

good news on nutrition



briefing 2: integration

Successful programmes in Uganda and Nigeria demonstrate how integrated programmes can generate 'win-wins' across multiple sectors. The UK should increase spending on nutrition and promote nutrition integration, and encourage other actors to do the same. At the preschool level, the UK should promote multi-stakeholder partnerships for research into immunisation-nutrition integration, and ensure that research findings are utilised by UK-funded programmes and widely shared. At the school level, the UK should become a member of the School Meals Coalition, and recognise the importance and potential of integrated school nutrition and health programmes for development.

Introduction

There can be no dressing up the fact that humanity is way offtrack in achieving Sustainable Development Goal 2 and the World Health Assembly global nutrition targets.¹ However, progress on certain aspects of nutrition is occurring in some countries.

This is the second in a series of briefings that highlight positive change in key aspects of nutrition. It focuses on integration, i.e. the delivery of 'a range of interventions that address multiple needs through collaboration within and across a variety of sectors... and with participation of all relevant stakeholders to achieve common goals through national systems'.² In particular, this briefing explains the importance of providing vitamin A supplementation (VAS) and home-grown school feeding (HGSF) through integrated programmes using real-life stories of success.

The scale of the challenge is considerable. An estimated 250,000-500,000 children who are deficient in vitamin A become blind annually, and half of them die within one year of losing their sight.³ Furthermore, around 284 million children of primary and secondary school age are going hungry.⁴

Yet, as the following examples of integrated programming (at the preschool level in Uganda and at the school level in Nigeria) demonstrate, it is possible to rise to these challenges in ways that strengthen health, food, education and social protection systems. The UK should increase spending on nutrition and promote nutrition integration (including by continuing to use the Organisation for Economic Co-operation and Development's nutrition policy marker and committing to the proposed Global Compact on Nutrition Integration), and encourage other donors and Global South governments to do the same.

The UK should take two additional measures. First, the UK should promote multi-stakeholder partnerships for research into immunisation-nutrition integration (INI), and ensure that findings are utilised by UK-funded programmes and widely shared. Second, the UK should become a member of the School Meals Coalition, and recognise the importance and potential of integrated school nutrition and health programmes for development.

Why integrated programmes are important

The Lusaka Agenda calls for greater alignment of global health initiatives with efforts to achieve universal health coverage and strong health systems. Meanwhile, the Stepping Up Effective School Health and Nutrition partnership calls for a more joined-up, systems approach to school-based nutrition and health interventions.

This increased focus on integration is underpinned by the recognition that the potential impact of one set of interventions can be strongly affected by interventions in other areas. Nutrition, health, agriculture, education and other sectors are deeply interrelated. Marginalised groups, including women and girls, pay the highest price when this reality is underappreciated.

There are a number of specific advantages associated with integrated programming.⁵ First, by reducing duplication (e.g. in relation to logistics) and thus saving costs, integration can enhance efficiency. This can be especially important in insecure settings, where access to populations may be challenging. Second, integrated approaches encourage questions about the particular needs of communities and how these needs can be strategically served. Third, integrated services can reduce the burden of care that disproportionately falls on women and girls,⁶ while supporting their development more comprehensively and effectively than isolated initiatives.

There are strong connections between malnutrition and vulnerability to infections. For example, stunted children are around 32% more likely to be zero-dose (children who have not received any routine vaccination) than to have received at least one vaccine.⁷ Similarly, under-vaccination is associated with an 18% higher likelihood of a child being wasted.⁸

There are also strong connections between malnutrition and diminished educational access and attainment. School meals in the Global South boost enrolment by 13%, attendance by 12% and test scores by 15%.⁹ Similarly, there is clear evidence that nutrition education in schools in the Global South improves the nutritional status of students.¹⁰

Preschool level integration

Good news on preschool integration: Uganda

Where vitamin A deficiency is a public health concern, VAS is a highly cost-effective nutrition intervention. Indeed, a recent analysis estimates that VAS is 9 to 59 times as effective as spending on unconditional cash transfers.¹¹ VAS not only protects against blindness, it also prevents at least 12% of child deaths caused by common childhood illnesses.¹²

INI programmes deliver both nutrition interventions (which may include VAS) and vaccinations to preschool children at key contact points between the health system and the child. In Kampala, INI was originally a part of the Maternal and Child Health and Nutrition (MCHN) Activity programme, which was jointly funded by the US and Ugandan governments from January 2020 to December 2024.¹³ Since the end of the MCHN Activity programme, INI in the capital is now funded solely through domestic resources.

