

## Unemployment, Living Wages and Food Security in Alice, Eastern Cape, South Africa

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**ABSTRACT** As unemployment and inflation affect the South African economy, employment opportunities continue to be minimal for those living in pastoral areas making residents more prone to hunger, starvation and food insecurity. The principle objective of this paper was to investigate the effects of unemployment and living wages on household food security in Alice, Eastern Cape as well as indicate important issues that policy makers and governments should deal with in order to assist households to be food secure.

Structured interviews incorporating the household hunger scale and selected demographic characteristics were administered to 441 respondents in Alice, Eastern Cape, South Africa. Cluster sampling was used to select respondents where the population was divided into mutually exclusive groups and systematic random sampling was then employed within each cluster. The findings of this research indicate that the higher the unemployment level and the lower the living wage and the more likely households are to be food insecure. There is thus a need for job creation and community based projects to help eradicate household food insecurity amongst the unemployed.

### INTRODUCTION

South Africa has recently promulgated the Restitution of Land Rights Amendment Act- an act that may have widespread repercussions on food security for the country (Makinana 2014). This Act re-opens the land claims process to enable restitution for unlawful land expropriation during the apartheid era. Notwithstanding the need for restitution and justice, threats to commercial food production may have negative consequences for South Africa's poor who are more sensitive to inflation and who already have limited employment and earning opportunities. In the first quarter of 2014, unemployment rose to 25.2%. This study sought to understand the current status of food security in Alice, in the rural Eastern Cape and to explore the relationships between employment, income and household hunger. In South Africa, there is extensive unemployment, and the wage income is low relative to the cost of living and number of dependants in each household, which contributes to food insecurity (Altman and Ngandu 2010).

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### Problem Statement

Topical research on food security by (Musemwa et al. 2013) in the Eastern Cape shows that employment opportunities are minimal and people in pastoral places rely on government grants and remittances for a living and this therefore, makes it difficult for people living in rural areas to be food secure.

The unemployment rate in South Africa increased from 25.49% to 31.20 % from 2000 to 2013, declining to 25.2% in 2014 (Taborda 2014). South African households mainly purchase their food this implying that they rely on their income to attain their dietary goals. Thus, with the prevalent unemployment and low incomes (living wages), people are currently less likely to have sufficient food (Altman and Ngandu 2010). Considering the fact that food is a basic necessity in life and after taking a look at the statistics and rate of unemployment in South Africa, this study sought to explore the effects of unemployment and living wage on household food security.

### Objectives

The objectives of this study are to explore the effects of unemployment and living wage on household food security; to investigate if unemployment leads to low food security. This study will also describe households in Alice,

Eastern Cape, a predominantly rural and historically disadvantaged area, in terms of breadwinner's age, gender, income source, income per month, employment status and education level.

### Hypotheses

$H_0$ . Unemployment has no effect on household food security.

$H_1$ . Unemployment has an effect on household food security.

$H_0$ . Living wages have no effect on household food security.

$H_1$ . Living wages have an effect on household food security.

### Literature Review

The South African government states that food security is attained when all people at all times have physical, social and economic access to adequate, safe and nourishing food to meet their dietary needs and food preferences for an active and healthy life (Constitution of South Africa, Act 106 of 1996). Jacobs (2009) states that household food security depends on household revenue and asset status hence this study paid particular attention to employment status and household living wage.

A living wage is an expression used to describe a minimum wage that is high enough to cover a specific quality and quantity of housing, food, utilities, transport, health care and recreation (Congress of South African Trade Unions 2011). Essentially, a living wage is the minimum income necessary for a household to meet its basic needs.

Unemployment is defined as a situation in which those who are able and willing to work cannot find a job (World Bank 2006). It has negative effects on personal well-being, this includes inability to purchase basic goods and take care of oneself suggesting that unemployed individuals cannot fulfill basic needs for instance food thus supporting an alternative hypothesis, that unemployment has an effect on food security.

### Theoretical Framework

Barret (2010) states that there are three main concepts associated with food security namely availability, access and utilisation. Food avail-

ability is defined as a state when a variety of food is available to people both at national local level. Food accessibility refers to the ability of people to buy sufficient quantities of foods that are nutritionally adequate. When food is stored, prepared, distributed and eaten in nutritionally adequate ways by all members of the household then food utilisation is considered to be optimal. Since the study was looking at the effects of unemployment and living wage on food security at household level, food security means that all individuals and households have access to adequate food by generating sufficient income to purchase it.

