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State of the City Food System Report

Ouagadougou

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Deliverable Details

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LINCS Value Framework

	Learning The project stresses the value of experiential learning and that multiple ways of knowing are welcomed, deemed of equal value, and can be connected to enhance understanding. *"NEA ONNIM NO SUA A, OHU" - "He who does not know can know from learning"*	**Inclusivity** and deliberate engagement and empowerment of communities will enhance their agency and participation in decision-making for a people-centred and informed research, policy and practice. *"FUNTUNFUNEFU-DENKYEMFUNEFU" - "Unity in diversity"*	**Novelty** represents the embracing of the new or unexpected, which necessarily requires diverse expertise, skills and perspectives. It includes the dismantling of inappropriate systems in favour of traditional or indigenous practices. *"UAC NKANEA" - "UAC lights" symbolises technological advancement.*	**Collaboration** To successfully ensure transdisciplinary work, societal actors must be continuously engaged to co-define the research objectives and questions, and to continuously contribute to meaning-making with the researcher as the research progresses. *"BOA ME NA ME MMOA WO" - "HELP ME AND LET ME HELP YOU".*	**Sustainability** is articulated both as the overarching global imperative to ensure economic, environmental and social wellbeing, and as the ethos that every project intervention must aim to become self-sustaining. *"SANKOFA"- The backwards turning bird symbolises returning while looking forward*
How does this deliverable contribute to each of the values?	This has involved a deep learning process connecting food systems understanding to urbna systems understandings	The report entailed less engagement and a surface review but consultations with diverse stakeholders will now take place	This is one of the first reviews to connect urbna systems and food systems knowledge and to assess the food system of a city as embedded in both the urban, the policy and the infrastructural contexts	This work involved convening different food systems knowledge specialists. More collaborative work will commence with this report service as the site of conversation	This report serves a key sustainability position. The wealth (per a broad definition) of society is embedded how society functions and that is embedded in context and the environment. The intersections between these sphere also needs mediation and governance. This report seeks to understand this process as a primary entry point to ongoing food system engagement.
How did you practice this value in this deliverable?	Through the initial brief and active engagement through the development of the report.	This process built the foundation for more inclusive conversations with diverse actors who impact the food system across the city	This report is novel and pushed researchers to engage diverse systems at the urban scale – food, urban, governance, health, policy, politics, etc.	This report was collaborative in terms of how it brought researchers together. However, it is a key tool upon which collaborative processes are now built	This report sought to offer greater understanding about the intersections of the three spheres and how these are mediated through the sphere, who governs these processes and how these enable or constrain outcomes.

2. Abstract

Long before its independence, Burkina Faso was faced with gaps between food supply and demand. This situation will continue after independence and become recurrent, establishing the country in an irregularity of food supply and demand. Governments will multiply several strategies ranging from regulation to free trade under the control of international institutions. These strategies will be articulated in turn on the approaches of food self-sufficiency, food security and the current state advocates the legitimacy for a state to have sectors of sovereignty. An agro-sylvo-pastoral offensive (ASP) by 2025 is currently being carried out.

However, despite all the efforts of the government supported by international institutions and donors, the profile of Burkina's food system follows the pattern of a food system that functions with difficulty. Marie Poussart 2006 and Banaon et al highlight the flaws of the food system in terms of sustainability. Food production, still based on that of local cereals, millet, corn, sorghum, has evolved concomitantly with population growth but it lacks diversity and imports of rice wheat and fish strengthen the country's food supplies. However, the food vulnerability noted unevenly in the country and more accentuated in the north due to the security crisis which has shaken the country since 2012 is a marker of limited accessibility. Thus the nutritional situation remains worrying even if the trend in recent years has been towards improvement. Indeed, in 2019, one in four children under five (05) years suffers from stunted growth (25.4%), 17.3% are underweight and 8.1% are wasted (National Policy multi-sector nutrition policy, 2020). The food system has nevertheless attracted the attention of the government and donors through several programs and projects but with the security crisis, the war in Ukraine which is added to climatic hazards, its resilience is being severely tested, hence the offensive prompted. With the aim of improving the profile of the national food system, four areas of synergistic action are identified: improving productivity while preserving natural resources; preserve and sustain work within the food system; reduce territorial imbalances; improve food and nutritional balance.

The city of Ouagadougou, with regard to programs to improve the food system, is downstream of actions for the storage, redistribution and marketing of local foodstuffs by government action and the private sector. This is a marker of the close participation of municipal authorities in the governance of the food system because Burkina has opted for a transversal decentralization approach which advocates synergy of action. Only the municipal authorities will have to demonstrate their skills so that the State cedes to them a sector that it considers sovereign. While waiting for the problems that emerge from the urban food system (misuse of pesticides, unsafe culinary practices, health quality of market infrastructures and therefore of products and dishes, etc.) of Ouagadougou which is a signatory of the Milan Urban Food Policy Pact (MUFPP, 2015) attract the attention of civil society, professional organizations, researchers, international organizations (NGOs) and international institutions (FAO, World Bank, EU). The municipality will have to carve out a place in the governance of the food system with these different partners to acquire national legitimacy. In this perspective, the Project to Support Urban Economic Growth and Metropolitan Governance of Greater Ouaga (PAGO) financed by the European Union, would be an opportunity for the city.

3. Introduction

Burkina Faso located in the heart of West Africa with a population of 23.25 million inhabitants including 49% men and 51% women in 2023. Its capital Ouagadougou, former Mossi kingdom in the south, had 33,000 inhabitants in 1950 compared to 3,204,000 estimated in 2023. The city's current growth rate is estimated at 4.84% (United Nations 2023). This report covers an inventory of the food system profile of both the country and its capital which is participating in the AfriFOOD-links project as a hub city. Four sections make up this report and mainly deal with i) the history of the city of Ouagadougou, its governance in relation to national structures, its economy, its infrastructure, food security and current responses in this area by combining them with those nutritional; ii) city AfriFOOD-links reference of the food system which focuses on the actors and their organization, the regulatory environment, the production environment, the nature of the food economy, infrastructures, nutritional deficiencies and interventions on the subject seen over the decade (2012-2022), strategies for household access to food, infrastructure and interventions over ten years (2012-2022) on food and nutritional security; iii) The state of multi-actor governance and process supply, which addresses governance modes and practices in a diachronic posture before addressing threats and opportunities. Note that not all parts of section three are completed, they will be taken into account later with the parts not yet addressed. The report was prepared on the basis of bibliographic data.

4. Scope of the City Report

This work is of capital importance for the city of Ouagadougou. It must already be recognized that the city of Ouagadougou suffers from a lack of data in many areas, mainly that of its food system. This report will allow the city to have data to better articulate its food policy which, translated into a project, could be presented to donors. In addition, analyzing the city's participation in the governance of the food system in conjunction with national authorities will allow it to better assess its position. With better information, the municipality will be able to initiate a plan to strengthen its capacities in order to seek an effective, even efficient and sustainable position in terms of governance of the food system. This report will therefore offer the city of Ouagadougou a working and decision-making tool, and will facilitate positioning on their governance.

5. The City: Ouagadougou

5.1. History of the City

Ouagadougou was the political capital of Burkina Faso but nowadays it's both the political, economic and cultural capital. The country is known as the "land of honest people" which is a land lock country located in West Africa and neighbored by six countries (Mali, Côte d'Ivoire, Ghana, Togo, Benin and Niger). Ouagadougou cover an area of 600Km^2 (Gloux et al., 2018) which includes the surrounding rural communes: Pabré, Tanghin-Dassouri, Komki-Ipala, Komsilga, Koubri, Saaba and Loumbila. To make "the greatest Ouaga" (Périssol et al., 2019).

Ouagadougou is at a strategic position because it's located in the heart of West Africa. Historically, the city is located at the crossroads of ancient trade routes, a strategic position on the scale of West Africa, which in history allowed the metropolis Ouagalaise to be the instrument of three state powers: the traditional Moogo kingdom, from the colony of Upper Volta and the independent nation of Burkina Faso. The history of the city of Ouagadougou reveals an identity constructed by a strong heritage reconciling tradition and modernity (Périssol et al., 2019).

Ouagadougou was the south part of mogho kingdom with houses made from clay and mainly occupied by Mossi people. According to (Fournet et al., 2008), the Mossi are warriors, colonizers and their societal and political organization is military, internalizing, ultra-hierarchical and unequal. This hierarchy allowed the city to maintain its status as the capital of a colony and then capital despite the dislocation of Upper Volta in 1932 and its reconstitution in 1947. This contrasts with other AOF countries which have experienced changes of capitals (Fournet et al., 2008).

5.2. Pre-colonial city

The first known cartographic sketches of Ouagadougou, established by the explorer Binger in 1892, do not allow us to describe an old urbanization core since at that date, Ouagadougou was a rural town of around fifteen disparate hamlets of 5 000 inhabitants, implying other logics to justify that a village can hold the high command of the kingdom (Meyer, 2016). The city was been transformed by French colonists at the end of the 19th century and from the 1920s, the governor and his administrators applied authoritarian and segregationist urban planning in a colony devoid of any technical personnel (Dupuis et al., n.d.). At that time, Ouagadougou was structured around a central core, including the royal residence and the market, around which several hamlets were distributed geographically according to the hierarchical links uniting the districts, residences of servants and ministry. of the king (Skinner, 1974 ; Dupuis et al., n.d.).

5.3. Post colonial city

Ouagadougou is located in the province of Kadiogo, itself located in the Center region. When talking about the development of the post-colonial city of Ouagadougou, it is necessary to distinguish two major stages.

5.3.1. After independence

Disparaged during the colonial period under the name of Bancoville because of its architectural uniformity, little transformed during Independence, Ouagadougou is still under construction (Figur 1). The city of Ouagadougou occupies a geographical position favorable to trade, it is a hub for trade with the rest of Burkina Faso on the one hand, and other countries on the other (Dahani & Compaoré, 2021).

Figure 1: Aerial view of the western part of Ouagadougou. Opposition between well-organized subdivided spaces (top) and non-divided spaces (bottom).

Source Fournet et al., 2008

5.3.2. After the 1983 revolution

Spanning more than 300 km^2 at the time, the capital of Burkina Faso (former Upper Volta) has experienced the most radical urban transformations in the country since the 1983 Revolution. Ouagadougou has gained the status of "international city" since the mid-nineties, notably due to the ambitions of President Blaise Compaoré. and the proactive policy of Mayor Simon Compaoré.
Ouagadougou is still under construction with an uncontrolled sprawl of the city. There are more than 400,000 plots of land produced through official subdivisions in the Ouagadougou agglomeration, but half of them remain undeveloped (Périssol et al., 2019).

In addition to these developed areas, there are vast areas of precarious neighborhoods, locally referred to as “undeveloped neighborhoods,” these undeveloped neighborhoods are in the process of densification and spatial growth (Périssol et al., 2019).

5.4. Modern city

The State is engaged in two large-scale operations. Structuring the city into two centers approximately ten kilometers apart, these projects denote both the Presidency's desire to attract national and foreign investors through prestigious operations and to establish its power in the area of the agglomeration, and this through the organization of the city center into an attractive place conducive to business - the ZACA - and through the creation of a new part of the city housing the seats of power and the residences of “new rich” - “Ouaga 2000”. These projects were lunched by the president Thomas Sankara and were completed under the president Blaise Compaoré governance. The 1983 Revolution marked the city of Ouagadougou with its proactive and authoritarian urban program with the ambition of breaking down customary notables, getting rid of foreign influence, building a new society and building dignified urban planning - according to the leaders - of a modern capital through, in particular, large-scale subdivisions and the construction of cities (Dupuis et al., n.d.)

Nowadays, the city of Ouagadougou has twelve (12) districts and fifty-five (55) sectors involving in the “Grand Ouaga” project. According to the project AMMA, (2017)The “Grand Ouaga” space is a geographical space made up of eight (8) municipalities located within two (2) bordering regions: the Center region and the Central Plateau region (Figure 2). These municipalities are distributed as follows:

- Seven (7) communes in the Kadiogo province, Center region, including an urban commune (Ouagadougou) and 6 rural communes (Komsilga, KomkiIpala, Koubri, Pabré, Saaba, Tanghin-Dassouri);

- A rural commune (Loumbila), in the province of Oubritenga, Central Plateau region.

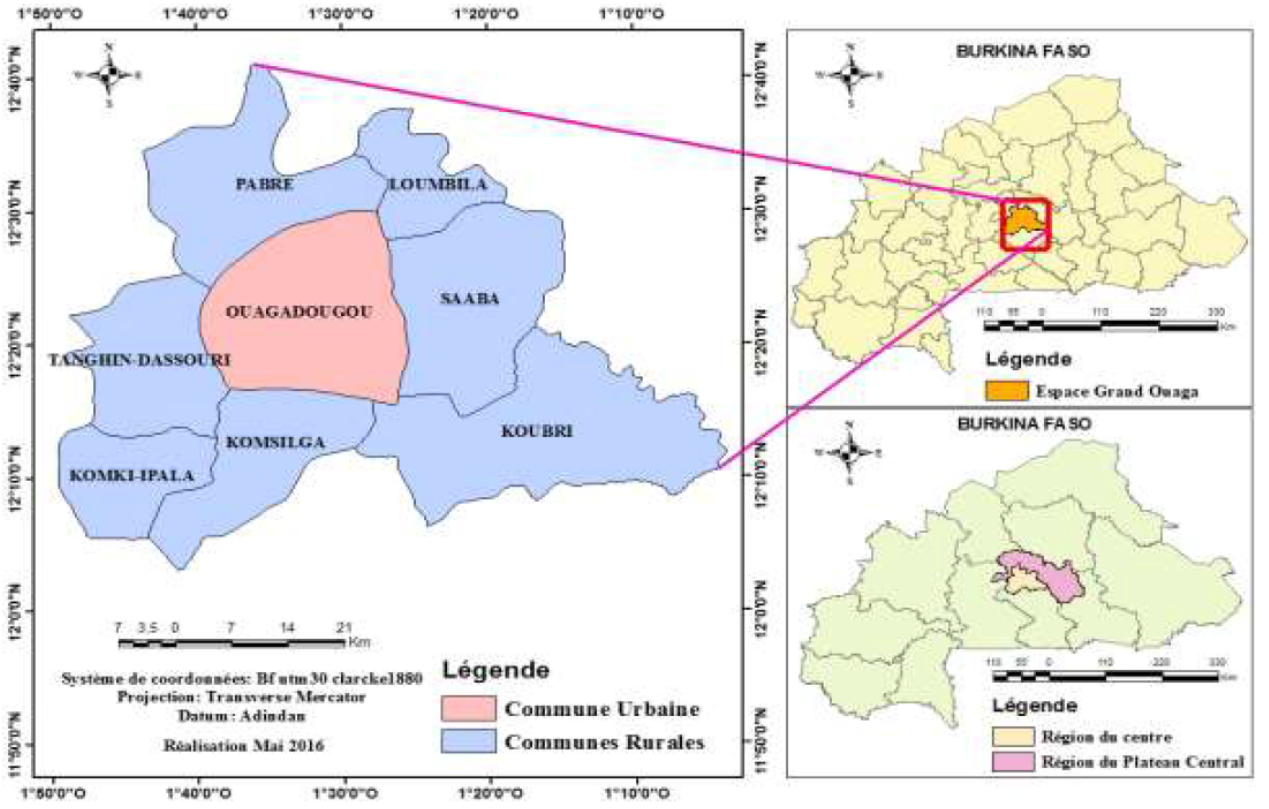


Figure 2: Greater Ouaga

(source: AMMA, 2017)

The figure 2 shows the urban commune of Ouagadougou in the center and in pink color. It is surrounded by 7 rural communes in blue and together forms "Greater Ouaga".

5.5. City's Governance Structure (embedded within national structures)

Decentralization took its roots in Upper Volta three decades before the country's independence; it was in January 1927 that the city of Ouagadougou and that of Bobo-Dioulasso were stablished as communes. It is almost three decades after the law of December 18, 1955 on the municipal reorganization of West and Central Africa, which will establish the full exercise of these two territorial entities by elected executives. Historically, it is the Burkinabe constitution, amended in 1991, which truly established the right of communities to administer themselves and manage their own affairs with a view to promoting development and strengthening local governance. However, it was in 2005 that the General Code of Territorial Communities (CGCT) would be promulgated. This is despite the 2001 law which makes the city of Ouagadougou the capital of the Center Region. Thus, after several legal provisions, (Traoré & Benon, 1998) relating to the planning of the national territory and the functioning of defined entities, Ouagadougou is finally endowed with a relatively autonomous territorial and administrative identity.

