

Legal and Political Feasibility of Implementing Front-of-Pack Labelling Interventions to Prevent Nutrition-Related Non-Communicable Diseases in Kenya

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Abstract

Background: Kenya lags in the adaptation and implementation of front-of-pack labeling interventions despite the rising prevalence of nutrition-related non-communicable diseases. It is important to explore the factors influencing the political acceptability and legal feasibility of this policy recommendation to support its uptake in the Kenyan context. The objective of this study is to assess the legal and political feasibility of implementing front-of-pack labeling (FOPL) interventions for the prevention of nutrition-related non-communicable diseases in Kenya.

Design: The feasibility assessment used the novel FELIP Framework. We conducted desk-based reviews of the existing laws, laws related to the sector, the present legal infrastructure, and processes involved in adopting the laws to identify potential policy formulations. We also conducted key informant interviews with stakeholders on their views on the barriers, facilitators, and legal and political feasibility of the FOPL policy. The findings from the key informant interviews and desk reviews were analyzed thematically and mapped against the original policy formulations identified as part of the FELIP method.

Results: Policy and decision-makers in Kenya are in support of the adoption and implementation of a front-of-pack labeling intervention. The main facilitators to the development of the policy identified were (1) the availability of supporting evidence, (2) the development of standards, and (3) the identification of an appropriate policy anchor and administrative infrastructure. The main barriers were (1) nutrition literacy, and (2) industry interference.

Conclusion: The adoption and implementation of a front-of-pack labeling system in Kenya is largely politically acceptable and the legal infrastructure is favorable to anchor the policy. There is a need to increase political will in support of public health interests over commercial interests. Public health campaigns are essential to realize the effective uptake of the intervention at the population level.

Background

The rising prevalence of non-communicable diseases (NCDs) is a public health issue of concern for sub-Saharan African countries. Globally, there was a notable increase in NCD-related deaths between 1990–2019 [1]. Specifically, it was reported that the probability of premature deaths from NCDs such as cancers, diabetes, and cardiovascular disease stood at 20.9% in the African region in comparison to a global average of 18.8% [2]. The increasing availability and consumption of ultra-processed, energy-dense foods, high in salts, sugars, and saturated fats, and the consumption of sugar-sweetened beverages (SSBs) has been identified as a key driver of overweight, obesity, and nutrition-related NCDs (NR-NCDs) in the region [3]. Kenya's Ministry of Health identifies these shifts in dietary patterns as a major driver of the increased burden of morbidity, and hospital-related mortalities due to NCDs which are currently estimated at 50% [4].

If unregulated, current trends in overweight and obesity have concerning implications for the epidemiological profile of the Country [5]. Furthermore, the detrimental impact of NCDs on the socio-

economic development of emerging economies has been forecasted by researchers [6]. These concerns are particularly relevant to Kenya which, in comparison to its peer low and middle-income countries (LMICs) has better economic performance which has in part been attributed to better-educated and healthier Kenyans in the labor force [7]. Cognizant of the need to intervene to facilitate healthier food choices by consumers, there have been calls by the international community for policy tools intended to inform consumer food purchases and dietary habits. In line, the World Health Organization (WHO) developed a set of guiding principles and a framework manual for front-of-pack labeling (FOPL) as a tool to facilitate consumer literacy on the nutrient content of foods and beverages [8][9]. The adoption of FOPL is intended to aid healthy food choices for populations for improved health outcomes. These recommendations are intended for use by Member States led by governments through collaborative processes with key stakeholders. Furthermore, it is anticipated that FOPL will drive the agenda for healthier food environments by catalyzing the reformulation of foods by industry actors [10].

Even with evidence on the urgency for action, best practice from the global community, and presence of local expertise, action by the Kenyan government towards the adaptation and translation of FOPL policy recommendations for the prevention and control of NCDs seem to bear negligible forward movement for the Country [11]. Analyses of the implementation of healthy public policies for the prevention of NCDs bear insights to the barriers and enablers of NCD prevention policies [6][12][13][14]. While these findings are likely generalizable to a suite of NCD prevention and control policies in the SSA region, what is not yet well explored is the factors influencing the political acceptability, and the legal feasibility of FOPL policy formulations for successful and timely policy uptake in the Kenyan context. This paper seeks to address the legal and political feasibility of FOPL interventions in Kenya informed by the perspectives of key policy and decision makers representative of government agencies, civil society organizations (CSOs), and international non-governmental organizations (INGOs) concerned with the food environment in Kenya.