### Empirical Literature

As mentioned before, the unemployment rate in South Africa is currently 25.2% (Taborda 2014). Altman and Ngandu (2010) state that the fewer the jobs, that is the higher the unemployment rate, the lower household incomes will be and the higher the levels of food insecurity. Employment levels therefore influence household food insecurity.

According to Statistics South Africa (2011) many South African households are unable to purchase food primarily because their purchasing power is limited by a scarcity of income generation opportunities, especially in rural areas such as Alice. Most rural households in South African are increasingly failing to afford food. In 2014, the Human Sciences Research Council and Medical Research Council reported that only 45.6% of South Africa's households are food secure, 28.3% are at risk of food insecure and 26% are food insecure. The highest concentration of food insecure households exists in the Eastern Cape, where more than 30% of households experience hunger.

The high incidence of food insecurity in the Eastern Cape could be attributed to low skills levels in the province, with 10.5% of those older than 20 having never received any education (Statistics South Africa 2012). Musemwa et al. (2013) recommended that educating rural households using even informal methods could help to promote food security.

Labadarios et al. (2009) found that the level of education is related to food access through its effects on employment. The link between education and food insecurity is supported by research conducted in Hamburg, Eastern Cape

by Ndhleve et al. (2012), who found that households with inadequate access to food were less educated and earned low incomes. The United Nations Development Programme (Report of 2006) indicated that food insecurity is linked to income and unemployment however; Labadarios et al. (2009) found that when incomes are low and food prices are high, employment will not help much in improving access to food.

Van der Merwe (2011) states that households need secure living wages to ensure food security. Living wage is the minimum wage sufficient to cover the basic needs of humans. However, the Congress of South African Trade Unions (2011) states that the introduction of minimum wages led to employment levels declining. The setting of minimum wages resulted in the decrease in demand for labour and given that South Africa has a high level of unemployment, minimum wage setting puts pressure on employment growth (Congress of South African Trade Unions 2011). According to Gindling and Terrell (2010) the challenge is therefore put to policy makers to set a minimum wage that is fair given the worker's needs and cost of living but that will not harm employment growth.

Households differ widely in terms of their main sources of income. Thus, setting a minimum wage will not help every citizen or household. Congress of South African Trade Unions (2011) states that income sources of households in South Africa include wages, salaries, business income, grants and other income derived from the national security system. Ndhleve et al. (2012) in their study in Eastern Cape found that social grants were the main sources of income. Policy makers must ensure that people relying on social grants for a living receive an amount that is equivalent to a living wage.

The problem of household food insecurity is aggravated in the rural areas because there are higher rates of unemployment in South African rural areas, low wage incomes and falling remittances (Altman 2009). The majority of wage earners in rural areas face difficulties achieving a minimum nutritional standard and hence can be said to be food insecure (Altman 2009).

Altman and Ngandu (2010) found that even if unemployment is halved, achieving household food security will still be a challenge if reliance is still placed on wage income thus they postulate that greater policy attention is needed to

improve food security for low income households. Though the Constitution of South Africa (Act 108 of 1996) states that every citizen has the right to access to food and water, it is clear from the above that the policies in the country are failing to achieve food security at household level. South Africa's constitution is criticized for allowing access to food but not guaranteeing a supply of food for each citizen.

## METHODOLOGY

This section provides a description of the methodology that was applied in the study

### Population

The population used households in Alice, Nkonkobe District Municipality, Eastern Cape which comprises 3,705 households or approximately 12,000 individuals.

### Sampling Technique

A cluster sample was used where the population was divided into mutually exclusive groups. Systematic random sampling was then employed within each cluster. This was drawn by selecting a random household on the aerial chart within each cluster and then selecting every fifth household until the sample was drawn. The overall sample size was 441.

### Research Instrument

The research instrument was divided into two sections;

#### *Section A: Household Information*

This first part of the questionnaire elicited general household information and occupational data such as, employment status, highest educational level and source of income of the breadwinner, household size and household living wage per month.

#### *Section B: Household Hunger Scale*

The household hunger scale was developed and specifically validated for cross cultural use

(Ballard et al. 2011) and is used to assign households along a scale of severity of food access from no hunger to severe household hunger (Ballard et al. 2010). It enquires directly if the household has experienced events typical of a food insecure household. The household hunger scale scoring is carried out by coding the responses and then categorising households into little or no household hunger, moderate household hunger and severe household hunger.

