BENCHMARKING POLICIES FOR CREATING HEALTHY FOOD ENVIRONMENTS TO PREVENT DIET-RELATED NON-COMMUNICABLE DISEASES (NCDs) IN UGANDA

Healthy Food Environment Policy Index (Food-EPI) country scorecard and priority recommendations for action in Uganda

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TABLE OF CONTENTS

LIST OF FIGURES

EXECUTIVE SUMMARY

Background

Uganda, just like other Low- and Middle-Income Countries (LMICs) is facing a double burden of malnutrition and diet-related Non-Communicable Diseases (NCDs). The consumption of fast foods including unhealthy diets that are energy-dense and nutrient-poor is fast increasing. This, coupled with urbanization and globalization of food production and marketing exacerbates the burden of obesity and other diet-related NCDs. There is growing evidence that unhealthy food environments drive unhealthy diets. Accordingly, comprehensive government actions are needed to create healthier food environments; to support people to consume healthier diets, and to reduce obesity and other diet-related NCDs.

What we did!

We assessed the extent of implementation of food environment policies in Uganda and identified priority actions for the government to implement, with its partners, to create healthier food environments. The methodology is based on the Healthy Food Environment Policy Index (Food-EPI) by INFORMAS (International Network for Food and Obesity/NCDs Research, Monitoring and Action Support). A Food-EPI expert trained a team of Researchers from EPRC to adapt and use the Food-EPI tool in Uganda between March 2020 and December 2021. We collected evidence on the extent of government action to implement food environment policies across 13 policy and infrastructure support domains and 55 related indicators of good practice, of which **12 were double-duty action indicators**. As part of the process, a panel of 24 local experts rated the extent of government action on each indicator of good practice against in-country planning and development cycle ('initiation', 'in development', 'implementation' or 'evaluation'), and against international best practices ('excellent', 'very good', 'low-medium' or 'very little'). Using an importance and feasibility criterion, we identified and prioritized actions for the government to improve food environments in Uganda.

Findings

We compared the extent of implementation of food environment policies and infrastructure support with in-country planning and development cycle and international best practices. Gaps and opportunities for creating healthier food environments were also identified.

Concerning the in-country policy development cycle;

a) **Only 1 out of the 55 areas of good practice was rated to be in the evaluation phase i.e., the infrastructure support area on adoption and implementation of national policy on breastfeeding.**

It was found that over a third (20) of all the 55 areas of good practice were in the "policy development" phase, indicating that no implementation had taken place in these areas of good practice. Most of these (16/20) were in the policy domain

For policy, they include: Food composition targets or standards for industrially processed foods; targets or standards for meals sold from food service outlets; Front-of-pack supplementary nutrition information system for packaged foods; system of labelling menu boards; Restrictions on exposure and power of promotion of unhealthy foods to children including adolescents through broadcast and non-broadcast media; ensuring that unhealthy foods are not commercially promoted to children in settings where children gather; Tax incentives to encourage healthy food choice; Taxation on unhealthy foods to discourage unhealthy food choices; Subsidies in favour of healthy rather than unhealthy foods; Food-related income support programs for healthy foods; Policy in other public sector settings for food service activities to provide and promote healthy

food choices; Support and training systems for schools and other public sector organizations to meet the healthy food service policies and guidelines; Zoning laws and policies to limit the density or placement of food outlets selling mainly unhealthy foods, and encouraging the availability of outlets selling healthy food options; support systems to encourage food stores and food service outlets to promote the availability of healthy foods; and Undertaking risk impact assessments for trade and investment agreements.

Under infrastructure, they include: Establishing population intake targets for the nutrients of concern or relevant food groups to meet recommended dietary intake levels; Evidence-informed food-based dietary guidelines; Procedures to restrict commercial influences on the development of food environment-related policies related to food environments where they have conflicts of interest with improving population nutrition; and formal platforms for regular interactions between government and the commercial food sector.

b) **Out of 34 indicators in the implementation phase, the majority (25) belonged to the infrastructure support domain.**

For policy support, they include Large-scale food fortification programs; Nutrient declarations for packaged food in line with Codex recommendations; Regulating and reviewing claims on foods; Restricting marketing of breast milk substitutes; Promoting healthy food choices in schools; Provision for time, spaces and resources for breastfeeding in workplace and public places; Promoting access to safe drinking water and optimal environmental hygiene and sanitation; Ensuring a safer neighbourhood food environment; and Protecting government regulatory capacity with respect to public health nutrition.

For infrastructure support they include: Leadership/political support towards improving food environments, nutrition, and diet related NCDs and their related inequalities; Up-to-date implementation plan linked to national needs and priorities; Priorities to reduce inequalities or protect vulnerable populations in relation to diet, nutrition, obesity and NCDs; Complementary feeding action, accompanied by a plan; Country level targets for exclusive breastfeeding and complementary feeding; Leadership/political support to address all forms of malnutrition; Policies and procedures using evidence in the development of food and nutrition policies; Ensuring transparency in the development of food and nutrition policies; Ensuring public access to comprehensive nutrition information and key documents; Monitoring the status of food environments; Funding the promotion of healthy eating and healthy food environments; Funding research targeted for improving food environments; Health promotion agency to improve population nutrition with a secure funding; Coordination mechanisms to ensure policy coherence, alignment, and integration of food, obesity and diet-related NCD prevention policies across governments; Formal platforms for regular interactions between government and Civil Society Organizations; A system-based approach to improve the healthiness of food environments; and Processes to ensure that development of all government policies relating to food are sensitive to nutrition, public health, and reducing health inequalities in vulnerable populations.

In comparison with international best practice;

a. **None of the good practice areas was rated in the excellent performance range.**
b. **Government action was rated as having "very good progress" in only one (1/55) indicator under infrastructure support – i.e., adoption and implementation of national policy on breastfeeding.**
c. **Less than half (23/55) of the good practice indicators were rated as having "good progress"– this includes 18 infrastructure support areas and 5 policy support**. The specific areas with good progress ratings are:

For *Infrastructure support:* Adopting complementary feeding policy with an action plan; Setting country level targets for exclusive breastfeeding and complementary feeding; Political support for actions to address all forms of malnutrition; Developing food and nutrition policies using evidence; Ensuring transparency in the development of food and nutrition policies; Ensuring public access to comprehensive nutrition information and key documents; Regular monitoring of adult and childhood nutrition status and population intakes; Regular monitoring of adult and childhood overweight and obesity prevalence using

anthropometrics; Regular monitoring of the prevalence of NCD metabolic risk factors and occurrence rates; Evaluating major programs and policies to assess their effectiveness towards nutrition and population health; Regular monitoring of country level indicators for breastfeeding and complementary feeding; Developing Growth Monitoring Programmes (GMP); Regular monitoring of food safety indicators; Government funding for research on food environments, reducing obesity, NCDs and their related inequalities; Coordination mechanisms to ensure policy coherence, alignment, and integration of food, obesity and diet-related NCD prevention policies; Platforms for regular interactions between government and CSOs; Using a system-based approach to improve healthiness of food environments; and Ensuring that policies relating to food are sensitive to nutrition, public health, and reducing health inequalities in vulnerable populations.

Under policy support: The specific areas include the implementation of mandatory large-scale food fortification programs; nutrient declaration in line with Codex recommendations; Restricting the marketing of breast milk substitutes; Promoting access to safe drinking water and optimal environmental hygiene and sanitation; and Measures to manage investment and protect government regulatory capacity.

d. **Government action was rated as having a "low level of progress" in 31/55 indicators. The low progress is more pronounced in the policy domain (20/55) compared to the infrastructure support domain (11/55).**

Recommended actions for creating healthy food environments in Uganda

The Expert Panel identified and prioritised 22 actions for creating a healthier food environment in Uganda, considering perceptions of the importance and feasibility. Two actions were prioritised as highly important and highly feasible. These were:

1. Reviewing and improving the quality of existing standards and developing new ones in areas with no standards (e.g., regulating nutrients of concern and nutrient declarations). This includes age-specific categorisation-related standards.
2. Standards promotion. In addition, the action under governance on capacity building to enforce implementation and monitoring of standards was considered important and feasible to achieve.

1. BACKGROUND

Like other Low- and Middle-Income Countries (LMICs), Uganda faces a rising health burden of diet-related Non-Communicable Diseases (NCDs), including obesity and overweight. Evidence shows that NCDs account for one-third of adult deaths in Uganda (WHO, 2017; WHO, 2018), and the NCD burden is rising. For example, new annual cancer cases are as high as 32,000; hypertension increased by 42% between 2012 and 2016; and diabetes cases increased by 7% over the same period (Ziraba et al., 2009).

The primary risk factors fuelling the escalation of NCDs in Uganda are poor nutrition and obesity. Poor diet, driven to a large extent by unhealthy food environments, generates more NCDs than physical inactivity, harmful use of alcohol, and smoking combined (Malhotr et al., 2015). Overweight and obesity increased by nearly 35% between 1992 and 2005, and recent Demographic and Health Survey data show that Uganda's progress towards reduction of wasting and overweight is not splendid (UBOS & Macro International, 2007; UBOS & ICF, 2018).

Further, urbanisation and globalisation of food production and marketing are key drivers of the rising prevalence of obesity in LMICs, including Uganda (Caballero, 2007). This is because urbanisation creates changes in social and physical environments, leading to increased consumption of energy-dense and nutrient-poor foods, which are highly correlated with diet-related NCDs and low micro-nutrient intake (Asiki et al., 2019).

Swinburn et al. (2015) defined food environments as the physical, economic, political, and socio-cultural surroundings, opportunities, and conditions that influence people's food choices. Therefore, a healthy diet is promoted by the conditions or surroundings that reduce the risk of NR-NCDs.

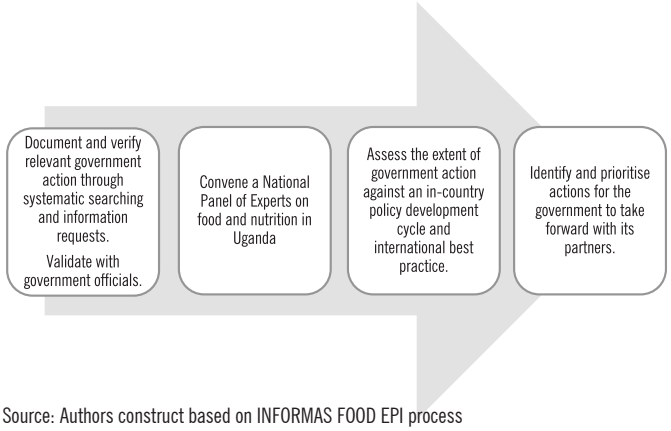
Therefore, the government must implement policy interventions to create a healthy food environment. In Uganda, the challenge of inadequate data, among other factors, has resulted in a lack of national policy on NCD prevention and control. There needs to be national policy, strategies, standards, and guidelines to direct the prevention and control of NCDs - the absence of these is exacerbating the risk of NCDs.[1].

