

# Assessing the Sustainability of the Tanzania National Vitamin A Supplementation Program

## Results of a sustainability analysis



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*This assessment was made possible by the generous support of the American people through the United States Agency for International Development (USAID) under the terms of Cooperative Agreement No. GHS-A-00-05-00012-00. The contents are the responsibility of the Academy for Educational Development, Helen Keller International, and Tanzania Food and Nutrition Centre, and do not necessarily reflect the views of USAID or the United States Government..*

## **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 home visits and other 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.