Administratively, Ouagadougou is a decentralized community, a legal personality with legal and financial autonomy, it has 12 districts and 55 sectors. According to Public Expenditure and Financial Accountability (Gloux et al., 2018), the districts do not have financial autonomy or legal personality, do not have their own assets and cannot borrow unlike the overall municipal body. Thus, governance within the municipality is weakly decentralized so that the districts only receive funds from the central municipality by delegation. However, certain socio-economic institutions, regardless of their geographical location, enjoy financial autonomy: the municipal oral health center, the Bangr Weogo urban park, the independent management authority for commercial facilities, the urban economic development agency, etc. Overall, the analysis of city governance suggests a difficult implementation of decentralization: public power is still making its mark in the city.

According to PEFA, the organization chart of the municipality is as follows:

Organization chart

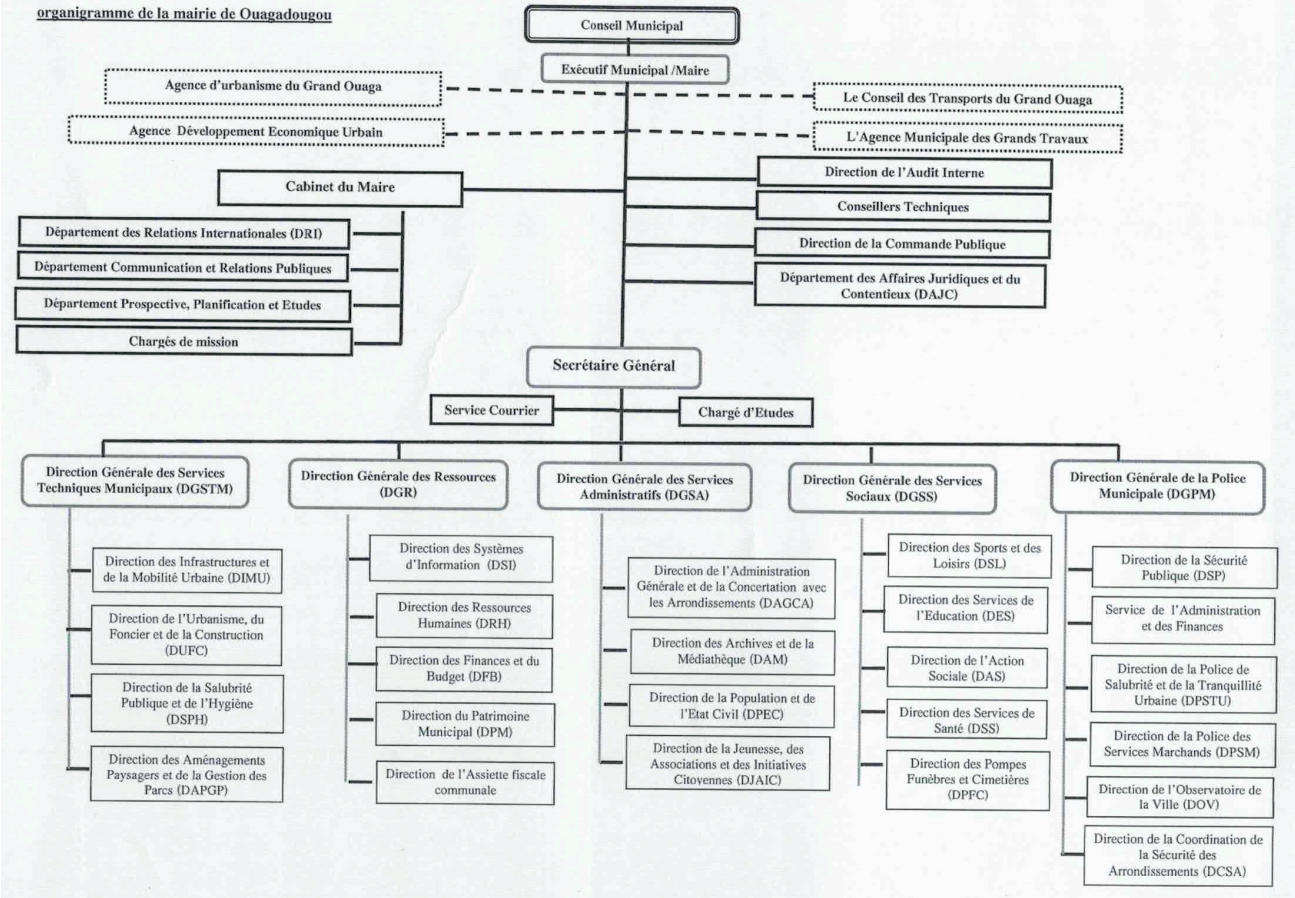


Figure 3 : Organization chart

The city of Ouagadougou was governed by special delegations until 1995 when it saw its first elected officials but this did not free it from the supervision of the public authority despite the legal provisions (MATD, 2018) which are taking and creating a body for monitoring and strengthening decentralization (MATD, 2001). Concretely, an analysis of the structuring and governance of other bodies subsequently created says a lot about the links between the municipality of Ouagadougou and the public authority In the National Commission for Decentralized Cooperation created by decree in May 2012, twelve ministries are represented, eight members from the association of municipalities, five from civil society and two from the regions. The governance of this body is ensured by the Minister of Territorial Administration and the vice-presidents come from the public administration. To better understand the interactions between local and national authorities, in the ten-year decentralization strategy we read this. The inventory of decentralization carried out in 2015 highlighted the limits of the process undertaken, due to a sum of more or less interconnected factors; limits relating to:

- The quality of local governance;
- The capacity to exercise local public project management;
- The financial resources of local authorities;
- The place of local economic development in strategic and prospective documents.

Also, it was affirmed the need to initiate a cycle III of decentralization to better build the development of the country with local authorities capable of producing accessible and quality local public services and boosting local economic development. ". In addition to the ten-year plan which covers the period 2017-2026, Burkina Faso has adopted a vision of decentralization for 2040: "Effective local authorities deliver quality and accessible local public services, drive development inclusive and sustainable local environment and drive a local democracy anchored in the socio-cultural substrate. However, with an unstable political situation, the security crisis and the commune of Ouagadougou which seems to be facing a brain drain, taking over public administration on the municipal territory remains a real challenge.

On April 26, 2024, a decision by the Council of Minister suspended the public-school canteen services delegated to the territorial authorities since 2016. Thus, the question of Loada and Otayek (Emile Le Bris) in 1995 on the future of decentralization remains raised, especially when we know that the government in these perspectives favors synergy of action with local authorities. This creates an institutional network which does not seem to rhyme with performance or innovation.

5.6. Overarching report on economy of the City.

The city of Ouagadougou is the main economic center of the country. The sources of wealth creation mainly come from the secondary and tertiary sectors. As stipulated in the study of the National Territorial Planning and Sustainable Development Plan (MEPAT, 2018), Burkina Faso officially has in 2021, 66 industrial establishments, 34 of which are located in the city of Ouagadougou, i.e. 51.51 %. In addition, at the level of GDP by region, the (MEPAT, 2018) shows that the increase in GDP growth rates in the Center region (Ouagadougou) between 2005 and 2012 came mainly from the contribution of the tertiary and secondary sector, and this shows 29 .5% in 2005 compared to 30.9% in 2012 (INSD 2012). However, an in-depth analysis of the economic fabric of the city of Ouagadougou reveals the existence of a predominantly tertiary productive base (commerce and services), which represents 48% of GDP (INSD 2022). It is the main engine of growth. Economic activity is highly dependent and is mainly concentrated around the agri-food and textile sectors. The informal sector also occupies a preponderant place in the economic fabric of the city. Its contribution to the city's economy is significant. According to data from the business house and the Burkina Chamber of Trade and Industry, the city of Ouagadougou has recorded a high number of business creations (SME/SMI) in recent years. More than sixteen thousand (16,000) new companies were created in 2021. This indicates that the sector is buoyant and offers opportunities for wealth creation.

Besides this, the primary sector is not left out. Urban agriculture remains a primary activity providing food, wealth and employment, particularly for the most vulnerable groups. Ouagadougou and its surroundings produce more than 90% of the vegetable and fruit needs, as well as creating thousands of jobs for city dwellers. Thus, according to C. M. G. Kêdowidé et al. (2011), there were around a hundred market gardening sites grouped in 28 zones and cultivated over an area of approximately 750 ha occupied by more than 5,000 farmers and 15,000 seasonal workers.

In Ouagadougou, all three sectors have their importance and their contributions which are equally distinct from each other.

5.7. City Infrastructure report

The demographic explosion in the city of Ouagadougou has led to strong growth in economic activity. This led to the establishment of enormous commercial, sporting and social infrastructures. These infrastructures are recorded in the Public Expenditure and Financial Accountability (Gloux et al., 2018) report on the 2016-2018 performance "Evaluation of municipal public finance management" of the municipality of Ouagadougou. The municipality has, in particular, service delivery units made up of 40 health and social promotion centers (CSPS), 8 urban medical centers (CMU), 15 municipal high schools and 5 socio-economic units including the center municipal oral health department, the Bangr Weoogo urban park, the municipal center for the promotion of performing arts, the municipal CEEP management unit, the independent management authority for commercial facilities. In 2018, 2,756 schools, 56 CSPS and 16 sports infrastructures (stadiums) were transferred to the Municipality of Ouagadougou. Still according to the Gloux et al., (2018), the Municipality of Ouagadougou has 4 large bus stations, around a hundred commercial infrastructures and a project to build a labeled fruit and vegetable market in connection with the green belt. It should be noted that commercial facilities located on the perimeter of the Municipality of Ouagadougou experience variable operating conditions depending on the type of equipment. But since 2019, the Municipality of Ouagadougou has entrusted the management of its large commercial facilities (markets and bus stations) to a department called the Urban Economic Development Agency (ADEU) which has the status of directorate within the municipal administration. However, certain market infrastructures are private initiatives whose management is not the responsibility of ADEU. In addition, the Ouagadougou refrigerated slaughterhouse where the municipality is a 12% shareholder.

5.8. Food and nutrition security

5.8.1. Current food and nutrition security responses

In Burkina Faso, the nutritional situation remains worrying even if the trend in recent years has been towards improvement. Indeed, in 2019, one in four children under five (05) years old suffers from stunted growth (25.4%), 17.3% are underweight and 8.1% are wasted (National Policy multi-sector nutrition policy, 2020).

Mechanisms are implemented through the information system on food and nutritional security which has a system consisting of monitoring of agricultural campaigns, the development of cereal balance sheets, close monitoring of vulnerable populations and market monitoring A plan on the profile of the food system in Burkina Faso was developed with the aim of improving the sustainability of the food system (Banaon, et al., 2021). This plan involves two (02) main levers to be activated for a good response in terms of food and nutritional security:

5.8.2. Direct and internal levers of the system

- Increase yields in a sustainable manner, in an environment characterized by its great fragility: better valorize water resources (notably development of lowlands and other partial water management developments), transform production systems with a agro ecological approach;
- Diversify livelihoods outside of primary production (e.g. processing activities, storage capacities);
- Strengthen the productive environment in order to improve the viability of family farms (support services for producers: agricultural advice, access to quality inputs, access to credit);
- Create the conditions for inclusive rural transformation (e.g. strengthening socio-educational structures, strengthening farmer organizations);
- Strengthen nutritional education, in rural and urban areas, for a healthy and balanced diet, promoting local products;
- Preserve natural resources: restore degraded areas on a large scale.

5.8.3. External levers determining certain major drivers of the system

- Fight against insecurity: ensure the security of the territory and populations;
- Manage the demographic challenge to improve the long-term balance between supply and demand while preserving natural resources: supporting the demographic transition, in particular via an efficient education system and social safety nets;
- Support decentralization policies to promote interventions adapted to each context and ensure better distribution of investments;
- Develop basic infrastructure for communication, in particular cross-road networks to streamline the exchange of food products between territories.

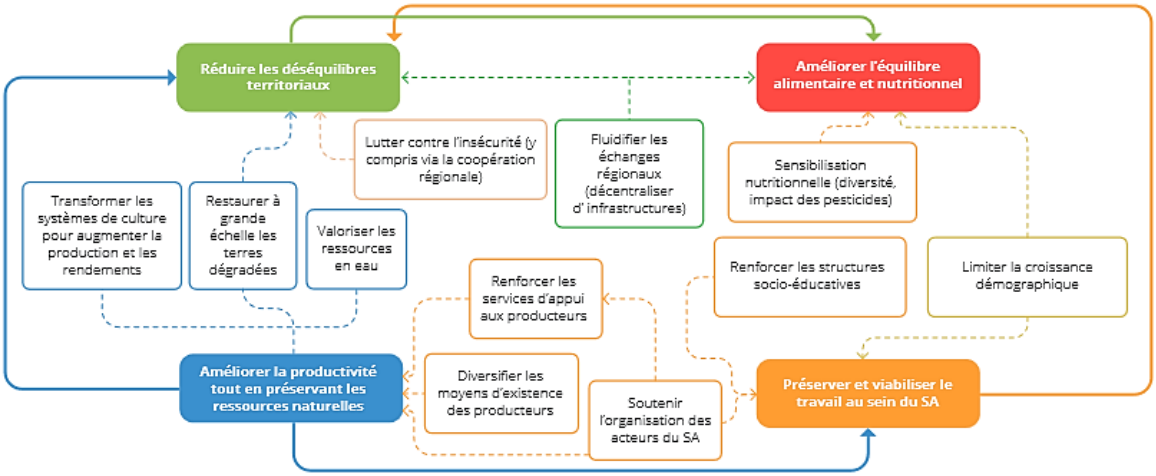


Figure 4 : Profile of the food system in Burkina Faso

Source : (Banaon, et al., (2021) :

Also, several nutrition-sensitive interventions have been developed including:

- Promoting the production of diverse, healthy and nutrient-rich foodstuffs;
- Promoting the fortification (including biofortification) of foods;

- Promoting the use of improved seeds (yield and nutrients);
- Promotion of market gardening;
- Promotion of agricultural sectors;
- Promoting access to assets and inputs;
- Promotion of food labeling;
- Strengthening the capacities of stakeholders in food processing and preservation through the improvement of food processing and storage techniques;
- Promotion of food quality, safety and hygiene;
- Promoting food and nutrition education;
- Promoting the consumption of local products and dishes;
- Prevention, reduction, management of food losses and waste;
- Research focused on improving the productivity and nutritional quality of foods;
- Controlling food prices to promote a healthy and balanced diet;
- The application of technologies to lighten the workload;
- Collection and analysis of data on the composition of foods and/or dishes;
- Reducing barriers to fruit and vegetable trade

(Ministry of Health, 2020).

5.9. State of nutrition transition

Today, sub-Saharan Africa is experiencing a nutritional transition associated with food insecurity and at the same time a change in lifestyles, particularly in urban and semi-rural areas. Health systems are struggling to cope with excess morbidity and mortality still largely due to infectious and parasitic diseases, the various consequences of nutritional deficiencies, and complications of pregnancy and childbirth (Montero p. et al; 2013). While the majority of the continent's populations experience food insecurity due to recurring cereal deficits, certain communities, particularly urban ones, have entered a phase of food transition brought about by the urban lifestyle. The number of overweight/obesity people, and those with chronic diseases, has increased significantly (Barouaca et al; 2012). The corresponding risk factors are also increasing in urban centers.

The evolution of dietary practices is defined through the nutritional transition. It is generally accompanied by the abandonment of traditional diets and the adoption of more sedentary lifestyles. Traditional diets containing cereals and vegetables are giving way to more diversified diets richer in animal products, fat and refined sugars (Barouaca et al; 2012). With improving incomes and increasing urbanization, diets rich in complex sugars and fiber are gradually giving way, even if cereals still occupy an important place, to energy-dense diets, rich in lipids and simple sugars that we found in soft drinks so popular with young people (Cahiers Agricultures 2004). A sedentary lifestyle leads to a reduction in physical activity and consequently a reduction in overall energy expenditure. The more societies move away from traditional diets, towards diets rich in processed products, the more the phenomenon of nutritional and health transition will be marked by the appearance of overweight and obesity, hypertension, diabetes, etc. hypercholesterolemia, and by an increase in mortality from cardiovascular diseases (ischemic heart disease, strokes), and from certain cancers (breast and colon). The nutritional transition accounts for approximately 60% of the causes of death and 46% of the overall burden of morbidity (Raynaud, 2009).

