

Artigo submetido a 30 de Abril 2020; versão final aceite a 26 de Maio de 2021
Paper submitted on April 30 2020; final version accepted on May 26, 2021

Access to Land and Food Security. The Perspectives of the Rural Stakeholders of Huambo, Africa

Acesso à Terra e Segurança Alimentar. As Perspetivas das Partes Rurais Interessadas de Huambo, África

Maria Emília Pepeka

mariaemiliapepeka@yahoo.com.br

Instituto Superior das Ciências da Educação e do Desenvolvimento, Huambo, Angola

Maria de Fátima Ferreira

fatima.ferreiro@iscte-iul.pt

Instituto Superior das Ciências do Trabalho e da Empresa, Lisboa, Portugal

Tomaz Ponce Dentinho

tomas.lc.dentinho@uac.pt

Faculdade de Ciências Agrárias e do Ambiente, Angra, Portugal

Abstract

This paper tries to understand whether access to land in the Central Plateau of Angola can reduce hunger, poverty, food insecurity and thereby contribute to sustainable regional development. The Q Method approach based on the selection and ranking of phrases collected from local authorities allow the identification of different attitudes that constraint sustainable development related to access to land and food security. The State disagrees with the potential of small farms, Family Farms do not agree with the importance of access to land and those who have access to land disagree with the role of the market. Summing up the results of this exercise recognize that access to land is a solution to the hunger and food insecurity that is at odds with governments and the community.

Keywords: Food Security, Access to Land, Sustainable Development, Q Method, Africa.

JEL Codes: R11; Q15; Z13

Resumo

Este artigo tenta compreender se o acesso à terra no Planalto Central de Angola pode reduzir a fome, a pobreza e a insegurança alimentar e, assim, contribuir para o desenvolvimento regional sustentável. A abordagem pelo Método Q envolve a seleção e classificação de frases coletadas junto das autoridades locais e permite a identificação de diferentes atitudes que restringem o desenvolvimento sustentável no que se refere ao acesso à terra e à segurança alimentar. O Estado discorda do potencial das pequenas propriedades, os agricultores familiares não concordam com a importância do acesso à terra e quem tem acesso à terra discorda do papel do mercado. Os resultados deste exercício permitem reconhecer que o acesso à terra é uma solução para a fome e a insegurança alimentar, mas cuja solução se encontra limitada pelo conflito de atitudes do governo e da comunidade.

Palavras-Chave: Segurança Alimentar, Acesso à Terra, Desenvolvimento Sustentável, Método Q, África

Código JEL: R11; Q15; Z13

1. INTRODUCTION

Food security is important for the socio-economic development of any country or region. The African continent is also not exempt from this concern considering its precarious economic situation marked by wars, natural disasters, low technology and prevalence of a high illiteracy rate. One of the objectives of the World Food Summit in 2009 (FAO, 2009), is to reduce the number of malnourished people.

FAO (2009) defines food security defined in four dimensions. 1) Availability of food or the existence of sufficient quantities of food of adequate quality, supplied through domestic production or imports, including food aid. 2) Access to food or the appropriate resources to purchase food appropriate to nutritious food, namely traditional rights including the right to access to collective resources. 3) Biological use of food through adequate food, drinking water, sanitation and medical attention, to obtain a state of nutritional well-being. 4) Stability to have food security throughout two-moment for the population, for the home family or for a person being possible to prevent seasonal supply risks or crises.

Within this context, the question is whether access to land is a way to reduce hunger, poverty, food insecurity and thereby contribute to sustainable regional development.

To answer this question we review the literature on food security and access to land in point 2, explain the methodological approach in point 3, present data collected in point 4 and the results in 5. In section 6, we discuss the outcomes and in Section 7 suggest conclusions and recommendations.

2. LITERATURE REVIEW

The literature reports that access to land is associated with food, economic and social security (Locke, 1823; Ostrom & Schlager, 1996; Timmer et al., 1999, Miranda, 2000; and Negrao, 2002). More recently, the World Bank (2014) reinforced that modern, efficient, and transparent land tenure policy is important in reducing poverty, and promoting growth and sustainable development. The goal is no longer simply to maximize productivity, but to optimize across a far more complex landscape of production, environmental, and social justice outcomes (Godfray et. al., 2010). Access to land is not only important for food security in the short term; in the long term land tenure secures the capacity to invest in growth and development that sustains food security (Maxwell and Wiebe, 1999).

There are two main forms of access to land: free access and restricted access. Free access to land is usually associated with overuse and tragedy of the commons (Ostrom & Hess, 2011).

The increasing importance of land in developing countries in Latin America, Africa and Asia and the relative abundance and flexibility of land in Africa (Platteau, 1996) stimulated governmental intervention in the regulation of access to land (Valente, 2003). However, the implementation of land regulation is specific to the historical, cultural and political context, very much pressured in developing countries by human survival and food security (Maniglia, 2009).

Food security mobilizes institutions, governments and science. FAO defends that food supply should be based on small and medium family-based production units, connected with local markets and integrated dynamically with the agro-food industry (Anda, 2002; Maluf, 2006; Falcon & Pearson, 1983; and Miranda, 2000).

For Schlager & Ostrom (1992) and Yandle (2007) "Land" is a physical asset used as a production factor to obtain products and resources. "Access or the right to enter a defined physical property and withdrawal viewed as the right to obtain "products" from land (e.g., catch fish, appropriate water, etc.). (Schlager & Ostrom, 1992). (Yandle, 2007). Ferreiro, (2011) relates it to the empowerment of marginalized individuals and poverty reduction:

"[...] secure access to land and other natural resources" as an "essential part of local empowerment of marginalized individuals and groups and can be instrumental in poverty reductions". Access to land is conceived as a "prerequisite to gaining access to other productive resources."(Ferreiro, 211 p. 4).

These references place great importance on the land and put it in the spotlight. Thus, the demand for land on the African Continent is great. So much so that in the context of food aid and the reduction of poverty that characterizes the developing countries, large areas of land are being occupied with productions that will awaken the emergence of the land market (Hall, 2012). The same thinking is put forward by Tognetti et al., (Apud Ferreiro, 2011). These authors state that there is intense pressure on indigenous lands in many countries by agribusiness dealing with timber and mining, and large-scale infrastructure projects.