INI in Kampala involves: VAS; nutrition assessments and referrals (e.g. to therapeutic feeding and specialised counselling) if necessary; and Bacillus Calmette-Guérin, diphtheria-tetanus-pertussis, measles and polio vaccinations. INI is delivered through high-volume public health facilities and community outreach. Both approaches are necessary, as well over half of the city's population live in informal settlements, and find transport costs and clinic waiting times to be barriers to accessing health services.

The availability of multiple health services in the form of a 'one-stop shop' is attractive to members of the public. Significant progress was seen just a year after INI implementation. For example, data from community outreach demonstrated an increase in VAS of 52% for the first dose and 44% for the second dose. Similarly, data from public health facilities showed an increase of 116% in full immunisation by one year of age.

There are many reasons for the success of INI in Kampala. First, INI is supported by various national strategies, policies, guidelines and tools. Second, INI has helped to strengthen coordination and linkages within and between different health sectors. For

example, health workers now routinely perform nutrition assessments for children who come for immunisation, and now more actively promote breastfeeding babies in the first hour of birth.

Third, INI efforts have emphasised the importance of collecting and using high quality data for planning, implementation, monitoring and learning purposes. Fourth, regular training and mentoring for health workers, so that they can identify gaps in relation to immunisation and nutrition regardless of the presenting complaint, has been vital.

When Aisha's son, Troy, was 8 months old, she took him to a clinic funded by the MCHN Activity programme.¹⁴ Aisha says: "At the clinic, I was helped a lot. I was shown how Troy was sick – that he was malnourished." Troy was referred for further tests and diagnosed with tuberculosis, which was the cause of his malnutrition. He was rapidly put on a treatment regimen for tuberculosis and given ready-to-use therapeutic food. Thankfully, as Aisha explains, Troy's health is improving: "He crawls and plays, he is recovering rapidly, and [he] sleeps well."

Preschool integration challenges in Uganda and beyond

Despite the success of INI in Kampala, this approach has faced several challenges. These challenges are also broadly relevant to other contexts in Africa and the wider Global South.

First, integration requires more planning time and greater coordination at different levels. Greater alignment of systems and processes, along with clarity regarding the division of responsibilities, can maximise efficiency. In addition, more robust regulation of the private sector, so that it contributes to – or at least does not undermine – the goals of integrated programmes, is necessary. For example, private health providers in Kampala lack designated catchments and targets regarding service delivery, which can lead to vaccine wastage and difficulties in assessing their performance.

Second, there is a lack of clinical staff. This leads to longer queues and waiting times for patients, a reliance on volunteers for delivering services, and incomplete documentation of interventions and outcomes. Higher rates of recruitment and retention, as well as more effective training and support, are essential to ensure sufficient numbers of empowered clinical health workers.¹⁵

Third, there remain many members of the public who are not aware of the benefits of immunisation or nutrition interventions. In the case of Kampala, some people leave after the child in their care has been immunised, as some of the nutrition interventions that are available take more time to administer. Thus greater community sensitisation and mobilisation, as well as tailored social and behaviour change communications, can help to inform and educate.¹⁶

Fourth, there is a great need for more research that is conducted in partnership with communities. In broad terms, there is a need to generate further evidence on the dual impact and cost-benefit of integration. More specifically, how INI can reach zero-dose and severely malnourished children, and how incentives can affect the uptake of INI services, are both questions worthy of further investigation.

Finally, the new US government's freezing of much overseas development assistance (ODA) has been hugely damaging to health, and development more broadly, in Uganda.¹⁷ While it is unclear how INI in Kampala specifically will be affected, there is likely to be at least some negative impact, especially as it was hoped that delivery of INI through both public health facilities and community outreach could be scaled up across the capital.

School level integration

Good news on school-based integration: Nigeria

HGSF is a government-led school feeding model that aims to provide safe, fresh, diverse, nutritious and culturally-appropriate school meals, using food sourced from local smallholder farmers rather than from (often subsidised) food aid or imported commodities. The Committee on World Food Security,¹⁸ African Union¹⁹ and G20²⁰ have endorsed HGSF.

