

Building healthy habits, securing a sustainable future: To empower Mozambican children toward healthy diets and a sustainable planet

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Topic: Healthy diets for people and planet

Background: Sub-Saharan African countries face a persistent challenge of malnutrition, encompassing both undernutrition, affecting 239 million people (FAO, 2020), and overnutrition (Bain *et al.*, 2013; John-Joy Owolade *et al.*, 2022). In Mozambique, approximately 37% of children under the age of 5 suffer from chronic malnutrition, while 4% experience acute malnutrition and 3% are overweight (INE, 2021; UNICEF Mozambique, 2023). These statistics underscore the urgent need to address both ends of the malnutrition spectrum, exacerbated by poverty, climate variability and limited access to sanitation (Onyeaka *et al.*, 2024). These issues hinder children's development, increase their vulnerability to diseases and compromise long-term health outcomes (WHO, 2023).

Malnutrition in Mozambique will persist unless efforts to promote sustainable agriculture, diverse diets, and clean water access are implemented. While strategic education can empower children to make healthy choices, challenges like unclear communication, limited research on effective education and opaque food systems hinder progress. This policy prioritizes bridging these gaps. By fostering intergenerational knowledge exchange, leveraging storytelling and mobile apps and utilizing media platforms, it aims to enhance knowledge, attitude, and practice of healthy diets and sustainable food practices among children aged 7-14. By preserving cultural food heritage and equipping the younger generation, Mozambique strives for a healthier and more resilient future.

Policy objectives: To enhance Mozambican children's knowledge, attitude, and practice regarding healthy and balanced diets for people and the planet.

Innovative policy ideas:

1. Intergenerational knowledge exchange - Empowering through elders'

wisdom: To bridge the knowledge gap and connect with cultural heritage, children will relate to older generations. This intergenerational exchange will see elders share their knowledge of traditional, healthy recipes and sustainable food practices through engaging storytelling and practical demonstrations.

2. Food heroes - Learning by doing: Community members will be identified and trained as "Food Heroes" to act as educators for the children. These trusted individuals will play a crucial role in disseminating information and fostering a sense of ownership within the community. Finally, the proposal emphasizes experiential learning by organizing community events and cooking demonstrations specifically designed for children.

3. Interactive school gardens and climate-smart agriculture education:

(A) These gardens will showcase a unique blend of traditional and climate-smart techniques, allowing students to witness sustainable food production practices firsthand. By integrating both time-tested methods and innovative approaches, the gardens will serve as a valuable resource for students to understand the importance of a balanced approach to food systems.

(B) Age-appropriate clubs focused on nutrition, biodiversity and sustainable food production will be developed to further solidify their understanding and cultivate a passion for healthy eating and environmental responsibility. These clubs will provide a platform for students to delve deeper into these topics, fostering critical thinking, collaboration, and a sense of ownership over their food choices and the health of the planet.

4. Media campaigns with a local twist:

(A) Celebrity champions: Feature popular local celebrities in public awareness campaigns promoting healthy diets. These relatable figures can inspire children and build trust.

(B) Traditional Storytelling: Utilize engaging storytelling formats like folktales and fables to deliver messages about healthy eating and environmental responsibility in a culturally relevant way.

Alignment with global goals: This initiative directly contributes to achieving the UN's Sustainable Development Goal 2: Zero Hunger and Goal 13: Climate action. The program tackles malnutrition, promotes sustainable food choices, and aligns with the Food and Agriculture Organization of the United Nations' (FAO) focus on healthy diets, local food systems, and community empowerment. It also echoes the World Food Forum's call for intergenerational dialogue, ensuring valuable traditional knowledge is passed on to future generations.

Inclusion: The study will consider children between 6 and 14 years old. To ensure the generalizability of the findings, participants will be drawn from both public and private schools.

Data collection tools: The mobile app will be utilized to collect valuable data on food choices, dietary habits, and good habits of a sustainable planet. This data can be used to identify patterns, trends, and areas for improvement in dietary behavior and healthy planet.

How is this proposal innovative by leveraging data? This proposal moves beyond traditional awareness by leveraging data in several innovative ways. Firstly, a mobile app with gamification elements will collect dietary intake data to identify regional food consumption patterns. This data will be used to tailor educational content and interventions. Secondly, "Food Heroes" can track program effectiveness and identify outreach gaps through mobile data collection tools. Finally, the proposal integrates school-based projects where students collaborate with grandparents to collect and analyze data on changing food environments. This data will further inform future educational strategies.

How to advance this policy via research, policy model, and stakeholder engagement? This policy proposal takes a multi-pronged approach to achieve lasting change. National committees will be established to conduct research and collect data through pilot programs in collaboration with research institutions, governments and non-governmental organizations. Effective engagement of stakeholders, partnership building, phase-based implementation, regular monitoring and clear communication strategies will be crucial for achieving the desired outcomes and securing long-term funding.

Project outcome and impact: The project's goal is to empower Mozambican children to make informed dietary choices that benefit both their health and the planet. This will be achieved by combating misinformation through engaging educational programs and promoting locally sourced, nutritious options that are produced using sustainable practices. By equipping children with knowledge and fostering positive attitudes towards healthy eating that considers the environmental impact, the project expects a rise in demand for nutritious and sustainably produced foods, improved infant and young child feeding practices, and a decrease in malnutrition and non-communicable diseases. This will ultimately contribute to a healthier, better-nourished population and a more sustainable food system that protects the planet's health.

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