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From hunger
to food insecurity:
technocracy and
sustainability

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INTRODUCTION

This paper is an anthropological contribution to a theoretical, conceptual, and methodological discussion of the concepts of food (in)security. The decision to focus on these concepts is related to their relationship with sustainability issues and also to the fact that they are of fundamental importance in the evaluation of the nutritional status and food situation of different individuals and populations. The fact that the notions of food (in)security are at present indispensable to conduct research on issues such as *adequate food*, satisfaction, or deprivation of food, also justifies the attention devoted to it in this text. Moreover, the circumstance that the concepts of food (in)security give rise to relevant studies, arguments, and narratives that are used by different actors (intergovernmental structures, governments, industry, farmers, populations...), for purposes not always convergent, is another reason to pay attention to this topic. Taking also into account that food (in)security assessments mostly produced by experts are at the origin of programmes and measures through which public policies are implemented, the attention to these concepts is justified even more. Key concepts in the construction of discourses on food scarcity, production, and quality, which are drawn up by the United Nations, states, and other actors, are appropriated by different entities and can be used in different ways. They may appear, for example, to support political positions about forms of agriculture that are mainly focused on the quantity of foods produced and on intensive and extensive forms of agricultural production than on the protection of small farmers. These concepts are not neutral, neither in their uses nor in the way in which they are conceptualized, thus requiring continuous scrutiny.

What is proposed here is a contribution to a debate on how these concepts have been established, redefined, and transformed into evaluation tools. I will go into this discussion bearing in mind the way in which they have evolved and acquired new meanings, not looking for a literature review but, above all, a critical reading that allows us to establish dialogues between Anthropology and the specific uses and understandings that are made of the notions of food (in)security. In the final part of this paper, I will discuss how these notions can be instrumentalised, resorting to the fieldwork I conducted in 2016 in Nampula, Mozambique, related to a school feeding pilot project. The reference to this research will have a more illustrative value than a detailed presentation. Through it I will seek to refer to the discussion on how the notions of food

security/insecurity can be seen as instrumental in implementing food aid programmes and development projects. These projects are doubtful in terms of sustainability, because they often involve deep changes in the agricultural landscape.

As Truninger and Díaz-Méndez (2017) point out, the literature on food security has been very marked by production issues, that is, mainly focused on the quantity of food produced. Although the existence of sufficient food does not in itself mean that food security is ensured, the fact is that the association between food security and the quantity of food produced has become a constant. Thus, in a context that is projecting a significant increase in the global population, concern about the possibility of lack of resources has led to a strong focus on increasing agricultural production. This concern also serves to justify, in some cases, the presentation and development of agricultural projects that are debatable in terms of sustainability. This is the case of the PROSAVANA project (Mozambique), which I will refer to in the final part of this work. With the justification of increasing production and combating food insecurity, a type of intervention (large-scale intensive farming) is proposed that will be difficult to complete without resettlement and without problems for small farmers.

Food insecurity confronts us in this way with diverse and sometimes contradictory questions. While it evokes humanitarian security and refers to the eradication of hunger, which is one of the sustainable development goals (SDGs), it is also often and paradoxically the pretext for unsustainable forms of exploitation, from both an environmental and social point of view.¹ We must therefore be attentive to the way in which the concept of food insecurity is used, since it can serve the predatory aims of certain forms of agricultural investment or certain forms of political action, just as it can be an important resource through which social problems are combated. The classification of a context as critical in terms of food security creates conditions for the development of specific action programmes, and opens the doors to the entry of several agents, be they state officials, intergovernmental agencies, non-governmental organizations, or agribusiness. Such classifications may not be neutral and the possibility of making an instrumental use of the concept of food insecurity is not negligible. Particular vigilance on this concept, by those who focus in depth on this topic, is therefore recommended.

1 United Nations – General Assembly (2015).

The debate on sustainable development has led the United Nations to define goals (SDGs) that suggest contradictions and difficulties of conciliation. Goal 2: “End hunger, achieve food security and improved nutrition and promote sustainable agriculture” is an example of what is claimed, as food insecurity is one of the recurring arguments justifying the existence of crops with GMOs (genetically modified organisms) or crops with higher productivity. To harmonize the eradication of hunger with “sustainable consumption and production patterns” (goal 12), while pursuing economic growth (goal 8), suggests the same perplexity. Redclift (2005) gave a good account of many of the paradoxes that sustainability can take. Environmental and social goals are indeed often divergent. Intending to assign a neutral burden to the notion of sustainability, linking it to global security, environmental justice, or rights of nature, which should be seen as human rights, distracts from political action and the worldview followed by different orientations and political organizations. The concepts sometimes have long routes until they become instruments of action on the world, and efforts in their objectification or neutralization do not necessarily correspond to truly objective and impartial uses. The discussion on the notions of food (in)security, which I will focus on below, will seek to critically analyse the construction of these concepts, seeking to demonstrate how their re-elaboration affects the understanding of the world. More than a review of the literature, the historical perspective that will be presented here should be seen as a condition to discuss the forms that the concepts assume and how they support a worldview.

