999 to 112 per 1000 live births in 2004-05. The same survey reported a decline in infant mortality rates from 99 to 68 deaths per 1000 live births. A cost analysis study (MOST, 2005) conducted in 2004 of the twice-yearly VAS program in Tanzania mainland demonstrated a high level of cost effectiveness of this delivery approach relative to other health interventions.

Funding for integrated VAS/deworming has been provided mainly by UNICEF complemented by district funding included in district annual comprehensive council health development plans (CCHPs). In districts that included VAS and deworming in their CCHPs, funding was earmarked under the donor basket fund, government block grant and a district's own revenues. Some districts, even those that included VAS and deworming in their CCHPs, did not earmark additional sources of funding but simply included what they expected from UNICEF support in their annual plans.

Effective from 2007/08, UNICEF will join the group of basket fund donors; therefore, no UNICEF funds will be directed to districts that are earmarked specifically for the VAS/deworming program. This has raised concerns that districts may place less emphasis on VAS and find it difficult to sustain successful VAS activities. Concerns have been expressed about the adequacy of planning, management and leadership, staffing or logistics supply to ensure sustained coverage (APOC & WHO, 2004).

In response to these concerns, partners working on VAS and deworming nationally discussed the development of a tool to assist districts—the main implementers of the VAS and deworming program—to undertake a self-assessment with some support from national facilitators (HKI, A2Z & TFNC, 2006). The tool examines program components to identify potential areas of vulnerability that could affect program sustainability. The tool stimulates discussion and reflection and provides findings that can be used to prompt action at the district and national levels to sustain high coverage and to apply corrective measures where needed. This report presents the findings of the facilitated district self-assessment in Tanzania mainland and recommended actions.

1.1. Objectives of the assessment

The main objective of the study was to strengthen and sustain high coverage of the VAS and deworming program in Tanzania by identifying aspects of different program components that may impair program stability. The specific objectives were to:

- Assess the vulnerability and likely sustainability of the preventative VAS and deworming program in Tanzania mainland at the district level through a district level self-assessment
- Identify program elements that put the VAS and deworming program “at risk”
- Take action based on the findings at the national and district levels to strengthen the VAS and deworming program

2.0 STUDY DESIGN AND METHODS

The Tanzania Food and Nutrition Centre (TFNC), Helen Keller International (HKI), and A2Z - The USAID Micronutrient and Child Blindness Project organized a two-day national workshop on “Assessing vulnerability and sustainability of the preventative VAS and deworming program in Tanzania” in October 2006 in Dar es Salaam. Twenty-one people participated, with representatives from a regional health department, four district health departments, the Ministry of Health’s Reproductive and Child Health section, the National Institute for Medical Research (TFNC), UNICEF, Helen Keller International (HKI), and USAID.

The workshop participants identified the following eight program components to assess sustainability: 1) planning, 2) management and leadership, 3) logistics supply, 4) supervision and monitoring, 5) advocacy and community ownership, 6) availability of financial resources, 7) availability of human resources, and 8) program effectiveness (coverage). They also identified sources of information; methods for collection, analysis, and reporting of the information; and the process for testing, refining, and scaling up the tool. Data sources included:

- Interviews with district health staff and managers, district heads of departments and community leaders
- District annual comprehensive council health development plans for the current and past years
- Reports of implementation of the VAS/deworming plans
- Minutes of planning and evaluation meetings at both district and community levels

With the facilitation of an A2Z monitoring and evaluation consultant, participants developed a set of objective and subjective indicators for each program component, provided input into the development of data collection and scoring tools and agreed on an advocacy activity as part of the assessment process. The draft assessment tools and the advocacy activity were pretested in a district in the central zone and a district in the southern coastal zone by staff from TFNC, HKI, and the Ministry of Health's regional vitamin A field coordinators. Modifications were made based on the field test results.

To improve the reliability and timeliness of the exercise, 21 national facilitators (one per region) were selected from TFNC and other health-related institutions to guide the process. They received training on the tools and the advocacy activity. Discussion with facilitators in the course of the training resulted in further review and modification of the assessment tools. Each national facilitator was assigned a regional counterpart, often a VAS field coordinator who was either a reproductive child health coordinator or an immunization coordinator, and the two facilitated the district self-assessment. Over a one-month period (1st February to 6th March 2007), the 21 teams visited all districts in their assigned regions. All (119) districts in Tanzania mainland participated in the self-assessment.

During each district visit, a short advocacy talk was given by knowledgeable staff to council health management teams (CHMT) on the health impact of VAS/deworming, the rationale for increased district ownership of the VAS/deworming program, and the importance of prioritizing the program in their annual health plans. Approximately four members of a CHMT who were well versed with the VAS and deworming program took part in the self-assessment. The national and regional facilitators were present to guide district staff to ensure that the questions were understood. The district staff answered questions on the sustainability tool and provided their assessment for the program component being discussed. In addition, the facilitators helped district staff with review of program records, including coverage results, CCHP planning documents, and district and community meeting minutes to help answer some of the questions pertaining to planning and community involvement.

Answers to some of the questions required community visits. The facilitators and one of the district respondents visited two communities and held meetings with community local governments to explore community awareness, involvement, and support for the VAS and deworming program. From 4 to 40 community members could be involved in these meetings. The responses from community visits and district staff were then reconciled. Following the discussions with relevant district staff and community leaders, the facilitators also provided their subjective assessment of sustainability for the eight program components.

2.1. Methods of data analysis

Data were manually cleaned by a team of four national facilitators and verified by the Nutrition Coordinator for HKI Tanzania and a national coordinator for the assessment from TFNC. The coordinators contacted the districts by telephone to clarify any missing or doubtful data found during the manual cleaning.

The manually cleaned data were entered, further cleaned and analyzed in both SPSS version 12.0 and Microsoft Excel 1997 and later versions. The assessment process resulted in a set of scores based on the questionnaire completed by the district assessment team and a set of scores based on the judgment of the facilitators.

District self-assessment scores. The information collected during the district self-assessment process was aggregated and summarized using several scores.

- Program component score. Scores were assigned to the indicators selected to assess the sustainability of each program component, as shown in Annex 1. These scores were summed to give an overall score for the component. For example, the planning component consisted of six indicators: 1) inclusion of VAS/deworming in the most recent CCHP, 2) money planned for the upcoming VAS/deworming campaign, 3) reliability of the funding source, 4) presence of a VAS coordinator, 5) presence of the VAS coordinator on the planning team for CCHP, and 6) priority given to VAS/deworming in community plans submitted as part of the CCHP planning process. The total maximum score for the planning component was 9. The

overall maximum ideal scores for the other program components, based on the questions asked and indicators used, were: management and leadership, 14; logistics supply, 10; supervision and monitoring, 9; advocacy and community ownership, 22; availability of financial resources, 11; availability of human resources, 4; and program effectiveness (coverage), 9. Annexes 2-9 give the indicator scores for all districts by program component, an overall score for each program component, and total and mean scores for all districts.

- Sustainability score. Annex 10 brings together the overall program component scores from Annexes 2-9 and adds them up to get a total sustainability score for the VAS/deworming program. The maximum ideal overall sustainability score, i.e., a summation of all maximum program component scores, is 88.
- Vulnerability score. The program component scores and the sustainability scores were sorted in ascending or descending order to aid in determining which districts were most vulnerable. For all components except advocacy/community ownership and program effectiveness (coverage), districts that scored less than or equal to 50% of the ideal maximum score on the district self-assessment sustainability scale were judged vulnerable (vulnerability score=1, not vulnerable or relatively less vulnerable=0). Cut-off points on advocacy and community ownership as well as program effectiveness were set at less than or equal to 75% of the maximum ideal score (vulnerability score=1, not vulnerable or relatively less vulnerable=0) for these program components since all districts scored above 50% and most were above 75%. Overall vulnerability scores were computed by adding the vulnerability scores for each program component with 8 points indicating the highest level of overall vulnerability for a district's VAS/deworming program. The vulnerability scores are presented in Annex 11.
- *Facilitators' judgment scores*. Another set of scores represents the judgment of the facilitation team on program sustainability for each program component. The facilitators did not assess all the program indicators. Instead, they looked at each program component as a whole and assigned a value with 0=not sustainable, 1=possibly sustainable, 2=somewhat likely, 3=very likely, and 4=sustainable. The scores of the

facilitators for each component and each district are also found in Annexes 2-9. The facilitators' eight program component scores are summed and presented in Annex 10. The overall maximum ideal sustainability score a district could achieve based on facilitator judgment was 32. These scores were mainly used to provide an independent, subjective assessment of the district self-assessment. Since there was good consistency between these and district scoring, the facilitator judgment scores were not used in computing the vulnerability score.

