Factors contributing to household food insecurity in Mhlontlo area, Eastern Cape, South Africa

Bolyn Mosa Selepe and University of Zululand

Samela Shalom Mtyingizane University of Zululand

Mfundo Mandla Masuku*
University of Zululand
Department of Anthropology and Development Studies
KwaDlangezwa
3886

e-mail: MasukuM@unizulu.ac.za

Corresponding author*

Abstract

South Africa is considered as food secure at national level, while households in the rural areas are food insecure. Since food is an essential basic human need, it is even constitutionally declared as a need to be protected. The Eastern Cape Province is characterised as one of the provinces which have high rates of food insecurity in the country. The study determines the extent to which the identified factors of household food insecurity contribute to the livelihood in the study area. The primary aim was to investigate whether the community was provided with assistance by different organisations to overcome the situation of being food insecure and, also the strategies employed by the government to improve the situation. The study comprised a sample of thirty-five respondents from the community and three governmental officials of Mhlontlo Municipality and Tsolo Agriculture and Rural Development. The study revealed that factors that contribute to food insecurity were high level of unemployment, underemployment and dependence on the State grants. The study also revealed that there is inadequate service from the government to promote programmes that could alleviate food insecurity through promoting substance farming. Community development programmes are unevenly distributed to the community due to the lack of communication, and households have abundance of land but food production is not frequent. Therefore, land is underutilised for food production. The study recommended that the Tsolo Municipality and the Department of Rural Development should establish suitable programmes such as agricultural support programmes through promoting subsistence farming.

Key words: food, food insecurity, community, food security, households.



Source: http://www3.imperial.ac.uk/newseventsimages?p_image_type=mainnews2012&p_image_id=19486

1. Introduction

Rural areas are commonly characterised by food insecurity, which is a violation of human rights since every human being has the right to food on a daily basis (Shisanya and Hendriks, 2014). An uncertain food supply, problems with food quantity and quality, running out of food, lacking money to buy food, skipping meals and ongoing hunger are all elements of being food insecure, thus people in the rural areas develop livelihood strategies to survive (Ihab et al., 2013). Interestingly, South Africa is food secure at a national level; available data clearly indicate that this is not the case for all households particularly in rural areas (De Cock et al., 2013). The contributing factor to this problem is the issue of inadequate food security and this condition of food insecurity occurs when "people lack sustainable physical or economic access to enough, safe, nutritious, and socially acceptable food for a healthy and productive life" (Idiku et al., 2012). On the other hand, viewing food insecurity at a provincial level, the Eastern Cape is one of the provinces that are characterised by the worst of poverty in South Africa (Integrated food security strategy) IFSS (2002).. Within the province there are unequal levels of poverty based on rural location, race and gender.

African rural households are known to be dependent on land as a source of food and household income, but they face major constraints in agriculture such as inadequate rainfall, inadequate water facilities and, no rights of land tenure that prevent the people from growing food (Backeberg and Sanewe, 2010). Land remains the main source of food consumption for households in Africa and food security has shifted towards issues surrounding access to and control of land (Fonjong et al., 2010).

There is dependence on uncertainty of employment such as seasonal or piece jobs that assure no financial security, especially amongst the youth. The scarce skills shortages of the rural poor negatively result in food shortages and women and children are more prone to

food insecurities because of gender and age differences (Sidh and Basu 2011). This finding implies that single headed households led by women may be food insecure since they may not have stable and reliable employment to provide adequate and nutritious food on a daily basis. Sonnino et al., (2014) states that food security can also be linked with ownership of household assets and equipment such as of proper food storage facilities, like refrigeration and electric stoves, etc.

Roos et al. (2013) point out that the contribution of retail stores has positive influence on food security by providing a variety of food preferences to select from. Greenberg (2010) reiterated that markets or community stores are significant outlets for food distribution to lower-income groups as they bring food retail outlets closer to the consumers. They have adequate supply and variety of food options at reasonable prices discovering that high food prices negatively affect food security of the most vulnerable and can have a negative impact on their livelihood and welfare.

Furthermore, rising food costs can also have a major impact on food insecure households and, as a result, push those who are not capable of coping with rising food costs further into hunger and food insecurity (Gustafson, 2013). To reduce the prevalence of food insecurity the government possibly may provide appropriate policies and infrastructure as these can raise household incomes and rural wages and improve rural economies.

