PRIORITIZING LIFESAVING VITAMIN A SUPPLEMENTATION IN THE CONTEXT OF RESOURCE SHOCKS

ADVOCACY BRIEF

PURPOSE

Recent reductions in global funding for maternal and child health may require governments to make difficult decisions, particularly in low- and middle-income countries (LMIC) of Africa and Asia, where resources for health programs are already stretched. This Global Alliance for Vitamin A (GAVA) brief highlights the importance of safeguarding vitamin A supplementation (VAS) — a low-cost, high-impact intervention that is proven to reduce child morbidity and mortality in settings where vitamin A deficiency (VAD) is a public health problem. The brief also recommends practical, flexible approaches to deliver VAS to vulnerable children aged 6–59 months within different contexts if countries need to make adjustments to their approach.

KEY MESSAGES

- **VAD is a silent killer.** In VAD-affected areas, children aged 6–59 months are at significantly higher risk of death from common infections like measles and diarrhoea.[1]
- **VAD persists.** Many LMIC continue to face moderate-to-severe levels of VAD*, with the highest burden in sub-Saharan Africa and South and Southeast Asia.[2]
- **VAS saves lives.** In areas with VAD and high under-five mortality, VAS remains one of the most cost-effective interventions to prevent young child deaths,[3] especially among children aged 6–23 months where the mortality rate tends to be higher.[4]
- **Removing VAS now would be a costly setback.** Until food systems and health services can reliably address the underlying causes of VAD among children, VAS remains essential for continued reduction of under-five mortality.
- **Flexible delivery = optimal child survival.** Adapting delivery to the local context and using all opportunities to provide VAS will better ensure that all children aged 6–59 months are reached twice yearly, including the most vulnerable and hard-to-reach children.
- **Targeted action works.** Microplanning, using local data to inform programming, and conducting targeted communication and outreach to underserved populations can better ensure that no child is left behind.

* According to WHO guidance on determining the level of importance of a public health problem based on the prevalence of low serum retinol.[5]