FROM HUNGER TO FOOD INSECURITY

The opening of a discussion on the concept of food insecurity is, in the context of this work, an unavoidable procedure, not only because this concept is the source of considerable measures and public policies, but also because this notion has become for both experts and politicians the epicentre from which the intense and obstinate relationship of individuals with food is set. If in the past *hunger* served to classify extreme states of food deprivation, creating states and processes easily recognizable in the social imaginary, today *hunger* is the subject of a judgment and technical treatment that refers to a specific gradual scale, defined by *experts*, which turns it into a potentially closed field in which only *experts* seem to gather conditions for effective participation.

The quest for rigour and operationalization of the notions of food (in)security to allow its presentation in statistical data gave rise to classifications ranging from mild to moderate or severe, chronic or transitory food insecurity (Lopes and Torres 2017a), and from hunger to chronic or acute malnutrition. These dimensions are constructed in a way that can result in quantitative data.

As the result of a conceptualization with the intent of statistical neutrality and operationality, the notion of *hunger* has thus become more complex and asserted itself as being only diagnosable by *experts*. More than two decades ago Radimer, Olson and Campbell (1990) had already reported on the need to measure hunger. These authors said that most of the documentation on hunger, then available, did not explicitly define what *hunger* was, and that those definitions could be related to situations as disparate as the physical sensation of hunger, the interruption in the provision of certain types of food, poor food quality, etc., so that other ways of identifying *hunger* needed to be found (Radimer et al. 1990, 1544). It would therefore be necessary to find instruments and concepts for a more rigorous measurement. They created a questionnaire with adaptations and modifications according to social and cultural contexts that is often used today (Lopes and Torres 2017a). Reiterating that the notion of food insecurity was very flexible and not very strict, Maxwell and Smith (1992) also point to the existence of some 200 definitions of food insecurity in published documents. This reality implied that at the beginning of each publication there was always a need to explain what was meant by food (in)security, so consequently there has been an effort to define this concept more precisely. The evolution in conceptual terms allowed the concept of food security to become a more technocratic and operational concept that could be used in the definition of public policies.

The search for objectivity led to such a complex set of calculations, for such technicity, that a closure was introduced. It is, I believe, this closure that needs to be analysed. First, and *in extremis*, this closure may induce an exclusionary effect, since common citizens, even if advised, can only classify the world in a fruitless way, that is to say, without practical implications, insofar as they feel they do not have *rigorous instruments* of observation and classification. As citizens, and even when being involved, they can rely on only *experts* when it comes to the arduous task of establishing diagnoses of reality that are supposed to lead to *good policies*. Still in the same line of thought, we can think of this situation as capable of leading to forms of alienation from reality, even if only partially, since it ceases to be perceptible through its *unprepared*

view, and is attainable only through the view and diagnosis of others. At this level we are therefore confronted with an epistemological problem which, by inviting us to inquire about the *conditions of the possibility* of different forms of knowledge and the use made of it, questions us about how the construction of scientific knowledge can remove the subject from the world. Hence, an unanswered question arises: can this effect of withdrawal, whether it corresponds to a deliberate act or not, be combined with the imposition of a world view grounded on a form of knowledge called scientific, but which at the same time never ceases to be a *narrative* about the world? Getting back to the example - the notion of food insecurity - it is worth thinking about how the dense construction of this concept can lead to the removal and exclusion of less specialized views on issues and problems that are a determining factor in the lives of ordinary citizens, and in that sense, an object of restlessness and interpellation.

The closure to which I have alluded, exposing a technocracy that admits only *experts*, is also a source of uneasiness for a second reason: it not only excludes laymen, but also tends to remove subjects such as History, Geography, Sociology, and Anthropology, among others, from their *field of action*, which may be silenced, if not excluded, by the mathematical work with which devout economists add pertinent and indispensable variables to the construction of concepts such as food security, even though they have a long intellectual and scientific tradition of description and analysis of problems related to food deprivation. As an example, consider the prevalence of quantitative approaches over qualitative approaches, even when the nature of the subject matter would suggest otherwise. This is the case with the application of quantitative analyses based on questionnaire surveys for the study of food security levels in household consumption, when a predominantly qualitative research would be advised, considering the variability according to gender, age, symbolic value of the food, place of consumption, number of meals, and other conditions that influence these same consumptions (Contreras and Gracia 2005).

It is not intended, of course, to undermine quantitative methodologies nor to doubt the accuracy and adequacy of the information collected or to underestimate the importance of statistical data. However, there are good reasons to suggest that the assessment of food insecurity would benefit from the possibility of making the use of direct and/or participant observation more consistent and frequent, even if just in case studies, in combination with other approaches. Mixed methodological strategies that articulate qualitative

research with quantitative research, such as that undertaken by Truninger et al. (2015), allow for a more weighted and less *closed* view of reality.