Burkina Faso, a rural country in West Africa where poverty is very great, the transition is expressed particularly at the nutritional level. The situation in cities is particularly complex, because two phenomena coexist: on the one hand, growth delays and deficiencies due to undernutrition have always been a problem. Currently in nutritional transition, Burkina Faso is also seeing the development of pathologies due to excess (overweight and obesity). However, these very different problems concern the same population.

According to Zeba A. N. (2012), the prevalence of overweight/obesity, abdominal obesity, high blood pressure, hyperglycemia, insulin resistance and high density lipoprotein (HDL-C)) low in the city of Ouagadougou, were respectively 24.2%, 12.5%, 21.9%, 22.3%, 25.1% and 30.0%. Women were significantly more affected than men by both cardiometabolic risk factors (FRCM) and nutritional deficiencies.

The double burden of malnutrition affected 25.8% of people in Ouagadougou with the International Diabetes Federation (IDF) thresholds for abdominal obesity, high blood pressure (EBP), and hyperglycemia. The two main phenotypes observed were the association of "overweight/obesity with at least one micronutrient deficiency", and the association of at least one FRCM other than overweight/obesity with at least one micronutrient deficiency. Nearly 72.9% of people (WHO) or 81.2% (IDF thresholds) had at least one FRCM.

The nutritional situation is characterized by a persistence of malnutrition in all its forms. In Ouagadougou, workers mainly eat in street restaurants and maquis. Meals are unbalanced, composed of cereals and excess added sugars and salts (SOME M. T. A., 2022).

5.9.1. Nutritional deficiencies

The nutritional situation of the population of Burkina Faso remains fragile and is exacerbated by the effects of drought, irregular weather phenomena linked to climate change and insufficient access to basic social services. Additionally, the effects of the COVID-19 pandemic in recent years have hampered progress towards achieving the 2030 SDG goal of zero hunger (FAO 2022).

Furthermore, the war in Ukraine has contributed to the destabilization of agricultural supply chains, thus causing repercussions on global prices of cereals, fertilizers and energy. In addition, since 2018, Burkina Faso has faced a deterioration in the security situation resulting in internal displacement of populations, and the non-operation or minimal operation of health facilities with a reduction in access to health services. and nutrition (SP/CONASUR, 2022).

Data relating to childhood undernutrition, micronutrient deficiencies, overweight and obesity among children and adults show that Burkina Faso is faced with a double nutritional burden (coexistence of different forms of malnutrition).

Malnutrition can be defined as a pathological state resulting from an excess or default mismatch between food intake and the body's needs. The different types of malnutrition encountered in Burkina Faso are:

- Protein-energy malnutrition which includes;
- Chronic malnutrition which results in stunted growth and results in children being short for their age;
- Acute malnutrition: it is a form of undernutrition caused by a drop in food consumption and/or an illness causing bilateral edema, or sudden weight loss. It is defined by the presence of bilateral edema or emaciation;
- Global malnutrition: this is a coexistence of acute and chronic malnutrition in the same individual. It manifests itself as underweight which results in low weight for age;
- Chronic energy deficit which manifests itself as thinness due to chronic undernutrition;
- Malnutrition due to micro-nutritional deficiency

The most common specific nutritional deficiencies in Burkina Faso are iron deficiency anemia (anemia), vitamin A and iodine deficiencies.

Nutrition-related chronic non-communicable diseases: Although there is insufficient data, there is a clear increase in chronic non-communicable diseases linked to nutrition such as overweight, obesity, high blood pressure, diabetes and heart conditions in Burkina Faso.

The problem of health safety and nutritional quality of foods: Consumption of quality food is essential for good health and nutrition. This requires a good mechanism for controlling and promoting the quality of foodstuffs.

The nutritional situation in Burkina Faso is characterized by a persistence of malnutrition in all its forms even if the trend was downward from 2009 to 2021. Indeed, according to the results of the 2023 national nutritional survey (ENN, 2023), over this period, the prevalence of acute malnutrition increased from 11.3% to 9.7%, that of chronic malnutrition from 35.1% to 21.6% and that of underweight from 26% to 17 .5% among children under 5 years old (ENN, 2023. Due to the inaccessibility of areas due to the security crisis, there is no representative data at the national level in 2022 although the survey has taken place (ENN, 2022).

For women of childbearing age, in 2020, the prevalence of acute malnutrition was 4.1% based on mid-upper arm circumference (MUAC) and 9.0% based on body mass index (BMI). Among these women, 13.5% were affected by overweight and 7.6% by obesity (ENN 2020).

In addition to these different forms of malnutrition, micronutrient deficiencies remain a concern. Indeed, according to the results of the national survey on micronutrients, the prevalence of anemia in children under 6-59 months was 41.0% and more than 50% in children aged 6-59 months. suffered from vitamin A deficiency according to the same survey (MSHP, 2023).

As for the situation of infant and young child feeding, despite the improvement observed since 2012, efforts remain to be made. Indeed, exclusive breastfeeding has reached the global target defined for 2025 which is at least 50% but remains lower than the objective of the scale-up plan for the promotion of optimal feeding practices. of infants and young children (2013-2025) which is 80%. As for complementary food, 68.4% of children aged 6 to 23 months did not benefit from a minimum acceptable diversity (consumption of at least 5 out of 8 food groups). In addition, more than 76% of children aged 6 to 23 months did not benefit from a minimum acceptable diet. Among women of childbearing age (15 – 49 years), the proportion of those having consumed at least 5 food groups increased from 20.3% in 2017 to 16.5% in 2021.

The nutritional survey carried out in 2023 in 10 regions of Burkina Faso provided updated data on nutritional deficiencies among children aged 6 to 59 months, women of childbearing age (15-49 years) and adolescents (10-19 years old).

The results obtained indicate for children under 5 years of age that the highest prevalence for acute malnutrition was observed in Balès (10.7% including 1.5% in the severe form) and the lowest in Comoé. (4.3% with 0.0% in the severe form). Prevalences above the WHO "high" threshold (10%) were observed in two provinces: Balès (10.7%) and Sissili (10.0%).

Concerning chronic malnutrition, the highest prevalence was observed in Kourwéogo (28.3% including 12% in the severe form). The lowest prevalence was observed in the provinces of Boulgou with 13.2% including 3% in the severe form. As for underweight, the highest prevalence was observed in Bougouriba (19.2% including 3.3% in the severe form) and the lowest in Boulkiemdé (7.7% including 1 .7% in the severe form). According to the BMI (Body Mass Index), the prevalence of underweight among women of childbearing age is higher in Kouritenga (19.6%). In contrast, the provinces of Zoundwéogo and Houet had respectively the high proportions of overweight (27.8%) and obesity for women of childbearing age (12.1%). As for overweight among adolescents aged 10 to 19, only two provinces presented non-zero prevalences These are the provinces of Passoré and Ganzourgou with 1.1% and 1.9% respectively. For obesity, more than 16% of adolescent girls in Boulgou presented obesity followed by the stratum. regional center east with 14.2% well above the province of Kadiogo (3.2%) and Houet (3.8%).

In the specific case of children, a national survey carried out on micronutrients in 2020, the results of which were published in 2023 (MSHP, 2023), showed that the prevalence of stunting was 21% and that of severe stunting 7%.

Stunting varied by location, residence, child age, and wealth quintiles. The prevalence of stunting was highest in rural areas (25%), compared to 19% in other cities and 17% in Ouagadougou and Bobo Dioulasso. Stunting was higher in rural areas (25%) than in urban areas (18%). Stunting varies by age, with a highest level for children from 18 to 23 months (31%) and the lowest for children from 9 to 11 months (11%);

The prevalence of severe stunting varies by location and residence. Nine percent of children in rural areas were severely stunted, compared to 7% in other cities and 4% in Ouagadougou and Bobo- Dioulasso.

Underweight was highest in rural areas (21%), compared to 16% in other cities and 10% in Ouagadougou and Bobo- Dioulasso. The prevalence is higher in rural areas than in urban areas (21% versus 13%).

The prevalence of wasting and severe wasting was approximately 10% and 2%, respectively. Wasting varied according to the age of the child such that 15% of children aged from 6 to 23 months had wasting, compared to 7% of children aged from 24 to 59 months. Wasting was 9% among children aged from 6 to 8 months and reached a maximum of 16% among children aged from 12 to 17 and from 18 to 23 months.

5.10. Vulnerable groups.

Nowadays, malnutrition has become a global phenomenon. It affects one in three people worldwide. The evolution of food systems and behaviors has led to the emergence of a new phenomenon which sees different forms of malnutrition coexist in the same country. Some countries thus face high rates of undernutrition, malnutrition due to deficiencies, and excess (overweight, obesity).

Every year, around the world, more than 3.1 million children under the age of 5 die from causes related to malnutrition. Approximately 159 million children under the age of 5 suffer from stunted growth. By compromising the physical and cognitive development of children, malnutrition has a lasting impact on younger generations. Malnourished children are more prone to illness and experience more learning difficulties.

In 2012, 62% of households in Burkina Faso were food insecure. Of this proportion experiencing food insecurity, 18% of households were moderately food insecure, 1% of households were severely food insecure and approximately 43% of households were borderline food secure (WFP, 2014a). In 2016, the food security situation in Burkina Faso still does not seem rosy and the country remains dependent on food aid. Thus, FAO statistics for the period 2014-2016 report that 3.7 million Burkinabes of all categories, including young children, their mothers and pregnant women, are undernourished. In sub-Saharan Africa, stunting rates among children under 5 exceed 35%.

The issue of malnutrition is complex. It finds its origin in a set of causes (poverty, food insecurity, insufficient care practices, poor environmental hygiene and inadequate health services). The response must therefore be multi-sectoral and allow access for all to essential services (health, hygiene and drinking water, healthy and diversified food), in a stable and peaceful political environment.

5.11. Culture of the City and relationship with its food system.

The Ouagavillois city dweller who from Bancoville (Meyer), has diversified the materials of his habitat as well as his way of living, traditional family concessions which bring together several households are becoming rare because individualized habitats currently dominate, villas, mini villas, celibatoriums, apartment, entrance hall, duplex etc. It should be noted that a spatial distribution of housing types is emerging, making it possible to identify divided and undivided parts of the city. (Library)

Ouagadougou is a cosmopolitan city if we consider the origin of its population.

Burkina Faso has around sixty geo-cultural groups and almost all of them are represented in the city of Ouagadougou. This gave the city a favorable environment for the emergence of a dynamic of geo-cultural influence: Mossis consume the identity caterpillars of geocultural groups in Western Burkina (Biblio). These groups also consume and appreciate Moaga identity dishes, babenda[1]. The plurality of the Ouagavillian gastronomic repertoire, Charlotte Konkobo/ Yaméogo 2017 was not only built from Burkinabe food cultures.

Dishes from the food cultures of West African countries are strongly adopted by city dwellers, attiéké[2] from Ivory Coast, Donkouno[3] from Ghana, akassa[4] and leaf sauce from Benin are sold daily in restaurants, especially those in the informal sector (SIA), Fao.

Bread, pasta, pastries, lasagna, caviar, cheeses, English bread, shawarma, hamburger, beer, wine are also part of the gastronomic repertoire of the Ouagavillois eater which he consumes at home and /or in the multitudes of restaurants, bars, maquis, wine cellars.

This profile of food practices validates the analysis of N. Bricas on the study of fifteen Central and West African cities, with regard to the city of Ouagadougou, namely "the capacity of urban markets to lead to the development of local food sectors". This being the case, the culture of the city in Ouagadougou favors the emergence of a dynamic of innovation which promotes the resources of the endogenous food system. Thus, from agricultural, horticultural speculation and local silvo-pastoral resources, several highly remunerative value chains have developed Charlotte Konkobo/ Yaméogo, Inclusive demand Muse October 2021 n to Ouagavilloise urban culture. The cowpea value chain has been maintained for three decades with more than ten dishes popular with eaters due to the innovations of SIA actresses. In horticulture in Ouagadougou and rural communities, the amaranth value chain has developed supported by the innovative prowess of actresses with babenda. According to the minister in charge of agriculture, Ouagadougou consumes 80,000 local chickens[5] per day, bringing 390 million FCFA to the national economy, Kaceto.net November 2022.

5.12. Food and nutrition system challenges faced in the City

Food and nutritional insecurity due to climatic, economic and social factors, is exacerbated by conflicts in the Sahel. The major challenges facing the food and nutritional system are:

- Strengthening the fight against micronutrient deficiencies;
- Scaling up the promotion of infant and young child feeding practices in the thirteen regions;
- Universal access to drinking water and sanitation;

[1] **Babenda**, is a dish invented by the Mossi during famine to survive today with its modernized recipe and meeting the expectations of city dwellers, all categories and ages combined, it is widely consumed in Ouagadougou. Several ethnic groups prepare and consume it occasionally in households while it is sold every day by street actresses. Based on amaranth, sorrel and your choice (cleome, bean leaf, black nightshade, etc.), peanuts and cereals (rice, corn, sorghum) are added. But rice is used more. The daily consumption of babenda is at the origin of the development of an amaranth value chain and offers several women an income-generating activity (AGR). The dish became eligible in all categories of domestic and administrative ceremonies.

[2] **Attieké** : Fermented cassava semolina couscous eaten with raw vegetables or sauted in oil and fish. In 2019 the Ivorian State launched the recognition of lagoon attiéké as a Protected Geographical Indication (PGI)

[3] **Donkounou**, a dish of Ghanaian origin made from fermented whole corn and eaten with tomato sauce, fried fish and beef skin soup. In three decades the dish is widely sold in the street after a recomposition according to the dietary affects of the Ouagavillian consumer.

[4] **Akassa,** a Beninese dish made from fermented corn dough and eaten with a sauce made from leafy vegetables (Amaranhe, black nightshade, spinach) and pistachio. This dish is very plentiful in Benin (fish, crabs, shrimp, meat, red palm oil) and is expensive. In Ouagadougou you can find it for all budgets so much so that it is sold in the street every day. An Akassa '4 value chain is currently well developed in Ouagadougou through the innovative practices of restaurateurs. Note that akassa was the subject of a transfer of know-how from Benin to Burkina through the DTA (Food Technology Department) and UNB/FSA (National University of Benin) from 1996-2000. The restaurateurs were the actors in the transfer.

[5] The logo of the labeled local chicken was unveiled in November 2022.

- Contribution to the management of disasters and humanitarian crises;
- Improving schooling and maintaining girls during school cycles and the socio-economic and legal status of women;
- Improving governance in nutrition: structuring the institutional and organizational framework of nutrition stakeholders, strengthening the legislative and regulatory framework in the field of nutrition, effective and efficient financing in favor of nutrition, human resources, appropriate and continuous communication while ensuring accountability to stakeholders, transparency and the fight against corruption.

6. AfriFOODlinks City food system baseline information

6.1. Food systems stakeholders

Food system stakeholders include farmers, processors, input and equipment suppliers, distributors and consumers of agrobiology products. These actors involved in the Burkinabè economy are structured as informal micro-enterprises. In terms of the size of the companies, almost all (96.5%) are micro-enterprises (less than 10 employees; turnover annual less than 15 million FCFA). Large companies represent less than 1% of the workforce. In terms of legal status, more than 91.9% of the companies listed are sole proprietorships (EI). More structured companies, notably SARLs (0.6%) and SAs (0.2%) are very poorly represented.