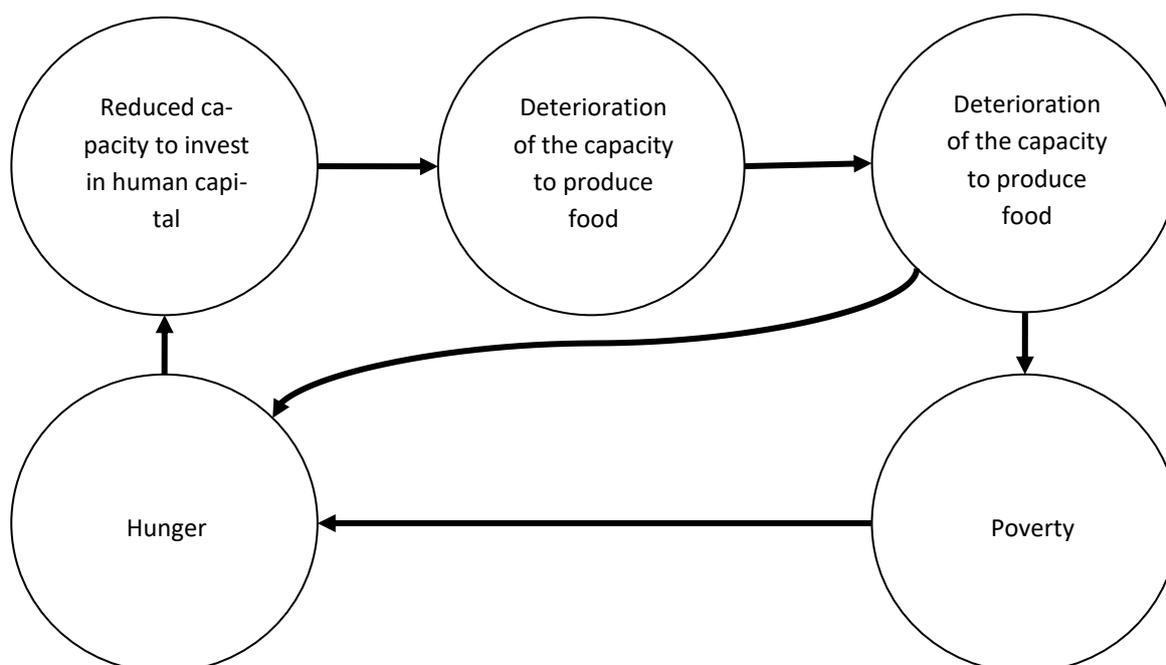
Unequal access to land increases agricultural food problems and their impact on poverty; on the contrary, access to land by the population confers autonomy on disadvantaged indigenous peoples (Maparura, 2010). Negrao (2002) points out that access is not only an indispensable condition for ensuring consumption, but also for the retention of people in the countryside

However, there is not always consensus among authors and in different countries in the last century regarding the importance of land as a factor of production and source of wealth. Some authors defend environmental issues with the presumption that developed countries have already solved food issues (Arnalte, Baptista & Garrabon, 2012). Others admit the relative reduction of the importance of land as a factor of production when compared to other components, in danger due to the continued increase in agriculture associated with capitalist intensification (Navarro, 2012).

Access to land and natural resources is a central and strategic issue in the development debate and presents a great challenge for many governments as a starting point for improving the quality of life and dignity of their citizens. Even nowadays, when government attention focuses on other global issues, land issues like access, availability and distribution continue to be important in the struggle against poverty, food security and genre. Land, even with all technological innovation in agricultural production, continues to be the main asset for food production, housing and access to other natural resources (water, forest resources) that are essential for people's livelihoods. (Borges et al., 2001).

Experiences on the fight against hunger show that: a) the reduction of hunger requires accelerated development and poverty reduction; b) hunger is a cause and consequence of poverty; c) hunger affects negatively health, productivity and investment perpetuating poverty. There is a vicious circle of hunger and poverty. It passes through constrained investment in human capital, deterioration of the capacity to produce food and low productivity of labour and land (FAO, 2006) (Figure 1).

Figure 1: Vicious Circle of Hunger and Poverty



In which regards to food, consumption is a cultural practice of social groups (Canesqui and Garcia, 2005). The Bantu population uses maize as the basic food source as happens with the Mbyá-Guarani

described by (Tempass, 2007); from the corn, homemade or bought in the market, it is possible to get flour, produce *fuba*, assemble the soft drink Otchisangwa, slipped destilated the strong drink named *capuca* and also feed domestic animals. There is little food variety in rural areas of Angola.

3. METHODOLOGICAL CONSIDERATIONS

3.1 Methodology

The approach to address the question about the importance of access to land in food security focus on the analysis of the perception of traditional authorities and peasant farmers on the subject. The case study analysis the situation in Huambo Province, specifically in the Municipalities of Mungo, Caála and in the Commune of Calima whose populations live mainly from subsistence agriculture. The stakeholders of these localities reported on the economic, technological, social and regulatory aspects of their places to test the following research hypothesis:

H1. There is a causal link between access to land, productivity and food security.

A field visit to *ombalas* (kingdoms) took place from 28-05 to 31-05-2012 in the province of Huambo and, through the application of interviews; it was possible to understand the relationship that the population had with the land and the forms of access to land in their *ombalas*. Whenever needed interviews were conducted in the mother tongue while safeguarding the fidelity of the content.

From the interviews and the literature, we extract 69 phrases from which, based on content analysis (Laurence, 2013), these phrases reduced to 31. This reduction was to eliminate redundancies between sentences and to decrease the number of sentences considered in the Q-questionnaire covering four thematic areas: Social, Economic, Governance and Technology.

Q Method is Principal Component Analysis made on the ranking of statements, or Q sorts, recorded in questionnaires made to the stakeholders. Q Methodology reduces the many individual viewpoints of the subjects down to a few "factors," which are claimed to represent shared ways of thinking. The Q-methodology works with a small non-representative sample and therefore conclusions do not aim to represent the population but to synthesize the perspectives of the stakeholders interviewed. Nevertheless it must be noticed that each respondent makes $[n(n-1)/2]$ comparisons of statements where n is the number of statements which expands enormously the number of effective observations.

In the application of the Q – questionnaire, we used a Likert scale to evaluate the sentences by the stakeholders, because the traditional use of cards would take too much time and would be difficult to apply for people that cannot read. The data obtained were standardized so to be analyzed by the Principal Component Analysis of the Q Methodology using the SPSS software.

If the involvement of the stakeholders on the topic is relevant (Bastraz & Biondi, 2011) the use of the Q Method (Gil & Guimarães, 2011) is applicable. Based on Principal Component Analysis (Presanha, 2015) the Q Method, applied with due care (Couto et al, 2011), can help to analyze the existence, or not, of the agreement between the opinions of the respondents. There are some applications of the method in Angola related to the attitude regarding green spaces (Enakulo, 2018) and the evaluation of a rural development project (Dos Anjos, 2012).

3.2 Data

The survey took place in the Province of Huambo in Angola. In this type of research, the sample is representative when it embodies the different stakeholder interests of the community, but should be smaller than the number of selected phrases. Accordingly, 24 informants from four locations were part of the survey. Mungo, Kaputo (Calima), Caála and Huambo City. In the data collection, beyond the questionnaire, also semi-structured diagnostic interviews took place through a fruitful dialogue with the interviewees.

