Building a multisectoral vitamin A program in Uganda: Establishing sustainable roles for effective implementation

Louise Sserunjogi, MOST/USAID, Kampala, Uganda; Philip WJ Harvey, MOST/USAID and Johns Hopkins Bloomberg School of Public Health, Baltimore MD, USA.

Introduction

An analysis of the nutrition situation in Uganda was carried out in 1999 in order to identify priority nutrition actions for the health sector. At that time there was no nationally representative biochemical data on vitamin A deficiency (VAD), but indirect data suggested strongly that VAD was a problem of public health significance – under-five mortality rate was high, VAD was identified as a significant clinical problem in a “typical” district, and the usual diet was low in vitamin A.

The primary constraints to effective micronutrient nutrition programs identified by the analysis were:

• Little appreciation of the significance and magnitude of micronutrient malnutrition;
• Lack of integration of nutrition within district health services;
• No comprehensive national micronutrient strategy;
• Limited involvement of the private sector; and
• Data gaps on key policy and program issues.

The timing of the assessment was opportune in that it coincided with finalization of a new Health Policy. The new policy focused attention on a set of priority health services known as the Uganda National Minimum Health Care Package. This package included nutrition improvement. The policy also specified that responsibility and budget for implementation of the services was to be decentralized to district and sub-district levels. The Government Health Sector Strategic Plan called for improving vitamin A status through increasing coverage of supplementation for preschool children, enhancing breast-feeding, and increasing consumption of vitamin A-rich foods through agriculture and fortification. This paper outlines a few of the key processes undertaken in the effort to achieve sustainable implementation of a comprehensive vitamin A program in Uganda.

Supplementation

In 1999 vitamin A was being delivered to children through routine EPI measles vaccination at 9 months of age and through National Immunisation Days (NIDS) for polio. The Ministry of Health instituted a stakeholders' taskforce. This consisted of technical officers, donor agencies such as UNICEF, World Bank, WHO, USAID, community-based organizations, and academic institutions. This partnership-building approach strengthened collaboration and coordination among stakeholders for a national program. The national protocols for vitamin A supplementation were made consistent with WHO recommendations.

The first step taken in strengthening the on-going supplementation interventions was to understand the knowledge and practices of health workers and caregivers in relation to vitamin A deficiency and supplementation. Several research and policy documents were reviewed, operational research was carried out, and exit interviews at NIDs were conducted. This process facilitated the development of a series of communication and advocacy materials and fed directly into the development of training programs. The Ministry of Health
launched the supplementation program by supporting one district to pilot test all the processes needed to implement a successful program at district and community levels. This trial addressed community mobilization efforts and tracked the cost of activities and community response, as well as testing methods for monitoring and evaluation. This approach helped the district to assess resource mobilization efforts as well as community involvement in such an exercise.

The months of May and November were selected for the biannual distribution of vitamin A to all eligible children and the national program was launched in May 2002. Stakeholders such as UNICEF and the World Bank Early Childhood Development Project assumed responsibility for supporting distributions in the areas in which they were working. Since 2002 different delivery mechanisms for getting the vitamin A to children have been used as opportunities present themselves. For example, in August and September 2002, a measles campaign was undertaken in 16 border districts and the vitamin A distribution was added to that. Immediately after that, the rest of the country was covered. These different delivery mechanisms have made it difficult to monitor coverage. The Ministry of Health estimated national annual coverage of 50% in 2002 and 60% in 2003.

In April 2004 the Ministry of Health launched a new strategy to promote twice-annual CHILD DAYS. During the CHILD DAYS an integrated package of child health interventions is delivered. This includes vitamin A to all children aged 6 months to 5 years, de-worming, immunization, growth monitoring, insecticide treatment of mosquito nets, and health education. Coverage in the May round in 2004 was estimated at 76%.

### Diet Diversification

The nutrition group worked with the agriculture sector through NARÓ, the National Agricultural Research Organization; CIP/VI-TAA, the International Potato Center; and VEDCO, a community-based organization working with women farmers to promote the production and consumption of orange-fleshed sweet potato (OFSP) in Luwero. This was a pilot project based on building women’s capacity to produce new varieties of orange-fleshed sweet potato for their households. The women were instructed in new techniques of field preparation, planting, pest-control, harvesting, processing and food preparation. Careful qualitative research was done to understand the local context into which this new product was being introduced. This work was used to develop advocacy and communications used subsequently in promoting the benefits of the potato in new areas.