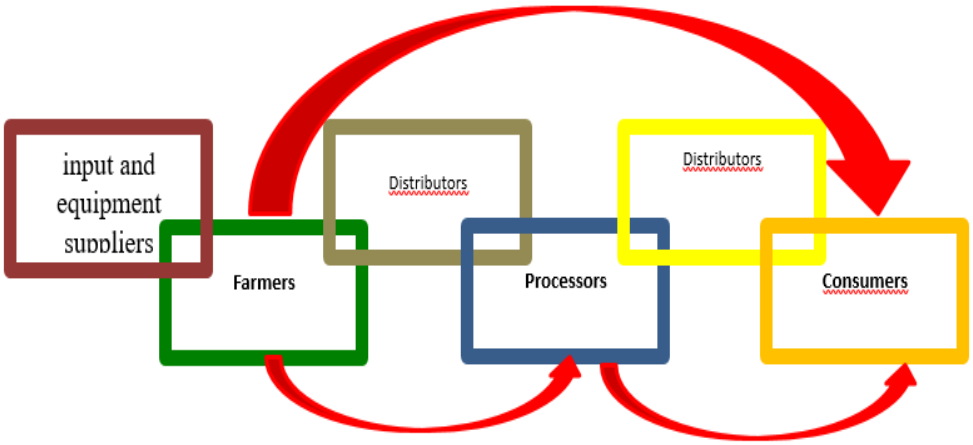


Figure 5 Relationship between food system actors

The different sectors of the food system organized around producers, collectors and wholesalers – exporters, processors and even distributors are, however, poorly organized. However, there are interactions between the different agents, even if these are not done in an organized manner. Depending on their collection capacity and their direct interactions with other agents in the sector, we distinguish primary collectors from main collectors. Indeed, the latter, with a greater collection capacity, are supplied by both producers and primary collectors and have direct interaction with exporting wholesalers.

The agriculture and agro-industry sectors in Burkina Faso suffer from poor integration between producers and more sophisticated agri-food companies. The potential for agro-food production and processing remains underexploited. Certain agricultural raw materials are exported raw for processing in neighboring countries (Côte d'Ivoire or Ghana) where cost structures are more competitive for processing units. The low level of structuring of the national agri-food industry favors the consumption of imported food products in urban areas, especially since tax and customs regimes are sometimes to the advantage of the latter.

Dynamic agri-food processing SMEs are developing in various sub-sectors (sesame, mango, fruit juice, corn, cashew nuts, shea and other natural products), driven by growing demand from national, regional and international urban markets. But they encounter difficulties in sourcing raw materials from Burkinabè producers (availability throughout the year, compliance with quality standards).

Burkina Faso has few sophisticated companies active in the agricultural sector or sourcing local agricultural products. These include cotton factories (SOFITEX, FASO-COTON and SOCOMA), industrial producers of cottonseed oil (SN-CITEC and SOFIB), a large-scale sugar company (SN-SOSUCO which produces more of 30,000 tons of sugar per year for the national market and employs more than 3,000 people), flour mills (Moulin du Sahel) and the BRAKINA brewery (for which raw materials remain largely imported), food multinationals (Nestlé). These companies have little connection with smaller companies (especially food processing SMEs).

6.2. Policy and regulatory environment

To address food and nutritional insecurity, the Policy plans to promote optimal infant and young child feeding practices; strengthen nutrition-sensitive food security interventions; strengthen nutrition-sensitive water, hygiene and sanitation interventions; strengthening nutrition-sensitive social protection interventions; strengthen nutrition-sensitive education interventions; strengthening nutrition-sensitive health interventions; strengthen the quality of treatment for acute malnutrition in hospitals and outpatient settings; improve coverage and accessibility to integrated management of malnutrition; reduce vitamin A deficiency among vulnerable groups; reduce the prevalence of anemia among women of childbearing age, children under five and school age; eliminate iodine deficiency disorders; strengthen food fortification; improve the provision of care in the management of chronic non-communicable diseases linked to nutrition; promote good nutritional practices and healthy lifestyles; strengthen the legal and institutional framework relating to food safety; strengthen the capacity of food safety inspection and control services; promote the application of good practices in food safety by all actors in the food chain in order to maintain a high level of food safety; improve institutional governance in nutrition; improve the nutrition monitoring and evaluation system; improve financial governance for nutrition; strengthen nutrition research; strengthening the skills of actors in different sectors on nutrition; strengthen communication, advocacy and social mobilization in nutrition; strengthen women's empowerment; and strengthen the prevention and management of emergency situations in nutrition (National Nutrition Policy 2016).

The main laws governing nutrition in Burkina Faso are:

- Law No. 028-2008/AN of May 13, 2008 establishing the Labor Code in its articles 1, 145 to 148 which guarantees maternity leave and the right to rest for breastfeeding during the resumption of service;
- Law No. 049-2005/AN of December 21, 2005 relating to reproductive health in its article 7 which guarantees the health of the child in particular neonatal care/monitoring of the child, vaccination, monitoring of child growth and nutrition;
- Law No. 23/94/ADP of May 19, 1994 on the public health code in its articles 3, 9, 11 to 15, 19 to 22, 23 to 25, 33 to 43 which emphasizes protection, the promotion of good food and nutritional conditions.

In addition to these Laws, interministerial decrees and orders in favor of nutrition have been signed. These include:

- Decree No. 2018-0093/PRES/PM/MS of February 15, 2018 organizing the Ministry of Health in its article 18 creating a technical secretariat responsible for improving the diet and nutrition of mothers and children;
- Decree No. 2008-003/PRES/PM/MS/MAHRH/MASSN/MEF of January 10, 2008 relating to the creation, responsibilities, composition, organization and operation of the National Nutrition Consultation Council (CNCN);
- Decree No. 2002-464/PRES/PM/MS of October 28, 2002 creating the Nutrition Directorate;
- Decree No. 99-377/PRES/PM/MS of October 28, 1999 creating the National Public Health Laboratory and its amendment;

- Decree No. 93-279/PRES/SASF/MICM of July 28, 1993 relating to the marketing and related practices of breast milk substitutes (BMS) products;
- Interministerial decree No. 2013-1033/MS/MASA/MICA/MEF of September 27, 2013 regulating the importation, marketing and use of salt in Burkina Faso;
- Interministerial decree No. 2012-0232/MICA/MS/MEF/MAH of October 30, 2012 relating to the mandatory enrichment of refined vegetable oils with vitamin A and soft wheat flour with iron and folic acid;
- Joint decree No. 2011-0265/MICA/MS/MEF of December 9, 2011 establishing the characteristics of oils intended for consumption in Burkina Faso;
- joint decree No. 2003-007/MS/MEFP/MAHRH/MCPEA of January 3, 2003 establishing the conditions for controlling the health quality of food and similar products.

Notwithstanding the legislative and regulatory framework governing the field of nutrition, notable shortcomings remain in their implementation. We also note the low dissemination and insufficient appropriation of the texts by the actors, the overlapping responsibilities of those involved in nutrition, hence the need to develop them to take into account the above-mentioned inadequacies (National Multisectoral Nutrition Policy 2020 – 2029).

At the national level, several policy documents and strategies have been developed by sectors sensitive to nutrition and whose implementation contributes significantly to improving the nutritional status of populations. These are, among others, the Accelerated Growth and Sustainable Development Strategy (SCADD), the National Health Policy (PNS), the National Food and Nutritional Security Policy (PNSAN), the National Sanitation Policy and Strategy (PSNA) , the National Water Policy (PNE), the National Gender Policy (PNG), the National Social Protection Policy (PNPS), the national social action policy
The 2020-2029 multisectoral nutrition policy was developed with a vision of guaranteeing by 2029 a better nutritional status and social and economic well-being for all the inhabitants of Burkina Faso for the sustainable development of the country. Considering the multifactorial and multisectoral causes, the fight against malnutrition requires a synergy of actions involving all sectors with nutrition-sensitive or specific interventions.

The overall objective of the national multisectoral nutrition policy is to improve the nutritional status of populations, particularly women, children and vulnerable groups through the implementation of multisectoral nutrition interventions. The sectors with sensitive interventions selected are those which include the following themes:

- Food safety;
- Health;
- Water, hygiene and sanitation;
- Education;
- Social protection, and all sectors favorable to nutrition.

The field of intervention of nutrition is defined in accordance with the provisions of decree No. 2008-003/PRES/PM/MS/MAHRH/MASSN/MEF of January 10, 2008 relating to the creation, responsibilities, composition, organization and operation of the National Council of consultation on nutrition (CNCN) on the one hand and on the other hand, the report relating to the definition of the planning sectors of the PNDES, including the "Agro-sylvo-pastoral production" sector, the "Health" sector, the "Education" sector and training", the "Environment, water and sanitation" sector, the "Labor, employment and social protection" sector and the "Research and innovation" sector.

The national multisectoral nutrition "olic' covers the following areas:

- Health promotion,
- Prevention and treatment of malnutrition and non-communicable diseases,

- Prevention and management of malnutrition in emergency situations,
- The availability and use of food products,
- Integrated management of water resources,
- Sanitation of the environment and living environment,
- Management of the living conditions of vulnerable groups,
- Universal health coverage:
- Improving the educational level of the population.

The national multisectoral nutrition policy is implemented through rolling five-year operational action plans, developed by the sectors implementing specific and nutrition-sensitive interventions in accordance with the orientations and priorities defined in this multisectoral policy.

6.3. Food diversity and staple foods

Cereals occupy a central place in the diet of Burkina Faso (Konkobo/Yaméogo et al., 2002). However, the values linked to their consumption and culinary practices have changed under the effect of changing urban behavior. New values based on a perception of modernity lead to a new distribution of local cereals. Corn, a lean cereal, is becoming the main cereal for the preparation of to the detriment of millet and sorghum, and is extending its production to traditionally non-producing regions. The diversification of rice-based dishes and the innovations introduced are increasingly evident in the food consumption of urban households. In addition to local cereals, there are imported cereals as well as local artisanal and industrial products. New needs for diversification are accompanied by new consumption practices. The introduction of imported industrial products that are easy to prepare (pasta, Arabic couscous, etc.), promotes the diversification of dishes and influences local culinary practices. Furthermore, economic constraints limit the number of daily preparations, leading to changes in the frequency of consumption of tô and rice. Dishes based on local cereals are recomposed (tô), abandoned (millet couscous) or discarded (boalboal) in household culinary preparations. Some of these dishes become the object of commerce for catering saleswomen. The criteria for assessing cereals essentially take into account the organoleptic characteristics of the products and those linked to culinary practices. Promoters of small agri-food businesses seem to have recognized the new demands of consumers and are putting on the market artisanal products that are easy to use and have an appropriate taste. If tubers, legumes and vegetables occupy a second place in household diets, we are also observing a change in eating habits regarding these products thanks to new preservation techniques and market gardening (tubers and vegetables). The popularization of fabirama, the diversification of dishes based on cassava and cowpea, and innovations in the preparation of yam and cowpea couscous constitute the most significant changes. These changes, mainly guided by a search for diversification of the products consumed, result in a modification of the composition of dishes leading to a modification of culinary practices (Konkobo/Yaméogo et al., 2002).

Also, it appears that food consumption in the city of Ouagadougou is evolving and diversifying by the dishes consumed, but also by the modes of consumption: the phenomenon of consumption outside the home and snacking is quite characteristic of countries in nutritional transition [A. Bendech et al, 2000]. Danel, (2002) found that for foods high in fat, compared to the consumption of cereals, it seems that the consumption is very high, even in excess. Younger populations are most affected by the consumption of more diversified diets rich in sugars and fats. These are therefore emerging diets, which are distinct from the traditional diets still consumed by older populations (Danel, 2002).

6.4. Production environment

In Burkina Faso, the three main cities of the country (Ouagadougou, Bobo Dioulasso and Koudougou) bring together urban and peri-urban areas and are characterized by a strong and growing population. They are home to the main wholesale and consumer markets as well as market gardening, intensive poultry and egg production, and dynamic fattening workshops but threatened by the increasing urbanization of agricultural land. Downstream, dietary transitions are accompanied by food-related diseases (abuse and lack of control over chemicals not approved in peri-urban areas on market garden products). Small livestock and imported poultry are affected by health quality problems. Faced with growing poverty in cities and a growing unemployment rate, exacerbated by migration from rural areas to urban areas, a challenge for this area is to offer attractive jobs for young urban people, in the agricultural sector, agro-food processing and distribution (FAO, 2021).

You only have to look at the evolution of surface areas to see the interest in agriculture in the city of Ouagadougou: the growth is undeniable. It appeared there in the 1920s-1930s around large dams (Kêdowidé, 2011), under the leadership of Catholic religious institutions, keen to provide for the food needs of the inhabitants and to establish, thereby, "a climate of confidence conducive to their evangelization" (Diop Guèye et al., 2009). At this time, the cultivation of vegetables (salads, tomatoes, cabbages, carrots, potatoes, etc.) was also introduced by the settlers, with the objective of satisfying their own needs (Spicher, 2004; IAGU/RUAF, 2006; Compaoré, 2008). It was at the same period that these vegetables (salads, tomatoes, cabbage, carrots, potatoes, etc.) appeared in Ouagadougou (Kêdowidé, 2011) and they were far from disappearing afterwards since it was these vegetables that Today we find a large part of the plots inside the city of Ouagadougou. Market gardening represents nearly 70% of cultivated areas (Kêdowidé, 2011), the remaining 30% being dedicated to horticulture and cereal growing. In the 1960s, with the rural exodus, new city dwellers settled in town and they

> "preferred new market garden products to local products, which constituted, for them, prestige products linked to a certain social evolution".

Areas dedicated to urban agriculture continued to increase, particularly in the 1970s, which is linked to an acceleration of the rural exodus, explained in particular by repeated droughts during this decade in Burkina Faso (Bagré et al., 2002). For most of these new city dwellers, the city represented an opportunity for the practice of agriculture: available land, more abundant water resources (Cissé, 1997).

Subsequently, the attraction exerted by urban agriculture was far from diminishing – despite the constraints and in particular the agrarian and land reform of 1996. Between 1996 and 2009, surface areas increased by 255% (Kêdowidé, 2011). and the trend continues, as confirmed by the observations and testimonies of the market gardeners interviewed (Amélie Robert et al 2020). 760 ha are thus cultivated "at one time or another of the year", distributed over 102 sites, according to the inventory drawn up by C. G. Kêdowidé (2011). As this agriculture is not recognized, there is no official or fixed estimate since the areas also vary, during the year and from one year to another, depending on the extent of flooding (Cissé 1997; Bagré et al., 2002), which complicates the inventory. The total area devoted to agriculture in Ouagadougou has continued to increase because production is also carried out on former concessions and unbuilt residential land. Indeed, urban agriculture is gaining more and more followers in Ouagadougou (Augis, 2017). Already in 2011, it was "practiced even at sources of untreated wastewater and any free space or unoccupied reserve (Ndiaye, 2008; Kêdowidé et al., 2010; Kêdowidé, 2011)., Low soil fertility in Ouagadougou, the fact that waste and wastewater are used as a means of fertilizing these soils (Amélie Robert et al 2020).

6.5. Typical food basket for different income categories

The security crisis in Burkina Faso as well as that in Ukraine have caused inflation which has led to an increase in the incidence of poverty. Indeed, the poverty threshold in Burkina Faso increased from 297,134 euros in 2018 to 378,313 euros in 2021 with an incidence of poverty noted respectively 13.1% and 16.6%

in urban areas INSD, EHCVM, 2023 with disparities depending on the type of residence in an urban environment. Households in Ouagadougou are predominantly headed by men with the following distribution:

Table I : Distribution of households according to the sex of the head of the household

Stratum	Man	Woman
Ouaga Urban	83.9%	16.1%
Ouaga Péri Urban	88.0%	12.0%
Ouaga ensemble	85.3%	14.7%

Tableau II :Distribution of households according to wealth level and place of residence

Stratum	Very rich households	Rich households	Medium	Poor	Very poor
Ouaga Urban	30.7%	23.4%	21.8%	15.9%	8.2%
Ouaga Péri Urabin	6.9%	9.7%	12.2%	19.6%	51.7%

Regarding their economic level we distinguish: very rich households 30.7%, rich 23.4%, medium 21.8%, poor 15.9% and very poor 8.2% for the urban area. In the peri-urban area, on the other hand, we find the opposite distribution with respectively: 51.7%, 19.6%, 12.2%, 9.7% and 6.9%.

Poverty also has a female face because 29% of households headed by women are very poor compared to 18% for those headed by men.

