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GOVERNMENT NOTICE

Labour, Department of

Government Notice

R. 845 Basic Conditions of Employment Act (75/1997): Investigation into minimum wages and conditions of employment for the Agricultural Sector: Invitation for representations.......

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GOVERNMENT NOTICE

DEPARTMENT OF LABOUR

No. R. 845

13 September 2001

BASIC CONDITIONS OF EMPLOYMENT ACT, NO 75 OF 1997

INVESTIGATION INTO MINIMUM WAGES AND CONDITIONS OF EMPLOYMENT FOR THE AGRICULTURAL SECTOR: INVITATION FOR REPRESENTATIONS

I, Membathisi Mphumzi Shepherd Mdladlana, Minister of Labour, in terms of Section 54 of the Basic Conditions of Employment Act, No 75 of 1997, hereby announce that the report attached hereto on the outcome of the investigation into minimum wages and conditions of employment has been submitted to the Employment Conditions Commission for their consideration and advice.

Interested parties are hereby given the opportunity to make written representation to the Employment Conditions Commission on the content of the report. Such representations must be submitted to the following address within 90 days after publication of this notice.

The Chairperson, Employment Conditions Commission, c/o Directorate Employment Standards, Department of Labour, Private Bag X 117, PRETORIA, 0001.

M M S MDLADLANA MP MINISTER OF LABOUR

DETERMINATION OF EMPLOYMENT CONDITIONS IN SOUTH AFRICAN AGRICULTURE

Report by the Department of Labour

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Report has been prepared together in cooperation with the:

Centre for Rural Legal Studies and the Department of Agricultural Economics, University of Stellenbosch

National Institute for Economic Policy

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Foreword

The release of this report investigating the setting of minimum wages and conditions of employment for workers in the agricultural sector is a significant step forward in our national endeavour to ensure a 'better life for all'.

The Basic Conditions of Employment Act which was put into effect at the end of 1998, provided for the first time in our history, the opportunity to set minimum wages for farm and domestic workers. In September 1999, I requested the Department to begin an investigation, as is required by the Act, to determine appropriate minimum wages and conditions of employment for farm workers.

This very extensive and detailed report on the investigation reflects the seriousness with which the Department undertook this task. I believe it represents a sound basis to begin a constructive and informed public debate on minimum wages and conditions of employment for farm workers.

The public comment will be considered by the Employment Conditions Commission who will then advise me on what the final minimum wage and conditions of employment should be. In doing this, the Act requires them to consider the effect any measure may have on:

- the ability of employers to carry on their business successfully
- the operation of small, medium and micro-enterprises, and new enterprises
- the cost of living
- the alleviation of poverty
- wage differentials and inequality
- conditions of employment
- the likely impact of any proposed condition of employment on current employment or the creation of employment.

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I would like to thank researchers, Department of Labour officials and the USAID, who generously funded the research, for making this ground breaking work possible.

I look forward to a healthy and constructive debate and public dialogue on this report.

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M M S Mdladlana Minister of Labour

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Acknowledgements

This report has been a collective endeavour. The different parts of the report are the work of different research organisations with the assistance of many role players including employer organisations and NGO's.

In the first part of the report, an attempt is made to describe, as accurately as possible given the paucity of data, the livelihoods of farm workers in South African. Official statistics, the results of primary research carried out for the purposes of this study, and the information gained during a series of public hearings are used in arriving at this description.

Norma Tregurtha of the Department of Agricultural Economics at the University of Stellenbosch conducted the analysis of the official statistics, while the fieldwork for the primary research was coordinated on behalf of the Centre for Rural Legal Studies in Stellenbosch by Ruth Hall, Karin Kleinbooi and Alida van der Merwe. Joachim Ewert of the Department of Sociology, University of Stellenbosch, assisted them.

Alida van der Merwe died tragically in a car crash in June 2001.

The teams responsible for the fieldwork are identified in the introduction to Part I of the report. Hall and Kleinbooi were also responsible for the analysis of these data. The public hearings were coordinated by the national Department of Labour.

The following people provided critical assistance which enabled them to gain access to farms:

Kobus Kleynhans from Agriculture South Africa (AgriSA)

Carl Opperman from Landbou Wes-Kaap

Peter Southey from KwaZulu-Natal Landbou-Unie (KWANALU)

Tom Duvenage from Noord-Kaap Landbou-Unie

Pieter Moller from Vrystaat Landbou

Willie Auret from Noordwes Landbou-Unie

Lourie Bosman from Agri Mpumalanga

Johan Hendricksz from Oostelike Provinsie Landbou-Unie

AgriSA and the provincial unions were also part of the co-ordinating teams for the public hearings. These were arranged through the good offices of the provincial Departments of Labour whose contributions, along with those of members of the public who attended the hearings and participated in the proceedings, are gratefully acknowledged.

The **second** part of the research focuses on the most important strategic considerations that have to be taken into account when changes to the basic conditions of employment of farm workers are being considered. This includes a review of the international literature on minimum wages, an assessment of the competitiveness of South African agriculture, an assessment of farmer and worker perceptions around the minimum wage and other basic conditions of employment, and an assessment of the impact of a minimum wage for agriculture on the wider South African economy.

The analysis of the South African agricultural sector as well as the literature survey was the responsibility of Nick Vink of the Department of Agricultural Economics, University of Stellenbosch, Farmer and farm worker perceptions were part of the results of the primary research co-ordinated by CRLS; Samuel Bonti-Ankomah, Asghar Adelzadeh and Daniel Kekana of the

National Institute of Economic Policy in Johannesburg did the macro modelling.

Third, the report proceeds with an assessment of the implications of the various parts of the analysis contained in Parts I and II, and recommendations flowing from the analysis. Responsibility for Part III was thus shared by:

- Staff of the CRLS and NIEP including Asghar Adelzadeh, Samual Bonti-Ankomah, Joachim Ewert, Ruth Hall, Karin Kleinbooi, Normal Tregurtha and Nick Vink: and the second s
- Haroon Bhorat and Paul Lundall from the Development Policy Research Unit at the University of Cape Town;
- Michael Anderson of Nathan Associates:
- Staff members of the Department of Labour, including Lisa Seftel, Virgil Seafield and Fatima Bhyat.
- Paul Benjamin of the law firm, Cheadle, Thompson and Haysom.

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Introduction

This summary is divided into four parts. Part one looks at the socio and economic position of farm workers.

Part two looks at the scope for increasing the wages of farm workers in South Africa.

Part three looks at the motivation for a minimum wage and at what level it should be set. It also includes recommendations in respect of conditions of employment in part four.

Part 1

The purpose in Part I is to arrive at a better understanding of the social and economic position of farm workers in South Africa. To this end, some methodological issues in the measurement of poverty are first discussed. Here, we come to the conclusion that the 'capability model' of Amartya Sen provides an appropriate conceptual framework for such measurement. This is followed by more concrete empirical evidence based on formal data sources as well as field research carried out for the purposes of this report. The main conclusions drawn from this analysis of the data are:

- agriculture and hunting provide 930 000 jobs or 11,4% of South Africa's formal employment, while contributing less than 5% of GDP. 20% of all South African farm workers are found in 10 magisterial districts, mostly in the Western Cape and KwaZulu-Natal
- 70% of all agricultural workers are male. Farm workers are also relatively young, their
 average household size is relatively small, and the overwhelming majority are South African
 citizens
- children living on commercial farms are more likely to be stunted and underweight than any other children, while only children in the former homeland areas had a higher prevalence of wasting. Almost one in three children on commercial farms are stunted, one in five are underweight and one in twenty-five display the symptoms of wasting.
- only one in four children on commercial farms are 'food secure', and almost a third are at
 risk of hunger. Nevertheless, children on commercial farms are better off than children from
 other rural and informal sector households
- more than 65% of all farm workers live in a formal dwelling. The quality of housing symbolises the dignity of workers. People find poor quality housing inconvenient and unpleasant, and also degrading and dehumanising
- farm workers have the **lowest rates of literacy** in the country. The unemployed non-urban labour force has a higher average education level than the average farm worker
- the average cash wage in agriculture in 1996 was R419,00 per month (or R544,00 at current prices 2000). There is considerable variation at provincial level. Farm workers earn the lowest wages among those formally employed in the country. The ratio of mean to median income in agriculture of below 50% means that farm wages are more skewly

distributed than in any other sector of the economy. About a quarter of remuneration is paid in kind. The benefits that accrue to permanent workers depend substantially on the gender of the worker

- female farm workers are paid less than male. This gender disparity exists despite the fact that the female are better educated than male. Female are paid less because the tasks typically performed by female are viewed as less skilled, and because employers often choose to view male workers as 'permanent' while female are viewed as 'casual' workers whose employment is contracted via a male partner
- the gap between female and male who reported receiving UIF, training, medical services and pension or provident funds is substantial. Some employers define only male as permanent workers, so that a distinction between the benefits provided to permanent and temporary workers is manifest as a gender distinction
- there is considerable evidence of a cycle of debt together with high interest rates either to farm shops or directly to the employer on many farms. This appears to be due to the isolation of farms and reliance on employers to provide transport into town. Workers also identified what can be termed 'forced purchases' where the employer insists that they buy certain items, normally farm produce, at specific rates
- there appears to be a lack of clarity among employers and workers on the distinction between payment in kind and benefits. There also appears to be a conflation of payment in kind and deductions. In practice there may be substantial grey areas, particularly in the case of accommodation and for other goods and services for which deductions are made but at below a market rate
- despite the fact that 54% of workers sometimes worked longer hours than the legal limit
 they generally do not receive any compensation for working overtime. There was no
 substantial gender discrepancy between the maximum working hours cited by female and
 male in the sample
- 27% of the sampled farm workers do not get annual leave even though they qualify for full or pro-rata leave. Of those female who indicated that they get annual leave, 28% indicated that they do not get paid for their days of leave, while 92% of the male reported they did get paid during annual leave
- while children of 14 years and younger were reported to be working on farms in seven of the nine provinces, this was found on less than a quarter of the farms in the sample
- there is substantial room for improvement in compliance with labour legislation on farms.
 Few workers enjoy full labour rights, and female enjoy fewer rights than male
- the position of pregnant female is a cause for concern because many do not get paid
 maternity leave, and few are members of the UIF. The prevalence of child labour is a further
 cause for concern. These results should also be assessed against the absenteeism rates
 experienced by most employers. 72% of employers said that they do not lose more than 5%
 of labour time due to absenteeism.

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The evidence is clear that most South African farm workers live in circumstances of absolute and relative poverty. Some form of policy intervention is therefore needed to redress the situation. Whether intervention is successful will depend on the extent to which workers' capabilities are improved. The data show a clear correlation between farm worker income and access to housing and household services, and literacy levels. Thus, a minimum wage or an income supplement aimed at increasing the incomes of farm workers could improve their capabilities.

Yet this need not be the case. Improvement of capabilities requires that additional income be invested in nutrition, education, health, etc. rather than in consumer goods. Further, a minimum wage that is set too high may benefit those who are able to retain employment, but could harm those who become unemployed. As the latter is more likely to include vulnerable groups such as female, the youth and non-South African workers, there is a limit to the extent to which a minimum wage can be used to take people out of poverty.

Our main conclusion from the analysis in Part I of the report is that the circumstances of farm workers justify the introduction of a minimum wage. However, our analysis also shows that the most vulnerable farm workers, namely female and children, could lose most if a minimum wage were set too high.

Another conclusion that can be drawn from this discussion is that it is inappropriate to define poverty with reference to a specific wage rate. While target per capita incomes or more sophisticated measures such as the minimum level of living, etc. can be useful planning tools, the discussion shows that they are at best partial measures. Poverty can be more usefully defined as the absence of capabilities, and thus of entitlements. A minimum wage can therefore only be one part of the instruments required to eradicate poverty from among farm workers.

Part II

The purpose in Part II of the report was to try and further our understanding of the scope for increasing the wages of farm workers in South Africa. To this end, Part II covers four main issues. First, the theoretical and empirical literature on minimum wages was investigated. Second, the competitiveness of the South African commercial farming sector was analysed. Third, employers and workers were asked their opinions of a fair minimum wage and a range of other issues. Fourth, the wider economic implications of a minimum wage were modelled in order to assess the macroeconomic effects of the introduction of a minimum wage.

1. Theoretical literature

There are at least three broad implications from the theoretical arguments about the effect of minimum wages for the agricultural sector:

- the minimum wage cannot be opposed purely on the grounds of its adverse effects on employment. Theoretically, there will be a negative effect in the case of a free market without monopsony powers. However, the magnitude of the employment effect depends on the degree to which the wage is set above the equilibrium wage rate.
- the empirical evidence on the poverty alleviating effects of a minimum wage is as ambiguous as the evidence on the employment effects. From a purely economic view, it is better to provide direct income transfers to the poor rather than to manipulate market prices (wages).

Agricultural economists have generally argued in favour of income transfers to farmers rather than price supports as a mechanism of farm subsidies, yet politicians have, until recently, preferred the latter

Successful implementation may call for a decentralised system of wage determination.
However, the experience in India, which also faces implementation capacity constraints,
shows simple implementation systems are preferable. This does not, however, negate the
need for differential minimum wages in different regions or for different commodity
production systems.

2. South African agriculture

The commercial farming sector in South Africa has been subjected to extensive deregulation over the past two decades. The main policy shifts up to 1994 included deregulation of the marketing of agricultural products; changes in the fiscal treatment of agriculture, including the abolition of preferential tax treatment and a reduction in direct budgetary expenditure; and a start to the processes of land reform, reform of labour legislation, and trade policy reform.