Inadequacy or lack of contextualised evidence or data affects appropriate planning, regulations, and policy formulation and implementation. To effectively improve policy interventions for creating a healthy food environment and curb the burden of NCDs, it is crucial to have a comprehensive understanding of existing NCD-related efforts, the gaps therein, and their extent of implementation. We assessed the extent of implementation of government policy actions related to promoting or creating healthy food environments and progress against national or in-country policy development cycle and international benchmarks. We also identified priority actions for the government to take forward with its partners.

2. APPROACH

We used methods based on the Healthy Food Environment Policy Index (FOOD-EPI) by INFORMAS (International Network for Food and Obesity/Non-Communicable Diseases Research, Monitoring and Action Support). INFORMAS monitors and benchmarks food environments and policies internationally to increase the accountability of governments and the food industry for actions to reduce diet-related NCDs (Swinburn et al., 2013). The FOOD-EPI in Uganda was conducted between March 2020 and December 2021 by a team of researchers trained by a FOOD-EPI expert. Figure 1 illustrates the critical steps in the Uganda FOOD-EPI process.

Figure 1: Process for assessing the extent of food environment policy implementation in Uganda



Source: Authors construct based on INFORMAS FOOD EPI process

1 https://www.parliament.go.ug/page/parliamentary-forum-non-communicable-diseases.

2.1 Document and verify

We collected evidence on the extent of government action to implement food environment policies across 13 policy and infrastructure support domains (7 policy domains and 6 infrastructure domains- Figure 2) and 55 related indicators or areas of good practice. Out of the 55 indicators, Uganda's FOOD-EPI process included 12 indicators assessing double duty actions that address the problem of double burden of malnutrition (over and undernutrition) in the country.

The domains and indicators of good practice in the FOOD EPI protocol were tailored to the Ugandan context by the research team in consultation with INFORMAS. Evidence of government action on each of the indicators was considered using a broad view, including government policies, work plans, national strategies, formation of working groups of technical committees, finance allocation as well as evidence of formal/informal activity across policy processes (from agenda-setting to implementation, monitoring and evaluation).

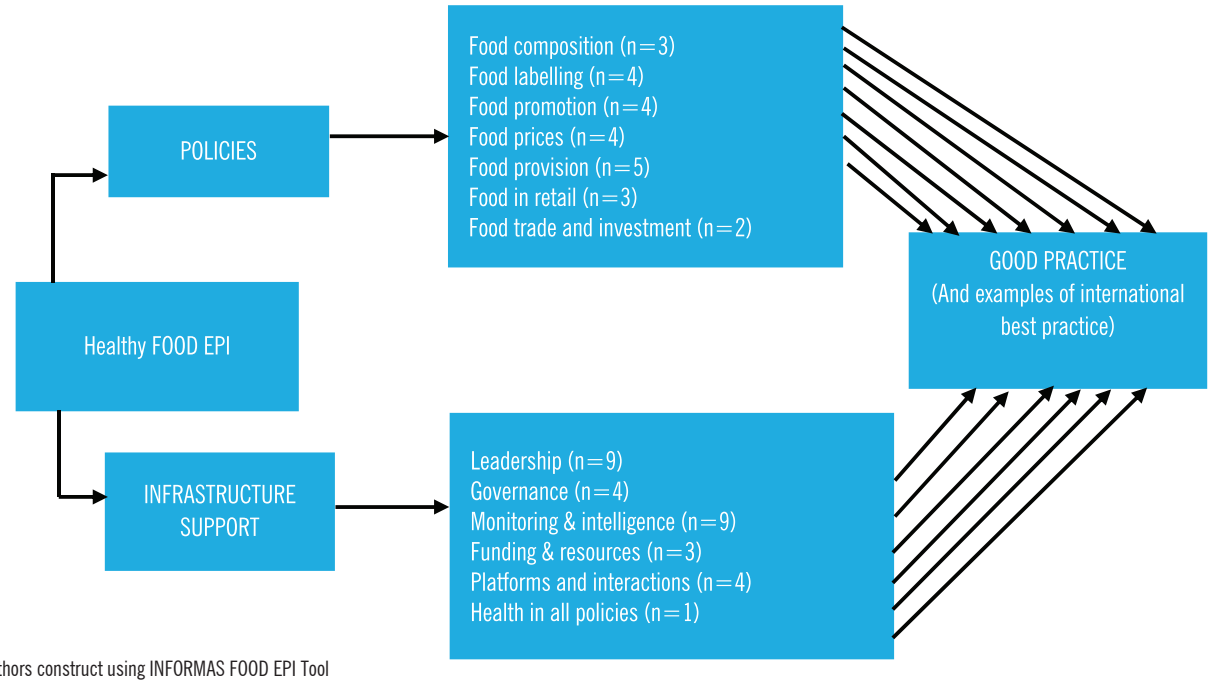
We systematically searched government websites and websites of other international and local institutions (e.g., FAO, WHO, UNICEF) as well as academic databases (primarily peer-reviewed articles) for evidence of government actions. Requests for information were also submitted to relevant Government Ministries, Departments and Agencies (MDAs), where the information or documents identified were not publicly available. Physical searches and reviews of documents not available online were also conducted.

The team of researchers collated and documented the identified evidence in an evidence paper known as an "evidence pack". The evidence pack was then shared with government officials from relevant MDAs and non-state actors for validation. The feedback received from the validation and critical review processes was incorporated into the final evidence pack (Appendix 1). The evidence pack contains information about actions the Ugandan government took to create healthier food environments on each good practice indicator, which was presented alongside examples of international best practices as identified by INFORMAS (Appendix 1). The evidence of action collated in Uganda spanned the period 2003 – 2021, which covers both the first and the second National Development Plan (NDPI and NDPII) periods.

2.2 Convene

A panel of 24 experts on food and nutrition issues in Uganda was convened during the evidence-gathering process. The expert panel members were mainly from non-government (civil society and academia), and some were

Figure 2 Components, domains and indicators of the FOOD EPI tool used in Uganda



Source: Authors construct using INFORMAS FOOD EPI Tool

from the government sector. The main responsibility of the expert panel was to review and validate the evidence gathered on the government's actions to create a healthy food environment in Uganda, rate the actions against the policy development cycle/process in the country and against international best practices and finally, to propose and priorities further actions that the government should take to create a healthy food environment in Uganda.

2.3 Assess

The National Panel of Experts (NPE) reviewed the evidence pack and used the information to rate the extent of government action in implementing policies of food environments and infrastructure support against two yardsticks, namely (1) an in-country policy planning and development cycle and (2) international best practice. The ratings covered all 13 policy and infrastructure support domains and the 55 sub-areas of good practice listed in Figure 2 and Annex Table 1. A 5-level scale was used to categorize the level of government action against in-country development: '1=Agenda setting/initiation phase', '2=Policy development phase, '3=Implementation phase', '4=Evaluation phase' and '5=Cannot rate'. The level of action against the international best practice was categorised into a 6-level scale as: '1 = <20% implementation, i.e., very low to no progress ', '2 = 21-40% implementation, i.e., low to medium progress', 3 = 41-60% implementation, i.e., good progress concerning best practice', 4 = 61-80% implementation i.e., very good to excellent progress', '5 = 81-100% implementation i.e., excellent progress', and '6 = Cannot rate. For both rating exercises, the "cannot rate" option was dropped during the analysis. This assessment process took place during an expert panel workshop that was held in Kampala in February 2022.

2.4 Identify and prioritize

After the rating exercise, the NPE identified potential policy and infrastructure support actions that the government could take forward with its partners to create a healthy food environment. The panel subsequently prioritized the identified actions. The prioritization considered perceptions of relative importance (i.e., need, likely impact, and equity) and feasibility (i.e., level of acceptability, affordability, and cost-effectiveness).

3. COUNTRY SCORECARD 1: IMPLEMENTATION OF FOOD ENVIRONMENT POLICIES AND INFRASTRUCTURE SUPPORT IN RELATION TO IN-COUNTRY POLICY DEVELOPMENT CYCLE

Out of 55 indicators, no indicators were rated to be in the initiation phase, 20 were in the development phase, 34 were in the implementation phase, and only 1 was in the evaluation phase.

3.1 Government actions in the policy development phase

Figures 3 and 4 summarise the results of the government's policy action rating in relation to the in-country policy development cycle. At least ***20/55 (36%) indicators are in the "policy development" phase***, indicating that the Government of Uganda has not taken any policy action regarding these areas of good practice, according to the rating. Most of the good practice indicators in this stage were in the policy domain (16) compared to the infrastructure support domain (4). Specifically, the actions rated to be in the development phase include.

3.1.1 Policy – Figure 3

i. ***Food composition***: Food composition targets, standards, or restrictions for the content of the nutrients of concern (e.g., trans fats, added sugars, salt, and saturated fat) in industrially processed foods – for example, the National Food and Nutrition Strategy (NFNS 2005); Food composition targets, standards, or restrictions for the content of the nutrients of concern in meals sold from food service outlets.

ii. ***Nutrition labelling***: Front-of-pack supplementary nutrition information system for packaged foods; a consistent, single, simple, and visible system of labelling the menu boards of all quick-service restaurants or fast-food chains. No policy action is currently being implemented concerning these two policy areas, i.e., front-of-pack and menu board

labelling.

iii. ***Food Promotion***: Companies should be restricted from promoting unhealthy foods to children and adolescents through broadcast media such as television and radio. No policy action is being implemented to restrict exposure and the power of promoting unhealthy foods to children in all settings. The Children Act Amendment Bill (2015) does not address the advertisement of unhealthy foods to children.

iv. ***Food prices***: All the four best practice areas of food prices are also rated to be in the policy development stage – These are; Tax incentives to encourage healthy food choices – for example, reduction or removal of sales tax, excise, value-added or import duties on fruits and vegetables; Taxation or levy on unhealthy foods such as; sugar-sweetened beverages and foods high in nutrients of concern, to increase their retail prices and discourage unhealthy food choices. However, there is no specific evidence of action to reinvest the taxes to improve population health, subsidies in favour of healthy rather than unhealthy foods, and food-related income support programs for healthy foods.

v. ***Food provision***: Policy in other public sector settings for food service activities (e.g., canteens, food at events, fundraising, promotions, vending machines, etc.) to provide and promote healthy food choices; Support and training systems to help schools and other public sector organizations and their caterers meet the healthy food service policies and guidelines. Some of the critical actions here include the school health policy (under review), Ministry of Education and Sports guidelines (2013), and the Education Act (2008).

vi. ***Food in retail***: Zoning laws and policies to place limits on the density or placement of quick-serve restaurants or other outlets selling mainly unhealthy foods in communities and to encourage the availability of outlets selling healthy options such as fresh fruit and vegetables; and Support systems to encourage food stores and food service outlets to promote the availability of healthy foods and to limit the promotion and availability of unhealthy foods. No specific government actions are being implemented in all these areas.

vii. ***Food trade and investment***: Undertaking risk impact assessments before and during the negotiation of trade and investment agreements to identify, evaluate and minimize the direct and indirect negative impacts of such agreements on population nutrition and health. There is no evidence of any specific action being implemented regarding risk impact assessments before and during trade and investment agreements.