### Data Collection Method

Data was collected by trained fieldworkers in July 2013 using a structured questionnaire which permitted the collection of a large amount of data. The fieldworkers interviewed respondents and administered the questionnaire following a structured pattern to control response bias and increase the reliability of the data. The interviews were conducted in Alice.

### Data Capturing and Analysis

Data was coded and captured, both descriptive and inferential statistical analyses were used in this study. Descriptive statistics were used on the demographic information. The data was imported into SPSS in order for statistical analysis to take place. When the data was imported into SPSS, chi-square tests were conducted to discover if there was a relationship between household food security and unemployment as well as between living wages and household food security. Cramer's V was used to test the magnitude of the association where p-values were significant.

### Ethical Considerations

Ethical research practice was ensured during the study, with ethical clearance being obtained from both the participants and University of Fort Hare's ethics committee. Ethical considerations included informed consent, anonymity, confidentiality, protection from harm, provision of privacy, objectivity and honesty in reporting findings and procedures.

## RESULTS AND DISCUSSION

This section presents the key findings of the study, the demographic profile of the sample will be presented. Subsequently the main findings

and results relating to the hypothesis of the study will be presented.

### Demographic Profile of the Sample

As presented in Table 1, the majority of the respondents were Xhosa speaking and aged between 40 and 49. More females than males participated in the study. This is in keeping with the demographic profile of the Eastern Cape, where there are more females than males (Statistics South Africa 2012).

**Table 1: Biographical information in percentages**

	<i>n</i>	<i>%</i>	<i>Cum. %</i>
<i>Language</i>			
Xhosa	393	89.32	89.32
Afrikaans	31	7.05	96.36
Other	16	3.64	100.00
Total	440	100.00	
<i>Age</i>			
<18	6	1.41	1.41
18-29	66	15.49	16.90
30-39	73	17.14	34.04
40-49	107	25.12	59.15
50-59	82	19.25	78.40
>60	92	21.60	100.00
Total	426	100.00	
<i>Gender</i>			
Male	141	34.22	34.22
Female	271	65.78	100.00
Total	412	100.00	

Table 2 shows that most of the participants in the study were unemployed, 54% (237) of the respondents were unemployed and only 24% (106) had full time employment. Nine percent (41) had piecework jobs, 6% (28) were self employed and 7% (29) had part time jobs. The Eastern Cape has an unemployment rate of approximately 37% overall (Statistics South Africa 2012).

**Table 2: Employment status**

<i>Employment status</i>	<i>n</i>	<i>%</i>
Unemployed	237	54
Piecework	41	9
Self-employed	28	6
Part-time	29	7
Full-time	106	24
Total	441	100

The majority of the respondents did not have a matriculation certificate (see Table 3) Labadaris et al. (2009) found that the level of education is related to food access through its effects on

employment. Musemwa et al. (2013) recommended that educating rural households using informal methods could also help to ensure alternatives to promote food security.

**Table 3: Educational level**

<i>Educational level</i>	<i>n</i>	<i>%</i>
Primary	119	27
Secondary	165	37
Certificate	77	18
Degree/Diploma	62	14
Postgraduate	18	4
Total	441	100

With reference to Table 4, 62% of the research participants earn less than R1 500 per month. The Integrated Food Security Strategy South Africa (Report of 2011) also states that Eastern Cape Province is poverty stricken and poorest in the county with 70% of households spending less than R 1000 per month on food. More so, topical research in Hamburg, Eastern Cape by Ndhleve et al. (2012) found that households with inadequate access to food also earned low incomes. The problem of household food insecurity in the Eastern Cape can therefore be explained by a lack of purchasing power hence households need secure living wages to ensure food security (Van der Merwe 2011).

**Table 4: Income per month**

<i>Income per month</i>	<i>n</i>	<i>%</i>
<R1500.00	272	62
R1501.00-R4528.00	96	22
R4529.00-R12644.00	34	8
R12645.00-R30327.00	11	2
R30328.00-R52593.00	20	4
R52594.00-R71992.00	1	0
>71992.00	7	2
Total	441	100

One-third of the households relied on social grants as their main source of income and a further 11% rely on pensions for their income (Table 5). Ndhleve et al. (2012) found that households with social grants as their main source of income have a lower risk of inadequate access to food.