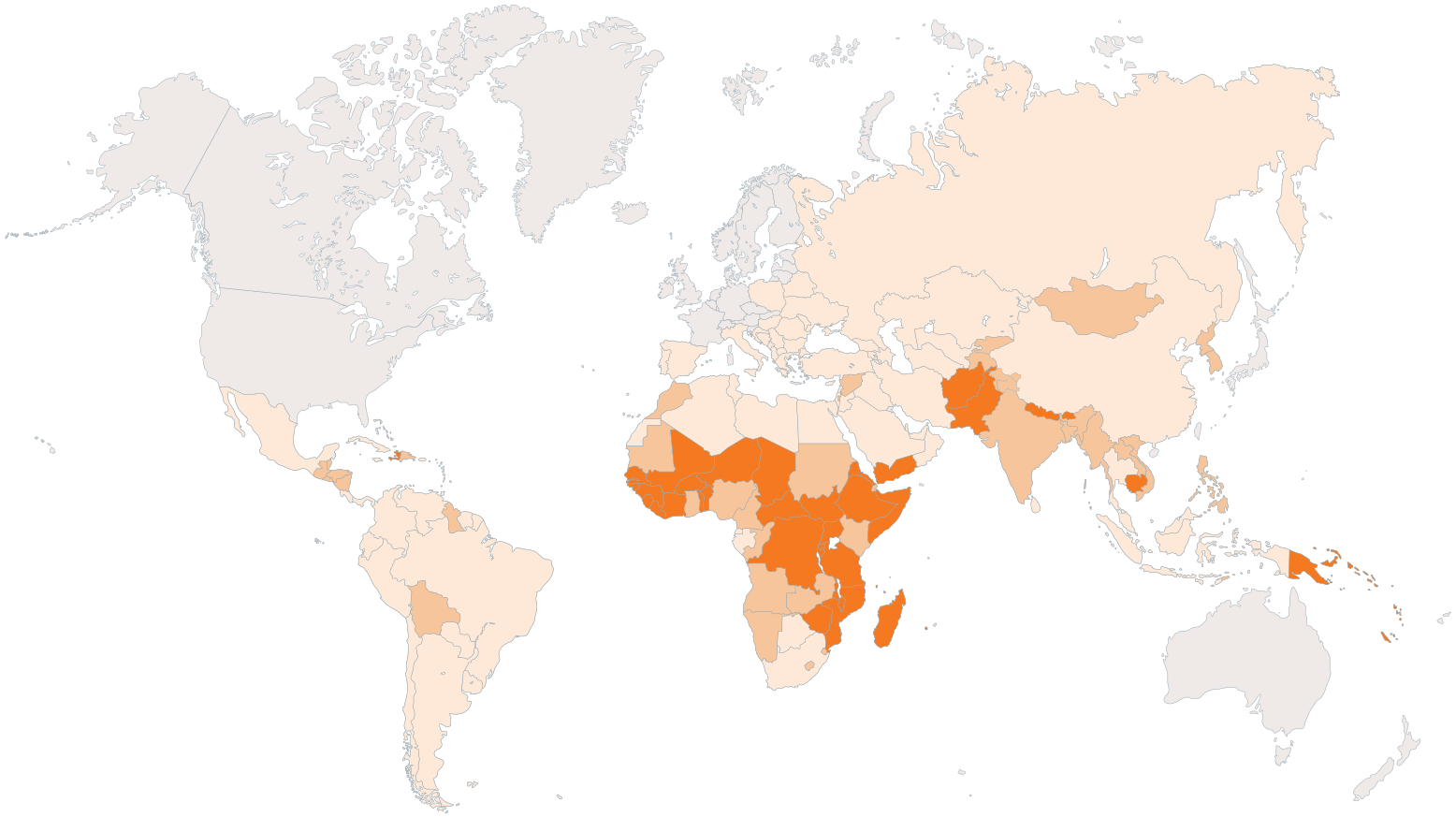
WHY VITAMIN A STILL MATTERS

Vitamin A is essential for human health and survival. According to the World Health Organization (WHO), children under five in many LMICs still face particularly serious consequences from VAD,[6] including blindness, impaired growth, weakened immunity and death. Children aged 6–23 months are the most biologically vulnerable, especially those who are not optimally breastfed and are exposed to infections like measles and diarrhoea. These children often have low body stores of vitamin A and limited access to vitamin A-rich foods, putting them at the highest risk of death from VAD.

WHERE VITAMIN A DEFICIENCY PERSISTS

While global progress has been made, VAD continues to threaten children's lives, particularly in sub-Saharan Africa and South and Southeast Asia. 84 countries are likely to have a moderate-to-severe public health problem according to VAD levels among children under five years of age.[7]

Figure 1
Classification of countries by degree of public health significance of vitamin A deficiency



Public health significance (0–5 years of age)

Mild **Moderate** **Severe** **H-SDI or no significance**

This map is for illustrative purposes only and is not to scale. The boundaries used on this map do not imply endorsement by GAVA.

Adapted from: Song, P., et al. (2023). The prevalence of vitamin A deficiency and its public health significance in children in low- and middle-income countries: A systematic review and modelling analysis. *J Glob Health, 13* (2023 Aug), 04084. doi: 10.7189/jogh.13.04084

In countries where VAD remains a public health problem, the root causes are strikingly similar:

- **Inadequate diets** due to suboptimal child feeding practices and food insecurity
- **Weak public health systems** with limited capacity for routine delivery of preventive services
- **Lack of clean water and sanitation**, causing frequent infections that reduce vitamin A absorption

These challenges are often compounded by climate shocks, conflict and political instability. In these contexts, vulnerable children — especially those in hard-to-reach areas — are the most likely to be missed, deepening inequities and contributing to high under-five mortality.