The most important policy initiatives taken subsequent to this time include institutional restructuring in the public sector; the promulgation of the Marketing of Agricultural Products Act, No 47 of 1996; trade policy reform; and labour market reform. The purpose of these policy reforms was to correct the injustices of past policy, to get the agricultural sector on a less capital-intensive growth path and to enhance the international competitiveness of the sector. The main impacts of these reforms can be summarised as follows:

- macro-level analyses show that the sector as a whole has benefited from this process of deregulation; however, there have been winners and losers in the process
- one of the more important effects of deregulation has been the shift in factor shares used to
 produce agricultural output in this country. The share of labour and capital has declined, and
 the share of intermediate goods has increased as production has shifted away from field crops
 to more intensive horticultural production
- the 'cost-price squeeze' is a familiar phenomenon to South African farmers. When output prices increase at a slower rate than the price of farm requisites, as has been the case in South Africa throughout the past five decades, farm profits are squeezed. Nevertheless, farm profits are determined not only by the relative prices of inputs and outputs, but also by the value of inputs used and outputs produced. Thus, the quantities of inputs used and of outputs produced are as important as the prices
- the total capital stock used in commercial agriculture in South Africa has declined in value because of the decline in the real value of land and fixed improvements, while the real value of intermediate goods used in the sector has increased, over the past two decades

- during the period 1980 1990, when inflation rates in South Africa had reached their peak
 and Total Factor Production (TFP) growth was at its weakest, Net Farm Income growth
 was negative (i.e. commercial farmers' profit margins grew thinner every year). However, by
 1990 TFP growth had recovered sufficiently to cause a positive annual growth in Net Farm
 Income in the period up to 1996
- field crop producers have reacted to the price signals engendered by deregulation by reducing the area of land planted and switching to higher quality land, which has resulted in higher average industry yields; and by reducing the amount of capital and intermediate goods used in production. The net result has been both improved productivity and lower gross value of production. As there has been no discernible change in output trends, the decline in the gross value of production has been as a result of changing prices rather than a change in the volume of output
- there is strong evidence of improved flexibility in input substitution in South African agriculture. The extent of the adjustments between capital and labour has increased, the substitutability between capital and land has increased, the complementarity between capital and intermediate goods has improved and land and intermediate goods have switched from being weak substitutes to being relatively strong complements
- there is an evident bias toward capital using technology in South African agriculture. At average factor shares for the entire period, the bias of technological change has been capital using, and labour, land and intermediate good saving
- farmers make decisions on what to produce and on what inputs to use in production on the
 basis of the relative prices of different product combinations, of different input combinations
 and of different input-output combinations. Thus, the bias towards capital intensity is
 probably policy-induced. Various analyses show that policy distortions are strongest in field
 crop production in the commercial farming sector and in capital intensive production in the
 former homelands.

In summary, the agricultural sector has reacted well on aggregate to the withdrawal of state support and to deregulation, despite the fact that there have been winners and losers in the process. It is also important to note that the sector is expected to continue to shed employment opportunities, partly because of a policy-induced capital intensity, and partly because of a natural shift in the economy towards the service sector.

3. Employer and worker perceptions

3.1. Size of the labour force

More than half of the respondents from the field research conducted by CRLS (the 'farm survey') were satisfied with the current size of their labour force. Of those who said their labour force size was sub-optimal, almost two thirds (i.e. a third of all farmers) believed that they had 'too many' permanent workers. Most of these were farmers in the field crop sub-sector.

The most common reasons cited by farmers for employing more workers than necessary was a sense of responsibility towards workers and their families, and a change in the operational

requirements of production. The only reason cited for employing fewer workers than necessary was a lack of financial resources.

Less than half of the employers reported that their permanent labour force was smaller now than three years ago and almost a third said it had increased.

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3.2. A minimum wage

Employers were asked their opinion of a 'fair minimum wage' for permanent general workers. More than two thirds cited a wage that was higher than the lowest wage that they currently pay. Nearly three quarters of the respondents said that their labour costs would be unaffected by a minimum wage of R20 a day, while less than half said that they would be unaffected by a minimum wage of R30 a day. Thus, the point at which half the employers said they would be affected by a minimum wage is in the region of R25 a day or R500 per month.

When employers were asked what they would do if their labour costs were to increase as a result of a minimum wage, most responded that they would increase mechanisation or that they would rationalise their labour force. Some argued that they would take steps to improve labour productivity. Among the black farmers interviewed, there was a common argument that they needed a low cost for labour to put them on an equal footing with white farmers, who had enjoyed this privilege for many years.

When workers were asked to cite what they would consider to be a fair minimum wage, their response was only about 20% above that cited by employers, with male expecting more than female. Workers justified their 'fair wage' on the grounds that the cost of living was high, that this is what they needed to improve their life and their children's prospects, that this was what their work was worth, and that the farmer could afford to pay such wages.

Thus, workers are likely to risk losing their jobs through the introduction of a minimum wage that is too high. Nevertheless, most workers pointed out that the minimum wages they expected was modest in relation to current wages. There is also substantial overlap between the minimum wages proposed by employers and workers.

3.3. Social and working environment

The responses by workers to questions about their social and working environment showed, among others, that the enforcement of labour legislation remained a challenge in the agricultural sector. Labour laws appear to have had little impact in practice on the farms included in the farm survey. This implies the need for new methods to improve compliance in the agricultural sector.

The qualitative information derived here indicates the extent to which employment in agriculture differs from employment in other sectors, in terms of:

- · the extent of dependence of workers on employers (for continued access to goods, services and especially homes, as well as for employment)
- the isolation of workers from sources of information and social support beyond the farm and the second of the second o

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the significant obstacles to enabling workers to access their labour rights - even when they
are informed of them.

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3.4 Macroeconomic considerations

The report has shown the declining trend of agricultural labour and that agricultural labour is lowly paid compared to other sectors in the economy. Although agricultural wage rate grew at a faster rate than many sectors of the economy, the gap between the wage rate in agriculture and other sectors continues to increase. Agricultural wage on the other hand is important for rural households, as it constitutes on average 39% of rural incomes.

The imposition of a minimum wage in agriculture could have a range of effects;

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- it may have some indirect positive effects on the economy
- it may lead to greater economic output and an increase in disposable income of households
- total economic output and household incomes may increase
- it may have implications for both agricultural employment and total employment
- although it may lead to job shedding in the agricultural sector as well as the total economy, it can result in an increase in employment in the manufacturing sector
- it will have no significant impact on agricultural output
- it may result in the increase in current income of households
- there will be no significant impact on the price level in the agricultural sector and the economy.

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1. The aims of a minimum wage in agriculture

There are a number of (potentially conflicting) aims that can be pursued through the use of a minimum wage:

- the purpose could be to improve the conditions of employment on average for all farm workers, on the supposition that conditions are so bad that such a course is justified. Our analysis has shown that the conditions of employment of farm workers leave much to be desired in a number of very important respects. However, our analysis has also shown that simply setting a minimum wage may not achieve this goal bearing in mind that existing labour legislation is virtually unenforced
- the purpose could be to reduce inequality between agriculture and the rest of the economy. Our analysis has shown that farm worker wages lag far behind the rest of the formal sector, even though their real growth has been above average since 1970. Raising farm wages to levels commensurate with the urban economy could lead to adverse consequences for farmers and farm workers alike. Historically, many countries have experienced such a rural-urban wage differential. In addition, basic conditions of employment have been negotiated

for the agricultural sector because of the peculiarities of its production process. While these will now be promulgated under the same legislation as holds for the rest of the country, the actual conditions can justifiably remain geared to the needs of workers and employers in the sector

- the minimum wage and basic conditions of employment could be used as part of a rural development strategy generally, or as a particular part of an agricultural growth strategy. In either of these cases the argument would be that an increased wage bill in agriculture would increase the purchasing power of rural consumers. However, this is contingent on the employment effects of the minimum wage. Thus, a minimum wage that is set at levels that are too high could lead to a reduction in the size of the wage bill
- finally, the purpose could be to reduce inequality within the agricultural sector. In this respect our analysis has shown that wage differences between farms are often more the result of the enterprise mix on farms than of any other factor. Thus, the labour market differs significantly between horticulture and extensive livestock farming. Nevertheless, large wage differentials are found in relatively small geographic areas, and even on individual farms.

The analysis presented in this report leads to the conclusion that:

- the primary goal of a minimum wage should be to address inequalities within the agricultural sector and to improve the situation of the worst off or most vulnerable
- to this end, the minimum wage has to be accompanied by improved enforcement of basic conditions of employment, ensuring that farm workers are covered by the Unemployment Insurance Act. Improved enforcement and other safeguards are also required to protect the interests of female, who consistently earn less than male, and who are less likely to be employed as permanent workers
- the introduction of a minimum wage and basic conditions of employment could contribute significantly to a rural development strategy to the extent that other programmes aimed at rural upliftment accompany their introduction
- a minimum wage, accompanied by basic conditions of employment and improved enforcement is the best instrument in the circumstances for achieving these goals. Our research has shown that economists have traditionally favoured lump-sum transfers as the most efficient form of subsidisation. Thus income grants are, for example, more preferred than a minimum wage. However income grants do not exist presently in South Africa, except for a very limited sub group of the population. Therefore the introduction of a minimum wage is expedient, as the mechanisms for its implemaletation are already in place.

The level of the minimum wage: a matter of principle

Our research leads to the conclusion that it would be incorrect to measure the impact of a minimum wage against specific poverty levels, whether they are some absolute measure of poverty or a relative measure, as is often done in such policy processes. Farm workers are the poorest of all formally employed South African workers. A minimum wage that sets to lift all of them out of poverty will in all likelihood increase the disparities among farm workers, and between farm workers and other rural people. Yet our research has shown that there is more or less common

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ground among employers and workers on what constitutes a fair minimum wage.

A further question that needs to be addressed is whether the agricultural sector can absorb the effects of a minimum wage. Farm workers questioned during the course of our field research pointed to their contribution to the profitability of the farm as justification for a minimum wage. However, this was a secondary justification: their primary argument focussed on their own needs. Further, while farm owners and farm workers did not differ significantly in their opinion of the level of a fair minimum wage, farm owners were generally reluctant to even consider the question lest they provide legitimacy to the issue.

However our analysis of the profitability of the agricultural sector provides important pointers. There is little doubt that, when looked at from a long-term perspective, the agricultural sector is healthier now in the post-deregulation era than before. This is partly because of the need to become competitive as domestic support was taken away from farmers, and partly because of the opening up of international opportunities in the post-sanctions era.

However it should be noted that any process of change such as that engendered by the economic and political liberalisation of South African agriculture creates winners and losers even though the net effects are positive. Those made worse off by the policy shifts of the past decade are more vulnerable to pressure from new changes in policy, such as would the case with a minimum wage.

In addition, the success of a minimum wage is more dependent on the future health of the agricultural sector than on the past performance. In this respect, there can be no single future scenario, not least because the sector is not homogeneous.

Our analysis shows that there is every reason to believe that the agricultural sector will continue to grow, but at a slower pace than the economy as a whole and that it will continue to shed labour in that process irrespective of a minimum wage. Our analysis also shows that, despite some weakening in short term indicators of farm profitability, the long run prognosis for the sector is positive.

Yet some adverse consequences must be anticipated. These can include job losses, especially among more vulnerable groups such as female, a more marked shift to the use of seasonal workers, workers who live off farm, and to contract labour; and greater use of (illegal) foreign workers.

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The level of the minimum wage: a matter of practice

The most important issue to consider here is whether a single minimum wage can be set for the whole of the agricultural sector. While a more rigid instrument, a single minimum wage is easier to implement, and will place less of a burden on implemaletation structures.

However a single minimum wage for agriculture would have to be set so low in order to accommodate the interest of workers in the extensive livestock sector as to be meaningless; or alternatively so high to accommodate the needs of workers on fruit and wine farms, that the rest of the sector will not be able to afford such wages. Thus a four-tier structure of minimum wages is proposed below.

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A fairly complex process was embarked upon to identify what minimum wage should apply to each area of the country. Each magisterial district was ranked according to three measures of human capabilities, namely:

- the proportion of people earning a cash wage of less than R200 per month
- the average number of school years passed by farm workers in that district
- and an index of household services.

A composite rank was then calculated from these three separate indicators, and districts were grouped into four roughly equal-sized groups in terms of the number of districts.

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4. Basic conditions of employment for agriculture

The CRLS farm study showed that many farmers did not comply with conditions of employment, particularly in respect of working hours, in existing labour legislation. Half of the workers interviewed indicated that there are times of the year in which they work 55 hours or more a week. One in ten said that they sometimes work for more than 72 hours a week.

Many respondents did not receive their legal entitlements in terms of annual leave, sick leave, maternity leave, UIF membership and overtime pay. Children of 14 years and younger were reported to be working on nearly a quarter of the farms in the study. Children of 15 to 17 years were reported to be working on nearly 40% of the farms.

Conditions under which female worked were worse than those experienced by male. Even among permanent workers, female were far less likely than male to get paid annual and sick leave, to be paid extra for overtime worked and to be members of the UIF. The latter, in particular, has serious repercussions for female's access to income during maternity. There were discrepancies between the conditions of employment among female and among male, even on the same farm.

Most of the problems identified through the research regarding employment conditions are already regulated through legislation and therefore more attention needs to be given to the implemaletation and enforcement of labour legislation in agriculture. However, there were aspects of farm workers' employment conditions that require specific regulation through the sectoral determination in order to give substance to the rights of workers.

These include:

- payment in kind
- sick leave and medical certificates
- working time including extension of hours of work and work on Sundays
- night work
- termination of employment
- provisions for small and new enterprises
- special measures for vulnerable groups, and
- enforcement.

Other issues to address include addressing the high level of indebtedness, deductions and labour contracting.

There is a high level of indebtedness among farm workers, with some spending more money on debt repayments than on food. Nearly half pay back debt on a weekly basis. Employers were a

¹ At the time of writing of the report the Department of Justice was in a process of redefining the magisterial districts. Since this was not finalised the existing magisterial districts were used.

major source of credit, together with farm shops (many of which are also operated by employers) and other parties.

