



HAL
open science

Public procurement for school meal programmes in Sub-Saharan Africa: nutritional outcomes, implementation challenges and programme enablers

Julia Liguori, Hibbah Araba Osei-Kwasi, Mathilde Savy, Silver Nanema,
Amos Laar, Michelle Holdsworth

► To cite this version:

Julia Liguori, Hibbah Araba Osei-Kwasi, Mathilde Savy, Silver Nanema, Amos Laar, et al.. Public procurement for school meal programmes in Sub-Saharan Africa: nutritional outcomes, implementation challenges and programme enablers. 14th European Nutrition Conference (FENS 2023), Belgrade, Serbia, 14-17 novembre 2023, Proceedings, 91, MDPI, pp.51, 2023, 10.3390/proceedings2023091051 . hal-04297170

HAL Id: hal-04297170

<https://hal.inrae.fr/hal-04297170>

Submitted on 21 Nov 2023

HAL is a multi-disciplinary open access archive for the deposit and dissemination of scientific research documents, whether they are published or not. The documents may come from teaching and research institutions in France or abroad, or from public or private research centers.

L'archive ouverte pluridisciplinaire **HAL**, est destinée au dépôt et à la diffusion de documents scientifiques de niveau recherche, publiés ou non, émanant des établissements d'enseignement et de recherche français ou étrangers, des laboratoires publics ou privés.



Distributed under a Creative Commons Attribution| 4.0 International License

Abstract

Public Procurement for School Meal Programmes in Sub-Saharan Africa: Nutritional Outcomes, Implementation Challenges and Programme Enablers [†]

Julia Liguori ^{1,*}, Hibbah Araba Osei-Kwasi ², Mathilde Savy ¹, Silver Nanema ³, Amos Laar ³ and Michelle Holdsworth ¹

¹ UMR MoISA (Montpellier Interdisciplinary Centre on Sustainable Agri-food systems), French National Research Institute for Sustainable Development (IRD), 34394 Montpellier, France; mathilde.savy@ird.fr (M.S.); michelle.holdsworth@ird.fr (M.H.)

² School of Sport, Exercise and Health Sciences, Loughborough University, Loughborough LE11 3TU, UK; h.osei-kwasi@lboro.ac.uk

³ Department of Population, Family & Reproductive Health, University of Ghana, Accra JRP8+PW9, Ghana; nanemasilver3@gmail.com (S.N.); alaar@ug.edu.gh (A.L.)

* Correspondence: julia.liguori@ird.fr

[†] Presented at the 14th European Nutrition Conference FENS 2023, Belgrade, Serbia, 14–17 November 2023.

Abstract: Background and Objectives: School-focused public food procurement and service policies (SPFPs) are increasingly being recognised as interventions that can improve the nutritional quality of food served in schools amidst growing overweight/obesity and persistent micronutrient deficiencies, stunting and wasting in sub-Saharan Africa (SSA). The review aims to investigate the impact of such policies on school food environments and nutritional outcomes of children/adolescents (5–18 y) in SSA and explore challenges and facilitators to implementing effective procurement. Methods: A mixed methods systematic review of studies in SSA published between 2012 and February 2023 was conducted. Studies were included if they reported on a publicly funded school meal (e.g., breakfast, lunch, snack, take home ration) and a nutritional (anthropometric, micronutrient deficiencies, food consumed) or food environment outcome. Quantitative findings were synthesised descriptively. Qualitative evidence was synthesized using an adapted eight-step school food system framework to guide coding (food production, wholesale & trading, transportation & storage, processing & distribution, food preparation, distribution to students, student-stakeholders and community involvement). This framework, along with infrastructure support domains, namely leadership, governance and monitoring/evaluation, guided categorisation of authors' policy-related recommendations. Results: A total of 33 studies (26 qualitative, 7 quantitative) were included from nine SSA countries. Evidence from the quantitative studies was mixed and did not demonstrate any measurable impact of SPFPs on nutritional outcomes. In total, 53 implementation challenges, particularly in food distribution, food preparation and wholesale & trading, and 37 implementation facilitators, notably student stakeholders, community involvement and processing & distribution, were identified across the school food system. Infrastructure support and policy recommendations from authors span across the school food system, particularly for improving food preparation and engaging students in programming. Discussion: While little evidence on the impact of publicly funded school meal programmes and nutrition outcomes was found (partly explained by inadequate research design to evaluate impact), qualitative evidence suggests that developing or revising SPFPs to include healthy (nutritious and safe) food at all levels of the school food system has much potential. The array of policy action needed to improve implementation of school meal programmes across the school food system calls for action at multiple scales of governance (national/local government), as well as engaging schools and local communities to strengthen stakeholder involvement.

Keywords: school meal programme; public procurement; sub-Saharan Africa



Citation: Liguori, J.; Osei-Kwasi, H.A.; Savy, M.; Nanema, S.; Laar, A.; Holdsworth, M. Public Procurement for School Meal Programmes in Sub-Saharan Africa: Nutritional Outcomes, Implementation Challenges and Programme Enablers. *Proceedings* **2023**, *91*, 51. <https://doi.org/10.3390/proceedings2023091051>

Academic Editors: Sladjana Sobajic and Philip Calder

Published: 17 November 2023



Copyright: © 2023 by the authors. Licensee MDPI, Basel, Switzerland. This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC BY) license (<https://creativecommons.org/licenses/by/4.0/>).

Author Contributions: Conceptualisation and methodology, M.H., A.L. and H.A.O.-K.; Screening title, abstract and full text, H.A.O.-K., J.L. and S.N.; Data extraction, J.L.; Quality appraisal, H.A.O.-K., J.L., M.H. and M.S.; Data analysis and synthesis, A.L., J.L., M.H. and M.S. Original draft preparation, J.L. and M.H. All authors have read and agreed to the published version of the manuscript.

Funding: The review is part of the Healthier Diets for Healthier Lives (HD4HL) Project, funded by the International Development Research Centre (IDRC-Canada) and The Rockefeller Foundation; Grant number: 109864-001. The funders played no role in the study design, data collection, analysis interpretation or writing of the manuscript.

Institutional Review Board Statement: Not applicable.

Informed Consent Statement: Not applicable.

Data Availability Statement: Not applicable.

Conflicts of Interest: The authors declare no conflict of interest.

Disclaimer/Publisher's Note: The statements, opinions and data contained in all publications are solely those of the individual author(s) and contributor(s) and not of MDPI and/or the editor(s). MDPI and/or the editor(s) disclaim responsibility for any injury to people or property resulting from any ideas, methods, instructions or products referred to in the content.