The example below illustrates the different types of scores for one district.

Program Component	Overall Program Component and Sustainability Scores		Vulnerability Score
	District Score/ Ideal Score	Facilitator Score/ Ideal Score	District Self-Assessment (1=vulnerable)
Planning	4/9	2/4	1
Management/Leadership	7/14	4/4	1
Logistics supply	8/10	3/4	0
Supervision/monitoring	6/9	4/4	0
Advocacy/community ownership	18/22	3/4	0
Availability of financial resources	8/11	3/4	0
Availability of human resources	3/4	2/4	0
Program effectiveness (coverage)	9/9	4/4	0
Sustainability Score	63/88	25/32	
Vulnerability Score			2/8

3.0 RESULTS AND DISCUSSION

This section summarizes the results of the district self-assessment and the facilitators' judgment for each of the program components.

3.1. Planning VAS and Deworming Program

As mentioned above, the planning component was assessed based on inclusion of the VAS/deworming program in the CCHP, the proportion of estimated funds needed included in the plan, inclusion of the program in the basket fund component of CCHP,

proportion of funds planned from the basket fund component and reliability of the funding sources. Other indicators used to assess planning sustainability were the availability of a VAS and deworming coordinator, inclusion of the coordinator in the CCHP planning team and the presence and priority of VAS and deworming in community plans (Annex 1). The district scores on the planning component are indicated in Annex 2.

Districts have a variety of funding sources, including government block grants, donor basket funds, council grants (from council/district's own revenue), cost sharing funds (limited to some districts), receipt in kind (drugs and other supplies purchased by the central government and allocated to districts), UNICEF (before it joined the team of basket fund donors), and other funding. Funds budgeted in the annual CCHP should include support for all activities for which the district has prior assurance/commitment from the funding partner; and the district should be ready to implement the related planned activities. Basket funds are provided by government and donor sources for general district use, and are considered reliable since once planned there is no flexibility for their re-allocation. Some districts included UNICEF funding in the CCHP, but the majority did not, though all the councils had been receiving the fund.

Table 1 shows that 89% of the 119 districts assessed had a VAS and deworming program included in their 2006/07 CCHPs. Only 43% of the districts had planned funds in their CCHP of more than 50% of estimated actual needs to implement the June 2007 round for VAS and deworming services. About 37% of the districts did not include the program in the basket fund component of their CCHP, and only 46% had received more than 50% of their planned funds for VAS/deworming from this source. The two main sources of funds for the December 2006 round of VAS and deworming events were the basket fund and various sources not indicated in CCHP (presumably dominated by UNICEF funding), with 61% of the districts reporting these funding sources. The least reported source of funds (8% of the districts) for the December 2006 round was district council grants.

Funding. District respondents for the self-assessment were asked whether the sources of funding for their VAS and deworming programs were reliable on a 3-point judgment scale

(Table 1). Only 10 districts (8%) indicated that the funding sources were very reliable. Overall, about 49% of estimated funds needed for the June 2007 round of VAS and deworming were included in CCHPs, and the basket fund component met about 48% of funds planned for the events (Table 2). For the December 2006 round, the main sources of funds were the basket fund, sources not planned in CCHP and the government block grant. The median value was Tsh. 1,160,000 (range of 9,045,000) for basket funds and Tsh. 500,000 (range of 12,130,500) for sources not in CCHP. Most districts did not include sources from council and government block grants. The reported UNICEF funds for the round ranged from Tsh. 0 to 6,086,000; most districts reported that they did not use this funding source.

Table 1: Sustainability of planning for VAS and deworming program based on district self-assessment scores

Indicators of Planning Sustainability	Number of districts (N=119)	% of districts
VAS and deworming included in 2006/07 CCHP	106	89
> 50% estimated need of funds planned in CCHP	51	43
VAS and deworming not include in basket fund component	44	37
> 50 % planned funds obtained from basket fund component	55	46
Source of funds for December 2006 round		
-Basket funds	73	61
- UNICEF	28	24
-GB Grant	33	28
-District Council	10	8
Not planned in CCHP	73	61
Reliability of source(s) of fund		
Very reliable	10	8
Reliable	76	64
Not reliable	33	28
Presence of VAS and deworming Coordinator	106	89
VAS/deworming coordinator participate in CCHP planning	95	80
VAS and deworming prioritized in community plans	13	11
Vulnerable: Score in planning ≤ 50% of maximum ideal score	34	29

VAS and deworming coordinator and community plans. Nearly 89% of the districts reported that there was a VAS and deworming coordinator present at the district level, and 80% responded that the coordinators were members of CCHP planning teams. The

VAS/deworming program appeared as a priority in community plans in only 13% of the districts. The assessment teams reviewed a total of 2,669 letters and minutes of community meetings sent by communities to district health teams indicating health priorities in their villages/streets. Only 81 (3%) of these mentioned VAS or deworming.

The overall self-assessment score on sustainability of planning the program indicated that districts attained a mean score of 5.07 out of a maximum ideal score of 9 (56%). Thirty-four districts (29%) had sustainability scores of less than or equal to 4.5 out of 9 points and were thus judged vulnerable (Annex 2).

Table 2: Funds planned for June 2007 and December 2006 rounds of VAS and deworming events in 119 districts of Tanzania mainland

Element of planned funds assessed	Range	Mean	Standard D	Median
Estimated fund needed for June 2007 round (Tsh)	1,000,000-18,299,900	6,993,260	3,753,432	6,784,000
VAS & deworming funds in CCHP, June 2007 (Tsh)	0- 15,978,000	3,275,734	2,694,870	2,615,000
VAS & deworming planned from basket fund, June 07	0- 8,380,000	1,679,710	1,985,494	1,000,000
Percent need planned in CCHP, June 2007	0- 100	47.8	32.0	46.4
Percent need planned in basket fund, June 2007	0- 100	48.0	44.7	40.0
Funds for December 2006 from UNICEF (Tsh)	0 – 6,086,000	649,480	1,278,294	0
Funds for December 2006 from basket fund (Tsh)	0- 9,045,000	1,774,663	2,080,447	1,160,000
Funds for December 2006 from district council (Tsh)	0- 1,665,000	57,588	240,660	0
Funds for December 2006 from GB Grant (Tsh)	0-15, 978,000	920,156	2,284,739	0
Funds for December 2006 from WVT (Tsh)	0- 4,816,000	64,672	477,977	0
Funds for December 2006 from HKI Tanzania (Tsh)	0- 450,000	3,782	41,251	0
Funds spent for December 2006 but not in CCHP (Tsh)	0- 12,130,500	1,121,251	1,651,882	500,000

Discussion

Significant differences among districts are evident in planning for and receiving adequate funds for the twice-yearly VAS and deworming program. Most districts budgeted less than 50% of their actual requirements to implement the program. This is likely to result in low quality services and even failure to pay for essential services such as service provider's transport and meal allowances. Most of the districts are of the opinion that

funds are reliable even though between 37% and 72% of them had not utilized basket or government block funds for the events partly due to over dependence on UNICEF funds.

The amount of funds for VAS/deworming in most CCHPs underestimates the actual funds available for implementing the programs. UNICEF's contribution, which until recently has covered the largest proportion of program specific costs (MOST, 2005), is not reflected in plans for 76% of the districts. UNICEF has been providing between Tsh. 2,000,000 and 2,500,000 for every round of the twice-yearly events in all districts (TFNC, 2006). Absence of UNICEF funds in most CCHPs may partly be due to lack of prior assurance from UNICEF on the amount of funds it planned to provide each district council for the VAS and deworming events. UNICEF is now moving their contribution into basket funds.

Districts should be encouraged to budget for VAS/deworming using the basket fund component, which is considered the most reliable source of funds. Once the funds are allocated, there are no provisions for re-allocation (HKI, A2Z & TFNC, 2006). Moreover, with UNICEF joining the team of basket fund donors, UNICEF will no longer be providing direct support to districts for VAS/deworming.