Two aspects of this phenomenon cause particular concern. First, it suggests that farm workers have little access to formal credit markets. Second, although many employers provide interest-free cash advances, cases were identified of extortionate interest rates being charged by employers - up to 50% per week on a cash loan to workers. The repayment of debt is a major contributor to deductions made off workers' wages.

Further work needs to be done on the credit needs of farm workers and other rural people. Recommendations are made to limit the total size of deductions being made from workers' wages in order to safeguard a minimum cash portion.

A phenomenon associated with deductions was that of 'forced purchases', where workers were given a 'bonus', the cost of which was then deducted from their wages. These practices are already illegal, in terms of the BCEA provision that deductions must be negotiated. The nature of the problem, however, indicates that further regulation may be necessary in order to stop the practice. This also indicates that enforcement activities should draw farmers and farm workers attention to this abuse and the fact that it is illegal.

In some parts of the country farmers have opted to source labour through labour contractors or labour-only brokers. Some have seen this route as a means by which to redefine workers as selfemployed people or contractors in their own right.

The sectoral determination needs to confirm that labour contractors are employers and to ensure that labour contractors, labour brokers and their clients retain joint responsibility for compliance with labour legislation and regulation, including the sectoral determination.

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Recommendations 1. Scope of application

- 1.1.1. It is proposed that this sectoral determination should cover:
 - (a) primary and secondary agriculture
 - (b) mixed farming
 - (c) horticulture.
 - (d) animal products
 - (e) field crops, and
 - (f) aqua farming.

The conditions of the sectoral determination should apply to workers who work in the agricultural sector except those who are self-employed. A self-employed person is one who controls the means and manner of his/her work in that he or she:

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- (a) provides the tools (if any) with which he/she works
- (b) is not supervised in any way
- (c) determines the timing of his/her work
- (d) determines the methods if his/her work.

It is further proposed that:

- a. any person who works for a single employer for at least two months in one year may not be classified as being self-employed
- b. any person who works or supplies personal services on a farm or in the agricultural sector should be regarded as a farm worker unless the work is entirely unsupervised or is supplied to a client or customer of a profession or business undertaking carried on by the individual
- c. any person who works on a farm, but is covered by another sectoral determination or by a bargaining council agreement, shall have their terms and conditions of employment determined by the other determination or the agreement concerned. For instance, an worker employed in a bed and breakfast establishment on a farm would be covered by the agricultural determination, unless there is a determination or a bargaining council agreement regulating the hospitality sector covering bed and breakfast establishments
- d. domestic workers and security guards on farms should be classified as farm workers and would be entitled to the same basic terms and conditions of employment as other farm workers.

A person who works in the agricultural sector is covered by the sectoral determination regardless of his or her status as:

- (a) an indefinitely employed full-time worker
- (b) a fixed-term full-time worker
- (c) an indefinitely employed part-time worker
- (d) a fixed-term part-time worker.

Part-time workers shall be entitled to the minimum wage applicable in their magisterial district, and to all terms and conditions of employment specified in the sectoral determination, on a pro-rata basis.

2. Minimum wage levels

2.1. Proposed minimum wage levels

It is proposed that there are four different minimum wages for each of the four geographical areas in the table below. The minimum wages to be paid to workers in the agricultural sector are:

- (a) R750,00 per month in the magisterial districts in Group 1
- (b) R600,00 per month in the magisterial districts in Group 2
- (c) R500,00 per month in the magisterial districts in Group 3
- (d) R400,00 per month in the magisterial districts in Group 4.

Table A: Ranking of Magisterial Districts by income and human capabilities

Group	Magisterial Districts Magisterial Districts
1	Alberton, Amersfoot, Balfour, Belville, Benoni, Bizana, Boksburg, Botshabelo, Brakpan, Bredasdorp,
	Bronkhorstspruit, Butterworth, Cala, Caledon, Camperdown, Cape, Ceres, Chatsworth, Cofimvaba,
	Cullinan, Dannhauser, Dundee, Durban, Dzanani, Engcobo, Flagstaff, Fort Beaufort, Ga-Rankuwa, George,
6. 6 1 11	Germiston, Giyani, Goodwood, Groblersdal, Heidelberg (G), Hermanus, Hewu, Hoëveldrif, Hopefield,
ia i riita	Humansdorp, Impendle, Inanda, Ingwavuma, Johannesburg, Keiskammahoek, Kempton Park, Knysna,
E. S. I	Krugersdorp, Kuilsrivier, Kwamhlanga, Lady Frere, Libode, Lower Tugela, Lusikisiki, Malamulela,
(m. 720)	Malmesbury, Mankwe, Mapulaneng, Mbibana, Mdantsane, Mdutjana, Mhala, Mhlabathini, Middelburg
	(MP), Middeldrift, Mitchells Plain, Mkobola, Mokerong, Moorreesburg, Mossel Bay, Moutse, Mpofu,
	Mqanduli, Namakgale, Nebo, Nigel, Nongoma, Nqamakwe, Nqutu, Nsikazi, Oudtshoorn, Paarl, Peddie,
Marity A.	Pietermaritzburg, Piketberg, Pinetown, Port Elizabeth, Port St Johns, Pretoria, Qumbu, Randburg,
or the	Roodepoort, Sekgosese, Seshego, Simdlangentsha, Simonstown, Somerset West, Soshanguve, Soweto,
1.5.5	Springs, Stellenbosch, Strand, Tabankulu, Temba, Thabamoopo, Thaba 'Nchu Thohoyandou, Ubombo,
10 mm 10 mm	Uitenhage, Umbumbulu, Umlazi, Umtata, Umzimkulu, Umzinto, Vanderbijlpark, Vereeniging, Victoria
	East, Vredenburg, Vuwani, Warmbad, Wellington, Willowvale, Witsieshoek, Wonderboom, Worcester,
Star in the	Wynberg, Zastron, Zwelitsha
2	Aberdeen, Adelaide, Albert, Alfred, Alexandria, Beaufort West, Belfast, Bergville, Bethal, Bethlehem,
\$77 - 17 - 17 - 17 - 17 - 17 - 17 - 17 -	Britstown, Bultfontein, Calitzdorp, Calvinia, Carolina, Christiana, Clanwilliam, Cradock, Delmas, East
9 (1)	London, Eerstehoek, Elliotdale, Ermelo, Eshowe, Estcourt, Gordonia, Hankey, Heidelberg (WC),
	Hlanganani, Iduywa, Joubertina, Kenhardt, Kriel, Ladismith, Lainsburg, Lions River, Lower Umfolozi,
	Middelburg (EC), Mapumulo, Mmabatho, Moltena, Montagu, Mooi River, Mount Ayliff, Msinga,
	Mthonjaneni, Mtunzini, Murraysburg, Namakwaland, Nkandla, Ntabathemba, Phalaborwa, Phokwani,
100	Prince Albert, Prieska, Port Shepstone, Potchefstroom, Potgietersrust, Randfontein, Ritavi, Riversdal,
	Robertson, Rustenburg, Sasolburg, Schweizer-Reneke, Sekhukhuneland, Standerton, Sterkstroom,
	Steynsburg, Sutherland, Swellendam, Tarka, Tsolo, Tsomo, Tulbagh, Umvoti, Uniondale, Van Rhynsdorp, Viljoenskroon, Vredendal, Vryburg, Waterval Boven, Williston, Witbank
3	Aliwal North, Barkley-West, Bloemfontein, Brandfort, Brits, Carnarvon, De Aar, Edenburg, Frankfort,
3	Fraserburg, Glencoe, Graaff-Reinet, Hartswater, Hay, Hlabisa, Hofmeyer, Hopetown, Huhudi, Kimberley,
	King William's Town, Kirkwood, Klerksdorp, Koffiefontein, Kranskop, Kuruman, Lady Grey, Lulekani,
()	Maluti, Mapumulo, Moretele, Mount Frere, Nelspruit, New Hanover, Ngqueleni, Nkomazi, Oberholzer,
	Odendaalsrus, Parys, Philipstown, Pietersburg, Pilgrims Rest, Queenstown, Reitz, Richmond (KZN),
	Somerset East, Thabazimbi, Underberg, Vryheid, Wakkerstroom, Welkom, Westonaria, Wolmaransstad
4	Albany, Babanango, Baberton, Barkley East, Bathurst, Bedford, Bethulie, Bochum, Bolobedu, Boshof,
	Bothaville, Cathcart, Clocolan, Colesberg, Delareyville, Dewetsdorp, Elliot, Ellisras, Excelsior, Fauresmith,
	Ficksburg, Fouriesburg, Hanover, Harrismith, Heilbron, Hennenman, Herbert, Hoopstad, Indwe, Ixopo,
	Jacobsdal, Jagersfontein, Jansenville, Kentani, Kliprivier, Komga, Koppies, Kroonstad, Kudumane,
	Ladybrand, Letaba, Lichtenburg, Lindley, Lydenburg, Maclear, Madikwe, Marquard, Messina, Mount
	Currie, Mount Fletcher, Mutali, Ndwedwe, Maphuno, Newcastle, Ngotshe, Noupoort, Paulpietersburg,
	Pearston, Petrusburg, Philippolis, Piet Retief, Polela, Postmasburg, Reddersburg, Richmond, (NC),
	Rouxville, Senekal, Smithfield, Soutpansberg, Sterkspruit, Steytlerville, Stutterheim, Theunissen,
	Trompsburg, Utrecht, Ventersdorp, Victoria West, Virginia, Volksrust, Vrede Vredefort, Warrenton,
	Waterberg, Weenen, Wepener, Wesselsbron, Willomore, Winburg, Witrivier, Wodehouse

All workers shall be entitled to receive the monthly minimum wage applicable in the magisterial district in which the agricultural enterprise in which they work is located. Where payments in kind are made, a reduced cash wage of not more than 20% below the minimum wage may be paid. (see later in report respect of payment in kind)

Motivation for proposed minimum wages

The table below shows that the current average wage in magisterial districts in Group 1 is R950.00, which is 1/3 above the average for the country, and includes 35.61% of the farm workers in South Africa. The proposed minimum wage for Group 1 is R750.00, or R40.00 per day (or R5.00 per hour) for workers who are not paid on a monthly basis, and so forth for each of the four groups.

Table A: Recommended minimum wages

Group	Average Wage (R per Month)	% Of Country Average	Number of Workers	Proportion Of total	Proposed minimum wage (R per Month)	Proposed daily Wage R per day (Hour)
1	950,00	134,	227044	35,6	750	40 (5,)
2	695,00	97,89	164849	25,8	600	35 (4,3)
3	588,00	82,82	84955	13,3	500	30 (3,75)
4	450,00	63,38	160816	25,2	400	25 (3,13)
Áll	710,00	100	637644	100	650	(6,15)

The Table below provides some further background to these proposed minimum wages. The calculations were based on the 1996 Census, thus the proposed minimum cash payments in 2001 had to be deflated to 1996 (3rd column). The average wage in 1996 for that group of Magisterial Districts before and after the introduction of the minimum wage is presented in the next two columns, while the absolute and percentage increase is provided in the two columns thereafter. It is important to note that this absolute and relative increase in average wages represents the **minimum** expected increase. Farm worker income data were only available in broad income ranges. In all cases only the wages of workers earning from R0-R200 were adjusted. The last column shows how many workers' wages will be affected in each of the Groups. Thus, it is estimated that 10.6% of the workers in Magisterial Districts in Group 1 are presently being paid at a rate below the proposed minimum wage, while almost half (48.8%) of those in Group 4 earn less than the proposed minimum wage.

Table B: The implications of the recommended minimum wage

Group	Proposed Cash Minimum Wage	Equivalent 1996 amount	Average Wage (before)	Average Wage (after)	R increase	% increase	Minimum % of workers affected
1	600	456,5	609,2	634,9	25,8	4,2	10,6
2	480	365,2	445,5	498,9	53,3	11,9	17,4
3	400	304,3	377,5	460,1	82,6	21,8	32,1
4	320	243,5	287,7	414,5	126,8	44,	48,8

3. Payment in kind

Most farm workers in South Africa receive a portion of their payments "in kind". In order to build on and improve existing practices, and to prevent the withdrawal of such payments, the sectoral determination needs to define and regulate payments in kind. This should allow for employers to pay a reduced cash wage to workers receiving payments in kind, while setting a minimum cash wage that must be received.

The single largest item of payment in kind is most commonly the provision of accommodation (followed by food). However, the quality is highly variable. The sectoral determination therefore

needs to define minimum standards for the purposes of determining whether accommodation provided to an worker may be considered to be payment in kind.

It is proposed that

Accommodation or food provided by an employer to an worker should only constitute payment in kind if it is provided:

- a. by the employer at his or her cost
- b. on a consistent and regular basis as a condition of employment

It is proposed that:

Payments in kind must be valued on the basis of the cost to the employer of supplying goods and services to workers subject to these restrictions:

- (a) The total payment in kind may not be deemed to constitute more than 20% of the total wage and
- (b) The maximum value of payment in kind to an worker who only receives accommodation or food but not both is 10% of the total wage paid; and
- (c) No additional deduction may be made from the worker's cash wage for a payment in kind.

Housing may be considered to constitute payment in kind only if no rental is charged for the house in which the worker is resident and if it meets the following specifications:

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- (a) a roof which does not leak is in place and
- (b) glass windows have been installed and can be opened and
 - (c) electricity is available inside the house and
 - (d) water is available on tap inside the house and
- (e) a flush toilet or pit latrine is available in, or in close proximity to, the house and
 - (f) the size of the house is not less than 54 square meters or 10 square metres per adult resident, whichever is greater.

