

Addressing food insecurity in South Africa

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INTRODUCTION

The preamble of the United Nations' Universal Declaration of Human Rights stresses the recognition of the inherent dignity and the equal and inalienable rights of all members of the human family. This is the foundation of the freedom, justice and peace in the world.

Whereas there are several articles of the Universal Declaration of Human Rights, there is one important article that clearly impinges on the economic rights of many citizens of the world. Article 25.1 of the United Nation's Universal Declaration on Human Rights states that:

“Everyone has the right to a standard of living adequate for the health and well-being of himself and of his family, including food, clothing, housing, medical care, the necessary social services and the right to security in the event of unemployment, sickness, disability, widowhood, old age or other lack of livelihood in circumstances beyond his control”.

This article stresses economic rights and implies that everyone has the right to live comfortably and should not be deprived of the basic daily requirements for survival.

The South African *Bill of Rights* reaffirms article 25.1 of the Universal Declaration of Human Rights, by stating in Section 26 and 27 that, everyone has the right to adequate housing, health care services, sufficient food and water and social security. These also include appropriate social assistance, if they are unable to support themselves and their dependants.

However, there is a clear contradiction between the Bill of Rights and the economic rights of many South Africans.

The macro-economic policy of the country is not changing the socio-economic situation, and the standards of living of many South Africans continue to deteriorate. Although the economy is growing annually, government has not changed so much in its attempt to ensure economic rights to all. This, in some way, violates the Bill of Rights and United Nations Declaration on Human Rights.

This research is aimed at analysing households' ability to be food secured in South Africa and review anti-poverty and food security programmes. It further looks at the contribution of land reform to food security.

The paper begins with a review of income and expenditure situation of households in South Africa using household information from the October Household Survey (OHS) and the Income and Expenditure Survey (IES). The research further estimates the minimum food expenditure required to meet the recommended dietary allowances (RDA). It also determines the gap between the required minimum food expenditure and the actual household food expenditure. The research further reviews social security and nutrition programmes and their implications for food security and a healthy society and analyses land reform and its contribution to food security.

Food Insecurity and the Consequences

Household food security is defined as access by all households at all times to adequate safe and nutritious food for a healthy and productive life.

Food security can thus be said to have two components;

- Ability to be self sufficient in food production through own production
- Accessibility to markets and ability to purchase food items

The threats to food security arise from a combination of factors which individually and collectively place food systems under stress. These include climatological, ecological, socio-economic and political factors. These factors interact with such factors as market and access to credit, the availability and sustainability of technology, the terms of trade, pricing policies and other idiosyncratic factors to threaten food supply.

The socio-economic conditions play a more important role in food security or insecurity. National food self-sufficiency should not be used as a proxy for household food security or as an index of national welfare. While South Africa produces sufficient food, this in no way ensures food security at individual household level. This is because ensuring access to food at the household level depends not only on secure food supplies, but also on stable demand or purchasing power. If families are unable to grow or purchase enough food, and social welfare nets are absent or ineffective, there may be hunger. This is the case in many South African societies.

It is estimated that 39% of the South African population is vulnerable to food insecurity (Mgijima, 1999). Furthermore, 22% of all children under the age of nine years are stunted¹ due to chronic malnutrition. This has negative consequences for the children's development.

Food insecurity is highest among the African population and rural households. Provinces with high stunting rates are also provinces with large rural population. The stunting rates² for individual provinces are as shown in Table 1 below. The Northern Cape and Free State show high stunting rates of 31% and 30% respectively.

According to the National Food Consumption Survey Group (2000), anaemia and marginal vitamin A status are widespread micronutrient deficiencies. Anaemia and marginal vitamin A status affects between 20% and 30% of young children. Rural children and mothers with limited education are most affected.

It is further said that malnutrition may lead to severe protein-energy deficiency known as *Kwashiorkor* and marasmus. Malnutrition may also lead to micro-nutrient deficiencies such as night blindness and cretinism.

¹ This implies such children have a low weight for their age and deficiencies in micronutrients such as vitamin A, iron and iodine.

² Stunting rate is a measure of protein energy deficiencies.

Table 1: Stunting Rate Among Children Between Ages 1-9 Years

Northern Province	23
Eastern Cape	20
Free State	30
KwaZulu-Natal	18
North-West	24
Northern Cape	31
Mpumalanga	26
Western Cape	14
Gauteng	19
South Africa	22

Source: National Food Consumption Survey Group (2000)

McLachlan and Kuzwayo (1997) have identified inadequate dietary intake and disease as the most significant immediate determinants of malnutrition. Inadequate dietary intake may include inadequacies in total energy, protein, vitamin or mineral intake. Infectious diseases such as measles, gastro-enteritis and respiratory infections are commonly linked to malnutrition. Poor nutritional status reduces the immune system and increases individual's susceptibility to infections. Malnutrition therefore has serious health repercussions.