Methods

This study was conducted as part of a larger study assessing the legal and political feasibility of two priority policy interventions in Kenya, Uganda and Tanzania: simplified nutrition labelling through the use of front-of-package labelling, and restrictions on child-directed marketing of unhealthy foods and beverages. This study was conducted collaboratively by researchers from two institutions from Kenya (African Population and Health Research Center – APHRC), and South Africa (PRICELESS) supported by a grant from the International Development Research Centre (IDRC), Canada through the Global Research and Capacity Building to Prevent NCDs Project (Global RECAP) [15]. Global RECAP aims to strengthen capacities to promote healthy food environments for the prevention of nutrition-related non-communicable diseases (NR-NCDs) through the identification of concrete context-relevant priority actions. The research teams involved in this study were trained in policy analysis research methods by technical experts from PRICELESS SA in October 2021.

Study Design

To achieve our aim, the FELIP framework (Fig. 1) was adapted to assess the legal feasibility of the FOPL intervention in Kenya as outlined in the steps below [16]. A detailed explanation of the methodological design and components of the policy formulations identified is outlined in this section.

Step 1: Adaptation of the FELIP framework for selected intervention assessment

The FELIP framework – a tool to assess the legal feasibility of fiscal policies for non-communicable disease prevention in sub-Saharan Africa – was adapted to allow for the assessment of the FOPL policy in Kenya. However, the FELIP framework is limited in that it only allows for the determination of policies which are possible to implement without consideration of the feasibility of successful policy implementation. The tool was adapted to include a political feasibility component supported by the Varvasovsky and Brugha (2000) stakeholder analysis. The V & B assessed key policy and decision makers involvement and interest in the issue, the position and level of influence of the stakeholder on the adoption of the policy, and the impact of the issue on the actor [17]. The V & B analysis was adjusted to identify stakeholder arguments for their position, any evidence provided by stakeholders in support of their position, and any indication of alternatives/ adjustments that can make the policy more acceptable (Appendix 2).

Step 2: Identification of the policy formulations used for the assessment

Guiding documents from the World Health Organization were used as a baseline to identify policy components for the two priority interventions, and was supplemented by a systematic review of domestic and regional legal instruments and academic literature. The researchers then created an Excel spreadsheet with the identified policy components using regulatory components captured in the World Cancer Research Foundation's NOURISHING Framework.

Step 3: Conducting key informant interviews

Semi-structured interviews were conducted with expert participants on their views on the legal and political feasibility of the selected policy interventions. The interviews probed on the following themes: participant experienced, views on the successes and challenges in developing NR-NCD policies, as well as FOPL policies specifically, potential barriers and facilitators to future policy action, and questions on the administrative feasibility of the proposed policy intervention broadly (Table 1).

Table 1

Semi-structured key informant interview guide – Data collection questions used.

What are the current government’s efforts in developing and implementing policies and actions to create a healthy food environment for the prevention of NCDs?
How are the policies and actions implemented /reinforced?
- Are there any policy reinforcement measures at various levels of the government?
- Are there any challenges that counteract these reinforcement measures?
What additional policies and actions do you think the government should implement to create a healthy food environment?
- Why do you think these policies/ actions have not been implemented in Kenya?
- Who should take responsibility for developing and implementing such policies?
- What are the opportunities for implementing these policies?
- What are the potential barriers / challenges?
- What are the potential facilitators?
What is your opinion on the implementation of front-of-pack labelling?
What is your opinion on the restriction of marketing of unhealthy foods and beverages to children?
Has the government of Kenya considered [insert priority intervention]?
- Do you think that this intervention would be politically acceptable to policy makers and the broader public?
- What might be barriers to the government adopting [insert priority intervention]?
- In your opinion, who might be influential on decisions regarding [insert intervention]?
- How might these stakeholders seek to influence the process?
In your opinion, what might be the administrative burden associated with adopting [insert priority intervention]?
- What is the existing infrastructure that could be used to implement the intervention?
- What would be the options to strengthen this infrastructure?
- What would be administrative facilitators to the implementation of the intervention?
- What might be administrative barriers to the implementation of the intervention?
- In your opinion, who might be influential on such action? Why? How?

