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REPORT OF SCOPING STUDY

POLICY AND LEGAL LANDSCAPE **ANALYSIS FOR FRONT-OF-PACK LABELING AND SALT TARGET SETTING IN NIGERIA**

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Abbreviations and Acronyms

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	Ave Health Sense Limited
	Back of Pack Labelling
CAFSANI	Consumer Advocacy for Food Safety and Nutrition Initiative
CAPPA	Corporate Accountability and Public Participation Africa
CS-SUNN	Civil Societies Network for Scaling Up Nutrition
CSOs	Civil Society Organizations
CVD	Cardiovascular Disease
DFDS	Department of Food and Drug Services
	Diet-Related Non-Communicable Diseases
FCCPC	Federal Competition and Consumer Protection Commission
	Federal Government of Nigeria
	Federal Institute of Industrial Research Oshodi
	Federal Ministry of Agriculture and Rural Development
FMITI	Federal Ministry of Industry, Trade, and Investment
FMJ	Federal Ministry of Justice
	Federal Ministry of Health
	Front-of-Pack Labeling
	Guidelines Dietary Amounts
	Global Health Advocacy Incubator
	International Association for the Study of Obesity
	International Institute for Tropical Agriculture
	Institute of Public Analysts of Nigeria
	Low and Middle-Income Countries
	Manufacturers' Association of Nigeria
	Ministries, Departments and Agencies
	Nimstries, Departments and Agencies National Agency for Food and Drug Administration and Control
	National Agency for Food and Drug Administration and Control Nigeria Sodium Study
	Nigerian Association for Small and Medium Enterprises
	Non-Communicable Diseases National Council on Nutrition
	National Food and Nutrition Policy
	Network for Health Equity and Development
	National Strategic Health Development Plan II
	National Health Policy
	Nigeria Health Watch
	Non-Governmental Organization
	NCD Multisectoral Action Plan
	National Policy on Food Safety and Its Implementation Strategy
	National Strategic Plan of Action on Nutrition
	Pan American Health Organization
	Resolve to Save Lives
	South East Asia Region Organization
	Sustainable Development Goals
	Standards Organization of Nigeria
	United Nations
	United Nations Children's Fund
WHO	World Health Organization

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Executive summary

The prevalence of Non-Communicable Diseases (NCDs) globally is rising, especially in Low- and Middle-Income Countries (LMICs). One of the major attributable risk factors is an unhealthy diet. There is a rising prevalence of cardiovascular diseases in the young Nigerian population and a high salt intake in the population. The World Health Organization (WHO) recommends numerous 'best buys' and other recommended interventions, including cost-effective salt reduction strategies, for the prevention and control of NCDs. This report covers two potential "best buy" interventions for packaged food, including Front-of-Pack labeling (FOPL) to guide consumers to make healthy food choices, and mandatory salt targets to drive food industries to reduce salt.

Through the Federal Ministry of Health (FMOH), Resolve to Save Lives (RTSL) commissioned a scoping study to assess the policy and legal landscape for FOPL and salt targets in Nigeria. The study provided an understanding of the policy instruments and processes required to develop FOPL and salt target policies, delineating roles, responsibilities and the potential support or opposition of key stakeholders in the development, implementation and enforcement of FOPL and salt target policies and regulations in Nigeria.

The scoping study employed a mixed-method approach to data collection. There was a desk review of existing evidence on epidemiological data on NCDs globally and in Nigeria, a review of nutrition and food-related national and international policies, and a mapping and assessment of the influence of stakeholders on policies. The study also conducted stakeholder engagement meetings and key informant interviews to assess the perceptions and gain insights into their understanding of the roles of stakeholders and the processes, barriers and success factors to a FOPL policy and setting salt targets. Participants interviewed in the study cut across sectors and included MDAs of government, CSOs, and academia.

The prevalence of cardiovascular disease (CVD) in Nigeria is rising and salt intake in the population is high. This landscape analysis found that while there are presently no policies addressing salt intake reduction to reduce CVD in Nigeria, several national policies include NCDs as key priority action areas for improving the population's health. These include the National Health Policy (2016) and the National Health Strategic Development Plan (2018–2022), among others. Additionally, the National Multisectoral Action Plan for the Prevention and Control of Non-Communicable Diseases (2020–2025) recommends priority actions for preventing and controlling NCDs in the country, including developing a FOPL policy and setting salt targets as priority interventions.

Given the poor uptake, impact, and effectiveness of voluntary food policies, a legally binding (mandatory) approach is recommended. Both FMOH and the National Agency for Food and Drug Administration and Control (NAFDAC) have the legal authority to establish regulations and health policies for any health issue in Nigeria, and either agency could potentially develop FOPL and salt target policies or regulations. One option is that the National Policy on Food Safety and Its Implementation Strategy (NPFSIS) developed by the Department of Food and Drugs Services (DFDS) of FMOH, under review at the time of this study, be revised to include provisions on FOPL and salt targets in the policy, as well as other provisions to restrict trans fat or sugar. A second approach would involve amending existing regulations of NAFDAC to incorporate mandatory FOPL as well as salt targets.

Similarly, the participants interviewed in the study recommended that developing a FOPL policy and setting a salt targets policy should employ a regulatory rather than voluntary approach for better compliance and enforcement. The study participants highlighted the need for public awareness to empower consumers to make informed food choices; leveraging existing data sources, systems, and stakeholders' capacities to

develop a FOPL policy and set salt targets; and funding research activities to generate evidence would inform policy development and policy action.

The findings from this study demonstrate great opportunities for developing mandatory policies for both FOPL and salt targets; however, in the immediate term, setting mandatory salt targets is more feasible for the following reasons:

- 1. While both salt targets and FOPL will likely benefit the Nigerian population, implementing both FOPL and salt target policies concurrently is not recommended. This is because both policies require political capital and resources, which may require more work to mobilize simultaneously. Further, sodium thresholds proposed for maximum salt targets are different from those proposed for FOPL, which may need clarification for policymakers and implementing industries. Thus, in the short term, this study concludes that focusing on a single policy goal mandatory salt targets provides the best opportunity to address sodium consumption in the short term.
- The University of Abuja's Nigeria Sodium Study (NaSS) is currently generating evidence for the sodium content of packaged and unpackaged foods. The findings can be used to set salt targets for packaged foods.
- 3. From global experience, developing salt targets encounters less opposition from industry stakeholders than developing FOPL policy. Thus, a mandatory salt targets policy based on global best practices may be more feasible and likely to pass currently.
- 4. Nigerians consume sodium exceeding the WHO recommendation of <2 grams/day of sodium, or <5 g salt/day, for adults. Nigeria lacks a legal framework setting out a national sodium limit in line with WHO recommendations. The only sodium target currently implemented in Nigeria is contained in the Nigeria Industrial Standards utilized by the Standards Organization of Nigeria for its chemical analysis of food and other products. However, the Nigeria Industrial Standards has standards that sometimes far exceed WHO guidelines. Nigeria's Action Plan on NCDs, which stipulates sodium targets consistent with WHO guidelines, is yet to be translated into concrete normative standards in the form of legislation and regulations but offers a clear platform and opportunity to move forward with policy change.</p>
- 5. There is an existing Food Safety and Quality Bill before the National Assembly in which the concept of "unsafe foods" could be redefined to include high-sodium foods.

Key recommendations for developing policy and regulation for mandatory salt targets

- 1. In the short-term, the FMOH can include expectations for mandatory salt targets during the review of the existing National Policy on Food Safety and Its Implementation Strategy to strengthen the mandate on salt targets in Nigeria. This can be followed by the development of a regulation to set salt target levels for packaged foods, which can be implemented and enforced by NAFDAC, as they have the regulatory powers and capacity to implement such a regulation.
- 2. A second approach to consider: The relevant department in the FMOH approved by the Honourable Minister of Health to coordinate sodium reduction activities, including setting salt targets, is the Department of Food and Drug Services. The Department also champions a Food Safety and Quality Bill at the National Assembly which could include high-sodium foods as "unsafe" for human consumption. The department could push for the signing of this bill into law to effectively provide the legal backing for setting salt targets and other food policy interventions of public health importance.

- 3. The DFDS should involve other departments within the FMOH and establish a multisectoral collaboration with other government MDAs, development partners, CSOs, academia, research institutions, the media, and other relevant actors, as identified in this study. They have crucial roles in the policy development, implementation, monitoring, and evaluation of proposed salt target setting, and all sodium reduction activities.
- 4. The current review of the NPFSIS should embody a mandatory regulatory approach and put monitoring mechanisms in place to ensure compliance by food industries. The policy should consider what is feasible for industries to implement, such as a realistic stepwise approach for setting salt targets in selected food categories. Further, clear conflict of interest guidelines should be put in place to clarify industry's role, ensuring that industry representatives are not present at the decision-making table or funding policy related research, but may be consulted during the policy development process to ensure industry perspectives and concerns are taken into account.
- 5. It is crucial that NAFDAC finalizes and adopts the Regulation on Pre-Packaged Food, Water, and Ice Labeling to include global best practices and evidence-based back-of-pack nutrient declarations that follow best practice measures for population impact to enable monitoring of sodium content and other nutrients in the packaged food supply. Having nutrients clearly displayed on the package will enable monitoring of a salt targets policy and set a pathway for future further action on FOPL.
- 6. There is a need to strengthen sodium monitoring and surveillance by funding regular, systematic data collection on the sodium content of packaged foods. The University of Abuja NaSS study is collecting data on the nutrient content of packaged food and salt intake, providing information that is key to setting salt targets and monitoring changes in salt intake over time. The government should strengthen collaboration with academia by funding research (free of conflict of interest) to generate an evidence base for policy action and sharing of best practices.