At the time of application of the questionnaires, participants were informed of the objectives of the interviews to dissipate any expectations but the first contact was with the *soba* of each village or someone who could represent him. Once again, the mother tongue was used to preserve the content of the questions and facilitate communication and understanding.

The 69 sentences were taken from the bibliographical material consulted and from the various articles and reports from the internet. From them, a set of 31 phrases was chosen to give a broad and non-

redundant picture of food security and property rights in the region. For this, the *Forpes* program was used to identify the most frequent words (1) and the most relevant associated words (2). The associated words allowed to group singular words by four thematic areas: Social, Economic, Governance and Technology (3). The selection of the 31 sentences was done with two criteria: on the one hand the density of singular terms for each sentence; on the other hand, the specialization of each sentence in each thematic area as measured by the Entropy Index calculated by the Forbes program.

The Forbes content analysis program identified the 26 most significant words of which land, access and security/insecurity have greater relevance to the detriment of economy and work. The content analysis program identifies six-word associations. The results for associated terms show a high frequency attributed to the food security association.

Table 1: Relative Density of Singular and Associated Terms identified in the interviews

Topic	Associated Terms			Singular Terms							
Social	Food Security (7)			Security (12)	Food (12)	Poverty (8)	Hunger (7)	Food (7)	People (7)	Farmers (7)	Population
Economy	Price Food (5)	Economy Security (3)	Economy Access (1)	Access (17)	Security (12)	Price (7)	Food (7)	Economy	Income	Work	Development
Governance	Land Ownership (3)	Land Usurpation (3)		Land (30)	Angola (7)	Usurpation	Property	Right	World		
Technology				Production (7)	Productive	Agricultural	Resources	Area			

Table 1: Relative Density of Singular and Associated Terms identified in the interviews.

The words most directly related to the topic of food security are mainly social concepts: food, hunger, poverty, people, population and peasants. The economic terms related to economics, access, price, income, labour and development. Governance includes phrases that have words like land, property, usurpation, law, Angola and world. Finally, technological aspects appear in sentences containing words like production, productive, agricultural, resource and area. Table 1 shows the relative density of these themes. The selection of 31 phrases for the Q Method exercise from the 69 identified in the interviews results from those that have at least two terms and a specialization entropy index higher than 0,6 (Salgado and Godinho, 2009)

4. PERSPECTIVES FROM THE STAKEHOLDERS

Results are interpretations of the main principal components linking the respective extreme phrases with the characteristics of the stakeholders that support them.

4.1 Results

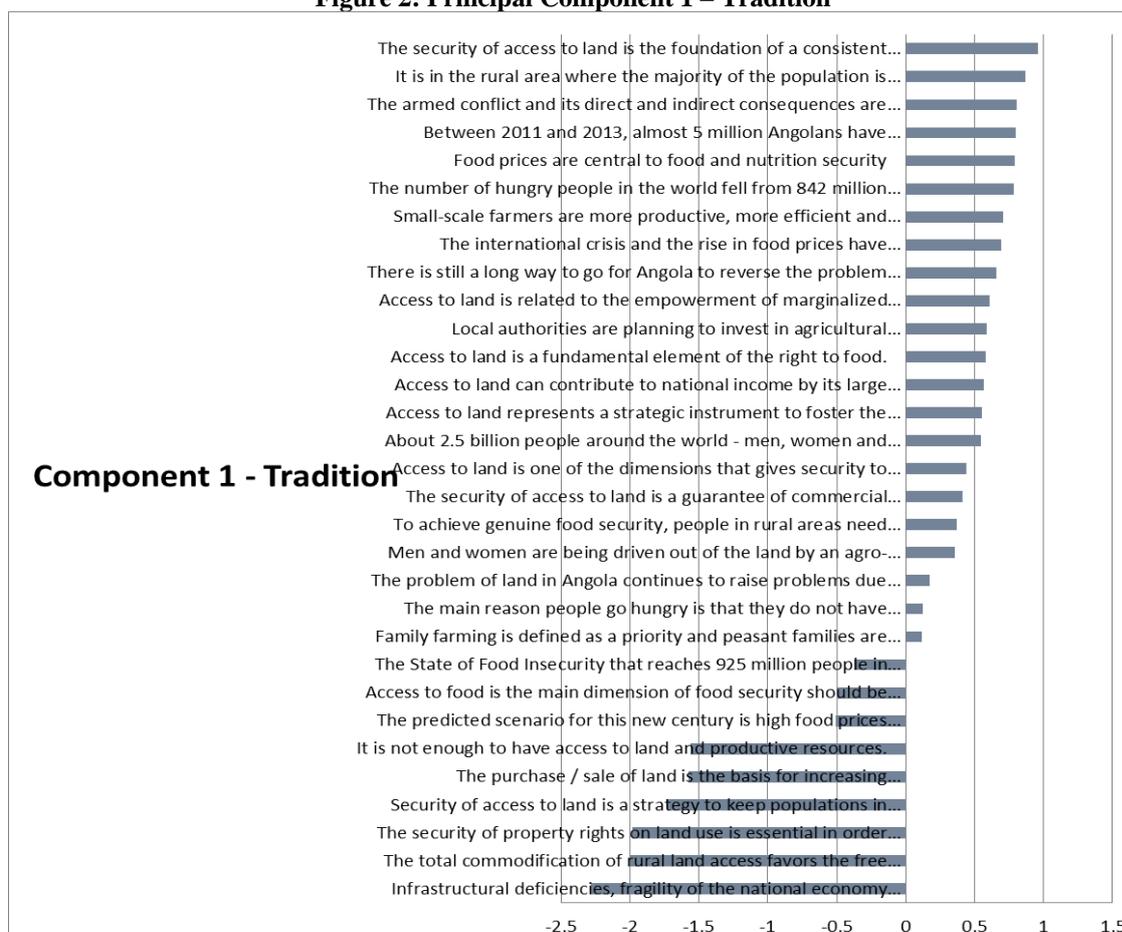
Looking at Table 2 it is clear that Component 1 aggregates some farmers with an expert, Component 2 links farmers and the Soba and Component 3 aggregates farmers. The other components, from 4 to 8, present a different perspective from various types of persons more detached from the rural areas since they include professors, experts and nurses. The use of the Q Method usually leads to these outcomes where real stakeholders tend to be associated with the first components whereas outsiders and external experts tend to present different attitudes from each other.

Figure 2 presents the evaluation of Component 1 that we nominated as *Tradition*. This perspective defends that access to land is the foundation of a consistent domestic food policy, the rural economy and the industrial economy. Notwithstanding this, the first components express intensely their disagreements regarding some quite general assumptions. The Tradition Component is against the idea that poverty is caused by deficiencies in infrastructures, education, training and health; their supporters do not agree with improved land markets; nor that access to land will reduce urbanization.

