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THE 'ENABLING ENVIRONMENT' FOR VEGETABLE-RICH DIETS IN BENIN: AN ANALYSIS OF POLICIES, STAKEHOLDERS, AND FRAMINGS

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ABSTRACT

One of the solutions to overcome malnutrition is to set up some policies to encourage vegetable consumption. Indeed, vegetables are important for human nutrition and health. They are rich in bioactive nutrients such as vitamins, minerals, phytochemical compounds, and dietary fiber. But in Benin, vegetable consumption is very low and their production is also facing many challenges. Understanding the food environment seems to be a key step to address relevant policies to improve healthy vegetable production and consumption. This study aims to understand the food policy environment in general, and in particular the policies, stakeholders, and their perceptions of the challenges and policy priorities for the production and consumption of vegetables in Benin. For this, through a qualitative approach, a documentation review of the existing policies were done. In addition, stakeholders' NetMap workshop which gathered 15 participants and 22 stakeholders' interviews were carried out. The interview data were processed and analyzed through a content-based analysis approach with Quirkos software. The results showed that many policies have been designed and implemented to improve food systems in Benin. These policies are mostly oriented toward agricultural product supply in terms of quantity (availability) and on improving social protection, equity, and livelihood, but with little attention paid to quality. The results of the interviews revealed many issues such as the high post-harvest losses, the high use of chemical fertilizers and pesticides, the weak access to improved seeds. In addition, the lack of food marketing and promotion, the lack of local vegetables promotion and the weak adaption strategies to address climate change effects have also been pointed out as issues. All these issues are seen by the stakeholders as priority points of attention that current and future policies should address to enable the environment for vegetable-rich diets in the country.

Key words: Food, agriculture, nutrition, vegetable, diets, policy, stakeholders, framings, Benin

Titre: L' 'environnement favorable' aux régimes alimentaires riches en légumes au Bénin: une analyse des politiques, des acteurs et des cadrages

L'une des solutions pour vaincre la malnutrition consiste à mettre en place des politiques visant à encourager la consommation de légumes. En effet, les légumes sont importants pour la nutrition et la santé humaine. Ils sont riches en nutriments bioactifs tels que les vitamines, les minéraux, les composés phytochimiques et les fibres alimentaires. Mais au Bénin, la consommation de légumes est très faible et leur production est également confrontée à de nombreux défis. La compréhension de l'environnement alimentaire semble être une étape clé pour aborder les politiques pertinentes visant à améliorer la production et la consommation de légumes sains. Cette étude vise à comprendre l'environnement de la politique alimentaire en général et en particulier les politiques, les parties prenantes, et leurs perceptions des défis et des priorités politiques pour la production et la consommation de légumes au Bénin. Pour cela, à travers une approche qualitative, une revue documentaire des politiques existantes a été réalisée. En outre, un atelier NetMap des parties prenantes qui a rassemblé 15 participants et 22 entretiens avec les parties prenantes ont été réalisés. Les données des entretiens ont été traitées et analysées selon une approche d'analyse basée sur le contenu avec le logiciel Quirkos. Les résultats ont montré que de nombreuses politiques ont été conçues et mises en œuvre pour améliorer les systèmes alimentaires au Bénin. Ces politiques sont principalement orientées vers l'offre de produits agricoles en termes de quantité (disponibilité) et vers l'amélioration de la protection sociale, de l'équité et des moyens de subsistance, mais avec peu d'attention accordée à la qualité. Les résultats des entretiens ont révélé de nombreux problèmes tels que les pertes post-récoltes élevées, l'utilisation élevée d'engrais chimiques et de pesticides, le faible accès aux semences améliorées. En outre, le manque de marketing et de promotion des produits alimentaires, le manque de promotion des légumes locaux et la faiblesse des stratégies d'adaptation aux effets du changement climatique ont également été signalés comme des problèmes. Toutes ces questions sont considérées par les parties prenantes comme des points d'attention prioritaires que les politiques actuelles et futures devraient aborder pour avoir un environnement favorable à une alimentation riche en légumes dans le pays.

