

Food Insecurity and Poverty in Sub-Saharan African Immigrant Population in Tarragona Province, Spainⁱ

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Abstract According to a 2012 IMO report 49.3% African immigrants in Spain were without jobs in 2011, household poverty rates in the immigrant population (31%) was 12 times more than that of the autochthon population. Despite efforts to generate enough income to secure the most modest of living standards for their families or for themselves, Sub-Saharan African (SSA) immigrants in Tarragona Province are faced with precarious economic conditions and difficulties in obtaining and controlling resources. SSA immigrants demonstrate a stream of actual or contemplated causal interventions to alleviate and/or overcome the effects of these precarious conditions and provide food for themselves and their families. Adopting a framework of human agency, this article engages the ethnography of everyday life of SSAs in the context of food insecurity. Emphasis is placed on praxis (i.e. the action itself), on the tactics and strategies employed by SSA immigrants to manage and transform constraining situations that enable the very 'habitus' of the group.

Keywords: agency, coping strategies, food insecurity, immigrants, economic crisis, poverty

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1. Introduction: Structuration Theory

[1] adopt Giddens' theory of structuration, specifically the concepts of social practice, the duality of the social structure, and agency to develop a conceptual framework in their research on food as a social practice. According to [2] social practices, "the situated activities of social actors which happen in the flow of daily life or in context"ⁱⁱ are at the root of the constitution of both agent and society (ibid.: 1984:xxii). Actors draw upon social structures constituted by 'rules and resources', creating both enabling and constraining conditions of practice (ibid.: 1984: xxii, 25). [1] highlight that individual action is not determined by the social structure, but rather enacted and concretized by people through the choices they make during social practice, and that through social practices, people reinforce and change the social structure. Therefore, structures are both the medium and the outcome of social practices that constitute social systems [2]. From this perspective, human agency and structure presuppose each other - structures are enacted by 'knowledgeable' human agents, and agents act by putting into practice their necessarily structured knowledge [3]. If structures are both enabling and constraining on human agency [4], and human agents are conceived as 'knowledgeable' and 'enabled', it implies that they (agents) are capable of putting their structurally formed capacities to work in creative ways, and that their action may have the consequence of transforming the very structures that give them the capacity to act [3]. [3] suggests a whole new conceptualization of Giddens' theory of structuration in

which structures refer only to rules or schemas and not to resources; and resources are thought of as an 'effect' of structures. Structures are defined as 'mutually sustaining cultural schemas'ⁱⁱⁱ and sets of resources that empower and constrain social action and tend to be reproduced by that action' (ibid.: 27). According to his argument, knowledge of a 'schema' by definition means the ability to transpose it; that is, apply it creatively.

Though an abstract and difficult concept to define, agency has become a widely used concept across the social sciences and the humanities to the point that some scholars have directly asked the question 'why agency now?' [5]. Other scholars have suggested that the many actions that aimed at transforming Central and Eastern European societies in the late 80s and early 90s served as springboard for much scholarship on human agency and social structures [6]. Much scholarship on the concept has attempted to subdivide it into different categories: the agency of (unequal) power [7]; residential agency and representational agency [8]; the performance of agency and the grammatical encoding of agency [9]. The wide interest and use of the concept in the social sciences and humanities also implies the proliferation of definitions with foundation in Giddens' theory of structuration. Agency is the capacity for actors to intervene in the world and to influence a specific process or state of affairs; it can be thought of as the capacity to act [2].

From his argument, that knowledge of a 'schema' implies the ability to transpose or extend that 'knowledge', [3] defines agency as the actor's capacity to interpret and mobilize an array of resources in terms of cultural schemas other than those that initially constituted the array (ibid.: 19). [6] suggests a provisional definition of agency

that avoids an over-generalizing notion of the concept that should be understood as culturally and linguistically specific, varying from society to society. According to her, agency should be perceived as 'the socioculturally mediated capacity to act' (ibid: 30). The capacity to act is limited by structural constraints from the agency/structure interplay, which [1] note refers to the conceptualization of social practice as the intersection of agency and social structure. That is the interplay between the ability to act and 'rules' or 'schemas' resources.

Living in the context of precarious economic conditions, Sub-Saharan African (SSA) immigrant groups in Tarragona province demonstrate a continuous flow of social practices (actual or contemplated causal interventions) to influence the effects of precarious economic conditions on their food access, and practices. This paper explores the relationship between the social, structural conditions influencing the food practices of the SSA immigrant group. It engages the ethnographies of the everyday life of the group within the context of precarious economic conditions and constraints on food access, and describes how the agency of the group is put at work.

2. Constraining Economic Conditions

Migration is a phenomenon with great preoccupation for many industrialized nations; as [10] note, migration shapes the structures of society and generates new priorities in many of its sectors. Spain has been the main destination for most migrations in the EU zone, experiencing significant increase in immigrant populations since the last part of the 1990s [11]. According to statistics from the Spanish Institute of Statistics (INE), the foreign population in the country rose progressively from 2005 through 2011 when there were a total of 5,751,487 foreigners. Since then, this number has constantly declined, decreasing by 0.3% to 5,736,258-registered foreigners in 2012. By 2013, this population decreased by 3.3% (5,546,238 registered foreigners) and by the end of 2014 the total number of registered foreigners in the country stood at 5,023,487, a 9.4% decline from the preceding year [12].

The decline in the immigrant population in Spain coincides with the economic crisis that has hit the country and other EU states since 2008. Like several other western countries, Spain has been hit hard by the global financial crisis. The crisis has affected individuals and families, state and politics (policies), the distribution of resources, health and well-being, and social inequalities [13]. Amongst many other effects, the crisis has caused profound devaluation of the purchasing power of households. And dire austerity measures undertaken since 2010 have failed to contain the situation. On the contrary, there has been a continuous loss in disposable household income: 2.9% in 2010, 3.4% in 2011, and 3.8% in 2012 [14]. As the European Commission suggests, the statistics are not surprising taking into consideration that the country witnessed one of the highest losses in jobs between 2008 and 2013 (ibid.: 2013). According to [15], there was a significant increase in the number of people (families) increasingly exposed to financial stress since the start of the crisis (i.e. over 4 million people) (ibid.: 2013). Unemployment stood at 21.7% in 2011 in Spain,

about 4,257,159 persons. The unemployment rate rose to 25% by 2012 (4,720,404 persons). In 2013, there were 4,845,302 unemployed persons in the country; a total of 26.4% of the population was without a job. By 2014, unemployment rate stood at 23.7% (4,419,860 unemployed persons). Long term unemployment^{iv} stood at 41.6% in 2011, 44.4% in 2012, and 49.7% in 2013; [16]. Meanwhile youth unemployment rose from 52.9% in 2012, to 55.5% in 2013 and 53.2% in 2014 [17].