Table 2: Association between Respondents and Principal Components

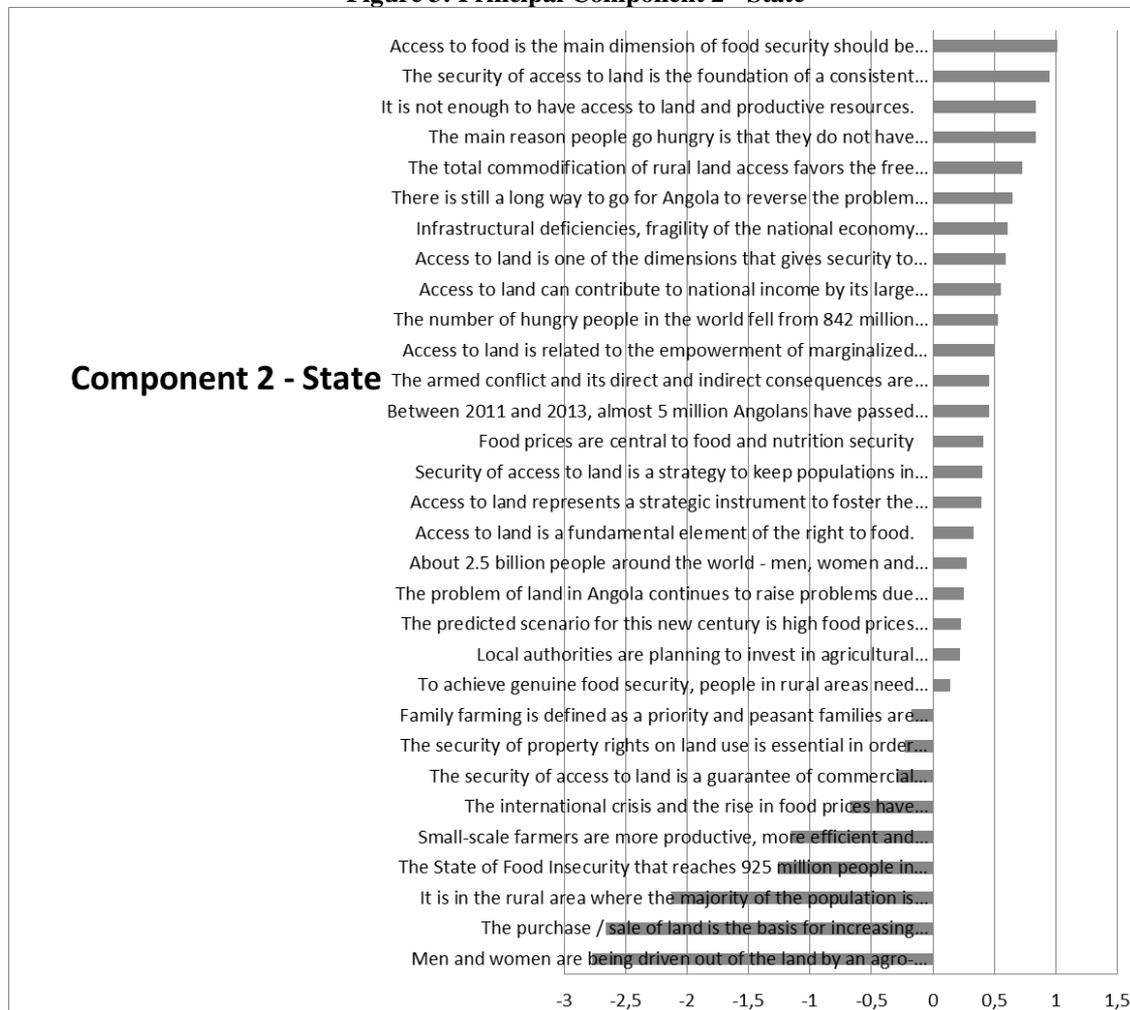
Cluster	Component	1	2	3	4	5	6	7	8
Cluster 1	Farmer	,930	-,051	-,018	,094	,009	-,110	,195	-,016
Cluster 1	..	,898	-,027	,010	,110	-,032	-,136	,259	-,115
Cluster 1	Expert	,847	,082	,147	,059	,176	,124	-,169	,007
Cluster 1	Farmer	,797	,327	,080	-,022	,038	,238	-,084	-,030
Cluster 2	Soba	,063	,874	,218	-,036	,136	-,096	,017	,034
Cluster 2	Farmer	,117	,819	,368	,224	-,096	-,116	,068	-,005
Cluster 2	Farmer	,086	,742	,050	,187	,038	,401	,136	-,057
Cluster 2	Farmer	,295	,554	,135	,052	,363	-,161	-,129	,543
Cluster 2	Farmer	-,090	,531	-,447	-,173	,326	-,217	-,277	-,236
Cluster 3	Farmer	,011	,280	,726	,138	,165	-,191	-,272	-,249
Cluster 3	Farmer	,315	,402	,688	-,031	-,065	,034	,105	,235
Cluster 3	Farmer	,542	,313	,620	,086	-,072	,004	-,137	,049
Cluster 3	Farmer	,239	,338	,562	-,089	,349	-,437	,115	-,128
Cluster 4	Farmer	,066	-,042	,073	,857	,196	-,057	-,071	-,116
Cluster 4	Farmer	,090	,209	,002	,848	,040	,204	-,012	-,085
Cluster 5	Porfessor	,100	,016	,132	,162	,829	,086	,168	-,051
Cluster 5	Professor	,022	,255	,123	,290	,647	,348	-,044	,171
Cluster 6	Professor	,076	-,033	,035	-,015	,134	,871	,060	,026
Cluster 6	Farmer	-,012	,027	,113	,376	,264	,518	,405	-,180
Cluster 7	Farmer	-,148	-,136	-,174	,095	,409	,130	,723	,109
Cluster 7	Nurse	,310	,252	-,065	-,188	-,106	,038	,677	,022
Cluster 8	Farmer	-,308	-,102	-,051	-,334	-,065	,076	,085	,735
Cluster 8	Expert	,169	,104	-,090	,534	,332	-,235	,380	,472
Cluster 9	Farmer	,136	,019	-,642	,011	-,163	-,285	,089	,012

Figure 2: Principal Component 1 – Tradition



Component 2, named *State*, argues that access to land is the foundation of consistent food programs endorsed by the State. Once more disagreements regarding some phrases are strong. They disagree that large farms promote rural exodus; they do not approve that landmarked links to agriculture productivity can reduce rural poverty; they do not recognize that there is increasing food insecurity in rural areas, nor that small scale farmers are more productive and contribute more to regional development.