1.1 The gender dimension of food insecurity

Women are more susceptible to a problematic issue of malnutrition which is an outcome of food insecurity and is specifically prominent amongst young women of reproductive age who are victims of gender discrimination and, marginalisation. Furthermore, women in rural areas are not included when making important decisions which inhibit them from food provisioning (Levay et al.,

2013). Female-headed households are among also most the vulnerable households in rural areas; they are harder hit by food price increases and benefit less as producers from price increases. and also, as consumers, households tend to spend more of their income on food than male-headed ones, so higher prices affect their total expenditures more (Gustafson, 2013).

Olowu (2013) also notes the increasing number of actual female household heads struggling to make a livelihood and ensuring food security of their families without access to credit, technology or extension services. They are denied security of land tenure; they do not have the collateral required for credit or the social status to deal with extension workers on an equal basis. As with culture predominantly in rural areas, on the basis of gender inequality the general trend is for women to have less personal autonomy. Therefore women have fewer resources at their disposal and limited influence over household decision making processes (Charles, 2011).

1.2 Effects of rising costs on food security

Rising costs have a major long term impact on vulnerable households forcing those already vulnerable and least able to cope with high prices of food deeper into poverty and hunger. Shisanya et al. (2011) point out that not every household is capable of paying much more when food prices increase. So, in simple terms, "when food prices rise, the poor or vulnerable households eat less food". Additionally, the poor spend most of their income on staple food and this is applicable even to those that farm and produce the food they consume and or sell.

Poor households experience financial constraints and opt for less nutritious food, consuming it mainly for its energy value., The evidence to this is settling for less expensive staple foods meant to satisfy

hunger, and not the nutritional demands of the body. High food prices limit the poor household's access to food in - many wavs resultina in households compromising their food quality, quantity and variety (Briers and Laporte, 2013). The increased cost of food prices are a source of destruction within poor families but poor households do not suffer equally (Gustafson, 2013). He further states that food insecurity is the impact of high food prices falling unreasonably on those who are financially insecure and are least affording, which affects - their food consumption. Such instances force poor families into a situation that will cause them to sell their assets or give up other productive essentials that push them deeper into the poverty trap that becomes even harder to escape.

Moreover, an important fact is that the impact of high food prices varies very much amongst poor households, within communities and, among different groups of people. Food insecurity unequivocally is a crisis that hits the poor most severely, thus the high prices of food and change in food prices of any magnitude has a negative impact in terms of food access (Saini and Jain, 2014).

1.3 Contribution of home gardens to food security

In the past, rural households produced most of the food for consumption purposes, but recent studies have shown otherwise. They indicate an increase in dependence on market purchases of rural households and sometimes reaching 90% of the food supplies being purchased instead of being produced. They further state that Subsistence food production also plays a significant function in reducing food-insecurity within households (Baiphethi and Jackobs, 2009).

Community food production in the form of home gardening, community gardening, and school gardening continues to increase in its regard as a factor that curbs the impact of food insecurity in

many parts of the world. However, this regard has led to public and private investment in the form of seeds, farming equipment and natural resources to boost food production and to prioritise food security (Smith et al., 2013). Nevertheless it is unfortunate that these home gardens are present in communities with higher than average household income. Home grown or subsistence food production is explored as a feasible contributor to food and nutrition security for the rural poor in South Africa (Faber et al., 2011).

Rural households' engagement agricultural activities is largely effective in the reduction of hunger and food insecurity and this is an indication of a positive relationship between community production and food security (Shisanya et al., 2011). Community gardening can be a form of food insecurity intervention to improve food diversification, allow direct access to food and increase financial savings on food bills since households consume what they produce and will maximise the buying power, particularly if production is meant for profits as well (Faber et al., 2011). In support of the function of home gardens. they have a positive contribution towards reducing the impact of food insecurity: they make a major betterment of dietary intake and they decrease- the chances of micronutrient deficiencies.

Galhena et al. (2013) support that home gardens are a strategy to improve household food security and nutrition; home gardens benefit households or communities by creating access to nutritious fresh foods, the people gain knowledge in producing their own food, allowing them to save money and be selfreliant instead of buying from commercial sources. Furthermore, diversification due to home gardening gives allowance to households to only purchase the foods that they do not produce themselves. However, the production through home gardening depends on access to certain resources such as productive natural resources of which are water, seeds, environmental services and market opportunities.