School feeding programmes are important social safety nets across the world, with a benefit-cost ratio of between 7 and 35 in the Global South.²¹ A recent review conducted by the World Food Programme demonstrates that HGSF initiatives specifically can generate significant gains for schoolchildren and smallholder farmers alike.²² These gains can be even greater when the school platform is used to deliver health and nutrition interventions alongside HGSF.²³

In Nigeria, the Renewed Hope National Home-Grown School Feeding Programme ('the Programme') was originally initiated in 2016. The Programme seeks to integrate its activities with school-based deworming (providing anti-parasitic drugs to children to rid them of intestinal worms) and water, sanitation and hygiene (WASH) interventions. The Programme reaches 9.9 million children attending grades 1-3 in public primary schools across the country.²⁴ Moreover, the Programme procures food from over 200,000 local farmers and has created 106,000 catering jobs (mainly for women).²⁵

In 2019, the federal government announced that the Programme had helped to increase enrolment in primary schools by over 20% in just four years.²⁶ The Programme also has significant health benefits for schoolchildren, in terms of better nutrition and lower prevalence of worms.²⁷ Furthermore, the households of smallholder farmers benefiting from the Programme are twice more likely to be food secure compared with the households of smallholder farmers who do not benefit from it.²⁸

There are two key reasons for the Programme's success. First, there is genuine political leadership driving the Programme. Successive Presidents have promoted a version of it. As a result, the Programme is embedded within national legislation and policies, and is one of only two such programmes in West Africa to be entirely funded through national resources.²⁹

Second, a clear system allows the Programme to flourish. School caterers employed by the Programme are expected to adhere to strict nutritional targets for meals, which are informed by the School Menu Planner PLUS tool (an artificial intelligence-powered online menu creation platform developed through a multi-stakeholder partnership). These caterers are supported by national- and state-level government officials to connect with, and purchase from, eligible local smallholder farmers (or aggregators who work with local smallholder farmers).

Abraham Ikongshul, a journalist, says the Programme '... offers a powerful antidote to Nigerians' struggle with hunger and unequal access to education... With continued commitment and collaborative efforts, a plate of food can truly transform lives'.³⁰

School-based integration challenges in Nigeria and beyond

While they are undoubtedly exciting, integrated HGSF programmes in Nigeria, and elsewhere in Africa, face a number of challenges.³¹

First, there are financial challenges. In Nigeria, disbursement of funds by the federal government can be inconsistent, which disrupts the smooth operation of the Programme. Moreover, the federal government is seeking to double the Programme's reach by the end of 2025³² (only 39% of primary schoolchildren currently benefit from it).³³ However, this will require substantial investment, particularly if deworming and WASH, which have lagged behind school feeding,³⁴ are to be scaled up to the same extent.

Second, there is a need for more capacity building and better infrastructure. In regard to capacity building, caterers require more training in meal preparation, handling and distribution. Similarly, smallholder farmers require greater support to supply food during off-seasons and to form groups and networks. In regard to infrastructure, there is a need to address poor road connectivity and inadequate storage facilities, as these cause transportation problems and food loss.

Third, monitoring, evaluation and learning (MEAL) need to be improved. The current MEAL system in Nigeria can cause delays and leave gaps, which can affect all groups that participate in the Programme, and impair cross-sectoral coordination. It can also undermine accountability mechanisms and hinder learning to inform the evolution of the Programme. Robust MEAL frameworks and comprehensive management information systems are necessary to generate relevant, timely, accurate and consistent data.

Fourth, greater community participation is required to maximise the potential of integrated HGSF programmes. Although community involvement in decision-making processes (through entities such as school-based management committees and parent-teacher associations) is a core tenet of the Programme in Nigeria, insufficient awareness-raising and advocacy efforts have resulted in limited engagement among community members. This has to change in order to build support for the Programme and ensure accountability, effectiveness and sustainability.

Finally, there is a peculiar lack of appreciation on the part of certain donors, including the UK, regarding the benefits and potential of integrated school nutrition and health programmes.³⁵ Investments in child nutrition and health during the first 1,000 days of life are unquestionably important. Yet, as the School Meals Coalition and many others have argued, in order to sustain and build upon these benefits, it is necessary to invest in child development over the next 7,000 days as well – and schools offer a natural platform through which such investments can be channelled.³⁶ Moreover, when ODA is provided for cross-sectoral programmes that leverage the school platform, it is often inadequately reported, coordinated and monitored.³⁷

Recommendations

The UK should increase spending on nutrition and promote nutrition integration (including by continuing to use the Organisation for Economic Co-operation and Development's nutrition policy marker and committing to the proposed Global Compact on Nutrition Integration), and encourage other donors and Global South governments to do the same.