As the crisis persists over the years from 2008, it caused a steady increase in the proportion of the population at-risk-of-poverty and/or social exclusion (AROPE)^v [18]. Statistics show that AROPE has been more severe in Spain than in the EU as a whole since the start of the crisis. The rate stood at 24.5% in Spain in 2008, while that in the EU was 23.7%; that of Spain rose by 0.2% in 2009 (24.7%). In 2010 it rose again by 1.4% and stood at 26.1%. It rose again in 2011 and was 26.7%, and also in 2012 and 2013 to 27.2% and 27.3% respectively [16]. The Spanish Ministry of Health (MSSI)^{vi} (2012) suggest that the AROPE data is illustrative of the particular intensity of the crisis suffered in Spain; over one in five persons lives below the poverty threshold. Moreover, about 10.3 million people were reported to live below the poverty threshold in 2012; that is, about 800,000 people more than in 2008 (INE, 2013). Also with the crisis, the poverty benchmark threshold of Spain was reduced from 7,800€ in 2009 for a single person, to just 7,200€ in 2012. The at-risk-of-poverty-rate pinpoints the population with income below the threshold of 7,200€ as poor, calculated on the basis of median income (as of 2012). However, it should be noted here that the at-risk-of-poverty-rate is a relative variable that does not take into account whether or not the threshold allows for minimal levels of subsistence/wellbeing to be reached and maintained.

This notwithstanding, the average income of the Spanish population (14,214€annum in 2008) fell by 2.3% between 2008 and 2012, standing at 13,885€annum by 2012. Within this same period the cost of living rose by approximately 10% [14]. Further, the 2011 Active Population Survey of the Spanish Institute of Statistics reported the exacerbation of severe forms of poverty in the country. The survey indicated that the number of households with no income whatsoever rose from 2.12% in 2007 to more than 3.5% by the end of 2012; suggesting about 630,000 households survived with no income. In 2008 6.8% of the population had income below 40% of the median income; this almost doubled by 2011 with 10.1% of the population living with no income. About 4.6 million people lived in severe poverty in 2011 [19]. A sharp rise in inequalities in the distribution of incomes has also been noted in the country; the country's top 20% of income earners recorded income that was 5.7 times higher than the bottom 20% of income earners in 2008. Meanwhile the income recorded by the top 20% of income earners was 7.2 times higher than that of the bottom 20% by 2012 [14].

The percentage of immigrants at risk of poverty in Spain exceeds that of nationals; 46.8% immigrants were at risk of poverty in 2013, and 54.2% in 2014. Using statistics from the INE 2006 Income and Living Conditions Survey [20] highlight that moderate and severe poverty are more accurate among immigrants than among Spanish citizens. The International Migration Organisation

(IMO) published a report on the impact of the crisis on the immigrant population in Spain indicating stark differences in employment, income and social protection levels with autochthon population since the beginning of the crisis. The report specifies 2.2 million jobs were lost between 2008 and 2011 in the country and that percentage of job loss among the African immigrant group within the same period as 21.5%, while unemployment rate in Latin American immigrants was 15% and 11.5% autochthons. Unemployment rate among the immigrant population in Spain (39.1%) in 2011 was double that of autochthons (18.4%). Meanwhile unemployment rate in the African immigrant group in the same year was 49.3%. Concomitantly 28% African households with active members were unemployed between 2005 and 2011; 11% other immigrant groups and 8% autochthons. The IMO report also highlights increased household poverty rates in the immigrant population (31%) compared to autochthons (19%), (12 times more) [21]

With the economic crisis, resources to access food and maintain a healthy diet have been severely affected. [22] highlights a lot of changes with regard to food acquisition and consumption habits of the Spanish population, with serious cuts in expenses on food. The food acquisition and consumption habits of many households with reduced or limited disposable income has been affected; it is now common in many households to substitute a less expensive food item for another (ibid.: 2014). It is suggested that changes in acquisition and consumption habits of the population are stressed by declines in household disposable incomes, high and long-term unemployment in the country [22]. The crisis has certainly produced thorough consequences on individuals and households, especially on their acquisition and consumption habits as a consequence of high unemployment rates.

However, this has not meant the scarcity of or deprivation of food, as was the case in some western societies like Canada in the 1980s through 1990s [23]. Moreover, more food is produced than is needed to feed the entire world [24]. Challenges in accessing food (as a result of financial constraints), or food insecurity, is not necessarily the outcome of the absence of food or food scarcity. In the case of SSA immigrants in Tarragona Province, food in security is the consequence of financial constraints caused by precarious economic conditions. In this sense, food insecurity refers to limited, inadequate, or insecure access to sufficient, safe, nutritious, and personally acceptable food (both in quantity and quality) to meet individual or households' dietary requirements for a healthy and productive life. The focus on limited, inadequate or insecure access to food emphasizes the primary role financial resources play in determining individual and household food consumption practices.

3. Food Mitigation Strategies; Human Agency at Work

Despite efforts to accommodate reduced or limited income from the loss of their jobs and the crisis Spain has been hit with, many SSA immigrants in Tarragona province are faced with the day-to-day challenge of providing food for both themselves and their families. The

challenges of both the biological and cultural weight of food in society propel households and individuals to carve out strategies to mitigate the effects of unusual and limited access to food [25-32]. SSA immigrants in Tarragona therefore develop coping strategies to deal with food shortage and limited access to food and mitigate the consequences of an immediate and unusual shortage in food [33,34,35]. This paper describes the various ways SSA immigrants in Tarragona Province put their agency (socioculturally mediated capacity to act) at work in order to influence the effects of immediate and unusual shortage of food.

Results presented in this paper focus on the day-to-day lived experiences with food insufficiency/insecurity of four of 20 SSA immigrants interview. However, the dietary intakes of all 20 SSA individuals were collected through an interviewer-administered 24-hour diet recall method to measure the usual intakes of the group. The nutrients intake was obtained from the '*Tablas de Ingestas Recomendadas para la población Española*' – Spanish nutritional objectives Recommended Dietary Allowances (RDA) based on the recipes and estimate of the quantities of meals eaten/reported by the informants. The recipes and estimate of the quantities eaten were entered into an excel sheet and their corresponding nutrient and energy/caloric values calculated using the RDAs tables for Spain. Informants' height (cm) and weight (kg) was also recorded in the 24-hour dietary recall interview; with which the Body Mass Index (BMI) of each individual was calculated and classified according to categories set by SEEDO (Spanish Society for the Study of Obesity). The quality of the meals – energy and nutrient of each meal for each individual was calculated over the 24-hour period. The level of energy contributions per food group to total energy contribution was also calculated; as well as the nutrient density (quantity of nutrient per energy unit (1000kcal) of the meals.

For reasons of confidentiality, the names of the four informants used in this paper are fictional; they are nationals of Cameroon, Nigeria, and the Democratic Republic of Congo (DRC) although the complete sample included in addition to these SSA countries, nationals from Congo, Gambia and Equatorial Guinea. Because 2008 is generally perceived as the onset of the economic crisis in Spain and other western countries, attention was placed on SSA immigrants who arrived in Spain before then. Data was gathered through qualitative methods, mainly through in-depth interviews with the use of an interview guide, tape recorder and field notes. The interviews were conducted at informants' residents, with discussions around, and observation of, food purchasing, preparing and eating practices. The next section highlights the ways SSA immigrants in Tarragona province experience food insecurity, and the strategies to mitigate the consequences of the experience.