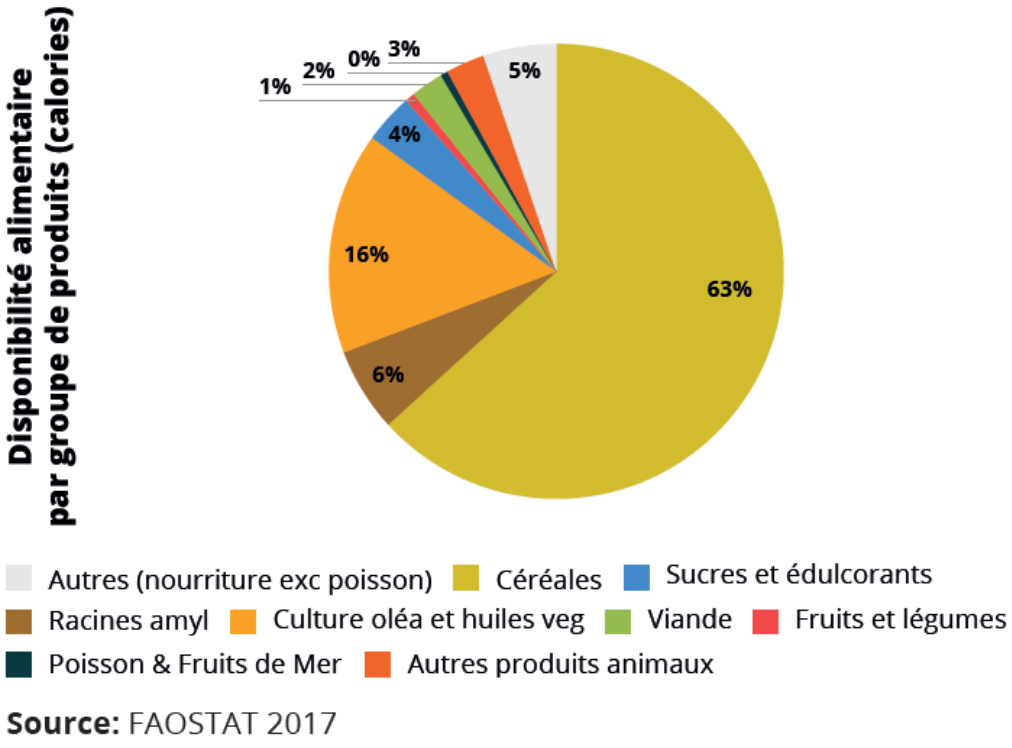
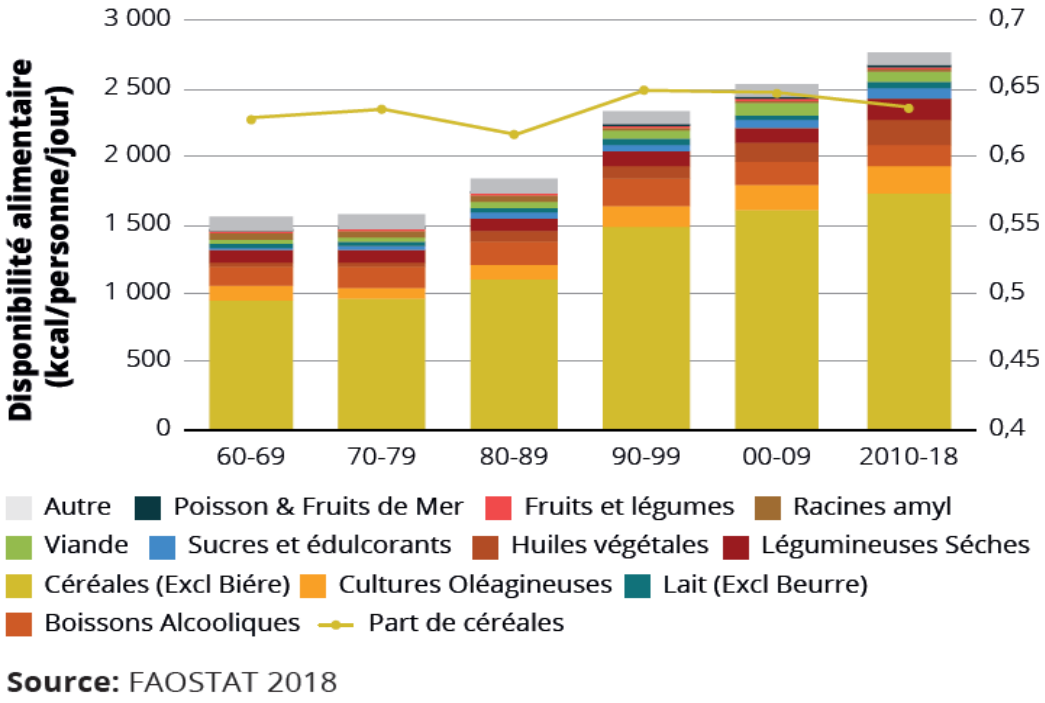


Figure 6 : Food availability by product group



Source: FAOSTAT 2018

Figure 7 : Food availability (Kcal/person/day)

The access of different categories of households to the diversity of foods represented above to constitute their basket depends strongly on their purchasing power and their eating practices where we still note a predominance of cereals but which are no longer available. Easy access given the current inflationary context.

Depending on the household category, we see that very poor households allocate 61% of their expenditure to food with, on average, a monthly sum estimated at 16,256 CFA francs per head. Among the rich, this amount per individual is twice as large. We could then say that the poor buy cheaper foods and the rich buy higher value foods (VAMU Report 2016). However, by referring to the poverty threshold mentioned above we can say how difficult it would be for certain categories of households to constitute a diversified basket of food products in Ouagadougou.

6.6. Nature of the food economy

The food economy can be defined, according to Louis MALASSIS (2018), as all the functional sub-sectors (agriculture, IAA, distribution, catering, "upstream" sectors) and socio-economic (artisanal, capitalist, cooperative, public) which contribute to the satisfaction of food needs in a given society. It analyzes the food consumption model and the production model that underlies it. In Burkina Faso, the food economy generally provides employment, it is central to household livelihoods, providing 56% of jobs overall, including 51% in agri-food production (Thurlow, 2021). It constitutes 42% of GDP (INSD 2022), which still indicates relatively low labor productivity in this sector. As for the city of Ouagadougou, it also occupies an important place in the lives of city dwellers. Generally speaking, the food economy of the city of Ouagadougou takes the form of formal and informal, primary, secondary and tertiary.

6.6.1. Formal food economy

The formal economy would obey economic laws, which would respect a division of labor, and a sharing between places of production, services and housing. It is part of an ordered social space which can hardly be other than the city located in a national economy. The formal food economy is everything that largely relates to the Agro-Food Industry (AIF) which operates within a legal framework. In Burkina Faso, formal businesses represent only 9.1% of businesses, and have less than 1% of the total workforce. However, they contribute to 93.0% of the overall turnover of Burkinabè companies.

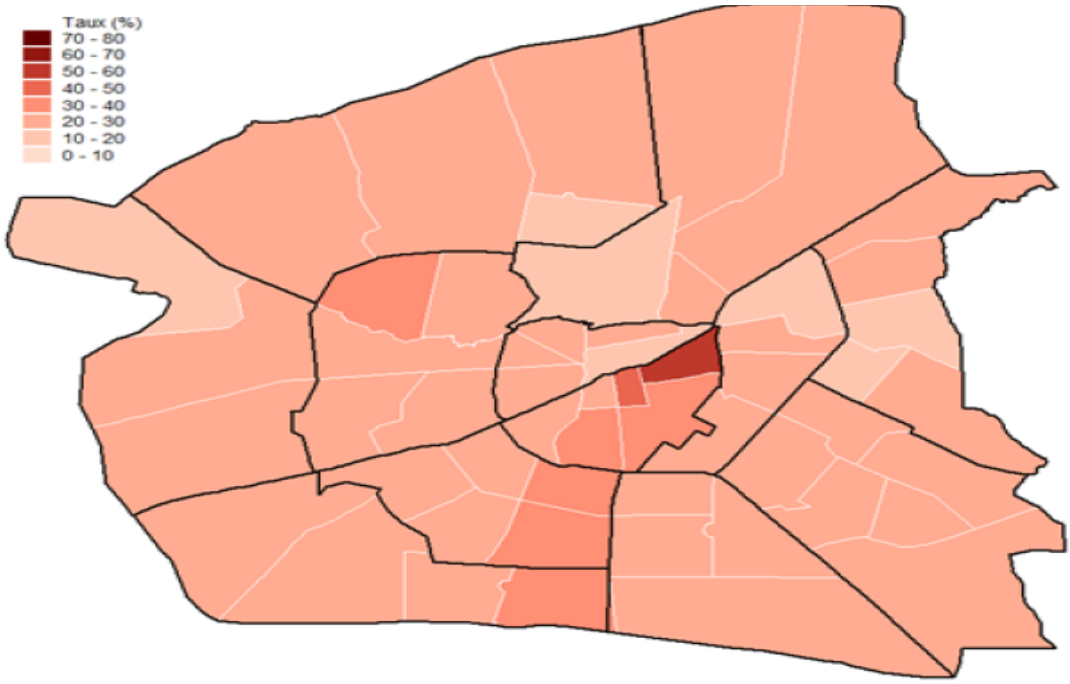
The formal private sector is embryonic and concentrated only in urban communes, mainly in Ougadougou. In the agri-food sector, we are observing the emergence of processing SMEs, driven by growing demand from national, regional and international urban markets. The sector has few sophisticated companies active in the agricultural sector or sourcing local agricultural products. These include cotton factories (SOFITEX, FASO-COTON and SOCOMA), industrial producers of cottonseed oil (SN-CITEC and SOFIB), a large-scale sugar company (SN-SOSUCO which produces more of 30,000 tonnes of sugar per year for the national market and employs more than 3,000 people26), flour mills (Moulin du Sahel) and the BRAKINA brewery (for which raw materials remain largely imported), mines, hotels, urban supermarket chains, food multinationals (Nestlé). These companies have little connection with smaller companies (especially food processing SMEs).

VI.2. Informal food economy

The informal economy is economic activity that is carried out without the activity being subject to state oversight or regulation; it meets neither registration obligations nor bookkeeping, much less taxation. The Burkinabè economy relies largely on informal micro-enterprises. 90.9% of the 99,261 non-agricultural businesses (INSD 2018) recorded are informal. In terms of company size, almost all (96.5%) are micro-enterprises (less than 10 employees; annual turnover less than 15 million FCFA). 55.4% of the companies concerned are located in the capital Ouagadougou and are more dominated by the food sector. Most of these companies are active in commerce (52.6%) and services (28.2%). The importance of the city's formal food economy is reflected by its strong contribution to regional GDP.

A significant portion of Ouagavillois food consumers are made up of households that derive their income from what is referred to as the “informal sector” or “informal economy” Léonidas HITIMANA et al. 2011 (Informal economy and food security). Correlatively, a significant part of the food consumption of this population is supplied by informal sectors - unobserved or poorly observed by official statistics.

For example, each sector individually is a source of job creation and wealth across the entire value chain. Thus, the poultry sector has a strong dynamic of evolution, particularly around the main cities, with the intervention of agro-industrial companies upstream (production of poultry feed), distributors and processors downstream (sellers of live chickens and braised). In addition, according to the AIB (2022), the poultry industry allows the consumption of more than 80,000 chickens per day in the city of Ouagadougou and brings in more than 300 millions FCFA to the municipal economy.



Source RGPH 2019

Figure 8 : Employment rate of 15-24 year olds according to the districts of Ouagadougou

6.7. Food access strategies of households

In Burkina, terminologies used by city dwellers and even Burkinabés describe the evolution of household food situations. Before the drought of 1973 we say "At the time when there was food and drink", Charlotte Yaméogo 1999; " continuous day "; "a Kao shot". These terminologies rhyme with the reduction in the number of preparations and subsequently the number of meals available in households per day. Thus, from three daily preparations depending on their category, households have two, one to a few weekly or monthly preparations. This reduction in food availability by households has favored the development of the informal food sector (SIA) in the city of Ouagadougou Charlotte Yaméogo 1999. SIAs promote access, individual or at household level, to a diversified diet or even satisfy the hedonic aspects of eating. Could this be the origin of the low rate of severe food insecurity in Ouagadougou 10%, VAMU 2016.

Tableau III :Proportion of households having adopted dietary strategies in Ouagadougou

Strategies	Consume less expensive foods	Borrow food	Reduce the quantity of daily meals	Reduce adult consumption	Reduce the number of daily meals
subdivided area	34,3%	9,2%	24,7%	18,9%	20,1%
undeveloped area	53,1%	53,1%	53,1%	53,1%	53,1%
Total Ouaga	42,0%	13,4%	31,8%	25,6%	27,4%

Source : VAMU 2022/DGESS/MARAH

Tableau IV : Origin of dishes consumed

Zone urbaine	Preparation at home	Purchased in whole	Purchased in part	Donations
Urban Ouaga	75.2%	6.9%	17.7%	0.2%
Ouaga Péri Urban	70.2%	4.8%	24.4%	0.5%
Ouaga ensemble	73.6%	6.2%	20.0%	0.3%

Distribution of households according to the main origin of dishes consumed Strate VAMU 2016
Among the household strategies, the reduction in the number of meals per day, the use of SIA and an increasing number of vegetable and other condiment stalls stand in front of concessions in urban and peri-urban areas in Ouagadougou. The latter are often limited in terms of market infrastructure. In urban areas, low income, the distance to travel and efficient management of the food budget lead to resorting to domestic stalls.

6.8. Nutritional deficiencies (2012-2022)

The most common specific nutritional deficiencies in Burkina Faso are iron deficiency anemia, vitamin A, vitamin B12, folate and zinc deficiencies. These deficiencies have recently been reported for children under 5 years old (MSHP, 2023).

6.8.1. Iron deficiency and anemia

Anemia is a condition in which there are not enough healthy red blood cells (measured by hemoglobin) to provide oxygen to the body's tissues. Anemia is a major public health problem, affecting 40% of children aged 6 to 59 months worldwide (Stevens et al., 2022). Iron deficiency is a major contributor to anemia and is estimated to be responsible for a quarter to half of all cases of anemia in children aged 6 to 59 months worldwide, and perhaps less in populations where the burden of anemia and infections is greater (Petry et al., 2016). Other micronutrient deficiencies (folate, vitamins A and B12, riboflavin), infectious agents, genetic hemoglobinopathies and other factors can also cause anemia (Namaste et al., 2017).

According to the results of the 2020 national micronutrient survey in Burkina Faso (MSHP, 2023), the prevalence of anemia assessed by low hemoglobin (Hb) concentration (<11.0 g/dL) among children aged 6 to 59 months was 41%; with mild anemia (Hb 10.0-10.9 g/dL) at 25%, moderate anemia (Hb 7.0-9.9 g/dL) at 16% and severe anemia (Hb <7.0 g/dL) at 0.3%. It was found that more children suffered from anemia in rural areas (49%) than in other cities (40%) and in Ouagadougou and Bobo Dioulasso (32%). Thirty-six percent of children in urban areas suffered from anemia. Anemia was more common in children aged 6 to 23 months than in children aged 24 to 59 months (56% versus 37%). The prevalence was higher (65%) in children aged 18 to 23 months (65%) than in children aged 48 to 59 months (29%).

Concerning women of childbearing age, old data indicated a prevalence of anemia among pregnant women was 72.5% (ENIAB, 2014).

6.8.2. Vitamin A deficiency

Vitamin A is involved in the immune system, in the functioning of the retina and vision in general, in the synthesis and metabolism of mucous membranes, bones, teeth and skin. Its deficiency can manifest itself in eye problems which can lead to xerphthalmia.

Based on data from the 2020 National Micronutrient Survey (MSHP, 2023), the prevalence of vitamin A deficiency varied by location, residence, gender, and use of potash in the kitchen. The prevalence was highest among children in rural areas (56%) compared to 52% in other cities and 40% in Ouagadougou & Bobo Dioulasso. The prevalence of vitamin A deficiency was 47% among children in urban areas. More than half of male children had vitamin A deficiency (54%) compared to 46% of female children. About half of children from households that cook with potash had vitamin A deficiency (51%) compared to 33% of children from households that do not cook with potash.

6.8.3. Zinc deficiency

According to the National Micronutrient Nutrition Survey (MSHP, 2023) report, zinc deficiency, measured by low serum zinc (<65 µg/dL or 57 µg/dL depending on time of day) and corrected for inflammation, was 13% in children 6 to 59 months. The prevalence of zinc deficiency varied by location, residence and wealth quintile. More children in rural areas (17%) had a zinc deficiency than children in Ouagadougou & Bobo Dioulasso (11%) and children in other cities (10%). Ten percent of children in urban areas were zinc deficient. The prevalence of zinc deficiency decreases with increasing wealth. Zinc deficiency was highest in the lowest wealth quintile (19%), compared to 13% in the middle quintile and 6% in the highest wealth quintile (MSHP, 2023).