The UK should promote multi-stakeholder partnerships for research into INI, and ensure that research findings are utilised by UK-funded programmes and widely shared.

The UK should become a member of the School Meals Coalition, and recognise the importance and potential of integrated school nutrition and health programmes for development.

Endnotes

- 1 FAO et al, 2024, The State of Food Security and Nutrition in the World, <https://www.fao.org/publications/home/fao-flagship-publications/the-state-of-food-security-and-nutrition-in-the-world/en>; UNICEF et al, 2024, Levels and trends in child malnutrition, <https://data.unicef.org/resources/jme-report-2023/>.
- 2 Action for Global Health, 2013, Adopting a child-centred approach: Integration for maximising impact on child health, p. 3.
- 3 WHO, 2024, 'Vitamin A deficiency', <https://www.who.int/data/nutrition/nlis/info/vitamin-a-deficiency>.
- 4 Sustainable Financing Initiative for School Health and Nutrition, 2023, School meal programmes: A missing link in food systems reform, <https://www.edc.org/sites/default/files/School-meals-Food-Systems.pdf>.
- 5 This section is informed by M Gallagher, 2024, Bridging the gap: Integrated immunisation and nutrition, <https://results.org.uk/publication/bridging-the-gapintegrated-immunisationand-nutrition/>.
- 6 D Dhar, 2020, 'Women's unpaid care work has been unmeasured and undervalued for too long', <https://www.kcl.ac.uk/news/womens-unpaid-care-work-has-been-unmeasured-and-undervalued-for-too-long>.
- 7 A Wendt et al, 2022, 'Exposure of zero-dose children to multiple deprivation: Analyses of data from 80 low- and middle-income countries', *Vaccines*, 10.
- 8 M T Solis-Soto et al, 2020, 'Relationship between vaccination and nutritional status in children: Analysis of recent demographic and health surveys', *Demographic Research*, 42.
- 9 A M Acosta & B Bedasso, 2024, Do school meals boost education in low- and middle-income countries? <https://www.cgdev.org/blog/do-school-meals-boost-education-low-and-middle-income-countries-15-year-review>.
- 10 Y Y Xu et al, 2021, 'Integrating nutrition into the education sector in low and middle income countries: A framework for a win-win collaboration', *Maternal & Child Nutrition*, 17.
- 11 GiveWell, 2024, Vitamin A supplementation, <https://www.givewell.org/international/technical/programs/vitamin-A>.
- 12 Nutrition International, 2023, 'Better together: The power of vitamin A and vaccines for child survival', <https://www.nutritionintl.org/news/all-blog-posts/better-together-vitamin-a-vaccines-for-child-survival/>.
- 13 This 'good news' story is based on a case study in T Davis, 2023, A literature review and proposed learning agenda on immunisation-nutrition integration, <https://eleanorcrookfoundation.org/resources/a-literature-review-on-immunization/>.
- 14 Quotes in this paragraph are from FHI 360, 2023, 'A Ugandan mother's fight against malnutrition', <https://www.medangel.org/a-ugandan-mothers-fight-against-malnutrition/>.
- 15 See also E T Chehab et al, 2016, 'Experience of integrating vitamin A supplementation into polio campaigns in the African region', *Vaccine*, 34.
- 16 See also S T Ahmed et al, 2023, 'A scoping review on integrated health campaigns for immunization in low- and middle-income countries', *Health Policy and Planning*, 38.
- 17 J Namatovu, 2025, 'USAID freeze: Uganda catches a cold', <https://chimpreports.com/usaid-freeze-uganda-caughts-a-cold/>. See also RESULTS, 2025, 'U.S. global aid 'Stop-Work Order' will claim lives, harm communities globally', <https://results.org/news/u-s-global-aid-stop-work-order-will-claim-lives-harm-communities-globally>.
- 18 CFS, 2012, Thirty-ninth session: Final report, <https://openknowledge.fao.org/server/api/core/bitstreams/7c2fe983-1ccf-4482-bd08-bbf75066bf39/content>
- 19 For example, see the AU's biennial reports on HGSF <https://au.int/en/documents/20210301/african-union-biennial-report-home-grown-school-feeding>.