2. Method

The study employed both quantitative and qualitative methodologies in order to achieve its objectives. Two government institutions were selected to collect data namely: Tsolo Agriculture and Rural Development Institution (TARDI) and Mhlontlo Local Economic Development (LED). One official (key informant) was interviewed from each institution. These institutions were selected because they are responsible for the development activities in Mhlontlo Municipality. The official from LED of Mhlontlo Municipality and Manager at TARDI were deemed suitable as key informants to respond to interview questions with regards to contribution of these institutions to food security in the study area. The official from LED of Mhlontlo Municipality was located through a snow ball method where there was a chain referral from municipal offices to a development officer who later recommended the extension officer who worked in conjunction with both the community of Mhlontlo area and the municipality.

A survey was carried out with a representative sample of 31 community members who fully completed the questionnaires which included four items as follows: demographic profile, socioeconomic characteristics and questions concerning food security and insecurity. governmental officials Three were interviewed for their perceptions - as well about information facts which contribute- to food insecurity within their jurisdiction.

The data were analysed on Microsoft excel computer programme where all responses to questionnaires were coded in a digitised format so that the findings could be described in quantities through tables and graphs. Content analysed was used to analyse qualitative data from interview questions-in which participants had the opportunity to express their views about issues of food insecurity.

3. Characteristics of the study area

Bele is a rural settlement in Tsolo under Mhlontlo Municipality; it is located on the east side of the Eastern Cape Province beside the N2 route connecting Mthatha and Mt Frere. The Eastern Province is relatively one of the most food insecure provinces in the country since nearly 70% of households spend less than R1 000, whilst only 7.6% or slightly more spend R3 500 on food per month in households of the more affluent provinces such as Gauteng. Godfray et al. (2010) discussed that the Eastern Cape is characterised by inequalities prevailing and poverty, particularly in the rural regions. In addition, the province is manifested by insufficient and unstable supplies of food, particularly at household level due to poor economic status and, weak institutional support (IDP, 2012-2017).

The majority of land is used for agricultural purposes and subsistence farming, with large scale communal tenure and grazing. The Human Development Indicator (HDI) indicates a slight improvement in the quality of life for people in the O.R Tambo

District, other poverty indicators point to an increase in poverty. The literacy rate in the District of 47.3% is significantly lower than for the province (63.5%) and for South Africa as a whole (71.3%). Household dependency on Government grants is undisputed and it is the high levels of poverty that makes households dependent upon this as a primary income source Mhlontlo Municipality IDP (2012-2017 & (O.R Tambo district IDP, 2012-2017).

4. Results

This section focuses on the analysis and interpretation of data collected from the municipality officials, the Department of Agriculture and community members.

Variables affecting food security

Table 1 exhibits various variables that influence the state of domestic food security, these variables includes gender of household head, age of household members, state grants and main sources of income.

Table 1 Variables affecting household food security (N=31)

Variable	Frequency	Percentage
Household heads		
Male	16	(51.6)
Female	15	(48.4)
Total	31	(100)
Age of household heads		
18-39	9	(29)
40-64	11	(35.5)
≥65	11	(35.5)
Total	31	(100)
Main source of income		
Employment	10	(32)
Grants	12	(39)
Grants and employment	9	(29)
Total	31	(100)

Fifty two percent of the households are male headed. Thirty six percent of the households were headed by the age group of more than 40 years of age, while 29% were headed by members aged between 18-39 years of age. Evidently, the main sources of income were state grants at 39%, followed by 32% of

households dependent on employment. Twenty nine percent of the households reported coupling employment (seasonal work and temporary work) with state grants.

Assets and equipment for households

These are household tangible assets/equipment such agricultural assets and kitchen equipment that affect household consumption and production of food. Assessment seeks to determine the ownership of these assets and equipment by households - which may have an influence in the food security. In the case "dichotomous indicators" of food insecurity, 90% of the respondents have an ownership of electric cooking appliances and gas primus or paraffin stoves (68%), and 65% of households own a refrigerator. Ownership of proper food storage facilities has a positive relationship with food security as it extends the shelf life of food. The households reported that they owned following agricultural equipment, namely, tractor (13%), plough (39%), garden fork (52%), watering can (42%), hand hoe (97%) and or a wheel barrow (81%). It is mentioned by some households that those who do not have these equipment are likely to be food insecure. This indicates that the households without these agricultural equipment may have a negative impact of not practising subsistence farming as a main or additional source of food security for the households.

Water facilities

Table 2 shows evidence of how households access water.