It was unclear from the assessment if districts that included HKI and World Vision Tanzania (WVT) as source of funds for implementing the December 2006 round of the VAS and deworming were assured of this funding. HKI provided support for advocacy, skills development workshops and advocacy meetings with councilors and other key persons influential in CCHP planning between April and November in 2006 in a total of 20 districts. These activities should not have been counted as funds for provision of VAS and deworming services or have created an automatic expectation of funding for implementation. Districts should focus more on basket and other already established council funding sources to plan for their services. They should be reminded to plan only for funds that they are sure will be available, preferably with official commitment from potential funding partners.

In addition to questions on funding sources, the self-assessment included questions on the VAS coordinator. It is highly commendable that most district councils have appointed coordinators for VAS and deworming activities as this broadens the chance of prioritizing the program. Communities in many districts have not yet included VAS as a priority in their plans although they participate actively, following directives from the district councils every round of the interventions. Regular community sensitization and advocacy on health and nutrition, including VAS and deworming, is important to facilitate increased prioritization of related services.

3.2. Management and Leadership of VAS and Deworming Program

In the 119 districts assessed, 24% provided VAS and deworming services for 2 days and 80% for about one week. The number of sites used for the December 2006 round of VAS and deworming distribution ranged from 13 to 313 per district. Only 37% of the districts viewed these sites as adequate (Table 3). Ninety-eight districts (82%) had more than 80% of the sites served by at least one formal health worker. Thirteen districts (11%) reported problems with distribution of VAS and deworming services mainly because of late availability of supplies and funds for implementation. Shared transportation was most frequently cited as an example of the integration of VAS/deworming with other development activities in the council. For example, cars from non-health departments such as education and natural resources may be used for VAS/deworming.

The mean walking time of people from home to the distribution site in 97% of the districts is more than 10 minutes, and about half of the districts reported a walking time of more than 30 minutes. Except for the walking time to the service post and high client load reported at sites in 45 districts, most districts rated themselves high on the management and leadership indicators (Annex 3), with only 16% of the districts regarded as vulnerable for this program component.

Table 3: Sustainability of Management and Leadership of VAS and deworming program based on district self-assessment scores

Indicators of Management and Leadership Sustainability	Number of districts (N=119)	% of districts
Adequate distribution sites for December 2006 round	44	37
> 80% of sites served at least with one trained health worker	98	82
Average walking distance to the services within 10 minutes	3	2
Minimum population served at site <200	12	10
Maximum population served at site >500	53	45
Efficiency in provision of supplies	99	84
Efficiency in budget release	100	84
Efficiency in volunteer mobilization	114	96
Efficiency in volunteer/staff work	118	99
Efficiency in assistance from CHMT	117	98
Efficiency in cooperation with CMT	106	89
VAS and deworming distribution to be simple	117	98
Vulnerable: Score in Management/Leadership<50% of maximum ideal score	19	16

Discussion

Areas of vulnerability in many districts were inadequacy in the number of service posts, long distance from home to the posts and inappropriate number of children served per site. Too many or too few children in some sites may result in inefficient use of resources. Integration of distribution with other activities within the districts is viewed as a way for sustaining the program. Efforts should be made to protect the current best practices in management and leadership reported in most of the districts, and to facilitate sharing of experiences among districts.

3.3.Logistics Supply in VAS and Deworming Program

Most districts reported performing well in indicators related to logistics supply (Table 4, Annex 4). Almost all districts (98%) thought that communication was adequate to facilitate effective use of available resources, and 94% noted that tools were available for estimating the quantities of VAS and deworming supplies needed. Most (87%) of the districts reported that key district health managers knew how to use these tools, and the

majority of districts (68%) reported using IEC and related communication efforts in the previous round.

The indicators showing greatest vulnerability were the ones related to service delivery with 75% to 96% of the districts vulnerable in at least one of the three supply delivery indicators. Late delivery of supplies for the twice-yearly events from the national level did not allow adequate lead-time for timely and efficient delivery of the supplies to service-providing outlets within the districts. Only 55% of the districts described the transportation of VAS and deworming supplies within the districts as “very reliable.”

The mean score on the sustainability scale for logistics supply was 6.5 out of 10 maximum ideal points (65%) (Annex 10). Twenty-one districts (18%) scored less than or equal to 50% on the sustainability scale on logistics supply and thus they were judged vulnerable.

Table 4: Sustainability of Logistics Supply in VAS and deworming program based on district self-assessment scores

Indicators of Logistics Supply Sustainability	Number of districts (N=119)	% of districts
Adequate communication for effective use of resources	117	98
VAS deworming supplies available \geq 2 months before implementation	5	4
Adequate lead time for delivery of the supplies and implementation	30	25
>2 out of 5 previous rounds supplies received in time for distribution	24	20
Presence of tools for estimating VACs and deworming tablets needs	112	94
Key district health managers know how to use the tool	104	87
IEC materials/communication efforts used in previous round	81	68
Reliability of vehicle transportation of supplies within district		
- Very Reliable	65	55
- Reliable	51	43
- Not reliable	3	3
Effective cross-sectional sharing of transportation resources	118	99
Vulnerable: Score in Logistics Supply \leq50% of maximum ideal score	21	18

Discussion

Late arrival of supplies from the national level was viewed as the most vulnerable aspect of logistics supply and could weaken the sustainability of the program. Most districts

reported adequate communication to facilitate effective use of resources, particularly the effectiveness of cross-sectional sharing of transport within different departments. However, in many districts delays of delivery of supplies from national level leads to higher district costs for local distribution because it becomes difficult to integrate delivery in routine distribution and supervision routes in the districts.

Key actors at national level—TFNC, UNICEF and Medical Stores Department (MSD)—need to strive for timely procurement and delivery of the supplies to districts. Regular monitoring is important to ensure that the best practices in logistics supply such as effective cross-sectional sharing of resources and use of tools to estimate supply requirements are maintained and that weak elements are addressed.

3.4 Supervision and Monitoring in VAS and Deworming Program

Districts expressed strong support for the twice-yearly VAS/deworming program as reported in the supervision and monitoring component of the self-assessment (Annex 4). Approximately 84% of the districts consider the program very important, and 99% want to see it continued (Table 5). Three-fourths regard implementation of the twice-yearly VAS/deworming program as a routine service, although nearly 83% of the districts had more than half of their staff paid an allowance for providing the service at their routine duty stations, which suggests that the VAS program is not managed as a routine activity. Most (80%) district teams completing the self-assessment were of the opinion that staff would provide the service even without being paid allowances.

During the previous round, more than half of the distribution sites received supportive supervision by the end of the first day of implementation. The self-assessment identified two areas of weakness related to supervision. Most (54%) districts had not yet included the VAS/deworming services in their routine supervision checklist. On the basis of the criteria set for the self-assessment, many districts had more supervisors for the sites than needed for optimal utilization of resources.

Table 5: Sustainability of Supervision and Monitoring in VAS and deworming program according to district self-assessment scores

Indicators of Supervision and Monitoring Sustainability	Number of districts (N=119)	% of districts
VAS and deworming events considered routine activities	91	77
>50% of staff providing the services at duty stations paid allowances	99	83
District staff think VAS and deworming is important		
- Very important	100	84
- Important	19	16
- Not important	0	0.0
Staff think VAS and deworming program should continue	118	99
District Staff would work without being paid allowances	95	80
>50% of sites visited by supervisor end of first day of implementation	84	71
Supervisor to site ratio <1:10	50	42
VAS and deworming in district supervisor's checklist	54	45
Vulnerable: Score in Supervision & Monitoring \leq50% of maximum ideal score	11	9

The mean district self-assessment score, expressed as a proportion of the 9-point maximum ideal score for supervision and monitoring, was 67% (Annex 10). Eleven (9%) of the districts were judged vulnerable and thus likely to have low sustainability of supervision and monitoring of the program

Discussion

Elements likely to positively impact the sustainability of supervision and monitoring are staff attitude that the program is routine and should continue and a willingness to provide VAS/deworming services without allowances. Staff allowances for VAS/deworming services performed at their normal duty stations are the most likely threat to vulnerability for this program component because they imply that the services are viewed as special events rather than as a routine activity. One possible explanation for the allowance is that some staff during the twice-yearly events provide the services outside of their normal work hours and even on weekends and holidays.

To ensure sustainability, districts should optimize the number of supervisors so that they do not make the events unnecessarily expensive. Twice-yearly VAS/deworming should be included in the routine supervision checklist to facilitate “mop up actions” to reach the

children that miss the service during the days set for the mass supplementation and deworming events.