Figure 3: Principal Component 2 - State



Component 3, named as *Market*, argues that land property rights and land use will stimulate private investment, including foreign, modernizing land use. Contrary to Component 2 (*State*), those who defend the *Market* consider that small-scale farmers are more productive, more efficient and contribute more to broad regional development; the *Market* perspective also argues that the international crisis and the rise in food prices aggravate the vulnerability regarding food security.

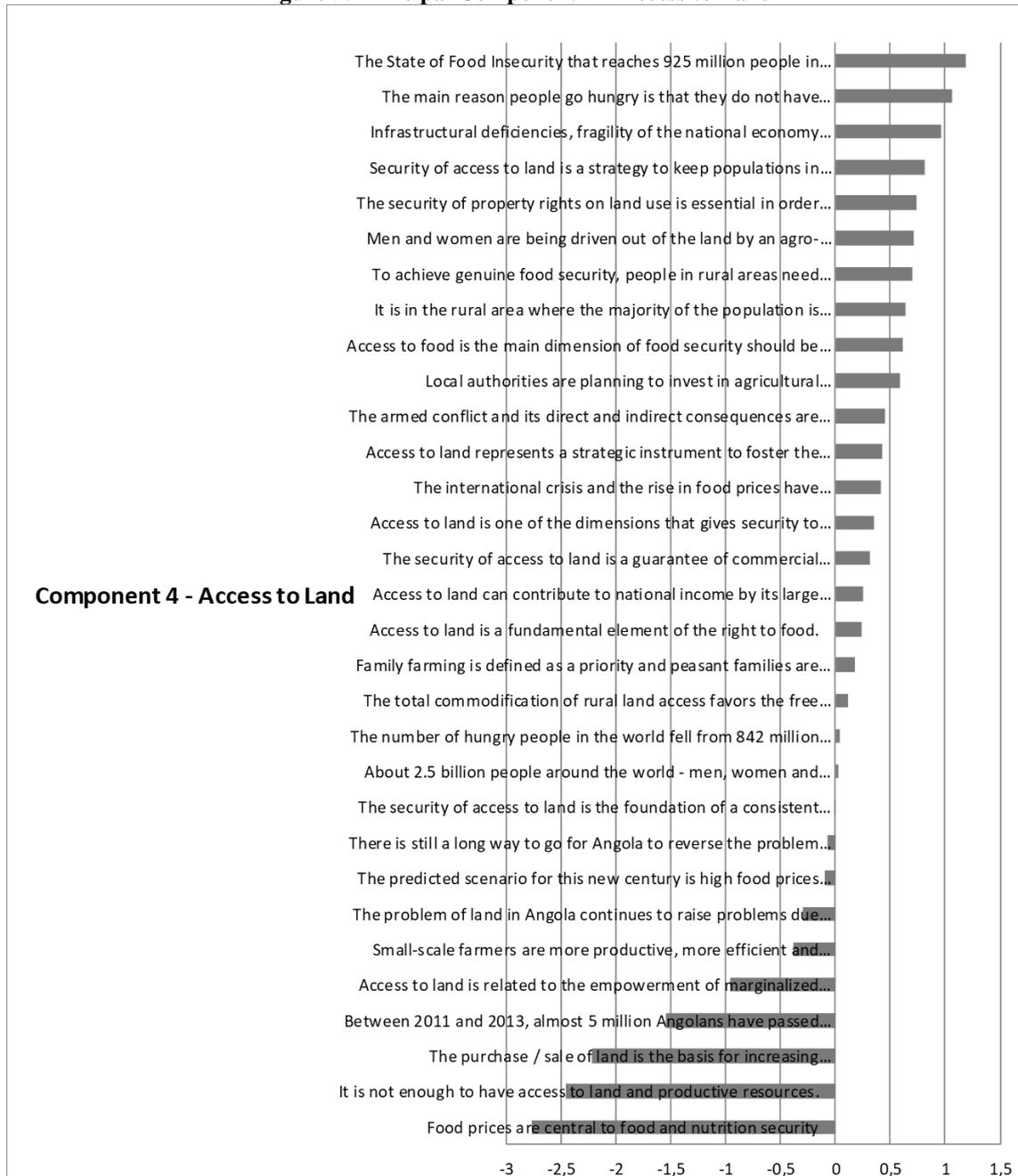
The Market perspective disagrees that the main reason people go hungry is that they do not have enough land to grow their food, or that men and women are being driven out of the land by large agro-food corporations.

Component 4, named *Access to Land*, and opposite to Component 3 *Market*, defends that the main reason people go hungry is that they do not have enough land to grow their food or do not earn enough to buy food. Two farmers that have different views put the argument forward. Interestingly they also point out the failures of the State to provide Infrastructures, education, vocational training and health. Consistently this perspective of farmers, that request more land, think that food prices are not relevant for food security but they do not like the idea of having markets for land presented in Component 3.

Figure 4: Principal Component 3 – Market



Figure 5: Principal Component 4 – Access to Land



Interestingly Component 5, named *Family Farms*, is very much associated with the perspectives of the professors interviewed. They strongly disagree with the defenders of the Component 3 *Market*.

Figure 6: Principal Component 5 – Family Farms



4.2 Conflicting Views

Fourteen of the 31 phrases tend to be rather consensual between the five main perspectives (Tradition, State, Market, Access to Land and Family Farms) identified in the analysis of the questionnaires and representing more than 40% of the stated rankings.

Looking at the remaining 17 non-consensual phrases, conflictual perspectives cluster into three main disagreements:

1) The *Traditional* perspective disagrees with the *State* and the *Market* perspectives in the following ideas. Contrary to the others, Traditionalists do not believe in the benefits of the market of land, do not consider the importance of public services and do not see any causality between an improved market of land and the mobility of rural labour. On the other hand, *State* and *Market* views dislike the

2) *Traditional* thinking in which concerns the idea that agro-industrial systems lead to the exodus of the rural population.

3) The *State* view clashes with the *Traditional* and the *Market* perspectives in similar thoughts. The *State* view disagrees with the other perspectives on the potential of small farms and with the dependence on external markets. *Traditional* and *Market* assessments dislike the *State* ideas that land security is not enough to promote development and food security and, understandably, do not agree that public policies should promote access to food.

4) *Market* understanding does not agree with the *Traditional* and the *State* viewpoints in a few important judgements. On the one hand, the *Market* perspective is against the idea that people are hungry because they cannot grow food or because they do not have enough money to buy food. On the other hand, the *Traditional* and the *State* standpoints disagree with the *Market* perspective that access to land is the base for rural development and food security.

5) The perspective of *Access to Land* does not agree with the views of the others on the statement that puts higher importance on food prices.