Supply of accommodation may not be a payment in kind unless the worker is ordinarily resident on the farm.

Where more than one worker occupies a single house, and that house is considered to constitute a form of payment in kind, the value of the use of the house must be deducted from the wages of all adult workers resident therein, on a proportionate basis. However an employer may not deduct more than a total of 20% of one worker's wage in respect of the same house.

Housing may not be considered to constitute payment in kind in the case of workers under the age of 18.

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The cost of supplying fuel, electricity or water may be included in the cost of accommodation if the worker is not charged for this. Fuel may be considered to be payment in kind, insofar as the employer provides the workers with electricity and/or firewood and/or a flammable liquid fuel. Water provided to an worker may be valued as the average cost of water provision for domestic use by the worker and any dependants of the worker;

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4. Sick Leave and Medical Certificates

In many rural areas, access to medical and health services is difficult for farm workers that are compounded by lack of independent transport and public transport (or the financial means to use public transport). The requirement that workers produce a medical certificate to claim sick leave therefore poses practical problems.

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In some instances, therefore, it may assist farm workers if the law were to expand the range of health practitioners who are authorised to provide such a medical certificate. At present, levels of qualification among traditional healers and community health workers have not been confirmed within the National Qualifications Framework (NQF). The sectoral determination therefore needs to specify that, in addition to the recognised professions of doctors, nurses and psychologists, traditional healers and community health workers may provide medical certificates. It is proposed that: -

Workers shall be entitled to sick leave on the terms specified in the BCEA, subject to the provision that medical certificates may be provided by any of the following:

- (a) amedical doctor/general practitioner
- (b) a clinical nurse practitioner²
- (c) a traditional healer
- (d) a community health worker
- (e) a psychologist
- (f) any other health practitioner authorised to diagnose a medical condition. and appears to the first supplies of the same parties for the parties of the same in

WORKING TIME 5.

In terms of section 9(1) of the BCEA, the normal maximum ordinary working week (i.e. excluding overtime) for an worker is 45 hours in a week. In terms of item 5 of Schedule 3 to the BCEA, for a period 12 months after its commencement the ordinary maximum hours of farm workers were 48 hours.

Section 55(6)(c) provides that a sectoral determination may not reduce the protection afforded to workers by section 9. Accordingly, it is not possible for a sectoral determination to permit an ordinary working week in excess of 45 hours.

Certain aspects of minimum standards in agriculture are still regulated by the Basic Conditions of Employment Act 3 of 1983. These provisions are section 6A (extension of working hours), section 10(2A) (pay for work on Sundays) and section 14(4A) (rights during notice period). These provisions were introduced by the BCEA Amendment Act 104, 1992 with effect from 1 May 1993 following a tripartite negotiation process in the now defunct National Manpower Commission.

Their appropriateness for inclusion in the sectoral determination is considered below. These provisions remain in force until such time as the matters regulated by these provisions are regulated by a sectoral determination applicable to farm workers (item 3 of schedule 3 to the BCEA).

² As defined in section 38(a) of the Nursing Act, No. 50 of 1978, a clinical nurse practitioner is equipped with clinical curative skills.

Extension of Working Hours for Farm Workers 5.2.

Section 6A of the BCEA of 1983 permits a variation of ordinary hours of work to accommodate seasonal fluctuations in the demand of work. Paraphrased, it provides as follows: -

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- " a worker and an employer may conclude a written agreement to extend the farm worker's ordinary hours of work by not more than four hours per week for a period not exceeding four months in any continuous period of twelve months provided that the ordinary hours of work are reduced by the same number of hours during a period of the same duration in the same period of twelve months.
- the agreement may not extend the farm worker's ordinary daily hours of work to more than ten hours on a day.
 - the employer must pay the farm worker during any period of extended or reduced hours of work, the wage the farm worker would have received for normal ordinary hours of work.
 - if the farm worker's employment terminates for any reason at a time when he or she has worked the extended hours but not the equivalent number of reduced hours in terms of the agreement, the employer must pay the worker for the extended hours worked at the prescribed overtime rate."

This section permits an averaging of working hours over a 12-month cycle based on an ordinary working week of 48 hours. It accommodates seasonal fluctuation in the demand for work while at the same time giving the worker a regular income. For the employer, it results in savings on overtime during busy periods such as harvesting.

It is proposed that the above provisions should be retained but adjusted to operate on a 45hour week. An extension of five hours per week should be permitted. This would allow for an ordinary working week of 50 hours during peak seasons.

5.6. Work on Sundays

regard for

Section 10(2A) of the BCEA, paraphrased, provides as follows: -

"1. The employer of a farm worker who is required to perform work on a Sunday in the ordinary course of events must pay the worker an amount calculated in accordance with the following table:

Time worked on a Sunday	1 uymen	junisi as marris
	for one hour	in action is given to
Longer than 1 hour but less than 2 hours	IIII LIIIR CICLIALILI WIII KELI	etarskyznyta dyl d si mocen west sa
Longer than 2 hours but less than 5 hours	The worker's ordinary daily wage plus a ordinary	enscholek-karojesten (
t trace installer on Metallicity of the pr	working day off in the following week without	is Ward of
	following week without remuneration	in inglations

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Longer than 5 hours	The greater of double the wage payable in respect of
ecolor radio)	time worked (excluding overtime) or double the
. Perint was a swarfa meng mud	ordinary daily wage plus an ordinary working day off
a nero se plan Principa tio na de la	without remuneration in the following week.

This provision was introduced to deal with forms of agricultural work in which workers are required to work for a short period on each day of the week such as milking cows, setting irrigation equipment etc. It represents an exception to the rule reflected in section 16(2) of the BCEA of 1997 that a worker who works on a Sunday (no matter how short the period) is entitled to at least a full day's pay. It is **proposed** that this provision be incorporated into the sectoral determination.

5.7. Night Work

Section 17 of the 1997 BCEA introduced protections for workers who perform night work. Sections 17(3) – (5) contain provisions that have particular relevance to the protection of the health and safety of workers who regularly perform shifts at night. These provisions require employers to inform workers of the health and safety hazards associated with their work and give the workers a right to a medical examination concerning these hazards. In terms of the BCEA, these protection apply to workers who work for a period of longer than one hour after 23h00 and before 06h00 at least five times a month or fifty times per year.

Item 3(2) of the transitional provisions to the BCEA varies this provision by providing that, until there is a sectoral determination for agriculture, the protection in section 17(3) only applies to farm workers who work after 20h00 and before 04h00 at least five times per month or fifty times per year. The reason for this provision was that it was considered inappropriate to apply the protections in section 17(3) to workers who might start work extremely early to perform functions such as milking cows etc but who do not work night shift.

It is **proposed** that this provision should be retained in the sectoral determination.

5.8. General considerations

In drafting the sectoral determination, it must be borne in mind that certain provisions in the BCEA are phrased in general terms and their interpretation can give rise to some uncertainties. Where appropriate, the sectoral determination should seek to clarify the circumstances in which agricultural workers are entitled to these benefits.

It is **proposed** that this be done in respect of the definition of emergency work in terms of section 6(2) of the Act and the circumstances under which workers can be required or permitted to work during their meal intervals (section 14(2) of the Act).

6. Termination of employment

The general rules applicable to termination of employment in the BCEA should apply to the agricultural sector. In particular, this would require that a contract of employment terminable at the

instance of a party to a contract may be terminated on notice of not less than: -

- (a) one week, during the first four weeks of employment of farm workers
- (b) four weeks thereafter.

Presently section 14(4A) of the 1983 BCEA provides rights in respect of accommodation, crops and cattle for farm workers whose services have been terminated. It states that the farm worker shall be entitled:

- to the accommodation for the period to which he (sic) would have been entitled under his contract of employment if the contract of employment had been terminated with the required notice or for a period of 30 days from the date on which the contract of employment was terminate, whichever period is the longer
- to his(sic) livestock being kept on the land of the employer for the period stipulated in his contract of employment or for 30 days from the date on which the said contract was terminated, whichever period is the longer
- to tend to his (sic) standing crop on such land, which forms part of his remuneration, and harvest and remove it within reasonable time after it has become ready for harvesting unless the employer pays the farm worker for such crop the amount they have agreed upon.

Three proposals are made in respect of termination of employment.

Firstly, it is proposed that the rights in respect of accommodation during periods of notice should be the same as for other workers in terms of section 39 of the BCEA.

Secondly, it is proposed that the provisions currently included in section 14(4A) of the BCEA of 1983 giving workers rights in respect of cattle and crops should be retained in an appropriate form in the sectoral determination.

Thirdly, it is proposed that the sectoral determination should specifically state that the provisions related to termination do not affect the right of a dismissed farm worker to dispute the lawfulness of an eviction or any other action taken in terms of the Extension of Security of Tenure Act (ESTA).

7. Supply of farm workers by third parties

There is an increasing trend towards" outsourcing" in terms of which third parties supply farmers with their labour requirements. Farm workers supplied by these agencies are a vulnerable group within farm workers and often face particular difficulties in enforcing their rights.

The determination should define and regulate two types of agencies that supply farm workers to farmers. The first of these is "employment" or "labour contracting". This is a person who conducts a business of providing to a client other people to render services or work and who remunerates those people. (This category is referred to in the Labour Relations Act and Basic Conditions of Employment Act as "temporary employment services", although its scope is not confined to people who provide temporary workers.)

The employment service and the client are jointly and severally liable to comply with the relevant labour legislation. Thus, where the employment service does not pay the workers concerned, the client becomes liable for that obligation. This has resulted in farmers using the services of reliable

employment services that comply with the legal obligation in the law. It is proposed that the determination should explicitly provide that if the employment service is in default of its obligations to remunerate the workers for a period of 30 days, the client concerned becomes liable to make the payment.

The second category of agencies that supply labour are what are termed" labour brokers". They differ from employment services in that, while they conduct a business of providing workers to employers, they do not remunerate employees and thus are not employers. In this case, the client is the employer and pays remuneration to the workers concerned. This category of labour supply is not regulated by either the Labour Relations Act or the Basic Conditions of Employment Act. It is proposed that the Sectoral Determination should regulate it and that the joint and several liability should apply between the employer and the labour broker. This would prevent labour brokering from being used as a device to avoid compliance with the law.

8. Small businesses and new enterprises

While the research did not look specifically at the impact of minimum wages on small businesses and micro-enterprises, there was an assumption that a significant number of agricultural workers are small. In particular, the position of small farmers (farmers on communal lands in the former homeland areas, and beneficiaries of the land reform programme) needs to be accounted for.

Thus, it is **proposed** that the minimum wage should not apply to all employers who employ five or fewer workers throughout the year. However, all employers should comply with the basic conditions of employment recommended here, regardless of how many people they employ.

In practice this will mean that virtually all of the small farmers, whether on communal lands or under the land reform programme) will be exempt from paying minimum wages. At the same time new entrants who are start on a small scale will also be exempt in practice.

8. Special measures for vulnerable groups

Our research has shown that female, the youth and foreign workers constitute the most vulnerable groups among the farm labour force. Yet it is not easy to protect their interests through the provisions of labour legislation in the absence of effective enforcement mechanisms. The following is **proposed:**

- special steps should be taken to enforce the prohibition of child labour on farms, and that
 special conditions of employment be set for the youth (those less than 18 years old, and more
 than 14). These should at least include a ban on night work (including the herding of
 livestock); a 35-hour work week; and a prohibition on working with agro-chemicals, even if
 the prescribed protective clothing, etc. is available
- that a premium be included in the minimum wage paid to seasonal and temporary workers
 who are paid a daily rate. These have been included in the calculations in Table B above.
 Such a measure is expected to favour female workers.

10. Exceptions and time period before implementation

Our recommendations cover a minimum wage for each of four groups of Magisterial Districts in the country. However, we are aware that conditions can vary greatly within a Magisterial District. Therefore, we propose that:

A six-month period should be allowed between the time of promulgation of these recommendations and their coming into force. During this time appeals should be made to the Employment Conditions Commission to regroup Districts where there is sufficient evidence that this is justified in terms of the criteria used to make these recommendations.

In addition, any farmer can utilise the variation provisions spelt out in Section 50 of the BCEA. In terms of these provisions, an individual farmer or group of farmers who can prove hardship can be given a variation for a defined period.

11. Enforcement

Our field research has shown that existing labour legislation is rarely enforced on farms in South Africa. Enforcement is more likely to occur in those rare cases where workers are unionised. Due particularly to the geographical distance that separates farms from each other and urban centres, conventional mechanisms provided in labour legislation are very difficult to apply.

There are at least four current initiatives that could assist in implementation, but without placing too large a burden on the thinly stretched resources of the State. These include:

- voluntary efforts between employers and workers to create a code of conduct for a specified group of employers (farmers). Such codes are being discussed at the level of the provincial agricultural unions, and are supported by AgriSA
- proposals to use access to state support institutions as a lever to reward farmers for following fair labour practices. The proposed Social Product of the Land Bank falls into this category, and has the added advantage of providing rewards for responsible labour management rather than the conventional reliance on penalties only
- industry agreements to support fair labour standards in excess of those required by the state.
 A case in point is the recent adoption of the Winetech Vision 2020 empowerment strategy
 that commits the industry to bettering these standards, for example by adopting a minimum
 wage in excess of the prescribed wage
- external interventions such as those that fall under the heading of fair trade or ethical trade
 practices, where foreign buyers prescribe, among others, fair labour standards from those
 whose produce they buy.

The Minister of Labour has recently launched an initiative together with major national employer organisations and trade unions entitled: "Vision for Agricultural Relations". It sets out a commonly agreed vision for labour relations on farms as well as implemaletation steps. This initiative can also assist in respect of improving enforcement.