3.1.2 Infrastructure – Figure 4

i. ***Leadership***: Establish population intake targets for the nutrients of concern and/or relevant food groups to meet WHO and national recommended dietary intake levels and establish clear, interpretive, and evidence-based food-based dietary guidelines.

ii. ***Governance***: Procedures to restrict commercial influences on the development of policies related to food environments where they have conflicts of interest with improving population nutrition.

iii. ***Platforms***: The last good practice area with policy under development relates to formal platforms for regular interactions between the government and the commercial food sector on implementing healthy food policies and other related strategies.

3.2 Government actions in the policy implementation phase

Government action was rated to be in the implementation phase in 34/55 areas of good practice (about 62%). Almost three-quarters of these (25/34) are infrastructure support, and only 9 out of the 34 are policy support. *Specifically, under the policy domain (Figure 3),* there was evidence of policy action to;

- Implement mandatory large-scale food fortification programs to increase the availability of micronutrients in staple foods. The critical policy actions here include; the Food & Drug (Food Fortification) Regulations, 2011 (No.53) - a mandatory food fortification bill; UNBS established standards for fortification, e.g., maize, wheat flour; Uganda National Fortification Standards; and the National Development Plan (NDPIII) which emphasizes promoting consumption of fortified foods in schools and dietary diversification.
- Ensure packaged food labels have Ingredient lists and nutrient declarations per Codex recommendations.

Some of the policy actions here include the adoption of East Africa Standards Nutrition labelling requirements; Food & Drugs Act, CAP 278 (i.e. regulatory measures on food labelling which prohibit display/sale of foods with false labels); National Standardization Strategy (2019–2022); and Weights and Measures (sale and labelling of goods) Rules, 2020 - in line with Codex Alimentarius standards.

- Regulate, approve, or review claims on foods to protect consumers against unsubstantiated and misleading nutrition and health claims. Here, the government established the Uganda National Bureau of Standards (UNBS) and the Food & Drugs Act, which provide for regulation of claims on foods to curb misleading claims.
- Restrict marketing of breast milk substitutes. This is provided for in the policy guidelines on Infant and Young Child Feeding (IYCF).
- Provide and promote healthy food choices in schools and early childhood education services. This is catered for under the school health policy.
- Provide time, space, and resources for breastfeeding in the workplace and public places and spaces. This is addressed through the policy guidelines on IYCF and Maternity Protection under the Employment Act (2006). The parliament of Uganda also maintains a breastfeeding facility, although this is limited in scope in that it benefits only members of parliament and parliamentary staff.
- Promote access to safe drinking water and optimal environmental hygiene and sanitation (WASH) in public places and spaces to address/ reduce malnutrition. This is provided for under the following – school health policy (2008), national water policy, the Water Statute (1995), National Water and Sewerage Corporation Statute (1995), and NDPIII (e.g., sustainable urbanization and housing programme, and safe WASH access) among others.
- To ensure a safer neighbourhood food environment (regarding food safety components) for food traded by informal retailers and traders.
- Manage investment(s) and protect government regulatory capacity with respect to public health nutrition.

Specifically, under infrastructure support (Figure 4), there was evidence of;

- Leadership and/or political support (at the head of state or ministerial level) towards improving food environments, population nutrition, diet-related NCDs and their related inequalities". This is evident in several actions, including adopting the African Regional Nutrition Strategy, the Uganda Nutrition Action Plan, and the Nutrition Guideline for the general population.
- Action to have an up-to-date implementation plan linked to national needs and priorities, to improve food environments, reduce the intake of the nutrients of concern to meet WHO and nationally recommended dietary intake levels, and reduce diet-related NCDs.
- Action to establish priorities to reduce inequalities or protect vulnerable populations in relation to diet, nutrition, obesity and NCDs. For example, among others, actions exist such as; national nutrition planning guidelines and the Nutrition Guideline for the general population, among others.
- Action to implement complementary feeding, accompanied by an action plan for its implementation and promotion, for example, under the policy guidelines on IYCF.
- Action to set country-level targets for exclusive breastfeeding and complementary feeding, including specific timeframes. This is also evident under the IYCF policy guidelines.
- Leadership or political support to address all forms of malnutrition over the life course (i.e., wasting, stunting, underweight, overweight, obesity, micronutrient deficiency, and diet-related NCDs) at the national level. The main actions here include the Uganda Nutrition Action Plan and the National Food and Nutrition Strategy.
- Action to implement policies and procedures using evidence to develop food and nutrition policies. The Uganda Food and Nutrition Policy (UFNP) and National Nutrition Planning Guidelines provide for the use of evidence in policy development and implementation.
- Action to ensure transparency in the development of food and nutrition policies.
- Action to ensure public access to comprehensive nutrition information and key documents (e.g., budget documents, annual performance reviews and health indicators) for the public. This is provided for under

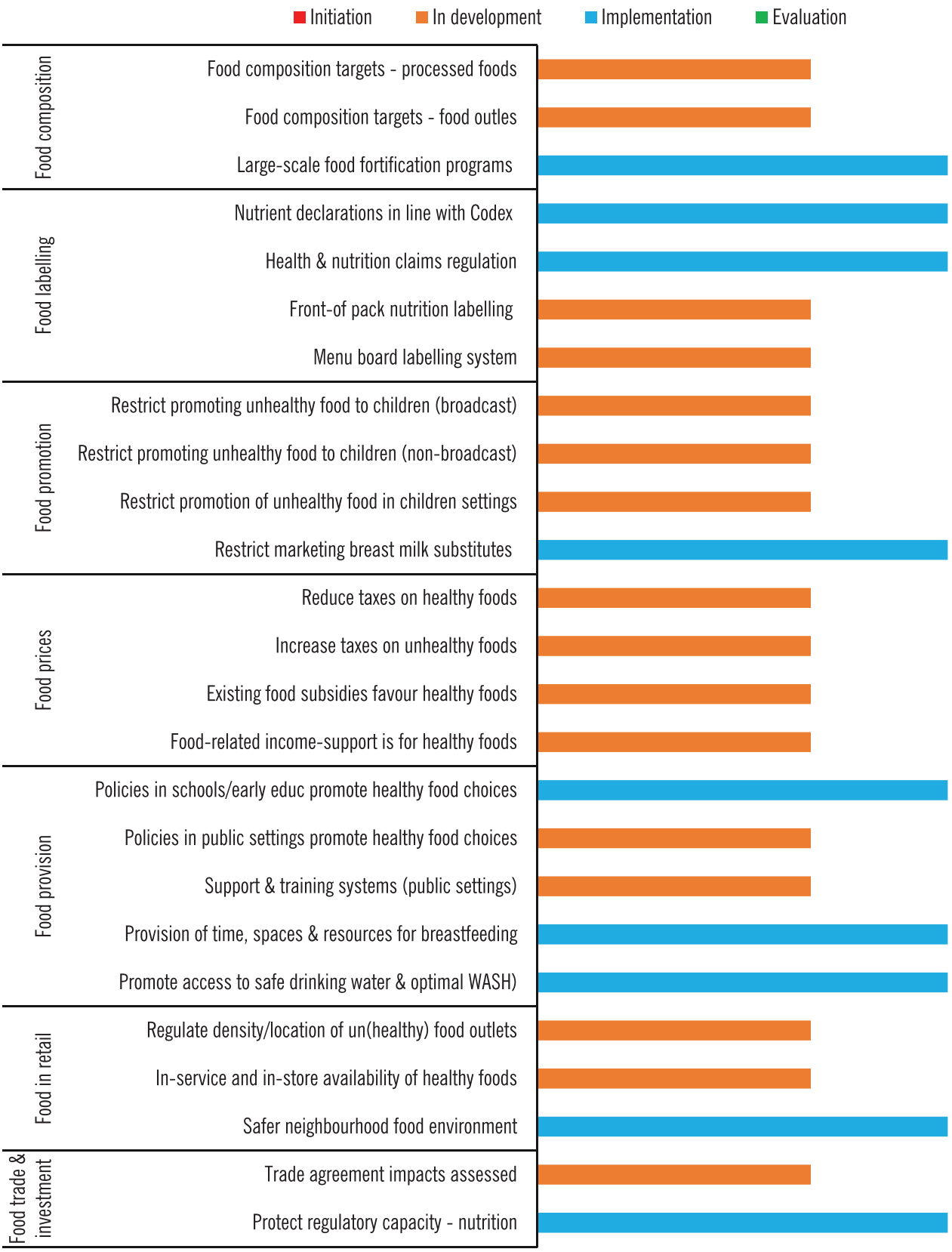
the UFNP, NFNS, Annual Health Sector Performance Review, and websites of government Ministries, Departments and Agencies.

- Action to monitor the status of food environments, food safety population nutrition and diet-related NCDs and their inequalities, and to measure progress on achieving the goals of nutrition and health plans. The following are the monitoring systems in place - conformity of food to standards requirements - enforced by UNBS – however, coverage of monitoring systems is limited (e.g., schools); the UFNP emphasizes monitoring the Food and Nutrition situation. However, it does not have a well-laid-down or comprehensive M&E framework to monitor food and nutrition; the Uganda Demographic and Health Survey contains nutritional information used for monitoring.
- Action to fund the promotion of healthy eating and healthy food environments. This is seen in the following - National Budget Framework Paper (NBFP FY 2020/21), where investment in the prevention or management of NCDs - is one of the priorities of the health sector in the medium term. However, this is not very explicit on healthy eating and food environment budgetary allocations to health services programs through MoH. There is also an allocation for public health - UGX 5.2 billion, where about 13% is for NCDs and health education, promotion, and communication. Other actions include the Multi-sectoral Food Security and Nutrition project implemented (2015- 2019) and the UFNP, which proposes Food and Nutrition (F&N) interventions should be funded through the consolidated fund and advocates for school children feeding fund.
- Action to fund research to improve food environments, reduce obesity, NCDs and their related inequalities. For example, the Ministry of Health (MoH) budget provides for annual health research allocations.
- Action towards implementing a health promotion (e.g., within the Ministry of Health) that includes an objective to improve population nutrition with secure funding. There are two critical divisions at the MoH - health education and promotion and the nutrition division. In addition, the Ministry of Agriculture, Animal Industry and Fisheries (MAAIF) has the Food and Nutrition security division under the crop resources directorate. The Uganda Aflatoxin Technical Working Group was also established.
- Action towards coordination mechanisms across government MDAs to ensure policy coherence, alignment, and integration of food, obesity and diet-related NCD prevention policies across governments. For example, a Nutrition Technical Working Group was established at the MoH. This is a multi-sector group that coordinates nutrition across sectors.
- Action towards formal platforms for regular interactions between government and Civil Society Organizations (CSOs) on developing, implementing, and evaluating healthy food policies and other related strategies. The main action here is establishing the Nutrition Technical Working Group and the presence of civil society groups that collaborate with government agencies.
- Action towards a system-based approach with (local and national) organisations/partners/groups to improve the healthiness of food environments at a national level - for example, the Uganda Multi-Sectoral Food Security and Nutrition project that was implemented between 2015 and 2019.
- Action on processes to ensure that the development of all government policies relating to food is sensitive to nutrition, public health, and reducing health inequalities in vulnerable populations – i.e., Health In All Policies (HIAP) domain. The actions here include the National Health Policy, NDP III, and the National Nutrition Planning Guidelines, among others.