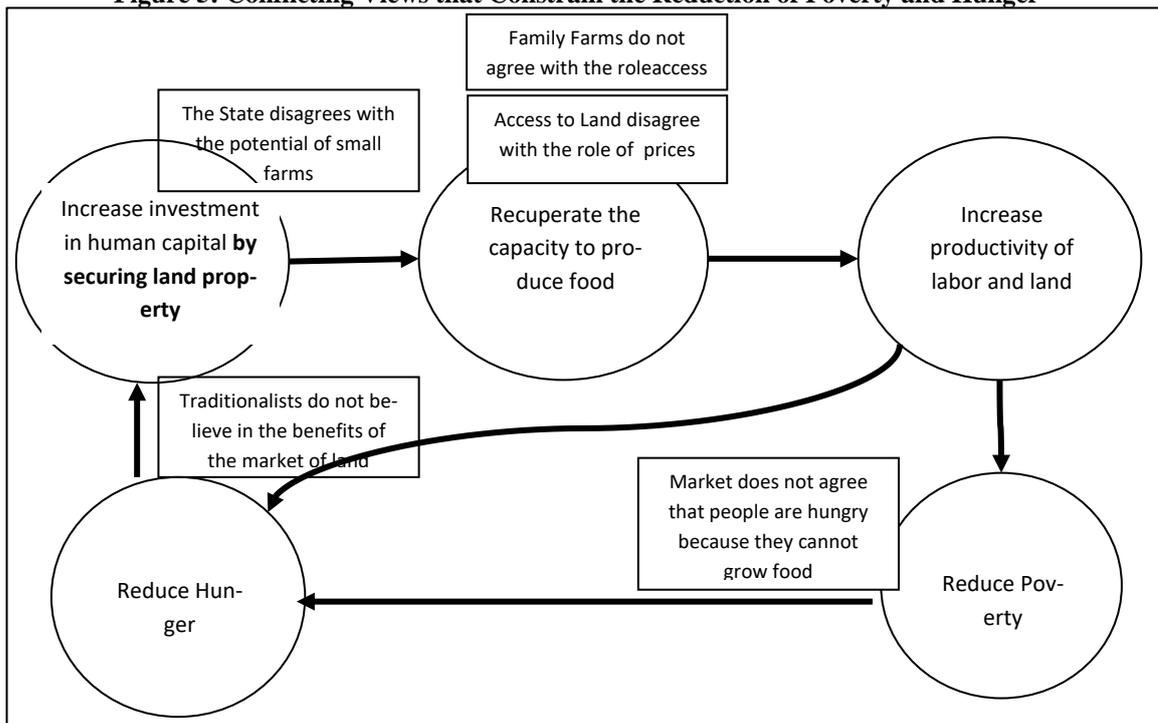
6) *Family Farm* component shows remarkable antagonism to the other perspectives in which concerns the idea that access to land is a guarantee of commercial transactions and that there is an aggravation of the number of people with food shortages.

4.3 Synthesis – conceptual trap

Attitudes and perceptions influence behaviours. In the present exercise, respondents gathered themselves following what they accept and believe. In addressing the issue of hunger, food and land, action in fact matters, but it is also important to identify the disagreements that impede action and development.

Figure 5 below shows how each perspective interferes with the hunger cycle and that helps to understand how each one of them limits the reduction of poverty and hunger: a) The State perspective disagrees with the potential of small farms; b) Traditional view does not believe in the benefits of the market of land; c) the Market point of view does not agree that people are hungry because they cannot grow food; d) the ones that defend Access to Land do not believe in the importance of food prices; and e) the protectors of Family Farms do not believe that land property rights are essential to address the problem of food shortages and rural development.

Figure 5: Conflicting Views that Constrain the Reduction of Poverty and Hunger



5. DISCUSSION

The analysis of food security confronts the complexity of the concept and defines social and economic measurement mechanisms and indicators. This situation feeds governmental concerns regarding the definition of effective policies, civil society worries to mobilize sustainable actions and research question suitable to guide feasible research projects.

The argument that land can contribute to the reduction of food insecurity is unquestionable. The reports of the UN World Bank, (FAO, 2002), (UN, 2010) and known authors (Negrão, 2002; Maluf, 2006; Pougala, 2011; Timmer, Falcon & Pearson, 1983; Thornton, 2009; Miranda 2000; Ferreiro, 2011; Hall, 2012 defend this fact. Nevertheless, Maniglia (2009) warns to the observation of different objectives of agrarian law that may limit production following e with the local reality and its level of concern with the collective and with the quality of life of its members.

Our reflection aims to demonstrate the relationship between access to land, productivity and food security perceived by the local stakeholders and how their fears can impede the reduction of poverty and hunger.

Access to Land

Access to land is widely referenced in the literature and it is the consensus of most authors that it can contribute to reduce hunger and deter people in the countryside (Timmer, Falcon & Pearson, 1999) and (Negrão, 2002). Access to land has seen related to the empowerment of marginalized individuals and poverty reduction (Ferreiro (2011).

Ownership is a condition of social status and the greatest asset in the rural context is land. Hence, traditional authorities keep land within the community to keep its history of the community and sense of belonging. In the choice between community land and modern agriculture Component 1 – Tradition chooses endogenous land-based development through self-consumption, domestic production or family farming.

Access to land occupies top positions in the various components. For the majority of the population, customary law regulates access to land, and transmission to beneficiaries is by oral means. Negrão (2002) compares the orality with the title giving them the same value but other references do not point to this fact. Ostrom & Hess's view, (2011) characterizes land as a freely accessible property regime with limitations. This fragility makes large areas vulnerable and subject to occupation mainly in countries concerned with agrarian expansion to substitute imports that feed their growing populations (Hall, 2011).

The use of customary law is restricted, does not guarantee full property rights limiting access to credit and, therefore, investment. Thus, despite its great relationship with food production and food satisfaction, only with private property, the guarantee of investment is safeguarded, as mentioned by (Markussen, 2008; Markussen, Tarp & Broeck, 2010; Ostrom & Hesse, 2011; Schlager & Ostrom, 1992; Jr & Hoskins, 2003; Obeng-Odoom, 2011; World Bank, 2008; Lerman & Shagaida, 2007; Spierenburg (2003); and Segers et al. 2010. Rural users that recognize the inheritance of the commonality by *mulemba* title, or some other symbol, do not share this thought. Nevertheless, governments and outsiders do not share this idea.

Productivity

Based on the concept of productivity, there is a multidimensional indicator relating the result to the resources used. However, when it comes to land productivity, other factors are at stake mainly soil fertility and evolving agricultural technologies. Africa's soils are largely poor and although fertilizers can increase production (Mokwunye & Viek, 1986; Quiñones et al. 2012), they are beyond the reach of small peasant farmers. It makes sense to analyse the feed based on production but there is a need to talk about dependency ternal factors. Being so access to land must be associated to access to information (Júnior & Trentin, 2004).