It is proposed that the Department of Labour at a national, provincial and local level should liase with all relevant parties to the above mentioned agreements in order to find synergies in the enforcement of agreed conditions of employment. This should include participation as neutral experts in deliberations where the parties request their participation. In taking this initiative the Department should encourage all parties to make special provision for the position of female as independent labourers in their own right.

PARTI

LIVELIHOODS OF FARM WORKERS IN SOUTH AFRICAN AGRICULTURE

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Chapter One

1. Introduction

Public policy on minimum employment standards has had a long history in many countries. These policies have been a response to the failures of the market to establish acceptable minimum living standards.

In South Africa, apartheid policies enabled harsh exploitation of farm workers. And today, although the sector's contribution to the general economy has declined substantially, it is still a major employer in rural areas and continues to play a critical role in rural development and the creation of sustainable rural livelihoods. However, as our analysis will show, it is the part of the formal economy with the lowest wage rate and arguably the poorest (and least monitored) working conditions. State intervention may, therefore, be necessary to establish acceptable minimum working standards in the sector. However, State intervention may also have adverse effects.

The purpose of this report is to provide a detailed understanding of the agricultural sector so as to make informed decisions about minimum wages and working conditions. One of the key themes that runs through this report is the need to address the balance between the need for State intervention and the need to manage the possible negative effects of such intervention.

To this end, the report is divided into three parts. The purpose of **Part I** is to arrive at a better understanding of the social and economic position of farm workers in South Africa. Therefore, methodological issues in the measurement of poverty are discussed. Here we conclude that the 'capability model' of Amartya Sen provides an appropriate conceptual framework for such measurement. This is followed by more concrete empirical evidence based on formal data sources as well as field research carried out for the purposes of this report.

The purpose in Part II of the report was to further our understanding of the scope for increasing the wages of farm workers in South Africa. To this end, Part II consists of four main arguments. First, the theoretical and empirical literature on minimum wages was investigated. Second, the competitiveness of the South African commercial farming sector was analysed. Third, employers and employees were asked their opinions of a fair minimum wage and a range of other issues. Fourth, the wider economic implications of a minimum wage were modelled in order to assess the macroeconomic effects of the introduction of a minimum wage.

The main conclusions drawn from the analysis are presented in **Part III** of the report. These are followed by a comprehensive set of recommendations in **Part IV**.

Chapter TwΩ

Development and poverty: The early debate

In everyday language we all have some understanding of poverty, and of what it means to be poor. However, when it comes to the scientific measurement of poverty, what is implicit in everyday language has to be made explicit. The capability model of Amartya Sen¹ (1993) provides an appropriate conceptual framework for such measurement.

It is clear from their rhetoric and from the of policy instruments for poverty alleviation that they endorse that the major development agencies and aid donors support such a multivariate interpretation of poverty at an ideological level. However, at the methodological level there is still a tendency to measure poverty indirectly in terms of private current incomes (or private consumption expenditures). The availability of income data and of statistical techniques to calculate poverty lines, minimum living levels and poverty head count ratios has encouraged the institutional acceptance of this ideological-methodological incongruence².

Analysts in South Africa have not fared any better, and most of the empirical work on poverty measurement has also utilised the indirect poverty line method³. One of the purposes of this report is to illustrate how these basic capabilities can be accounted for in the measurement of poverty to ensure a more policy relevant understanding of the plight of farm workers on commercial farms in South Africa. In this regard our recommendations will take all the components of these basic capabilities into account. However, a sector determination such as this can in the final analysis, only make firm recommendations on the minimum wage and other basic conditions of employment.

This section of the report starts with a literature review to substantiate the capability model of poverty. This is followed by a brief discussion of data sources and methodology, and then by an extensive analysis of farm worker capabilities.

Development theorists⁴, have argued that there are four distinct elements to a development paradigm, namely:

Sen, A. (1993). 'Poor, relatively speaking'. Oxford Economic Papers 35

² Boltvinik, J, (1999). Poverty Measurement Methods - An Overview. SEPED Series on Poverty Reduction. New York: UNDP.

³ See e.g. May, J, M Carter and D Posel (1995). The composition and persistence of poverty in rural South Africa: an entitlements approach. Policy Paper No 15, Johannesburg: Land and Agriculture Policy Centre; and Leibbrandt M. and I Woolard (1999). 'A comparison of poverty in South Africa's nine provinces'. Development Southern Africa 16(1): 28-54

⁴ For example Weaver, J and K Jameson (1981). Economic Development: Competing Paradigms.

Lanham, New York and London: University Press of America.

- value assumptions, which relate to the goals or ideals the paradigm attempts to realise and centre on what constitutes the 'good life' and the 'good society';
- a criterion or measure of development by which to assess its performance
- a general methodology in which the mechanics of the development process are laid out
- a strategic component, which specifies the policy action necessary to support and promote development.

Until the 1980s Development Studies was conventionally supported by the so-called neo-classical or orthodox development paradigm that is the growth model. The values underlying this paradigm described the good life in terms of the consumption of goods and services, the 'good society' was defined as one that provided a high level of material wealth for its citizens. The success criterion this supported was the highest rate of GNP possible, although this later became subject to distributional constraints. The methodology was elementary, based on a simple production function where output was dependent on the levels of production factors such as capital, labour, natural resources, technological change, and entrepreneurial ability. This suggested that an increase in output (growth) could be brought about by a positive change in any one of the production factors. Underdevelopment was caused by:

- obstacles to growth. There could be structural features in an economy that impede growth, such as cultural attributes, resource endowments, geography, etc.
- missing production factors. One of the production factors (agricultural resources, entrepreneurs) is absent or of low quality
- vicious circles. In this case the mechanism of economic growth is unable to work effectively. A low rate of savings, for example, leads to a low rate of investment, which leads to a low rate of growth, which in turn leads to a low level of savings.

The orthodox paradigm supported a variety of development strategies such as capital investment, human capital investment, employment, redistribution and basic needs. These were policy initiatives aimed at promoting growth and ensuring that its benefits were equally distributed.

By the 1970s it became clear that this paradigm was fundamentally flawed. Technically this view could not accommodate the dialectic nature of development, but, more importantly, it could not justify the values that underscored it. Therefore, much effort was put into the search for an alternative development strategy, and notions of basic needs provision, dependency theory and the neo-liberalism of the 'Washington consensus' and its accompanying structural adjustment programmes dominated the discourse. However, these were all in some measure derived from the larger, more embracing, social project of modernisation. As the concept of modernisation began to lose legitimacy, the underlying value structure supporting development crumbled.

The state of development studies in the early 1990s is exemplified by Sachs⁵, who argued that '... the idea of development stands today like a ruin in the intellectual

⁵ Sachs. W (1992). 'Poor not different'. In P. Ekins and M. Max-Neef, (Eds.) Real Life Economics: Understanding Wealth Creation. London, Routledge p56

landscape... It's high time to set about the archaeology of this idea and uncover its foundations... to see it for what it is: an outdated monument to an immodest era...' This rethinking of the meaning of development led some to call for the end of development. Nevertheless, there was an alternative view. While Sen⁶ agreed with the pessimists' diagnosis, he suggested that the themes that launched development economics (growth, industrialization and employment) remained relevant. Their relevance, however, lay in their status as the **means** of development and not as its overall **objective**. In his view the only way in which the development discourse could proceed was if the ends of development and not the means became its focus, namely people and the quality of the lives that they live.

Sen⁷ argued that when assessing a person's quality of life, the focus had to be on the 'doings and being' or capabilities that make up that life. Certain of these capabilities play a fundamental or 'basic' role in determining the quality of life. Satisfying them up to a certain critical level is a necessary, although not sufficient condition for living a valuable life. He regarded being adequately nourished, leading a long and healthy life, being literate and avoiding homelessness as basic capabilities.

Poverty is thus best defined as 'basic capability failure'. To be poor is not only about having insufficient income, it is about being malnourished, being unhealthy, being illiterate and being homeless. Income remains important, but it is of instrumental and not intrinsic value. While the ability to achieve certain basic capabilities such as being well nourished depends on a person's command over goods and services (i.e. on their income), the relationship between low income and capability failure is not normally direct. Experience shows that this relationship can be parametrically variable between different communities and even between different families and different individuals. To focus only on income is therefore to ignore this variability. In this fashion, Sen introduced the era of Human Development of the 1990s and beyond.

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⁶ Sen, A (1986). 'Development: which way now?' In R. Althorpe and A. Krahl (Eds.), Development Studies: Critique and Renewal. Leiden, E.J. Brill. p39

⁷ Sen, A (1984). Goods and people. <u>In S. Sen (Ed.)</u>, Resources, values and development. Oxford, Basil Blackwell.

⁸ Ladrechi (1999): 8.

Chapter Three

Development and poverty: human development

The human development approach to development and poverty is based on two separate but related strands of development thought. The **first** of these originates from an eclectic body of development research loosely titled 'Perspectives of the Excluded'. These perspectives identify important themes that the neo-classical development approach failed to reflect in its theoretical and methodological structure, and are primarily a response to the inherent limitations of the neo-classical model in identifying who or what the process of development marginalizes.

The second strand of the human development approach is the Capability Ethic formulated and refined by Amartya Sen. This approach establishes the philosophical and theoretical foundations of human development. More specifically it clarifies the question: 'What is wellbeing, how do we measure it and how is it linked to development and poverty?

1. Perspectives of the excluded

Contra-modernisation, as Beukes⁹ prefers to call perspectives of the excluded, is a range of fragmented theories joined by a shared belief that the content of development (its meaning and purpose) is more important than its form¹⁰. These diverse views or approaches converge around the theme of alienation or exclusion and its adherents focus on giving voice or drawing attention to those whom development processes have left out.

The topic of development and alienation was sparked in the 1970s by a series of international conferences and publications. The Cocoyoc Declaration of 1971¹¹ and the Dag Hammerskjöld Report to the United Nations in 1975 emphasised how the process of development induced alienation and marginalisation of people and the environment. As signs of these trends were also evident in developed countries, the development goal of 'high mass consumption' was fundamentally flawed. The Hammerskjöld Report was aptly titled: What Now?¹². More specifically this view claimed that the benefits of development, and implicitly its costs, were not evenly distributed. Sectors and sections

⁹ Beukes, E.P (1989). 'Theories of economic development an overview and some implications'. <u>In J.K.</u>
Coetzee (Ed.), Development is for People. Johannesburg, Southern Book Publishers p225

¹⁰ Van Zyl, JC (1995) Needs-based development strategy and the RDP: Some Broad Issues. Halfway House, Johannesburg: DBSA.

A statement issued at the conclusion of a seminar entitled 'Patterns of resource use, environment and development strategies', hosted by the United Nations bodies in 1971.

¹² Hettne, B (1995). Development theory and the Three Worlds. Essex, UK: Longman Scientific and Technical

of societies were left behind or left out. These include the so-called beneficiaries of development¹³, people's cultures¹⁴, women¹⁵, the environment, and rural areas.

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2. The capability ethic of Amartya Sen

The 'Perspectives of the Excluded' is essentially a critique of the values, methodology and strategy of neo-classical development economics and does not offer an alternative conceptual framework. Such a framework is found in the work of Amartya Sen, who integrated these ideas into a single conceptual framework. For Sen, the measure of a developed society is the extent to which it empowers its citizenry to 'live and act in certain valuable ways' 16. Consequently, development must focus on removing the constraints or barriers that inhibit people from achieving a worthwhile life. Development must 'emancipate people from the forced reality to live less or be less' 17 and focus on improving their overall level of wellbeing. There is nothing original or radical about seeing wellbeing in terms of the capability to function. Sen 18 shows how the traces of his capability approach can be found in the work of Aristotle, Smith and Marx.

Yet Sen went further to argue that entitlements are central to wellbeing and development because they generate capabilities. Entitlements are the link between people and the commodities they need to realise certain important capabilities¹⁹. Not all capabilities are generated by commodities, however many basic capabilities such as being well nourished depend on peoples' command of goods and services.

Resources or entitlements generate capabilities and thus from a policy point of view they are an important means of development. Consequently policy makers have to investigate 'the acquirement problem' and concentrate on 'enhancing, securing and guaranteeing entitlements' The 'acquirement problem' looks at the person within

¹³ See e.g. Goulet, D (1995). Participation in development: new avenues. <u>In VK Pillai and LW Shannon</u> (Eds.) Developing areas: a book of readings and research. Oxford, Berg Publishers; and Korten, DC (1984). 'People-centred development: towards a framework'. <u>In DC Korten and R Klauss</u>, (Eds.) People centred development: contributions towards theory and planning frameworks. Connecticut, Kumarian Press.

¹⁴ Marglin, S (1990). 'Towards the decolonisation of the mind'. <u>In Apffel Marglin</u>, F and S Marglin (Eds.). *Dominating knowledge: development, culture and resistance*. Oxford, Claredon Press; Glover, J (1995). 'The research programme of development ethics'. <u>In Nussbaum, M and J Glover (Eds.), Women, culture and development</u>. A study of human capabilities. Oxford: Claredon Press; Verholst, T., 1987. No life without roots: culture and development. London, Zed Books

¹⁵ Hettne, (1995) Op cit, Jarquette (1990)

16 Sen, A (1988). 'The concept of development'. In H Chenery and TN Srinivasan (Eds.) Handbook of Development Economics Volume 1. Amsterdam, North Holland, p15

¹⁷ Sen (1984) Op cit p 510

Sen, A (1989).' Development as capability expansion'. Journal of Development Planning 17: 41-58
 Gore, C (1993). 'Entitlement analysis and 'unruly' social practices: a comment on the work of Amartya Sen. Journal of Development Studies, 29(3): 429-460

²⁰ Sen, A (1995). 'Food, economics and entitlements.' <u>In Dreze, J and A Sen, The Political Economy of Hunger Vol. III. Oxford, Claredon Press, p63</u>

the system (their actual entitlements) and examines the effect of this position on their wellbeing.