3.5. Advocacy and Community Ownership in VAS and Deworming Program

This section of the self-assessment reviews the level of awareness of the VAS/deworming program and the extent to which communities are involved, with details for each district found in Annex 6. Awareness of the program is high among council health management teams (CHMTs) with 91% of the districts reporting that their council members were well informed of the twice-yearly program and the remaining districts (9%) reporting modest awareness (Table 6). More than 90% of the districts reported that both their CHMTs and council management teams (CMTs) were aware of the program's impact on child mortality and its cost-effectiveness.

Most districts (87%) scored well on indicators of sustainability of community ownership except for planning, in which only 39% of districts mentioned any community involvement. Service providers also reported limited community involvement in planning and the absence of the VAS/deworming program on the agenda of community development meetings. More than half (59%) of the districts indicated that communities would be ready to contribute food for service providers during the twice-yearly events, and 92% thought that communities would protest if the program ended.

Table 6: Sustainability of Advocacy and Community Ownership of VAS and deworming program based on district self-assessment scores

Indicators of Sustainability of Advocacy and Community Ownership	Number of districts (N=119)	% of districts
Awareness of members of CHMT of the program		
-Most aware	108	91
-Somewhat aware	11	9
- Not aware	0	0
Knowledge of CHMT on impact of the program on child mortality	119	100
Knowledge of CHMT on cost effectiveness of the program	117	98
Awareness of CMTs on impact of the program on child mortality		
-Most aware	68	57
-Somewhat aware	51	43
- Not aware	0	0
Knowledge of CMTs on impact of the program on child mortality	116	98
Knowledge of CMTs on cost-effectiveness of the program	108	91
Community members aware about VAS and deworming		
-Most aware	69	58
-Somewhat aware	50	42
- Not aware	0	0
Community involved in planning	46	39
Community involved in selecting service providers	104	87
Community involved in service provision	106	89
Community involved in follow up of missed children	107	90
Community involved in mobilizing parents/caretakers	116	98
Community involved in other contributions (food, accommodation to service provider premise/venue, etc)	117	98
VAS and deworming in community development agenda	29	24
Service providers reporting community involvement in planning	55	46
Community would contribute food/funds for service providers if needed	70	59
Communities would protest if the program stops	109	92
Advocacy presentation done to council during the assessment	40	34
Vulnerable: Score in Advocacy and Community Ownership \leq75% of maximum	35	29

The mean score attained by districts was 79% of the maximum ideal score on the sustainability scale (17 out 22 points) for advocacy and community ownership. The facilitator’s judgment was similar with a mean of 70%. Even with a higher cut-off point for vulnerability (\leq 75% of the maximum points on the scale) than most of the other program components, only 35 districts (29%) were judged vulnerable.

Discussion

Although most districts seem to perform well in terms of advocacy and community ownership, there are areas for improvement, particularly as they relate to building a spirit of community ownership of the program. Well-designed and regular sensitization and advocacy in CCHPs will help involve communities in planning and prioritization of VAS/deworming events and minimize dependency on decision-making from higher administrative levels. Even though these events have been occurring since 2001, districts need to remind communities of key health interventions such as VAS and deworming that are often overlooked when communities identify their priorities.

3.6. Financial Resources Available in VAS and Deworming Program

The contribution of financial resources available to sustain the VAS and deworming program was assessed by reviewing CCHPs for the past five years to determine if the program was included in the council health plans and the proportion of program funding obtained from the basket fund component of CCHP. Annex 7 provides each district's response to the questions on available financial resources. Table 7 shows that 94% of the districts had included VAS and deworming in their CCHP at least once in the past five years. Seven districts—Bunda, Sikonge, Uyui, Mufindi, Lindi Urban, Simanjiro and Mwanga—did not include the program in any of their CCHPs in the 5 years prior to the self-assessment.

Table 7 also indicates that 31 districts (26%) did not include more than Tsh 500,000 for the VAS/deworming program in their basket fund component in any of the five previous distribution rounds held prior to the assessment. One encouraging sign is that 77% of the districts did include the program in the basket fund for the most recent round at the time of the assessment.

Table 7: Sustainability of Available Financial Resources for VAS and deworming program based on district self-assessment scores

Indicators of Sustainability of Available Financial Resources	Number of districts (N=119)	% of districts
Number of years with VAS/deworming in CCHP out of 5 past years		
>3 rounds out of 5	37	31
2-3 rounds out of 5	56	47
1 round out of 5	19	16
None (0)	7	6
VAS & deworming in basket fund for the most recent distrib. Round	81	77
Distrib. rounds out of 5 previous, with VAS in basket fund > 500,000/=		
3-5 rounds	54	45
1-2 rounds	34	29
None (0)	31	26
Vulnerable: Score in Available Financial Resources \leq 50% of maximum	74	62

For the five distribution rounds prior to the survey, use of the basket component met only 16% to 29% of the estimated funds needed by the districts (Table 8). Although the amount of funds related to the estimated need and basket component for the five rounds was not compiled in this assessment, the median estimated amount needed by a district for the June 2007 round (the most immediate round after the self-assessment) was reported at Tsh 6,784,000 with a range of Tsh 1,000,000 to Tsh 18,299,900.

Taking all these factors together, the mean score on overall sustainability of available financial resources was 4.8 on an 11-point sustainability scale (40%). Nearly two-thirds (62%) of the districts were judged vulnerable on the financial resources program component.

Table 8: Percent of estimated need of funds used from basket fund by 119 districts in 5 distribution rounds prior to the assessment

Distribution Round	% of estimated need used from basket fund
December 2006	29
June 2006	19
December 2005	20
June 2005	18
December 2004	16

Discussion

Three-fourths of the districts included the VAS/deworming program in at least half of the distribution rounds reviewed. However, more than half of them utilized the basket fund of greater than Tsh 500,000 in less than half of the distribution rounds (1-2 rounds out of 5). During the workshop to develop indicators and tools for the self-assessment, participants agreed that Tsh 500,000 was a minimum acceptable amount that a district would need to run one round of the VAS and deworming events. Inadequate inclusion of VAS/deworming in CCHP, particularly limited utilization of the basket fund (<30% estimated need), should be addressed to improve financial sustainability of the program.

3.7. Human Resources Available in VAS and Deworming Program

More than half (53%) of the districts reported that they did not have adequate human resources for VAS and deworming distribution, and only 19% of the districts had more than 80% of health staff positions filled (Table 9, and Annex 8 for district details). However, most districts (>86%) reported successful involvement of social groups in VAS/deworming activities through public announcements, transport assistance, planning, etc., and most reported an acceptable ratio of volunteers plus staff to population for their sites. The mean score on the overall sustainability on human resources available was 2.5 on a 4-point sustainability scale (63%) and 2.9 on the 4-point facilitator scale (73%). Overall, about half (52%) of the districts were assessed as vulnerable in the area of available human resources for sustained programming.

Table 9: Sustainability of Human Resources Available for VAS and deworming program according to district self-assessment scores

Indicators of Sustainability of Available Human Resources	Number of districts (N=119)	% of districts
Adequate manpower for the distribution	56	47
>80% of health staff vacancies filled	23	19
Ratio of service providers to population >1:500	103	87
Social groups used for mobilization of activities for last distribution	112	94
Vulnerable: Score in Human Resources Available \leq 50% of maximum	62	52

Discussion

Many districts report that they do not have adequate manpower for the VAS distribution, and most indicate a high staff vacancy rate, which is assumed to have a negative effect on the provision of routine health services. However, given the high coverage achieved, staff openings do not seem to have a significant effect on the twice-yearly VAS and deworming events most likely because community volunteers complement health sector staff used for the distribution. Furthermore, the adequacy of ratio of staff and volunteers to population for most districts suggests that human resource management is not a critical issue. This mismatch between the perception of inadequacy of manpower, and good community involvement, mobilization of volunteers and adequate staff ratios may reflect the amount of time and energy needed to achieve these manpower goals, and a sense that this process may be vulnerable. To improve overall health services, local councils and the central governments need to address the issue of high staff vacancies, and support districts in their mobilization of volunteers.