Mot clés: Alimentation, agriculture, nutrition, légume, régime alimentaire, politique, acteurs, cadrages, Bénin

INTRODUCTION

Poor-quality diets are the root of all forms of malnutrition as well as common non-communicable diseases. They affect both individuals and societies [1]. Although there is largely consensus in the nutrition community on dietary requirements, certain food groups (for example, fruits and vegetables) are often lacking in the diets of socially marginalized groups. This latter often do not have the dietary diversity required to prevent malnutrition and diet-related chronic diseases [2]. Improving access to healthy food requires a better understanding of our food environment [3] (defined as “the interface that mediates people’s food acquisition and consumption within the wider food system” [4]), and the policies that shape it. According to food environment frameworks, policies should promote demand and desirability for healthy foods, while supporting an increase in the supply of sustainably produced vegetables at affordable prices, and available through convenient and well-regulated outlets [5]. A better understanding of current policy shaping the elements of food environments supporting a healthy diet, as well as their interactions, is essential to enable political leaders to design effective and targeted policies [3]. Therefore, there is a need to understand the policy environment, and how this has been shaped by different actors and their various norms, narratives, and interests across the food system to draw lessons to inform decisions in support of vegetable-rich healthy diets everywhere.

In Benin, food insecurity remains persistent in 9.6% of households [6], despite agriculture being the bedrock of the Beninese economy [7]. Leafy vegetables are widely grown and consumed across both rural and urban areas in the country. The income generated by the market gardening activity allows several thousands families to meet their daily needs [8]. In rural areas, this agricultural sub-sector is considered one of the important measures to guarantee food security and promote income diversification [9]. In addition, these vegetables serve as valuable sources of minerals, vitamins, fiber, and other bioactive compounds and also contribute to food security and poverty reduction, particularly among women producers [10]. Nevertheless, despite their nutritional and economic benefits, vegetable consumption in Benin remains low by current estimates, with an average of 80g per capita per day, which falls far below the WHO recommendation of 240 grams [11].

In Benin, vegetable production is a country-wide activity which is more intensive in the urban and peri-urban areas of southern Benin, and represents an important income generation activity and employment opportunity [12, 13]. The Beninese state and many other organizations are working together to develop vegetable production, create jobs, and strengthen food security in the country [9]. Thus, vegetable production increased in Benin by 95% with an annual average of 577,677 tonnes from 2008 to 2015 [14]. In the Strategic Plan for the Development of the Agricultural

Sector for Benin (2017-2025) and the government's programs actions (2017-2021 and 2021-2026) vegetables are among the fourteen priority sub-sectors to be developed [15]. This case study aimed to understand the Benin policy landscape as it affects food environments within national food systems related to vegetable production and consumption. It also intended to apprehend the stakeholders' perceptions of the issues, and the policy priorities that should be addressed by policymakers to improve vegetable production for healthy diets in the country.

MATERIALS AND METHODS

Research aims and questions

This research aimed to analyze the current policy environment for vegetable-rich food systems for healthy diets in Benin.

The research questions were:

1. How does written food system policy and legislation enable or disable vegetable-rich diets, and how complete and coherent is the written policy environment across levels and sectors?
2. Who is involved in food system policy creation, and how do these actors interact?
3. How do policy actors feel policy processes have affected food systems (with particular reference to vegetables)?

Research approach

This is an in-depth, qualitative case study based on traditional policy science, tracking the food policy process over time and assessing how certain policy issues came to the fore and who and what drove this process [16]. Within this, the study was interested in understanding written policy content; key actors, their interactions and power; and how these actors perceive specific policy issues and aim to set agendas to address these [17].

The research was framed by the High-Level Panel of Experts on Food Security and Nutrition (HLPE) food system framework [18] (for the written policy review and the NetMap), and focusing specifically on the Turner *et al.* [4] Food Environment Framework (for the in-depth interviews). The food environment includes key domains external to consumers (availability, prices, product properties and marketing of different foods), and key domains personal to consumers (accessibility, affordability, acceptability, information, and knowledge of different foods) [4].

Data collection

This study was deployed in three phases. The first phase was the documentary desk review through data extraction and summary in Excel of existing policies and strategies. These policies were the ones designed under the sectoral ministries as well as the multisectoral policies. To realize this, a search was done on the ministries

and government, the regional institutions websites as well as on the technical and financial partners websites.

The second phase was the mapping of the key stakeholders involved in the vegetable policy process, their interactions and influence. To realize this, we used the NetMap method [19, 20, 21], through a workshop held in January 2022. This workshop gathered 15 key informants with knowledge of the sector from different vantage points, and took them through a facilitated process of creating drawn maps of actors in the vegetable-related policy network, elaborating their links, and assigning relative influence (power) based on the respondents' understanding of the network.