The measurement of wellbeing has always created problems. The first alternative measures to per capita Gross National Product (GNP) were introduced in the late 1970s (e.g. the Physical Quality of Life Index (PQLI) which combined statistics on infant mortality, literacy and life expectancy to render a cross-country comparative development index²¹. The most important of these, however, was the Human Development Index of the United Nations Development Programme (UNDP). The HDI incorporates three important dimensions of human development: longevity, knowledge and living standards. By assimilating data on average life expectancy, literacy levels and income these three dimensions are converted into a single numeric, an internationally or interregionally comparable index²². A TOTAL PROPERTY AND THE PARTY

However, although it is a much richer development measure than an economic growth statistic, the Human Development Index (HDI) still fails to capture the complexity of the development process. It omits the important question of human rights and the issue of sustainability, two important failings of GNP. It also confines itself to only two capabilities - health and education. Furthermore it still includes an explicit monetary measure of income, a reminder that 'commodity fetishism' is not entirely dead. THE REPORT OF THE PARTY OF THE

If human development theory continually reiterates the importance of understanding wellbeing in a complex and plural way, the question arises as to the usefulness of such an index. Paul Streeten²³ points out that when such composite indices are compared with per capita GNP, they reinforce the shortcomings of the latter. A human development index is therefore only a summary tool. It is not a substitute for a more thorough account of wellbeing. Its merits and failings should be interpreted with this in mind.

This problem is compounded in the case of farm workers in South Africa because the evidence shows that available income and expenditure data are neither a reliable indicator of their real income levels nor of their ability to achieve certain basic capabilities. This is largely because:

- farm workers receive a significant proportion of their wages in-kind payments. It is difficult for both employers and employees to translate these into cash equivalent;
- in many cases it is more costly for rural people to translate income into capabilities. For example if a farm worker is to purchase high school education for her child, she has to consider the cost of either transport or alternative and the state of t

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⁻ company of the company but an early relative the first first and the contract of the contrac ²¹ Miles, I (1992). 'Social indicators for real-life economics'. In P. Ekins and M. Max-Neef (Eds.), Real life economics: understanding wealth creation. London, Routledge.

²² UNDP (1993). Human Development Report 1993. New York, Oxford University Press

²³ Streeten, P., 1994. Human Development: Means and Ends. American Economic Review: Papers and the property of the second Proceedings, 84(2): 232-237.

accommodation arrangements in addition to the cost of the schooling, because South African high schools are geographically concentrated in urban centres.

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When measuring the poverty status of farm workers it is, therefore, even more important than usual to do so on the basis of their achieved basic capabilities rather than merely their income.

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Chapter Four

Measuring poverty among farm workers in South Africa

Part I of this report draws on two main sources of data. In the first instance, the available formal data sets are used to build a profile of the situation of farm workers in South Africa. These formal data are supplemented by the results of a survey that was undertaken for the purposes of this sectoral determination. While no attempt was made to provide a statistically significant survey, the evidence gathered during this process adds immeasurably to our understanding of the conditions of work and life of the farm workers of South Africa.

1. Formal data sources

The data presented below draw on several data sets collected by Statistics South Africa over the past five years:

- in October 1996, all South Africans were enumerated on the basis of a general household questionnaire. While the results of Census 96 have subsequently been made available in a number of reports, this document makes use of a 10% sample drawn from the data set. The primary reason for making use of a sample is that it is linked to a software package, Supercross, which permits self-designed cross tabulations. This feature not only makes low level data disaggregation possible, it also provides the opportunity to directly compare the poverty status of farm workers with other employees, in the economy and with the unemployed;
- data on wage rates and employment levels were also taken from the 1996 Agricultural Survey. This was an establishment survey that covered 10% of all large commercial farmers;
- additional data on employment levels and wage rates were collected from numerous October Household Surveys (OHS). The OHS is an annual omnibus household survey that covers between 0,2% and 0,5% of all households depending on the sample size. As the sampling method of the OHS has changed over time, however, these data have to be treated with caution (Statistics South Africa, 2000);
- none of these general household data sets provides any detailed information on the health and nutritional status of the South African population. However, the results of a recently published study on the nutritional status of South African children aged between 1 and 9 are also included here. The study is titled the National Food Consumption Survey (NFCS) and it used the Census 1996 sampling frame to draw a nationally representative sample of 3 000 children. The results of the study are available disaggregated by province and area.

Table 1 below summarises the main characteristics of these data sets.

1.1. The farm survey: methodology

This part of the research comprised a set of 62 case studies by the Centre for Rural Legal Studies (CRLS). Each case study consisted of semi-structured interviews with one employer and (wherever possible) four employees on the same farm. It was thus possible to triangulate responses and identify discrepancies between employers' and employees' responses on some topics.).

The research was conducted in all nine provinces. The sampling across provinces was done on the basis of the Agricultural Census, and the number of case studies per province was proportionate to the number of farm workers recorded as employed in that province.

Table 1: Formal data sources

	Census 96	OHS	Agricultural Survey	NFCS
Date	1996	Annually 1996-1999	1996	1999
Sample size	4.1 million	16,000 (1996)- 30,000 (1999)	6 000	3 000
% of population	10	0,2-0,5	10	0.1
Unit of analysis	Households	Households	Commercial farms	Children 1-9
Smallest level of data disaggregation	Magisterial District and area type	Provincial and area type	Provincial	Provincial and area type

The original source for a sample list of farms was drawn from the Deeds Registry database. For each province, three times the number of case studies in the sample was drawn through a random selection process. 24 This proved insufficient, the reasons being that (a) many registered farms were not operated as agricultural enterprises; and (b) many farm owners were unwilling to participate in the study. Supplementary lists were then obtained from AgriSA and NAFU affiliates in the provinces. Representatives of these organisations provided contacts according to specifications relating to the types and scales of agricultural production prevalent in these provinces. It was emphasised that it was in the interest of employers in the sector to ensure that a range of practices and experiences were captured in the research.

The CRLS team of fieldworkers interviewed employers on 62 farms across the country. The overwhelming majority of the interviewees were male; only one female employer was interviewed.²⁵

A question on the race of the respondent was included in the questionnaire administered to employers, the reason being that the sectoral determination will need to take account of the process of racial transformation in agriculture. Three employers chose not to respond to this question. While most respondents were White, we endeavoured to locate Black employers in provinces where a substantial number of Black farmers have entered commercial agricultural production – for example, in Mpumalanga and the North West and to a lesser extent in the Northern Province and Free State. This was not successful in the Eastern Cape and in KwaZulu-Natal.

²⁴ The Knowledge Factory, a Geographical Information Systems (GIS) consultancy, generated this list for the study.
²⁵ The study did not aim to achieve equal representation of female and male employers in the sample.

The study did not aim to achieve equal representation of female and male employers in the sample.

The focus of the study was on 'commercial agriculture' in the sense that all or most of the products on these farms are marketed. However, 'subsistence agriculture' is also an employment sector, and the two sectors are likely to become less distinct over time as State-led and private land reform and agricultural development programmes take effect. It was therefore important that black small-scale agriculture not be excluded from the study.

Table 2. Race and gender profile of employers

	Gender		Race					Total
ye fallow and		4						(%)
	Female	Male	African	Coloured	Asian	White	Unknown	- 14
Western Cape	1	12		1. 1	. M 4	13	es to the	13
Eastern Cape		5	THE STATE	1.5	7.1	5	2 - 1	5
KwaZulu-Natal		- 9	975 L	10 th 8	31	9		9
Northern Cape		4		1		3	(C) (F	4
North West		6	3	Ø:		3		6
Northern Province	4.	9	1		5-1	6	2	9
Free State		5	41		14 E. A.	4		5
Gauteng	5 1 P 2	3	W- 1		in the year o	3		3
Mpumalanga		8	3			4	1	8
Total (count)	1	61	8	1	. 0	50	3	62
Total (%)	1.6	98.4	12.9	1.6	0	80.7	4.8	100

Fieldworkers were contracted to conduct the interviews in all provinces except the Western Cape, where CRLS kept responsibility for the fieldwork. The fieldworkers were all practitioners with experience in the rural sector. Most were employees of non-governmental organisations, while two were consultants. The fieldworkers included:

- James Aphane of Nkuzi Development Association
- Fundi Madlala of the Association for Rural Advancement (AFRA)
- □ Gobi Mphela of The Rural Action Committee (TRAC, Mpumalanga)
- Tebogo Mokone of The Rural Action Committee (TRAC, North West)
- Ruairi O'Conchuir of FARM Africa
- and the property of the second Eddie Barnett of the Association for Community and Rural Advancement and the standard service of

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- Mmabatho Sehlabo (consultant)
- Teresa Connor (consultant).

All fieldworkers attended a briefing workshop in Stellenbosch, run by CRLS in partnership with academics from the Departments of Agricultural Economics and Sociology at the University of Stellenbosch in October 2000. Fieldworkers were provided with further information and logistical support during the fieldwork phase of the research.

The method developed by the research team to gain access to farms was based on a recognition of the politically sensitive nature of the study. Prior to the start of the fieldwork, the CRLS made contact with the following organisations to inform them of the study and request their and their members' cooperation:

- Agriculture South Africa (AgriSA), the largest national membership organisation representing commercial farmers
- each provincial affiliate of AgriSA: Landbou Wes-Kaap (Western Cape); Eastern Province Agricultural Union (Eastern Cape), KWANALU (KwaZulu-Natal Landbou-Unie); Agri-Mpumalanga (Mpumalanga); Vrystaat Landbou-Unie (Free State); Agri Noord-Wes (North West); and Agri Noord-Kaap (Northern Cape)

- the Transvaal Agricultural Union (Northern Province and Gauteng)
- the National African Farmers' Union (NAFU), a national membership organisation representing black farmers
- trade unions organising in the agricultural sector on a national level: the Congress of South African Trade Unions (COSATU); the Food and Allied Workers' Union (FAWU); and the South African Agricultural, Plantations and Allied Workers' Union (SAAPAWU)
- the method for obtaining access to farms was elaborate, but was necessitated by the high level of scepticism regarding on-farm research, and particularly that which related to wages, among some employers in the agricultural sector. All farmers were fully briefed about the research to ensure their cooperation.

Despite this, the research team encountered serious obstacles in obtaining access to farms. The reasons included the following:

- a spate of 'farm murders' (murders of farmers and their family members) in the North West and Mpumalanga heightened the suspicion of farmers and in the case of the North West, the provincial farmers' organisation decided to bar all 'outsiders' from farms pending negotiations with the MEC for Safety and Security in that province
- the Transvaal Agricultural Union (TAU) chose not to support the research. In
 the absence of other representative bodies at the provincial level, this required
 us to make contact with district level organisers of AgriSA in the Northern
 Province and Gauteng, which was possible only due to substantial assistance
 from AgriSA national office
- in the Free State there were rumours and allegations that the study was a front for ANC election campaigning in the rural Free State – a story which spread among farmers in that province and led them to refuse interviews. This was due to the fact that the fieldworker in that province was a consultant and also on contract to the Independent Electoral Commission (IEC) during-the period of fieldwork
- the outbreak of foot and mouth disease in KwaZulu-Natal posed a temporary obstacle in gaining access to farmers in some regions, but with extensive assistance from KWANALU, all case studies were completed in this province.

The data were analysed in four key ways. First, the range and aggregate responses to questions are presented. These were then, where appropriate, disaggregated by province, sector and gender (of employees) to derive an assessment of the ways in which variables are uniformly or unevenly distributed across these categories.

The quality of the data is variable. The employees, questionnaires were consistently well answered, with the exception of certain problems with reporting expenditure. In both the employer and employees, questionnaires, the general level of qualitative information was high, and produced information that was useful and relevant to the study.

There were, however, problems with the responses of employers. Many gave information that was internally inconsistent, and some refused to provide answers to certain questions. This limited the extent to which the information was useable. The

poor response to questions regarding the farm economy in particular precluded any detailed analysis of the relationship between wage levels and the profitability of farms.

A point that must be emphasised is that the results of the primary research are not representative of the agricultural sector, because the sample size was not designed to be statistically significant. The purpose of the study was rather to provide additional information on general practices in the sector, to provide more depth to the analysis of the formal data, and to point to patterned variations in labour practices in the agricultural sector.

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Chapter Five

Long term trends in farm sector employment

Agriculture, as a primary sector, has traditionally played an important role in the development of the South African economy despite the presence of a large mining sector. Even today, it plays a central role in growth, and it contributes more than 10% of formal employment opportunities. The sector has, by all measures, relatively large linkage effects with the rest of the economy, and is a major earner of foreign exchange.

However, while agriculture has experienced relatively high rates of growth over the past century, fuelled mainly by healthy productivity growth in the past two decades, the sector has experienced a conventional secular decline, and today contributes less than 5% of GDP.

Table 3 below shows the most recent macro level data on farm employment in South Africa. These data show that the sector shed about 180 000 regular employees between 1985 and 1996, and about 210 000 casual and seasonal employees between 1985 and 1996.

Table 3: Farm employment in South Africa

	1985	1990	1991	1992	1993	1994	1995	1996
Regular	807341	728414	702323	656 772	647 839	625 244	628 925	
Casual, seasonal	516411	456262	413239	394 425	491 588	302 185		304 690
Total	1 323 694	1 184 676	1 115 562	1 051 197	113 9427	927 429	918 735	930 141

While the long term trend in farm employment is unambiguously downwards, Figures 1 and 2 below show that agricultural employment has declined at a slower pace than employment in the economy in general. Thus, the decline in farm employment is only partly the result of a secular decline in the contribution of the sector to the economy. A higher economic growth rate over the past two decades may have resulted in a less pronounced downward trend in employment.