6.8.4. Folate deficiency

In Burkina Faso, children under 5 years old are also affected by folate deficiencies. Indeed, according to the 2020 Micronutrient Nutrition Survey (MSHP, 2023), 2% of children aged 6 to 59 months had serum folate deficiency and one in five children was at risk of serum folate deficiency. The prevalence of serum folate deficiency varied by location and residence. Four percent of children in rural areas had serum folate deficiency compared to <1% in other cities or in Ouagadougou & Bobo Dioulasso. Less than 1% of children in urban areas had serum folate deficiency. The risk of serum folate deficiency varied by location, residence, and age. Nearly a third of children in rural areas were at risk (29%) compared to 17% in other cities and 14% in Ouagadougou & Bobo Dioulasso. Fifteen percent of children in urban areas were at risk of serum folate deficiency. The risk of deficiency is greatest for children aged 18 to 23 months (34%) and decreases to 16% for children aged 48 to 59 months.

6.8.5. Vitamin B12 deficiency

Regarding vitamin B12, the prevalence of its deficiency was 12% and that of its depletion 19% (MSHP, 2023). The prevalence of vitamin B12 deficiency varied by location, residence and age. More children in rural areas had a vitamin B12 deficiency (15%) compared to 14% in other cities and 6% in Ouagadougou and Bobo Dioulasso. Ten percent of children in urban areas had a vitamin B12 deficiency. The prevalence of vitamin B12 deficiency was higher among children aged 6 to 23 months (23%) than among children aged 24 to 59 months (9%). The prevalence was highest in children aged 12 to 17 months (32%) and decreased to 6% for children aged 48 to 59 months. The prevalence of vitamin B12 depletion varied by location, residence and wealth quintile. One in four children aged 6 to 59 months in rural areas were vitamin B12 depleted, compared to 19% in other cities and 11% in Ouagadougou and Bobo Dioulasso.

Fifteen percent of children in urban areas were vitamin B12 depleted. The prevalence of vitamin B12 depletion decreased with increasing wealth. It was highest in the lowest quintile (25%) and lowest in the highest quintile (10%).

A study carried out on the cost of hunger in 12 African countries, including Burkina Faso in 2015 (AU, 2015), shows that the social and economic impact of child undernutrition costs the country a lot of money every year in healthcare costs, additional burdens on the education system and in terms of labour productivity. The report estimates that child undernutrition costs Burkina Faso's economy the equivalent of 7.7% of its Gross Domestic Product every year. Most of the health costs associated with undernutrition

occur before a child reaches the age of one, and 40% of infant deaths in Burkina Faso were associated with undernutrition.

The consequences of stunting are particularly worrying. Stunting (not growing tall enough for their age) occurs when children do not receive enough essential nutrients, including proteins, vitamins and minerals, both during the intra-uterine period and during the first two years of their life cycle. People who suffer from stunted growth in childhood are likely to experience frequent illnesses, perform poorly at school, repeat grades or drop out, and have low productivity at work. The report found that stunted children have a repetition rate of 11.5%, compared with only 8.5% for those who are not stunted. In addition, more than half of the country's adult population (52%) were stunted as children; this represents more than 4,743,580 people of working age who were unable to reach their full potential as a result of child undernutrition.

In rural areas of Burkina Faso, where the majority of the population is engaged in manual activities, it is estimated that in 2012, 37,205 million CFA francs (around $73 million) were lost due to the reduced productivity of people who suffered from stunted growth during childhood. Child mortality due to undernutrition also reduced Burkina Faso's working population by 13.5%.

Child undernutrition is not only a health issue, but also a major social and economic problem that requires multi-sectoral commitment and major investment.

6.9. Food Systems Assets

The term "food system" refers to all the steps necessary to feed a population: growing, harvesting, packaging, processing, transporting, marketing and consuming. The food system encompasses all interactions between people and the natural environment, land, water, climate, etc. as well as the effects of the natural environment on human health and nutrition. It also includes the inputs, institutions, infrastructure and services that underpin the achievement of all these steps, as well as the place of diets and cultural practices in determining impact. All these steps and/or elements constitute the assets of the systems with the implications of the different actors in the links. In Burkina Faso, as everywhere else, these assets are promoted within groups, organizations and confederations.

This is how the Faso Peasant Confederation (CPF), which brings together around fifteen national umbrella organizations including the UNPCB (cotton) and the UNPRB (rice), is the main interlocutor of the State regarding public policies. As for the network of producer organizations (POs) in Burkina Faso, it is certainly important but fragmented. It is the cotton POs that are most supported in providing economic services to farmers. Many cereal POs (UGCPA, FNZ, FEPA-B) also develop advanced economic functions: group purchase of inputs, provision of credit, storage and group sale of harvests. Dynamic agri-food processing SMEs are developing in various sub-sectors (sesame, mango, fruit juice, corn, cashew nuts, shea and other natural products), driven by growing demand from national, regional and international urban markets.

Since the 2000s, inter-professional associations have been set up: CIC-B (cereals), CIR-B (rice), Tables filières (mango, cashew, shea, milk, etc.), INTERSB (sesame). They aim to create a framework for consultation between the different operators within the sectors (producers, processors, traders, transporters, etc.), to strengthen exchanges and organize the market, with a varied degree of operationality. As for urban centers such as Ouagadougou, it is market gardeners who are on the front line for effective implementation of food system assets through the development of more than 750 ha in the city of Ouagadougou and its surroundings. These market gardeners produce and supply Ouagadougou with 90% of its fruit and vegetable needs. Although they are organized in cooperatives and groups, it is clear that they need support in order to facilitate interactions between market gardeners and their environment.

6.9.1. Food processing firms

Agriculture represents 78% of jobs and 34% of GDP in Burkina Faso. The sector is dominated by subsistence production systems, characterized by small-scale farming, with low productivity, high levels of self-consumption, and weak integration of value chains. The national industry still remains very underdeveloped. It occupies approximately 1% of the active population and contributed 20% of GDP in 2001. There are around a hundred industrial companies, 69.28% of which are located in Ouagadougou and 17.77% in Bobo. Dioulasso and 12.95% in other towns such as Koudougou and Banfora. In 2001, the agro-food industries provided 55% of the added value and 50% of jobs and brings together for all companies processing starchy foods (cereals, legumes, roots and tubers), fruits and vegetables, and forest products. non-timber, oilseeds, meat and meat products etc.

The industrial sector in Ouagadougou is dominated by the food industry which represents approximately 57% of food businesses currently in operation. Some manufacture import substitution products such as BRAKINA and COBU.

6.9.2. Food system organizations and trade associations

The network of producer organizations (POs) is large and fragmented in Burkina Faso. The Faso Peasant Confederation (CPF), bringing together around fifteen national umbrella organizations including the UNPCB (cotton) and the UNPRB (rice), is the main interlocutor of the State regarding public policies. Cotton POs are the most supported in providing economic services to farmers. Many cereal POs (UGCPA, FNZ, FEPA-B) also develop advanced economic functions: group purchase of inputs, provision of credit, storage and group sales, particularly in maize.

Processing players mainly operate in artisanal processing. This is the domain of women par excellence. They are organized within the Network of Cereal Transformers of Faso (RTCF), with two regional networks in Bobo-Dioulasso and Ouagadougou. We are observing the emergence of semi-industrial and industrial corn processing units, the important ones of which are OMEX, MELS, SITRAC, GMF, SODEPAL and SIMAO.

Rice processing stakeholders are organized into parboiler cooperatives in production areas, a National Union of Parboilers (UNERIZ-B created in 2010), and a National Union of Industrial and Semi-Industrial Rice Processors of Burkina (UNTR-B created in 2012) which brings together around 300 companies (mostly small units). A rice hulling factory was set up in 2019 in Bobo-Dioulasso and placed under the management of the seed company NAFASO SA.

Oilseed and protein products generally undergo a low level of processing in Burkina Faso (95% of shea exports are in the form of raw nuts, for example). Women are the main actors involved in the processing of these products. The sector is dominated by artisanal practices, but we are currently seeing the emergence of semi-industrial companies in associative or individual form, especially in Ouagadougou and Bobo Dioulasso.

The processing and marketing of cotton is carried out by 3 industrial ginning companies which share the territory: SOFITEX, FASO-COTON and SOCOMA. There are also industrial spinning companies (FILSAH) and oil production companies (SN CITEC, Watam, SOFIB). The actors in the processing of the sesame sector came together in 2014 within the Association of Sesame Processors in Burkina (ATS-B). In the cashew sector, around ten processing units came together within the National Association of Cashew Processors of Burkina Faso (ANTA-BF) in 2013. In the peanut and soy sectors, the players in processing are poorly organized.

Those involved in fruit and vegetable processing are small units that dry mangoes and ripen bananas. The growth in exports of fresh and dried mangoes attracts many processing SMEs, especially around Bobo

Dioulasso (close to the production areas). The Professional Association of Mango Processors of Burkina (PTRAMAB) brings together 120 processing units. Banana ripeners and processors have set up the Association of Banana Ripening Professionals of Burkina (APROMUB). An industrial tropical fruit processing unit (DAFANI S.A.) was installed in 2007 in Orodara in the heart of the fruit growing basin of Burkina Faso. Vegetable processing is still in its infancy. The most widespread method of processing remains drying which is carried out on a small scale, particularly in cases of overproduction or sorting discrepancies that cannot be kept or sold.

The Burkinabè commercial sector, for its part, includes a multitude of organizational methods which complement each other and delimit the work of supporting and supervising the sector but which sometimes overlap and also compete with each other. Presenting the characteristics of the different merchant groups (associations, unions, employers' organizations) in summary form allows us to better appreciate their similarities and their specificities (table 1). In addition, accompanied by Figure 2, this table also illustrates the place they occupy and the functions they fulfill in the management of the commercial sector.

Tableau V : Characteristics of types of business groups

	Associations	**Organisations**	**Syndicats**
Type de membres	Commerçants	Commerçants + Associations	Commerçants + Associations
Objectif principal	Défense intérêts moraux	Défense intérêts moraux + économiques + corporatistes	Défense intérêts moraux + économiques + corporatistes
Zone d'intervention	Localisée	Nationale	Nationale
Branche d'activité	Sectorisée	Transversale	Transversale
Nombre de membres	Réduit	Important	Important
Prestations prioritaires proposées	1. Formation 2. Entraide 3. Partenariat	1. Plaidoyer 2. Formation 3. Appui/Accompagnement	1. Plaidoyer 2. Négociation collective 3. Formation
Affiliation	Syndicats et/ou Fédération	Autonome	Centrale syndicale
Principaux représentants	AMICO; RAEI;	ONACOMB	FSCB; OSCB, SYTNACOMB, USPCK

Associations: basic units for supervising commercial activity, have a limited scope of intervention at the geographical and sectoral level and they aim to support the development of their members through the various services provided (training, financing, awareness) . Most of them are affiliated to a national union or association federation.

Trade Union Federations: made up of a multitude of associations and/or small unions that they seek to supervise through institutional support, transfer of skills and transmission of information. Also serving as a relay for the main grievances and concerns of their member base, they carry out advocacy actions with public authorities. Their coverage area is national, their transversal radius of action and the number of their members very large. They are also affiliated with the main national trade union centers which participate in international conferences and congresses.

Organizations: operate at two levels since they include associations but also traders among their members. Defending corporate interests, they are structured by commercial sectors (bookstore/stationery, textiles and clothing, hardware, etc.) and have management autonomy. Their coverage area is national, their transversal radius of action and the number of their members very large.

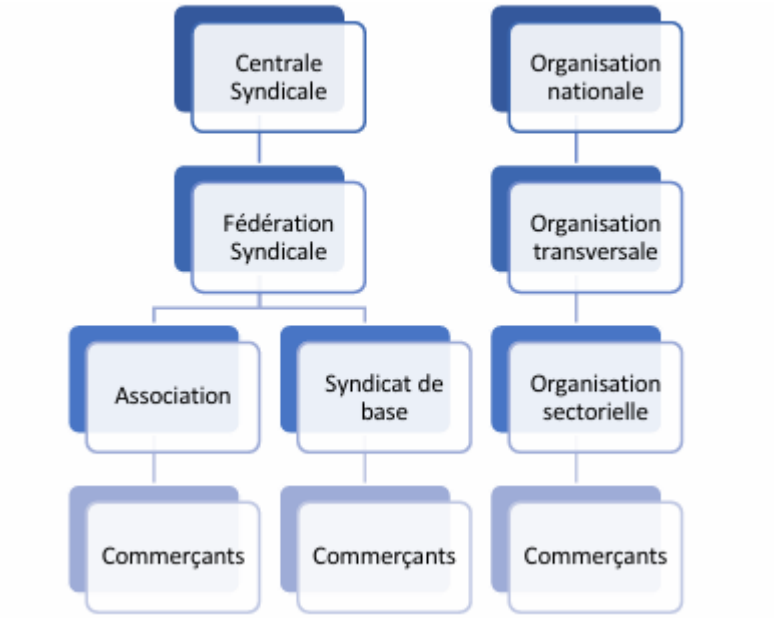


Figure 9 : Representation of the different levels of management of commercial activity

6.9.3. IX.3. Local food production/harvest assets (lakes, forests, peri-urban land)

Like many large African cities, Ouagadougou is experiencing an increase in its agricultural areas. But these are highly dependent on water and soil resources. This means that land and water are key local production assets. Then come the inputs and the support and support structures. Thus, in Burkina Faso, cultivable and exploitable land is estimated at 11.8 million hectares, but only 5.7 million hectares are cultivated. Burkina Faso is limited in its endowment of natural resources, particularly water. However, to reduce its vulnerability to droughts and water shortages, the country has built several dams (1,035) and water reservoirs (1,827) developed according to DGIH data (2012), along the main rivers and their tributaries. These reservoirs meet the water needs of the urban population and allow irrigation of crops during the dry season, thus contributing to the country's agricultural diversity (CILSS, 2016). In addition, there are spaces (nearly 1,000 ha) set up to facilitate market gardening. This has allowed Burkina Faso to have a potential comparative advantage in several non-traditional cash crops, such as fruits (particularly mangoes, oranges) and vegetables (onions, tomatoes, potatoes and beans), which it could export to African countries on the West Coast and to European countries where demand is strong, especially for products from organic farming.

The agricultural sector contributes 1/3 of the country's GDP and employs around 80% of the population, but it struggles to produce a sufficient food supply for a rapidly growing population. Total food production has increased over the past two decades, largely due to the expansion of agricultural areas (Posthumus et al., 2019).

The lack of investment and the weakening of public services hinder the development of the rural sector, thus reducing agro-sylvo-pastoral productivity and job creation in rural areas. Soil degradation and erosion. Burkina Faso's rapid population growth and resulting increase in food demand are putting increased pressure on already limited land and water resources, thereby increasing environmental stress. In particular, the expansion of agricultural areas, inadequate land management, poor agricultural practices and

extensive livestock farming have largely led to the destruction of natural vegetation cover (encroachment on forests and pastures) and land degradation by soil erosion (Nyamekye et al., 2018).

These factors in turn constitute major obstacles to the sustainable and integrated socio-economic development of farmers and other user groups. However, recent experiences of implementing and adopting nationwide soil and water conservation measures by governments and institutions – aimed at slowing down the process of degradation, combating erosion soil and increase agricultural production are encouraging (CILSS, 2016; Nyamekye et al., 2018).

6.10. Food safety

Street foods or foods sold on public roads play a growing socio-economic role in all African cities. This mode of eating which has become a phenomenon of modern societies allows more than 80% of urban populations to satisfy their nutritional needs, generates income allowing many households to meet their expenses, and creates jobs for many people. without qualifications or school instructions. Despite its importance, street food poses several health problems due to Food Toxi-infections (TIA). Ignored toxic infections often lead to large-scale deaths, as the press sometimes reports in many countries.