Step 4: Supplementary desk review of local laws, policies and other literature

A desk review of legal and policy instruments identified using the INFORMAS Food-EPI method (conducting preceding this study) was conducted, as well as supplemental materials identified during the key informant interviews were collected [18]. Along, with the findings from the key informant interviews, the data was thematically analyzed and mapped against the original policy formulations identified as part of the FELIP method (Appendix 1).

Results

Sixteen participants (7 government officials, 9 from CSOs including NGOs and patient groups) from different sectors discussed the feasibility of the adoption and implementation of FOPL interventions in Kenya. Three dominant themes emerged from the data analysis: the perceived limitations/ barriers and reasons for the perceived unfeasibility of the FOPL intervention, and the factors deemed as facilitators to the FOPL intervention. Table 2 outlines the themes and categories that contribute to each theme.

Table 2
Themes and contributing categories

Theme	Contributing categories
Facilitators to the FOPL policy development and implementation	• Supporting evidence
	• Development of standards
	• Identification of policy anchor and appropriate administrative infrastructure
Barriers to the FOPL policy development and implementation	• Nutrition literacy
	• Industry interference

Facilitators to FOPL Policy Development and Implementation

Supporting evidence

An expert from the ministry of health mentioned that the availability of the national cost of illness data could assist in mitigating industry resistance and “make them see the sense” of the intervention.

Evidence was said to increasingly be considered important for policy and decision making for healthy diets in Kenya. One expert explained that “without evidence we won’t be able to convince the population and also the industry why we need to regulate some of these particular products or why they are part of providing a healthy diet or healthy nutrition to Kenyans”. Reference was made by a government actor to the successful regulation of the powerful tobacco industry actor owed to the use of evidence to support decision making.

“Tobacco industry is one of the highest tax paying organizations or industries in this Country and yet the policy makers accepted because, one, there was evidence” Ministry of Health Official 1

An expert expressed that data on the burden of NCDs would inform decision making in relation to Kenya’s health sector and for advocacy for interventions on diseases of concern. Moreover, this expert explained that this data can be used to justify the allocation of resources for NCDs for better health outcomes.

The experts generally considered cost-evidence essential to decision making on action for healthier food environments. Several experts noted that there is a need for evidence on the cost of inaction versus the cost of intervention. According to one expert, the failure to intervene in nutrition-related risk factors for children through action in the four proposed intervention areas of the RECAP project, implies that future investment in the management and treatment of NR-NCDs and their associated complications – a costlier undertaking.

“ if we are not going to invest in the health of children by doing what is propose in this particular instance by limiting marketing of unhealthy foods introducing, of pack labeling, reformulating the foods essentially what we are waiting for is these children to get either obese or to get NCDs which will be so much more expensive for us to manage or treat rather than investing in this policies which will help us prevent getting to that point.” Civil Society Organization Official 1

The above quoted participant added that forecasting budgetary allocation to NCDs using projections of current government spending can assist with decision making on resource allocation to NCD prevention, management or treatment. Despite acknowledging the importance of cost-evidence, most of the study participants reported never having used cost information for decision making for health, or NCDs specifically. The lack of consideration of cost evidence was reported in the development of the National NCD Strategic Plan. It was explained that this was in part due to a lack of national level evidence costing data thus, global evidence was considered in decision making.

Development of Labelling Standards

An expert added that the capacity of KEBs is also in the communication of standards to manufacturers. Further, it was said that these standards are developed by KEBs in collaboration with other stakeholders.

Some key actors thought to be important in the development of standards included: the department of health; Ministry of Trade; Treasury; the Office of the President; donors; and research organizations.

The discussion surrounding standards surrounded 2 key issues. Firstly, participants discussed standards from the perspective of establishing the system of labeling; the use of font; legibility and layout of information on packaging; and language used. Acknowledging Kenya’s status as a member state of the World Trade Organization (WTO), and of the East African Community (EAC) trading block, experts from the civil society, and from the government iterated the importance of harmonizing national standards to those of the WTO and EAC.