Figures 3 and 4 show the relative performance of regular vs. casual and seasonal employees in agriculture. With respect to regular employees, the data show the long-term downward trend. The data also show the successive structural shifts in the employment trends over this period. Employment (both permanent and seasonal) increased with the introduction of tractors in the period after the Second World War, then declined with the introduction of mechanised harvesting from the late 1960s. This latter trend can be seen in the sharper drop in seasonal employment during this period. Thereafter, both categories show a decline.

Regular employment seems to have shifted to a different trend line in the period after deregulation started having an effect on the sector, namely the mid-1980s. Table 3 shows an increase to 1986, after which it dropped sharply to 1991, and then less sharply thereafter. In all likelihood these trends are the result of the severe drought of

the early 1990s, and the beginning of the current period of more sustained economic growth.

Seasonal employment increased to 1987, then dropped sharply to 1992, and then showed an increase in 1993 that was sufficiently large to cause an increase in overall employment in the sector. The category of casual and seasonal employees is notoriously difficult to estimate, so that this increase may be no more than a measurement error. On the other hand, the large increase in exports of fruit (the sector that is the largest user of casual and seasonal labour) that was experienced during this period may have resulted in an increase in jobs.

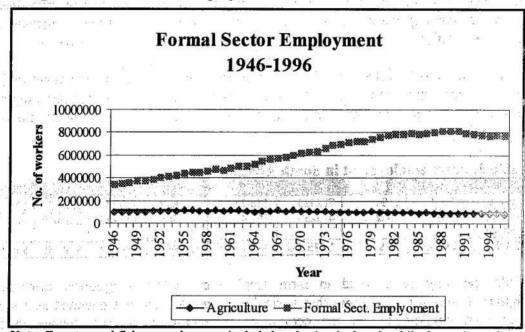


Figure 1: Formal sector employment in South Africa, 1946-1996

Note: Forestry and fishery workers are included under 'agriculture', while domestic workers on farms are excluded.

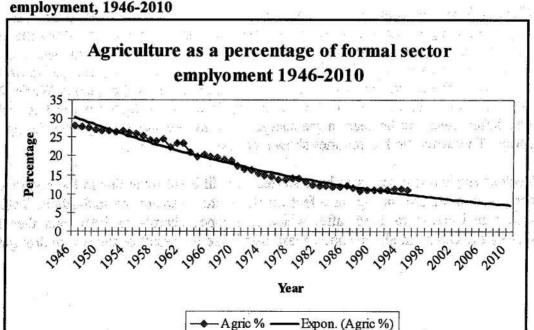
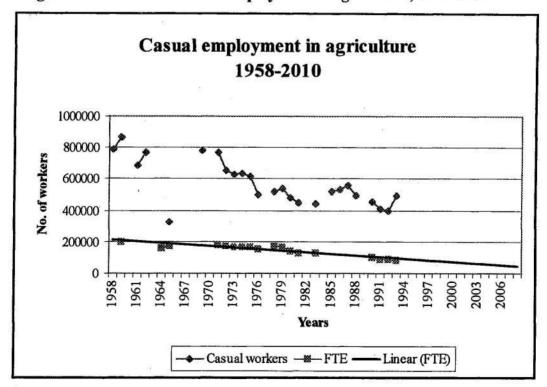


Figure 2: The ratio of agricultural employment to formal sector employment, 1946-2010

Figure 3: The trend in regular employment in agriculture, 1918-2010

Figure 4: The trend in casual employment in agriculture, 1958-2010



Finally, Table 4 shows the average employment intensities of the main branches of farming in the country.

Table 4: The employment intensity of agriculture

Sector	Hectares unde	er production per perma	ient employees.
Horticulture		12,97	
Field crops		33,64	
Mixed farming		98,15	
Animal production		188,77	

Chapter Six

The livelihoods of farm workers

The objective of this poverty profile is to reflect the absolute and relative poverty status of farm workers in South Africa. It begins with a demographic overview of farm workers, looking specifically at the following variables: gender, age, nationality, and household size and structure. The second part of the profile looks at farm worker capabilities, covering amongst others nutritional status, education levels and access to housing and household services. The profile is concluded by a discussion of farm worker income levels and livelihoods.

1 Locating farm workers within the South African labour market

In 1996, the South African population was estimated at 41 million people, grouped in 9,1 million households. Spatially, these individuals and households are concentrated in certain provinces such as Gauteng and KwaZulu-Natal, as well as in the urban areas²⁷ of the country. **Table 5** shows the spatial distribution of the South African population.

The functioning of the South African labour market is illustrated in the right-hand columns of **Table 5**. Here both formal unemployment (at more than a third of the total labour force for the country as a whole) as well as the proportion of the working age population that is formally employed (the labour absorption rate or LAR) is measured. This structural feature, which implies that a large proportion of the working age population have to find their livelihoods in the informal economy, is common to many developing countries. The Western Cape has the lowest unemployment rate and the highest LAR. In contrast 46% of the Northern Province's working population is unemployed, and fewer than one in four adults there have a formal sector job.

Of the 9,5 million South Africans employed in the formal economy, 86% classified themselves as 'employees'. The remaining are either self employed (7%), employed in a family business (2,1%) or are themselves employers (4,3%). The tertiary sectors provide the bulk of the country's jobs. However, collectively the primary sectors (agriculture, hunting, forestry, fisheries and mining) employ 1,2 million people while the manufacturing sector employs about 942 000. Agriculture and hunting provides 930 000 jobs or 11,4% of South Africa's formal employment, while contributing less than 5% of GDP. The provincial distribution shows that these agricultural jobs are concentrated in certain provinces, with 50% of farm workers employed in the Western Cape (20%), the Free State (15%) and Kwa-Zulu Natal (15%). Data from the 1996 Agricultural Survey suggest a similar absolute and relative distribution of

²⁷ The definition of urban and rural areas is problematic, as was already pointed out by the Commission of Inquiry into the Provision of Rural Financial Services (the Strauss Commission) in 1996. Formally, an urban area is defined as an area that has been legally proclaimed to be urban. This distinction is ambiguous, as many people living in large informal settlements, even on the metropolitan periphery such as in Durban, are classified as non-urban. Nevertheless, this distinction does not affect the definition of a farm worker.

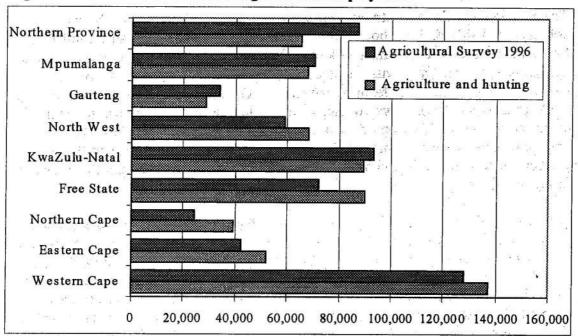
employees, across provinces when compared with Census 96. This comparison is shown in Figure 5.

Table 5: The spatial distribution of the South African population

Access	Populat	on	Househ	ouseholds Distribution		oution	Labour	
to it, and the	' 000	%	'000	%	Urban %	Non-urban %	Unemploy ed %	LARª
Western Cape	3 957	9,8	983	10,9	88,8	11,2	17,9	54,8
Eastern Cape	6 302	15,5	1,332	14,7	40,4	59,6	48,5	23,3
Northern Cape	841	2,1	187	2,1	68,2	31,8	28,5	44,0
Free State	2 633	6,5	625	6,9	72,5	27,5	30,0	42,8
KwaZulu-Natal	8 417	20,7	1,661	18,3	52,6	47,4	39,1	32,2
North West	3 355	8,3	721	8,0	38,6	61,4	37,9	36,1
Gauteng	7 348	18,1	1,964	21,7	96,6	3,4	28,2	51,3
Mpumalanga	2 798	6,9	604	6,7	43,1	56,9	32,9	36,2
Northern Province	4 927	12,1	. 982	10,8	12,7	87,3	46,0	22,9
South Africa	40 579	100,0	9,059	100,0	59,9	40,1	33,9	37,9

Note: a Labour absorption rate

Figure 5Provincial distribution of agricultural employment



Looking at the distribution of agricultural employment on a provincial basis ignores the considerable intra-provincial concentration. On a magisterial district level, more than 10% of all South African farm workers are found in eight of the country's 354 magisterial districts, with the majority of these located against the Eastern seaboard (see Table 6).

The 1996 Agricultural Survey makes a distinction between regular employees, and seasonal and casual employees,. Seasonal and casual employees are grouped together and defined as occasional or day labourers. This category includes sheep shearers, reapers and fruit-pickers. Not included under casual and seasonal employees, in the

1996 Agricultural Survey, are labour contractors and their employees,. In 1999 a postal survey carried out by the National Department of Agriculture (NDA) reported that contract workers accounted for an increasing proportion of the agricultural labour force. In 1996/1997 21% of farm workers were employed by labour contractors while this had apparently increased to 25% in 1998/99. The provincial ratio of regular to casual is shown in Figure 6 below. This ratio shows considerable inter-provincial variation.

Table 6: Magisterial districts containing most farm employees

District	Number of employees
Worcester, Western Cape	16092
Lower Tugela, KwaZulu-Natal	15298
Caledon, Western Cape	14386
Ceres, Western Cape	13844
Letaba, Mpumalanga	12866
Brits, North West	11813
Paarl, Western Cape	10995
Barberton, Mpumalanga to wife the theory	10930
	

2 The demographic features of South African farm employeees

In this analysis the position of farm employees is compared with the following labour reference groups:

- other (urban): This consists of all employees working in other sectors of the economy and who work in urban areas
- other (non-urban): This consists of all employees working in other sectors of the economy and who work in non-urban areas
- unemployed (urban): This consists of all people who were classified in the Census as being unemployed and living in urban areas. By unemployed is meant that these people a) did not work seven days prior to the interview and b) want to work and are available to start work within four weeks after the interview
- unemployed (non-urban): This consists of all people who were classified in the Census as being unemployed and living in non-urban areas. By unemployed is meant that these people a) did not work seven days prior to the interview and b) want to work and are available to start within four weeks after the interview.

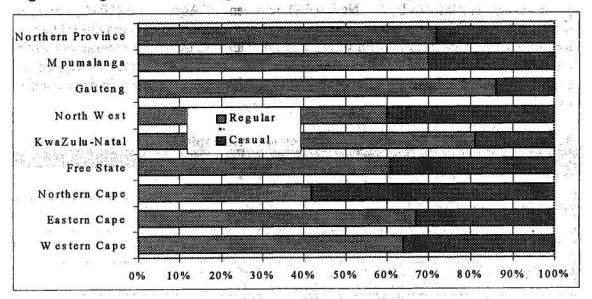


Figure 6: Regular and casual agricultural workers (%)

Gender 2.1.

As can be seen in Figure 7, 70% of all agricultural workers are male. This reflects a strong male bias when compared to the gender distribution in other sectors of the economy. These data also show that women in both urban and non-urban areas bear a disproportionate share of the country's unemployment burden. The primary fieldwork mirrored this gender distribution closely. Of the total of 230 employees who were interviewed, 158 (or 68,7%) were male and 72 were female.

Among the 230 employees interviewed, 221 were permanent, 218 worked full-time and 205 worked year round as opposed to on a seasonal basis. The majority, in other words, were permanent, full-time farm workers who are employed throughout the year.

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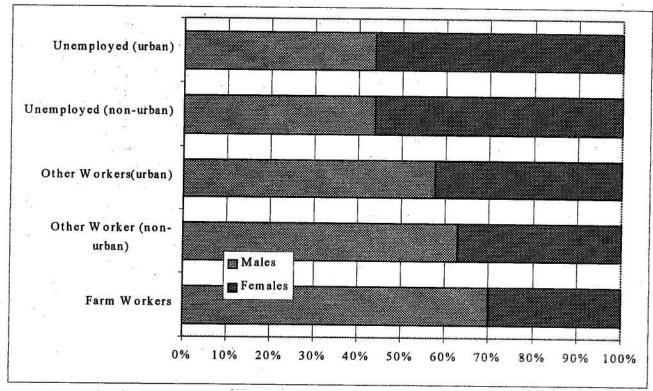
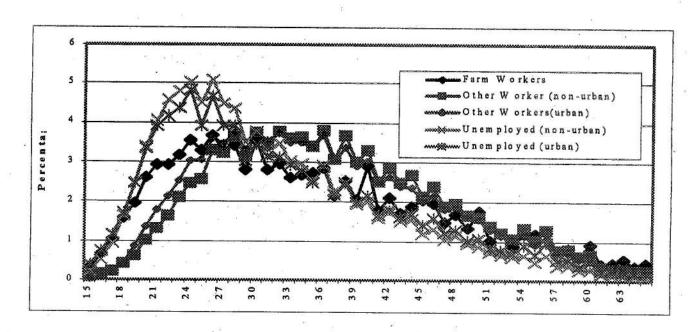


Figure 7: Gender and farm employment

2.2. Age

Farm workers are relatively young when compared with other employees, in the country. Moreover, their age profile is more skewed to the right when compared with urban and non-urban employees, (whose age profile is almost identical). Figure 8 also shows how the youth (people aged between 15 and 19) are more likely to be among the unemployed in both the urban and non-urban areas of the country.