### The Relationship between Unemployment and Household Food Security

The results in the Table 6 indicate that there is a large practical relationship between unem-

**Table 5: Income source**

<i>Income source</i>	<i>n</i>	<i>%</i>
Wage	166	38
Grants	145	33
Pension	48	11
Investments	3	1
Remittances	23	5
Other	56	12
Total	441	100

ployment and household food security ( $\chi^2(4) = 23.26, p < .001, V = 0.13$ ). Since the  $p$ -value is less than 0.05 it is possible to reject the null hypothesis and accept the alternative, thus, it is confirmed that unemployment has a relationship with household food security in the rural Eastern Cape. This is despite the access the rural population has to land and opportunities for food production.

The results also indicate that 73% of the unemployed were food secure. This can be explained by the fact that many of the respondents receive grants, pensions and remittances. The results also show that 6% of the unemployed were moderately food insecure and 21% were severely food insecure. In contrast, amongst respondents who were self employed, did part time and piecework jobs 72% were food secure, 8% moderately insecure and 20% were severely food insecure.

The results also indicate that amongst the full time employed, 77% were food secure, 5% moderately insecure and 18% were severely food insecure. This brings one to question the reasons why someone who has a full time job can be food insecure- suggesting that high food prices may be contributing to food insecurity in Alice.

### The Relationship between Living Wages and Household Food Security

The results in Table 7 indicate that there is a large practical relationship between living wages and household food security ( $\chi^2(4) = 23.26, p < .001, V = 0.13$ ). In view of the fact that  $p$ -value is less than 0.05 the null hypothesis is rejected in favour of the alternative, therefore, living wages have a relationship with household food security. This is supported by the Integrated Food Security Strategy South Africa (2011) which indicates that household food insecurity in South Africa is exacerbated by lack of purchas-



**Table 6: Chi-square test of independence: The relationship between unemployment and household food security**

Group	<i>Observed contingency table</i>							
	<i>Food secure</i>		<i>Moderate hunger</i>		<i>Severe hunger</i>		<i>Total</i>	
	<i>Fo</i>	<i>%</i>	<i>Fo</i>	<i>%</i>	<i>Fo</i>	<i>%</i>	<i>Fo</i>	<i>%</i>
Unemployed	173	73	15	6	49	21	237	100
Piecework/self/part-time	70	72	9	8	19	20	98	100
Full time employment	94	89	0	0	12	11	106	100
Total	337	77	24	5	80	18	441	100

**Table 7: Chi-square test of independence: The relationship between living wages and household food security**

Group	<i>Observed contingency table</i>							
	<i>Secure</i>		<i>Moderate</i>		<i>Insecure</i>		<i>Total</i>	
	<i>Fo</i>	<i>%</i>	<i>Fo</i>	<i>%</i>	<i>Fo</i>	<i>%</i>	<i>Fo</i>	<i>%</i>
<R1500.00	188	55	84	25	66	20	338	100
R1501.00-R4528.00	18	78	4	17	1	4	23	100
>R4529.00	66	83	8	10	6	8	80	100
Total	272	62	96	22	73	17	441	100

ing power. Even in rural areas, households still require living wages in order to be food secure.

### CONCLUSION

This study explored the relationship between household food security and living wages as well as between household food security and unemployment in Alice in the Eastern Cape. A sample of 441 was drawn and structured interviews were conducted. The study found that household food security is significantly related to both income and unemployment.

With respect to the findings discussed previously it can be concluded that employment status of an individual affects household food security. Though the results indicated that amongst the employed 11% are food insecure, this may be as a result low living wages and the increased number of breadwinner's dependents. Amongst the unemployed, 73% are recorded to be food secure, this may be because those individuals are receiving social grants and remittances hence the government is doing a great job to improve household food security. Furthermore, it can be concluded that living wages affect household food security. In respect of income, 45% of those who earn less than R1500 are food insecure.

### RECOMMENDATIONS

Household food security needs improving by means of sustainable measures. Benefits and grants may not be sustainable in terms of providing a living wage, thus alternate measures and interventions are necessary. These could be, for instance, teaching households how to grow crops in a sustainable manner and teaching them how to use affordable ingredients in a nutritious and economical way.