Table 2: Main sources of water for households N=31

Water source	Public tap & tank	Boreholes	Total
Frequency	19	12	31
Percentage	(61)	(39)	(100)

People use public taps and water tanks for drinking and cooking (61%) purposes. Thirty nine percent of the households use boreholes as a source of water for both domestic and agricultural purposes. The respondents also indicated that sometimes they don't find water from public taps and they were told by the officials to refrain from using water from public taps for agricultural purposes due to it scarcity. When there is no water from

the public tap they normally use mobile tanks which the municipality supplies to save the situation for that particular period.

Infrastructure and services of the designated community

Table 3 depicts the services and infrastructure of the study area.

Table 3: Level of access to public infrastructure and services within the study area N=31

Infrastructure and services	Yes (%)	Frequency	No (%)	Frequency
Proper roads Regular public transportation	(84)	26	(16)	5
	(100)	31	(0)	0
Proper local food stores	(77)	24	(23)	7
Purchase from local food stores	(32)	10	(68)	21
Access to electricity	(100)	31	(0)	0

The maximum of 77% of the households admitted to having proper local food stores and 68 % of the respondents stated that they do not purchase food from local food stores. Eighty four percent of respondents stated that they have proper infrastructure for road ease of transportation. while 16% is inconvenienced with poor roads. households stated that they have access to regular transportation and electricity.

Coping mechanisms

When households can no longer skip meals they employ other methods of accessing food when they run out of it. A key informant from Mhlontlo mentioned multiple that there are community development programs in support of food security in the Mhlontlo region and 40% of households were not aware of these programs within the community. Many households pointed out an unequal distribution of services amongst the wards of Mhlontlo Local Municipality with some wards receiving the programs that assist in food security and some not receiving any.

Contribution made by Mhlontlo LED and TARDI to food security of Mhlontlo area

In assisting the people through development programs, the key informant said that LED of Mhlontlo Municipality works in conjunction with other institutions and other government subdivisions such as the Department of Social Development, South African Social Security Agency (SASSA) and National Food Development Programme (NFDP) to develop varietv а programmes to assist the communities of Mhlontlo. , He further elaborated there is provision of food parcels and financial aid through the Department of Development, (SASSA) Social and (NFDP). The key informant - further pointed out that the municipal economy has an advantage in agriculture and, as a result, a food security programme by the name of Siyazondla (we feed ourselves) was developed and it provides support in field crop production such as maize, beans and livestock, thereby encouraging subsistence farming. Furthermore, an Urgent Care Assistance Company (UCAC) which is a partly selffunded corporation serves to assist the communities of Mhlontlo by visiting households with bed ridden people to supply food aid and contribute- money for the community to start poultry farming projects. The key informant indicated that in the process of development planning and implementations of programmes institutions communicate with the people through extension officers, traditional leaders, ward committees and holding public meetings which are mechanisms of public participation so as to prioritise the needs of the people.

The key informant alluded that the local municipality invites community members

to their institutions where they deliver a variety of services, such as education and training to promote and sustain food security programs. These institutions collaborate with extension officers of Mhlontlo area and request them to inform interested people or existing cooperatives to join training offered by the TARDI which will enhance their skills in their area of interest so they can be better mobilised to initiate cooperatives. To ensure sustainability of their - projects, they do monitoring and evaluation through follow up meetings with the cooperatives and also visitations to their work places to check progress.

5. Discussion on the findings

Table 1 indicated that males are the majority of household's heads and this is supported by Posel and Rogan (2009, 2011, and 2012) who also found that the decline in poverty and food insecurity rates favoured male-headed households. May et al. (1998); Ray (2000); Woolard (2002); and Dungumaro (2008) indicated that in South Africa's female-headed households may be more vulnerable to food insecurity because they were previously disadvantaged, because they are getting low salaries and they don't have land ownership, especially in rural areas. The effects of unemployment in Mhlontlo area led to deprivation of households to have income increasing the incidence of food insecurity. Those households that depend on income from seasonal or part time jobs revealed that in some instances they experience a spell of food temporary insecurity especially when the employment period has ended. The findings of Sidhua et al (2008) are in agreement with this study when they articulate that the ability of households to cope with food insecurity is unstable influenced by employment opportunities and that insecurity of food diminishes with adequate wages and secure job opportunities.

The findings clearly show that the Mhlontlo community depends on state grants as it is indicated in table1. An assertion made by Sekudu and Kweka

(2012) that " many of those who receive social grants lament that the amount made available is never enough, though of course better than nothing". It is in accordance with the situation of grant recipients in Mhlontlo area as several household members pointed out that the money is inadequate to meet their needs. Van Driel (2009) perceives grants as a strategy by the government to reduce the undesirable impact of food insecurity as it is so in Mhlontlo area since in other instances the grant happens to be the sole source of income which is shared with the entire household.