It is expected that the recommendations from this study will provide a better understanding of the policy and legal environment that will guide the Federal Government of Nigeria (FGN) to develop, implement, monitor and evaluate mandatory policies for FOPL and salt targets for selected packaged food categories. This report will serve as a reference document, advocacy, and decision-making tool for FOPL and salt target interventions by the government and other stakeholders in Nigeria.

1. Introduction

1.1 Background

The Nigerian population is affected by several social determinants of health, and overall, the health and well-being of most Nigerians is not optimal. Individual factors such as biological, socio-demographic, lifestyle and healthcare-seeking behavior contribute to poor health. Socioeconomic factors such as poverty, employment, income, access to health and other social services and environmental and cultural factors, equally affect the health and well-being of many Nigerians.

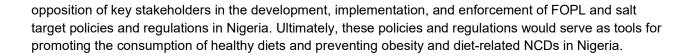
Nigeria has been experiencing a double burden of communicable diseases and NCDs since 2005. This is aggravated by a rising CVD prevalence among Nigeria's young population, which calls for urgent prevention interventions (1). Previously, health system reforms and investments have primarily focused on communicable diseases. However, with the recent increase in NCD prevalence, the government has invested more effort in preventing and controlling NCDs.

An unhealthy diet contributes to the prevalence of CVD globally, including in Nigeria. There is a progressive decline in the consumption of healthy food, fruits, and vegetables in Sub-Saharan African countries, as well as a rise in the consumption of ultra-processed products high in salt, sugar, and fats (2). Changing consumer behavior, especially eating habits, has been challenging. Hence, simpler, population-level, cost-effective approaches to reducing the consumption of unhealthy nutrients such as salt are needed (3). In 2011, a resolution at the political declaration of the high-level meeting of the General Assembly on the prevention and control of NCDs acknowledged that the global burden and threat of NCDs constitutes one of the significant challenges for development in the twenty-first century (4). Reducing sodium intake effectively reduces the burden of cardiovascular diseases, and the World Health Organization (WHO) recommends that member countries reduce salt intake to less than 5g (1 teaspoonful) of salt (equivalent to 2g sodium) per person per day, in line with the global aim to achieve a 30% relative reduction in mean population intake of salt/sodium by 2025 (5).

The risk of CVD, stroke, and coronary heart attack in Nigeria demands that salt reduction be higher on the agenda. The government needs to take more decisive policy action, including mandatory maximum salt targets or packaged food labeling policies to reduce salt in food (6). Although there is no definitive population-wide data on the extent of sodium intake in Nigeria, studies demonstrate that the mean daily salt consumption in Nigeria is likely far higher than the WHO recommended daily limit of 5g/day (2g sodium) (7,8). Policymakers and public health advocates are increasingly looking for policy levers to reduce the burden on health systems, encourage consumers to choose healthier food options, discourage ultra-processed foods and beverages and improve the population's nutritional status. In 2017, WHO released its 'best buys,' which are cost-effective, feasible, and high-impact intervention recommendations to address NCDs, notably to support low-income, resource-constrained countries (9). Among the "best buys" interventions, one of the most cost-effective solutions is reducing salt intake by developing mandatory national policies, strengthening surveillance systems and engaging multisectoral stakeholders. Some recommended policies include implementing FOPL and setting salt targets for packaged food.

1.2 Purpose of Study

The policy and legal landscape scoping study was conducted to assess existing policy instruments and pathways, identify key stakeholders, delineate roles and responsibilities, and map the potential support or



1.3 Scope

The scoping study was conducted in Abuja, Nigeria, between February 2021 and April 2022. A total of 15 key informants were interviewed across government MDAs and CSOs, while 54 people participated in the stakeholders' engagement meeting. The goal is to develop a national policy that guides all sectors at all levels; hence, federal government MDA officials and staff of CSO at head offices were targeted to participate in the study.

1.4 Study Objectives

The study objectives included:

- 1. Review existing policies and the legal landscape that impact the development, implementation, monitoring, and evaluation of potential FOPL and salt target policies in Nigeria.
- 2. Identify key stakeholders, their roles, perspectives and influence relevant to developing a FOPL policy and setting salt targets for Nigeria.
- 3. Make key recommendations to the government of Nigeria on policy actions and strategies necessary to develop a FOPL policy or set salt targets for Nigeria.

2. Methods

The scoping study employed a mixed-method approach to data collection and comprised four stages, namely:

2.1 Stakeholder Mapping and Power Analysis

Identifying and mapping key stakeholders was an iterative process throughout the study. At the inception of the desk review, the consultant engaged the FMOH team to list and map the stakeholders. An excel sheet was used to record critical stakeholders relevant to developing a FOPL or sodium reformulation in Nigeria. Separate sheets were created for different stakeholder groups. Subsequently, more stakeholders were mapped at the stakeholders' meeting and during the key informant interviews using a snowball approach.

2.2 Desk Review of Policy and Legal Landscape

The desk review consisted of an electronic search of Google, two online databases (Google Scholar and PubMed), and the LINKS community sodium reduction resources on the RTSL website to identify journal articles. Government policy and legal documents were also recognized by government ministries, departments, and agencies and used for policy and legal review.

2.3 Stakeholder Engagement Meeting

Stakeholder engagement meetings were conducted with 54 participants across MDAs, technical partners,

CSOs, and academia who have experience in developing health and nutrition policies and regulations in Nigeria. The purpose of the activity was to gain the perception of stakeholders on FOPL and salt target setting for sodium reformulation for packaged food. Industry stakeholders were not engaged during these meetings to ensure the process was free of potential conflicts of interest.

2.4 Key Informant Interviews

Key Informant Interviews were conducted between February 28th and April 1st, 2022, using probing questions to gain an in-depth perspective on the roles of key stakeholders in FOPL policy development and salt target setting. Fifteen key informants were purposefully sampled among high-level government officials from MDAs and staff of CSOs using a pretested guide. The criteria for selecting the respondents were based on the understanding of the organization's previous and current activities on nutrition policy formulation, including an understanding of stakeholders' engagements with government institutions responsible for developing and implementing nutrition-related policies in Nigeria.

The qualitative data were coded and analysed using thematic analysis. Information on the landscape analysis was given to the participants, and informed consent was obtained from those who expressed interest and participated in the interviews. The audio files were backed up for safety and were transcribed.

3. Study Findings

3.1 Review of International Best Practices for FOPL and Salt Targets

Setting Salt Targets for Packaged Foods

Setting salt targets is essential to reduce the consumption of salt in the population, which comes mainly from packaged food. (10) In 2021, WHO released the Global Sodium Benchmarks for Different Food Categories to guide countries in setting salt targets. (3) Existing sodium targets of common food categories and subcategories were analyzed from different countries. The approaches used for setting the global sodium benchmarks included setting maximum targets, targets at subcategory levels (where a food category has different food types in that category to allow setting a target), and targets at the lowest levels (within a food subcategory). The global benchmarks will allow cross-country comparison of sodium data across food categories; however, WHO encourages countries to set national salt targets based on their sources of sodium.

For LMICs, salt targets should be set at the maximum upper levels for the product categories that contribute the most amount of salt, the salt targets should be standardized (for instance, salt per 100g of product), with feasible timelines set to monitor compliance and program effectiveness. In setting salt targets in LMICs, a five-step approach has been proposed to include:

- 1. Identifying the foods which contribute to salt in the diet;
- 2. agreeing on which foods to set mandatory targets for;
- 3. establishing progressive target levels;
- 4. stakeholder engagement with clear conflict of interest policy, and
- 5. establishing monitoring mechanism (10).

In addition to these steps, ensuring that nutrient declarations are required on the back of packaged foods enables monitoring over time.

Many countries have adopted a voluntary approach. The UK, for example, started its salt reduction program in 2004. Since then, it has set several voluntary salt reduction targets in three-year intervals, with the following salt targets set in 2024 .(11) The UK opted for a voluntary approach due to the bureaucracy of the legislation process, food industry negotiation agreements, a robust monitoring mechanism to hold industry accountable and enormous support from NGOs (12). The UK approach was initially effective, but after the government changed, oversight of the program was handed mainly to industry. There was a decreased commitment to public monitoring, making it less effective over time. (13)

In contrast, some countries have adopted a legislative approach, for example, South Africa and Argentina. In 2016, South Africa enacted a regulation to reduce sodium in some foods to address the rising prevalence of CVD in the country. The country set maximum salt levels per 100g in some food categories, with a three-yearly reduction across food categories. South Africa experiences the challenge of costly compliance and a lack of salt substitutes for food reformulation. (14) The Senate and Chambers of Deputies of Argentina promulgated a law in 2013 that sets maximum limits of sodium for each food category, sets progressive decrease of the maximum values over time, delineates the functions of enforcement authorities, stipulates behaviors that will be considered as a violation of the law and their accompanying sanctions. (15) In 2017, the regulation was supplemented by a decree that mandates the FMOH to set up an Advisory Committee to promote the reduction of sodium consumption by the Argentine population.