“we are also a member of the world trade organization so all even as we are coming with the proposed restriction that we have we also have to cognizance of the WTO about the EAC because anything we say about the advertising or the labeling we normally use the east African standards so definitely it has to be in harmony” Ministry of Health Official 2

In addition, some experts stressed the importance of establishing nutrient thresholds that would inform the labeling of product packages. This was mentioned to be essential for the purpose of making it clear to the lay person what constitutes foods of interest to them. One participant gave an example of the use of the traffic light system which has been adopted by several countries and simplifies packaging in a way that can be understood by consumers:

“maybe the simplicity of the packaging is most critical because as I have mentioned, other countries have just used the traffic lights ... You also have to be very sure that you have the green light that at least this is something that has less sugar, less fat, less whatever and all that sort of thing. So if there is a way in which even a layman can be able to understand what you are packaging and labeling, to me that’s most important I think... also to align with what is internationally agreed because a lot of our products are not just going to be sold in Kenya” Non-governmental Organization Official 1

Policy anchor and administrative infrastructure

Some experts also discussed the need to anchor the FOPL policy within a legal framework to support its implementation in the Country. According to one expert, FOPL is a matter of consumer protection and therefore, it was suggested that the policy be anchored in Article 46(1) of the Constitution of Kenya.

“it say that the consumers have the right to information necessary for them to gain benefits from goods and services... then you need to give proper detail of what is contained there in terms of nutrition content then the fidelity of what we are saying because there is one thing to label and there is another to have content reflect the label.” Non-governmental Organization Official 2

According to another expert, the Public Health Act (CAP 242) – concerned with the protection of public health - is the “bigger anchor policy” which also empowers Public Health Officers work towards compliance/ enforcement. There was also mention of the Food, Drugs and Chemical Substances Act (CAP 254).

Overall, most experts suggested that the Kenya Bureau of Standards (KEBs) should be on board the policy as an agency supporting the enforcement/ implementation of FOPL nationally. This was largely because KEBs is a government agency which was established to ensure that *“foods that we eat, both locally and also in terms of imports, are able to meet required standards. So more or less like they’re also like the main house where standards are being hosted”*. Additionally, it was said that KEBs has a wide network that can support FOPL implementation in the Country. Furthermore, experts also considered supermarkets and the Department of Health as instrumental in the enforcement of FOPL. Considering Kenya’s current devolved system of government, some experts expressed that enforcement would be better handled at the level of County Government.

Barriers to FOPL Policy Development and Implementation

Some limiting factors have been suggested to the successful development and implementation of the FOPL policy in Kenya:

Nutrition Literacy

Despite agreement that the implementation of FOPL policies are fundamental for the promotion of consumer nutrition literacy for better informed food purchase and consumption habits for the prevention of NR-NCDs, participants raised concerns that FOPL requirements do not guarantee changes in consumer purchase behavior. These challenges were discussed with reference to the current labelling systems which were described as written with a scientific audience in mind rendering them “irrelevant” to the lay person. The importance of “simplify(ing) the nutrition labelling” system with a focus on the macronutrient content of foods, or to systems which utilize the traffic light system for better public understanding was emphasized. There was mention of the need to consider and address factors beyond literacy driving purchase behavior for successful uptake of FOPL. Overall, experts neither doubted the value nor acceptability of FOPL by the public, rather they emphasized that the intervention “needs to go hand-in-hand with proper advocacy so that people actually understand what they are saying on this packaging and what the messaging is on them” for behavior change:

“If the consumer is educated on why he or she has to look at the label before buying then of course it would be a success story otherwise you realize that buy by recall... public health education would actually be essential on the role of why you need to look at the label before you buy so now people can change their mindset when they are doing their shopping”. Ministry of Health Official 1

Industry Interference.