The households had adequacy of these assets at their disposal and ownership of proper food preparation equipment allowed households to prepare whichever desired food with ease. The benefits of owning proper food storage facilities such а refrigerator have a positive relationship with food security. Huang et (2012) stated the importance of household assets, as they provide buffers during economically difficult times and reduce households' need for public assistance in terms of storage and preparation equipment. Water is key to household food security and it is a basic human need required for food preparation. processing and production. Households of Mhlontlo area do not have an inadequate access to water facilities (Table 2).

It is evident that households rely on food and financial coping strategies during hard times. The households apply various means to access food when they run out of provisions; they use methods of getting food loans from shops, asking food from neighbours and relatives.

D'souza et al. (2012) and Schoenfeldt et al. (2013) articulate that households cope with food security shocks by relying on assistance from relatives and neighbours, selling off assets, making financial loans, and in severe cases of desperation they reduce intake of food in quantity and quality and shift toward lower quality and cheaper foods, thus allowing them to acquire more food to maintain calories.

6. Conclusions

Based on the findings, there are multiple factors that may contribute to the food insecurity of households in Mhlontlo area. The aim of the study was to identify factors that contribute to food insecurity in Mhlontlo area and to examine the contribution of community/development government programme activities by institutions on household food security. The researchers conclude with reference findings that community the development programs are unevenly distributed inadequate and have contribution in improving the state of food insecurity in Mhlontlo area. Inadequate support from government institutions in terms of implementation of community development programmes that could improve the condition of food insecurity, the population of Mhlontlo area is characterised by high unemployment of the study population coupled with a dependence on the state grants. They have abundance of land but food production is not frequent, therefore, land is underutilised for food production were identified as the major contributing factors of food insecurity in this study.

7. Recommendations

The community needs to be mobilised through education and training to be entrepreneurs and create their own opportunities since the chance of employment is scarce.

Government institutions should evenly distribute their services amongst communities and create suitable programs such as agricultural support programs so as to mobilise households to better utilise their already available land and households need to practice persistent subsistence production to close the gap of inadequate household income.

References

Backeberg, G.R. & Sanewe, A.J. (2010). Underutilised indigenous and traditional crops: why is research on water use

important for South Africa? **South African Journal of Plant and Soil.** Available at: http://dx.doi.org/10.1080/02571862.2010.1 06.

Baiphethi, M. & Jackobs, P.J. (2009). The contribution of subsistence farming to food security in South Africa, **Agrekon**, 4(48), 459-482

Briers, B. & Laporte, S. (2013). A wallet full of calories: The effect of financial dissatisfaction on the desire for food energy. **Journal of Marketing Research**, 50 (December), 767-781.

Charles, I.T. (2011). Gender equity & food security: Lessons from Ozalla community, Edo State, Nigeria, **Gender & Behaviour**, Vol. 9 Issue 1, 35-43.

De Cock, N., D' Haese, M., Vink, N., Van Rooyen, C.J., Staelens, L., Schonfeldt, H.C., & D'Haese, L. (2013). Food security in rural areas of Limpopo Province, **South Africa. Food security**, 5(2), 269-282.

Dungumaro, E. (2008). Gender differentials in household structure and socioeconomic characteristics in South Africa, **Journal of Comparative Family Studies**, 39(4), 429-451.

D' souza, A.D., & Jolliffe, D. (2012). Rising food prices and coping strategies: household-level evidence from Afghanistan. The Journal of Development Studies 48(2), 282-299.

Faber, M., Witten, C. & Drimie, S. (2011). Community-based agricultural interventions in the context of food and nutrition security in South Africa, South African Journal of Clinical Nutrition, 24(1), 22-30.

Fonjong, L., Sama-Lang, I. & Fombe, L. (2010). Assessment of the evolution of land tenure system in Cameroon and its effects on women's land rights and food security, **Perspectives on global development and technology** (PGDT), vol.9, no 12, 154-169

Galhena, D., Freed, R. & Maredia, K.M. (2013). Home gardens: a promising approach to enhance household food security and wellbeing. **Journal of Agriculture & Food Security**, 2(1), 8.

Godfray, H.C.J., Beddington, J.R., Crute, I.R., Haddad, L., Lawrence, D., Muir, J.F., Pretty, J., Robinson, S., Thomas, S.M. & Toulmin, C. (2010). Food security: the challenge of feeding 9 billion people. **Science**, 327: 812–818.