Given the challenges and requirements necessary to implement a voluntary policy, mandatory salt targets are more likely to be effective, particularly in countries that do not have the enabling environment for a voluntary approach. A mandatory system ensures enforcement, is more efficient in decreasing salt content in foods by manufacturers and levels the playing field, encouraging equal salt-reduction competitiveness across the food industry.

For setting baselines, monitoring performance against salt targets, and monitoring compliance with and enforcing regulations, credible data on sodium is necessary to guide setting salt targets. Various methods of monitoring salt levels that consider resource limitations, scope, and accuracy have been identified, including industry self-reporting, food label surveys for salt level baselines, food composition databases, and chemical analysis of food (16). Different approaches to monitoring population-level sodium reduction programs have been demonstrated. They include comparative dietary surveys, assessment of 24-hour urinary sodium (although the gold standard, it is costly and burdensome on participants), spot urine measurement and comparative food surveys for sodium content in packaged foods. Having mandatory nutrient declarations on the back of packages is critical to effective monitoring of salt targets.

Front-of-Pack Labeling

Typically, shoppers take less than 10 seconds to select grocery items—not enough time to read and interpret many complicated nutrition fact panels. Front-of-Pack Labeling (FOPL) is an economical and simple way to provide quick information to guide consumer choices. FOPL refers to simplified nutrition labeling systems (often visual information) placed on the front of food packages to help consumers understand the nutritional quality of food and help them select healthier foods. It can further provide the industry an incentive to reformulate its products. (17)

Globally, numerous countries are using FOPL, which can be classified into two major systems: nutrient-specific systems (interpretive and non-interpretive) and summary indicator systems. Nutrient-specific labels

provide nutrition information for one or more nutrients and are either interpretive or non-interpretive. Interpretive systems offer guidance and judgment about whether products are healthy or unhealthy (e.g., warning labels on unhealthful products). Non-interpretive systems show information only, with no specific judgment or recommendation (e.g., GDA (Guideline Daily Amount)). Summary indicator systems combine several criteria to establish one indication of the healthfulness of a product and show judgment or recommendations (e.g., Nutri-Score or Health Star Rating). (18) Interpretive, nutrient-specific systems, especially warning labels, are the most effective of these systems. A significant advantage of the warning label is that it allows consumers to quickly identify unhealthy products and encourages them to avoid junk food and ultra-processed foods. (19)

In 2016, Chile was the first country to introduce a front-of-pack warning label system, combining straightforward text with an easily recognizable 'stop' symbol in black and white for each nutrient in excess to help consumers make better grocery decisions while shopping. (20)This label is mandatory and is applied to food products high in calories, sugars, sodium, and saturated fat. Products labeled with this warning are also subject to marketing restrictions. Evaluation studies (21)(22) of the Chilean mandatory law show a significant decrease in purchases of sodium, sugar, calories and fat in several groups of packaged foods and beverages, as well as substantial reformulation of foods by industry to reduce the nutrients of concern. (23) Since 2016, nine additional countries, including Israel, Argentina, Colombia and Mexico have passed mandatory policies to adopt this labeling system in their national food supply.

Although many FOPL systems exist, the key elements of an effective FOPL system include:

- 1) A robust nutrient profiling model to set clear and meaningful criteria for the labels,
- 2) labels that are interpretative, simple, and immediately visible with set size limits for all types of packaging as well as simple formats, colors, and icons,
- 3) mandatory placement on all packaged products, and
- 4) an endorsement by a government or scientific organization (free of conflict of interest) to increase credibility. (24)

An effective FOPL will deter consumers from choosing unhealthy foods. Some labels, especially summary indicator systems or healthy choice logos, try to position healthier choices positively; however, they could be more effective at influencing healthier choices overall compared to clear and simple warning labels. Further, regulating health claims allowable on packaged foods can help prevent mixed messages to consumers that may counter the effects of a warning label.

According to a recent study, 48 countries have passed policies to implement mandatory or voluntary FOPL systems. (25) A large majority of these countries have adopted interpretive systems, and fourteen countries adopted a mandatory approach. While more countries have adopted voluntary schemes, these typically have low uptake, impact and effectiveness. Thus, mandatory approaches are required to achieve the desired public health benefits.

3.2 Stakeholder Mapping and Power Analysis

The following stakeholders were identified as relevant for developing a FOPL policy and setting salt targets. Their interests and potential influences were equally mapped, as shown in Table 1 below.

Table 1: Stakeholder Assessment Matrix for FOPL and Salt Targets Policies

Stakeholder Groups	Stakeholders	Current Interests & motivators / Current work related to FOPL & salt targets	Role in developing and implementing FOPL/setting salt targets R=Responsible A=Accountable C=Consulting I=Informed*	Recommendations on how to engage the stakeholder	Level of influence H=High M=Medium L=Low
Federal Ministry of Health	Department of Food and Drug Services (Food Safety & Quality Programme), Department of Public Health (NCD Division), Department of Family Health (Nutrition Division), Department of Health Planning, Research and Statistics	Identifying and setting national policy direction, policy development, stakeholder buy-in, resource mobilization	R, A	Advocacy, technical and financial support, capacity building	Н
Federal Ministry of Budget and National Planning	Nutrition Division, National Council on Nutrition	Identifying and setting national policy direction, stakeholders buy-in	C, I	Advocacy	Н

Federal Ministry of Justice	Honourable Minister; Permanent Secretary, Legal Drafting Department	Passing and gazetting regulations	R, C	Advocacy; technical support	Н
Federal Ministry of Agriculture and Rural Development	Nutrition Division	Multisectoral collaboration and buy-in	C, I	Advocacy, technical and financial support	M
Other Federal Ministries	Federal Ministry of Humanitarian Affairs, Disaster Management and Social Development, Federal Ministry of Trade and Industries	Multisectoral collaboration buy-in	C, I	Advocacy, technical and financial support	M
Agencies of government	NAFDAC	Policy implementation, enacting regulations, monitoring and enforcement, compliance, research, awareness creation, consumer protection, food packaging/labeling/certification	R, A, C, I	Technical and financial support, capacity building	Н
	Federal Competition and Consumer Protection Commission	Supporting regulations, monitoring and enforcement, compliance, research, awareness creation, consumer protection	R, I	Advocacy, capacity building	М
	Institute of Public Analysts of Nigeria	Enacting regulations, monitoring and enforcing compliance	C, I	Technical and financial support, capacity building	M to L
UN agencies	WHO, UNICEF, FAO, WFP	Evidence generation,	C, I	Technical forum for	M to L

Development partners	RTSL	and knowledge management, technical and financial support Research and, knowledge management, technical and financial support	R, C, I	Knowledge Management, Education and Learning, collaboration, resource mobilization Technical forum for Knowledge Management, Education and Learning, collaboration, resource mobilization	M to L
Academia	Federal Universities (Departments of Nutrition and Food Sciences)	Research and knowledge management,	C, I	Technical forum for Knowledge Management Education and Learning, financial support	M to L
Civil Society Organizations (to be vetted to ensure compliance with conflict of interest policy)	Nutrition Society of Nigeria, Nigerian Heart Foundation, Network for Health Equity and Dignity, Corporate Accountability and Public Participation Africa, Nigeria Health Watch, Civil Societies for-Scaling Up Nutrition Network, NCD Alliance, Health Reform Foundation of Nigeria, Policy and Legal Advocacy Center	Engaged in public awareness creation, policy formulation, policy/legal advocacy and support, research, some deliver public health interventions in communities.	R, C, I	Technical forum for Knowledge Management Education, Information sharing, capacity building	M to H
Professional Associations	Nigeria Medical Association, Medical Women Association of Nigeria, Society for Public Health Professionals of Nigeria, Association of Public Health Physicians of Nigeria	Engaged in public awareness creation, policy formulation, policy/legal advocacy and support, research, some deliver public health interventions in	C, I	Technical forum for Knowledge Management Education, information sharing, capacity building.	M to H

Labor Congress

		communities.			
Media	International Society for Media in Public Health, Nigerian Association of Women Journalists, Nigerian Union of Journalists	Public awareness creation, policy support, advocacy	C, I	Information sharing, capacity building	M to L
Food Industries	United Africa Company (UAC), Nestle, Deli, Dangote, BUA, Honeywell, Unilever, Beloxxi Industries	Big industries involved with packaged foods in Nigeria. They have both national and international reach with strong consumer patronage of their products. Also have strong marketing and advertising power.	I	Information sharing, engagement for food reformulation activities by government	Н
Organized Private Sector/Trade Unions	Manufacturers Association of Nigeria, Nigeria Association of Small and Medium Enterprises, Nigeria	Economic and trade concerns	I	Information sharing, technical support, capacity building	Н

^{*}R = those responsible for completing a task assigned or for the entire completion of the project; A = those who have ultimate control over the project and related resources; C = those who give advice to the responsible members; I = those who need to be kept in the loop at all stages of the project

3.3 Review of Legal Landscape for FOPL and Salt Targets

Constitutional issues

The Nigerian Constitution establishes three areas of legislative competence: exclusive, concurrent and residual lists. The Federal Government may only address exclusive list issues; concurrent list issues are addressed through shared Federal and State Government powers; and residual list issues may only be addressed by states. While food does not appear on any of these lists, in practice the Federal Government plays the principal role in food regulation. This is underscored by the powers of the Federal Government to make laws for the FCT, and by its concurrent powers, has the capacity to legislate on some health issues. Despite the residual powers by the states, the Federal Government generally legislates on food for the nation.