3.3 Government actions in the evaluation phase of the policy cycle

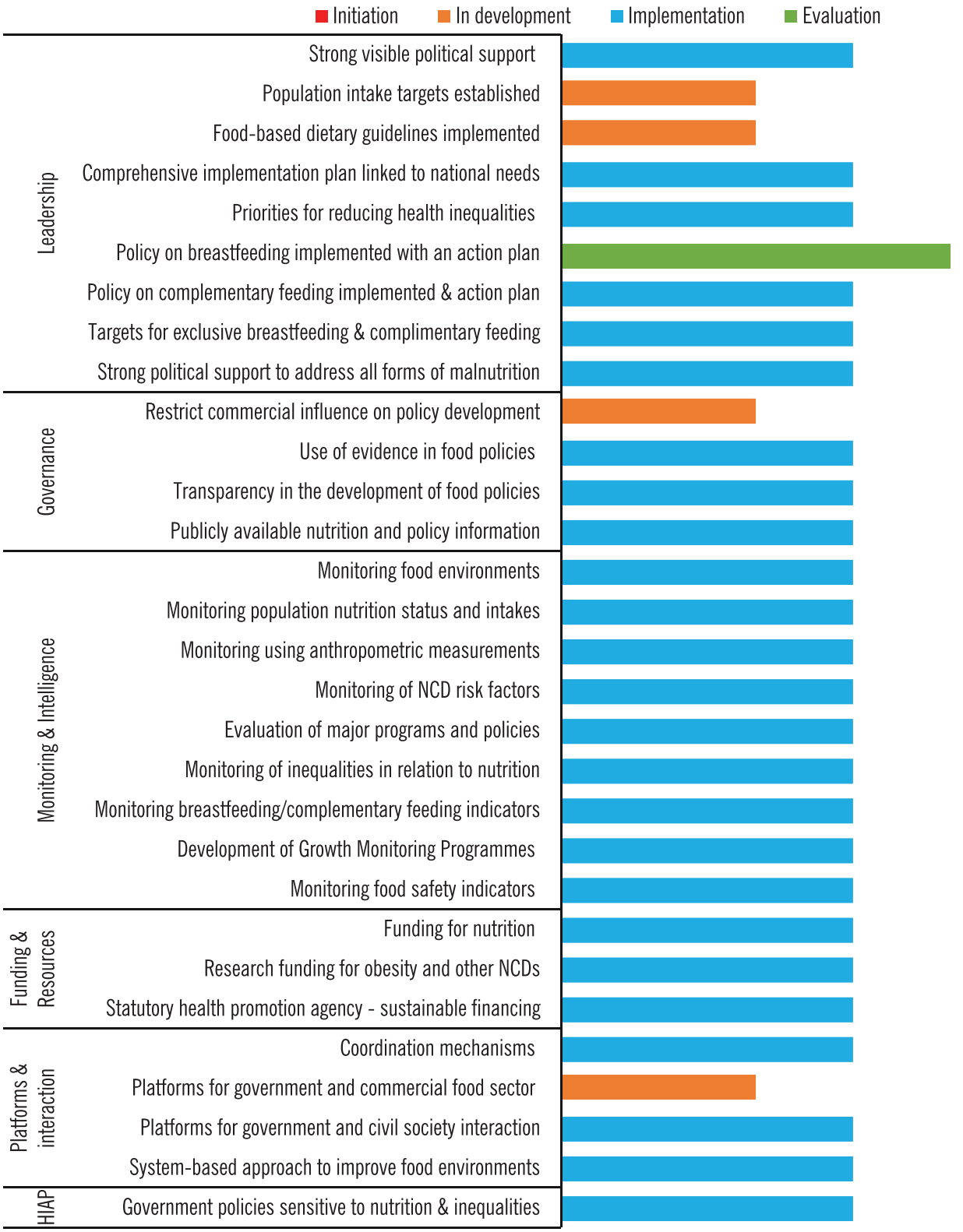
Government action was rated to be in the evaluation phase in only 1 out of the 55 areas of good practice (about 0.018%). This was in the infrastructure domain of leadership – Figure 4. Specifically, there was substantial evidence of action on adopting and implementing national policy on breastfeeding (e.g., Baby Friendly Health Initiative - BFHI, maternity leave, and Baby Friendly Community Health Initiative (BFCH). The specific policy actions include the policy guidelines on Infant and Young Child Feeding (IYCF), the BFHI and Health Facility Practices Policy of October 1999, and the Integrated Management of Childhood Illness Feeding Guidelines, among others.

Figure 3 Implementation of food environment policies in relation to in-country policy development cycle



Source: Authors computation using EPRC's FOOD EPI rating data, 2022.

Figure 4 Implementation of infrastructure support in relation to in-country policy development cycle



Source: Authors computation using EPRC's FOOD EPI rating data, 2022.

Source: Authors computation using EPRC's FOOD EPI rating data, 2022.

4. COUNTRY SCORECARD 2: IMPLEMENTATION OF FOOD ENVIRONMENT POLICIES AND INFRASTRUCTURE SUPPORT AS COMPARED WITH INTERNATIONAL BEST PRACTICE

The results of government policy action rating of progress in relation to international best practice are summarized in Figures 5 and 6. Results indicate that ***overall, none of the good practice areas was rated in the excellent performance range based on comparison with international best practices.***

i. Very good progress: In addition, the government was rated as performing very well (i.e., very good progress) in relation to international best practice in only one (1/55) best practice area of leadership under infrastructure support – Figure 6. The excellent performance progress is on adopting and implementing national policy on breastfeeding (e.g., Baby Friendly Health Initiative, Maternity leave, and Baby Friendly Community Initiative). This finding is consistent with the high level of rating observed along the national policy development cycle. Such actions include the policy guidelines on Infant and Young Child Feeding (IYCF), the BFHI and Health Facility Practices Policy of October 1999 and the Integrated Management of Childhood Illness Feeding Guidelines.

ii. Good progress: The government was rated to be performing relatively well (good progress) at the level of international best practice in less than half of the good practice areas (23/55). Here, better performance is in the infrastructure support areas (18/55) – Figure 6 compared to policy (5/55) – Figure 5. As shown in Figure 6, the specific areas where the government was rated as having good progress in the leadership domain are;

a) Adopting a complementary feeding policy accompanied by an action plan to implement and promote it.
b) Setting country-level targets for exclusive breastfeeding and complementary feeding.
c) Political support for actions to address all forms of malnutrition.
d) Developing food and nutrition policies using evidence.
e) Ensuring transparency in the development of food and nutrition policies.
f) Ensuring public access to comprehensive nutrition information and key documents.
g) Regularly monitor adult and childhood nutrition status and population intake against specified intake targets or recommended daily intake levels.
h) Regularly monitor adult and childhood overweight and obesity prevalence using anthropometric measurements.
i) Regular monitoring of the prevalence of NCD metabolic risk factors and occurrence rates.
j) Evaluate major programs and policies to assess their effectiveness and contributions to achieving the goals of the nutrition and health plans.
k) Regular monitoring of country-level indicators for breastfeeding & and complementary feeding.
l) Develop Growth Monitoring Programmes (GMP).
m) Regular monitoring of food safety indicators.
n) Government funding for research targeted at improving food environments, reducing obesity, NCDs and their related inequalities.
o) Coordination mechanisms across government MDAs to ensure policy coherence, alignment, and integration of food, obesity and diet-related NCD prevention policies.
p) Platforms for regular interactions between government and CSOs on developing, implementing, and evaluating healthy food policies and other related strategies.
q) Using a system-based approach to improve the healthiness of food environments.
r) Ensuring that the development of all government policies relating to food is sensitive to nutrition, public health, and reducing health inequalities in vulnerable populations.

In the policy domain, as illustrated in Figure 5, the areas are;

a) Implement mandatory large-scale food fortification programs to increase the availability of micronutrients in staple foods.

b) Declaration of ingredient lists and nutrients in packaged foods per Codex recommendations.
c) Restricting the marketing of breast milk substitutes.
d) Promoting access to safe drinking water and optimal environmental hygiene and sanitation (WASH) in public places and spaces to address all forms of malnutrition.
e) Adoption of measures to manage investment and protect government regulatory capacity with respect to public health nutrition.

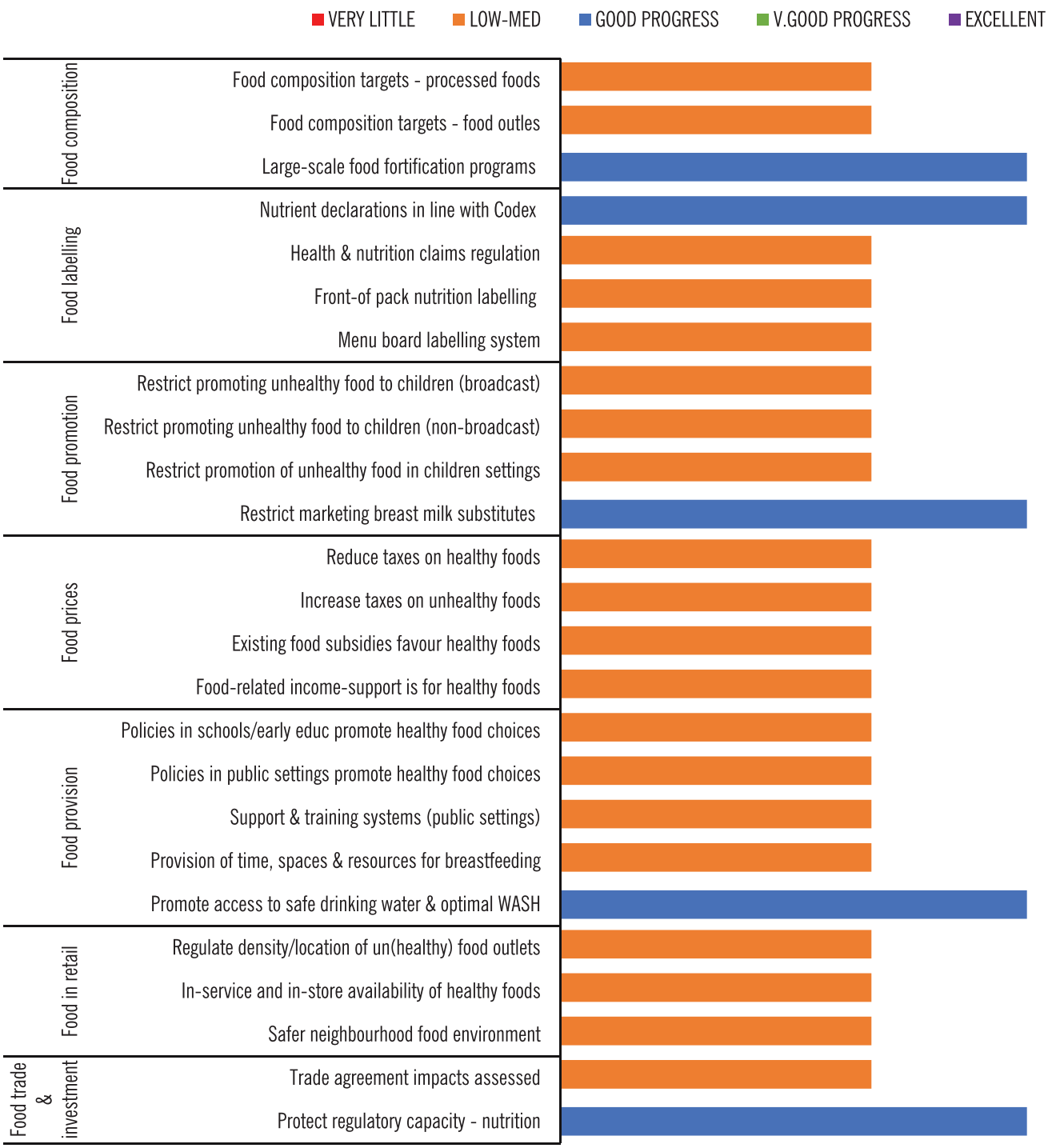
The policy actions for the listed areas or indicators are the same as the actions highlighted under the rating against the local policy development cycle.