Greenberg, S. (2010). Contesting the food system in South Africa: issues and opportunities. Belville: Institute for poverty, land and Agrarian Studies (PLAAS); 2010

Gustafson, D.J. (2013). Rising food costs & global food security: Key issues & relevance for India. Indian J. Med. Res, 2013 September, 138(3), 398-410.

Haung, J., Nam, Y. & Wikoff, N. (2012). Household assets and food stamp program participation among eligible low-income households, **Journal of Poverty**, 16(2), 171-193.

Iduke, F.O., Angba, A.O. & Ushie, M.E. (2012). Food insecurity challenges and sustainable agricultural development in Nigeria. OIDA. **International Journal of Sustainable Development**, 5(10), 25-30

Ihab, A.N., Rohana, A.J., Wan Manan, W.M., Wan Suriati, W.N., Zalilah, M.S. & Rusli, A.M. (2013). Nutritional outcomes related to household food security among mothers in rural Malaysia. **Journal of Health populnutr.** 2013 Dec; 31(4), 480-489.

Leavy, A.V., Mumtaz, Z., Rashid, S.F. & Willows, S.N. (2013). Influence of gender roles and rising food prices on poor, pregnant women's eating and food provisioning practices in Dhaka, Bangladesh. **Reproductive Health** 2013, pp.1-12.

May, J., Budlender, D., Mokate, R., Rogerson. & Stavrou, A. (1998). Poverty and inequality in South Africa. Report prepared for the office of the Deputy President, Republic of South Africa. Pretoria.

Mhlontlo local Municipality. (2012-2017). **Integrated Development Plan**. Mhlontlo Municipality offices.

Mturi, A.J., Sekude, J. & Kweka, O. (2012). Understanding the experiences and challenges of child-headed households and the role of social grants in South Africa. **Journal of Social Development in Africa**, Vol. 27, No2, (2012)

Olowu, D. (2013). Gender aspects of food security in Lesotho: implications for an integrative Rights-Based Approach. Nigeria: Centre for Psychological Studies/Services, Ile-Ife.

O.R. Tambo District Municipality. 2012-2017. **Integrated Development Plan**. Municipality offices.

Posel, D. & Rogan, M. (2009). Women, income and poverty: gender access to resources in post-apartheid South Africa, **Agenda**, 81. 25-34.

Posel, D. & Rogan, M. (2011). Gendered trends in poverty in the post-apartheid period, 1997-2006. ERSA Working Paper No. 205. Cape Town: **Economic Research Southern African.**

Posel, D. & Rogan, M. (2012). Gendered trends in poverty in the post-apartheid period, 1997-2006, **Development Southern Africa**, 29(1), 97-113.

Ray, R. (2008).Poverty and expenditure patterns of households in Pakistan and South Africa: a comparative study, **Journal of International Development**, 12, 241-256.

Roos, J.A. Ruthven, G.A., McLachlan, M.H. & Lambard, M.J. (2013). Food availability and accessibility in the local food distribution system of low income, urban community in Worcester in the Western Cape Province: Original research Vol. 26(4), 194-200.

Saini, M.S. & Jain, R. (2014). Sustainability in the three dimensions of

society-urbanisation, food insecurity and agriculture.

Schonfeldt, H.C., Hall, N. & Bester, M. (2013). Relevance of food-based dietary guidelines to food and nutrition security: A South African perspective. **Nutrition Bulletin**, 38(2), 226-235.

Shisanya, S.O. & Hendriks, S.L. (2011). The contribution of community gardens to food security in the Maphephetheni uplands. **Development Southern African**, 28(4), 509-526.

Sidn, S.N. & Basu, S. (2011). Women's contribution to household food and economic security: A study in the Garhwal. **International Mountain Society (IMS)** www.mrd-journal.org.

Sindhu, R.S., I. Kaur. and K. Vatta. (20080. Food and nutritional insecurity

and its determinants in food surplus areas: the case study of Punjab state. **Agricultural Economics Research Review**, Vol. 21, 91-98.

Sonnnino, R., Faus, A.N.A.M. & Maggaggio, A. (2014). Sustainable food security: An emerging research and Policy Agenda. **Int.jrnl.of Soc of agr & food**, vol.21, No.1, 173-188.

Van Driel, M. (2009). The social grants and black women in South Africa: a case of Bophelong Township in Gauteng. **Journal of International Women's Studies**, 10(4).

Woorland, I. (2002). An overview of poverty and inequality in South Africa. Working Paper prepared for DFID: Department for International Development.