Malnutrition might be caused by not enough food in the home or not having enough time to prepared food. The most important factor though, is not having enough food in the household. Households adopt different strategies in the acquisition of food to feed the household. Such strategies include own production, food purchases using acquired income from employment, self-employment or social transfers. A household vulnerability to food insecurity is high if it has to use the bulk of its human, material and financial resources to meet food needs, with just a little or nothing left to address other basic needs like clean water or housing.

In South Africa, as in many other developing countries, food security is a concern. Among poor households, particularly in the rural areas, a significant number may be considered resource poor and therefore food insecure although South Africa is considered to be food self-sufficient. Women and children bear the long-term consequences of food insecurity because of the negative impact on their learning capacity and productivity in adult life (McLachlan and Kuzwayo, 1997).

Income and Expenditure of Households and Poverty Level in South Africa Unemployment

Poverty continues to be the main factor in household food insecurity. Given that there are not many viable livelihood strategies available (particularly in rural areas), most poor households are highly dependent on wage incomes. Employment levels

therefore, influence poverty trends and hence food insecurity. The fewer the jobs, the lower the household incomes, and the higher the vulnerability to food insecurity.

According to information from October Household Surveys (OHS), there was an increase in the expanded unemployment rate from 34.4% to 36.2% between 1996 and 1999³. Statistics South Africa also reported an increase in the official unemployment rate⁴ in South Africa from 20.3% in 1996 to 23.3% in 1999.

Joblessness trends shift as one moves from province to province. Statistics SA figures show the rate of unemployment reaching a high of 49% in the Eastern Cape and dipping to 18% in the Western Cape. In four provinces, the Eastern Cape, KwaZulu-Natal, Northern Province and North-West, the unemployment rates are higher than the national average.

Household Incomes⁵

For those who are employed, wages tend to be too low to sustain them and their families. Wages constitute a large part of incomes in both rural and urban areas. A 1997 Rural Survey showed that wages accounted for about 39% of incomes in former homelands. In some provinces, that figure is as high as 48%. This indicates limited livelihood strategies and great dependence on wage incomes.

Income distribution in South Africa is among the most unequal in the world. The income information from the 1995 Income and Expenditure Survey (IES) has been adjusted to 2000 figures by multiplying by the Consumer Price Index (CPI). The assumption is that household income has grown by the inflation rate.

Based on this, the average annual household income is R33,428 or R2786 per month. However, About 6.9 million households receive monthly incomes⁶ of less than R2500 in 2000. This is about 73% of all households. Only 27% receive incomes of more than R2500 per month.

A further breakdown indicates that about 46% of all households receive monthly incomes of R1000 or less per month. In other words, almost half of South African households earn a monthly income of R1000 or less. This has serious implications for standards of living and importantly food security of many households.

Rural households are also more vulnerable to poverty and food insecurity than urban households. According to the Income and Expenditure Survey, about 84% of rural households had monthly incomes of less than R2500 with 62% reporting monthly incomes of less than R1000. Only 21% of urban households earn less than R1000 per month. This is an indication that location has a close relationship to poverty. Furthermore, provinces that are more rural has a greater proportion of households earning less than R2500 a month relative to more urban provinces. For example, about

³ In estimating expanded unemployment rate, statistics South Africa has classified those who were not looking for work, those unwilling to accept a suitable job if it were offered within a week, and those who have not taken active steps to find a job in the past four weeks as not economically active

⁴ The official unemployment rate represents people who are seriously looking for job

⁵ Details of household incomes are presented in the appendixes

⁶ This is employment income including bonuses, commissions and allowances

45% of households in Gauteng earn less than R2500 per month, whereas as much as 83% of households in the Eastern Cape earn less than R2500 per month.

Household income also varies with household size. The proportion of households receiving less than R2500 a month decreases as household size increases from 1 to 4. The proportion, however, increases with increase in household size beyond 4. About 40% of all households receiving income of less than R2500/month have 5 or more members. Also, 18% of all households receiving less than R2500/month have 7 or more members. About 74% of households with 7 or more members receive an income of less than R2500 per month. However, this is relatively low compared to 83% of 1-member households receiving less than R2500 per month. Fifty-six percent of households with 4 members earned less than R2500 per month. Larger-sized households are therefore more vulnerable to poverty and food security than smaller-sized households.