iii. Low Progress: The government was rated as having a low level of progress (LOW-MED) in relation to international best practices in most of the good practice areas (31/55). The results demonstrate that Uganda has achieved little progress in relation to international benchmarks in most of the good practice areas. The low progress is more common within the policy domain (20/55) – Figure 5, compared to the infrastructure support domain (11/55) – Figure 6. The specific areas with low progress are:

a) Food composition targets, standards, or restrictions for the content of the nutrients of concern in industrially processed foods and meals sold from food service outlets.
b) Regulations, approval and review of nutrition and health claims on foods for consumer protection; Front-of-pack supplementary nutrition information system and/or nutrition labelling; and system of labelling the menu boards of quick service restaurants.
c) Restricting exposure and power of promoting unhealthy foods to children and adolescents through broadcast and non-broadcast media.
d) Action to ensure that unhealthy foods are not commercially promoted to children, including adolescents, in settings where children gather, such as preschools, schools, sports and cultural events.
e) All government food pricing policy action areas were rated as low.
f) In the food provision domain, all the good practice areas were rated as low except for promoting access to safe drinking water and optimal environmental hygiene and sanitation in public places.
g) All the good practice areas under the food in the retail domain were rated as low.
h) In the food trade and investment domain, undertaking risk impact assessments before and during the negotiation of trade and investment agreements was rated as low.
i) The areas rated as having low progress under the leadership domain were; Political support for improving food environments, population nutrition, diet-related NCDs and their related inequalities, establishment of clear population intake targets for the nutrients of concern and relevant food groups to meet WHO and national recommended dietary intake levels; Establishment and implementation of food-based dietary guidelines; Putting in place a comprehensive, transparent, up-to-date implementation plan linked to national needs and priorities, to improve food environments, reduce the intake of the nutrients of concern to meet WHO and national recommended dietary intake levels, and reduce diet-related NCDs; and Establishing government priorities to reduce inequalities or protect vulnerable populations in relation to diet, nutrition, obesity and NCDs.
j) In the governance domain, putting in place procedures to restrict commercial influences on the development of policies related to food environments where there are conflicts of interest with improving population nutrition was rated as low.
k) In the monitoring domain, the two areas rated as low progress are; Systems for regular monitoring of the food environments (especially for food composition for nutrients of concern, food promotion to children, and nutritional quality of food in schools and other public sector settings), against codes or guidelines and standards; and systems for regular monitoring of progress towards reducing health inequalities or health impacts in vulnerable populations and social and economic determinants of health.
l) In the funding and resources domain, all the good practice areas were rated as having low progress, apart from funding for research to improve food environments and reduce obesity, NCDs and their related inequalities.
m) Lastly, low progress was noted on having in place formal platforms (with clearly defined mandates, roles, and structures) for regular interactions

between the government and the commercial food sector on the implementation of healthy food policies and other related strategies.

Figure 5 Implementation of food environment policies in relation to international best practice



Source: Authors computation using EPRC's FOOD EPI rating data, 2022.

Figure 6 Implementation of infrastructure support in relation to international best practice

Source: Authors computation using EPRC's FOOD EPI rating data, 2022.

5. RECOMMENDED ACTIONS FOR CREATING HEALTHIER FOOD ENVIRONMENTS IN UGANDA

After rating government policy actions, the National Expert Panel identified and prioritized 22 actions for creating a healthier food environment in Uganda, considering the identified actions' perceived importance and feasibility. Of the 22 identified actions, only two were prioritized as highly important and feasible for Uganda (Table 2). These actions were both under the food composition domain (COMP-a and COMP-b). The first was reviewing and improving the quality of existing standards and developing new standards in areas without standards (e.g., regulating nutrients of concern and nutrient declarations). This includes age-specific categorization-related standards. The second was on awareness creation, documentation, and popularising standards and practices for uptake and scaling up (standards promotion). The third was the action under governance (GOVER-b) on capacity building (e.g., for Local Government officials) to enforce implementation and monitoring of standards, which was considered important and feasible to achieve as its ranking lies on the borderline (Figure 7). Food labelling, in particular, establishing a system for implementing menu boards in restaurants was considered the least important and least feasible to implement in Uganda.

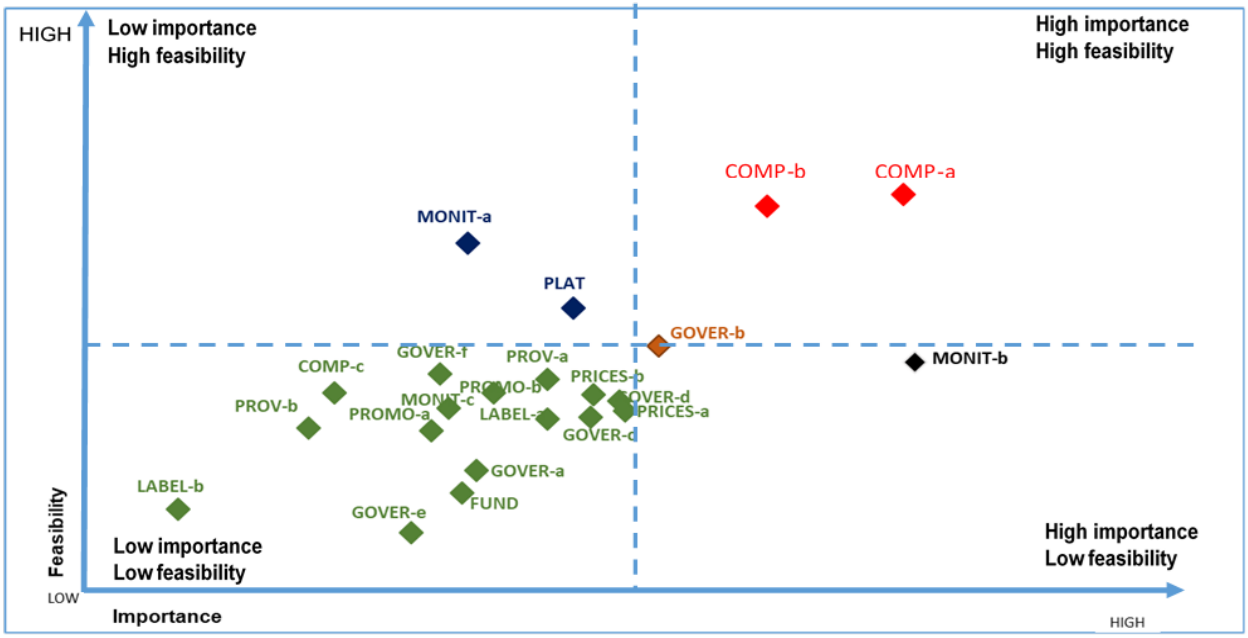
Table 1 Prioritized and recommended policy and infrastructure actions for creating a healthier food environment in Uganda

Policy domain (Indicator)	Recommended policy action	Label
High importance and high feasibility		
Food composition	Review and improve the quality of existing standards and develop new standards in areas without standards (e.g., on regulating nutrients of concern, nutrient declaration, etc.). This includes age-specific categorization-related standards.	COMP-a
Food composition	Awareness creation, documentation, and popularization of standards and practices for uptake and scaling up (standards promotion).	COMP-b
Governance	Capacity building (e.g., for Local Government officials) to enforce implementation and monitoring of standards.	GOVER-b
High importance and low feasibility		
Monitoring & intelligence	Fast track the Food Safety Bill. This will ensure that a framework law to ensure healthy food is in place.	MONIT-b
Low importance and high feasibility		
Monitoring & intelligence	Benchmark existing good practices for healthy food.	MONIT-a
Platforms for interactions	Establish a multi-sectoral and multi-stakeholder platform on healthy food and/or nutrition.	PLAT
Low importance and low feasibility		
Food prices	Incentives for healthy foods and disincentives for unhealthy foods (e.g., through taxation).	PRICES-a
Food composition	Promote verification of fortificants in specific foods and support entrepreneurs with fortificants.	COMP-c
Governance	Establish a Uganda Food Authority.	GOVER-a
Governance	Increase coverage of UNBS services (including accredited laboratory services) and adequate staffing and retooling of UNBS – technology, funding, and staffing for surveillance by UNBS.	GOVER-c
Food labelling	Establish a nutrition profiling model for Uganda, popularize and disseminate it.	LABEL-a

Policy domain (Indicator)	Recommended policy action	Label
Food labelling	Establish a system for implementing menu boards in restaurants.	LABEL-b
Food promotion	Ban advertisement of unhealthy (junk) foods in schools and transport services (buses, bus stops, taxi parks).	PROMO-a
Food promotion	Implementation and enforcement of advertisement and broadcasting guidelines.	PROMO-b
Funding and resources	Provide adequate funding and build Research & Development (R&D) technical capacity.	FUND
Food prices	Review the tax policy to discourage unhealthy foods.	PRICES-b
Food provision	Fast-track the Uganda School Health Policy and review it to ensure healthy school feeding.	PROV-a
Food provision	Put in place a regulation requiring provision for breastfeeding spaces by all employers.	PROV-b
Governance	Address coordination and mandate issues across institutions working to ensure healthy food.	GOVER-d
Governance	Establish a National Food Reserve System to ensure healthy food security, safety, and nutrition.	GOVER-e
Monitoring & intelligence	Establish a surveillance system for NCD risk factors at all levels (schools, workplaces, etc.).	MONIT-c
Governance	Strengthen the implementation of the Program-Based Approach (PBA) of the NDPIII.	GOVER-f

Source: Authors compilation using EPRC data, 2022

Figure 7 Importance and feasibility of recommended actions for the Ugandan Government: Actions targeting policy and infrastructure food environments



Notes:
1/4 Red: Are actions that are considered of high importance and high feasibility
2/4 Dark Blue: Are actions that are considered of low importance and high feasibility
3/4 Black: Are actions that are considered of high importance and low feasibility
4/4 Green: Are actions that are considered of low importance and low feasibility

Source: Authors compilation using EPRC FOOD EPI rating and prioritization data, 2022.