Third, 22 interviews were undertaken with key informants knowledgeable about aspects of vegetable policy processes in Benin. Interviewees were selected from a list of 95 stakeholders identified through the NetMap workshop, purposively identified to represent different actor types and viewpoints. The selection was based on the stakeholders weight, influence and importance as revealed by the netmapping results. The interview guide was grounded in a key policy agenda-setting framework [22] and included guiding questions on among others: the respondent's framing of key policy issues; how they see the current policy environment; and their perceptions of policy priorities to better enable vegetable-rich diets.

Data Analysis

The data and information gathered from the policy documents (39 national and 4 regional and international, (see table 2 in Annex 1) were synthesized based on a documentary grid and analysis of the information from each policy relevant to vegetables was done based on the different food environment framework headings. The NetMap data was entered into a matrix in Excel showing connections and relative influence of the actors, and the Excel matrix was used to draw a network map using Vizualyzer software. This map was analyzed visually to look at the most central actors within the policy process and those defined as most influential by respondents, and to look at linkages and disconnects between different types of actors. Interview transcripts were processed and coded in Quirkos qualitative data analysis software. From this, issue framings and policy priorities were coded, and patterns were identified across different actor types. In addition, a quantitative variable "n" was chosen to estimate how many times the interviewees' policy priorities have referred to the food environment headings, and a comparison was done with the policy documentary review data.

RESULTS AND DISCUSSION

How does written food system policy and legislation enable or disable vegetable-rich diets, and how complete and coherent is the written policy environment across levels and sectors?

The data obtained from the policy documentary review showed how current policies in Benin are shaped across different sectors which contribute to shaping the food environment in the country (figure 1). As shown in Figure 1, most of the relevant food policies in Benin are designed in the agricultural sector, followed by the social protection sector. However, few have been designed in the health, water and sanitation (WASH), environmental, or trade sectors. These results show the main role that agriculture plays in the population's well-being especially food and diets. In fact, according to Dayou *et al.* [23], agriculture employs 70% of the active population. Through its agricultural policies, the Government plans to increase agricultural production and productivity through the extension of cultivation areas and improved yields of most food and cash crops [15]. For instance, the Benin Republic, through its Strategic Plan for Agricultural Sector Development (2018-2022) focuses on improving food and nutrition security, and improving farm-level income, with promotion of the vegetable subsector as priority. However, agricultural productivity does not necessarily translate to demand fulfillment at the retail level or improvement in vegetable availability to consumers [24]. As pointed out by Babio *et al.* [25], food security has long been considered in terms of the quantities of food available to different segments of the population in Benin, as in most African countries, rather than diet quality.