Authorities

In Nigeria, multiple federal laws have perspectives on authority for food safety administration and management: the Food and Drugs Act gives powers to the Minister of Health to issue regulations on food products and safety; the NAFDAC Act, on the other hand, authorizes NAFDAC to do the same. Nonetheless, the NAFDAC Act is the more recent and specific of the two laws. Practically, the FMOH and NAFDAC share some regulatory jurisdiction over food safety (including sodium or salt quality).

Federal Ministry of Health

The two main authorities on health and food safety governance in Nigeria are therefore the FMOH and NAFDAC. The Government of Nigeria delegates the powers to develop national policies and implementation guidelines to federal ministries. A leading government MDA with a statutory mandate to develop policies would typically set the policy agenda, identify and coordinate stakeholders, mobilize resources, formulate the policy and develop its implementation, implement monitoring and evaluation framework and disseminate the approach to the states and other stakeholders.

The Food and Drugs Act is the primary piece of legislation in Nigeria that governs the production, importation, storage, advertising, and sale of food, drugs, cosmetics and medical equipment but has no specific provisions for sodium content in foods or for food labeling. It prohibits deceptive or misleading labeling and packaging of food and other regulated items likely to mislead consumers about their quality, value, composition, merit or safety. The Food and Drugs Act also prohibits the labeling, packaging, marketing or advertising of any non-food substance or item to be confused to be food or other regulated products unless it meets the standard for food or other regulated products. The Minister of Health has the authority under section 16(2)(c) of the Food and Drugs Act¹ to approve regulations governing the labeling and packaging of food and the offering or exposing in any manner for sale of any food in Nigeria. The Department of Food and Drug Services leads the development of food safety policies, programs and strategies at all stages of the food supply chain. The Ministry currently serves as chair of the National Codex Committee (NCC) and the National Food Safety Management Committee (NFSMC). The FMOH's work on sodium governance is primarily led by the Food and Drugs Services (FDS) Department within the ministry.

The current review of the NPFSIS could provide a window of opportunity to include salt target setting and FOPL in the policy. The FMOH can champion the review of a section of the policy to include a mention of excessive intake of unhealthy nutrients as "unsafe" for human consumption, provide a framework for the scope, implementation, monitoring and evaluation framework for salt reduction policies and the recommended steps for setting, implementing, monitoring and evaluating salt targets in packaged foods.

As of December 2022, the Food Safety and Quality Bill had been passed by the Senate and is at the concurrence stage in the House of Representatives. While the policy provides the strategic aspirations and framework for the implementation, monitoring and evaluation of FOPL and salt targets, the bill reinforces these

¹ Food and Drugs Act CAP F32, Law of Federation of Nigeria (LFN) 2004 (Cap 150) of 1990 as amended by Decree 21 of 1999 (formerly called Food and Drugs Decree 35 of 1974).

aspirations with a statutory, legislative backing to the policy, further amplifying its mandatory pronouncement.

While the Bill currently does not reference sodium or salt intake, current language states that "food business operators shall not place food on the market if it is unsafe" (Sect 9(1)); that food is deemed unsafe if "injurious to health" and "unfit for human consumption" (Sect 9(2)); and that in determining whether food is injurious to health, the immediate, short-term and long-term effects, as well as adverse effects on the health of subsequent generations, must be taken into account (Sect 9(4)).

NAFDAC

The regulatory, implementation and enforcement roles and responsibilities related to food safety are executed by NAFDAC, the government agency under the Department of Food and Drugs in the FMOH. NAFDAC registration is required for food items imported, manufactured, advertised, sold, or distributed in Nigeria. NAFDAC is an agency within FMOH; it was established by a separate Act of Parliament with specific statutory roles and mandate. Its functions under Section 5(a) of the NAFDAC Act include the regulation and control of "importation, exportation, manufacture, advertisement, distribution, sale and use of food, drugs, cosmetics, medical devices, packaged water and chemicals". It can also "compile standard specifications and guidelines for the production, importation, exportation, sale and distribution of food", issue guidelines on food advertisement, or on the suitability of food products.

While the NAFDAC Act does not explicitly address food product labeling, it does empower the National Agency for Food and Drug Administration and Control to issue regulations and guidelines on food package labelling—which is subject to the approval of the Honourable Minister of Health under sections 5 and 30. According to Section 6(a) of the NAFDAC Act, the Governing Council is authorized to advise the Federal Government of Nigeria on national policies concerning the control and quality specifications of food, pharmaceuticals, cosmetics, medical devices, bottled water and chemicals.

The Food, Drugs and Related Products (Registrations, Etc.) Act Cap. F32 LFN 2004 under section 12 also authorizes the Agency to make Regulations on any subject matter addressed by the statute. It should be noted that federal vs state exclusive/residual list issues do not pose a challenge for regulations adopted by NAFDAC, and unlike other pieces of health legislation covered by the residual lists, these need not be re-enacted by States. Food industries are bound by NAFDAC Regulations as they are registered by the Corporate Affairs Commission, which is a Federal Government agency. As such, whether they are based in the FCT, in states or at local government levels, they are still bound by NAFDAC Regulations.

As set out above, the key standard-setting agency for food manufacture, sale and consumption is NAFDAC. While NAFDAC has no clear legal framework establishing sodium reduction policies, its establishing legislation allows it to adopt regulations and guidelines. Current NAFDAC regulations address packaged food advertisement and labelling (27) (28). Other relevant Regulations include the Food Grade (Table or Cooking) Salt Regulations 2021, Food Fortification Regulation 2021, Food Products Advertisement Regulation 2021 and the Food Additives Regulations, 2021.

Most recently, in 2019, NAFDAC consolidated the 2005 food labeling regulation and the 2014 guide to food labeling into a more comprehensive regulation named "Pre-Packaged Food, Water and Ice Labeling Regulations, 2019"(26). The draft regulation is awaiting gazetting at the Federal Ministry of Justice. This would be the primary regulation establishing basic rules for labeling all pre-packaged foods sold in Nigeria. The draft regulation could be revised to include implementation and enforcement of FOPL because it already stipulates that no pre-packaged food may be sold in Nigeria unless it bears a label. Furthermore, all food labels must be printed in English and must not be inaccurate, misleading, deceptive, or likely to mislead consumers about the product's character, quality, quantity, or origin.

The regulation also requires a mandatory nutrient declaration and labeling at the back of the product's packaging. The mandatory nutrient declaration includes providing nutritional information or nutritional facts per

100 g, 100 ml, or serving of the product, for which the label shall include the energy value in KJ/kcal, the amounts of fat (specifically saturated fat and trans fat), carbohydrates, protein, salt and any other nutrient for which a nutrition or health claim is made.

There are additional general laws and regulations on the broader issue of food labeling. These provide various rules and obligations which manufacturers and producers of food products must comply with within the packaging and labeling of their products. The food-related regulations that have been passed, gazetted and published on NAFDAC's website include Cocoa and Cocoa Products Regulations (2021), Food Additives Regulations (2021), Food Grade (Table or Cooking) Salt Regulations (2021), Food Irradiation Regulation (2021), Fortification Regulations (2021), Non-nutritive Sweeteners in Food Products Regulations, Soft Drinks Regulations (2019), Food Products Advertisement Regulations (2021) and Fruit Juice and Nectar Regulations (2021).

3.4 Review of Nutrition and Food-Related Policies and Programs in the Health Sector

The National Policy on Food Safety and Its Implementation Strategy (2014)

In its effort to improve food safety and control the safety of the food environment, the FMOH, in collaboration with key stakeholders, developed the National Policy on Food Safety and Its Implementation Strategy (NPFSIS). The policy's objectives include reducing food-borne illnesses, protecting consumers from consuming contaminated, unhealthy, mislabeled, or adulterated food and maintaining consumer confidence in the food system. The policy is being reviewed to include a recommendation for the National Assembly to enact the National Food Safety and Quality Bill, which will have a broader scope that highlights the consumption of excess salt, TFA, saturated fats, and sugars as unhealthy food unsafe for human consumption. The National Food Safety and Quality Bill is equally championed by the department, which has undergone a public hearing and is awaiting further stakeholders' input and passage into law by the National Assembly. The bill is expected to complement the National Policy on Food Safety and Its Implementation Strategy by providing legal backing to enforce the mandatory implementation of policy actions embedded in the food safety policy. The food and feed labeling section of the bill is a potential vehicle for highlighting the need for a FOPL policy and salt targets to address the high consumption of salt by consumers.

The National Health Policy (2016)

The National Health Policy offers stakeholders in health a comprehensive framework for leveraging all resources for health development toward the realization of Universal Health Coverage, as defined in the National Health Act 2014, in line with the Sustainable Development Goals (SDGs). The main policy aim is to develop Nigeria's health system to provide effective, efficient, equitable, accessible, affordable, acceptable and complete health care services to all Nigerians.

The policy identified NCDs as a major public health issue in Nigeria. It emphasized priority policy objectives to reduce the burden of NCDs, by the SDG3 target ("To ensure healthy lives and promote well-being for all at all ages"). The key policy objectives include incorporating NCD prevention into relevant policies at all levels of government, generating current evidence on NCDs and providing an appropriate framework for research on NCD prevention and control in Nigeria.