3.1. Food Acquisition Strategies; a Matter of Sales/Prices, Quality and QUANTITY

Deviations from social and cultural norms surrounding food acquisition, selection and consumption behavior is characteristic of food insecurity (and food insecure individuals and households) [36,37]. In the context of resource constraints, it is logical that the food acquisition,

consumption, and selection practices of individuals and households (experiencing financial constraints) are greatly affected. Strategies used by SSA immigrants to counter the effects of immediate and unusual shortage in food vary and depends on the frequency, duration and severity of the experience. Where food products are acquired or purchased, the kinds of product that is obtained vary in the SSA immigrant group in Tarragona. The price and quantity of the food items greatly determine the choice of where to shop, as Annie explains.

“Before we did most of our shopping at 'Carrefour' supermarket and it entailed going there by bus or car, now I do most of my shopping for groceries at 'Mercadona', 'Bonarea' and recently in 'Dia' supermarkets because they are all nearby, they always have products on sales - a special 50% discount on the second unit of a product. In 'Dia' supermarket for instance, there are discounts for different products on a daily basis... a pack of frozen fish at 'Dia' is sold at 3.90€ and an additional pack cost half the price of the first - 1.90€. I prefer buying from these supermarkets, the products are good in quantity and quality, especially those sold in 'Mercadona', they are superb”

Annie is a single mother of three children from the DRC; she divorced her ex-husband less than a year ago. She migrated to Spain in 2004 through the desert route and ship to Lampedusa. Annie's migratory trajectory began from Cameroon where she joined her mom who had migrated earlier to that country. After the death of her mother, Annie decided to travel abroad through the 'difficult way' - the journey through the desert to Europe. She left Cameroon in 2003 to Niger through Nigeria, then to Algeria, her planned destination in the African continent before continuing to Europe by boat. After being caught and locked up in prison in several attempts to make it to Algiers, the city from where she was supposed to take the boat to Italy, she changed her destination to Libya. The truck that took her and several other SSA(s) struggling to make it to the European continent, left them in the middle of the desert with none knowing where to go or how to proceed. They began trekking in the desert in the direction of the settling sun and the night lights. Annie explains that when they ran out of water and she became so weak and tired, she asked that she be abandoned there in the desert to die. She knew that was the end and explains that she had seen the remains (skeletons) of humans in the desert while they were trekking. It is believed they were the skeletons of other people who likewise had journeyed to Europe through the Sahara. Somehow, supernaturally as she narrates, she received strength after praying to God and was able to walk to the village next to the desert in Libya. The trekking through the desert to the village took her two days. Like in Algeria, Annie was caught by the police in Libya and thrown into prison again. However, thanks to the Cameroonian embassy in Libya she was set free; the embassy sent a diplomatic car from Tripoli to get her from her prison to the capital (Tripoli). She lived there until she got the opportunity to travel in a boat to Italy (Lampedusa) in 2004. The boat got to Lampedusa and from there she was able to make it to Barcelona then later to Tarragona where she has been living since.

Annie got married to a DRC compatriot in the course of time in Spain and had three children all of them with disabilities or impairments. She is now divorced and is

without a job. In fact, she has been unemployed ever since she migrated to Spain; she has never been beneficiary of any social assistance programs except the support she now receives from her ex-husband to take care of their kids. While her ex-husband has taken care of their everyday needs, she emphasizes that there were many employment opportunities when she arrived Spain, especially in the care for elderly persons. She couldn't do these jobs because she had to take care of her children. She did have many people who came to her for 'plaiting' (hair braiding) to generate income. Hair braiding then cost about 35-50€ and she had a lot of clients. She still has a couple of clients but complains that they don't pay 'well' as before because of the crisis -she now makes only 13€ per person. With few clients and a business in the underground economy, Annie lives on an income of less than 500€ a month including the monthly stipend from her ex-husband. Supposed to be 600€ she explains she never gets the full amount. With such a limited budget she emphasizes the importance of knowing how to manage it wisely, and where to purchase groceries (of larger quantities) and especially at a cheap price.

“There are some groceries I used to buy which I don't anymore because they are now expensive for me and you know there is no money. Is difficult to admit it but I now go in mainly for the cheap products, products my children and I can consume for longer periods, products on sales or discounts like the frozen chicken in 'Mercadona' supermarket. The frozen products are sold at a cheap and affordable price for me, so I often go in for the frozen products, something I didn't even consider before. In the past we never bought frozen chicken or fish at the supermarkets, we always bought the 'fresh ones'. A pack of chicken (not frozen) in the supermarket costs some 4.5€ but those in the freezers, if you check it out, cost about 2.50€ or less...what do you do, well I get the frozen chicken thighs at 2€ - 2.50€ and save the few euros you would have otherwise spent on the fresh chicken, for other products like juice for the kids...and there is this 2 liters 'cola' juice sold at 'Mercadona' at 0.50€ which to me is better than the usual Coca-Cola and Fanta drinks in taste and price. You see, if you buy the frozen chicken you save some few euros for other products, and in addition to the cola juice, you can get some yogurts for your kids.”

Concerns to get more products at the most minimal cost possible, guides Annie's food acquisition behavior and choice of where to purchase food items. 'Día', 'Mercadona' and 'Bonarea' are the preferred supermarkets from where most groceries are obtained. This is mainly because of their prices, acknowledged to be cheap and affordable (especially 'Mercadona') for many, and also because of the possibilities of discounts on several products on sales. However, price or discount opportunities and quantity of products sold are not the only motivation of choice of shopping venue for groceries for SSA immigrant families in the province. For some the choice of place (or supermarket) to shop for groceries, especially perishable fruits and vegetables, is guided by the interplay of opportunities (bargaining opportunities), quality and price. There are certain products of good quality (fresh products) that can be purchased at affordable prices even cheaper than the original price. However, this depends on having knowledge of where to purchase it and especially on how and when; i.e. at what time of the day to shop. These

categories of products (vegetables and fruits) are generally bought in open air markets such as the Sunday markets of Bonavista that run from early morning to 2:00pm. Most of the products sold in this open-air market are fresh and often directly from the fields. Since, most of the products are perishable, many vendors aim to sell most if not all because they are difficult to conserve until the next market day. Many SSA immigrants exploit this surplus to their advantage as Tony explains.

“the fruits and vegetables we consume here at home we buy it from the market in Bonavista, I go there at the 'rush hours' when vendors begin to pack the unsold products to leave... at this hour you get products at giveaway prices, fresh fruits and vegetables of good quality. For example, 15kg of fresh potatoes is sold for about 3€ during normal sales hours in the market but if you get there when they are closing, you can get it for 1.50€ or 2€. The same quantity of potatoes at the supermarkets will cost you some 7€ or more... 15kg potatoes is a lot and we can eat it for the next one month or so if you conserve it well.”