3.8. Effectiveness of the VAS and Deworming Programs

Assessment of program effectiveness, as measured by coverage, mainly involved a review of the five recent distribution rounds prior to the assessment. Most districts (83%) reported that they had consistently attained a VAS coverage of more than 80% in all five previous distribution rounds and had strategies to reach those that were missed, sustain the services and reduce program costs (Table 10 and Annex 9). The reported common features of the “mop-up” and program sustainability strategies were: house-to-house visits to reach children that were missed during the twice-yearly events, increasing the number of service distribution sites or days, inclusion of the program into CCHPs and increased community sensitization.

Table 10: Sustainability of Effectiveness of VAS and deworming program based on district self-assessment scores

Indicators of Sustainability of Program Effectiveness	Number of districts (N=119)	% of districts
VAS Coverage >80% in any one of the 5 previous distribution rounds	119	100
VAS Coverage >80% in all the 5 previous distribution rounds	99	83
VAS coverage over the 5 previous rounds has been increasing/stable	105	88
Maximum and minimum difference in VAS coverage <20%	90	76
Mop up strategy following VAS and deworming distribution	110	92
Content of mop up strategy		
-House to visit to reach children that missed the service	49	41
-Increasing the number of distribution posts or days	23	19
-Increased community sensitization	22	19
-Others ^a	17	14
Strategy to sustain the program and reduce cost	105	88
Inclusion of the program in CCHP	77	73
Inclusion of the program in basket fund component of CCHP	9	9
Regular community sensitization	8	8
Add service delivery posts	2	2
Others	9	9
Vulnerable: Score in Program effectiveness < 75% of maximum ideal	9	8

^{a)} Others included: Integration of the program with routine services including mobile and outreach services, increasing allocation of funds to RCH services.

Many districts seemed to perform well on the indicators selected to measure sustainability of program effectiveness (coverage). Only nine districts (8%) were judged vulnerable with little likelihood of sustaining high coverage. These districts were Kibaha Municipal, Kishapu, Ilala Municipal, Lindi Urban, Kilombero, Mtwara Mikindani Municipal, Kilindi, Ruangwa and Tabora Municipal. Of the 9 districts found vulnerable in terms of program effectiveness, 8 were also found vulnerable in financial resources; 4 in advocacy and community ownership; 2 in planning; 1 in logistics supply; and 1 in monitoring and supervision. Five of the 9 vulnerable districts were urban. Therefore, inadequacies in financial resources and community ownership as well as urban settings could be important factors to consider in devising efforts to sustain high coverage in VAS and deworming.

The mean district self-score on program effectiveness was about 93% of the maximum ideal on a 9-point sustainability scale.

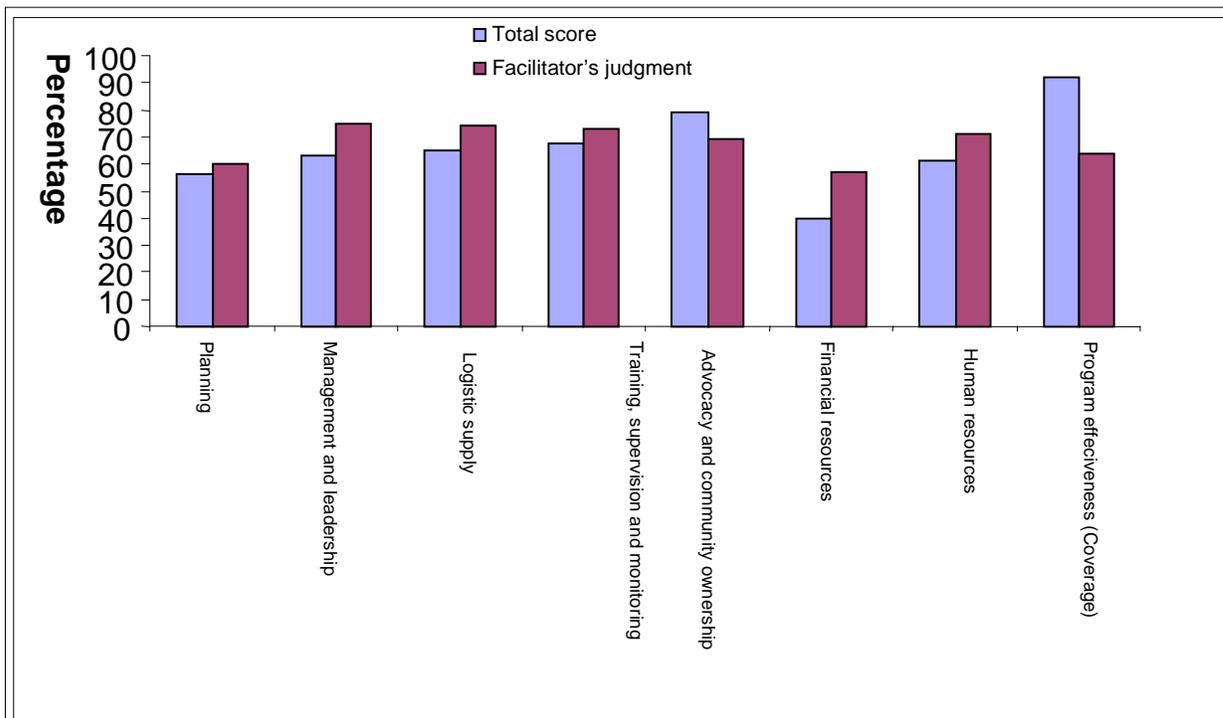
Discussion

Efforts should be made to maintain high performance in the indicators for program coverage and help the few low-performing districts to improve their status. Of the vulnerable districts, Kibaha Municipal, Kishapu and Kilindi did not have sufficient coverage data to facilitate assessment on effectiveness because they recently formed independent health management teams. These three districts had not yet started organizing the VAS and deworming events in some of the distribution rounds assessed although they were officially recognized as districts in 2002. Of greater concern are the other six districts, 4 of which are urban councils that implemented the twice-yearly events in all the rounds assessed. Improvement in components of financial resources available and advocacy and community ownership may contribute to improving the sustainability of program effectiveness.

3.9. Overall Sustainability in VAS and Deworming Program

The mean district self-scores on the eight program components of sustainability, expressed as a percent of the maximum ideal scores on the program component sustainability scales (see section 2.1 -methods of analysis - for a discussion of maximum ideal scores), ranged from 46% on available financial resources to 93% on program effectiveness (Figure 1).

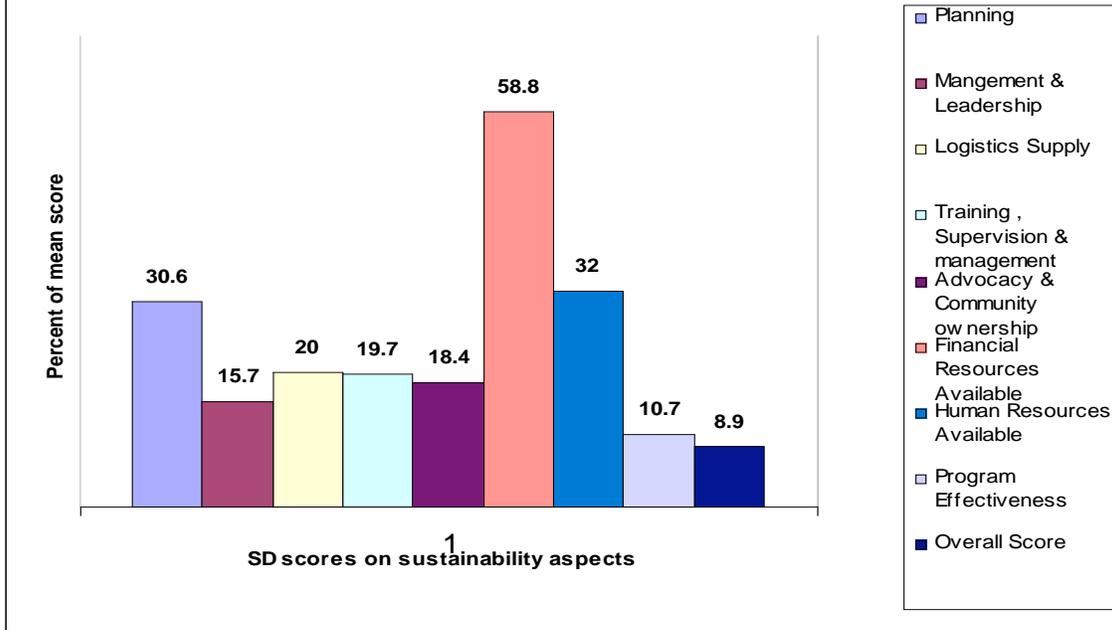
Figure 1: Mean scores on district self-assessment and facilitator's judgment on sustainability of VAS and deworming program components