Furthermore, regarding a more global and epistemological discussion, it is necessary to mention another concern, which is related to the emphasis that has been placed on the *securitization* and how this topic fills the international agenda. This has become *par excellence* the way of addressing a wide range of problems: human security, environmental security, energy security. Food security is therefore part of this vacancy we currently live in, where a notion of *risk* prevails as a category involved in all human activity. In this case, the definition of human security has now been included amongst the components from which the notion of food security (UNDP 1994) should be assessed.

STUDIES ON *HUNGER*

The use that Audrey Richards (1932; 1995 [1939]), anthropologist, pioneer in the study of food in southern Africa, made of the term *hunger* would today be inaccurate, at least in the light of the developments on how to measure food deprivation. Nevertheless, her descriptions and analyses are an important milestone in the history of the Anthropology of food. Although she used specific techniques for analysing nutritional status, such as food weighing (Richards 1995, 178-183), and having E.R. Widdowson's collaboration in the field of biochemistry to write about nutritional aspects of the Bemba diet (Richards and Widdowson 1936), some of the most important aspects of her analysis, such as the claim that the relationships established from food were among the most significant cohesive forces of *communities* she observed, or the argument about the idea that hunger, appetite, nourishment, and taste are conditioned by cultural practices and not reduced to mere biological instincts, derive from an intense observation that has not been strictly confined to the quantification of the ingested food. This last dimension is indeed presented by Richards in *Land, Labour and Diet in Northern Rhodesia* (1995 [1939]), as having been made with some difficulties in data recollection, despite the fieldwork carried out between January and July 1933.

Richards (1995 [1939]) tells us that it was impossible for her to weigh and measure the food consumed by some families which she had visited throughout the year and which had been relevant for the evaluation given the seasonal variation in food consumption (Richards 1995, viii). Having

pointed out such difficulties, despite all the fieldwork, it does not seem abusive to suppose, even if the due time distance between the implementation of these studies and the sophistication in which surveys of food consumption are currently made is taken into account, that the information resulting from this type of questionnaire does not avoid significant omissions.² Although the exact figures create the illusion of objectivity, and even if there are efforts to introduce more and more rigorous forms of assessment, there are good reasons not to dismiss a more qualitative approach, combining different techniques of data collection.

Audrey Richards (1995 [1939]) also tells us that despite the simple way in which she collected the elements of food consumption for a nutritional analysis (1995, ix), the fieldwork developed amongst the Bemba in 1933 revealed some of the difficulties of observation and evaluation focused on consumption in the domestic unit. Richards (1995, ix) tells us that variations in food, according to the seasons, the amount of food eaten between meals and outside the domestic unit (for example, wild fruits) and hospitality issues, which implicate the sharing of meals, were some of the aspects that influenced the evaluations focused on the domestic unit.

Contreras and Gracia (2005), whose examples are geographically and temporally less distant than the studies done by Richards, also draw attention to this concern when addressing the methodological issues created by techniques such as the questionnaire survey, in which the domestic unit is taken as the food consumption unit. The example that they use from the Spanish surveys on food consumption allows them to present the limitations of this type of procedure.³ It also allows them to refer to other shortcomings, such as those relating to the categories used to classify food (which are excessively generic, not accounting for new products entering the market) or the identification of purchased food with consumed food (Contreras and Gracia 2005, 173). Beyond these aspects, the authors also point out the discrepancy that often occurs between discourses and eating habits. Not every individual remembers exactly what he/she consumed last week.⁴ The difficulty in clearly identifying

2 De Garine (1980) also emphasized the fact that generalizations from questionnaire responses are mainly a response to the discourses generated by these questionnaires.

3 Ministerio de Agricultura, Pesca y Alimentación. 2004. *La alimentación en España 2002*. Madrid.

4 In the *Inquérito Alimentar Nacional e de Atividade Física* (Lopes and Torres 2017b), respondents were asked in the questions on food choices to think about a typical week within the last 12 months.

the consumed food can thus be a bias factor. Consequently, it is advisable to minimize this type of effect with the use of intensive qualitative approaches.

Going back to Audrey Richards and the context in which she accomplished her work *Land, Labour and Diet in Northern Rhodesia* (Richards 1995 [1939]) and since this research was developed from the need to analyse the nutritional problems in the British colonial territories (a question that Britain decided to pay more attention to from the 1930s on), and having emerged from the creation of a Commission on Diet, composed by anthropologists and nutritionists, designated by the International African Institute, this work sought to show how anthropologists could contribute to the study of nutrition in African societies. Within a more general context, which we are interested in highlighting here in order to analyse the notion of food insecurity, this research must be seen in the light of the concern with studies on nutrition and health, which began to be well-evidenced between the wars, and later on, after World War II.