Tony is a 24 years SSA immigrant living in Tarragona; he migrated to Spain in 2007 when he was 16. His coming to Spain was by means of a family reunion with a foster family resident in Madrid with the principal objective of continuing his baccalaureate studies, getting a job and being able to help his parents and siblings back in his country. Things didn't go that well as hoped; he fell out with the foster family, couldn't get into college and could not get a job. His differences with his foster family and need to work motivated him to change his resident status to allow him access to the job market. In this way he could remove the foster family and be eligible for the job market. His research on how to get a new resident status brought him to Tarragona in 2010 when the country was in real crisis. One of the conditions to get the resident status he wanted was to present a one-year employment contract at the 'Subdelegación del Gobierno, Oficina de Extranjería'. This was difficult to obtain because the country was in crisis and one-year employment contracts were rare. He was then advised that the easiest way to get the legal resident status with the right to work was to buy one. He bought one not knowing it was falsified. Two years later his legal residency in the country was cancelled and he became an illegal and unemployed person. He has been unemployed since 2012 with no social assistance whatsoever, surviving from little jobs in the underground economy and from renting out two rooms in his flat and sharing even his own room in exchange for money. Things have become so difficult for him (two of the tenants renting the rooms have left, it is difficult to get other persons, and jobs in the grey economy are scarce) that he has decided to move in with a family from his country living in Tarragona. The family has chosen to take care of him until things get better for him; Tony has reapplied to obtain legal residence and the right to work in Spain and awaits the publishing of the decision. Tony acknowledges being worried on several occasions that he may run out of food or money and not be able to buy more food.

SSA immigrants get to know about the market and the best hour to shop there through the network of their African friends and fellow countrymen. Groceries are bought in bigger quantities when shopping is done at the market in Bonavista and though most of what they buy is perishable products, they have developed techniques to

conserve them longer. Tony cleans the potatoes he buys from the market, peels off the skin and stores them in his freezer. He notes that he sometimes cooks and stores them in his freezer, for meals later. The opportunity to bargain prices is reported to be a motivation for shopping at the Market in Bonavista. Tony explains that price bargaining is a common practice in most markets in Africa, and that they like it and are good at it and they make use of these previous skills when they shop at Bonavista - bargaining with vendors to get products at cheaper prices. Therefore, the choice of where to get groceries is shaped by price, quantity, and quality, and characterized by knowledge of discount offers, bargaining opportunities and abilities, and knowledge of strategic shopping hours (rush hours). SSA immigrants take all of these into consideration in their choice of where to shop for groceries. While Annie is keen on the prices and quantity of the products on sales at the supermarket, especially 'Día', 'Mercadona' and 'Bonarea', Tony, in addition to the prices and quantity of the products on sales at these supermarkets explores the 'rush hours' at the Bonavista market to get fresh and quality products (vegetables and fruits) at 'giveaway' prices.

3.2. Food Sharing; an Expression of Solidarity and Friendship

Money is not the only resource for exchange for food. When household or individual financial resources fail or run the risk of not meeting food needs, there is recourse to other non-financial sources. Friends, family and food banks are alternatives in situations of limited access to or shortage in food supply resulting from financial constraints in individuals and households. One commonly used source to mitigate food insecurity in most western societies as noted in many studies is the recourse to formal or official food safety nets programs like the network of food Banks [38]. This is revealed as the least utilized option by informants in this study. Apan, one of the informants I interviewed, indicated that he stopped using the food banks (the Caritas and the Red Cross) after he received the first assistance package:

“I got to a point where I had to go ask for food at Caritas and I was so ashamed, they ask me to provide several documents which I had to go wait for long hours at different offices to get... documents like the 'empadronamiento'^{viii}, prove of unemployment status, valid residence card etc.... and in all of this to get what? Expired or near expired food, a quantity of food that cannot sustain you until the next period of assistance... I don't think it was worth the stress, so I stopped after receiving the first portion”

Apan is a doctoral student from Nigeria. He migrated to Spain in 2007 to further his studies. The person who encouraged him to travel abroad to further his study told him that once in Spain, he would be able to get a job while studying. Things were okay for him when he got to Spain; he was offered a remunerable job at the university where he studied. That helped him in his day-to-day subsistence until he got his Master's degree. He then enrolled for a doctorate program in the same university but he had lost his job and was unable to find a new job in the university or outside. Though there were many job offers and employers who were willing to hire him, his resident status (as a student) made this difficult. He couldn't get a job as a student and so couldn't continue his studies; to get

a job he needed to change his resident status. To do that, he needed to provide a job contract. Unable to get at least a one year employment contract and determined to change his resident status (which was the only way for him to be 'fit' for employment), he decided to get into a legal relationship with a Spanish partner. His legal relationship with a Spanish partner now entitles him to a legal resident status as a European Community Resident and entitles him to work, though since he got it he has been having only short-term (three months) contracts. He notes that his inability to work when he had the residence status as a student was not only due to the 'the student status' dilemma of the Spanish laws; it was also because the country was in crisis. With the little income he now has from his temporal jobs, he is able to subsist from day-to-day. In those difficult days without a job and without money to buy food, Apan devised other ways of getting food:

"I went to the 'seaport' with some friends that work in the fishery industry, I went there sometimes when they came back from fishing and needed assistance in the selection, cleaning and packaging of the fish they had caught. I went there most mornings at about 9:00am to assist in the cleaning, selection and packaging of the fishes. Slightly damaged or injured fish were kept aside and often given to those who helped in the cleaning, selection and packaging. We were sometimes paid for that but the main interest, at least for me was not in the little money paid us but in the rejected fish we were given, I was happy to take it home with me"

This is a coping strategy common in the food insecurity literature in low resource countries; that is, the exchange of labour or workmanship for food to mitigate the effects of food insecurity [39,40].

In addition to the exchange of labour for food; some SSA immigrants rely on family and friends to mitigate risk of food insecurity.

"What I got from Caritas back then could not sustain me, it couldn't meet all of my needs and so I couldn't depend on it. Thank God, I had a supportive family, friends and neighbors to resort to, especially because I had neither job nor money back then... I sometimes got financial assistance from home but neither the food from Caritas nor the assistance from home could sustain me here. The financial assistance from home was mainly used to pay my rent and after that I couldn't buy any other thing. The only way I could have adequate food was to rely on friends and I had very supportive friends, I regularly eat at their homes... we live in a kind of solidarity, and when I resort to friends, it is not just to a single friend, I had this Cameroonian family where I eat dinner and sometimes got food to take home and eat at lunch the next day, and also had immediate neighbors I shared flats with - they were all Senegalese and worked in the fishery industry, they also always invited me to share their meals. We had this strong bond in the flat, wherein none could eat and not care if the other was without food. So they cooked and we jointly ate from the same 'bowl', from the same dish, sometimes it was rice, sometimes 'couscous' and sometimes some other Senegalese recipe. On some occasions when I wasn't home and food was ready, they waited until I came back so that we could all eat. So we had this spirit of sharing which really helped me and they all knew my situation"

Many SSA immigrants believe that food is the least they can share with another person irrespective of the

other's condition, that is whether he or she is or not in need of food. Life experiences, especially experiences of difficult moments when somebody (in some cases strangers) offered their support without obligation in return characterized the solidarity amongst many SSA immigrants in the crisis -- the sharing of food with those who do not have. Apan noted that the Cameroonian family (Ndza) I interviewed always invited him for dinner at their home. I asked them about their food sharing behavior with fellow countrymen and the family head provided this explanation:

"I grew up with my uncle who welcomed me into his home and family when I was 11 years old and I lived with him until I turned 28. He was not obliged to take me in but he did with joy, and provided my every need as though I was one of his children He never mistreated me in anyway but gave me everything I needed whenever he could - food, accommodation and education. When I came over to Spain I had no relative or friend yet another person, a complete stranger gave me shelter, food and many other things for free. These persons I have referred to weren't obliged to be nice to me, they weren't obliged to be hospitable and caring but they did, it is my turn to show kindness and help others because I have been helped a lot in my life...you know a parable from my region in Cameroon says once food is ready, it is ready to be trashed; meaning that cooked food cannot be kept, once it gets into your mouth passes down your throat its taste is forgotten, so why not share it with another person?"