Food Security

The effect of food insecurity is so great that it corresponds to a wide range of references from authors, institutions and the scientific community concerned with the subject. Its manifestation is hunger and the countries affected by this situation bear witness to its deplorable effects. Hunger underpins the loss of

self-esteem and triggers less dignified attitudes and behaviours. Thefts, robberies, criminality, lack of love for others, and even group segregation can be some examples that do not help the social harmony and development of nations. Nevertheless, when we interconnect the words and the associated words, other social concepts such as poverty, people, population and peasants appear directly linked to the theme of food security.

Food is difficult to access when there is still a large proportion of the population under 1 US\$ per day. In Huambo, lack of family income limits the access to the market and the only way to obtain required goods is to sell products, whimsy and seasonal.

FAO establishes food production focused on agriculture, with a set of formulations that prioritize small and medium family-based agriculture, local commerce and dynamic integration with the agro-food industry. Other authors such as (Anda, 2002; and Maluf, 2006) reinforce this policy mainly because they involve about 70% of the population of African countries that find a subsistence form of family farming.

This reveals the relationship between land access, productivity and food security. However, it is always important to clarify the mechanism that gives access to land because of the guarantee of the title of land access.

6. CONCLUSION

This study tried to understand the interactions between land ownership and food security using a Q Method exercise applied to farmers and experts.

In Huambo, customary law governs the vast majority of the rural population and territory but the results of this exercise recognize that access to land is a solution to the hunger and food insecurity that is at odds with governments and the community. Nevertheless, results also help to understand why there is a trap that impedes adequate action to improve access to land and food security. Experts from the government disagree with the capacity of small farmers; small farmers do not believe in the benefits of the market of land that could promote those who are better farmers, some do not agree that food security comes from agricultural capacity, the ones that defend Access to Land do not believe in the importance of the market prices; and defenders of Family Farms do not believe that land property rights are essential for rural development.

The recommendation is to promote land markets in the places nearby urban areas and the necessary evolution of the role of traditional authorities namely in which refers to the definition of land-use property rights. The right of the path, the right of claiming, the property rights and the ownership rights, usually attributed to the State, should allow the sustainable development of the traditional communities, but the right to rent and land use based on clear and effective renting laws.

References

Borges, L., Clengo, A., Galan, B., & Coelho, A. (2001). *Guião para a Integração da Perspectiva de Género na Legislação relativa a Terra e Águas em Angola, Cabo Verde e Moçambique*. FAO Legal Papers Online (Vol. No. 88). Retrieved from www.fao.org/legal/prs-ol

Enakulo E (2018) – Análise e Avaliação Socio Cultural das Áreas Vers de Lazer na Cidade do Huambo. Tese de Mestrado em Gestão e Conservação da Natureza. Universidade dos Açores.

FAO (Organización de las Naciones Unidas para la Agricultura y la Alimentación). (2002). *O estado de la inseguridad alimentaria en el mundo*. Roma.

FAO (2009). Declaration of the World Summit on Food Security. World Summit on Food Security, Rome, 16-18 November 2009. http://www.fao.org/fileadmin/templates/wsfs/Summit/Docs/Final_Declaration/WSFS09_Declaration.pdf

Ferreiro, M. D. F. (2011). Desenvolvimento Rural e Instituições: Normas Jurídicas e Propriedade da Terra em Portugal. *Seminário Ibérico: Combate À Desertificação, Abandono Rural E Despovoamento – Intervenções Raianas*.

Godfray HCJ, Beddington JRB, Ian Crute IR, Haddad L, Lawrence D, Muir JF, Pretty J, Robinson S, Thomas SM and Toulmin C (2010) - Food Security: The Challenge of Feeding 9 Billion People. 12 FEBRUARY 2010 VOL 327 SCIENCE, p.812-818. www.sciencemag.org

- Hall, D. (2011). Land grabs, land control, and Southeast Asian crop booms. *Journal of Peasant Studies*, 38(4), 837–857. <http://doi.org/10.1080/03066150.2011.607706>
- Jean-Philippe Platteau. (1996). *The evolutionary theory of land rights as applied to sub-saharan Africa: A critical assessment. Development and Change*. Oxford. Retrieved from <http://www.usda.gov/wps/portal/usda/usdahome?navid=food-security>
- Júnior, V. J. W., & Trentin, I. C. L. (2004). Abordagem territorial no diagnóstico das agroindústrias familiares. *Congresso Da Sociedade Brasileira de Economia E Sociologia Rural*, 17.
- Laurence, B. (2013). *Análise de Conteúdo* (70 Lda). Lisboa/ Portugal.
- Lerman, Z., & Shagaida, N. (2007). Land policies and agricultural land markets in Russia. *Land Use Policy*, 24(1), 14–23. <http://doi.org/10.1016/j.landusepol.2006.02.001>.
- Locke, J. (1823). Concerning the true original extent and end of civil government. *The Two Treaties of Government*, 1–216. <http://doi.org/10.2307/2218500>.
- Maluf, R. (2006). *Segurança Alimentar E Fome No Brasil -10 Anos Da Cúpula Mundial de Alimentação*.
- Maniglia, E. (2009a). *As Interfaces Do Direito Agrário E Dos Direitos Humanos E a Segurança Alimentar Elisabete Maniglia*. (U. S. P. Cult & U. Acadêmica, Eds.). São Paulo.
- Maparura, S. (2010). Land Reform The Fate of Southern Africa.
- Markussen, T. (2008). Property Rights, Productivity, and Common Property Resources: Insights from Rural Cambodia. *World Development*, 36(11), 2277–2296. <http://doi.org/10.1016/j.worlddev.2008.04.008>.
- Markussen, T., Tarp, F., & Van Den Broeck, K. (2011). The Forgotten Property Rights: Evidence on Land Use Rights in Vietnam. *World Development*, 39(5), 839–850. <http://doi.org/10.1016/j.worlddev.2010.09.016>.
- Maxwell D and Wiebe K (1999) – Land Tenure and Food Security. Exploring the Dynamic Linkages. *Development and Change*. Vol 30. 825-849.
- Miranda, E. (2000). Do direito consuetudinário à propriedade privada.
- Mokwunye, A. U., & Vlek, P. L. G. (Eds.). (1986). *Management of Nitrogen and Phosphorus Fertilizers in Sub-Saharan Africa*. Dordrecht: Springer Netherlands. <http://doi.org/10.1007/978-94-009-4398-8>
- Negrão, J. (2002a). a Indispensável Terra Africana Para O Aumento Da Riqueza Dos Pobres, *179(179)*, 1–15.
- Negrão, J., Carvalho, A. de, Donato, J., & Júnior, T. M. (2004). Urban land market in mozambique. *Cruzeiro Do Sul*, 71.
- Obeng-Odoom, F. (2012). Land reforms in Africa: Theory, practice, and outcome. *Habitat International*, 36(1), 161–170. <http://doi.org/10.1016/j.habitatint.2011.07.001>
- ONU. (2010). *I nstituto de Estudos para o Desenvolvimento Relatório sobre os Objectivos de Desenvolvimento do Milénio*. Retrieved from <http://mdgs.un.org/>
- Ostrom, E., & Hess, C. (2011). Private and common property rights. Retrieved from <http://www.ncbi.nlm.nih.gov/>.
- Ostrom, E., & Schlager, E. (1996). *The formation of property rights*. (S. S. Hanna, Ed.) *Rights to nature: Ecological, economic, cultural and political principles of institutions for the environment (1996)*.
- Quiñones, A. ., Martinez-Alcántara, B., Martínez, J. M. ., Fornerginer, M. A. ., Iglesias, D. J. ., Primo-Millo, E. ., & Legaz, F. (2012). Fate of N-labeled potassium nitrate in different citrus-cultivated soils: influence of spring and summer application. *Water, Air, & Soil Pollution*, 223(5), 2209–2222.
- Quiñones, A. ., Martinez-Alcántara, B., Martínez, J. M. ., Fornerginer, M. A. ., Iglesias, D. J. ., Primo-Millo, E. ., & Legaz, F. (2012). Fate of N-labeled potassium nitrate in different citrus-cultivated soils: influence of spring and summer application. *Water, Air, & Soil Pollution*, 223(5), 2209–2222.
- Salgado AP and Godinho IM (2009) – Medidas de Localização das Atividades e de Especialização Regional. Capítulo 2 de Compêndio de Economia Regional Tomo II, Dentinho et. al. Principia, Lisboa.
- Segers, K., Dessein, J., Hagberg, S., & Teklebirhan, Y. (2010). Land Use Policy Unravelling the dynamics of access to farmland in Tigray , Ethiopia : The “ emerging land market ” revisited &. *Land Use Policy*, 27(4), 1018–1026. <http://doi.org/10.1016/j.landusepol.2010.01.004>.
- Schlager, E., & Ostrom, E. (1992). The Board of Regents of the University of Wisconsin System Property-Rights Regimes and Natural Resources : A Conceptual Analysis Author (s): Edella Schlager