Possible avenues for industry opposition included the cost implications of revised packaging incurred with the implementation of the new labeling standards by industry actors. Furthermore, participants cited challenges with the enforcement of FOPL among Small and Mid-Size Enterprises (SMEs) who are said to have “curved a niche for themselves in the market” in comparison to larger multinationals. Comparatively, other experts opined that some small businesses are capable of implementing FOPL faster than larger organizations:

“KEBs had mentioned that there are already businesses which are implementing the front of pack labeling ... it is because they are small and are capable of doing rapid changes quickly as opposed to big business which need to do the changes in kind of a long term thing” Civil Society Organization Official 2

Another industry strategy suggested to potentially hinder progress on the development and implementation of FOPL included leveraging trade agreements and their influence/ relationships with policy and decision makers to lull the process of FOPL implementation by requesting for a longer transition period to which the government is likely to comply. A consumer protection specialist also warned that in the case of successful policy implementation, there will be a need for the establishment of

strong verification mechanisms as they explained that industry often uses “labeling as a marketing gimmick” to mislead consumers to increase sales. Reflecting the same concern, an expert from the government expressed the need for an investment in verification mechanisms for the FOPL claims. In their perspective:

“As a country we also invest in regular surveillance where products can be sampled and counterchecked so that so that we don’t have products that are misleading or products that have been deliberately tempered with.” County Government Official 1

Discussion

This section presents a discussion of the key emerging themes from the study and considers the implications on the political and legal feasibility of the proposed intervention. Our study found that there is intention from the national government to introduce FOPL. Furthermore, the ongoing dialogue on the development of Kenya’s potential Nutrient Profile Model (Kenya NPM) is promising as the NPM will be utilized as a guide for the implementation of FOPL. Interestingly, industry interference was noted as a potential factor lulling the process of FOPL implementation in Kenya currently. While the findings did not bear in-depth explanations of the noted conflict of interest between food industry actors and policy and decision makers in government, there was mention of vested interests of decision makers who are invested in the food industry; contributing to the delay/ lack of implementation of the FOPL system. Similar challenges emerging from partnerships with food industry actors on issues surrounding regulation are noted, not only in LMICs such as Colombia and Chile, also in Canada and France[19]. The result of these partnerships also include the development of industry-friendly FOPL [20]. As the purpose of FOPL is the promotion of healthy food environments, there must be caution in the adaptation of commercial interests to the FOPL system over public health concerns; keeping in mind that the ultimate goal for industry actors is ‘regulatory capture’[21].

This potential deflection of the FOPL narrative from one focused on improving population health, to an inclination towards consideration of commercial and trade related issues discussed by Kenyan experts reflects on accounts by Mialon et al [19]. While our results show concern for the ability to regulate industry due to the presence of trade agreements, and industry bargaining power as a result of industry contribution to the national economy through job creation and government taxes, experts in our study were of the belief that interference from this perspective can be stemmed by leveraging on international cooperation in trading blocs such as the WTO and the EAC. It has been proposed that this can be achieved through the promotion of ‘health in all policies’ – at a national and international level [22]. This approach was also noted as a strategy to also mitigate industry’s use of trade and investment agreements to delay/ oppose progressive policies observed in the tobacco, alcohol and food industry regulation efforts [23]–[26].

Addressing the potential industry opposition to progressive health policies and criticism of their effectiveness in advancing population health, experts stressed the need for locally generated evidence.

Firstly, data were said to be crucial in achieving buy-in from key policy and decision makers. Specifically, there was mention of the need for robust evidence on the burden on NCDs in the Country as was done in the successful regulation of the tobacco industry in Kenya. More specifically, cost evidence was stated to aid the decision making process by informing policy makers on the cost of inaction and that of industry-friendly approaches to the Country. Indeed, the development of cost-effective policy solutions for NCD related interventions is dependent on the cost identification. However, national and regional level databases and resource allocation to enable these estimations are scarce. Nonetheless, nationally representative COI will be helpful in the prioritization of, and resource allocation to the proposed strategies for targeting the prevention of NR-NCDs [27].

In addition, our results also show the need for buy-in and understanding of nutrition labels by the general public. Literature suggests that in order for the FOPL to have an effect, consumer literacy and acceptability of the labels is a priority action [28]. Literacy not limited to the provision of information, also referring to the ability of the public to understand and utilize nutrition information for informed decision making for better health outcomes. Cognizant of this, respondents of our study suggested the need to ensure that consumer literacy is promoted for the successful uptake of the proposed regulation. This is of particular importance to LMICs as it has been found label understanding is lower among low-income and low-education priorities who are more at risk of nutrition-related illnesses [29], [30]. Global evidence indicates that interpretive systems such as warning labels (WLs), Nutri-score, and multiple traffics light system (MTL) are preferable in low income settings as they facilitate quick and easy understanding and identification of the excessive nutrients present in a product [31]. These findings potentially necessitate the need for an assessment of the nutrition literacy levels of the population. Further studies should explore the comprehensibility and effectiveness of various FOPL systems.