In developing countries, ready-to-eat foods are sometimes sold on the streets in unhygienic conditions. Biological, chemical or physical contamination of food today constitutes a serious threat to the health and economy of these countries (WHO, 2002). Whether at the scale of the food industry, households or collective kitchens, the consequences of food contamination are always dramatic. Indeed, food-borne diseases and particularly diarrheal diseases constitute an important cause of morbidity and mortality in developing countries. Around 70% of diarrhea is linked to the consumption of contaminated food (Food safety and inspection service, 1998). In Burkina Faso, street food is characterized by the absence of hygiene both in the immediate environment of the sites and in terms of food handling, exposing consumers to the risks of certain diseases (Barro et al ., 2003). Previous work has shown contamination of certain foods by antibiotic residues such as meat, eggs, chicken gizzards and livers (Samandoulougou et al., 2015; 2016; 2021); lettuce (Somda et al., 2017). Compaoré et al., (2021) had shown the prevalence of aflatoxin contamination in rice and corn grains used in the production of infant flour. Non-alcoholic drinks such as zoom-koom and gnamakoudji (ginger juice) are also subject to numerous microbiological contaminations (Besadjo-Tchamba, 2014; Tapsoba et al., 2017) due to the non-application of good hygiene and processing practices for actors in the processing and marketing chain.

Scientific work has made it possible to reduce the load of pathogenic microorganisms in these drinks by improving the production process (Tapsoba et al., 2018). Other work has also made it possible to improve the nutritional and microbiological quality of certain foods such as soumbala, infant flour and kilishi (Compaoré et al., 2020; Tiendrebeogo, 2022; Dabo et al., 2023).

The city of Ouagadougou is characterized by a strong and growing population. The area is home to the main wholesale and consumer markets as well as market gardening, intensive poultry and egg production, and dynamic fattening workshops threatened by the increasing urbanization of agricultural land. Downstream, dietary transitions are accompanied by food-related diseases (abuse and lack of control over chemicals not approved in peri-urban areas on market garden products). Small livestock and imported poultry are affected by health quality problems. Faced with growing poverty in the city and a growing unemployment rate, exacerbated by migration from rural areas to urban areas, a challenge for this area is to offer attractive jobs for young urban people, in the agricultural sector, the agro-food processing and distribution. A key lever is raising awareness among urban consumers and peri-urban producers about water and air pollution and the health risks linked to the food system. In addition, stricter quality control of processing and distribution activities as well as imported food products must be developed. The promotion of professional training and technical and financial support (for young people, in particular) in activities in the agricultural and food sector also constitute an important lever in achieving food self-sufficiency.

6.11. Food infrastructure

Food infrastructures constitute spaces or establishments which provide a framework either for producing, for processing or even for eating; or any other places that can offer a food service to an individual. In the city of Ouagadougou, there are several types of food infrastructure according to the INSD (the 2022 statistical directory of the central region), These are infrastructures either production or marketing and which can take the form formal, or the informal form.

As for formal infrastructures, these are infrastructures whose existence is known by the authority. They are subject to laws and regulations and have tax obligations. These include classified and unclassified hotels, residences, motels, inns, and guest houses (786), certain restaurants (509), according to ObsTour (Tourism Observatory 2023); there is also the refrigerated slaughterhouse in the city of Ouagadougou and certain markets and yaars. All these infrastructures offer the populations products, dishes and dishes that are as varied as they are diverse.

As for informal infrastructures, these are all food infrastructures which operate in a given space without formal specifications. Thus, from North to South, from East to West, the city of Ouagadougou is surrounded by market gardening sites which produce enormous quantities of fruits and vegetables, thus supplying markets and yaars, and providing nearly 90%. of the fruit and vegetable needs of the city of Ouagadougou. It should also be noted that many of these markets and yaars are informal infrastructures and the city does not have any markets dedicated solely to fruits and vegetables. In addition to this, there is street food (maquis, street restaurants, kiosks, snack bars, bars, etc.), street vendors, shops, food stores, certain street and neighborhood markets and yaars, fruit and vegetable shops, fishmongers/butchers, which offer ranges of raw and prepared (ready to eat) food products.

However, it should be noted that among these food infrastructures, some are developed and others are not. But for some time, the Municipality of Ouagadougou has undertaken a vast development of public infrastructure, especially for schoolchildren.

Thus, at the end of 2018, the town hall of the Municipality of Ouagadougou initiated the construction and development of food sales spaces in schools to guarantee food hygiene. According to Issoufou Ouédraogo (Faso.net journalist article: "Commune of Ouagadougou: Food sales spaces in schools"), the pilot project involved three (3) public primary schools (the EZAKA school, the Karpala and the Gounghin Nord school) in the city of Ouagadougou. The desired objective of this project is to regulate the sale of food in all schools in the municipality and to have traceability of food consumed in schools on the one hand; and on the other hand, seek to promote school canteens in conjunction with the cooperative of municipal restaurant chains in a healthy framework. The municipality is investing in making the sanitation of the living environment in schools a requirement. And this, through the development of school infrastructure, school equipment, and capacity building.

6.12. Food and nutrition system interventions (2012-2022)

Several policy and strategy documents contributing to the improvement of the nutritional status of the population have been developed (Table VI).

Tableau VI : policy and strategy documents contributing to the improvement of the nutritional status of the population in Burkina

	Policy and strategy documents	Location within the government structure

1	the national health policy	Ministry of Health
2	the national health development plan	Ministry of Health
3	the sectoral education policy of Burkina Faso(PSE/BF)	Ministry of education
4	the National Sanitation Policy and Strategy (PSNA)	Ministry of the environment and living environment
5	the National Water Policy (PNE)	Ministry of agriculture, hydraulic resources, sanitation and food safety
6	the National Nutrition Policy (PNN)	Ministry of Health
7	the National Food Security Strategy (SNSA)	Ministry in charge of Agriculture
8	the National Food and Nutrition Security Policy (PNSAN)	Ministry of Health
9	the National Nutrition Policy (PNN)	Ministry of Health

Among which we can cite: the national health policy, the national health development plan, the sectoral education policy of Burkina Faso. Faso (PSE/BF), the National Sanitation Policy and Strategy (PSNA), the National Water Policy (PNE), the National Nutrition Policy (PNN) and the National Food Security Strategy (SNSA), the National Food and Nutrition Security Policy (PNSAN), the National Nutrition Policy (PNN), revised in 2016.

6.13. Programs

At the level of the institutional and organizational framework, nutrition interventions in Burkina Faso are found in policies and programs developed separately in different ministerial departments such as for example the Ministry in charge of Agriculture and Hydraulics (food security), the Ministry in charge of National Education (nutrition and school canteens) and the Ministry in charge of Social Action (social safety nets). In 2008, the government created a National Nutrition Consultation Council (CNCN) with regional branches (CRCN). The objective of the CNCN was to ensure the orientation and monitoring of the national nutrition policy as well as liaison and coordination between ministerial departments, actors and partners concerned by the implementation of the national nutrition policy. In addition to the CNCN, there are other consultation frameworks that take nutrition issues into account. We can cite, among others, the National Food Security Council (CNSA), the National Social Protection Council (CNPS), the consultation framework on water and sanitation.

The main sensitive nutrition interventions are:

6.13.1.1. Integrated Management of Acute Malnutrition (PCIMA)

Following the recurring food crises in the sub-region, Burkina Faso, like other Sahel countries, has developed and implemented the strategy for community management of acute malnutrition (PCMA). With the scale-up plan, the management of acute malnutrition has been integrated into the minimum activity package (PMA) of public and religious health facilities. To improve program coverage, the community component has been implemented since 2011 in all health districts in the country.

6.13.1.2. Promotional interventions for infant and young child feeding (IYCF)

Since 2013, Burkina Faso has had a plan to scale up IYCF interventions. This plan defines the package of activities to be implemented gradually until 2025. The objective is: "Increase the rate of exclusive breastfeeding among children aged less than 6 months by 38% in 2012 at least 80% in 2025 and the rate of minimum acceptable feeding practice among children aged 6-23 months from 3.5% in 2012 to at least 30% in 2025.

6.13.1.3. Micronutrient deficiency intervention

Several strategies have been developed to combat micronutrient deficiencies. Vitamin A supplementation campaigns associated with deworming are organized every six months for children aged 6-59 months. In addition, pregnant women benefit from iron and folic acid supplementation in health facilities as do school-aged children in certain provinces of the country. Furthermore, Burkina Faso has been involved in food fortification since 2007. widely consumed, notably vegetable oils for vitamin A and soft wheat flour for iron/folic acid. Also, the country is committed to the universal salt iodization strategy which resulted in 2013 in the adoption of an inter-ministerial decree making the importation of iodized salt compulsory in Burkina.

6.13.1.4. In the area of nutrition-sensitive social protection

With the support of the World Bank, the government is committed to a pilot cash transfer project called "BurkinNaongsaya" costing 25 billion FCFA, executed by the Ministry of Social Action and National Solidarity. There are also targeted food distributions during lean periods for the benefit of vulnerable groups.

Pilot experiments of exemption from health costs for children under five years of age and free treatment for malnutrition are being implemented in certain districts.

Also, the adoption of the law on universal health insurance in 2015 constitutes an opportunity for scaling up the exemption of health costs for children under five years old.

6.13.1.5. Education sector

At the education level, among the nutrition-sensitive interventions, we include hygiene and nutrition in schools and school canteens. The promotion of health, hygiene and nutrition activities in schools remains fragmented. The current challenge remains the effective implementation of the health-nutrition component of the Strategic Development Program for Basic Education (PDSEB) which will take into account all the essential aspects linked to school health, the promotion of hygiene/ sanitation in educational structures, to school nutrition with an emphasis on the popularization of nutritional education where there are already developed modules.

School canteens have been adopted by the State for the entire country. However, effectively covering the food needs of students throughout the school year and diversifying the food basket with a nutritional objective remain significant challenges to overcome. Furthermore, school gardens, which are supposed to improve the provision of balanced meals, are only functional in 10.06% of schools in 2018.

6.13.2. Plans

In terms of nutrition in Burkina Faso, the main plans are:

1. The adoption of the National Economic and Social Development Plan (PNDES) on July 20, 2016 now marks the operationalization of the orientation document at the national level around fourteen (14) planning sectors. The PNDES is therefore designed in the logic of results-based management (GAR).

2. The Multisector Plan for Nutrition (2016-2020) makes the PNN operational.

3. Response and Support Plan for Populations Vulnerable to Food Insecurity and Malnutrition (PRSPV) 2023: the Burkinabè State and its partners have been committed since 2012 to providing a concerted response through a continuous development process and implementation of Response and Support Plans for Populations Vulnerable to Food Insecurity and Malnutrition (PRSPV). These plans aim to meet the specific needs of households and reduce the effects of food and nutritional crises on populations and livestock.

   The 2022 plan with a forecast cost of two hundred and thirty-seven billion seven hundred and eighty million two hundred and eighty-five thousand four hundred and fifty (237,780,285,450) CFA francs was implemented following three (03) phases namely mitigation (January-June), lean season (July-September) and recovery (October-December)

4. Multisectoral nutrition strategic plan 2020-2024

   This plan should make it possible to better empower sectors with specific and nutrition-sensitive interventions, to provide updated guidance to all stakeholders and partners in order to obtain better results.

6.13.3.FOUNDATIONS OF THE NATIONAL NUTRITION POLICY

At the international and sub-regional level: the policy document is inspired by frameworks and directives aimed at improving the nutrition of populations. Under which, it can be noted:

- Scaling Up Nutrition (SUN) which is a global movement that brings together governments, civil society, businesses and citizens in a global effort to end undernutrition. This movement aims to create a favorable political environment with strong country leadership, and a common space (multi-actor platforms) where actors can align their activities and take joint responsibility for strengthening nutrition.
- The Sustainable Development Goals (SDGs) which constitute a reference framework for sustainable human development. Made up of seventeen (17) objectives, they contribute to the nutritional security of populations by 2030.
- The World Health Assembly's Global Nutrition Targets, which constitute a framework for guiding interventions to be prioritized in order to achieve the desired results by 2025. There are six of these targets, including the prevention of undernutrition, obesity as well as the prevention of anemia in women of childbearing age.
- The African Regional Nutrition Strategy (ARNS) covers the period 2015-2025 and aims to improve nutrition in Africa through the achievement of five objectives.
- At the regional level: Burkina Faso is a member of two regional economic communities, the Economic Community of West African States (ECOWAS) and the West African Economic and Monetary Union (UEMOA), whose sectoral policies influence the economic environment of Burkina, particularly for the agri-food markets. The UEMOA agricultural investment plan is now implemented through the same national policy frameworks (National Agricultural Investment and Food and Nutritional Security Programs, PNIASAN) as those of the ECOWAS plan and the two agricultural policies Municipalities share the same regional intersectoral coordination mechanism.

The agreement establishing the African Continental Free Trade Area (AfCFTA) was negotiated from 2016 to 2018, entered into force in May 2019 and, as of February 2020, had been signed by 54 of the 55 AU member states. The FTAA aims for greater economic integration through the removal of trade barriers and customs duties on 90% of basic products, with the objective of creating a single market of 1.27 billion consumers.

- African Union Regional Nutrition Strategy 2015-2025,
- The Rome declaration on nutrition and its framework for action from the second international conference on nutrition in 2014,
- The strategy of the "Scaling Up Nutrition" movement 2016-2020 and
- The REACH initiative

6.14. City and regional scale development challenges and current responses

In the current security context in Burkina, it should be noted that the city's governing bodies are managed by agents appointed by the public authorities both at the municipal level and at the regional level. Let us remember that the decentralization model of Burkina timidly grants relative autonomy to the municipality. Thus the policies, plans, regulatory provisions, creation of institutions and infrastructure for food issues at the national level, cited in the previous chapters, also apply to the city in the absence of territorial specifications. Under these conditions, the public authority which advocates for synergy of action in terms of decentralization decides on actions intended for the city with or without the actors of the city or the region. From this perspective, the participation of local or regional authorities is an enormous challenge to take up.

In a scoping study of the food system in Burkina Cecilia Alessendro and Fabien Tondel recognized that Burkina had the best institutional framework in terms of governance of the food system compared to other neighboring countries. However, the primacy of the primary sector and the challenges of productivity, environmental, financing, adapted technology, inputs, quality etc. mean that actions are oriented towards agricultural production areas. The challenges linked to marketing for certain food or cash crops are managed by government institutions (SONAGESS, APEX) for certain crops, rice, corn, cotton, cashew nuts, etc., professional organizations,

NGOs and international institutions (PAM) are mobilized, leaving local authorities outside the processes. In a context where urban agriculture is promoted by international institutions, FAO and relayed by municipalities, notably the city of Ouagadougou, it remains marginalized, yet the challenges are almost the same as in rural areas. The aforementioned scoping study is carried out as part of the AgrInvest-Food system Project which in turn is linked to the SDGs. In the study report, we note a rich repertoire (97) of institutions and organizations among which no local institution is cited. The gateways to a local response to the challenges of the food system remain very narrow. The challenges of decentralization actually mirror those of food systems governance "Across the world, a wide range of stakeholders support the transformation of food systems. However, initiatives often lack a common framework to frame the complex interactions, interdependencies and trade-offs intrinsic to food systems. This often results in policy inconsistency and poorly coordinated interventions. In developing countries, and in particular In Africa, farmers, processors and other food systems actors struggle to access the financial resources needed to accelerate progress towards the Sustainable Development Goals (SDGs) and increase resilience to global shocks. The inability of financial institutions and private investors to identify profitable opportunities within food systems is just one of the obstacles hindering investment. Cecilia Alessendro and Fabien Tondel, FAO 2021. The security crisis and climatic hazards in Burkina, the global health crisis (COVID 19) and the war in Ukraine are putting a severe test on the food security approach by exacerbating the risk of hunger so much so that by 2025, the Current government authorities intend to meet the

challenges through a strongly sovereign approach. This perspective, legitimately chosen according to the national authorities, is difficult to accommodate to a territorial approach and free trade.

6.15. Other city-specific information

The city of Ouagadougou has been a twin city of the city of Lion in France for three decades. In partnership with the Metropolis of Lyon, it is hosting a major project to support urban economic growth and metropolitan governance of greater Ouaga (PAGO) for a period of thirty-six months. The budget of the PAGO project amounts to four billion twenty-nine million seven hundred and seventy-five thousand CFA francs. This is a project that will contribute to the development of sustainable urban agriculture through the adoption of agroecological production practices and agroforestry and ten rural municipalities. The city of Ouagadougou is home to a green belt that extends over a thousand hectares - two hectares or twenty-one kilometers long and five hundred meters wide. In January 2024 the city obtained supervision of the green belt. This infrastructure will allow the city to place the development of urban agriculture in a sustainable manner and thus provide stakeholders with secure production conditions and for consumers a commercial infrastructure will be put in place in order to free them from any suspicion E. Cheyns even anxiety C.Fichler when it comes to product quality.