It can be argued from the above that, rural households and large households are more vulnerable to poverty and consequently food insecurity and need to be targeted for poverty alleviating strategies and nutrition programmes.

Household Expenditure⁷

As with income information, the household expenditure from the 1995 IES has been adjusted to 2000 values by multiplying by the Consumer Price Index (CPI). The adjusted information indicates that South Africans spend an average of R4518 per month on household goods. The average household expenditure is higher than the average monthly income of R2786. This indicates a gap between average monthly income and expenditure of R1732. Furthermore, about 73% of all households have incomes below R2500 per month. This is far below the average monthly expenditure.

Household expenditure has some relation to location. Rural households spend less on household goods than urban households. Rural households spend R2468 per month on average relative to R6133 for urban households.

Household expenditure also varies according to the province in which the household is located. Average household expenditure range from R7742 per month in Gauteng to R2665 in Eastern Cape. The average household expenditure for seven provinces, are below the national average of R4518 per month. Only households in Gauteng and Western Cape have average monthly expenditure of more than R4518.

The household size also has implications for household expenditure. Households with 4 members spend more on average, than households with less than or more than 4 people. As the household size increases from 1 to 4 members, household expenditure also increases. However, household expenditure decreases with an increase in household size above 4. Households with 7 or more members spend R3095 per month on average compared to a household expenditure of R5667 per month for four-member households. The data further indicates that households with 2 members spend more relative to households with 7 members. This may imply that bigger sized households correspond to low income households.

⁷ Details of household expenditures are presented in the appendix

Household Food Expenditure

On average, 17% of total household expenditure is spent on food. Again there are variations across race, gender of household head, location and quantiles.

In terms of location, rural households spend less on food than urban households. Rural households spend R588 per month on food, which are about 23% of household expenditure. Urban households on the other hand spend R945 per month on food (about 15% of their household expenditure). This is not unexpected as rural households may be supplementing their food expenditure by own production. However, it must be mentioned that not all rural households supplement their food consumption with own production.

There are also variations in household food expenditure across provinces. The average household food expenditure is lowest in Free State and highest in Gauteng. Households in three provinces: Gauteng, Western Cape and KwaZulu-Natal, have higher average food expenditure than the national average of R788 per month. In terms of the proportion of food expenditure to total expenditure, households in Gauteng spend 13% of their expenditure on food whereas households in Eastern Cape spend 22% of their household expenditure on food alone. Households in Mpumalanga, Northern Province and Eastern Cape spend more than 20% of household expenditure on food alone.

The size of a household also influences the amount spent on food. Household food expenditure peak at a household size of 4 and decline with an increase in household size beyond 4. Households with 4 members spend R892 per month on food. Households with seven or more members, on the other hand, spend R811 per month on food. Thus, the larger the size of household, the higher the proportion of household expenditure allocated to food. Households with seven or more members spend 26% of their household expenditure on food whereas one-member households spend 16% of household expenditure on food.

Again rural households and larger-sized households have relatively lower food expenditure. This is, however, due to the fact that these household categories have the lowest incomes in society. These groups of households are therefore more vulnerable to food insecurity and malnutrition.

The Minimum Recommended Food Expenditure

The minimum recommended food expenditure is the amount of money required to purchase enough food to satisfy the recommended nutrient amount. This is estimated on the basis of the Recommended Dietary Allowances (RDA)⁸, the most commonly

⁸ The Recommended Dietary Allowances (RDA) are a set of nutrient standards. It represents the average daily intake of energy and nutrients considered adequate to meet the needs of the average healthy person under usual environmental stress (Bartoll, 1998). According to the RDA, each person's diet should satisfy a certain minimum amount of energy, proteins, minerals and vitamins. The major vitamins include vitamin A, vitamin B6, vitamin B12, vitamin C, vitamin D, vitamin E, vitamin K, Thiamin, Riboflavin, Niacin and Folate. The major required minerals include calcium, phosphorus, magnesium, iron, zinc, iodine and selenium.

purchased food items in South Africa⁹ and the retail prices of the food items¹⁰. The following assumptions were made about the recommended dietary allowances.