The behaviour of this Cameroonian family exemplifies sharing as a central identifying characteristic of African culture and that it entails all a person has, whether little or much. Many SSA always insist that a visitor to their home should drink or eat something; if the visitor doesn't then their host feels they have not been a good host. Moreover, in African society, men often sit around a table of food or drinks to share conversations, argue about politics, tease each other, exchange vital information, etc. They pointed out that they miss such gatherings here and that is why when they get the opportunity, they organize little meetings to share together what they have. The family believes that by sharing the little they have, God will give them more. Food sharing in SSA groups in Tarragona is not just recourse to mitigate immediate and unusual shortage of food supply for food insecure households or individuals, but also a characteristic of the culture of the group and a practice of given to others what you were once given.

3.3. Rational Use of Finances

[22] suggests that cost of food is one of the more flexible among household or individual expenditures, and one of the first to be cut in situations of reduction in or limited household disposal income. This was observed in many of the SSA immigrant families in this study; cuts in food costs are expressed as a logical, rational use of a limited household budget. Eating in restaurants is not a common practice in SSA immigrant families. The rare times SSA families eat out of home is on special occasions like their child's birthdays, when they go to the cheap 'fast food' restaurants like McDonalds and Burger King. One of the informant notes:

"I basically eat at home and what I eat at work is brought from home, I have a microwave at my office that I

use to heat the food I bring from home. Some few times I have bought bread at lunch from the supermarket nearby.”

The rational use of limited resources doesn't only help mitigate food insecurity, it helps reduce the harsh effects of the economic crisis on households' food consumption (both in terms of quality and quantity) as explained by the Cameroonian family:

“In my home, we cook sauces that can be consumed on two, three, four and five occasions. We eat tomato sauce that's cooked today (Sunday), the same tomato sauce can be consumed again on Tuesday, then on Friday. That said, in some houses this same quantity of food may be cooked and consumed on one occasion and a lot of what's left of it is subsequently trashed, so by rationing we have variety and manage better the little we have”

It was observed that the Cameroonian family did most of its cooking over the weekends; they did several dishes to be consumed during the week. Cooking is done by both spouses, they cook different kinds of sauces such as pistachio nut sauce - to be eaten with couscous during the week; tomato sauce - to be eaten with rice during the week; and a typical African dish (compliment) known as 'ndolé'^{viii} - to be eaten with couscous, cocoyam, rice or cassava. After cooking the different sauces, the couple then divides them into portions, according to the portions that will be consumed, storing those that will be consumed first in the fridge and those to be consumed last in the freezer. Some of the sauces (dishes) like 'ndolé' which is not cooked on a regular basis is often made in larger portions and can be consumed over a month. Cooking in large quantities then portioned for subsequent days avoid food waste, save time and is economical for the family. They compare what they spend on the meals they cook over the weekends to that consumed by an individual in a restaurant and note that it is far less.

4. Overview of SSA Immigrants' Nutritional Status

The general and theoretical objective of nutrition has always been to know the energy and nutrient needs and the actual dietary intake of the population or an individual; and use it as the basis for dietary planning and assessing nutritional status. The 24-hour diet recall method provided data of the nutrient and energy intake of SSA immigrants' meals. This information was compared with the RDAs for the Spanish population spelled out in the nutritional objectives of the country; and the degree to which they meet, exceed or fall below RDA is highlighted. Dietary intakes lower than RDAs does not imply dietary deficiency in an individual or group (for there is need for confirmation with a biochemical or clinical assessment); it suggests the probability of risk for deficiency - energy and nutrient intake in the individual or group [41]

Table 1. Anthropometric Data

	Women	Men	Total
Weight	64.55	80.45	73.3
Height	163.66	178.45	171.8
BMI (kg/m ²)	24.1	25.27	24.74

The SEEDO uses the BMI to define obesity risk, and classifies BMIs as follows: below 18.5 – underweight; 18.5-24.9 - normal weight; 25-26.9 – grade I overweight;

27-29 – grade II overweight (pre-obesity); 30-34.9 – type I obesity; 35-39.9 – type II obesity; 40-49.9 – type III obesity (morbid) and; 50 & above – Type I obesity (extreme). The BMI of SSA immigrant group as a whole is within the normal weight category of the SEEDO classification, meaning there is no risk of overweight or obesity in the group.

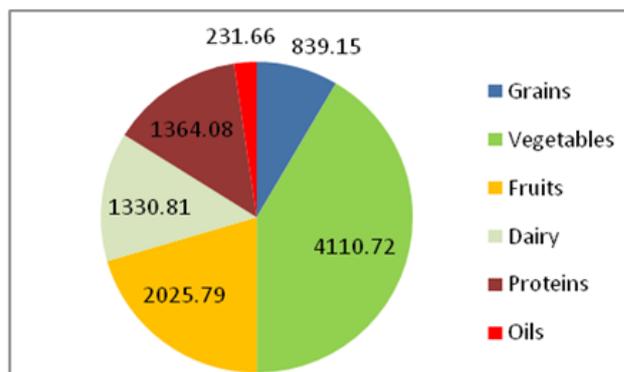


Figure 1. Dietary Intakes by Food Group (g/per/day)

SSA immigrants' dietary behaviour with regards to food groups exceeds the RDA of 400g of fruits/day for fruits and 300g of vegetables and legumes/day for the Spanish population. There is lower intake of dairy products, grains and oils in the group.

Table 2. Daily Energy and Nutrients Intake

		Eaten	Recommended*
Nutrients	Total Calories (kcal)	2512	2650
	Protein (g)	103.5	47.5
	Carbohydrate (g)	267.1	55
	Dietary Fiber (g)	30	27.5
	Total fats (% calories)	39.8	-
Vitamins	Vitamin A (µg RAE)	880.2	900
	Vitamin B6 (mg)	2.515	1.7
	Vitamin B12 (µg)	6.12	2
	Vitamin C (mg)	208.1	60
	Vitamin D (µg)	3.2	15
	Vitamin E (mg AT)	17.1	12
	Vitamin K (µg)	230.4	105
	Folate ((µg DFE)	576.15	400
	Thiamin (mg)	1.89	1.05
	Riboflavin (mg)	1.88	1.6
	Niacin (mg)	26.5	17.5
	Choline (mg)	379.55	≥30 - 175
	Minerals	Calcium (mg)	969.55
Potassium (mg)		3935.25	3500
Sodium (mg)		3710.3	≥30 - 175
Copper (µg)		2387.1	900
Iron (mg)		20.2	14
Magnesium (mg)		637.2	340
Phosphorus (mg)		637.2	700
Selenium (µg)		125.4	62.5
Zinc (mg)		16.25	15

*Mean, men and women as per the average age of the sample (31) and as indicated in the RDA Tables of the Nutritional Objectives of Spain.