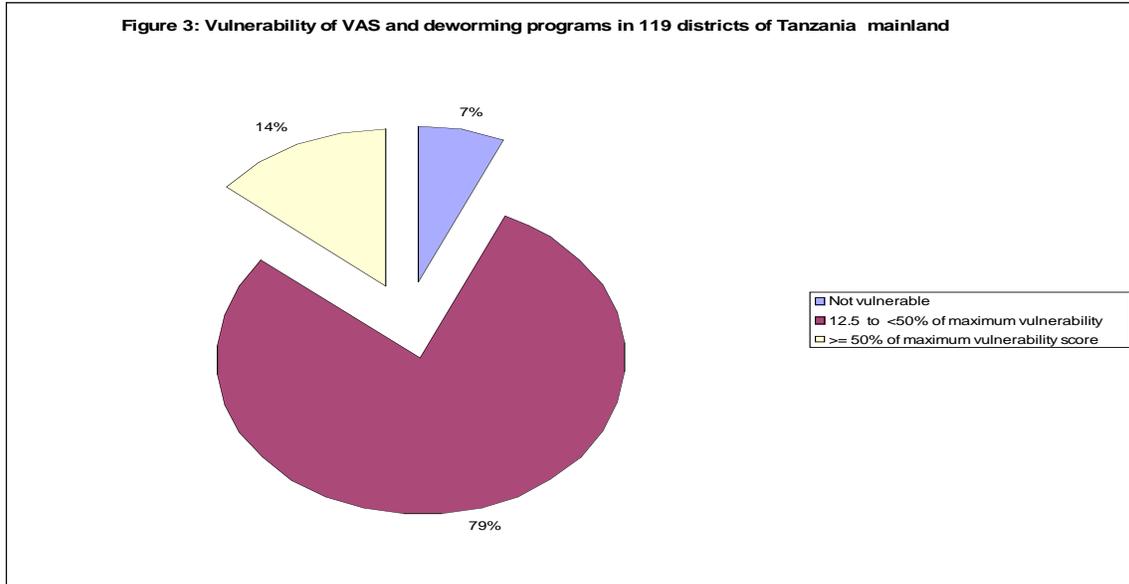
The mean scores on national facilitators' judgment based on a maximum possible score of 4 for each program component ranged from 58% on available financial resources to 80% on program effectiveness. In six of the eight components, the facilitators' judgment was higher than the district teams' assessment, although for most components there was reasonable agreement.

There was more variability (higher proportions of deviations from mean scores) for three components: financial resources, human resources and planning from district self-assessments (Figure 2). The standard deviation expressed as a percentage of the mean scores was greater than 30% for these three components, suggesting greater differences between districts for these components. The same pattern was observed for facilitator scores.

Figure 2: SD as proportions of mean scores on aspects of sustainability of VAS and deworming program



The sustainability scores were used to develop vulnerability scores for each program component and for the overall program. Overall vulnerability scores ranged from 0 to 5 on an 8-point scale. Seventeen districts (14%) were judged most vulnerable as they scored greater than or equal to 50% (4/8) of the maximum possible points on the vulnerability scale (Figure 3 and Annex 11).



Discussion

Generally districts had low sustainability scores compared to the maximum ideals, suggesting need for improvement. Both the district self-assessments and the facilitators' judgment showed considerable variability in available financial resources and planning. The scores on planning and available financial resources as well as those on overall vulnerability may be useful in selecting districts where more efforts to improve the programs should be focused. This assessment indicates that these efforts needed to be directed to the 17 most vulnerable districts.

4.0 GENERAL CONCLUSION AND RECOMMENDATIONS

The indicators used in the sustainability tool have shown variability among districts; thus, they will likely be useful in comparing the probability of sustaining the program across districts. A higher proportion of districts are more vulnerable in indicators related to financial resources, planning and human resources compared to other components assessed.

Seventeen districts were judged most vulnerable based on an overall score for all program components. Therefore, efforts to improve sustainability of the program should be

directed to districts that are not performing well on available financial resources, planning, logistics supply, and advocacy and community ownership and those that were categorized as most vulnerable in terms of the overall sustainability assessment. Since the vulnerable districts are scattered all over the regions of Tanzania mainland, it is important to harmonize government and partner efforts to ensure that all of these districts are supported to improve their likelihood of sustaining the program. Also, the key actors at national level need to ensure timely procurement and delivery of supplies to districts. Some of the best practices demonstrated by many districts should be shared with the more vulnerable districts to help them improve their areas of vulnerability.

One of the key next steps should be sharing district experiences in acquiring and allocating funds for the VAS and deworming program. Regular monitoring is important to ensure that the best practices in all program components are maintained and the weak ones addressed. Future supervision of the VAS program should include a checklist that helps supervisors review the key program components, and records progress with some of the indicators reflecting greatest vulnerability.

5.0. REFERENCES

African Program for Onchocerciasis Control and WHO (2004). Guidelines for conducting evaluation of the sustainability of CDTI projects. APOC Management, Lagos Nigeria. p. 44.

Alderman, H; Konde-Lule, J; Sebuliba, I; Bundy, D; and Hall, A. Effect on weight gain of routinely giving albendazole to pre-school children during child health weeks in Uganda: Cluster randomized controlled trial. *BMJ* 2006; 333; 122-124.

Beaton G.H.R., Martorell K.A., Aronson et al (1994): Effectiveness of vitamin A supplementation in the control of young child morbidity and mortality in developing countries. ACC/SCN state of the Art series, Nutrition Discussion Paper 13, New York, NY United Nations.

Ching, P; Birmingham, M; Goodman, T; Shutter, R; and Loevisohn, B. Child mortality impact and costs of integrating vitamin A supplementation into immunization campaigns. 2000; 90; 10; 1526-1529.

Helen Keller International, A2Z Project: The USAID Micronutrient and Child Blindness Project & Tanzania Food and Nutrition Centre (2006). Proceedings of the workshop on assessing the vulnerability and sustainability of the preventative vitamin A supplementation and deworming programs in Tanzania. 17-18 October 2006, White Sands Hotel, Dar es Salaam Tanzania.

MOST, USAID Micronutrient Program (2005). Cost Analysis of the National Twice-Yearly Vitamin A Supplementation Program in Tanzania. Arlington, Virginia, USA. p. 44.

National Bureau of Statistics (NBS) Tanzania and ORC Macro. 2005. United Republic of Tanzania. Tanzania Demographic and Health Survey 2004-05. Dar es Salaam: NBS and ORC Macro.

Ndossi, G. 2004. History of vitamin A supplementation program in Tanzania. Paper presented at the national vitamin A supplementation stakeholders meeting held at White Sands Hotel, Dar es Salaam, 26-27 August 2004.

Nyandindi, U. 2004. Overview of deworming program in Tanzania mainland. Paper presented at the national workshop for developing guidelines, training package, communication strategy, IEC materials and monitoring tools for integrating vitamin A supplementation and deworming for children aged less than 5 years and post partum women, held at TANESCO training institute, Morogoro Tanzania, 19-23 April 2004.

Tanzania Food and Nutrition Centre (TFNC). 2006. Reported on Approved Support of funds by UNICEF to district Councils of Tanzania Mainland from years 2001 to 2006. Records of national task force meetings on vitamin A supplementation and deworming program.

TFNC (1998). Preliminary report of the 1997 national Vitamin A Survey. TFNC Report No.1880. TFNC, Dar es Salaam Tanzania.

TFNC & Helen Keller International (HKI) (2007). VAS and deworming data base covering years 2001 to 2006. HKI Tanzania, Dar es Salaam.

Wohlgemuth, L (2006). Changing Aid Modalities in Tanzania (ECDPM Policy Management Brief no. 17). Maastricht: ECDPM.

World Health Organization (2005). The evidence is in: Deworming helps meet the millennium development goals. WHO/CDS/CPE/PVC/2005.12 issue on deworming. WHO, Geneva. Switzerland.

World Health Organization (2006). Action against worms. January 2006, Issue 6. wormcontrol@who.int.WHO, Geneva. Switzerland.