Encouragingly, vitamin A supplementation has been demonstrated to be lifesaving in these contexts. In high-risk settings, administering VAS twice yearly has been associated with up to a 24% reduction in all-cause mortality among children under five years of age.

WHY MAINTAINING VITAMIN A SUPPLEMENTATION IS CRITICALLY IMPORTANT

VAS programs are implemented in different ways depending on the context of the country. With the reduction of external support for delivery platforms (e.g., national immunization days) and less support for maternal and child health programming in general, many countries may be facing tough trade-offs. Yet in settings where under-five mortality is still high and VAD is a public health problem, **WHO recommends that twice-yearly VAS continue to be prioritized as a critical, life-saving and cost-effective intervention**[8] — buying time while longer term solutions like food fortification and system strengthening take root.

GAVA strongly recommends maintaining VAS for all children aged 6–59 months in high-risk areas until the following:

- Reliable, year-round access to vitamin A-rich foods is achieved;
- Routine health services consistently reach children with high coverage; and
- Underlying conditions driving VAD have sustainably improved.

Removing VAS prematurely not only risks a reversal of progress toward reducing under-five mortality, but it also risks the lives of the children who need it most.

ADAPTING VITAMIN A SUPPLEMENTATION TO TODAY'S REALITIES

Sudden shocks that reduce resources for programs may lead governments to reprioritize target groups and reconsider the way that VAS is delivered. Although delivery strategies might need to be adapted to changing contexts and declining funding, the goal must remain constant in areas with high under-five mortality and where VAD is a public health problem: **to reach every child at risk of VAD with VAS every six months, starting at six months of age**. Success in achieving this goal hinges on understanding local barriers to coverage and applying **context-specific, equity-focused solutions**.

ESSENTIALS FOR EFFECTIVE VITAMIN A SUPPLEMENTATION PROGRAMMING

- **Co-deliver VAS and deworming**, providing deworming medication to children, starting at 12 months of age.
- **Integrate VAS** into national and subnational health budgets and plans.
- **Tailor delivery of VAS** through micro-planning based on local data, terrain and service capacity.
- **Use every available delivery platform**, from campaigns and community-based volunteers to facility-based and outreach services.
- **Invest in and conduct social and behaviour change communication** to improve caregiver awareness and create demand for VAS.
- **Ensure local supplies of vitamin A capsules and deworming tablets** are available when needed, especially for frontline health workers.
- **Train and support frontline workers**, including community volunteers, to consistently reach underserved children.
- **Monitor VAS coverage** to identify issues and make program corrections in a timely fashion.

TAILORING VITAMIN A SUPPLEMENTATION TO MAXIMIZE REACH AND RESILIENCE

DELIVERY OPTIONS

- In settings with high levels of VAD and high under-five mortality, countries have historically achieved high VAS coverage through special campaigns, such as Child Health Days or national immunization days. These approaches have been heavily reliant on external funding, which is now quickly declining. Nevertheless, opportunities to **piggy-back VAS on any mass campaign** in the country with a similar target group may exist and could be cost-effective, particularly for reaching children in underserved areas.
- Efforts to **integrate VAS into routine facility- and community-based health services** — such as growth monitoring and routine immunization — are underway in several countries. Initial coverage is often low, particularly for children over the age of 12 months, but it can improve with investments in outreach, demand generation, supportive supervision and health worker training.
- **Delivery by community-based health volunteers** can extend the health system effectively into communities, particularly in countries with hard-to-reach areas. Since community-based health volunteers know their communities well, they know who and where the eligible children are, helping to effectively reach more children right at the age of six months and every six months thereafter. These volunteers can mobilize caregivers to seek VAS for their child, or if the policy environment permits, may even provide VAS directly to the children. This approach can be highly equitable and responsive, but it depends on the policy environment, reliable training, supervision and, where applicable, a reliable supply of vitamin A capsules to this level. Care must be taken not to overburden volunteers, and recognition of their time and effort is important for sustainability.