The mean age of informants in this study is 31 years, and the recommended energy intake for the Spanish population for persons 20-39 is 3000kcal for men and 2300kcal for women. That is a mean energy/calorie intake of 2650kcal for this sample. SSA immigrants' calorie/energy intake is below the RDAs for the Spanish population. This

may be explained by the fact that many SSA (especially the men) do not eat breakfast, and energy intake from beverages other than water is low. Skipping breakfast is not associated to limited resources but to how important or less important it is to the day's meal. Many SSA immigrants don't consider breakfast an important meal of the day and generally don't have time to eat breakfast.

Daily fiber intake for the SSA group (30g/day) exceeds recommended allowances (27.5g/day) and that eaten by nationals (18.8g/day) [41]. Calcium (969.55mg/day) and phosphorus (637.2g/day) intake of the group do not meet the RDAs - 1000mg/day and 700mg/day respectively. Meanwhile dietary intake for potassium (3935.25mg/day) and sodium (3710.3mg/day) exceeded recommended allowances - 3500g/day and 30175g/day respectively. Also, Sodium/potassium ratio for the group (0.94) did not meet RDA of ≥ 1 . Although dietary intake for calcium and phosphorus minerals did not meet RDAs, the calcium/phosphorus ratio (1.52) does exceed the RDA (≥ 1). The proportion of sodium/potassium (0.94) does not meet recommended allowances of ≥ 1 .

Vitamin D is needed by our system so as to be able to absorb calcium; insufficient intake of vitamin D implies our system's inability to produce sufficient calcitriol and there will be low absorption of dietary calcium. A ratio of 800mg calcium/day and 5 μ g vitamin D (a value of 160) is recommended for men and women between 20 and 39 years. Calcium/vitamin D ratio of the sample (303) exceeds RDAs for the Spanish population. This means the group's intake of vitamin D is sufficient for the quantity of calcium it eats.

According to the nutritional objectives for Spain, a meal/diet is considered of good quality when the quantity of nutrients per energy unit (1000kcal) is high. With the exception of calcium (969.55mg), Vitamin E (17.1mg) and vitamin A (880.2) for which intake does not meet the RDA, protein intake (103.3g), iron (20.2mg), zinc (16.25mg), vitamin A (880.2 μ g), folate (576.15 μ g), vitamin C (208.1mg) and vitamin D (3.2 μ g) meet and exceed RDAs. This means SSA immigrants' dietary intakes are high in density and of good quality.

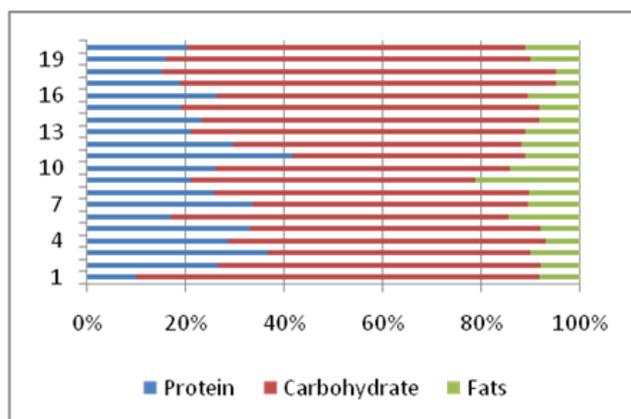


Figure 2. Energy contribution per food group to total energy contribution (% of Dietary Energy Intake) per day

The energy contribution per food group to total energy contribution, i.e. the relative caloric contribution is recommended to be between <30 and 35% fats, 10-15% proteins and 50-60% carbohydrate. Energy contribution from carbohydrate and proteins to total energy contribution is

within recommended allowances. Meanwhile energy contribution from fats (39.8%) to total energy contribution exceeds recommended allowances.

Table 3. Omega-3 Fatty Acids (g/day) / Omega-6s/Omega-3s Intake

	α -Linolenic Acid (g)	EPA + DHA (g)
Recommended	0.2-2	0.25
Average eaten/per	2.16	0.23
Omega-6/Omega-3		
Recommended	4/1-5/1	
Total Eaten	13.2/1	

The balance between omega-6 and omega-3 fatty acids is important for health and has often been associated with diseases like cancer, arthritis, depression, dementia and heart problems. Excess of omega-6s than omega-3s in the body is dangerous for health [42]. SSA immigrants' omega-3 fatty acids intakes exceed the RDAs for Spain. Intake for Eicosapentaenoic Acid (EPA) + Docosahexaenoic Acid (DHA) (0.23g/per/day) does not meet the RDAs (0.25g/per/day). The omega-6/omega-3 ratio for SSA immigrants is 13.2/1 – higher than that of the African population (mainly from Algeria, Morocco, Senegal, and Tunisia) in a study carried out in 2009 [41]. This may be the result of many highly processed omega-6s in most western societies, which excludes most of the original nutrients in the process. Although a clear challenge for those living in the western world, there is a clear need for both plant and animal-derived fats.

That for SSA immigrants in this study is higher (13.2/1); this can be explained by the fact that many omega-6s fatty acids in western countries are genetically and highly processed, excluding most of the original nutrients in the process. There is need for both plant and animal-derived fats, although it is clearly a challenge in western countries. Most nutritionists recommend a shift to more omega-3s and a reduction of omega-6s in diets. Also there is less vitamin A (880.2 μ g/day) and vitamin D intake (3.2 μ g), falling below the recommended allowance of 900 μ g and 15 μ g respectively.

5. Conclusions

Food practice is not strictly under the control of an individual or family; it is also a behavior conditioned by the sociocultural context in which it occurs. As [1,43,44,45] note, it is a behavior integrally linked to context and embedded in the flow of day-to-day life. The economic crisis that hit hard in Spain in 2008 has generated constraints, especially financial ones, from increased unemployment rates, limiting disposable income available to households and individuals. This has increased the percentage of the population at risk of poverty and social exclusion (AROPE) and changed the (food) purchasing and consumption habits of the population. Like many living in the Spanish territory, SSA immigrants are confronted with limited financial resources to manage to be able to put food on the table for themselves and their families. Now, the capacity to manage these limited resources in precarious conditions is essential for the household and individual, where food consumption critically influences the effects of the crisis. The past experiences with hardships (both economic and social) in their countries of origin as well as abroad

influence SSA immigrants' sociocultural practices in their new country. Building from their previous capacities, they put into practice strategies that employ new knowledge to mitigate the effects of food shortage resulting from financial constraints. As one of the informant notes:

"For those of us who come from a 'crisis situation', we know what crisis is...we know how to manage an economic crisis, we spend only on what is necessary and when it is necessary, if something isn't necessary we do not spend on it because if you do where else will you get money from? We don't have another source of income here, no father or mother who can support you. On the contrary we are supposed to send money back home and take care of our parents, our families."