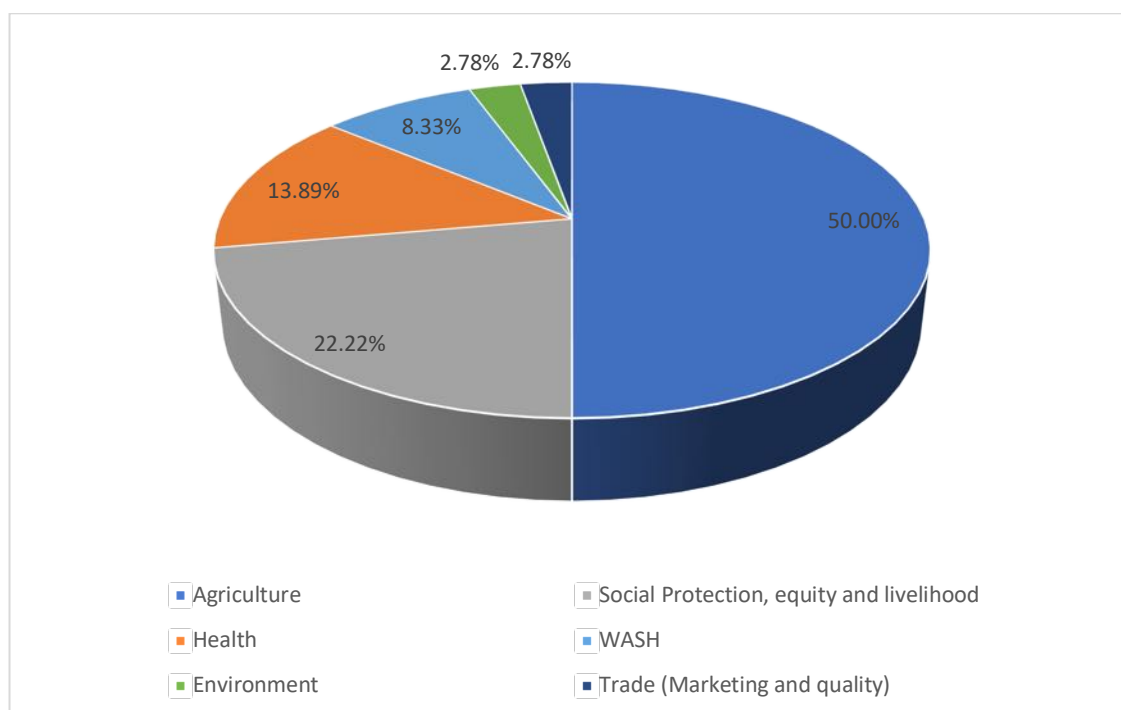


Figure 1: Coverage of current sectoral policies in the food environment in Benin

Source: The authors

The analysis also showed that the social protection, equity, and livelihoods sector have also been well-addressed by the policies; these seem to be transversal sectors, not surprising given the current low level of human development. However, according to Devereux [26], several African countries have introduced social protection programs only because donor agencies advocated for them and have provided financial and technical assistance, and this is the case in Benin. Indeed, the evidence base on the positive impacts of social protection on food security and other indicators of well-being is growing rapidly. Thus, the ongoing spread of social protection programs throughout Africa now appears to be irreversible. However, the long-term prospects of social protection are still unclear [26].

Finally, the trade sector has low coverage by the policies. This situation seems to be a gap that needs serious attention in the frame of promoting healthy diets for the population. The lack of policies targeting food marketing, sales, and quality was also raised by Snyder *et al.* [27], who stated that, despite the rapid influx of supermarkets and modern procurement practices, the food system in sub-Saharan African countries is still largely traditional, informal, and unregulated.

In addition, the results showed that the national policies cover all the HLPE [18] and Turner *et al.* [4] food system headings but to differing extents (Figure 2). Most of the policies address food affordability and availability. Few policies addressed food

safety, accessibility, information and knowledge while marketing and advertising got a very little attention from the policies.

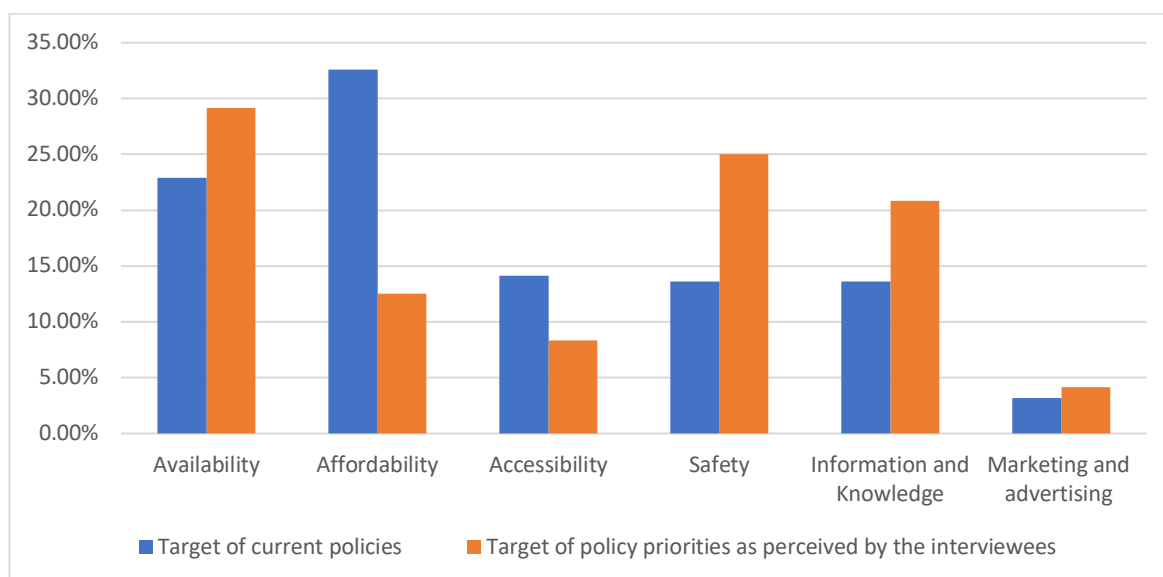


Figure 2: Food policies target per HLPE food system area in Benin

Source: The authors

Who is involved in food system policy creation, and how do these actors interact?