1. The recommended dietary allowances for South Africans are the same as that of United States. Recommended Dietary allowances are yet to be established for the South African population. In the absence of that, I have adopted the United States RDA as a proxy for South Africa.
2. It is also assumed that all South Africans eat from home. This assumption is to provide a minimum estimated cost as possible since cooking own food is cheaper than eating outside home.
3. The recommended dietary allowances vary according to age and gender. The variation makes it difficult to calculate the minimum food expenditure per person. To overcome this, a weighted- average of recommended dietary allowances were estimated for the South African population. Weights were given for each age group and gender as per the RDA allocations. These weights were computed using the 1996 Census. The weighted-average RDA was used as a guide in determining the required combination of food items for a healthy diet. Food Composition Tables for South Africa¹¹ were used to determine the amount of energy, proteins, vitamins and minerals in a unit of each of the identified food items.

Table 2 below shows the food item combinations that provides nutrient levels closer to the RDA and the expenditure required to purchase the food items. Table 2 indicates that a minimum of R9.55 is required on average per person per day for the minimum recommended dietary intake in South Africa. This will amount to R286.5 per month¹².

The monthly expenditure per household will increase according to the size of the household. Table 3 below indicates the estimated amount of food expenditure required for the minimum recommended dietary intake for different household sizes

The Food Expenditure Gap

Food expenditure gap is the difference between household's actual food expenditure and the recommended food expenditure. It provides a guide as to how much additional money is required for a household to meet their dietary requirements.

The minimum food expenditure for a household of size 5 is estimated at R1432.50 per month. The average household size is 5 in South Africa. This implies that many households in South Africa need R1432.50 per month to feed the household with the recommended daily allowances. This indicates that average household incomes should be at least R1432.50 per month to ensure household food security.

⁹ This information was obtained from the National Food Consumption Survey for South Africa conducted in 1999

¹⁰ Retail prices of food items for 1996 were obtained from Statistics South Africa. These were deflated to 2000 prices using the Food Price Index

¹¹ Food composition tables for South Africa have been compiled by the South African Medical Research Council and provides information on the amount of nutrients in different food items.

¹² 30 days is used to calculate the monthly expenditure

Table 2: A Healthy Diet and Expenditure per day

Food Item	Unit (gm)	Price/gm (Cents)	Total Cost (Rands)
Cereals & Cereal Products:			
Bread (2 slices)	60	0.372	0.223
Cooked Rice	125	0.398	0.498
Cooked mealies	70	0.25	0.175
Vegetables:			
Potato	120	0.199	0.238
Cabbage	20	0.186	0.037
Pumpkin	40	0.263	0.105
Carrot	20	0.327	0.065
Fruit:			
1 small orange	120	0.343	0.412
Orange Juice	200	0.500	1.000
Milk and Milk Products:			
Fresh milk	300	0.336	1.008
Yoghurt	200	1.651	3.302
Meat and Meat Products:			
Poultry	45	1.402	0.631
Beef	45	2.249	1.012
Egg	22.5	0.968	0.218
Legumes:			
White Beans	60	0.753	0.452
Fat and Oil:			
Cooking Oil	10	0.641	0.064
Margarine	10	1.050	0.105
TOTAL			9.55

Source: Authors' estimations based on the Recommended Dietary Allowances.

Table 3: Household sizes and the Estimated Minimum Food Expenditure, 2000

1	286.50
2	573.00
3	859.50
4	1146.00
5	1432.50
6	1719.00
7	2005.50
8	2292.00
9	2578.50
10	2865.00

Source: Authors' estimations based on the Recommended Dietary Allowances

As discussed earlier, more than 50% of the population is receiving incomes of less than R2500 per month and 30% of all households are receiving incomes of less than R1000 per month. In other words, 30% of all households cannot even meet the basic food requirements with their income and this has serious implications for malnutrition.

The Minimum Food Expenditure and the Food Gap in South Africa

As indicated in Table 4 below, comparison of household food expenditure to the minimum recommended food expenditure show that households of size 1 and 2 are currently spending more on food than the recommended minimum amount. As the household size increases the gap between the recommended and actual food expenditure increases. For a five-member household, an additional average income of R553 is needed per month to meet the recommended dietary allowance. Considering that the average household size is five in South Africa, the food expenditure for each household should be increased by R553 to ensure a healthy diet for each household.

Table 4: The Minimum Food Expenditure and the Food Gap, 2000

Household Size	Recommended monthly food Expenditure	Actual average monthly food expenditure	Food Expenditure Gap
1	286.50	424.55	-138.05
2	573.00	762.53	-189.53
3	859.50	818.16	41.34
4	1 146.00	892.14	253.86
5	1 432.00	879.62	552.88
6	1 719.00	803.57	915.43
7	2 005.50	810.91	1 194.50

Source: Authors' estimates

As illustrated in Table 4 above, the food expenditure gap widens as the household size increases. The extent of the gap is also an indication of the extent of food insecurity and malnutrition. It can therefore be said that, larger-sized households are more vulnerable to food insecurity and malnutrition than smaller-sized households.