John Boyd Orr (1936), a physician and scientist with research in nutrition, authored the important study – *Food, Health and Income* (Orr 1936) – in which he identified the nutritional problems of food consumption among the British.⁵ Having participated in the definition of the system of food rationing instituted in Great Britain during World War II, he believed that the solution to the problem of hunger could be solved by transferring food surpluses to the areas where people were deprived of them.⁶ He presented his proposal at the League of Nations, but it was not successful at that point. Nonetheless the proposal was relevant to put policy actions on nutrition on an international level.

These concerns about nutrition have created a legacy that extends to Anthropology, as we have already seen in the works of Audrey Richards (1995). Volume number 9 of the journal *Africa* (AAVV 1936) is also dedicated to the theme “Problems of African native diet”. Its introductory text by Boyd Orr introduces this topic. It refers to the importance of the development of native agriculture in ensuring adequate nutrition for populations whose

5 In his view, these problems were largely related to the fact that the consumption of foods of higher nutritional value (milk, meat, fish, and vegetables) depended on income, which consequently showed a reduced consumption of these types of food among the poorest.

6 Boyd Orr was the first director general of the FAO (1945-1948) and was awarded the Nobel Peace Prize in 1949, a distinction for his effort to eliminate famine in the world.

livelihoods were changing and who were increasingly aware of the demands of intense and continuous work.⁷ In this journal it becomes clear that the nutritional question, which is not reduced to the choice of adequate food, requires the dedicated attention of Anthropology and its practitioners. Richards, as well as other authors such as Fortes and Fortes (1936), gives us an account of the importance of a careful analysis of biological and sociological aspects in the study of nutritional issues.⁸ The emphasis placed by Richards on the social, cultural, and symbolic dimension of food, and the importance attached to “studies in the community”, stress the absolute need for an ethnographic observation.

The relevance of an in-depth observation, using a more ethnographic work to assess levels of food security is, however, ignored or underestimated today. When reading reports that are reference documents for action in this field, such as the ones the Food and Agriculture Organization (FAO) writes to describe food insecurity in the world, it is not common to find descriptions containing contributions that only a more intensive and continuous analysis, such as those derived from ethnographic approaches, could provide (FAO and IFAD 2015). The same is true of other large surveys that are a reference point from which policy instruments can be defined and measures taken on food issues. The *Inquérito Alimentar Nacional e de Atividade Física IAN-AF 2015-2016* (Lopes and Torres 2017a), which is closer to our reality, is an example of what is claimed.⁹ There is in fact a set of procedures that favour records that can be easily converted into numbers, which leaves out significant dimensions in the analysis of food issues.

Before dealing with aspects such as the potential instrumentalization of the concept of food security and how this can lead to unsustainable practices, it is worth looking at the historical course of this notion.

7 Domingos (2016) also highlights the importance attributed to the relationship between diet and work in the context of the Portuguese Empire and in situations of effective colonial occupation, referring to the way in which it was articulated with purposes of labour exploitation.

8 The term nutrition is used by Richards comprehensively, not exclusively concerning nutritional aspects. The word *food* would now be more appropriate, since it can include not only the nutritional aspects but also the social/ cultural/ economic and symbolic dimensions.

9 *National Food and Physical Activity Survey IAN-AF 2015-2016*.

THE UNSUSTAINABLE NATURE OF FOOD INSECURITY

According to John Shaw (2007), who refers to the writings of Orr from the early 1930s and within the framework of the League of Nations, Yugoslavia had pointed out the need to gather information on the state of food in the main countries of the world. According to Shaw (2007, 6), the report that emerged from this concern gave origin to the concept of food insecurity and became the first alert to the problem in terms of international politics. The accepted notion of food security is therefore, as a concept, the result of a discussion process that dates back to the 1930s and became more effective in the United Nations (UN) since the 1970s, when identification of a global food crisis and the desire to overcome it led to an intensification of the international debate on the availability of basic foodstuffs such as cereals and their price stability (UN 1975).

The world food market and its way of operating were pointed out as having triggered the food crisis, which brought up the search for transformations. There was yet another perplexity: although the Green Revolution was seen as a technological success, this success did not translate into a reduction of poverty and malnutrition (FAO 2003, 26). The World Food Conference in 1974 suggested in this context the need to build a system of food security (UN 1975) that could provide food for all. The discussions generated on this issue led to the first formulations on food security: “availability at all times of adequate food supplies of basic foodstuffs to sustain a steady expansion of food consumption and to offset fluctuations in production and prices” (UN 1975).