In total 95 actors were determined to have relevance to the vegetable policy process, among which 38 are governmental, 23 are donors and international NGOs, 18 are from the private sector, 14 are from civil society and local NGOs, and two from others such as individual farmers, and traditional and religious leaders. As shown in Figure 3, the government and the Ministry of Agriculture, Livestock and Fishing play a central role with the most important connections, and influence in the food policy designing and implementation in Benin. This corroborates the predominance of agricultural policies in the food system environment enabling in Benin as shown above.

There are regulation links from the Government towards all the actors, and from the Ministries towards their agencies. The Ministry of Planning and Development (MPD) and the Presidential Palace have also great influence but play a peripheral role. For instance, the MPD is the Ministry that allows and validates all the policies designing initiatives as defined in the policy process guide in the Country [28]. The donors (UN agencies, foreign embassies, EU, Word Bank), are playing a peripheral but important role as they are assigned a great influence through their financial support to the government, some national NGO, and the Civil Society actors.

Civil Society and farmer's organizations, such as the National Farmers' Organization and the Civil Society Platform are assigned medium influence with peripheral roles

and few links. There is a National Federation of Vegetable Farmers' Organizations which also is assigned a medium influence but plays an important role in agricultural policy design, especially where that targets the vegetable sub-sector.

Most of the actors are also linked through collaboration. For instance, the civil society actors collaborate generally to organize themselves for advocacy and lobbying actions towards the government. There are also collaboration links between the NGOs that are working in the same domain such as food security and nutrition for the local populations' well-being.

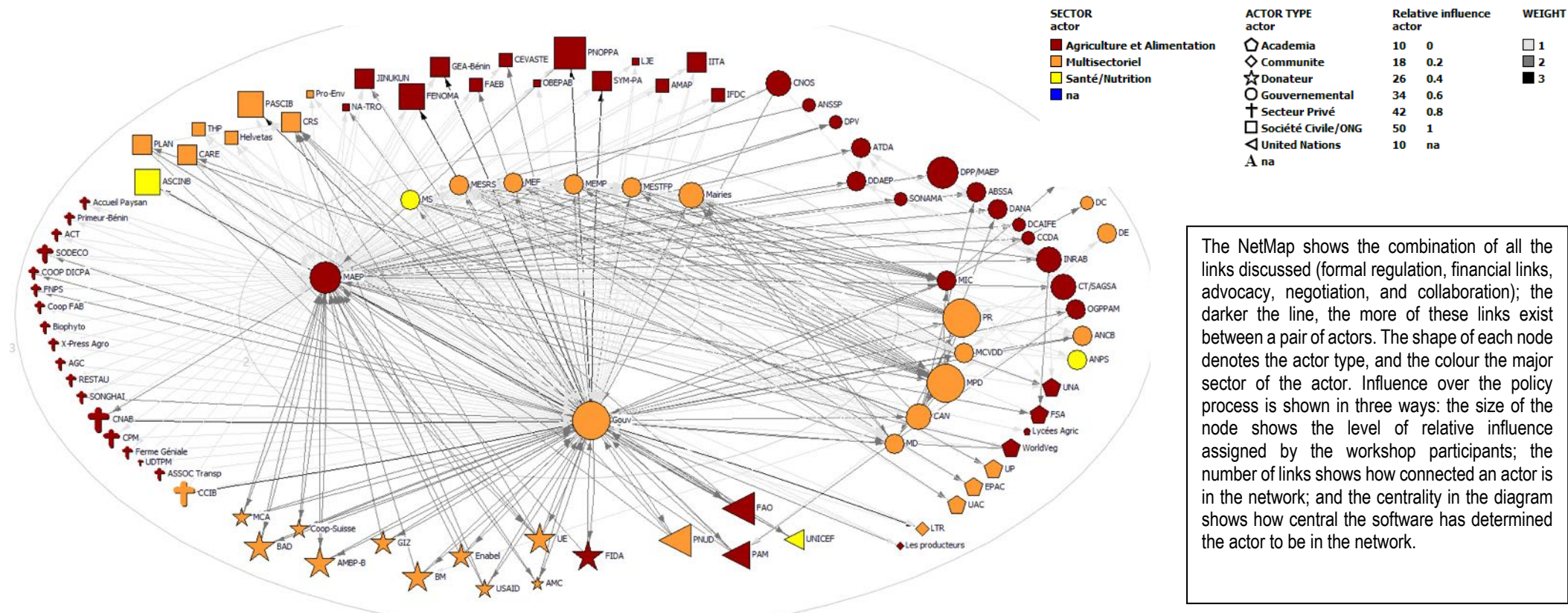


Figure 3: Actors involved in vegetable policy processes, their links and influence
Source: Authors

How do policy actors feel policy processes have affected food systems?