SSA immigrants in a crisis stricken Tarragona province manifest an extended flow of contemplated and actual causal interventions to leverage the effects of the crisis on their food access, food practices and nutritional health. Those whom have experienced crisis situations before (in their countries or in their migratory trek to Europe) have knowledge how to manage precarious conditions. Their expenses are for things prioritized as necessary and are conscious of what for them remains a reality, that they came to 'the old continent' for a better life for themselves and their loved ones and that they have no other person, besides themselves, to support them. On this basis they are careful to use limited resources wisely, expressed in their food acquisition strategies, food-sharing practices and rational use of resources in food consumption as described above. Conscious of the realities in which they live, their fundamental purpose of migration, they call on their previous experiences with crisis, as a vital resource that they put to work to influence situations of immediate and unusual shortage of food supply.

Some studies have found a relationship between individuals experiencing food insufficiency/insecurity and lower energy intakes than those who reported food sufficiency/security [46,47,48,49]. Other studies found no difference in energy intake between individuals from food-insufficient and food sufficient-households [50,51]. No direct relationship has been observed between poverty, food insecurity and the dietary intakes of SSA immigrants in Tarragona province. The daily total energy and nutrients intake of the group meets recommended dietary allowances for the Spanish population. However, SSA immigrants' ways of accessing/purchasing food items which constitutes socioculturally acquired, rational use of resources, food sharing and consumption behaviours demonstrate their ability to interpret and mobilize an array of resources (cultural 'schema' / knowledge – both newly acquired and originally constituting their array) to act on constraining situations such as insufficient/insecure food; though they may not be in conventional or socially acceptable ways in the country.

SSA immigrants' diets/meals is still closely similar to that eaten their countries of origin; a diet/meal characterised by high intake of foods rich in complex carbohydrates, tubers (cassava, yam) little portions of protein animal foods, much vegetables and fruits [41]. However, this quality dietary behaviour may change with inverse effects on the nutritional status of SSA immigrants, if the current crisis persists and there is more job loss for the group.

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References

- [1] Delormier, T., Frohlich, K. L., and Potvin, L., "Food and eating as social practice--understanding eating patterns as social phenomena and implications for public health.," *Sociology of Health & Illness*, vol. 31, no. 2, p. 215-28, 2009.
- [2] Giddens A., *The Constitution of Society*, Berkeley: University of California Press, 1984.
- [3] Sewell Jr. W. H., "A theory of structure: duality, agency, and transformation," *American Journal of Sociology*, vol. 98, no. 1, pp. 1-29, 1992.
- [4] Giddens A., "Some new rules of sociological method," in *Contemporary sociological theory*, C. C. e. al., Ed., Malden, Blackwell publishing, 2007, pp. xii, 489.
- [5] Ellen Messer-Davidow., "Acting otherwise," in *Provoking agents: gender and agency in theory and practice*, J. K. Gardiner, Ed., University of Illinois Press, 1995, pp. 23-51.
- [6] Ahearn L. M., "Language and agency," *Annual Review of Anthropology*, vol. 30, no. 2, pp. 109-137, 2001.
- [7] Ortner S. B., "Power and Projects: Reflections on Agency," in *Anthropology and social theory: culture, power and the acting subject*, Durham, Duke university Press, 2006, p. 129-159.
- [8] Kockelman P., "Agency: The Relation between Meaning, Power, and Knowledge," *Current Anthropology*, vol. 48, no. 3, pp. 375-401, June 2007.
- [9] Duranti A., "Agency in Language," in *A Companion to Linguistic Anthropology*, A. Duranti, Ed., MA & Oxford, Wiley-Blackwell, 2004, pp. 449-473.
- [10] Carrasco-Garrido, P., De Miguel, A. G., Barrera, V. H., and Jiménez-García, R., "Health profiles, lifestyles and use of health resources by the immigrant population resident in Spain," *European Journal of Public Health*, vol. 17, no. 5, p. 503-507, 2007.
- [11] Acevedo P., *Las mujeres inmigrantes del Magreb y América Latina en la Comunidad de Madrid: características sociales y sanitarias*, Madrid: Universidad Autónoma de Madrid, 2004.
- [12] Instituto Nacional de Estadística, "Explotación Estadística del Padrón Municipal," INE, Madrid, 2015.
- [13] Carmen Delia, D. Q., and Beatriz González, L. V., "Crisis económica y salud," *Gac Sanit*, vol. 23, no. 4, pp. 261-265, 2009.
- [14] Instituto Nacional de Estadística, "Encuesta de población activa (EPA): Tasa de parados. 4º T 2013," INE, Madrid, 2014.
- [15] European Commission, "How does Spain compare?," OECD Employment Outlook, July 2013.
- [16] European Commission, "Long-term unemployment by sex, annual average," Eurostat, 2015.
- [17] European Commission, "Unemployment rate by sex and age groups, annual average," Eurostat, 2015.