In 1983, and following the work of Amartya Sen (1981), the idea was dismissed that food availability would be sufficient for food security to exist. In fact, food could be available but people would not be able to access it, either because the price did not allow its acquisition or due to the lack of means, such as transportation, to obtain it. The concept then went on to include the notion of secure access by vulnerable populations: “ensuring that all people have both physical and economic access to the basic food that they need”. In 1986, the World Bank’s *Poverty and Hunger* report (World Bank 1986) would add to this conceptualization the distinction between chronic and transitory food insecurity, which is relevant when addressing situations of need and structural poverty. Thus, and in a nutshell, one would arrive at the following notion of food security: “access of all people at all times to enough food for an

active, healthy life” (FAO 2003). In the mid-1990s, the notion was broadened to include aspects such as safety (in the sense of healthy food), balance (nutritious food), and adequacy (culturally and socially appropriate food).

In November 1996 the notion of food security currently used was presented at the Rome Summit: “Food security, at the individual, household, national, regional and global levels [is achieved] when all people at all times have physical and economic access to sufficient, safe and nutritious food to meet their dietary needs and food preferences for an active and healthy life” (FAO 1996). This redefinition gave importance to the most vulnerable and their access to food. In 2002, FAO would refine this notion a bit further: “Food security [is] a situation that exists when all people at all times have physical, social and economic access to sufficient, safe and nutritious food that meets their dietary needs and food preferences for an active and healthy life” (FAO 2003, 27). Thus, elements of another nature, such as those that could result from social and cultural dimensions associated with food consumption (gender, religion, food taboos), were considered in the concept.¹⁰ The notion resulting from this process was therefore *negotiated and established* with the participation of various social, political, and economic agents and became subject to a significant apparatus in terms of governance, both in the United Nations and at national level, which turns into an important dimension when it comes to justify actions and programmes.

The notion of food security arrived at in 1996 implied four dimensions that were fundamental to evaluate this condition: *availability* (availability of adequate food in sufficient quantity); *access*, evaluated in physical terms (logistics), economic terms (financial capacity for acquisition), and social terms (gender, religion...); *utilization* (safe and nutritious food as well as clean water, sanitation, and health care); and *stability* (situation regarding continuity in the availability of food). It is worth noting that some dimensions of the concept have been emphasized so that in various circumstances the notion of food (in)security is not adopted *tout court*, but instead the notion of food and nutritional (in)security, emphasizing the importance of the question of nutrition and the biochemical quality of foods, since it was not enough to have sufficient food, but also nutritious food.

10 To this condition, other entities such as the Economic Research Service – United States Department of Agriculture later added elements such as the importance of obtaining food that was acquired through “socially acceptable means” (Lopes and Torres 2017b).

The integral dimensions of the concept of food security did not allow for all aspects of the definition presented, such as food preferences, to be assessed, but were taken as a way of objectifying a concept and of making it operational. To fulfil this purpose, the question of this condition is now made through the concept of food insecurity, a condition that can be observed in situations where there is no satisfaction of the above-mentioned dimensions: when “some people do not have access to sufficient quantities of safe and nutritious food and hence do not consume the food that they need to grow normally and conduct an active and healthy life” (Simon 2012, 8). The task of defining indicators that could accurately measure each of the dimensions of food insecurity became a laborious scientific work, aiming at results that could be recognized as valid. The assessment of food insecurity and its degrees (mild, moderate, severe) would also be made by reference to the household, a unit that in surveys carried out in Portugal was considered as corresponding to the family living in a house. As mentioned above, the composition of this unit is variable according to different social contexts, and the household may not coincide with the residents in the domestic space, a factor that should require some attention and that can be better understood when using qualitative approaches. On the other hand, individuals who are not integrated in this type of unit or who are not institutionalized, such as many of the homeless, are invisible in this type of inquiry.

There have been many specific proposals on how food insecurity should be assessed. As mentioned above, one of the most successful modalities among us was the Radimer et al.'s (1990) questionnaire survey, which was used by the Economic Research Service of the US Department of Agriculture and recently applied, with adaptations, in the *National Food and Physical Activity Survey IAN-AF 2015-2016*, carried out in Portugal (Lopes and Torres 2017c).¹¹ Pessanha et al. (2008) report five methods that analyse food (in) security: FAO method; household budget surveys; surveys of individual food intake; anthropometric research; food insecurity and hunger perception surveys (Pessanha, Vannier-Santos and Mitchell 2008). It is not relevant in this context to explore each of these methods; their reference only serves to illustrate the diversity of guidelines on how to measure food security, each

11 As reported by Lopes and Torres (2017c, 40): “this survey was widely applied in the evaluation and monitoring of public food assistance programmes in the US and other countries [...] adapted for Portugal by Sofia Guiomar of the National Institute Dr. Ricardo Jorge, in cooperation with Marck Nord of the Economic Research Service of the United States Department of Agriculture.”

with its advantages and disadvantages. The important thing is to underline the idea that social regulation policies implemented from the observation of food insecurity may serve specific actors, according to their specific interests, such as those that justify their action (intensive agricultural production) in combating food insecurity.