ANNEX 1

District level sustainability assessment instrument: SCORING GUIDE

Indicators for activities and processes

Planning

(Maximum score = 9 + 4 self scoring points)

Question	Instructions	Response	SCORING	
1. Has the council included VAS and de-worming in the most recent CCHP?	Review current CCHP plan	Yes No	Score yes = 1 Score no = 0	
2. Is the money <i>planned</i> for the upcoming VAS and de-worming round greater or equal to 50% of the estimated financial requirement?	Review current <i>planning</i> budget in CCHP and discussion with CHMT (for requirement)	Total estimated need: _____ Tsh Total planned for VAS/de-worming: _____ Tsh Total planned from basket: _____ Tsh % of need: _____ % of total planned from basket: _____	Score % of need > 50% = 1 Score % of total planned from basket > 50% = 1	
2b. What were the sources of planned funds (according to CCHP) for the December 2006 round of VAS and deworming campaigns?	Review current <i>planning</i> budget in CCHP and discussion with CHMT (for the funding sources)	Source: UNICEF: Tsh. _____ Gov. Block Grant: Tsh. _____ District council: Tsh. _____ Basket Fund: Tsh. _____ Others (specify): _____: Tsh. _____ _____: Tsh. _____	No scoring	
2c. How much money that was not reflected in the CCHP was spent for the December 2006 round of the campaigns by your district?	Review records of the December 2006 rounds of the services	Amount of money: Tsh _____		
3. Is the funding source/s reliable?	Record opinion of district staff	Very reliable Reliable Not reliable (circle one)	Score very reliable = 2 Score reliable = 1 Score not reliable = 0	
4. Is there a VAS coordinator?	Record response	Yes No	Score yes = 1 Score no = 0	
5. Is the VAS coordinator on the planning team for CCHP?	Review CCHP team list	Yes No	Score yes = 1 Score no = 0	
6. Was VAS and de-worming noted as a priority in the community plans submitted as part of the CCHP planning process for the most recent planning year?	Review notes, letters, other materials from village committees, review CCHP planning meeting minutes	Yes No # letters, notes with VAS: _____ # letters, notes reviewed: _____ (Record yes if any mention VAS or de-worming in any community note)	Score yes = 1 Score no = 0 Score # letters, notes reviewed > 15 = 1	
With regard to <i>planning</i> , in your overall judgment, is the program likely to be sustainable?			Score yes = 4 Score very likely = 3 Score somewhat likely = 2 Score possibly = 1 Score no = 0	
Yes	Very likely	Somewhat likely	Possibly	No

Management and leadership (Maximum score = 14 + 4 self scoring points)

Question	Instructions	Response	
7.What is the total number of distribution sites used during the most recent distribution?	Review VAS de-worming implementation report (or plan if report not available)	Total number of sites used:_____	No scoring
8.Was this an adequate number?	Record opinion of district staff	Yes No	Score yes = 1 Score no = 0
9.If not, how many more are needed?	Record opinion of district staff	Total number of sites needed:_____ % of need met: (#used/# needed): _____	Score > 80% of need met = 1
10.What is the average walking time to the distribution site for this district?	Record opinion of district staff	Average time (minutes):_____	Score < 10 minutes = 1
11.What % of all distribution sites had at least 1 trained health worker present for the distribution during the most recent round?	Review VAS de-worming report and district staffing documents	Total number of trained staff available:_____ Total number of sites:- _____ % of sites with 1 or more staff:_____ (opinion of district staff)	Score > 80% of sites with 1 or more trained staff = 1
12.What was the maximum number of children served at any distribution site (include estimated catchment population for site)?	Review VAS de-worming plan and district facility catchment records	Maximum number served for any site:____ Estimated catchment population for this site: ____	Score < 500 = 1
13.What was the minimum number of children served at any distribution site (include estimated catchment population for site)?	as above	Minimum number served for any site:____ Estimated catchment population for this site: ____	Score > 200 = 1
14.How many days were distribution sites kept open for the last round (# days)?	VAS de-worming plan	Total number of days sites open:_____	No scoring
15.Was the distribution efficient?	Record opinion of district staff responsible for:	Efficiency score:_____ (add scores below)	Use efficiency score
Supplies	(procurement officer)	Score:_____ Record 1 if yes, 0 if no	(see above)
Budget release	(DMO)	Score:_____	(see above)
Volunteer mobilization	(VAS coordinator)	Score:_____	(see above)
Volunteer/staff work	(VAS coordinator)	Score:_____	(see above)
CHMT assistance	(VAS coordinator)	Score:_____	(see above)
Non-health district government (CMT)	(DMO)	Score:_____	(see above)
16.How simple is VAS and de-worming distribution in your district?	Record opinion of district staff	Very simple Simple Not simple (circle one)	Score very simple = 2 Score simple = 1 Score not simple = 0
17.What part of the program is not simple?	as above	Area of difficulty:_____	No scoring
18.What are the specific ways that the distribution is integrated with other program activities?	Record opinion of district staff	Record areas of integration:_____	No scoring
With regard to <i>management and leadership</i> , in your overall judgment, is the program likely to be sustainable?			Score yes = 4 Score very likely = 3 Score somewhat likely = 2 Score possibly = 1 Score no = 0
Yes	Very likely	Somewhat likely	Possibly No

Logistics supply (Maximum score = 10 + 4 self scoring points)

Question	Instructions	Response		
19. Is there adequate communication to facilitate effective use of resources?	Record opinion of district staff	Yes No	Score yes = 1 Score no = 0	
20. Are VAS and de-worming supplies available at least two months before the campaign?	Review record from most recent distribution round, MSD delivery note	Yes No Date of receipt of VAC: _____ Date of start of round: _____	Score yes = 1 Score no = 0	
21. Is this lead-time for receipt of supplies adequate?	Record opinion of district staff	Yes No	Score yes = 1 Score no = 0	
22. For the past 5 rounds, how many times were supplies received in adequate time?	Review VAS de-worming plans	# times supplies received in time:- _____ (out of last 5 rounds)	Score >2 = 1	
23. Are there tools for estimating capsule needs for each round?	Review tools, or record opinion	Yes No	Score yes = 1 Score no = 0	
24. Do all DCCOs, DRCHCOs, DHO or responsible supply officer know how to use the tools?	Record opinion of district staff, or interview individual staff	Yes No # staff interviewed: _____	Score yes = 1 Score no = 0	
25. Were IEC materials and other communication efforts available and used during last distribution round?	Record opinion of district staff	Yes No	Score yes = 1 Score no = 0	
26. Is vehicle transportation of VAC and de-worming tablets reliable to sites within the district?	Record opinion of district staff or transport officer	Very reliable Reliable Not reliable (circle one)	Score very reliable = 2 Score reliable = 1 Score not reliable = 0	
27. Is there effective cross-sectional sharing of transportation resources, when needed?	Record opinion of district staff	Yes No	Score yes = 1 Score no = 0	
With regard to <i>logistics supply</i> , in your overall judgment, is the program likely to be sustainable?			Score yes = 4 Score very likely = 3 Score somewhat likely = 2 Score possibly = 1 Score no = 0	
Yes	Very likely	Somewhat likely	Possibly	No

Add as question for national level: Is vehicle transportation of VAC and de-worming tablets reliable to the districts? (from minutes of national task force meetings)

Supervision and monitoring (Maximum score = 9 + 4 self scoring points)

Question	Instructions	Response		
28. Is VAS and de-worming considered a 'routine' activity?	Record opinion of district staff	Yes No	Score yes = 1 Score no = 0	
29. What percent of staff doing the distribution <i>at their duty station</i> receive an allowance for this work?	Review record from most recent distribution round	# of staff working at regular duty site during distribution: _____ # of these paid an allowance: _____ % paid: _____	Score < 50% paid = 1	
30. Does the district health staff think VAS and de-worming is important?	Record opinion of district staff	Very important Important Not important (circle one)	Score very important = 2 Score important = 1 Score not important = 0	
31. Does the district health staff think the campaign should continue?	Record opinion of district staff	Yes No	Score yes = 1 Score no = 0	
32. Would district health staff do the distribution if they were not receiving payment?	Record opinion of district staff	Yes No	Score yes = 1 Score no = 0	
33. Were all distribution sites visited by a supervisor by the end of the first day?	Review record from most recent distribution round	# sites visited by supervisor by end of 1 st day: _____ Total # sites: _____ % visited by end of 1 st day: _____	Score > 50% = 1	
34. What is the supervisor to site ratio for the most recent round?	as above	# supervisors used: _____ # sites: _____ Ratio supervisors/sites: _____	Score < 1:10 = 1	
35. Are twice-yearly VAS and deworming services included in district's supervision checklist?	Review district's supervision checklist and interview district individual	Yes No	Score Yes=1 Score No=0	
With regard to <i>training, supervision and monitoring</i> , in your overall judgment, is the program likely to be sustainable?			Score yes = 4 Score very likely = 3 Score somewhat likely = 2 Score possibly = 1 Score no = 0	
Yes	Very likely	Somewhat likely	Possibly	No