- [18] European Commission, "At risk of poverty thresholds," Eurostat, 2014.
- [19] Instituto Nacional de Estadística, "Living conditions survey, 2014 data," INE, 2014.
- [20] R. a. A. J. Muñoz de Bustillo, "From rags to riches? Immigration and poverty in Spain," MPRA, 2009.
- [21] Colectivo IOÉ, "Impactos de la crisis sobre la población inmigrante en España," IMO, Madrid, 2012.
- [22] Martín Cerdeño V.J., "Treinta claves del mercado alimentario: pasado, presente y future," *Distribución y Consumo*, 2014.
- [23] Tarasuk V. S., "Household food insecurity with hunger is associated with women's food intakes, health and household circumstances," *The Journal of Nutrition*, vol. 131, no. 10, p. 2670-2676, Oct. 2001.
- [24] Gracia-Arnaiz M., "Faim dans le monde," in *Dictionnaire des cultures alimentaires*, J. Poulain, Ed., Presses Universitaires de France, 2012, pp. 541-555.
- [25] Rose D., "Economic Determinants and Dietary Consequences of Food Insecurity in the United States," *The Journal of Nutrition*, vol. 129, no. 2, pp. 517S-520S, Feb. 1999.
- [26] Tarasuk V. S., and Beaton G. H., "Women's dietary intakes in the context of household food insecurity," *The Journal of Nutrition*, vol. 129, no. 3, pp. 672-679, March 1999.
- [27] Dixon L. B., "Differences in Energy, Nutrient, and Food Intakes in a US Sample of Mexican-American Women and Men: Findings from the Third National Health and Nutrition Examination Survey, 1988-1994," *American Journal of Epidemiology*, vol. 152, no. 6, pp. 548-557, 2000.
- [28] Lee, J. S. and Frongillo, E. A. J., "Nutritional and health consequences are associated with food insecurity among U.S. elderly persons," *The Journal of Nutrition*, vol. 131, no. 5, p. 1503-1509, 2001.
- [29] Zizza, C. A., Duffy, P. A. and Gerrior, S. A., "Food insecurity is not associated with lower energy intakes," *Obesity*, vol. 16, no. 8, p. 1908-1913, Aug. 2008.
- [30] Melgar-Quinonez, H. R., Zubieta, A. C., Mknelly, B., Nteziyaremye, A., Gerardo, M. F. D. and Dunford, C., "Household Food Insecurity and Food Expenditure in Bolivia, Burkina Faso, and the Philippines," *The Journal of Nutrition*, vol. 136, no. 5, p. 1431-1437, 2006.
- [31] Hadley, C., Mulder, M. B. and Fitzherbert, E., "Seasonal food insecurity and perceived social support in rural Tanzania," *Public Health Nutrition*, vol. 10, no. 6, p. 544-551, 2007.
- [32] Knueppel, D., Demment, M. and Kaiser, L., "Validation of the Household Food Insecurity Access Scale in rural Tanzania," *Public Health Nutrition*, vol. 13, no. 3, p. 360-367, 2010.
- [33] Davies S., *Adaptable livelihoods: coping with food insecurity in the Malian Sahel*, New York: Macmillan Press, 1996, pp. , Macmillan Press, New York, 1996..
- [34] Nelson, D. and Finan, T., "Praying for drought: persistent vulnerability and the politics of patronage in Ceara, northeast Brazil," *American Anthropologist*, vol. 111, no. 3, p. 302-316, 2009.
- [35] Vásquez-León M., "Hispanic farmers and farmworkers: social networks, institutional exclusion, and climate vulnerability in southeastern Arizona," *American Anthropologist*, vol. 111, no. 3, p. 289-301, Sept 2009.
- [36] Radimer, K.L., Olson, C.M., Greene, J. C., Campbell, C.C. and Habicht, J-P., "Understanding hunger and developing indicators to assess it in women and children," *Journal of Nutrition Education*, vol. 24, no. 1, pp. 36S-45S, 1992.
- [37] Radimer, K. L., Olson, C. M. and Campbell, C. C., "Development of Indicators to Assess Hunger," *The Journal of Nutrition*, vol. 120, no. (11 supplement), p. 1544-1548, 1990.
- [38] Coleman Jensen, A., Nord, M., Andrews, M. and Carlson, S., "Household food security in the United States," Department of Agriculture, Economic Research Service, Washington DC, 2011.
- [39] Corbett J., "Famine and household coping strategies," *World Development*, vol. 16, no. 9, pp. 1099-1112, 1988..
- [40] Kerr R., "Informal labor and social relations in northern Malawi: the theoretical challenges and implications of ganyu labor for food security," *Rural Sociology*, vol. 70, no. 2, p. 167-187, 2005.
- [41] V. Moreiras, J. Torres, C. Vives, S. Pozo de la Calle and E. & T. Moreno, "Evaluación de patrones de consumo alimentario y factores relacionados en grupos de población emergentes: INMIGRANTES," Ministerio de Medio Ambiente y Medio Rural y Marino, Madrid, 2009.
- [42] R. O. Sanchez-Mejia, J. W. Newman, S. Toh, G.-Q. Yu, Y. Zhou, B. Halabisky, M. Cisse, K. Scearce-Levie, I. H. Cheng, L. Gan, J. J. Palop, J. V. Bonventre and L. and Mucke, "Phospholipase A2 reduction ameliorates cognitive deficits in a mouse model of Alzheimer's disease," *Nature Neuroscience*, vol. 11, no. 11, pp. 1311-1318, 2008.
- [43] Douglas M., *Food in the Social Order: Studies of Food and Festivities in Three American Communities*, New York: Russell Sage Foundation, 1984.
- [44] Mennell, S., Murcott, A. and Van, Otterloo A., *The Sociology of Food: Eating, Diet and Culture*, London: Sage, 1993..
- [45] Murcott A., "Social influences on food choice and dietary change: a sociological attitude," *Proceedings of the Nutrition Society*, vol. 54, no. 3, pp. 729-735, 1995.
- [46] T. V. a. B. GH., "Women dietary intakes in the context of household food insecurity," *The Journal of Nutrition*, vol. 129, no. 3, pp. 672-679, 1999.
- [47] R. D. a. O. V., "Nutrient intakes of individuals from food-insufficient households in the United States.," *American Journal of Public Health*, vol. 87, no. 12, pp. 1856-1861, 1997.
- [48] O. C. a. F. E. Kendall A, "Relationship of hunger and food insecurity to food availability and consumption," *Journal of the American Dietetic association*, vol. 96, no. 10, pp. 1019-1024, 1996.
- [49] a. B. P. Cristofar SP., "Dietary intakes and selected characteristics of women ages 19-50 years and their children ages 1-5 years by reported perception of food sufficiency.," *Journal of Nutrition Education*, vol. 24, no. 2, pp. 53-58, 1992.
- [50] W. M. a. R. K. Dixon LB., "Dietary intakes and serum nutrients between adults from food-insufficient and food-sufficient families: Third National Health and Nutrition Examination Survey, 1988-1994.," *The Journal of Nutrition*, vol. 131, no. 4, pp. 1232-1246, 2001.
- [51] D. P. a. G. S. Zizza CA., "Food insecurity Is not associated with lower energy intakes," *Obesity*, vol. 16, no. 8, pp. 1908-1913, 2008.
- [52] European Commission, "Long-term unemployment by sex, annual average," Eurostat, 2015.
- [53] A. Azcona, "Ingestas recomendadas de energía y nutrientes," in *Nutrición y dietética*, M. a. G. M. García-Arias, Ed., Universidad de León, 2003, pp. 27-44.

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ⁱⁱ "...The situated activities of social actors which happen in the flow of daily life or in context... Social practices are skillful procedures, methods or techniques that are appropriately performed by social agents." [2]

ⁱⁱⁱ Schemas are generalizable or transposable procedures applied in the enactment of social life ([3]:17).

^{iv} This is the probability of being unemployed for more than a year and indicates long-term unemployment in the percentage of unemployment.

^v At risk of poverty and/or social exclusion (i.e. AROPE) corresponds to the sum of persons who are: at risk of poverty (PAROP) or severely materially deprived (SMD) or living in households with very low work intensity (VLWI). At risk-of-poverty are persons with an equivalized disposable income below the risk-of-poverty threshold, which is set at 60% of the national median equivalized disposable income (after social transfers). Material deprivation covers indicators relating to economic strain and durables. Severely materially deprived persons have living conditions severely constrained by a lack of resources, they experience at least 4 out of the following 9 deprivation items: cannot afford - i) to pay rent or utility bills, ii) keep home adequately warm, iii) face unexpected expenses, iv) eat meat, fish or a protein equivalent every second day, v) a week holiday away from home, vi) a car, vii) a washing machine, viii) a color TV, or ix) a telephone. People living in households with very low work intensity are those aged 0- 59 living in households where the adults (aged 18-59) work less than 20% of their total work potential during the past year [18].

^{vi} Ministerio de Sanidad, Servicios Sociales e Igualdad (Spanish Ministry of Health, Social Services and Equality)

^{vii} An official document from the city council accrediting your residency in the city

^{viii} A typical Cameroonian dish consisting of a stew of nuts (groundnuts), indigenous West Africa bitter leaves and fish or beef. It may also contain shrimp or prawns.