The National Health Strategic Development Plan II (2018–2022)

The National Health Strategic Development Plan II (NHSDP II) is the overarching strategic document that guides all health-related interventions in Nigeria and provides the vision for a healthy life for all Nigerians. The NHSDP II serves to actualize the overall health vision of the Nigerian population as outlined in the National Health Policy (2016). The plan serves as a point of reference for all health-related policies in the country. The NHSDP II has referenced the need for reducing "the burden of morbidity, mortality and disability due to non-communicable diseases" as one of the key priority areas under Strategic Pillar 2 (Essential Package of Healthcare Services. This pronouncement in the NHSDP II serves as a policy reference point for both the government and other key stakeholders to put efforts into addressing diet-related NCDs, including CVD.

The National Policy for Food and Nutrition in Nigeria (2016)

The National Policy for Food and Nutrition is the guiding and coordinating policy for food and nutrition activities undertaken in Nigeria's various sectors and levels. Although the policy does not highlight FOPL or other sodium reduction strategies, the policy's broad objectives include ensuring nutrition considerations fit into the broader national developmental plans, providing the platform for identifying and allocating adequate resources, assigning roles and responsibilities of stakeholders across sectors and levels and encouraging and promoting healthy food habits to reduce malnutrition among vulnerable populations.

The National Multisectoral Action Plan for the Prevention and Control of Non-Communicable Diseases (2019–2025)

The National Multisectoral Action Plan for the Prevention and Control of Non-Communicable Diseases (NMAP-NCDs) sets the strategic agenda, governance implementation and accountability framework for the national response to the prevention and control of NCDs in Nigeria (29); as part of Nigeria's commitment to the fight against non-communicable diseases (NCDs), the country signed the political declaration at the UN General Assembly High-Level Meeting on NCDs in September 2011 (30). The FMOH and other MDAs and its partners developed the plan in 2019. The plan encompasses priority action areas that guide policy actions and interventions by stakeholders working to reduce morbidity and mortality of NCDs. Among these priority areas, priority 1.3.1 aims to "Reduce salt intake through the reformulation of processed food products to contain less salt, set target levels for processed foods, and adopt standards for front-of-pack labeling." In the strategic plan, FGN has proposed a reduction of premature mortality from NCDs by one-third by 2025 and a 30% reduction in mean adult (aged 18+) population salt intake by 2030.

The National Strategic Action Plan on Nutrition (2020–2025)

The revised National Strategic Action Plan on Nutrition (NSPAN) 2020–2025 contains a Diet-Related NCDs (DR-NCDs) section highlighting specific interventions for enhancing and improving quality nutrition for preventing, controlling and managing DR-NCDs, including developing policies, guidelines and regulations for the manufacturing, marketing and advertisement of processed, packaged foods containing high salt, sugar, trans-fatty acids, and saturated fats, as well as monitoring, evaluating, and enforcing the policies, guidelines and regulations. The Nutrition Division of the Department of Family Health at FMOH houses this plan and coordinates the activities related to DR-NCDs in the NSPAN. A desk has been created in the Nutrition Division of the department, with a desk officer to coordinate its activities.

The National Pathways to Food Systems Transformation Program (2021)

The National Pathways to Food Systems Transformation program is an initiative of the Federal Ministry of Budget and National Planning which complements existing strategies of the FGN to address the challenges of the consumption of unhealthy, unsafe food and unsustainable environmental degradation in the food value chain. The Federal Ministry of Budget and National Planning is the convener of this initiative and has organized several stakeholders' dialogues to chart a roadmap for national sustainable food systems. The food systems pathways provide strategies and platforms to improve food systems and initiate positive change for multiple food systems challenges, recognize the pathways' importance for realizing the SDGs' objectives and propose the development of guidelines to educate the public on healthy food choices. The pathway has the potential to drive and coordinate FOPL and sodium reformulation activities in Nigeria's food systems.

3.5 Sodium Monitoring and Surveillance Systems

At the High-level Meeting of the General Assembly on the Prevention and Control of Non-communicable Diseases, member states were encouraged to strengthen country-level surveillance and monitoring systems, including surveys that are integrated into existing national health information systems and to include monitoring exposure to risk factors and outcomes (31). Nigeria generally has weak monitoring and surveillance systems. There is currently no surveillance to monitor nutrients of packaged foods in Nigeria, which would be needed to assess nutrient consumption, set intake limits and develop a nutrient profile model to guide healthy food policies. In the past, some CSOs have been involved in research related to FOPL. More recently, there has

been an ongoing research effort on sodium reduction by a collaboration funded by the US National Institutes of Health between Northwestern and Washington Universities in the US and the University of Abuja, Nigeria (termed the Nigeria Sodium Study (NaSS)). The study was conducted in Kano and Ogun states, as well as FCT, Abuja, where about 7,000 packaged foods were sampled. NaSS aims to generate local evidence of population-level sodium intake, sodium sources in the Nigerian diet and nutrient content in retail packaged food. The measurement of population sodium intake will include samples of 24-hour urinary sodium collected as part of the WHO STEPS survey.

So far, the NaSS team has analyzed preliminary data on sodium sources and sodium content in about 7,000 retail packaged food, and findings have been shared with key national stakeholders. The study findings showed a relative increase in the consumption of food outside the home and accessibility of high salt diets as seen in different packaged food ranging from meat and meat alternatives per 100 g of product (904 mg per 100 g), sauces, dressings, spreads, and dips (669 mg per 100 g), snacks (539 mg per 100 g), seafood and seafood products (383 mg per 100 g) and convenience foods (367 mg per 100g) (32).

The NaSS team also conducted key informant interviews to explore stakeholders' knowledge and perceptions of the relevant contextual factors influencing the acceptability, feasibility, and appropriateness of the Nigeria national sodium reduction program. The results demonstrated stakeholders' lack of awareness of the salt content in food and how to read food labels, signifying a need for a simple and interpretive style of front-of-pack labels (32). These study findings also provide crucial data on the nutrient content of food categories sampled. This data will be used by the NaSS team and other stakeholders to set recommended salt targets for specific food categories, which can be adopted by the government in setting a mandatory salt targets policy. The data on sodium, sugar and saturated fat could also be used for developing a nutrient profile model for a FOPL policy.

3.6 Key Informant Interviews

A total of 14 participants from MDAs and CSOs were interviewed, as shown in table 2 below:

Table 2: Stakeholders Group

S/NO	MINISTRIES, DEPARTMENTS AND AGENCIES (MDAs)
1	FMOH, Department of Food and Drug Services
2	FMOH, NCD Division
3	FMOH, Health Planning Research and Statistics
4	FMOH, Nutrition Division
5	NAFDAC
6	SMEDAN
7	SON
8	FCCPC
CIVIL	SOCIETY ORGANIZATIONS (CSOs)
9	CAFSANI
10	CAPPA
11	CS-SUNN
12	NHED
13	Nigerian Heart Foundation NHF
14	Nigerian Health Watch

The following themes emerged from the analysis of the interviews:

- 1. Understanding of policy development and implementation
- 2. Importance of advocacy and support for policy development
- 3. Influence of FOPL on consumer purchasing decisions

- 4. Official actors and unofficial actors that influence policy development
- 5. Barriers to sodium reformulation
- 6. Critical factors for a successful passage of FOPL policy and sodium reformulation.

3.6.1 Understanding of Policy Development and Implementation

Some respondents stated that policy formulation and implementation are essential at this time when hypertension is ravaging society, even among the younger population. All the respondents interviewed have been involved in policy development or enacting regulations in Nigeria. This is substantiated by some respondents from CSOs and MDAs as stated below:

"We have worked with the key people in power, those in a position to adopt appropriate policies. Like the National Tobacco Control Act, we worked on the Fat and Oils Regulation 2019, and we worked on different environmental policies. We do capacity building, community engagement, and advocacy at all levels. This includes legislative advocacy by producing technical papers for the parliament, conducting pre-field sessions, technical sessions for stakeholders, and of course, we also do, building people's power. In some cases, that we have funds to do rallies, conduct media advocacy, those are the kind of activities we engage in" ... (CSO staff)

On the structure for the policy development, some respondents proposed that a technical working group should be put in place with the responsibility of creating a "Zero Draft" for the policy upon which the stakeholders proceed with the policy formulation process.

There is a general understanding of food policy development and implementation among the government's responsible MDAs that develop specific policies or regulations. Still, the respondents are unaware of any policies in place for FOPL or regulating the nutrient content of packaged foods in Nigeria. Below is a quote from an MDA official:

"There are [National documents] like the National Policy for Prevention and Control of NCDs, Multi-sectoral Action Plan (national) for the Prevention and Control of NCDs, National Nutritional Guideline for Control of NCDs. All these policies include FOPL and Sodium reduction in the broad policy statement, but there is no stand-alone policy on these issues..." (MDA official).

3.6.2 Importance of Advocacy and Support for Policy Development

Three of the five respondents from CSOs identified stakeholder engagement and buy-in as crucial for policy development. Two CSOs emphasized the need for carrying political leaders along in developing FOPL policy. An MDA official highlighted the need for advocacy by development partners and CSOs.

The respondents demonstrated consensus on the importance of developing a FOPL policy and how, if fully implemented, it would increase awareness of nutrient declaration and consumer choices. The issue of health benefits of the policy also came out strongly among some respondents.

A respondent from a CSO also stated there is awareness of high salt intake. He highlighted the need for policy development to address it.