The municipality is a signatory to the Milan Pact and before the advent of the current political context, it was engaged in a process of developing these partners. However, its participation in the management of school canteens which was suspended in April 2023 by the council of ministers and supervision of the green belt has allowed it to expand its partners in terms of NGOs and civil society. To play its role in decentralization, the municipality must rely on qualified human resources PEFA Chek February 2021, define its vision its programs, its action plans its strategies strongly freed from political practices which carry it into an eternal beginning again. Moreover, established in the area of the ancient Mossi kingdom, it must always forge a compromise with the traditional authorities, always well represented. They play a calming role during political crises and land conflicts and strongly participate in political games.

7. The state of Multi-Stakeholder food governance and processes

7.1. Modes and practices of food governance

Burkina's vision for Horizon 2030 is similar to this: " In Horizon 2030, Burkina Faso will dispose of durable hardware systems and components with different options (sanitary and security increases, climate changes), to ensure a safe environment. And nutrition for all of us. » Where the alimentary system is connected and articulated in the vision.

Tableau VII : practices of food governance

N°	Expectations	Specific Scope Of Action
1	Production of agro- sylvo -pastorale halieutique and faunique, diverse, sufficient, of good quality and unscrupulous in the durability	12
2	Convert 35% of ASPHF products to ensure nutritional quality and sanitation in 2030	4
3	Assure the health and nutrition of a healthy and nutritious diet for all of us and promote consommation habits, healthy life modes and local production benefits.	12
4	Assures the fluidity of changes in production zones, transformation and consumption of infrastructure travers and transport adapters.	6
5	Enforces the capacity of the operating systems and their equipment and their flexibility.	9

Of these fields of action, twenty-nine (29) short-term actions were erected compared to ten (10) long-term ones. Ministers with partner companies, professional organizations, and private companies own institutional corps for the purpose of different actions. Part of the strategic proposals used in this design plan**.** Allows the coordination of the operational interactions to remain real.

7.2. Key urban food systems governance actors

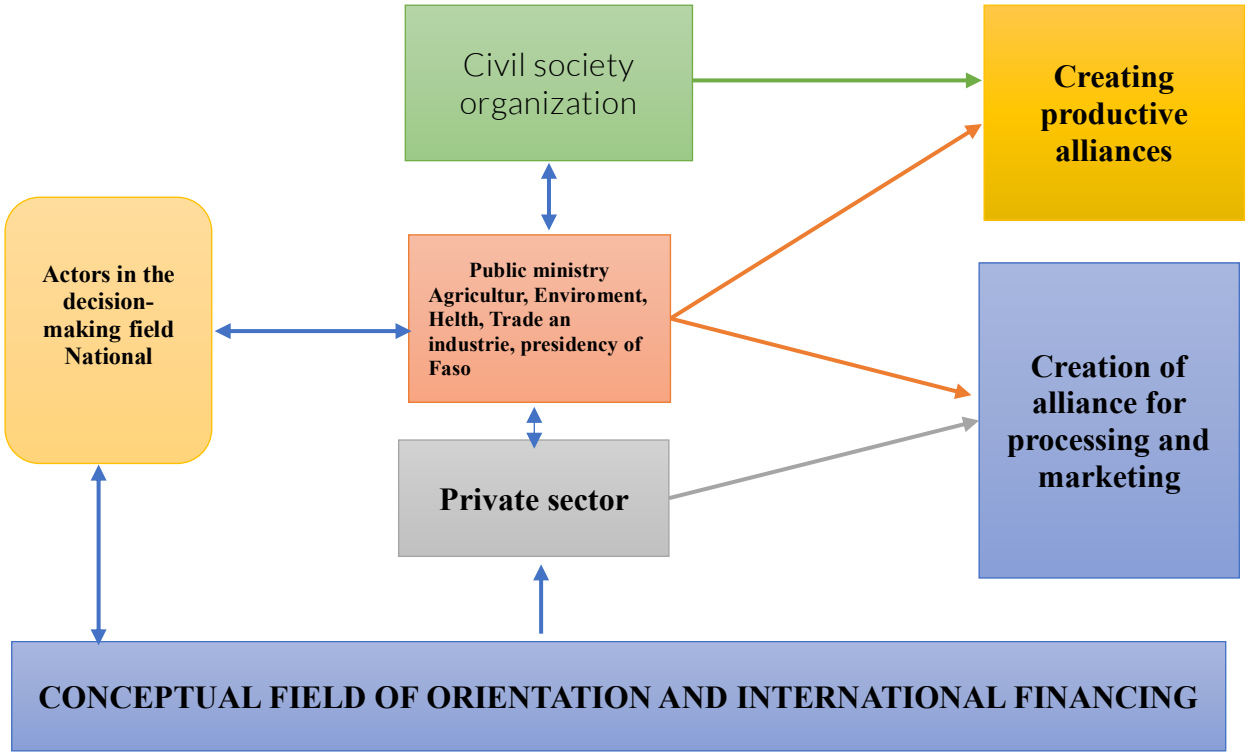


Figure 10 : urban food systems governance actors

7.3. Historical shifts in food systems governance

One of the priorities of the Burkinabé revolutionary state, 1983-1987, was food self-sufficiency. Several hydro-agricultural and/or hydro-electric dams were built to reduce dependence on the sole rainfall season from which the country benefits. Certain developments saw the light of day under the revolution (Sourou Valley, Kompienga 1988) and others after (Bagré 1992, Samandeni 2019) but the development continues because "The ancient and contemporary history of the Burkinabé food system is marked by the constant search of its populations for a balance between growing food needs and a supply – mainly cereals – which is very irregular from one year to the next or from one period of the year to another" Marie Poussart-Vanier. Food self-sufficiency remains an ideal more or less sought after by successive leaders. In this situation of irregularity in the endogenous food supply, the major constraints, according to the same author, are linked to the management of irregularity: those of production, supplies from the market or even access to foodstuffs. The management of irregularity led to the establishment of a security stock and emergency intervention system by the government.

From the first years of the country's independence (1960), we witnessed the creation of the agricultural product price stabilization fund (CSPPA, 1964) for the export of cash crops (peanuts, sesame, walnuts). shea, cotton, paddy rice). This fund will have its twin sister in 1978, the general equalization fund (CGP) to deal with imports of consumer products, rice, sugar, wheat, oil to facilitate access to these products throughout the territory. Subsequently and based on the previous unfavorable season (1967-1968), the government became aware of the speculations of traders who did not promote access to foodstuffs, so the National Cereals Office (OFNACER) would be created. in 1971 and an interministerial commission was set up to set the rules Marie Poussart-Vanie.

The drought of 1973-1974, which was deadly for both humans and livestock, led OFNACER to manage aid to curb the crisis and stop speculation by traders. She set the price of one hundred kilograms at 2500 FCFA

while on the markets the exchanges were made at more than double. Tensions between the State and traders will emerge and be exacerbated with the monopoly on cereal collection which will be attributed to the Rural Development Offices (ORD) in 1974. Thus, the food crisis is compounded by a socio-political crisis, Marie Poussart-Vanie. An arena of confrontation in terms of food security was established, it was not until 1978 that traders were approved and the growth of cereal trade in 1991 with the structural adjustment policy (NOT the institutions of Breton Wood under the Compaoré reign. What followed, under the aegis of the International Monetary Fund (IMF), was the privatization of regulatory institutions and the deregulation of the price of agricultural products.

The application of the PAS policy will lead to a notable transformation in the governance of the food system marked by the abolition of the following institutions: CSPPA, CGP and OFNACER. In 1994, the National Security Stock Management Company (SONAGESS) will be created with new prerogatives which are significantly more limited. SONAGESS has a storage capacity of thirty-five thousand tons of agricultural products composed of corn, millet and rice and is responsible for the information system on the cereal markets. However, in February 2010 it will see its missions expanded by a ministerial decree which grants it the responsibility of constituting a commercial buffer stock. Previously, it should be noted that another emergency response body will be created in 2009, the National Security and Emergency Relief Council (CONASUR) which brings together humanitarian aid.

It should be noted that the recurrence of global food crises will lead international institutions to rethink food management. Thus "The food security paradigm has established itself in the international community – with the FAO as leader – through awareness of the limits of self-sufficiency, which were dramatically revealed by the famines of the 1970s and 1980s. » The paradigm of food security is articulated on a neoliberal economic approach in which "The role of the State is then mainly centered on two fields of intervention: support for the "professionalization" of farmers and traders, now considered as private operators" and sending emergency food aid to compensate for possible market failures. » Marie Poussart-Vanie. However, according to the same author, in the case of Burkina, the food system that has emerged since the advent of the SAP and food security policies takes the form of a food system that does not function well "A food system that works This malfunction makes groups or individuals vulnerable to nutritional risk, of which the high rates of malnutrition or undernutrition and diseases (deficiencies in vitamins, minerals, amino acids, etc.) are tangible proof. » These nutritional diseases must have added those of cardiovascular disease, cancers, resistance to antibiotics, etc. regarding Burkina. This has led several stakeholders in the food system to promote new production practices both in urban agriculture and in rural areas.

The health risks linked to the use of chemical inputs in agricultural practices and recognized worldwide have had repercussions in Burkina. Thus after the installation of an organic agriculture certification agency (ECOCERT, etc.) for the certification of certain exported products, the actors accompanied by research and the Ministry of Agriculture set up the National Council of Organic Agriculture, 2011 (CNABIO). This Council issues the SPG label to committed producers whose practices meet the specifications. CNABIO results from the commitment of customary political authorities, actors, researchers, international organizations and local associations.

In addition to organic agriculture, we note that in terms of structuring actors, the Burkinabe State certainly wanted to put an end to "empty shells". Indeed, several associations in the rural world were devoid of an operational structure which led to a strong centrality of the first person responsible. The cooperatives and alliances that we encounter more and more present themselves as a response to the ineffectiveness of what has been called “Association or Group” in the organizational jargon of the actors. However, it should be noted that these restorative initiatives have a minor influence.


STOKEHOUSE WATINGA

8. Urban Agri-Food Systems entrepreneurial and trade context

8.1. Key agri-food systems actors and their roles

States and intergovernmental organizations: the role of States is to work to create a favorable climate for the development of agricultural businesses which essentially contribute to the development of GDP.

Multinational companies: With their main objective of maximizing their profit, these companies carry out production, distribution or research activities in several countries at the same time. Their development has been favored by the fact that straddling several countries confers considerable competitive advantages. These advantages are partly of fiscal, financial, economic and social origins.

Civil societies (farmers, processors, suppliers of inputs and equipment, distributors) They are mainly made up of professional organizations such as associations of producers, traders, industrialists and consumers. It therefore also includes the associations of what is generally called the "private sector".

The interests of agricultural producers vary depending on whether they produce for the market or not, whether they are net sellers or buyers of food products, depending on the products in which they specialize (cereals, protein crops, meat, milk, fruits, vegetables or others, export products or imported products) and the technologies they use (irrigation, fertilizers, pesticides, machines or not). This diversity is found at the level of the organizations that represent them (small or large producers, producers or breeders, etc.).

Generally speaking, however, producers seek to improve their standard of living as much as possible, to limit the risks they face (unstable markets, parasites and diseases, or extreme climatic events), to obtain compensation in the event of crisis and to benefit from efficient, accessible and adapted agricultural services.

Small producers are often less well organized. They may also have non-agricultural interests as they often seek off-farm employment opportunities to supplement their income, or even opportunities to migrate to the city or abroad in order to improve their lot in a sustainable way.

Like agricultural producers, agribusinesses and traders are a very diverse group. Their main objective is to seek to maximize profits. To do this, they seek to pay the lowest price for agricultural products, which puts them in potential conflict with producers. Their objective is to limit their production costs and to resell their product at the best price. For them, stability means stability in the quantity and quality of their supply – they seek to enter into contracts with producers, or to share production areas with other agro-industrialists or traders to limit competition – and markets for their products. Their other main concerns include the financing of their activities (investment and working capital), protection from foreign competition, ease of access to foreign markets, taxes, as well as quality and environmental standards (in the case of industrialists).

Consumers: Consumers are concerned on the one hand about the availability of quality food products at an accessible price and as stable as possible throughout the year, and on the other hand about their level and sources of income. They tend to turn to the State if prices skyrocket, and to their potential employers (if they are employees) if their purchasing power seems to them to be decreasing.

Grouped into consumer associations, they can negotiate with the State or groups of industrialists or traders on the quality and prices of food. They can also resort to more or less violent demonstrations, especially in urban areas, in the event of a crisis, to ask the State to react with policy changes (prices, wages, taxes, trade regulations, implementation safety nets, etc.).

The report will be finalized very soon according to the structure proposed by the leads. This will allow discussions to begin and a conclusion to be reached. But in the meantime we can say following the authors that the food system of Burkina is functioning with difficulty and that of the city of Ouagadougou is not left out. local authorities should undertake data collection to better understand and update their knowledge of the food system. Actions to transform the food system would be better targeted.

9. References

AUGIS, F., 2017. Pratique(s) du maraîchage urbain : le cas de Ouagadougou, Burkina Faso, Mémoire de Master 1 de géographie, sous la direction de J. L. Yengué et A. Robert, Uni- versité F. Rabelais, Tours, 116 p.

AMMA. (2017). Résultats de l'enquête socio-économique auprès des habitants des zones inondables du « Grand Ouaga » rapport définitif.

BAGRÉ, A. S. et al., 2002. Processus de reconnaissance et de la légalisation de l'agriculture urbaine à Ouagadougou : de la légitimation à la légalisation, BIOTERRE, Revue internatio- nale de la Vie et de la Terre, Actes du colloque international, Centre Suisse, Source : (Barussaud , 2017)

Barussaud S., 2017. Les politiques sectorielles intégrées de formalisation de l'emploi : L'exemple du secteur commercial au Burkina Faso. P10227-29 août 2001, p. 139-148.

Cinquième Resencement général de la population, cartographie et mesure de la pauvreté, Novembre 2022

Dupuis, B., Leu, P., Söderström, O., & Biehler, A. (n.d.). La mondialisation des formes urbaines à Ouagadougou Troisième partie.

Fournet, F., Meunier-Nikiema, A., & Salem, G. (2008). Ouagadougou (1850-2004) : une urbanisation différenciée (IRD (ed.); Petit atla).

Gloux, O., Mounier, P., & Nion, P. (2018). Commune De Ouagadougou.

MATD. (2001). Les textes d'orientation de la décentralisation (TOD) du Burkina Faso : Modifiés CND (Commission nationale de la décentralisation), - OUAGADOUGOU (BURKINA FASO) : COMMISSION NATIONALE DE LA DECENTRALISATION (CND),. WWW.Ritimo.Fr. https://www.ritimo.fr/opac_css/index.php?lvl=publisher_see&id=5540

MATD. (2018). Politique nationale de décentralisation au Burkina Faso. https://www.giz.de/de/downloads/giz2019-de-burkina-faso-dezentralizierung.pdf

MEPAT. (2018). SCHEMA NATIONAL D'AMENAGEMENT ET DE DEVELOPPEMENT DURABLE DU TERRITOIRE (SNADDT) 2040.

Meyer, P.-E. (2016). De Bancoville à la ville moderne. Ouagadougou (1850-2004), IRD edition, 25–37. https://doi.org/10.4000/books.irdeditions.892

Ministère de l(agriculture et de l'alimentation, 2021. Le secteur privé dans les filières agro-alimentaires au Burkina Faso

Ministère français des affaires étrangères , Rapport sur la nutrition mondiale 2016

Périssol, P. A., Lepoittevin, V., & Valenzuel, A. (2019). Ouagadougou 2050. www.ateliers.org

Skinner, E. . (1974). African urban life : the transformation of Ouagadougou (P. U. Press. (ed.); Princeton).

Traoré, M., & Benon, T. P. (1998). Loi N 040/98/AN portant orientation de la decentralisation au Burkina Faso.

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