The Social Security System and Food Security

With unemployment increasing in South Africa and average real household incomes decreasing against increasing food expenditures, it is important that some kind of government transfers or social welfare system be established in South Africa to cater for the very disadvantaged in society.

However, will raising total consumption expenditures (a proxy for income) reduce malnutrition? It is hypothesised that raising household incomes will contribute to higher calorie intake and better nutritional status. Income augmenting and related wage and employment policies can be hypothesised to improve nutritional outcomes even if income elasticities of demand for calories are low. In a study in Cote d'Ivoire, it was found that in both rural and urban areas, income is an important determinant of

long-term nutritional status (Sahn 1994). Raising the expenditure levels of households is therefore a key element to any effort to reduce chronic malnutrition.

South Africa has basic social security system comprising social assistance grants and social insurance payments. Social assistance grants are available to all resident citizens subject to a means test. War veterans, old age and disability grants are the most common. There is also the sickness insurance scheme for workers sponsored by the government.

Currently social security and welfare services constitute a significant poverty alleviation measure of the South African government. Compared to other middle income developing countries, South Africa is said to have an advanced social security system both in terms of coverage against contingencies and spending ratios (Berg, 1997). However, South Africa is also one of the developing countries with a very bad record of poverty and inequalities. Furthermore, the South African social security system, fall short to that described in *Article 26* of the Constitutional Rights of children (CRC) which states that parties shall recognise for every child the right to benefit from social security including social insurance, and shall take the necessary measures to achieve full realisation of this rights in accordance with the national law. The main social security grants currently in operation in South Africa are Old Age Pension, War veterans pension, Disability grant, Child support Grant, Care-dependency grant, Foster Care grant. Grant-in-aid

Old Age Pension, as in many countries, provides income security for older people in South Africa and it is one of the three main categories of social grants in the country. People who qualify for old age pension includes any South African citizen, 60 yrs old (for females) or 65 yrs old (for males). The state pays a maximum of R540 to the aged based on the above qualification criteria and a means test. The maximum pension amount increased in nominal terms by 21% between 1996 and 2000. The old age grant has been very critical for the survival of many households, particularly rural households where members of the household may be unemployed.

War veteran grants also provide income security to those who went to war. These are South Africans who are 60 years old, disabled and have served full-time in wars between 1914 and 1945. However, any eligible person receiving another social grant, like old age grant or disability grant, is not qualified for the war veteran grant. The maximum amount paid for this grant is R538 per month based on a means test. The maximum amount payable per month for war veterans increased from R448 to R538 between 1996 and 1999. This represents a nominal increase of 20%.

The child support grant is probably the only grant that benefits the child directly. This was introduced in 1998 to replace the state maintenance grant. The Child Support grant is an attempt by the state to reach as many poor South African children at possible at a much lower costs than the state maintenance grant. Children 7 years old and younger qualify for this grant. This is a change from the old state maintenance grant where anyone aged 18 years and younger was eligible. The child support grant also does not have any allowance for parents as opposed to the state maintenance

grant where mothers were also receiving grants. A grant of R100 per month is payable to a primary caregiver¹³ of a child or children under the age of 7.

Foster Child Grant is also another grant that benefits children. It is payable to a foster parent or parents in respect of a foster child who has been placed in their custody in terms of the *Child Care Act*. Foster parent and child should be a South African and the child should be under 18 years. The maximum amount payable per month for a Foster Child Grant is R374.

Care dependency grant is also a grant payable to the parents or foster parents of a care-dependent child between the ages of 1 and 18 years, who due to severe mental and/or physical disability, needs full time care. The care dependency grant does not exceed R520 per month per child.

Disability Grant is paid to any South African, 18 years or older, who owing to his or her disability is unable to obtain employment or does not have any other resources to support him or herself. Any disabled person receiving other social grants does not qualify for the disability grant. The maximum monthly amount payable for disability grant is R520. This also increased by 20% between 1996 and 1999.

At the moment there is no social security provision for unemployed South Africans apart from a few covered by the contributory scheme. The question should be asked whether social security grants be extended to the unemployed. This is the most obvious way for government to provide a minimum standard of living to nearly all its people. Proposals to extend social security grants to the unemployed have been rejected mainly on grounds of government's' budgetary constraints.

The social security system is inadequate in addressing food security and ensuring that every citizen is able to meet minimum dietary requirements to avoid malnutrition. There is therefore a clear need for income supplement to ensure that malnutrition, particularly among children is curtailed.