### LIMITATIONS

A desire for social desirability may have caused some respondents to answer some questions untruthfully or to want to impress the researcher with their answers. The respondents may have had valuable information to share, but the use of structured questionnaires limited their responses. The interview process did not enable the respondents to provide an in-depth account of their circumstances. In future, a qualitative component should be included in the questionnaire in order to get a deeper insight to the subject. For purposes of triangulation and in order to avoid common method variance, data collection methods other than structured interviews should also be used in future research.

## REFERENCES

- Altman M, Ngandu S 2010. Would halving unemployment contribute to improved household food security for men and women? *Agenda: Empowering Women for Gender Equity*, 24: 52-65.
- Altman M 2009. *Employment Scenarios to 2014 and 2024 in the Context of a Global Economic Slowdown*. Pretoria: Human Sciences Research Council.
- Altman M, Hart T, Jacobs P 2009. Household food security status in South Africa. *Agrekon*, 48(4): 345-361.
- Ballard T, Coates J, Swindale A, Deitchler M 2010. *Validation of a Measure of Household Hunger for Cross-cultural Use*. Washington: Food and Nutrition Technical Assistance Project.
- Ballard T, Coates J, Swindale A, Deitchler M, 2011. *The Household Hunger Scale*. Washington: Food and Nutrition Technical Assistance Program.
- Barrett CB 2010. Measuring food insecurity. *Science*, 327: 825-828.
- Congress of South African Trade Unions [COSATU] 2011. Toward a COSATU Living Wage Conference: A NALEDI Research Report. From <[http://www.cosatu.org.za/docs/reports/2011/naledi\\_research\\_paper.pdf](http://www.cosatu.org.za/docs/reports/2011/naledi_research_paper.pdf)> (Retrieved on 12 July 2014).
- Integrated Food Security Strategy for South Africa 2011. From <<http://www.nda.agric.za/doiDev/sideMenu/foodSecurity/policies.pdf>> (Retrieved on 12 July 2014).
- Jacobs FT 2009. The status of household food security targets in South Africa. *Agrekon: Agricultural Economics Research, Policy and Practice in Southern Africa*, 48(4): 410-433.
- Labadarios D, Davids YD, Mchiza Z, Weir-Smith G 2009. *The Assessment of Food Insecurity in South Africa*. Pretoria: Centre for Poverty, Employment and Growth, Human Sciences Research Council.
- Makinana A 2014. Sensitive Reform Policy Sees Re-opening of Land Claims. Mail and Guardian, July 1, 2014. From <<http://mg.co.za/article/2014-07-01-sensitive-reform-policy-sees-reopening-of-land-claims>> (Retrieved on 11 July 2014).
- Human Sciences Research Council and Medical Research Council 2014. *The South African National Health and Nutrition Examination Survey 2012, SANHANES-1: 2014 Edition*. Pretoria: HSRC Press.
- Musemwa L, Zhou L, Ndhleve S, Aghdasi F 2013. Factors affecting household access to enough food in the Eastern Cape Province of South Africa. *Journal of Development and Agricultural Economics*, 4(3): 84-91.
- Ndhleve S, Musemwa L, Zhou L 2012. Household Food security in a coastal rural community of South Africa: Causes and coping strategies. *Journal of Agricultural Biotechnology and Sustainable Development*, 4(5): 68-74.
- Republic of South Africa 1996. Constitution of the Republic of South Africa. From <<http://www.gov.za/documents/constitution/1996/a108-96.pdf>> (Retrieved on 12 July 2014).
- Statistics South Africa 2011. *Mid-Year Population Estimates*. Pretoria: Statistics South Africa.
- Statistics South Africa 2012. *Censuses 2011: Provinces at a Glance*. Pretoria: Statistics South Africa.
- Taborda J 2014. South Africa Unemployment up to 25.2%. From <<http://www.tradingeconomics.com/south-africa/unemployment-rate>> (Retrieved on 11 July 2014).
- UNDP 2006. Human Development Report 2006. Beyond Scarcity: Power, Poverty and the Global Water Crisis. From <<http://hdr.undp.org/en/media/HDR06-complete.pdf>> (Retrieved on 5 July 2013).
- Van der Merwe C 2011. Key challenges for ensuring food security in South Africa's inner cities. *AISA Policy Brief*, 36: 1-7.
- World Bank 2006. *Repositioning Nutrition as Central to Development: A Strategy for Large-scale Action*. World Bank Political Economy Research Institute (PERI). Washington, DC: University of Massachusetts.