Going back to methodological issues, let us see how the methodology used by FAO – relevant for the agency's support for agricultural and food programmes in Africa – made the definition of the amount of calories consumed *per capita* in a country the main reference for identifying situations of food insecurity. Calories consumed are estimated by analysing the food balance (average of three years) and household budget information. It is the average caloric intake, determined from family budgets, that allows determining if the minimum caloric value considered adequate is being assured. Thus, national information concerning production, import, export, and stocks is expected to be accurate and used to make estimations for each country (Pessanha et al. 2008). However, if this method has the advantage of easily allowing international comparison, it also has the disadvantage, as defended by Pessanha et al. (2008), of reliance on information about production that can be very imprecise. It is to believe that in countries such as Mozambique, where, as I mentioned before, I carried out fieldwork in 2016 (Nampula), and where the rationalization and effectiveness of the information collection services still raises some problems, this type of imprecision is to be found in a significant way. On the other hand, the FAO method makes it possible to assess the availability of food but not aspects related to its access or its nutritional qualities. In addition to these difficulties, this methodology does not allow identifying the families and individuals who are in a situation of food insecurity. Recently, FAO (FAO 2017) began using a new methodology - Food Insecurity Experience Scale (FIES) – to measure food insecurity by sampling this dimension. Through eight direct questions related to the experience of the people it thus obtained information that previously was not collected. This methodology of analysis, based on Item Response Theory (IRT), uses a psychometric model - Rasch model - and gives us more information about the accessibility to food. However, many of the problems observed continue to persist.

It is with these limitations that the FAO annually produces reports on food insecurity in the world. It is understandable that poorer countries are interested in food assistance and agricultural development programmes, and it is likely that they will find some advantage in declaring high levels of

food insecurity. It is also legitimate to believe that the agri-food sector sees business opportunities in contexts declared to be subject to food insecurity. There is then a set of concerns and even perplexities that forces us to think about the concept of food security, at least in order to prevent it from being easily manipulated, susceptible of exploitation, and ultimately a gateway to unsustainable agricultural projects.

PROSAVANA AND NATIONAL SCHOOL FEEDING PROGRAMME IN MOZAMBIQUE

One of the fundamental goals of Mozambican agrarian policy - achieving food and nutrition security - has been identified and addressed by various agents and projects (Vunjanhe and Adriano 2015). In fact, food and nutrition security is evoked to justify development projects and new forms of land use and exploitation.¹² Projects such as PROSAVANA and corporations such as the *Mozambique Agricultural Corporation* (MOZACO) are examples of these projects and agents.¹³ Both PROSAVANA and MOZACO have been denounced as land encroachers by various entities, such as the *União Nacional de Camponeses* (UNAC) and the *Acção Académica para o Desenvolvimento das Comunidades Rurais* (ADECURU). This last association repudiated the occupation of land in the district of Malema (Nampula) by MOZACO, which sought to produce soybeans there, highlighting the demands made by small farmers to reclaim the lands they once cultivated and that were later occupied (ADECURU 2015). According to ADECURU, MOZACO (presented as part of the New Alliance for Food and Nutrition Security in Africa) would target land occupation for agribusiness, leaving families of former farmers in distress.¹⁴ Moreover,

12 Concerning agrarian policy, see *Plano Estratégico para o Desenvolvimento do Sector Agrário 2011-2020* (MINAG 2011).

13 PROSAVANA is a Trilateral Project between Mozambique, Brazil, and Japan with the alleged purpose of developing agriculture in the Nacala corridor and thus contribute to reducing food insecurity. It was signed in 2009 but only officially launched in 2011. MOZACO is the result of a joint venture between Rio Forte, part of the Espírito Santo group of Portugal and the Mozambican group of Portuguese origin João Ferreira dos Santos (JFS) (Vunjanhe and Adriano 2015). Meanwhile, in 2014, Rio Forte was declared insolvent by the Luxembourg Court of Appeal.

14 The New Alliance for Food and Nutrition Security was launched in 2009 at the G8 Summit (L'Aquila - Italy) and was actually founded in 2012. Under the auspices of the G8 and against »

the New Alliance is viewed with mistrust (Vunjanhe and Adriano 2015), as some critics say that its ultimate goal is not to reduce hunger and poverty in countries like Mozambique, but rather to create a favourable environment for the entry of large corporations through the simplification of land use, review of national seed policy, the revision of environmental prohibitions, fiscal policy, etc. More than seeking to respond to local needs, it would be designed to increase world food production and favour private investment. The food price crisis (2008-10), associated with the crisis of the financial systems of 2008, seems to have been an excuse for significant transformations, favouring private initiative.