Nutrition Programmes in South Africa

Apart from income augmenting strategies to reduce incidence of malnutrition, other approaches have been used around the world to address the problem of malnutrition. Considering the fact that income-augmenting strategies are rare in many developing economies, nutrition programmes, particularly feeding schemes have taken more prominence in the fight against malnutrition in many developing countries. Feeding schemes, in particular have become more popular with policy makers with the argument that income supplement does not always reach the intended target, particularly children, who are most vulnerable to malnutrition. Income supplements may not necessarily ensure food security as household heads may spend the money on other non-food items. Feeding schemes, particularly school feeding schemes have been employed in many countries to alleviate malnutrition among children. South Africa is no exception with the pressure on the government for financial austerity.

¹³ A primary caregiver is any person who takes primary responsibility for the daily care needs of the child or children and not necessarily related to the children.

South Africa's nutrition programmes date back to the 1940's when the National Nutrition Council (NNC) was established with the aim of advising government departments about nutrition issues. The other function of the council was to oversee the implementation of action-oriented, comprehensive and sectorally integrated nutrition policies and programmes. The strategies included support to small-scale farmers, improved marketing of basic foodstuffs, school feeding schemes, direct food aid, and nutrition surveillance. The NNC worked hard to have a National Department of Nutrition established. However, both the NNC and the department died a natural death in the 1970s. The demise of these two institutions coincided with the coming into power of the National Party whose apartheid policies meant that as long as whites were not affected nutrition was not an issue.

A committee for the development of food and nutrition strategy for Southern Africa was appointed in 1989 and produced a draft policy on food security and nutrition. In 1990, a Nutrition Development Programme was established to implement a food aid programme. This programme was later renamed the National Nutrition and Social Development Programme (NNSDP). Below are the details of this programme together with other nutrition programmes that are currently operating in South Africa.

The National Nutrition and Social Development Programme (NNSDP)

The programme was established in 1990 to serve as a safety net for people considered likely to be affected by the proposed value added tax (VAT) on basic foodstuffs. Its functions later on included the ability of communities to achieve and sustain self-reliance with respect to their basic needs like water, shelter, clothing and nutrition needs. Funds of the programme are distributed through provinces on the basis of the population size and estimates of income for the province. The implementation of the programme is at local level through non-governmental organisations (NGOs) and Community-Based Organizations (CBOs). Despite its increasingly broadened vision the programme remains essentially a food distribution programme.

The contribution of the NNSDP to household food security and reduction of malnutrition is either modest or in doubt. The major weaknesses of the programme are its narrow focus on food relief, poor targeting and administrative incapacity. The programme lacks personnel and systems, resulting in non-disbursement of funds in the provinces. Only 18% (R65m) of the annual budget of R360m was spent in the first 6 months of 1996/97 financial year. Where money was disbursed (for example in Gauteng) it reached very few beneficiaries (2.5%). The benefits were also less than 20% of the minimum living level. The programme was reviewed in 1994 to make it part of a community based nutrition programme, and today it is popularly known as the Community Based Nutrition Programme (CBNP).

Primary School Nutrition programme (PSNP)

This was a Presidential Lead Programme under the Reconstruction and Development Strategy Framework established in April 1994. Its aims were to improve primary school pupils' active learning capacity, alleviate temporary hunger, educate pupils about nutrition, improve micronutrient intakes and enhance broader development initiatives. By November 1997 the focus was enhancement of food intake directly through provision of supplements.

The main component of the PSNP is the Primary School Feeding Scheme (PSFS). The performance of the PSFS is therefore indicative of the performance of the PSNP.

The amount allocated to the PSFS has remained relatively stable since 1994/95 financial year. It was R472.8 million in 1994/95, increased to R500 million in the following two years and declined to R457.9 million in 1999/2000. Funds for the 1998/99 and 1999/2000 financial years for the PSFS were obtained from Conditional Grants as opposed to the previous years where funding was allocated from the Rural Development Programme (RDP). The total budget allocations to the PSFS have never been fully spent since its inception. Only 29% of the budget allocation were spent in 1994/95. However, this proportion increased to 81% in the 1997/98 financial year but decreased again in 1998/99.

According to information from the Provincial Departments of Health, the target of the number of beneficiary learners has never been reached. The ratio of those benefiting to the target of the programme has ranged between 80% and 89% since its introduction. The number of schools reached is also less than the number of schools targeted. The proportion of reached schools to targeted schools has also ranged between 77% in 1996/97 to 90% in 1998/99.