6. CONCLUSION

This report (scorecard) identifies gaps in implementing food environment policies and opportunities to create healthier food environments in Uganda. Evidence on the extent of government action to implement food environment policies was collected across 13 policy and infrastructure support domains and 55 related indicators of good practice, of which 12 were double-duty action indicators. As part of the process, a national panel of experts rated the extent of government action on each indicator of good practice against in-country planning and development cycle ('initiation', 'in development', 'implementation' or 'evaluation'), and international best practices ('excellent', 'very good, i.e., very high progress', 'low-medium' or 'very little').

Concerning the in-country policy development cycle, the results show that almost all the good practice areas are below the evaluation stage. Most good practice areas are in the stages of policy development and implementation. The most pronounced policy action is in the leadership domain, particularly breastfeeding policy and related action plans such as the policy guidelines on infant and young child feeding. However, a considerable number of good practice areas (more than a third) have yet to be implemented. The results indicate more significant government action gaps in the policy domains than the infrastructure support domains, implying a high level of leadership and political commitment, but actual implementation is lagging. Concerning international best practices, there is a low level of progress of government action in most of the good practice areas, and the low progress is also more remarkable in the policy domain compared to infrastructure support.

Two actions were identified and prioritized as highly important and feasible to implement. The first is reviewing and improving the quality of existing standards and developing new standards in areas where standards are non-existent. The second is standards promotion. In addition, capacity building to enforce the implementation and monitoring of standards was considered important and feasible. The least important and least feasible action to implement is a menu board labelling system.

REFERENCES

Asiki, G; Wanjohi, M; Barnes, A; Bash, K; Vandevijvere, S, Muthuri S, Kimani E, and M. Holdsworth. (2019). Benchmarking policies for creating healthy food environments in Kenya to prevent diet-related non-communicable diseases (NCDs): Healthy Food Environment Policy Index (Food-EPI) country scorecards and priority recommendations for action in Kenya. African Population and Health Research Center. March 2019.

Caballero, B. (2007). The global epidemic of obesity: an overview. Epidemiologic reviews, 2007. 29(1): p. 1-5.

Cohen, B. (2006). Urbanization in developing countries: Current trends, future projections, and key challenges for sustainability. Technology in society, 2006. 28(1-2): p. 63-80.

Malhotra, A., Noakes, T, and S. Phinney. (2015). It is time to bust the myth of physical inactivity and obesity: you cannot outrun a bad diet. 2015, BMJ Publishing Group Ltd and British Association of Sport and Exercise Medicine.

Swinburn, B., Kraak, V., Rutter, H., Vandevijvere, S.,Lobstein, T., Sacks, G., Gomes, F., Marsh, T., and R. Magnusson. (2015). Strengthening of accountability systems to create healthy food environments and reduce global obesity. The Lancet, 2015. 385(9986): p. 2534-2545.

Swinburn, B; Vandevijvere, S; Kraak, V; Sacks, G; Snowdon, W; and C. Hawkes. (2013). Monitoring and benchmarking government policies and actions to improve the healthiness of food environments: A proposed government healthy food environment policy index. Vol. 14, Obesity Reviews. 2013. p. 24–37.

Uganda Bureau of Statistics (UBOS) and Macro International Inc. (2007). Uganda Demographic and Health Survey 2006. Calverton, Maryland, USA: UBOS and Macro International Inc.

Uganda Bureau of Statistics (UBOS) and ICF. (2018). Uganda Demographic and Health Survey 2016. Kampala, Uganda, and Rockville, Maryland, USA: UBOS and ICF.

World Health Organization. (2017). Non-communicable Diseases Progress Monitor, 2017. 2017, Geneva: World Health Organization.

WHO. (2018). Non-communicable diseases country profiles

2018. 2018.

WHO. (2013). Global action plan for the prevention and control of non-communicable diseases 2013-2020. 2013.

Ziraba, A.K., J.C. Fotso, and R. Ochako. (2009). Overweight and obesity in urban Africa: a problem of the rich or the poor? BMC Public Health, 2009. 9(1): p. 465.

APPENDIX

Appendix 1: Summary of the FOOD EPI Evidence Pack for Uganda

Policy domain	Good practice indicator	Examples of international best practice	Policies and government actions in Uganda
Food composition	Food composition standards/targets set for processed foods.	***Argentina***: Mandatory maximum levels of sodium in various food products. ***South Africa***: Mandatory targets for salt reduction in various food categories. ***Denmark***: Ban on trans fats.	-No explicit food composition targets, standards or restrictions on the content of nutrients of concern in processed foods have been set by the government of Uganda. -However, the National Food and Nutrition Strategy (NFNS) (2005), provides for adoption of supply-side policies such as encouraging the production of healthier foods, and controls on the fat content of processed foods to curtail increase in obesity and diet-related NCDs. -The Food and Drugs Act empowers the Ministry of Health (MoH), and in particular the minister of health, to regulate addition of any substance of any specified class to food intended for sale for human consumption or the use such substance as an ingredient in food preparation, but no regulations were found in relation to the content of the nutrients of concern in processed foods.
	Food composition standards/targets set for meals sold in food service outlets.	***Netherlands***: Agreement with trade bodies representing food manufacturers, supermarkets, hotels, restaurants, caterers and the hospitality industry to lower the levels of salt, saturated fat and calories in food products.	None found
	Mandatory large-scale food fortification programs to increase availability of micronutrients in staple foods.	***Philippines***: Philippine Food Fortification Program for the prevention and limitation of nutritional deficiencies. ***Canada***: Mandatory enrichment of flour with B Vitamins, iron, calcium (as bone meal) and folic acid.	-The Food & Drug (Food Fortification) Regulations, 2011 (No.53) provides for mandatory food fortification bill. -The Uganda National Bureau of Standards (UNBS) has established standards for fortification e.g., maize, wheat flour. -The Uganda National Fortification Standards exist -The current National Development Plan (NDPIII) promotes; consumption of fortified foods in schools.
Food labelling	Ingredients lists / nutrient declarations required, in line with Codex recommendations.	***Many countries (Canada, USA, etc.)***: Producers and retailers required by law to provide a comprehensive nutrient list on pre-packaged food products.	-Government, through UNBS adopted East Africa Standards Nutrition labelling requirements. -The Food & Drugs Act, CAP 278 provides for regulatory measures on food labelling: prohibits display/sale of foods with false labels. -The National Standardization Strategy (2019–2022) contains general rules for labelling. -The UNBS has established standard for Nutrient labelling requirements for foods. -The Weights and Measures (sale and labelling of goods) Rules, 2020 is in line with Codex Alimentarius standards.
	Regulatory systems in place for health and nutrition claims.	***Australia / New Zealand***: Law that regulate the use of nutrition content and health claims on food labels.	-Although Government, through UNBS and the Food & Drugs Act provides for regulation of claims on foods to curb misleading claims, no specific nutrient profiling model used to prevent unhealthy foods from carrying nutrition/health claims was found.

Policy domain	Good practice indicator	Examples of international best practice	Policies and government actions in Uganda
	Front-of pack nutrition labelling system.	***UK, Ecuador***: National guidance for voluntary' traffic light' labelling for use on the front of pre-packaged food products. Colour codes of green, amber and red identify whether products contain low, medium or high levels of energy, fat, saturated fat, salt and sugar. ***Australia / New Zealand***: use of Health Star Rating (HSR) system for front of pack nutrition labelling.	None found
	Menu board labelling system.	***South Korea***: All chain restaurants with 100 or more establishments to display nutrient information on menus including energy, total sugars, protein, saturated fat and sodium. Australia: Restaurant chains (with ≥20 outlets) required to display the kilojoule content of food products on their menu boards.	None found
Food promotion	Restrict promotion of unhealthy food to children in broadcast media.	***Norway***: Ban on marketing directed to children, for any product, including food and beverages. Ban applies to broadcast media originating in Norway. ***Chile***: No advertising of unhealthy foods directed to children under 14 (or when audience share is greater than 20% children).	-No specific evidence of policy to restrict promotion of unhealthy foods to children. -The Children Act Amendment Bill (2015) stipulates Children to have access to information to which a parent/ guardian deems necessary for the child's growth and well-being; but it does not address unhealthy food advertisement.
	Restrict promotion of unhealthy food to children in non-broadcast media.	***Quebec, Canada***: Ban on all commercial advertising directed to children (under 13 years) through any medium.	None found
	Restrict promotion of unhealthy food in children's settings.	***Spain***: Spanish Parliament approved a Law on Nutrition and Food Safety in 2011, which requires kindergartens and schools to be free from all advertising.	None found
	Restrict the marketing of breast milk substitutes through broadcast and non-broadcast media.	***Various countries***: Implement policies to restrict the advertisement and marketing of breast milk substitutes (BMS). They implement the international code of BMS code.	-The Policy guidelines on Infant and Young Child Feeding (IYCF) provides for regulation on marketing of Infant and young child foods, e.g., all infant formula labels shall not discourage breastfeeding or the use of human milk, and there should be no advertising of breast milk substitutes
Food prices	Reduce taxes on healthy foods.	***Poland***: Lower tax for unprocessed and minimally processed food products. ***Australia***: Tax exemption for basic foods including fresh fruits and vegetables.	None found
	Increase taxes on unhealthy foods.	***Mexico***: 10% tax on sugary-drinks and 8% tax on unhealthy snack foods. ***Hungary***: Public health tax on sugary-drinks, various unhealthy foods.	None found

Policy domain	Good practice indicator	Examples of international best practice	Policies and government actions in Uganda
	Existing food subsidies favour healthy foods.	***Singapore***: Transitional support to oil manufacturers and importers to help them increase the sale of healthier oils to the food service industry. ***Canada***: Subsidy program that helps provide isolated communities with improved access to perishable, nutritious food.	None found
	Food-related income-support is for healthy foods.	***UK***: British Healthy Start programme provides pregnant women and families with children (under four years) with weekly vouchers to spend on foods such as; milk, plain yoghurt, and fresh and frozen fruit and vegetables.	None found
Food provision	Policies in schools/ early education promote healthy food choices.	***Finland***: Nutrition recommendations for school meals e.g., food and nutrient recommendations for salt, fibre, fat, starch, fat and salt maximums for meat and processed meat, and drinks. ***Costa Rica***: Schools only permitted to sell food meeting set nutritional standards. ***UK***: Mandatory nutritional standards for all food served in schools- restrictions on high fat, sugar, salt, processed foods.	-The School Health Policy (2008), although outdated (under review), supports delivery of nutritious and appealing meals; promoting better nutrition & feeding practices in educational institutions. However, it does not have specific standards in place. - MoES guidelines (2013) encourages increased consumption of diverse nutritious foods, fortified food -The Education Act of 2008 stipulates that feeding of children in school is a role of parents and communities, who with the school determine the format of the feeding.
	Policies in public settings promote healthy food choices.	***Wales***: Vending machines dispensing crisps, chocolate and sugary drinks prohibited in National Health Service hospitals. ***Latvia***: Government set salt levels for all foods served in hospitals and long-term social care institutions. ***New York City, USA***: Mandatory nutritional standards for all food purchased/sold by city agencies (hospitals, prisons, aged care, health facilities).	None found
	Support and training systems in place in public sector settings.	***Japan***: Mandatory oversight or monitoring by dietitian/nutritionist (e.g. menu development) for all government facilities providing >250 meals/day.	-No specific evidence on training systems, however, the Uganda Nutrition & Food Policy (UNFP) recommends incorporating nutrition education in formal and informal training, to improve knowledge and attitudes for behavioural change.
	Regulations on the provision of time, spaces and resources for breastfeeding in the workplace and in public places and spaces.	***Kenya***: Parliament passed a Health Act which requires all employers to establish breastfeeding stations with the necessary equipment and facilities. ***Norway***: Maternity leave is 42 weeks with full pay or 52 weeks with 80% of salary. Flexible part time is available for women from two months after giving birth, with income supplemented from maternity benefits. After returning to work, women are entitled to 1 – 1.5 hour breaks to return home to breastfeed, or to have the child brought to work.	-Policy guidelines on IYCF stipulates the following; (a) Employers should protect/promote maternity rights and benefits; Mothers to practice optimal IYCF. (b) Encourages Ministry of Gender, Labour & Social Development (MGLSD) to; advocate for laws & regulations that enhance maternity protection. (c) Private sector and employers to create a working environment that promotes optimal IYCF, provide facilities and time for breastfeeding. -Maternity protection is provided for under Employment Act of 2006 (i.e., safeguard mother's necessary role; and maternity leave). -The parliament of Uganda maintains a breastfeeding facility for both MPs and staff. However, this is only limited to parliament.