Under this rubric, the findings of the issue framings and policy priorities as perceived by the interviewees summarized in Table 1 were discussed. The policy priorities as perceived by the interviewees are diverse and target differently in terms of weight in the food environment headings (see Figure 2 above: target of the policy priorities as perceived by the interviewees). The analysis showed that most of the future policy priorities as perceived by the interviewees should address food availability, food safety as well as information and knowledge on food issues. Food affordability and acceptability policy priorities are less raised, and food marketing and advertising got the lowest consideration. These results are in accordance with what has been found through the documentation review, which showed that most of the policies designed and implemented for food system improvement in Benin are mostly oriented on improving agricultural product supply in terms of quantity (availability). However, food availability as well as food safety, and information and knowledge on food products quality and usage, need to be strengthened through future policies according to interviewees.

In addition, all the interviewees pointed out that there is less attention paid to the quality of vegetables supplied on the market and perceived this as a priority focus. According to them, this can be explained by weak control and high usage of chemical fertilizers and pesticides by farmers in general and particularly vegetable producers, and this is a big issue for vegetable production and consumption. This result seems to be a global concern in sub-Saharan African (SSA) countries as said by Cachomba *et al.* [29] who estimated that there is evidence at the local level that small-scale farmers in SSA have become greatly reliant on synthetic pesticides, replacing more traditional methods of pest control. Also, Honfo *et al.* [30] said that several authors have investigated the causes of post-harvest losses of leafy vegetables and reported many causes including among others, the excessive use of fertilizers. These results are also similar to those of Monde *et al.* [9] who concluded a high use of chemical fertilizers in the market garden farms in Benin whereas the farmers are complaining about the lack of recommended and adequate fertilizers and pesticide access to improve vegetable production. In addition, consumers are still largely unaware of the dangers of toxic pesticide residue. Based on all the above, Sneider *et al.* [27] suggested that in the short run, immediate action must be taken to ban the use of “highly toxic” pesticides. The same authors however estimated that this latter must be accompanied by the provision of less toxic pesticides and training in integrated pest management strategies that are equally effective in pest control while decreasing overall volumes. After all these, it seems to be relevant that one of the priorities raised by most of the interviewees is to set up clearly in the policies a mechanism for the strict control of fertilizers and pesticides for food crop production in general and vegetable production in particular. In addition, the interviews pointed out that there is a priority need to work on consumer education, and the promotion of training of the vegetable farmers in organic fertilizers and pesticides.



On the other hand, there are few policy priorities and suggestions related to food affordability and acceptability and food marketing and advertising, despite high food costs constituting a major barrier to access to a healthy diet [3]. This also seems to be a priority policy gap in the interview results. In this same line, to improve the accessibility of vegetables, some of the interviewees suggested setting up a policy to place a high value on locally sourced foods, especially local vegetables to address nutritional issues, because several leafy vegetables produced and consumed in Benin are mostly exotic species and are the most important vegetables on which fertilizers and pesticides are used [9]. In addition, setting up a policy for a local seed production chain seems to be a priority.

Finally, the findings in Table 1 showed that climate change effects are seen as one of the big challenges that are brought up by respondents, affecting agricultural production in general and vegetable production in particular. This was also raised by Yegbemey *et al.* [31] who estimated that without relevant measures to adapt to climate change effects, agricultural production in the Republic of Benin is expected to decrease by between 5% and 20% in 2025. Therefore, climate change mitigation and adaptation seem to be a policy priority among respondents to strengthen vegetable-based healthy diets in Benin.

However, the documentary review has revealed many existing policies which could help to mitigate those issues, such as the National Policy for the Management of Climate Change (2021-2030), the National Plan for Agricultural Investment in Food and Nutrition Security (2017-2025), the Strategic Plan for the Development of the Agricultural Sector (2017-2025), the National Seed Policy (2015-2025), and the National Program for the Development of the Market Garden Sub-sector (2017-2021). This situation shows that many existing issues are not due to a lack of policies but to the fact that even policy actors are not aware of the range of existing policies, and the lack of visibility of real impact on the Beninese population.

CONCLUSION AND RECOMMENDATIONS FOR DEVELOPMENT

Through this work, the results showed that many policies are targeting vegetable production (directly and indirectly) in terms of quantity, and less attention is given to food safety and diet quality. In addition, many actors are involved directly and indirectly in specific actions to improve food and nutrition security in the country. However, many issues are still hindering food and nutrition security as well as the production and consumption of vegetable crops.