The 1999 OHS indicates that about 4.26 million children (aged 7-15 years) received free food through feeding schemes. This represented 45% of children in South Africa. About 90% of all children who benefited from feeding schemes in 1999 were blacks. About 31% of all urban children received free food through feeding schemes compared to 56% of rural children.

Table 5: Children in School and Receiving Free Food through a School Feeding Scheme by race (1000)

	African	Coloured	Indian	White	Total
Received Free Food	3819	376	27	33	4261
Did not Receive Free Food	3345	339	162	595	4446
Total	7164	715	189	628	8707

Source: Statistics South Africa, *October Household Survey 1999*

Although there are feeding schemes in South Africa, several households go hungry every day due to lack of money to purchase food. According to the 1999 OHS, about 1.13 million households with children under 7 years old went hungry due to lack of money to buy food. This is about 11% of all households. The situation is even worse in rural areas, where 16% of households with children under 7 years old went hungry as a result of their inability to purchase food. Another 2.3 million households with people aged 7 years and older could not afford to purchase food and consequently went hungry. This represents about 22% of South African households. In other words, 22% of households could not feed themselves. As expected the ratio is relatively higher in rural areas where 26% of households with people aged 7 years and older went hungry as a result of lack of money for food.

Integrated Nutrition Strategy (INS)

The Integrated Nutrition Strategy was developed in 1994 as a multi-sectoral programme under the auspices of the Department of Health. The programme focuses

on specific initiatives within the health sector including the restructuring of existing programmes. Much attention is being placed on anthropometric data, food prices, food production, land, incomes, employment and food consumption. The strategy proposes the incorporation of the various nutrition programmes into a new integrated programme. The integrated programme combines interventions of various sectors to achieve nutrition objectives.

The government is currently moving towards phasing out the school feeding scheme and replacing it with programmes and projects that would lead to self-sufficiency with regard to people's food and nutrition needs.

Land Reform and Food security

Social Welfare Programmes and feeding schemes are not sustainable in the long-run in light of increasing government debts. The Integrated Nutrition Strategy (INS) is therefore critical for food security in the long-run. The INS highlights land, among others, as an important factor in food security. This is because there cannot be own production and household food security if households do not have access to land. Many rural people depend very much on wage incomes. Employment in other words is important in most rural areas. But as farm jobs are slashed and poverty spreads and deepens, vulnerability to food insecurity also increases. Those who are able to work but unemployed do not have access to any social welfare programmes and very vulnerable to food insecurity. Such people can significantly reduce their vulnerability to food insecurity with access to land for own production and sales.

According to the 1997 rural survey, as many as 71% of people in rural areas in former homelands had access to land for farming. Majority of the people with access to land, were engaged in subsistence farming. Although very little income was generated from the sale of a variety of crops, livestock and animal, such households could supplement their food intake with own production. The 1999 October household survey also indicates that about 7.96 million produce agricultural goods for own consumption and income. About 81% however, produce agricultural goods mainly for own consumption. This is quite important for food security.

Whereas the rural survey of 1997 estimated that farming in rural areas (ex-homelands) contributed only 2.7% of household, other studies had estimated a higher contribution of cultivated land to household income (Makhura et al 1998; Ardington and Lund 1996) . Makhura et al (1998) estimated that 27.7% of total household income is generated from the sale of agricultural produce. This does not include the value of own consumption. Ardington and Lund (1996), also found in a survey that for those households with access to land, agriculture contributed about 16-20% of total household income.

Aliber (1996) calculated a conservative annual figure of R630 per household in 1996 as the total risk diffusion benefit from land reform in South Africa. This is the benefit from reduced income variability as a result of households having access to land. In a study conducted to monitor the quality of life of land reform beneficiaries, it was concluded by May *et al* (2000) that land reform has potentially reduced the poverty rate in rural areas by 1%. Although this figure is small and questionable, the bottom line is that land reform can reduce poverty and lower the vulnerability to food insecurity. Bonti-Ankomah (2000), in ascertaining the feasibility for transferring

certain categories of land to rural communities in Klipspruit, Kransbank and Sulphursprings in Mpumalanga, found that such transfers can potentially lead to net present values of R718.6, R1321 and R1254 per household per year respectively. Again these are low figures but can be attributed to the size of land and the number of beneficiaries involved. The bigger the size of land, and the smaller the number of beneficiaries, the higher the farm income per household and the lower the vulnerability to food insecurity. This is supported by Mlambo (2000), who in his study of determinants of poverty using multivariate regression, concluded that rural households with a sizeable amount of land are better off and are less likely to be poor and food insecure than those with marginal land or without land.