"There is a consciousness in the society already on the consuming of less salt and sodium in food so its time for stakeholders to begin the process of developing the policy..." (CSO staff)

Another CSO staff emphasized the need for advocacy as follows:

"So, you have to do it, your advocacy very well. You have to bring stakeholders on board to recognize, you have to put the evidence to show them the impact of the policy. You know, and why we have to have this. Once stakeholders are clear about these issues, all other issues can be solved". (CSO staff)

3.6.3 Official and Unofficial Actors that Influence Policy Development

Official actors are persons or organizations with a legal mandate to occupy public office who make government policies and laws. In contrast, unofficial actors are persons, organizations or interest groups who do not have this legal mandate but may lobby, sway policy agendas and serve as "watchdogs" for the public, usually protecting the public's interest. They include CSOs, NGOs, professional associations and pressure groups. Both official and unofficial actors have the ability to influence policy decision-making; thus, there was a consensus that all relevant actors (official and unofficial) should be involved from the start of the policy development process to foster buy-in and ownership of the process and prevent resistance to policy development. An MDA official states:

"I think as a starting point, the relevant stakeholders that will be involved in developing the systems should be well-defined and to take care of people who will be responsible for the management, monitoring, implementation..." (MDA official)

3.6.4 Barriers to Policy Development and Implementation

A significant challenge in sodium reformulation identified by a respondent is the interference by industries with a vested interest. A CSO staff explains:

"We might begin to experience resistance from sodium companies and corporations that might want to give excuses, but, um...I don't want to say it is normal, but it should be expected. That is, for us to be able to prepare and mediate whatever objections that they might want to come up with. They might want to come up with ridiculous objections about the printing of the warning, "it will cost this...". I mean, we heard that before in different campaigns, so it should be expected...." (CSO staff).

Another potential barrier to salt reduction policy development and implementation is funding. An MDA official stresses this:

"One of the challenges of developing and implementing these policies in this country is funds. Funding, at every level, either in developing it or implementing it. So, sometimes, the issue of funding is a challenge, you know? And sometimes, manpower to do the work...." (MDA official)

3.6.5 Critical Factors for a Successful Policy Passage

Respondents emphasized the importance of getting stakeholders' support and buy-in. For example:

"... the first thing is to be able to make the stakeholders understand the importance. So, if all the stakeholders that I mentioned understand the importance of this policy, right, and you have their total buy-in, then I think you have achieved sixty percent of the success. But when stakeholders have not seen the importance and have not bought into it, there will be a struggle..." (CSO staff)

3.7 Stakeholder Engagement Meeting

A stakeholders' engagement meeting was held with MDAs, technical partners, CSOs, and academia on February 9th and 10th 2022 in Abuja, Nigeria. The meeting aimed to gain insights and understanding from key national stakeholders regarding FOPL and salt target setting, with a focus on the role of stakeholders in the process, and identifying barriers and facilitators to developing a FOPL policy and setting national salt targets for sodium reduction in some packaged food. The groups brainstormed the following topics:

- 1. Availability of existing policies and regulations for FOPL and salt targets
- 2. Stakeholders for FOPL and salt target policy development
- 3. Consumer considerations for FOPL and setting salt targets

Table 3 below shows the stakeholder groups' distribution.

Table 3: Distribution of Stakeholder Groups

Stakeholder Group	Participants
Federal Ministries and Departments	Federal Ministry of Health: Food and Drug Services, Public
	Health, Family Health, Planning Research and Statistics,
	Hospital Service, Legal
	Federal Ministry of Education
	Federal Ministry of Industry, Trade and Investment
Agencies of Government	FCCPC, SMEDAN, SON, IPAN, NAFDAC, NEPC
Academia	University of Abuja, FIIRO
Civil Society Organizations	NHFNSN, CS-SUNN, FUNTA Services, Nigerian Health
	Watch, CAPPA, NHED, CAFSANI, Ave Health Sense, GHAI
Development Partners	WHO, FAO, RTSL

Table 4 presents key facilitators and barriers to FOPL policy development and salt target setting as discussed by the stakeholder groups.

Table 4: Facilitators/Barriers for FOPL and Setting Salt Targets for Packaged Food

Table 4. Facilitation Daring of Land Cotting Care Targeto for Facility Cott				
Theme	Facilitators	Barriers		
Availability of policies	There are national policies to support	The nutrient guideline is outdated and		
and regulations for	packaged food labeling, which include the	requires a review and update.		
FOPL	National Multisectoral Action Plan on	Lack of enforcement of laws by		
	NCDs, and National Nutrition Guidelines	government agencies.		
	for NCDs Prevention (2014)	Lack of technical assistance required to		

	There is a draft Pre-Packaged Food	enable follow through on the policy and
	Regulations (2019) (awaiting approval by	implementation strategies.
	FMOH) that provides information on food	Lack of robust monitoring and
	products that meet the minimum	surveillance systems for sodium.
	standards, especially in micronutrients.	Potential industry push back and
		interference could interfere with policy
		formulation process.
Stakeholders for	FMOH, FMARD, FME, FCCPC, CSOs in	Some actors with influence may not
FOPL policy	the nutrition space, OPS, SME, labour	support a comprehensive or best practice
development	and Trade Unions, NAFDAC, SON,	policy, or may oppose policy development
	donors, technical partners, academia.	outright.
Availability of policies	The Food Safety and Quality Bill,	Food industry, trade unions and other
and regulation for	currently before the National Assembly,	Organized Private Sector could oppose
setting salt targets	defines unsafe food to mean food that is	strategies aimed at sodium reformulation
	"injurious to health" and "unfit for human	and reducing dietary salt consumption or
	consumption". This could be adapted to	push for a weak policy that does not
	include high sodium foods in the	follow global best practices.
	definition. The Food Grade (Table or	
	Cooking) Salt Regulation (2021), if	
	revised, could include mandatory	
	declarations for salt targets.	
Consumer Motivation	Evidence suggests population salt intake	Food habits, prices, culture and religion
for a FOPL policy and	and sodium content in packaged food are	could affect consumer behavior and food
setting salt targets for	higher than WHO recommendations.	choices.
packaged foods		Low literacy level of consumers could
		affect the implementation of FOPL.

4. Analysis of Findings

4.1 Stakeholders for Developing FOPL and Salt Targets Policies

All the stakeholders mapped during the policy landscape review have a crucial role in both developing FOPL and setting salt targets. As outlined in the stakeholder's assessment matrix, each stakeholder has its specific role and can exert a level of influence on the policy. While MDAs statutorily have the mandate to initiate and lead policy development, implementation and evaluation, other key non-state actors must be engaged in the process to support the government's policy action.

The FMOH was identified as the best-positioned government institution to lead the development of a FOPL policy, set national salt targets for packaged food and coordinate the activities of all stakeholders in the policy development processes, particularly considering that the Minister of Health serves as the Chairman of the National Council on Health and is also a member of the Governing Council of NAFDAC. Although various departments in the ministry, such as the Departments of Public Health, Hospital Services, Family Health and Planning, Research, and Statistics, have a crucial role to play in developing the policies, the Department of Food and Drug Services (DFDS) within the FMOH is responsible for developing food and drug-related national policies and implementation guidelines in Nigeria. The department provides oversight functions to NAFDAC, which oversees implementation, monitoring, and enforcement of food-related regulations. Also, on commissioning this scoping study, the department secured the approval of the Minister of Health to lead and coordinate interventions related to sodium reduction in Nigeria.

The process of policy formulation is long and requires the full participation of key stakeholders. Where possible, the government leans towards harmonizing policies for easy coordination, implementation, monitoring and evaluation. The DFDS has developed several food-related policies, including the National Policy on Food

Safety and its Implementation Strategy and its accompanying National Food Safety and Quality Bill (33). The existing policy is a relevant instrument for FMOH to consider, including FOPL, TFA, salt, and other nutrients of public health concern.

The study participants stressed that the Federal Ministry of Budget and National Planning is a critical government player in developing the FOPL policy and setting salt targets for packaged food. The ministry houses the secretariat of the National Council on Nutrition (NCN), the highest nutrition policymaking and governing body in Nigeria. It developed the pathway for Food Systems Transformation, involving stakeholders ahead of the United Nations Food Systems Summit in 2021 to demonstrate its political commitment to transforming Nigeria's national food system (34). The NMAP-NCDs (2019–2025) highlights the mandate of NAFDAC to develop and enforce food quality, safety and standards regulations. (29) The agency is also responsible for regulating and controlling the importation, exportation, manufacture, advertisement, distribution, sales and use of foods, drugs, cosmetics, medical devices, bottled water and chemicals through the NAFDAC Act (Cap N.1 LFN 2004). The NAFDAC Act also empowers NAFDAC to conduct laboratory tests of food, drugs, cosmetics, medical devices, bottled water and chemicals added to food to ensure compliance with specified standards (35).

NAFDAC also has the capacity to enact food-related regulations. Previously, it has successfully developed and implemented food-related regulations, as described previously. The draft Prepackaged Food, Water, and Ice Labeling Regulation, 2019 requires nutrient declarations at the back-of-pack, which could serve as the starting point for a FOPL regulation in the future. A Food Grade (Table or Cooking) Salt Regulation of 2021 has also been enacted, which could be updated to include salt targets. In addition, the agency has reviewed the Fats and Oil regulation (36), approved by FMOH, which has moved to the Federal Ministry of Justice to be gazetted for public use.