In March 2016, in the course of fieldwork in Nampula, accompanied by a representative of the UNAC, I heard the words of discontent from members of the *Nakhitto* community regarding resettlement they had been targeted for in Iapala, district of Ribaué (Nampula). At the time, we could observe a signaling panel of an exploitation attributed to *Mathária Empreendimentos*, indicating a right of use of that land looked at with distrust. For UNAC, *Mathária Empreendimentos* was an agribusiness company with an interest in soybean production, financed through the PROSAVANA Development Initiative Fund, and thus a threat to small farmers. Talking to the community, we had the opportunity to hear complaints and requests for help from their representatives, a request for help in recovering the lands they had previously cultivated, which was already presented to the provincial authorities in Nampula. The new user of the land – identified as being the son of a former Portuguese settler who had been the owner of those lands – had acquired a Land-Use Right (*Direito de Aproveitamento e Uso da Terra* [DUAT]) – thus leading to resettlement of the population. The displaced population expressed great dissatisfaction with the new lands that had been assigned to them as being infertile, and thus not allowing them to grow enough food for their children. Translating the statements of the community members from Macua to Portuguese, the UNAC representative said:

They are hungry and ask for help from all who can hear them. They say that the new land is very sandy, which heats up a lot and burns the product [cassava]. The area is poor...

► the backdrop of the global food price crisis (2008-2010), the New Alliance for Food and Nutrition Security in Africa was also established in 2012, to improve food and nutrition security. This alliance was agreed upon by ten African states (including the Republic of Mozambique), transnational corporations, and multilateral financial institutions.

nothing grows! No maize, no cassava... nothing grows! Still they tried to cultivate in the ancient lands but they were expelled and threatened by the authorities. They had no compensation [for resettlement] and even the graveyard, where the grandparents and great-grandparents were buried, was occupied. We are nothing.

These cases allow us to reinforce the idea that the use of the concepts of food (in)security to justify new projects and farm enterprises does not mean that food and nutrition security will be achieved. In the last example presented, according to the description of the peasants, the resettlement generated more hunger than the situation that existed previously. In any case, a strict evaluation of the food (in)security of the population, which cannot be expressed in numbers only, would require the use of qualitative techniques of research, including direct and/or participant observation.

It is, therefore, in a scenario of contestation of big projects that will lead to the availability of land for agribusiness and the loss of land by farmers that we must look at the National School Feeding Programme – *Programma Nacional de Alimentação Escolar* (PRONAE). This programme – presented by the Mozambican Ministry of Education and Human Development (*Ministério da Educação e Desenvolvimento Humano* [MINED]) as innovative in relation to the more recent past, and presenting as a general goal the reduction, in a sustainable way, of the negative impact that food and nutritional insecurity cause in the education sector – is, in this context, an example to be explored in articulation with the arguments presented. With the support of the *World Food Programme* (WFP) during its pilot phase, this programme sought to implement a new model for school feeding management. It was implemented in different Mozambican provinces in a relatively restricted number of schools (12) and gave primacy to the food distribution focused on local food production and eating habits, and to food purchases made from farmers of the region instead of through food assistance entities from outside the country. It is argued that this latter type of aid, seen as a form of welfare and incapable of reversing historical relations of dependence, should give rise to actions capable of valuing local resources and promoting the involvement of local populations.

An important part in the framework of this pilot project, which results from the cooperation established between Mozambique, Brazil, and the WFP since 2010, is the *Memorandum of Understanding between the Government of Mozambique*, represented by the MINED, and *The United Nations World Food*

Programme (WFP) on the Transfer of Funds for the Acquisition of Food and Non-Food Goods under Cooperation Agreement BRA/04/044 (Memorandum). This document, which established the cooperation between these entities, dates from 2015, and follows an earlier project from 2010, which already mentioned this cooperation. The partnership established previously between the Mozambican government (through MINED), Brazil (through the National Fund for the Development of Education (FNDE), the Brazilian Cooperation Agency [ABC]), and PMA, gives an account of the political activity of international articulation built around PRONAE. The pilot project, which began to be formalized in 2012, was therefore part of the South-South cooperation with Brazil to support the Mozambican National School Feeding Programme.¹⁵ In order to establish itself externally as a reference country in matters related to public policies to eradicate hunger and poverty, Brazil would also evoke its experience and special expertise in this field. It would thus assume, in the Mozambican context, but not only there, a very active role in the implementation of programmes in which food insecurity emerges as an important reference (Santarelli 2015).