- **Delivery of VAS through non-health programs**, such as education or social services, can be effective if the programs cover all or part of the VAS target population. This approach can have broad reach and can be highly sustainable, but it will require interdepartmental coordination, training and supervision, and a reliable supply of vitamin A capsules. Non-health programs can also be enlisted to augment social and behaviour change communication efforts.
- **Hybrid models**, combining VAS delivery through campaigns, health facilities, and/or community-led delivery, offer a flexible, context-specific path to reaching all children aged 6–59 months. This approach allows resources to be prioritized to reach eligible children living in vulnerable circumstances while implementing the most appropriate delivery mechanisms everywhere to ensure coverage, even as conditions change. They can be tailored to the local context but require decentralized management, microplanning, implementation and funding.

PRIORITIZING VITAMIN A SUPPLEMENTATION IN THE FACE OF SEVERE BUDGET CUTS

When national health budgets are slashed, difficult choices must be made. However, even in a crisis, smart resource prioritization can protect the lives of the most vulnerable. In instances where VAS must be scaled back due to severe resource constraints, GAVA recommends that policy makers use the following prioritization framework to ensure that limited supplies and services are directed where they will have the most impact.

SOME VITAMIN A SUPPLEMENTATION SUCCESS STORIES

- Ethiopia's and Senegal's shift from campaigns to routine delivery showed initial drops in coverage but are rebounding with targeted investments.[9]
- Nepal empowers community health volunteers to deliver VAS in remote villages, achieving sustained coverage in hard-to-reach areas.[10]
- South Sudan piloted integration of VAS into community-led screening for wasting programs with good results, particularly for the youngest children.[11]
- India improved coverage for children aged 12–59 months using a facility- and community-based hybrid approach during two designated VAS delivery months.[12]

PRIORITIZATION FRAMEWORK FOR VITAMIN A SUPPLEMENTATION DELIVERY AND TARGETING

1	**Protect the most vulnerable with VAS**	• Prioritize children aged 6–24 months, especially in areas with high under-five mortality and known VAD. This age group is at highest risk of death from infections like measles and diarrhoea
2	**Focus on high-risk geographies**	Maintain universal VAS in districts or regions with: • High under-five mortality rates (>50 per 1,000 live births) • Moderate-or-severe VAD prevalence among children under five • Evidence of food insecurity, conflict or displacement
3	**Optimize delivery through the most cost-effective channels**	• Integrate VAS into established, functioning touchpoints like immunization contacts, growth monitoring sessions or community health worker visits rather than launching new platforms • Piggyback on planned campaigns or mobile health outreach where feasible • Consider using different strategies for age groups or sub-nationally, depending on the context.
4	**Don't eliminate VAS — instead, phase strategically**	• If elimination is being considered, transition away from VAS only in areas that meet all of GAVA's criteria for scaling back VAS (see GAVA's Conditions for Scaling Back Universal Preschool Vitamin A Supplementation for additional guidance). Before scaling back VAS services, ensure that children receive deworming twice a year and have year-round access to vitamin A-rich foods, clean water, sanitation systems and strong routine health services.
5	**Monitor and evaluate impact**	• Even in pared-down programs, build in basic tracking of VAS coverage and VAD-related outcomes to ensure that cuts are not disproportionately harming those at greatest risk. Be prepared to make program adjustments and reinstate VAS as evidence indicates.

BOTTOM LINE

There is no one-size-fits-all VAS delivery strategy. GAVA strongly encourages countries to maintain VAS in areas with high levels of VAD and high under-five mortality. Every opportunity should be leveraged to reach all vulnerable children twice yearly by using what works, adapting what's needed and protecting progress made. However, if cuts are necessary, they should be made strategically, ensuring resources are focused where they will have the greatest impact.

ACKNOWLEDGMENTS

GAVA is a technical advisory group and coalition of partners committed to supporting countries to scale up and improve their vitamin A supplementation programs in settings where vitamin A deficiency remains a public health problem, as a means to accelerate progress toward child survival and reduce the global impact of vitamin A deficiency.

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