Food security in general, as well as vegetable production and consumption in particular, are a priority for the government of Benin, and there is a relatively coherent set of policies on paper. In terms of key policy issues, most of the respondents recognized that the major issue related to vegetable production are the high use of chemical fertilizers and chemical pesticides by the farmers to grow vegetables. The farmers also recognized this as a problem and the lack of policies to address this issue.



As far as other policy priorities are concerned, the key ones are among others: to continue working on measures to adapt to climate change effects, to improve the yield in the production of fruit and vegetables to make the sector more attractive and more interesting for producers, to sensitize people to produce healthy vegetables for the population. In addition, it is important to secure land for local farmers and to promote seed production to make them available and accessible for the farmers, encourage agroecology practices in the farming systems as well as promoting home garden development in the Communal Development Plans.

Many existing policies are still relevant to help overcome some of the issues prioritized by the stakeholders, so there is a need to ensure that the policy landscape is known and understood by food policy actors in Benin. This paper is a contribution to that understanding. Ultimately, it is the real impact of the policies on the vegetable producers' and consumers' activities and livelihoods that requires a deep investigation through future studies, and how policy can navigate the trade-off among the needs of producers and consumers.

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Authors' contribution

All authors have contributed to all phases of this study, preparing and drafting of sections of the manuscript. All authors read and approved the final manuscript.

Conflict of Interest

The authors declared no conflicts of interest.



Table 1: Vegetable production and consumption issues, priorities as perceived by the interviewees, and their weight in the food environment framework

Actor type and specificities	Perception of vegetable production issues	Perception of vegetable consumption issues	Perception of priority policy actions	HLPE framework food environment headings referred by the priorities and their weights (n)*
All the actors' types	✓ Low prices and high post-harvest losses during periods of abundance ✓ Lack of mastery of adequate harvesting techniques and the unavailability of conservation equipment ✓ Poor water management by most of the farmers who adopt rain-fed production	✓ The quality of the vegetables produced is deteriorated because of the use of high-chemical inputs ✓ Food habits in many areas of the country don't include the consumption of vegetables ✓ High prices of vegetables during certain periods of the year ✓ Hight emphasis on yield improvement (quantity) rather than on quality through government policies	Set up a policy to enhance measures to adapt farmers to climate change effects	Availability and affordability
			Set up a policy to control and regulate the banned agricultural inputs markets	Safety
			Control vegetable supply when the demand is lower by promoting processing units and conservation facilities	Availability and affordability
			Place a high value on locally sourced foods, especially vegetables to address nutritional issues	Availability, acceptability knowledge and information
			Promote home gardens in the Communal Development Plans (PDCs) for healthy vegetable consumption promotion	Availability, accessibility affordability and safety

			Define a policy for sales per kilo of vegetables to apprehend the real data of vegetable production and sales	Information and knowledge
Farmers		✓ The high use of pesticides without any control and regulations. ✓ Many people are not consuming vegetables as they fear falling ill by eating contaminated vegetables	Set up a policy to regulate the banned agricultural inputs markets	Safety
			Sensitize farmers to produce healthy vegetables for the population	Safety and knowledge and information
Farmers and civil society actors	✓ Low availability of space for production, especially in urban areas ✓ Unavailability of specific inputs for vegetable production ✓ Lack of profitable markets ✓ Difficulties in estimating the demand and the supply ✓ Weak availability of quality seeds essentially dominated by imports and not high-yield seeds ✓ No seed production for local vegetables, even though it is these vegetables that are more consumed in rural ✓ Lack of policy to promote the production of organic inputs for vegetable production		Promote local seeds production	Availability
			Work to secure land for farmers	Availability
			Promote vegetable-specific fertilizers and pesticides	Safety
			The development of local product chains	Availability, affordability, acceptability and marketing and advertising
NGOs and research academy		✓ Consumers lack knowledge of the nutritional potential of vegetables available in their environment ✓ Little knowledge of food cooking practices that preserve nutritional value of vegetables	Work for better control food supply	Safety
			Production of evidence data to guide strategic policies	Information and knowledge

			Train and sensitize consumers on the cooking practices that preserve nutritional value	information and knowledge
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Source: Authors