I decided to carry out empirical work in the Nampula province between February and April 2016 to better understand the application of PRONAE's pilot project, and to find elements that would allow me to relate this programme to specific guidelines defined by the Food and Agriculture Organization (FAO) and the WFP on food security. In this province it was possible to find four Complete Primary Schools (EPC) that were covered by PRONAE: the EPC of Iapala – District of Ribáue; the EPC of Niapala – Rapale District; the EPC of Muecate – Muecate District; and the EPC of Muualo – Mossuril District. However, contact with the schools did not allow me to observe the implementation of the programme, because in April the schools had not received any amount of support from the WFP. It was only possible to gather information on how the programme had run the previous

15 The *Memorandum* defines as one of its general goals “To reduce, in a sustainable manner, the negative impact of food insecurity and nutrition problems in the education sector, particularly poor schooling, school dropout, absenteeism and school failure” (Clause 2, letter a). In addition to this general goal, the following specific goals (Clause 2 – point 2) are also to be highlighted: “Encouraging the daily attendance of pupils, in particular girls, thus reducing school absenteeism (letter b); [...] Promoting local economy through the acquisition of foodstuffs (letter d); [...] Promoting community participation in the training of their learners (letter e) [and] Contributing to the development of students’ skills in agricultural production (horticulture, fruit growing and livestock farming) (letter f)”.

year. According to the school coordinators, the experience had been quite positive, with fewer children being hungry, less school dropout absenteeism, and less school failure. However, there was, as in previous programmes, inconsistency and uncertainty in the support given to school meals. The lack of continuity in school feeding projects was, in fact, one of the flaws pointed out.

It is not the purpose of this text to make a detailed presentation of PRONAE; what is important here is to highlight the way in which the pilot project inherent in this programme is based on the problem of food insecurity. Secondly, it is important to highlight the fact that the implementation of this programme is the result of a cooperation that is associated with other cooperation projects in Mozambique, particularly in the Nacala Corridor area. There is one of the most extensive African railway lines in this area. It reaches from Moatize (Tete) to Nacala (Nampula), crossing the provinces of Tete, Niassa, and Nampula, and it was for this area that PROSAVANA was created. This is a project that foresees a profound change in the landscape of the region, and amongst its aims, as anticipated, is the increase in agricultural production, investing in greater technological efficiency and seed improvement, combating food insecurity, and promoting development. Focused on the extensive production of *commodities* such as corn and soybeans and a model of land use that breaks down with more traditional forms of agriculture, this project has already generated protests due to the resettlement of populations and the profound changes in the agrarian structure that it implies. The implementation of this development programme is still contested by the weak participation of civil society in its construction (Santarelli 2016; Chichava 2016).

When we focus on the *Memorandum* (MINED 2015) that supports PRONAE, and we realize the support given by Brazil to this project through the transfer of funds to the WFP, we cannot stop questioning ourselves about the distinct and even divergent way of dealing with issues of insecurity that are placed in PRONAE and PROSAVANA. If, on one hand, local, family farming is promoted through the purchase of food from local farmers to be distributed in schools, the other proposes an extensive, commodity-oriented agriculture that, according to several local associations, disrupts small farmers and generates food security problems - therefore, sustainability problems. Thus, we can see in these two examples two very distinct ways for Brazil to assert its expertise in the area of food security, an area in which Brazil intends to affirm

itself as a particularly well-positioned leader given its experience and the knowledge capital it has accumulated on this issue. If PRONAE seems to meet sustainability requirements by encouraging local food purchase, community participation, training of children in sustainable forms of production, and gardening, PROSAVANA is a more aggressive project that fears small-scale local farmers. Although these can be integrated into production by making contracts with agricultural enterprises, this raises doubts about the effectiveness of this mechanism as a source of income and a way of ensuring food security. If on one hand Brazil supports a programme of the Ministry of Education for local acquisitions, on the other hand it seeks to promote the transfer of knowledge, seeds, and technology of Brazilian companies. Thus, we can see that Brazil's affirmation as a reference country in the area of food security is done through different projects, handling the issue of food insecurity with different purposes in articulation with different ministries, but always counting on the decisive support of the State, indispensable for facilitating private initiative (Santarelli 2016). Given the divergent interests that are moving around issues such as food security and that are not always clearly identifiable, the use of qualitative research, which allows us to know more about these processes and the situation of the populations that these projects should benefit, seems to be crucial.

As a concluding note, I consider it pertinent to establish connections between different programmes, in an effort to detect and signal their inconsistencies. If PRONAE is very oriented toward the acquisition of local products from farmers, aiming at their distribution in schools, PROSAVANA is a programme to stimulate agribusiness, which makes us fear the disappearance of small farmers. The question is whether the UN's second sustainable development goal – “End hunger, achieve food security and improved nutrition and promote sustainable agriculture” – can be achieved through these projects. This is, however, only one side of the issue, and another, more profound, is the risk of inefficiency associated with the definition of Sustainable Development Goals that do not question, nor really call into question, the dominant socioeconomic model and its characteristics of predation and exhaustion. In the dominant model, food insecurity, which can be transformed into a closed concept, can in fact be a strong argument for *development programmes* that are applied without questioning. Ferguson (1994), who reflected intensely on development programmes, shows us their most obscure side. This is not the occasion to discuss his contribution. So

far, we acknowledge the need for a monitoring exercise around the notion of food (in)security, primarily because it is around this notion, which involves all citizens, that public policies are built.

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