Policy domain	Good practice indicator	Examples of international best practice	Policies and government actions in Uganda
	Promote access to safe drinking water and optimal environmental hygiene and sanitation (WASH) in public places and spaces as a strategy to address/ reduce all forms of malnutrition.	***Nepal***: WASH sector objectives in the national development plan, focusing on improving public health by ensuring accessibility of reliable, affordable and safe drinking-water and sanitation facilities for all. ***Indonesia***: National strategy for community based total sanitation.	-The School Health Policy (2008) has a strategy to ensure access to adequate safe water for better nutrition and feeding practices in educational institutions. -The National water policy promotes safe water access to the population. -The Water Statute (1995) promotes access to safe drinking water; optimal environmental hygiene & sanitation. The NWSC Statute (1995) puts emphasis on providing water supply & sewerage services for domestic and designated areas. -The NDPIII targets increasing access to safe WASH; access to safe water supply (70% - 85% for rural areas; and 74% - 100% for urban areas). -The sustainable urbanization & housing programme (under NDPIII) provides for efficiency of solid waste collection. This is key in promoting hygiene and sanitation, but the main objective is not specifically targeting reduction of malnutrition.
Food in retail	Zoning laws on the density/location of healthy/unhealthy food service outlets.	***South Korea***: Created "Green Food Zones" around schools, banning the sale of foods deemed unhealthy e.g., fast food and soda.	None found
	Systems to encourage food stores and food service outlets to promote the availability of healthy foods and limit the promotion and availability of unhealthy foods.	***UK***: Voluntary agreement with commercial companies to increase availability of fruits/vegetables at convenience stores.	None found
	Safer neighbourhood food environment.	***Canada***: The food retail and service regulation and code of 2003/2004 – regulates; food premises construction, design and facilities, including water supply, sewage and refuse disposal and waste management, and toilet facilities; microbial, physical and chemical contamination of food; and transportation, storage and distribution of food products.	-The Food & Drugs Act, CAP 278 prohibits adding injurious substance to food. -Under UNBS, Standards # US CAC/RCP 39:1993. Provides for code of hygienic practice for foods in mass catering deals; hygienic requirements for foods intended for feeding large groups of people. -The Public Health Act empowers MoH to make rules and policies - licensing, regulation & inspection of eating houses, and regulation of preparation and sale of food by hawkers. -Government has implemented urban sanitation and hygiene interventions for improving access to public sanitation and sewerage services. -National Sanitation Policy (developed by the National Sanitation Taskforce – 1997) promotes health through improved sanitation. -Existence of some Local Government Market Ordinance. Some of the ordinances provide for; market administrator(s) to maintain adequate facilities in markets for the protection of health and safety of the public – for example; "a person handling fresh food for sale shall not permit any part of the fresh food to come into contact with the ground"; and "livestock shall not be allowed in a market except in designated places".
Food trade and investment	Trade agreement impacts assessed.	***European Union***: Mandatory environmental impact assessments (potentially including health impacts) for all new trade agreements	None found

Policy domain	Good practice indicator	Examples of international best practice	Policies and government actions in Uganda
	Protect regulatory capacity regarding nutrition	***Ghana***: Standards set maximum % fat contents in beef, pork, mutton and poultry in response to rising imports of low quality meat.	None found
Leadership	Strong, visible political support for improving food environments and population nutrition.	***New York City, USA***: Mayor (M. Bloomberg) showed strong political leadership in introducing 'landmark' food policies, including restrictions on trans-fat and portion size restrictions on sugary-drinks.	- Uganda adopted African Regional Nutrition Strategy under the African Union, with commitments towards nutrition, and efforts to stimulate actions for improved nutrition outcomes. - Government leadership commitment include the following: (a) Developing Uganda Nutrition Action Plan (UNAP), signed by the President of the Republic of Uganda, stating that all stakeholders "must act now", to address nutrition problems. (b) Presidential Initiative on Healthy Eating and Healthy Lifestyle (PIHEHL). However, this focuses on the demand side, rather than supply. (c) Nutrition Guidance for the General Population in the context of COVID-19. This provides guidance on intake of healthy diets. (d) Through the Uganda Food and Nutrition Policy (UFNP), Uganda proposed establishment of a Food and Nutrition Committee, to coordinate food and nutrition programmes in the country. - Other commitments include: (i) Setting up a secretariat for the Uganda Food and Nutrition Council in the OPM; (b) nutrition coordination committees at sectoral and sub-national levels (ii) The National Planning Authority developed National Nutrition Planning Guidelines in 2015. This is a nutrition planning and coordination framework for the entire country
	Population intake targets established.	***Brazil***: The Strategic Action Plan for Confronting NCDs specifies targets for fruit and vegetable consumption, and reductions in average salt intake. ***South Africa***: Plan for the prevention and control of non-communicable diseases includes a target on reducing mean population intake of salt to <5 grams per day.	- The policy guidelines on Infant and Young Child feeding (IYCF) specifies intake targets or recommended intake levels – for example, ensure food is of the right thickness & nutrient density (energy and micronutrients); and complementary food should be fed five times a day and amount increased as infants grow older. - The presidential initiative on healthy eating and healthy life style provides simplified daily food intake recommendation for different categories of people.
	Food-based dietary guidelines implemented.	***Brazil***: National dietary guidelines address healthy eating from a cultural, ethical and environmental perspective.	None found
	Comprehensive implementation plan linked to national needs/priorities.	***EU European***: Food and Nutrition Action Plan 2015-20 outlines clear strategic goals, guiding principles, objectives, priorities and tools.	- Under the NDP, food & nutrition are considered critical aspects of development. Nutrition is a cross-cutting issue requiring multi-sectoral intervention. The current NDP (NDPIII) targets reduction in NCD rates - hypertension (3.2 to 2.5); diabetic rates (2.5 to 2.0); cancer (1.8 to 1.2). - UNAP: adoption of healthy nutrition behaviours, growth monitoring & promotion, awareness about importance of nutrition. - The Nutrition Advocacy and Communication Strategy (2015) puts emphasis on increasing awareness, especially pointing out that processed snacks or drinks don't represent good nutrition.

Policy domain	Good practice indicator	Examples of international best practice	Policies and government actions in Uganda
	Priorities for reducing inequalities related to nutrition.	***New Zealand***: Ministry of Health upholds contracts with NGOs/ other institutions to prioritise Maori health and Maori specific needs in service delivery, service development and planning.	- The Nutrition Guidance for the General Population in the context of COVID-19 targets the general public, special interest groups such as women, children, adolescents, elderly, and the sick. - The National Nutrition Planning Guidelines anchor nutrition planning on principles that address the needs of vulnerable population.
	National policy on breastfeeding implemented, accompanied by an action plan.	***Scotland***: Was accredited as the first jurisdiction to have 100% baby friendly accreditation in maternity and community services. ***Ghana***: Health delivery system supports the global public health recommendation of exclusive breastfeeding for 6 months, beginning from birth and currently implements the Baby-Friendly Hospital Initiative.	- The policy guidelines on IYCF promotes exclusive breastfeeding - Breastfeeding is also promoted through the BFHI and "Health Facility Practices Policy" of October 1999; the "Integrated Management of Childhood Illness (IMCI) Feeding Guidelines"; and the "Vitamin A Supplementation Guidelines". - The Employment Act of 2006" safeguards working mother's necessary role in infant feeding – e.g., maternity leave.
	Policy on complementary feeding implemented, accompanied by an action plan.	***Various countries***: Adopted WHO's global strategy for infant and young child feeding which comprises of breastfeeding and complementary feeding. ***Ghana, Kenya, and Papua New Guinea***: In 2020, a complementary feeding guideline was developed for the ASIA PACIFIC region.	- The policy guidelines on IYCF have provisions to support parents to introduce appropriate complementary foods at 6 months of infant's age. It also promotes use of a variety of nutritious, locally available foods for infants/children.
	Targets and timeframes for exclusive breastfeeding and complimentary feeding set at national level.	***Bolivia***: Established indicators for breastfeeding (early initiation, rooming in, skin to skin contact and exclusive breastfeeding for the first six months), and included them in the National Health Statistics and Information System for regular monitoring.	- Guidelines on IYCF contains targets for both breastfeeding and complementary feeding. It targets ensuring timely initiation of breastfeeding within the first hour of birth; protect, promote, & support exclusive breastfeeding for the first six months and continued breastfeeding up to two years; and promoting timely introduction of nutritionally adequate complementary foods.
	Strong visible political support for actions to address all forms of malnutrition over life course.	***Europe***: European union's farm to fork strategy focuses on ensuring food security and promoting sustainable food consumption and facilitating the shift to healthy, sustainable diets as a strategy to address obesity and related health conditions in the member states. ***Malawi***: The National Multi-Sector Nutrition Policy (2018-2022) highlights commitments to dealing with the double-burden of malnutrition.	- The UNAP was designed to address multiple causes of malnutrition. - The National Food and Nutrition Strategy (NFNS) articulates prevention of low birth weight through micronutrient supplementation; use appropriate fortified complementary foods for child growth. - Uganda implements a Vitamin A supplementation program, for example for mothers and children below 5 years during child-days-plus. - One key goal of the UFNP is to improve and promote the population's nutritional status to a level consistent with good health. - One of the targets of the human capital development programme of the NDPIII is to reduce the prevalence of under-five stunting from 28.9% to 24%.
Governance	Restricting commercial influence on policy development.	***Australia***: Public Services Commission Values and Code of Conduct includes a number of relevant sections (e.g. conflicts of interest, lobbying). ***US***: Mandatory and publicly accessible lobby registers exist at the federal level, as well as in nearly every state. Financial information must be disclosed, and the register is enforced through significant sanctions.	None found