and Elinor Ostrom Reviewed work (s): Property-Rights Regimes and Natural Resources : A Concept. *Land Economics*, 68(3), 249–262.

Spierenburg, M. (2003). Dynamics and Diversity: soil fertility and farming livelihoods in Africa. *Journal of Modern African Studies*. <http://doi.org/10.1017/s0022278x03254203>

Thornton, A. (2009). Pastures of plenty?: Land rights and community-based agriculture in Peddie , a former homeland town in South Africa. *Applied Geography*, 29(1), 12–20. <http://doi.org/10.1016/j.apgeog.2008.11.001>

Timimmer, C. P., Falcon, W. P., & Pearson, S. R. (1983). *Análise da Política Alimentar*. Baltimore e Londres: Banco Mundial The Johns Hopkins University Press.

Valente, F. L. S. (2003). Fome, desnutrição e cidadania: inclusão social e direitos humanos. *Saúde E Sociedade*, 12(1), 51–60.

World Bank. (2008). *Agricultura para o Desenvolvimento*.

World Bank (2014) Land and Food Security BRIEF, March 31, 2014 <https://www.worldbank.org/en/topic/agriculture/brief/land-and-food-security1>

Yandle, T. (2007). Understanding the Consequences of Property Rights Mismatches : a Case Study of New Zealand ' s Marine Resources. *Ecology And Society*, 12(2), 27. Retrieved from <http://www.ecologyandsociety.org/vol12/>.

Annex 1: Selected Phrases

	Phrases Selected
1	To achieve genuine food security, people in rural areas need access to productive land and obtain prices for their crops, thus guaranteeing a decent life
2	The security of property rights on land use is essential in order to preserve and stimulate the flow of private capital - including foreign - to the rural economy.
3	Small-scale farmers are more productive, more efficient and contribute more to broad regional development
4	Men and women are being driven out of the land by an agro-industrial system that looks at food production as another economic frontier to be won in the quest for profit led by large corporations.
5	Infrastructural deficiencies, fragility of the national economy and deficiencies in essential services in areas such as education, vocational training and health are causes of poverty.
6	The purchase / sale of land is the basis for increasing agricultural productivity and alleviating rural poverty.
7	Access to land is one of the dimensions that gives security to users
8	Access to land is related to the empowerment of marginalized individuals and to poverty reduction.
9	Access to land is a crucial element in access to food rights.
10	The security of access to land is the foundation of a consistent domestic food policy, the rural economy and the industrial economy.
11	The international crisis and the rise in food prices have contributed to causing or aggravating the vulnerability to food insecurity in these countries.
12	Food prices are central to food and nutrition security
13	It is not enough to have access to land and productive resources.
14	The total commodification of rural land access favors the free flow of labor in the countryside.
15	The predicted scenario for this new century is high food prices in the global food system.
16	Security of access to land is a strategy to keep populations in their areas by stopping the flow of the city
17	The main reason people go hungry is that they do not have enough land to grow their food or do not earn enough to buy food
18	Local authorities are planning to invest in agricultural development actions to combat hunger and poverty.
19	The security of access to land is a guarantee of commercial transactions wherever there is the land market, of the appropriation of labor income
20	The State of Food Insecurity that reaches 925 million people in the world, with 800 million of these living in the countryside, has been aggravated by the current trend of rising food prices
21	Access to food is the main dimension of food security should be promoted by public policies
22	The problem of land in Angola continues to raise problems due to the lack of effective mechanisms to regulate the use and possession of this productive resource
23	Family farming is defined as a priority and peasant families are responsible for the greater agricultural production consumed in the country
24	It is in the rural area where the majority of the population is hungry, it is understood that it is in her and in the adjacent areas that the resources should be directed first
25	Access to land can contribute to national income by its large number of participants
26	Access to land represents a strategic instrument to foster the development of the fight against poverty
27	About 2.5 billion people around the world - men, women and children - live off the land, growing crops, raising animals and fishing
28	The number of hungry people in the world fell from 842 million in 2011-2013 to about 805 million in 2012-2014
29	The armed conflict and its direct and indirect consequences are pointed out as the main causes for the high poverty rate that characterizes the Angolan population
30	Between 2011 and 2013, almost 5 million Angolans have passed or are still starving, that is, almost 25% of the population.
31	There is still a long way to go for Angola to reverse the problem of food insecurity