The new varieties had good yields and increased household food security. The new crop was popular with children because of its taste, texture, and color. But this was not so for adults. The women enjoyed and valued this project – they appreciated the learning process and gained confidence in their new skills. The Queen of one of the kingdoms launched the OFSP and this proved a substantial endorsement for it as a valuable commodity for improving children’s health. Collaboration between the health and agricultural sectors played a big role in the promotion of the vitamin A rich OFSP as a health food; a factor that greatly motivated women to have it available to feed their children.

Other stakeholders became involved and scaled it up to new districts. To date, more that 40 out of the 56 districts in the country have introduced production of the OFSP. The potato served as a household food commodity as well as an income generation initiative as it was being disseminated throughout the country. The success of the initiative was attributed to the strategy used to build hands-on-skills of the women in a community where sweet potato was already the main staple for household consumption. Two particular women from this community became role models and trainers for programs promoting OFSP in Uganda and also outside Uganda.
Food fortification

The initiative to promote food fortification invested heavily in building a public/private partnership to generate and maintain an interest in improving the nutritional quality of manufactured foods. With donor support and technical assistance, a multisectoral working group was set up to guide and monitor the implementation of this initiative. Food industries were sensitized on the magnitude and consequences of micronutrient deficiencies and on the role the private sector could play to contribute to the reduction of malnutrition in the country. The private sector identified a marketing opportunity and at the same time saw an opportunity to contribute to improving nutrition in the country. The government played its role by setting up a multisectoral-working group to guide and monitor implementation, develop implementation protocols and guidelines, standards and regulations, promote good manufacturing practices and develop advocacy and communication strategies.

A food fortification trial program was initiated with the participation of three factories (one for vegetable oils and two for maize flour). The intentionally limited scope and purpose of this pilot was to assess the feasibility of food fortification in terms of industries’ capacity to adhere to regulations, standards, and good manufacturing practices. The National Bureau of Standards developed food fortification standards and regulations, while the industries contributed their infrastructure for the trials. Other partners in this initiative were a university group that undertook food consumption studies and consumer protection groups that supported advocacy efforts for fortified foods.

The pilot study was successful and led to the launch of the food fortification program — comprising at the outset the vegetable oil manufacturer (for vitamin A) and two maize flour milling industries (for multiple vitamins and minerals) that participated in the trial. A commercial advertising company was engaged to develop an aggressive communications strategy targeting selected audiences and using several channels including a 6-month campaign of radio spots, talk shows and print media of posters, fact sheets and brochures.

Conclusion

In Uganda, we found six key factors to creating sustainable roles for improved nutrition across several sectors:

- Government support and ownership of public programs;
- Policy and program review by the government ministries – strengthening policies by developing implementation protocols and guidelines for supplementation, operational standards and regulations, and promoting good manufacturing practices for fortification;
- Stakeholder participation and partnership to accelerate actions;
- Research to test program feasibility, to identify the new varieties of sweet potato most likely to be adopted, to understand local culture and economic context for developing effective communication and training materials. This research was always undertaken in ways that contributed to the capacity and skills of local institutions necessary for sustainability;
- Advocacy and communication for community mobilization;
- Critical donor support and technical assistance to build national capacity for implementation.

The national food fortification logo is intended to create demand for products, and at the same time, ensure quality control and thus protect both producers and the consumers.
The multiple strategies used to ensure adequate intake of vitamin A in Uganda have had complementary effects in reaching different groups of the population. The national vitamin A program has increased demand for vitamin A by motivating consumers through the several communication and advocacy efforts used by different sectors. The Ministry of Health’s twice-annual CHILD DAYS strategy bears the symbol of vitamin A capsule supplementation; partnership with the food industries for the promotion of food fortification requires the national food fortification logo. The promotion of the vitamin A rich orange-fleshed sweet potato promotes growing of the potato to be fed to those that require it most, the children. This remains a work in progress and coverage of all interventions needs to be improved upon. We need to use the most appropriate and most cost-effective means through partnership building to reach the vulnerable populations.

Poster used to promote new varieties of orange-fleshed sweet potato in districts where they are being introduced.