The Standards Organization of Nigeria (SON), another government agency, was mentioned as a critical actor by participants at the stakeholders' engagement meeting. The Federal Government of Nigeria established the SON Conformity Assessment Programme (SONCAP) to check the quality and standards of all regulated products imported into the country, while the Mandatory Conformity Assessment Programme (MANCAP) is a mandatory product certification scheme implemented by SON to verify that all locally manufactured products in the country conform to the applicable Nigerian Industrial Standards (NIS) before they are available for sale or exported (37, 38). These standards requirements are particularly applicable to packaged food that are imported into Nigeria. Thus, the SON is a key stakeholder to be engaged when developing a FOPL policy. The agency will provide quality and standards checks for imported packaged foods, serving as additional safeguard measures for ensuring safety of food consumed by Nigerians.

4.2 Stakeholders' Roles in Policy Development

The need for multisectoral, multistakeholder inclusion in policy development cannot be overemphasized and the need for a multi-sectoral approach to policy development has been recommended (39). When a policy is developed without the involvement of the relevant actors from multiple sectors that have a role in its implementation, policy action becomes challenging.

Low stakeholder participation in the policy formulation process for alcohol control in Nigeria led to minimal policy action and implementation (40).

Although different actors play different roles and influence in the policy, formulation, and implementation processes, getting the buy-in and support of all stakeholders at the formative stage is crucial to the success of the policy passage and implementation. Thus, the stakeholder mapping for this study done by FMOH took a multisectoral approach to generating evidence for FOPL and salt targets policies for Nigeria through the engagement of multiple stakeholders across sectors.

The interests of CSOs in contributing to policy development has been demonstrated in this study. The CSOs

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interviewed showed understanding of the need for engaging with policymakers and policy development processes with the government MDAs. They also stressed the importance of considering the perceptions and choices of the consumers.

4.3 Adopting a FOPL System for Nigeria

Numerous trials have been conducted to compare the effectiveness of different FOPL warning systems in specific country contexts. Results from these studies consistently demonstrate that warning labels are most effective at improving customers' ability to identify unhealthy products and discouraging consumer purchasing of unhealthy products when compared to other systems, including Nutri-Score, Health Star Rating and Multiple Traffic Light labels.

Recently, more countries are recognizing the importance of a mandatory approach. Many voluntary systems, which are less effective, with less global uptake, are being replaced by mandatory policies. Countries that have taken a mandatory approach have demonstrated higher compliance by food industries than countries with voluntary systems. (17) (41) For example, studies from Australia and New Zealand (42) have found very low uptake of the voluntary Health Star Rating logo on food packages; only 28% of eligible products carried a label three years post implementation in Australia, and 21% four years post-implementation in New Zealand. Challenges associated with voluntary systems include the requirement of a robust government monitoring system, political commitment and compliance by the food industries.

While there are multiple FOPL systems that Nigeria may consider, the warning label system, as spearheaded by Chile and more recently strengthened in Argentina, would potentially be an ideal model to adapt to the Nigerian context. Multiple aspects of the warning labels system are conducive to the Nigerian context. Firstly, the warning label is a visual symbol with minimal text or interpretation required. It is simple and easy to understand; given that the literacy rate of the Nigerian adult population is 62%,(43) this is an important consideration.

Secondly, the warning label systems rely on a dichotomous and fairly simple nutrient profile model. This makes monitoring and enforcement easier, which is needed given the limited capacities of the Nigerian government in this regard. Thirdly, warning labels take a simple, effective approach of focusing only on the major nutrients of concern. The draft Pre-packaged Food, Water and Ice Labeling Regulation, 2019 includes provisions for back-of-pack labeling of these nutrients of concern, including salt, sugar and saturated fat. However, the proposed provisions allow for nutritional facts or information to be listed per 100 ml, 100 g or per serving. Allowance of declarations "per serving" does not adhere to Codex recommendations, which state that nutrients should only be listed as per 100 g or 100 ml.

Based on review of the global experience on FOPL policy development, the food and beverage industry has launched enormous efforts to oppose FOPL policy development in particular, as well as attempts to heavily influence the process to weaken policy standards, threaten countries with legal and economic concerns, divert attention and seek loopholes to regulations. It is likely that Nigeria will face similar challenges from industry if a FOPL policy is pursued. Thus, prior to launching policy development efforts, it would be necessary to develop strong conflict of interest policies, build up the scientific evidence base to counter industry arguments, ensure a back-of-pack regulation exists that follows global best practices and launch a major effort to build public awareness and support of labeling, which can help counter industry efforts.

4.4 Setting National Salt Targets for Packaged Food

The FGN through the FMOH and other MDAs has demonstrated interest in reducing the high prevalence of CVD in the country by enacting relevant national policies that provide the pathways for interventions to address the high burden of CVD. The NMAP-NCDs (2020 – 2025), under the priority interventions to promote a healthy diet, particularly recommends reducing salt intake through the reformulation of processed food products to

contain less salt and setting target levels for processed food. (29) The implementation of the action plan aims to achieve at least a 30% relative reduction in mean population intake of salt/sodium by 2025.

The key stakeholders mapped highlight the critical stakeholders for setting salt targets. It is recommended that the government leads the process of setting salt targets and ensures a clear national goal, a comprehensive strategy and ideally adopts a mandatory approach. For developing salt targets, both the FMOH (through the Department of Food and Drugs Services) and NAFDAC have crucial roles to play. NAFDAC is empowered by the NAFDAC Act with the regulatory powers and capacity to implement salt targets, such as by amending the current Food Grade (Table or Cooking) Salt Regulation (2021), and has the power to ensure compliance is enforced. The FMOH is needed to provide crucial support to the development of a NAFDAC regulation and can coordinate stakeholders and ensure a collaborative and participatory process for policy formulation, implementation and evaluation. The FMOH could also consider revising the existing NPFSIS to include a mandate for setting mandatory salt targets.

All actors have specific roles to play and exert a level of influence and support to the process of setting and implementing salt targets (as outlined in the mapping and power analysis table); as such, CSOs, academia and research institutions, technical partners and donors should be engaged by the government. It is critical to recognize the food industry's potential opposing role and influence in setting salt targets, therefore it's important to use a mandatory or voluntary approach and ensure that safeguards are in place to prevent any conflicts of interest in policy development.

Salt target programs require regular sodium surveillance and monitoring systems to track the levels of sodium in the food supply and identify companies that are not compliant. Currently, there is no systematic mechanism for monitoring sodium content in foods or assessing salt consumption in the population. As briefly described above, the NaSS project will provide baseline levels of sodium intake, identify major sources of sodium, and assess the salt content in packaged food. Data will be recollected after five years to evaluate changes. The levels of sodium and other nutrients for 12 packaged food categories have already been collected. The NaSS team can provide technical support to the FGN by recommending the target sodium levels for different food categories, using the WHO Global Sodium Benchmarks as reference points. They can further use the dietary recall, spot and 24-hour urinary sodium data from the WHO STEPS survey, once available, to determine sources of sodium in the population.

While the NaSS data will provide an excellent opportunity to assess the sodium content in the Nigerian food supply before and after policy implementation, this is a time-limited project, and it is still crucial to identify sustainable methods for ongoing monitoring of the food supply and assessing industry compliance.

It is worthy of note that the 30% relative reduction in mean population intake of salt/sodium by 2025 is aspirational, aligning with similar commitments made around the world. However, Nigeria needs to translate this goal into concrete action by setting realistic and gradually decreasing limits on salt/sodium in packaged and unpackaged foods based on evidence and stakeholders' consultation. The evidence generated on sodium content in packaged and unpackaged foods and the population-level urinary sodium estimation by the NaSS study provides the basis for setting salt targets aimed at meeting the national target and WHO recommendation of 30% relative reduction in mean population intake of salt/sodium by 2030.

4.5 Private Sector Potential Response

The FMOH adopted a multisectoral approach by involving industry players in developing tobacco policies in Nigeria. Although this showed the intention of the government to be inclusive in the policy formulation process, this posed challenges to the successful implementation of the tobacco policy as industries selectively adhered to it. (44) For instance, there is inconsistent compliance with mandatory warning specifications and cigarette labels, and only 28% of the tobacco taxes are realized in Nigeria. (45) This demonstrates that the potential negative influence of food industry players on developing FOPL and salt target policies cannot be ignored and consulting the food industry during the drafting of FOPL and salt targets may be counterproductive.

The private sector tends to oppose government policies and regulations that interfere with its profit margin. The recent tax of 10 Naira (\$0.24) per liter on sugar and sweetened beverages (SSB) imposed by the government to fight NCDs and raise public revenue came into effect in Nigeria following the passage of the Finance Act in 2021. (46) Already, industry opposition to the tax is significant, calling on the government to reverse the tax due to the increased cost of production. (47) One of Nigeria's leading CSOs campaigning for TFA elimination in the country, CAPPA, reacted to the industry outcry almost immediately, highlighting the need for the government to remain steadfast in the enforcement of the SSB tax for public health benefits. (48)

The current opposition of industry to the SSB tax shows the potential influence of Nigeria's food and beverage industries. While the government has demonstrated a commitment to safeguarding the population's health by introducing the SSB tax, the industry is responding with the cost implications of the tax on their businesses, disregarding the public health impact of the high current consumption of SSB in Nigeria. The prompt intervention of CAPPA demonstrates that CSOs in Nigeria are resolute in supporting the government to implement the SSB tax and protect the population's health.