20 G20, 2024, G20 Rio de Janeiro leaders' declaration, <https://g20.org/wp-content/uploads/2024/11/G20-Rio-de-Janeiro-Leaders-Declaration-EN.pdf>.

21 S Verguet et al, 2020, 'The broader economic value of school feeding programs in low- and middle-income countries: Estimating the multi-sectoral returns to public health, human capital, social protection, and the local economy', *Frontiers in Public Health*, 8.

22 WFP, 2024, Summary of evaluation evidence: Home-grown school feeding, <https://www.wfp.org/publications/summary-evaluation-evidence-home-grown-school-feeding>.

23 FAO et al, 2018, Home-grown school feeding resource framework: Synopsis, <https://openknowledge.fao.org/items/7892a32d-29f3-43cf-9e45-163670124dd8>; UNESCO et al, 2023, Ready to Learn and Thrive: School Health and Nutrition Around the World, UNESCO.

24 The Interview, 2022, 'FG begins de-worming of 10m pupils enrolled into school feeding programme', <https://theinterview.ng/2022/08/31/fg-begins-de-worming-of-10m-pupils-enrolled-into-school-feeding-programme/>; UNRISD, 2024, 'Home-Grown School Feeding and Health Programme, HGSFHP', <https://socialprotection.org/discover/programmes/home-grown-school-feeding-and-health-programme-hgsfhp>.

25 A Adesanmi et al (eds), 2025, Nigerian National Home-Grown School Feeding Programme Sourcebook, World Scientific.

26 H Edeh, 2019, 'Updated: FG says school feeding raised enrolment by 20% in 31 states', <https://businessday.ng/education/article/updated-fg-says-school-feeding-raised-enrolment-by-20-in-31-states>.

27 Evidence Action (undated) 'Our work in Nigeria', <https://www.evidenceaction.org/where-we-work/nigeria>; N E Okolo-Obasi & J I Uduji, 2024, 'The impact of National Home Grown School Feeding Programme (NHGSFP) on rural communities in Nigeria', *Journal of Economic and Administrative Sciences*, 40.

28 B Barnabas et al, 2023, 'Impact of homegrown school feeding program on smallholders' farmer household food security in northeastern Nigeria', *Foods*, 12.

29 WFP et al, 2024, Home-grown school feeding in West Africa: A landscape analysis, <https://www.wfp.org/publications/home-grown-school-feeding-west-africa-landscape-analysis>.

30 A Ikongshul, 2024, The home-grown school feeding programme in Nigeria, <https://borgenproject.org/home-grown-school-feeding-programme>.

31 This section is informed by A Adesanmi & F Adekunle, 2024, School food case study: Nigeria, <https://researchonline.lshtm.ac.uk/id/eprint/4672333/>; D Adeyanju et al, 2024, Challenges and opportunities in Nigeria's home-grown school feeding program, <https://cgspace.cgiar.org/items/53f3da8a-e0d8-4f55-8190-0970ddfcfb5e>.

32 S Johns, 2024, 'Nigeria expands school food programme following work with Imperial', <https://www.imperial.ac.uk/news/252393/nigeria-expands-school-food-programme-following/>.

33 WFP, 2022, The State of School Feeding Worldwide 2022, <https://www.wfp.org/publications/state-school-feeding-worldwide-2022>.

34 For example see C I Agu, 2023, 'An appraisal of the implementation of the national school feeding programme and its effect on enrolment and attendance in public primary schools in Southeast, Nigeria: Perception of heads of schools', *BMC Nutrition*, 9.

35 K Watkins et al, 2024, School feeding and the Sustainable Development Goals, <https://odi.org/en/publications/school-feeding-and-the-sustainable-development-goals-an-agenda-to-combat-child-hunger-boost-education-transform-food-systems-and-strengthen-equity/>; S Bagree, 2014, Home grown school feeding: Time for donors to deepen engagement, <https://www.gcnf.org/wp-content/uploads/2016/03/PCD-HGSF-Policy-Paper-FINAL.pdf>.

36 International Parliamentary Network for Education, 2024, School meals: A toolkit for parliamentarians, <https://www.ipned.org/schoolmeals>.

37 Sustainable Financing Initiative for School Health and Nutrition, 2023, Finance for school feeding, <https://edc.org/resources/finance-for-school-feeding-unlocking-opportunities-for-learning-nutrition-and-food-security/>.

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