This study provides insights from key policy and decision makers in Kenya from a broad range of backgrounds who inform perspectives from various government agencies, INGOs and CSOs on the introduction of FOPL for the promotion of healthy food environments. However, the range of stakeholders involved in the study also presents a limitation as the views shared do not include those of other important segments of the population such as the public. Furthermore, the sampling strategy included policy and decision makers which expertise in the area of nutrition, food environment and NCDs, therefore excluding other key experts in policy making whose insights may have enriched the discussion. Finally, the interview guide developed for this study focused generally on 4 proposed intervention areas – FOPL, food reformulation, restricting marketing to children, and fiscal interventions such as sugar-sweetened beverage (SSB) taxation. As a result, there was limited time for an in-depth exploration of participant perspectives on the legal and political feasibility of the introduction of a FOPL system.

Conclusion

This research shows that policy and decision makers with expertise in the food environment generally accept and are in support of the introduction of a FOPL system in Kenya. Despite this, there are potential barriers to the effective implementation of the intervention. As a result, the implementation of the FOPL

system in Kenya calls for the prioritization of the public health agenda over commercial interests; evidence generation for buy-in from policy and decision makers and the public; and public education to improve health literacy levels in order to realize the health benefits of the intervention at population level.

Abbreviations

FOPL

Front-of-Pack Label

NR-NCDs

Nutrition-related non-communicable disease

WL

Warning label

MTL

Multiple traffic light

LMIC

Low- and middle- income country

NPM

Nutrient profile model

Declarations

Ethics approval and consent to participate

Ethical approval for this study was given by the AMREF Ethics and Scientific Review Committee (**AMREF-ESRC P901/2020**) and the research permit obtained from the National Commission for Science and Technology and Innovation (**NACOSTI/P/21/8429**). Informed consent and permission to record was obtained from participants after full disclosure of the implications of participation in the study. As all the respondents participated on the basis of full anonymity, the transcripts were de-identified.

Consent for publication

Not applicable

Availability of data and materials

The data that support the study are not publicly available as it contains personal quotes from the key informant interviewees, which may be identifiable.

Competing interests

The authors declare that they have no competing interests.

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Authors' contributions

GA, PK, and KH designed and planned the study. VO, PK, MW, MM, CK and SM supported project implementation, data collection, and monitoring. GA, PK, MM and VO advised and discussed the data analysis. VO and PK analyzed the data. VO drafted the manuscript which was reviewed and edited by GA, PK, and MM. All the authors approved the final version of the manuscript.

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Figures

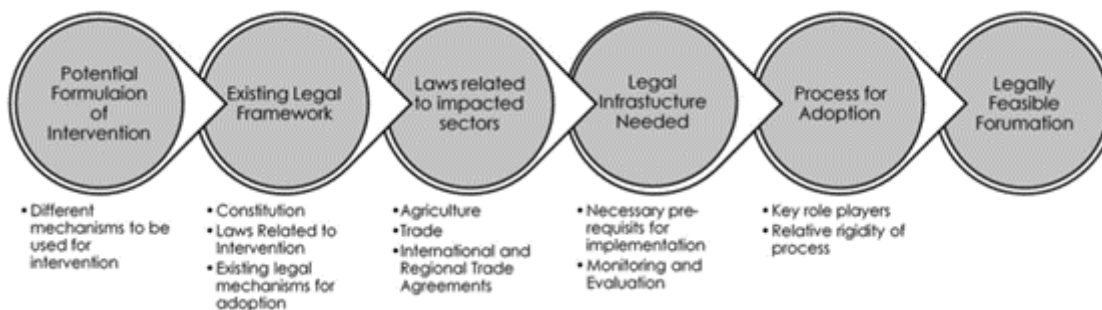


Figure 1

A graphic depiction of the FELIPE framework (Abdool Karim et al., 2021)

Supplementary Files

This is a list of supplementary files associated with this preprint. Click to download.

- [Appendixs.docx](#)