The effect of industry on government fiscal policy, as demonstrated by the SSB tax and its opposition by industry, indicates the potential opposition of food industries to nutrition policy development. The private sector was not included as a stakeholder group in this study; however, as highlighted in the stakeholder mapping and power analysis table, they are likely to be a vocal opponent. While opposition is likely for both FOPL and salt targets policy development, global experience suggests that opposition may be strongest for FOPL. Due to the efforts required to monitor and address industry opposition, it is more feasible for the government to take on one policy area at a time. The government should also mobilize several CSOs to support policy implementation and enforcement.

As a first step, the government should establish a conflict-of-interest policy to guide the entire policy formulation process to prevent negative industry interference in the process, especially where there exists an affiliation of an industry player or industry-supported CSO with the government and vice versa. It is important to mention that the Secretariat of the Scaling-Up Nutrition in Nigeria (CS-SUNN) movement in Nigeria is at the FMOH. As the convener and coordinating platform for state and non-state actors for the CS-SUNN movement in the country, it is crucial for the Secretariat to ensure minimal industry interference in formulating mandatory policies by adhering to and promoting the conflict-of-interest policy.

5. Recommendations

The policy and legal landscape scoping study for FOPL and salt targets reviewed the evidence and sought stakeholders' perspectives on the current situation in Nigeria. The analyses show that Nigeria has several national policies that provide strategic direction for the prevention and control of NCDs in Nigeria; these policies only provide a national framework for NCD interventions. A National Multisectoral Action Plan for the Prevention and Control of NCDs in Nigeria recommends FOPL and salt target setting as priority interventions for the prevention and control of NCDs.

However, the strategic plan of action does not have an existing policy to back the implementation of the priority interventions. There are also existing regulations that NAFDAC can review to include mandatory declarations for salt targets for packaged foods. To bridge these policy gaps, this study reviewed relevant nutrition and food-related policies and regulations to provide an understanding of legal and political opportunities to develop FOPL and salt target policies.

The recommendations provided stem from global experiences implementing FOPL and salt targets policies; a review of the regulatory landscape; and the analysis of roles, interests, potential influence, and perceptions of stakeholders relevant to the process of developing, implementing and enforcing FOPL and salt targets engaged in this study. The proposed recommendations aim to guide the FGN on FOPL and salt targets

policies, systems and processes to reduce high salt intake in Nigeria.

This report found ample opportunity for developing policies or regulations for both salt targets and FOPL; however, in the short term, there appears to be more existing political opportunity for developing mandatory salt targets compared to FOPL policy, as well as an urgent need for addressing high sodium consumption. This was concluded for the following reasons:

- 1. There are no concrete bills in the parliament or draft policies in the FMOH or NAFDAC addressing FOPL specifically, whereas there are existing opportunities to incorporate salt targets. For example, The National Food Safety and Quality Bill currently before the National Assembly defines unsafe food as food that is "injurious to health" and "unfit for human consumption". This bill could include high sodium foods, which would meet this definition.
- 2. There are active efforts through the University of Abuja's Nigeria Sodium Study (NaSS) collaboration to generate evidence and set salt targets for packaged foods. This project, which is in close communication with the FMOH and NAFDAC, will provide immediate opportunities and policy recommendations for the government to incorporate into existing draft policies or bills.
- 3. Based on global experience, developing salt targets encounters less opposition from industry stakeholders compared to developing FOPL policy. Thus, a mandatory salt targets policy based on global best practices may be more feasible and have a stronger likelihood of passing at this time.
- 4. Current sodium consumption in Nigeria exceeds the WHO recommendation of <2 grams/day of sodium or <5 g salt/day for adults, and Nigeria lacks a legal framework setting out a national sodium limit in line with WHO recommendations. The only sodium target currently implemented in Nigeria is contained in the Nigeria Industrial Standards utilized by Standards Organisation of Nigeria for its chemical analysis of food and other products. However, the Nigeria Industrial Standards contains standards which sometimes far exceed WHO guidelines. Nigeria's Action Plan on NCDs, which stipulates sodium targets consistent with WHO guidelines, is yet to be translated into concrete normative standards in the form of legislation and/or regulations but offers a clear platform and opportunity to move forward with policy change.</p>

Further, while both salt targets and FOPL will likely benefit the Nigerian population, it is not recommended to simultaneously address policy development for mandatory salt targets and FOPL. Both policies require political feasibility and the availability of resources to do both, which may be challenging to mobilize simultaneously. Also, the sodium thresholds proposed for maximum salt targets differ from those proposed for FOPL, which may confuse policymakers and implementing industries. Thus, in the short term, this study concludes that focusing on a single policy goal, mandatory salt targets, provides the best opportunity to address sodium consumption in the short term.

Key Recommendations for Developing Policy and Regulation for Mandatory Salt Targets

- 1. In the short-term, the FMOH can include expectations for mandatory salt targets during the review of the existing National Policy on Food Safety and Its Implementation Strategy to strengthen the mandate on salt targets in Nigeria. This can be followed by the development of a regulation to set salt target levels for packaged foods, which can be implemented and enforced by NAFDAC, as they have the regulatory powers and capacity to implement such a regulation.
- 2. A second approach to consider: the relevant department in the FMOH, approved by the Honourable Minister of Health to coordinate sodium reduction activities, including setting salt targets, is the Department of Food and Drug Services. The Department also champions a Food Safety and Quality Bill at the National Assembly which could include high-sodium foods as "unsafe" for human consumption. The department could push for the signing of this bill into law to effectively provide the legal backing for setting salt targets and other food policy interventions of public health importance.
- 3. The DFDS should involve other departments within the FMOH and establish a multisectoral collaboration with other government MDAs, development partners, CSOs, academia, research institutions, the media

- and other relevant actors, as identified in this study. They have crucial roles in policy development, implementation, monitoring and evaluation of proposed salt target setting and all sodium reduction activities.
- 4. The current review of the NPFSIS should embody a mandatory regulatory approach and put monitoring mechanisms in place to ensure compliance by food industries. The policy should consider what is feasible for industries to implement, such as a realistic stepwise approach for setting salt targets in selected food categories. Further, clear conflict of interest guidelines should be put in place to clarify industry's role, ensuring that industry representatives are not present at the decision-making table or funding policy related research, but may be consulted during the policy development process to ensure industry perspectives and concerns are taken into account.
- 5. It is crucial that NAFDAC finalizes and adopts the Regulation on Pre-Packaged Food, Water, and Ice Labeling to include global best practices and evidence-based back-of-pack nutrient declarations that follow best practice measures for population impact to enable monitoring of sodium content and other nutrients in the packaged food supply. Having nutrients clearly displayed on the package will enable monitoring of a salt targets policy and set a pathway for future further action on FOPL.
- 6. There is a need to strengthen sodium monitoring and surveillance by funding regular, systematic data collection on the sodium content of packaged foods. The University of Abuja NaSS collaborative study is collecting data on the nutrient content of packaged food as well as salt intake, providing information that is key to setting salt targets and monitoring changes in salt intake over time. The government should strengthen collaboration with academia by funding research activities (free of conflict of interest) to generate an evidence base for policy action and sharing of best practices.

6. Conclusion

Nigeria has a burden of both communicable and non-communicable diseases, an underdeveloped food system and poor social determinants of health. The rising prevalence of NCDs, especially CVD among the young population in Nigeria, is a source of concern that requires concrete action, including measures to curb the menace at the population level. High-impact sodium reduction interventions, such as setting salt targets to reduce sodium content in packaged foods and developing a front-of-pack warning labeling policy to guide consumers' food choices, have been shown to reduce the consumption of excessive nutrients of concern that lead to CVD and death. This study has identified a clear opportunity to immediately develop mandatory salt targets for packaged food, with clear provisions to support the implementation and enforcement of the policy.

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8. Appendix

List of organizations that participated in the Stakeholders' Engagement Meeting

	st of organizations that participated in
S/N	Organization
1.	Ave Health Sense
2.	FMOH/FDS
3.	FMOH/FDS
4.	Ave Health Sense
5.	FMOH/FDS
6.	Ave Health Sense
7.	FMOH/FDS
8.	Ave Health Sense
9.	FMOH
10.	FMOH
11.	Nigerian Heart Foundation
12.	SON
13.	FCCDC
14.	FMOH
15.	FMOH (DHPRS)
16.	University of Abuja
17.	FMOH (NHQ)
18.	AHS
19.	FIIRO
20.	WHO
21.	CAPPA
22.	RTSL
23.	FMOH
24.	UNIABUJA
25.	NCFOST
S/N	Organisation
26.	Nigerian Heart Foundation
27.	Funta Services
28.	Global Health Advocacy Incubator
29.	FAO
30.	FMOH/FSQP
31.	FMOH
32.	CS-SUNN
33.	CR
34.	Nigeria Health Watch
35.	NSN, Lagos

36.	FMOH/FDS
37.	FME
38.	CAFSANI
39.	FMOH/Nutrition Division
40.	IPAN
41.	NAFDAC
42.	RTSL
43.	FMOH/DFDS
44.	FMOH/FDS
45.	FMOH/FDS
46.	SON
47.	NEPC
48.	NCDs/FMOH
49.	FMOH/DHS
50.	NHED
51.	University of Abuja
52.	FMITI
53.	Ave Health Sense
54.	SMEDAN