Most of the above studies, however, have considered only agricultural production in estimating household incomes from land. Land on the other hand can be used to create other rural livelihoods. Rural people throughout the world make use of the wild and domestic plant around them. These livelihoods include the collection of wild resources such as fuelwood, edible herbs and fruits, bushmeat, medicines and others either for direct consumption or for sale (Shackleton 1999). This is critical for food security.

International experience also shows the importance of access to land and land reform in alleviating poverty and hence food security.

The consequence of the Chinese land reform programme was that there was a fast reduction in income-based absolute poverty from roughly 60% before land redistribution to an average of approximately 6-11% in 1979-81. There has also been a sustained reduction in the number of the poor from about 240 million to about 50-80 million over the period. Furthermore there has been a sustained high rate of agricultural growth, crop yields and per-capita food grain production (El-Ghonemy, 1990). This also implies food security for the majority of the population who had access to land.

South Korea also experienced considerable improvement in livelihoods after land reform. The South Korean land reform programme resulted in 60% of the total cultivated land area and an improved Gini coefficient of land redistribution from 0.729 to 0.384 between 1945 and 1965. The growth rate of agricultural output reached an impressive level by international standards. Average annual rate of food production increased by 4%. Average farm income per household also increased by 51.4% between 1963 and 1975 and the Gini coefficient in income in rural areas was at a low level of 0.298. Poverty was thus reduced at a fast rate of 20% per decade between 1945 and 1950 and 10% per decade from 1965 to 1978 (El-Ghonemy 1990).

Land Reform in Latin America and Africa gives mixed results of their impacts on poverty and food security. This can be attributed to the fact that most of the land reform programmes in Latin America and Africa has been partial reforms in the sense that land redistribution was the main focus and not much support was given to beneficiaries. This is in contrast to most land reform programmes in East Asia, where additional support was an important part of the programme. Additional support for land reform beneficiaries is therefore important.

Most land reform programmes in Latin America and Africa also adopted collective production for beneficiaries. As discussed before, the number of beneficiaries on one piece of land has implications for sustainability and poverty alleviation.

9 Summary and Conclusions

Poverty has grave implications for food security. Unemployment continues to increase and household incomes are low to sustain many households. The result is that many South Africans are poor and food insecure. Those most vulnerable to poverty and food insecurity are rural people and larger-sized households and children. The effect of food insecurity has been stunting in many children. The stunting rate of 22% among South African children between 1-9 years is quite high. This is a concern.

This paper shows that the food expenditure of many South Africans is far below the food expenditure necessary to meet the recommended dietary allowances. At least R9.55 is required for each person every day. This translates into R286.5 per person per month.

The study also estimated the food gap, which is the difference between what households currently spend on food to the recommended food expenditure. With an average household size of five (5) in South Africa, there is a food gap of about R553 per month per household. Again households with more than 5 members will have a larger food gap. Households with 7 members or more has a food gap of R1194.6 per month. To ensure that every household meets the recommended dietary allowance, a total bill of about R5.5 million per month is required to eliminate the food gap.

Ensuring that households consume the required amount of food will mean additional support to households. The current social security system, however, is inadequate in addressing food security and ensuring that every citizen is able to meet minimum dietary requirements to avoid malnutrition.

Although there are feeding schemes in South Africa, the programme does not reach its target and there is under-spending. The ratio of children benefiting from School Feeding Schemes as opposed to the target has ranged between 80% and 89% since inception. Several households still go hungry every day due to lack of money to purchase food. About 11% of all households with children under 7 years old went hungry in 1999, due to lack of money to buy food. Another 2.3 million households with people aged 7 years and older could not afford to purchase food and consequently went hungry in 1999.

This paper further shows that there is clearly food insecurity among many households and therefore a need for some income supplement or an effective nutrition programme to ensure that malnutrition, particularly among children is curtailed.

Income supplement will be quite important if household food insecurity and malnutrition are to be addressed effectively. However, the belief that income supplement will not necessarily lead to household food security and address malnutrition makes feeding schemes and food vouchers very critical. Feeding schemes and food vouchers will be more effective in addressing household food security and malnutrition in the short-run.

With pressure on government's budgets, social welfare programmes and feeding schemes are not sustainable. A more strategic long-term approach to food security is therefore required. The most important among this is provision of resources for own production particularly in rural areas. Land access becomes very important in this respect. Although land access is not a sufficient condition for household food security it can contribute significantly in reducing households' vulnerability to food insecurity.

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