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ANNEX

Table 2: Food system policies in Benin

	Food agriculture, inputs and supply	Food markets, trade and economy	Food marketing, sales and promotion	Social protection, equity and livelihoods	Food security, diets and nutrition	Food safety
International	UN Sustainable Development Goals (SDGs) 2015-2030					
	Comprehensive Africa Agriculture Development Program (CAADP 2015-2025 (African Union)					
	ECOWAS Agricultural Policy (ECOWAP 2025) (ECOWAS)					
	WAEMU agricultural policy (PAU) (WAEMU)					
National	National Development Plan (PND) 2018-2025					
	Growth Program for Sustainable Development (PCRP) 2010-2015					
	Letter of declaration of Rural Development Policy (LPDR) in 1991			Letter of declaration of Rural Development Policy (LPDR) in 1991		
	Rural Development Policy Declaration (DPDR) in 2000			Rural Development Policy Declaration (DPDR) in 2000		
	The Master Plan for the Agricultural and Rural Development Sector (SDDAR) 2000				The Master Plan for the Agricultural and Rural Development Sector (SDDAR) 2000	
	White Book on Land and Land Policy in Benin 2011-2050			White Book on Land and Land Policy in Benin 2011-2050		
	The Country Programming Framework (CPP),			The Country Programming Framework (CPP), FAO Benin 2017-2021		

	FAO Benin 2017-2021				
	The Benin Country Strategic Opportunities Program (COSOP) 2018-2022 IFAD			The Benin Country Strategic Opportunities Program (COSOP) 2018-2022 IFAD	
				The country strategic Plan - Benin (2019-2023) of the World Food Program	
				The National Gender Promotion Policy (PNPG) 2008-2025	
	National Strategy for the Implementation of the Agricultural Council in Benin (SNCA)				
	Strategic Plan for the Development of the Agricultural Sector (PSDSA 2017-2025) 2017-2025			Strategic Plan for the Development of the Agricultural Sector (PSDSA 2017-2025) 2017-2025	
	National Agricultural Investment Program of Benin (PNIA-Benin) 2010-2015			Strategic Plan for the Development of Food and Nutrition (PSDAN) operationalized by the National Results-Based Nutrition Program (PANAR 2010-2020 (PSDAN/PANAR) 2010-2020	
	National Plan for Agricultural Investment and Food and Nutrition Security (PNIASAN) 2017-2025			National Plan for Agricultural Investment and Food and Nutrition Security (PNIASAN) 2017-2025	
	The National strategy for the promotion of agricultural sub-sectors integrating the			The National strategy for the promotion of agricultural sub-sectors integrating the	

	agricultural clusters tool, adopted in 2017 for the period of 2017-2025			agricultural clusters tool, adopted in 2017 for the period of 2017-2025	
	The National Strategy of biological and ecological agricultural production (2020)			The National Strategy of biological and ecological agricultural production (2020)	
	National strategy for e-Agriculture in Benin 2020-2024			National strategy for e-Agriculture in Benin 2020-2024	
				Holistic Social Protection Policy (PHPS) 2014-2024	National Communication Strategy for Social and Behavioral Change for the Promotion of Nutrition in Benin and its operational plan for 2017-2021
				National Policy for the Promotion of Woman in 2002-2006	
	Policy for the Promotion of Women in the Agricultural and Rural Sector (PPFR)			Policy for the Promotion of Women in the Agricultural and Rural Sector (PPFR)	
				National Gender Promotion Policy (PNPG) 2008-2025	
				Comprehensive Food and Nutrition Plan for adolescent girls, pregnant and breastfeeding women and children, which covers the period 2016-2020	
				National Strategy for Infant and Young Child Feeding (ANJE) 2015-2019	

				National Health Development Plan (PNDS) 2018-2022	Health Sector Policy for Nutrition (PSSN) 2016-2025	
				National Policy of Health 2009-2018		
				National Community Health Policy 2015-2025		
				National Employment Policy, 2020 - 2025		
				The National Water Policy, adopted in 2008		
				The National Drinking Water Supply Strategy in Rural areas 2017-2030		
				The national policy document of the hygiene and sanitation of Benin (PNHA) adopted in 2013		
	National Strategy and Action Plan for the Promotion of Non-Wood Forest Products (SNPFNL) 2014-2025			National Strategy and Action Plan for the Promotion of Non-Wood Forest Products (SNPFNL) 2014-2025		
	National Policy for the Management of Climate Change, 2021-2030			National Policy for the Management of Climate Change, 2021-2030		
		National Quality Policy in the Benin Republic 2018-2025				National Quality Policy in the Benin Republic 2018-2025
			National School Food Policy (PNAS) 2014-2025			
Local	Communal Development Plans (Semè-Kpodji, Cotonou and Grand-Popo)					

Source: The Authors