Policy domain	Good practice indicator	Examples of international best practice	Policies and government actions in Uganda
	Use of evidence in policies related to population nutrition.	***Australia***: National Health and Medical Research Council requirements to develop evidence-based guidelines.	- The UFNP provides for strategies to; promote use of evidence in policy development and implementation; and the need for timely information on food and nutrition for rational decision-making; strengthen systems for early warning information on food and nutrition situation; and enhance operational research for nutrition; and compiling food composition data for all foods consumed in Uganda. - The National Nutrition Planning Guidelines stipulate for context-specific, verifiable nutrition data which should be used to inform decision making at sectoral or Local Government levels.
	Transparency in the development of food policies.	***Australia***: Open access principles across governments, FSANZ processes for extensive stakeholder engagement in the development of new standards.	-No specific action found
	Publicly available nutrition and policy information.	***Various countries***: "Freedom of Information" legislation provides certain rights of public to access documents of government departments/agencies.	- The UFNP requires UNBS to create public awareness on food standards and food quality through information dissemination. - The NFNS proposes provision of public information on healthy diets; Development of well-coordinated system for collating and disseminating information on food marketing and distribution. - Some Ministries, Departments and Agencies (MDAs) post policy documents and strategies on their websites. - The Annual Health Sector Performance Review; and national level surveys (e.g., UDHS and UNHS) provide information on nutrition and health indicators. - No evidence on budget documents specific to nutrition
Monitoring and Intelligence	Monitoring food environments.	***New Zealand***: Database of nutrient information for different foods, monitoring of school food environments nationwide.	- The main monitoring system implemented by the government focuses on conformity of food to standards requirements. This is enforced by UNBS, however, the coverage of the monitoring system is limited. - The UFNP highlights the need to put emphasis on monitoring the food and nutrition situation. However, it does not have well laid down or comprehensive M&E framework to monitor food and nutrition situation. -The UDHS is conducted after every five years, and it contains nutritional information that can be used for monitoring.
	Monitoring population nutrition status and intakes.	***USA***: National annual survey provides detailed national information on health status, disease history and nutritional intake of adults and children.	a. UFNP: registration and monitoring of food supplements in the market; continuous monitoring and documentation of food safety/quality. b. Policy guidelines on IYCF: specifies intake targets or recommended intake levels to be monitored. c. UDHS: for monitoring child nutrition status and nutrition intake; including prevalence of malnutrition, based on indicators on stunting, wasting, and underweight. NOT regular.
	Regular monitoring of adult and childhood overweight and obesity prevalence using anthropometric measurements.	***UK***: England's National Child Measurement Programme was established in 2006 and aims to measure all children in England in the first (4-5 years) and last years (10-11 years) of primary school. In 2011-2012, 565,662 children at reception and 491,118 children 10-11 years were measured.	- Conducted in a five year interval, using the UDHS. The UDHS ensures monitoring of overweight and obesity, and other health and nutrition indicators.

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	Monitoring of NCD risk factors.	***OECD countries***: Most have robust prevalence, incidence and mortality data for the main diet-related NCDs and NCD risk factors	- The STEPS survey, used for monitoring NCD risk factors and consumption of healthy foods was conducted in 2014/15. - The NFNS provides for establishment of a food and nutrition surveillance and monitoring system; and continuous monitoring of trends in diet–related disorders and promotion of healthy diets and lifestyle choices. - Through the UDHS, overweight and obesity are monitored.
	Evaluation of major programs and policies.	***USA***: The National Institutes for Health has dedicated funding for evaluating new policies/programs expected to influence obesity-related behaviours.	- Most policies/strategies have in-built M&E frameworks, for example the NFNS has an M&E component which proposes an impact assessment of the strategy after 5 or 10 years of implementation. - The UNAP had an M&E framework. However, the plan is cognizant of a weak M&E system for nutrition and food security indicators, and proposed a comprehensive/integrated multi-sectoral monitoring system for nutrition.
	Monitoring of inequalities in relation to nutrition.	***New Zealand***: All annual Ministry of Health surveys estimate by subpopulations	- The annual sector performance reviews and reports provide a monitoring platform. - We note that existing progress monitoring initiatives are not specifically meant for nutrition and health impact monitoring in vulnerable populations i.e., they are general health sector performance monitoring.
	Monitoring country level indicators for breastfeeding & complementary feeding.	***Bolivia***: Set indicators for breastfeeding (early initiation, rooming in, skin to skin contact and exclusive breastfeeding for the first six months), and included them in the National Health Statistics and Information System for regular monitoring. ***Vietnam***: Adopted the WHO IYCF indicators and incorporated them in the National Nutrition Surveillance System (NNSS).	- The UDHS and Health Management Information System (HMIS) capture and report information on timely breastfeeding initiation; exclusive breastfeeding of infants aged 0 - 6 months; and timely complementary feeding. - The policy guidelines on IYCF proposes M&E at all levels, to ensure effective implementation. Key indicators include; percent of mothers initiating breastfeeding within one hour of delivery, percent of children started on complementary foods at 6 - 10 months, etc.
	Development of Growth monitoring (GMP) programmes, and monitoring both childhood obesity and undernutrition.	***Argentina***: Set growth charts which were developed and released jointly by the National Department of Infant and Maternal Health of the National Ministry of Health and the Argentine Pediatric Society. ***Japan***: Child growth and development monitoring is conducted once a year in schools, through the monitoring and evaluation system for the school lunch program.	- The policy guidelines on IYCF promotes growth monitoring and promotion. For example, it requires maintaining child health card or mother and child health passport to monitor growth; and continued monitoring of growth through 5 years of age. - The routine HMIS at health facility level provides for measurement and regular monitoring of child growth, including childhood overweight/obesity and under nutrition.
	Monitoring food safety indicators such as microbial safety, mycotoxins, and chemical components.	***China***: Established food safety law of the people of China. The law provides for; food safety management in food production, processing, sale and distribution (including restaurant services), production, distribution and application of food additives, food storage and transportation; risk monitoring system and assessment for food safety such as monitoring food-borne diseases, food contamination, and harmful factors in food.	- The Aflatoxin Control Action Plan (ACAP) has an inbuilt plan for monitoring aflatoxin. - A Food and Nutrition Security division was established in the Ministry of Agriculture, Animal Industry and Fisheries (under crop resources); and Uganda Aflatoxin Technical Working Group. - Food safety, through aflatoxin mitigation has been mainstreamed in the Agriculture Sector Strategic Plan. - Other food safety provisions are contained in the UFNP, and the National Standards and Quality Policy (2012);

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Funding and Resources	Funding for nutrition as a proportion of total health spending.	***Thailand***: Expenditure report from 2012 showed the government had increased spending on nutrition (excluding food, hygiene control).	- The NBFP FY 2020/21 states that investment in prevention and management of NCDs is one of the priorities of the health sector in the medium term. However, it is not explicit on healthy eating and the food environment. - There is annual budgetary allocations to health services programs, through the Ministry of Health (MoH), for example FY 2020/21 allocation for public health was 5.2 billion shillings. Of this, about 13% is meant for NCDs and health education, promotion and communication. - A Multi-sectoral Food Security and Nutrition project was implemented between 2015 and 2019. It was funded to the tune of US$ 27.64 million, to increase production and consumption of micronutrient-rich foods and utilization of community-based nutrition services. - The UFNP proposes that Food and Nutrition interventions should be funded through the consolidated fund; and advocates for school children feeding fund.
	Research funding for obesity and other NCDs.	***Thailand***: National Research Council funded more projects on obesity and diet-related chronic diseases between 2013 and 2014.	- There is annual budget annual allocations for health research – e.g., FY 2020/21, health research was allocated Shs 788 million. However, it is unclear how much is specifically allotted to research on food environment and NCDs. -The UFNP proposes mobilization of resources for research related to food nutrient content and nutrition-related diseases, in order to generate information necessary for improving the food and nutrition situation in Uganda.
	Statutory health promotion agency with sustainable financing.	***Australia***: The Victorian Health Promotion Foundation is an autonomous government agency established as a dedicated health promotion agency.	- There is no independent government agency established through legislation, outside the MoH and MAAIF. - The MoH has two key divisions – ((a) Health education and promotion division, and (b) Nutrition division. - The MAAIF has a food and nutrition security division under crop resources directorate. MAAIF also established Uganda Aflatoxin Technical Working Group. - A specific nutrition-dedicated programme is non-existent. - We also observed that nutrition is only included in programmes and sub-programmes, for example, in the agricultural education platform. In health, out of 12 priority programmes and sub-programmes, nutrition is included as a sub-programme under MCH programme. Otherwise, nutrition is not addressed in a fully-fledged nutrition programme.
Platforms and interaction	Coordination mechanisms across departments / levels of government.	***Malta***: Inter-Ministerial Advisory Council on Healthy Lifestyles (cross-sectoral group) advises the Minister on Health with a life-course approach to nutrition.	- Nutrition coordination committees at sectoral level. - The UFNP provides for creating a mechanism for multi-sectoral coordination and advocacy for food and nutrition, and establishment of Uganda Food and Nutrition Council (UFNC), and proposed secretariat for UFNC at the Office of the Prime Minister (OPM). - A Nutrition Technical Working Group established at MoH – a multi-sector group tasked with the role of coordinating nutrition issues across sectors.

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	Platforms for government and commercial food sector interaction.	***UK***: "Responsibility Deal" was an initiative to bring food companies and non-government groups together to address NCDs.	None found.
	Platforms for government and civil society interaction.	***Brazil***: The National Council of Food and Nutrition Security (CONSEA) is made up of civil society and government representatives that advises the President's office on matters involving food and nutrition security.	- The Nutrition Technical Working Group provides platform for Interaction between the government and Civil Society Organizations (CSOs). It is multi-sectoral, and comprises experts from government, Development Partners, CSOs, private sector and academia. - Civil society groups also provide platforms for interaction, in collaboration with MoH and MAAIF, for example, the Uganda Food Rights Alliance, Uganda NCD Alliance, and Uganda National Heath Consumer Organization.
	System-based approach with (local and national) organisations, partners or groups to improve the healthiness of food environments.	***New Zealand***: Healthy Families NZ is a large-scale initiative that brings community leadership together in a united effort for better health. ***Australia***: Healthy together Victoria in Australia aims to improve people's health where they live, learn, work and play. Focus is on addressing underlying causes of poor health in children's settings, workplaces and communities by encouraging healthy eating and physical activity, and reducing smoking and harmful alcohol use.	No specific evidence office.
Health in all policies	All government policies sensitive to nutrition and inequalities.	***Slovenia***: Undertook a Health Impact Assessment in relation to agricultural policy at national level.	- The National Health Policy (2010) provides for mainstreaming of health in all policies. - The NDPIII prioritizes population health; and emphasizes the importance of population nutrition in development, under the human capital development programme of the plan (NDP). Specifically, the NDP contains better population nutrition indicators as part of key results to be achieved over the plan period. - National Planning Authority developed the National Nutrition Planning Guidelines, which gives direction or guide to nutrition intervention planning at all levels, in different sectors. - The MoH, under the Food and Nutrition Technical Assistance project implemented "Nutrition Service Delivery Assessment" to support integration of nutrition into all health services.

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