Advocacy and Community Ownership (Maximum score = 22 + 4 self scoring points)

Question	Instructions	Response		
36.Are CHMT members aware of the VAS and de-worming program?	Record opinion of district staff, or interview individual staff	Most aware Some aware None aware (circle one)	Score most aware = 2 Score some aware = 1 Score none aware = 0	
37.Knowledge about impact on child mortality and morbidity?	as above	Yes No	Score yes = 1 Score no = 0	
38.Knowledge about cost-effectiveness?	as above	Yes No	Score yes = 1 Score no = 0	
39.Are heads of departments of the District Council aware of the VAS and de-worming program?	Record opinion of member of council, or interview individual members	Most aware Some aware None aware (circle one) # interviews conducted:_____	Score most aware = 2 Score some aware = 1 Score none aware = 0	
40.Knowledge about impact on child mortality and morbidity?	as above	Yes No	Score yes = 1 Score no = 0	
41.Knowledge about cost-effectiveness?	as above	Yes No	Score yes = 1 Score no = 0	
42.Do community members know about VAS and de-worming?	Record opinion of district health staff, or interview community leaders or caregivers	Most aware Some aware None aware (circle one) # interviews conducted:_____	Score most aware = 2 Score some aware = 1 Score none aware = 0	
43.How does the community get involved? i) Planning these services ii) Selecting service providers iii) Provision of the services iv) Follow up on those who miss the services v) Mobilize parents/caretakers vi) Others contributions, e.g. facilities like service table, accommodation to service providers, service, house/premise at which the services are providers ,etc	Record opinion of district health staff, or interview community leaders	# interviews conducted:_____	Score yes = 1 Score no = 0 	
44.Is VAS and de-worming on the agenda in village health committee meetings?	Review health committee minutes	Yes No # agendas reviewed:_____	Score yes = 1 Score no = 0 Score # agenda reviewed>5=1	
45.Do community distributors report that villages are involved in planning?	Record opinion of district health staff, or interview distributor	Yes No # interviews conducted:_____	Score yes = 1 Score no = 0	
46.Is the community ready to contribute food or funds to support the distribution?	Record opinion of district health staff, or interview community leaders	Yes No # interviews conducted:_____	Score yes = 1 Score no = 0	
47.If the program were stopped, would community members protest?	Record opinion of district health staff, or interview community leaders or caregivers	Yes No # interviews conducted:_____	Score yes = 1 Score no = 0	
48.Was an advocacy presentation made to the District Council during this sustainability assessment?	Review minutes of meetings with council	Yes No	Score yes = 1 Score no = 0	
With regard to advocacy and community ownership , in your overall judgment, is the program likely to be sustainable?			Score yes = 4, very likely = 3 Somewhat likely=2, possibly=1, No = 0	
Yes	Very likely	Somewhat likely	Possibly	No

To add to national level:

Is every member of the Regional health secretariat aware of the VAS and de-worming program?

Does every Regional health secretariat member know about VAS and de-worming impact on child mortality and morbidity? Are all Regional health secretariat members aware of VAS as a cost effective intervention?

Financial Resources (Maximum score = 11 + 4 self scoring points)

Question	Instructions	Response		
49. Out of past 5 years, for how many years has any funding been included in the CCHP for VAS?	Review of CCHP for past 5 years	# years reviewed: _____ # years funding included: _____	Score > 3 = 3 Score 2-3 = 2 Score 1 = 1 Score 0 = 0	
50. Was the VAS/de-worming distribution included in the basket for the most recent distribution round? (actual, not planned)	Review record from most recent distribution round	Yes No	Score yes = 1 Score no = 0	
51. For how many rounds has more than 500,000 Tsh been allocated from basket funds for the distribution?	Review records from at least the past 5 distribution rounds	# distribution round records reviewed: _____ # with >500,000 Tsh allocated _____	Score 3-5 = 2 Score 1-2 = 1 Score none = 0	
52. What % of the estimated need has been used from basket funds for each of the past 5 distribution rounds?	Review records from past 5 distribution rounds	% for most recent round: _____ % for previous round: _____ % for previous round: _____ % for previous round: _____	Score > 50% = 1 for each year (total 5 points)	
With regard to financial resources , in your overall judgment, is the program likely to be sustainable?			Score yes = 4 Score very likely = 3 Score somewhat likely = 2 Score possibly = 1 Score no = 0	
Yes	Very likely	Somewhat likely	Possibly	No

Human Resources (Maximum score = 4 + 4 self scoring points)

Question	Instructions	Response		
53. Is there adequate manpower for the distribution?	Record opinion of district staff	Yes No	Score yes = 1 Score no = 0	
54. What is the current staff vacancy rate?	Review district health staffing records	# staff positions: _____ # filled: _____ % filled: _____	Score > 80% = 1	
55. What was the ratio of population to health staff plus volunteers used for the most recent distribution?	Review record from most recent distribution round	Total district population: _____ # staff used for distribution: _____ # volunteers used for distribution: _____ Ratio staff+volunteers/population: _____	Score staff + volunteer to population ratio > 1: 500 = 1	
56. What was the ratio of formal to staff to volunteer for the last distribution round?	data from above	Ratio staff / volunteers: _____	No scoring	
57. Were social groups (CORPS, religious institutions, local NGOs etc) used for mobilization activities for the last distribution?	Record opinion of district staff	Yes No # of social groups used: _____	Score yes = 1 Score no = 0	
With regard to <i>human resources</i> , in your overall judgment, is the program likely to be sustainable?			Score yes = 4, Very likely = 3 Somewhat likely = 2, Possibly = 1, No = 0	
Yes	Very likely	Somewhat likely	Possibly	No

Effectiveness (coverage) (Maximum score = 9 + 4 self scoring points)

Question	Instructions	Response		
58.What was the district coverage for the last 5 distribution rounds?	Review records from past 5 distribution rounds	Coverage most recent round: ____% Coverage from previous round: ____% Coverage from previous round: ____% Coverage from previous round: ____%	Score > 80% = 1 for each year (total score = 5)	
59.Has coverage of at least 80% been achieved for the last 5 rounds?	data from above	Yes No # rounds in last 5 with >80%: _____	Score yes = 1 Score no = 0	
60.Has coverage increased, decreased or remained stable over time?	data from above	Increased Decreased (circle one)	Score increased = 1 Score decreased = 0	
61.What has been the maximum and minimum coverage achieved for the past 5 distribution rounds?	data from above	Maximum coverage: ____% Minimum coverage: ____% Difference in coverage (maximum – minimum): _____percentage point difference	Score difference in coverage < 20 percentage points = 2	
62.Is there a mop-up strategy following the distribution?	Record opinion of district staff	Yes No	Score yes = 1 Score no = 0	
63.If so, what does this entail?	Record opinion of district staff	Describe method used: _____	No Scoring	
64.Has the district council devised a strategy aiming at sustaining and reducing costs of running the program?	Record opinion of district staff	Yes (Explain) No _____	No Scoring	
With regard to coverage , in your overall judgment, is the program likely to be sustainable?			Score yes = 4 Score very likely = 3 Score somewhat likely = 2 Score possibly = 1 Score no = 0	
Yes	Very likely	Somewhat likely	Possibly	No

Sources of information

- CCHP for past 5 years
- CHMT work plan for past 5 years
- VAS de-worming plans and reports for past 5 years
- Logistics supply management documents
- Minutes from CHMT meetings for current year
- Minutes from District Council meetings for current year
- Letters, minutes, and other material recording community input for health planning for current year
- Report on district health budget spent, provided for past 5 years
- Notes from interviews (district health staff, district council members, community leaders, caretakers)
- District population report (most recent figures)
- District health facility and staffing report (most recent report)