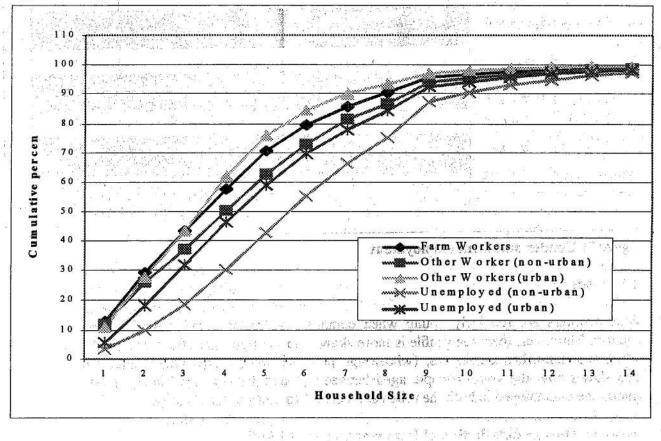
Figure 8: The age distribution of farm workers aged 15-65



2.3. Household size and structure

The average household size for farm workers is relatively small, as more than 60% of farm workers live in households containing four or fewer members (see Figure 9). This small household size may well be an artificial construct since on-farm housing is normally restricted to farm workers and their dependant children.





When looking at the relationship of farm workers to the household head, more than 80% were either the head of the household or were the partner of the household head. It is interesting to note the extent to which unemployed South Africans rely on their parental household for support.

2.4. Nationality

Census 96 found that the overwhelming majority of farm workers were South African citizens, and that less than 3% were foreign nationals mainly originating from other Southern African counties. Geographically these foreign employees, were concentrated in the Northern Province (39%) and Mpumalanga (24%).

3. Human capabilities of South African farm workers

This part of the Chapter assesses farm worker poverty levels by looking at their absolute and relative basic capability levels. The following capabilities will be explored in some depth, and revisited in the next; section when looking at the relationship between income and capability achievement:

- nutritional status
- access to housing and household services
- education and literacy levels.

3.1. Nutritional status of children living on commercial farms

Household surveys such as Census '96 and the OHS tend to be general and rarely collect detailed information on the nutritional status of a population. With respect to farm workers, this information gap has been filled by the recently published National Food Consumption Survey (2000). The NFCS measured the nutritional status of children aged 1-9 using a variety of methods, and disaggregated the data by area of residence. Note that while the data presented here specifically pertain to the children of farm workers, it is assumed that this information is indicative of the nutritional status of the farm worker household in general.

Table 7 below. The prevalence of moderate to severe stunting, underweight and wasting (where these categories represent progressively more severe symptoms of malnutrition) was measured as being greater than -2 standard deviations from the median measurements of the reference population. As can be seen from the Table, children living on commercial farms in South Africa are most likely to be stunted and underweight, while only children in the former homeland areas had a higher prevalence of wasting. Almost one in three children on commercial farms are stunted, one in five are underweight and one in 25 display the symptoms of wasting.

Table 7: Anthropometric status of children aged 1-9 years by area of residence

		Stunting	Underweight	Wasting		
*	% of sample	Height/Age	Weight/Age	Weight/ Height		
		< -2 Standard deviations				
Commercial Farms	11	30,6	18,1	4,2		
Formal Urban areas	39	16,0	7,8	2,6		
Informal Urban areas	11	19,3	7,6	2.1		
Former homeland areas	39	25,3	11,3	5.1		
South Africa	100	21,6	10,3	3,7		

An alternative way of gauging access to food, and thus nutrition, is to adopt a qualitative approach by administering, for example, a Hunger Scale Questionnaire. The caregivers of the children who took part in the NFCS survey were requested to complete such a questionnaire. Briefly, respondents were asked a series of questions²⁸

The eight questions asked were 1) Does your household ever run out of money to buy food? 2) Do you ever rely on a limited number of foods to feed your children because you are running out of money to buy food for a meal? 3) Do you ever cut the size of meals or skip them because there is not enough money for food? 4) Do you ever eat less than you should because there is not enough money

on their level of household food security. When more than five of the eight questions were answered in the affirmative, this indicated a food shortage problem. A 'yes' score of between one and four indicated that the household was at 'risk of hunger', while a negative response for each of the eight questions denoted a food secure household. Table 8 shows the results of this hunger risk survey. As can be seen urban households with a member employed in the formal economy experience the most food security. Only one in four children on commercial farms are food secure, and almost a third are at risk of hunger. Nevertheless, by these measures children on commercial farms are better off than children from other rural and informal sector households. While fewer farm children experience hunger than the national average, the difference is small: more than half (52%) of South Africa's children experience hunger, and 48% of those on farms share this tragedy.

Table 8: Hunger risk classification in children aged 1-9 by area of residence

	Food Secure	At risk of hunger	Experience hunger
Commercial farms	23	29	48
Formal urban	41	23	37
Informal urban	21	18	61
Former homeland areas	11	23	66
South Africa	25	23	52

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3.2. Access to housing and household services

The data displayed in Figure 10 show that from the primary research or farm survey more than 65 % of all farm workers live in a formal dwelling, which is a considerably higher proportion than for unemployed non-urban dwellers (45%) but only marginally higher than other non-urban employees, (62%). These differences are due to the fact that most farm workers live on-farm, in houses provided for them by their employers. Of the 230 respondents from the primary field surveys, for example, 191 (83%) live on the farm on which they work (see Figure 11).

When employees were asked whether they would prefer to stay on the farm or not, regardless of where they stay currently, just over half indicated that they would. However, these responses were not uniformly distributed across the country. **Figure 12** shows the variation in responses by province.

The provinces in which at least half of those interviewed indicated that they prefer to live on-farm rather than elsewhere were the Western Cape, the Eastern Cape the Northern Cape, Mpumalanga, Gauteng and KwaZulu-Natal. The factors that influence these preferences can be found in the responses of employees.

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for food? 5) Do your children ever eat less than you feel they should because there is not enough money for food? 6) Do your children ever say they are hungry because there is not enough food in the house? 7) Do you ever cut the size of your children's meals or do they ever skip meals because there is not enough money to buy food? 8) Do any of your children ever go to bed hungry because there is not enough money to buy food?

Figure 10: Housing: dwelling by type

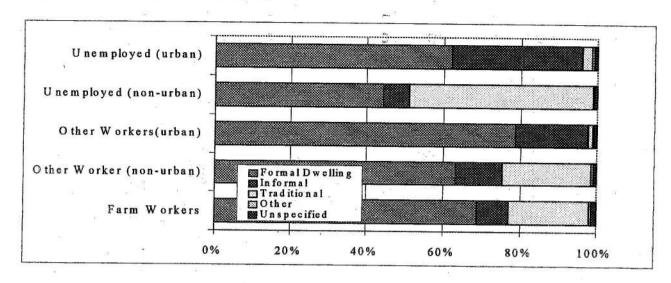
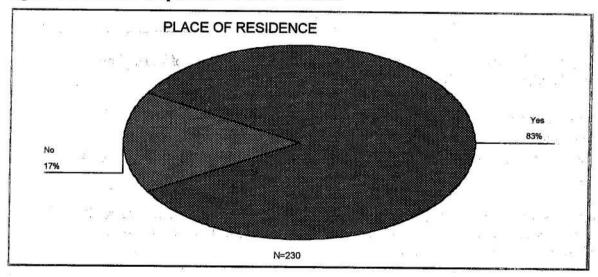


Figure 11: Whether respondent lives on the farm

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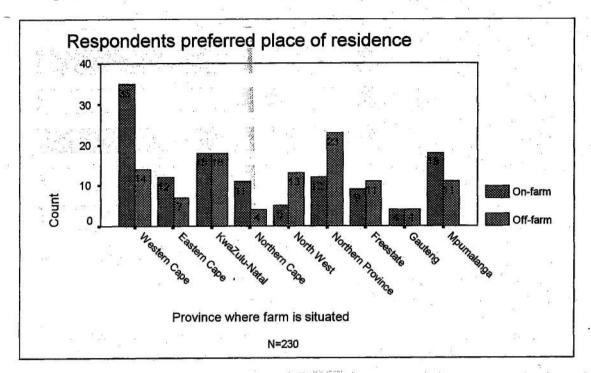


Figure 12: Preference for on-farm or off-farm residence by province

Respondents who indicated that it would be preferable to live off-farm had the following justifications for their choice:

- it is better live in one's own home and be with other family members
- privacy and freedom is better off the farm
- you can't be asked to do overtime work (especially on weekends) if you live off the farm.

These responses evidently reflect the diversity of South African agriculture. The variation between, and even within provinces is so great that it is difficult to generalise about farm workers needs from these responses.

Employees who live on-farm were also asked about the quality of their housing. The results show that services available to farm workers vary within particular farming units and from farm to farm. The availability of basic services like water and sanitation varied extensively. Often the pattern of service provision was uneven for example on some of the farms some of the houses have toilets and taps inside the house while on the same property some houses came without those services.

Most employees who were also farm dwellers live in small homes, with an average of three rooms per house. A few respondents live in hostels with non-family members. In some instances, 10 or more employees co-habit in such houses.

When employees were asked to cite up to three problems they experience with their housing, the issue of house size and the number of rooms emerged as a primary but not overriding concern. Among the 191 respondents, 25 complained about overcrowding. Some examples of the problem are presented below:

Housing problems of farmworkers

- "There are six people per single room during season" 22 year old man,
 Northern Province
- "We share a house of three rooms with another family" 30 year old man, Western Cape
- "I need another bedroom so we don't have to sleep with the children" 33 year old woman, Western Cape.
- "It's too small for my family we need more rooms for my family" 18 year old man, North West
- "Overcrowded house" 46 year old man, KwaZulu-Natal

A more detailed analysis of Census 96 data showed that farm workers appear better off than other non-urban workers with respect to the availability of on-site piped water (59% versus 38%). However the availability of piped water on-site in the urban areas of the country is considerably higher compared to the non-urban areas. This is illustrated by the fact that 76% of unemployed residents in urban areas have access to piped water on-site compared with only 18% of the non-urban unemployed.

However, the primary survey showed that only a third of these employees had tap water available in their homes (see Figure 13). When the other two thirds were asked how far they had to go in order to fetch water, the response of most was that they were able to collect water close to their houses, although some had to walk between 30 and 60 minutes in order to reach a source of water for household use.

Similar patterns emerged with respect to adequate sanitation (measured with respect to the availability of a chemical or flush toilet in a dwelling). Here Census 96 showed that farm workers were better off than other non-urban workers (27% versus 18%) but lagged far behind the urban unemployed (67%).

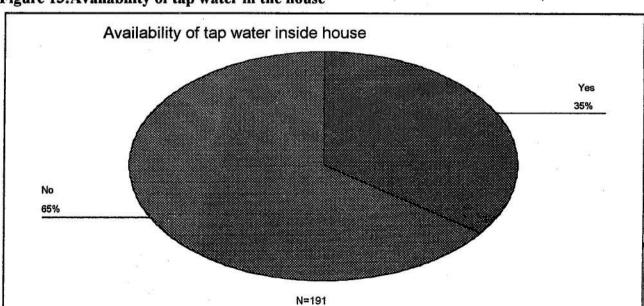


Figure 13: Availability of tap water in the house

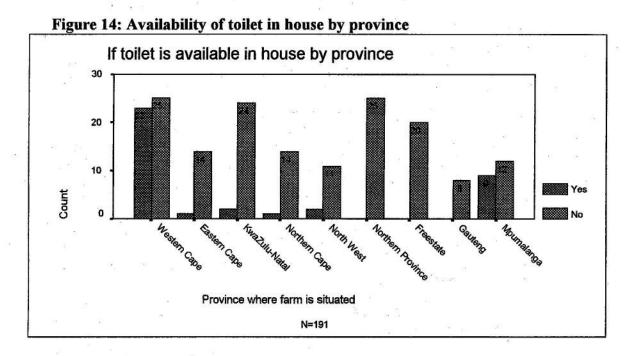
The availability of tap water inside employees' houses also appeared to vary by province. Although the number of respondents in each category was low, the

provinces in which this service was available least frequently were the Northern Province, Eastern Cape, KwaZulu-Natal, the Northern Cape and the North West. The province in which tap water was most likely to be available was the Western Cape, followed by the Mpumalanga and the Free State.

A number of questions were asked during the primary research about the availability of water. First, employees were asked whether their houses had indoor bathing facilities, referring to immovable installations such as a bath, shower or sink, and not including moveable buckets. Only a quarter of the employees resident on farms answered in the affirmative.

More seriously, four-fifths of the resident workers interviewed did not have toilets in their homes. In the Northern Province, Free State and Gauteng, not a single farm worker was found who had toilets inside their houses, while in the Eastern Cape, KwaZulu-Natal, Northern Cape and the North West, less than a quarter of those interviewed had inside toilets. This proportion rose to nearly half in Mpumalanga and the Western Cape (see Figure 14).

Two types of toilets were prevalent: pit latrines and flush toilets. Figure 15 provides a breakdown of the types of toilets used by farm workers resident on-farm. More than half of the on-farm residents use pit latrines and just less than a third had access to a flush toilet. Among the four-fifths who said they do not have access to any toilets, some clarified that they used buckets; those saying 'none' said that they relieve themselves in the bush. A characteristic remark was 'There is no toilet outside the house. We sit in the bush'.



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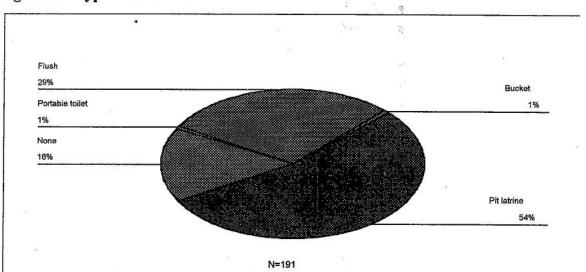


Figure 15: Type of toilet used

Finally, although most respondents have to collect water from outside their houses, it seems that sources of safe water are available on most farms in this sample. The majority (about three-quarters) of the respondents reported that they consider their drinking water to be safe. One-quarter said they did not think so, or did not know. Interestingly, a number of those who said their drinking water was not safe, or did not know whether it was safe, were from KwaZulu-Natal. Given that this study was conducted during the early months of the cholera epidemic in that province, this may not be indicative of access to safe drinking water at other times

When respondents were asked about the problems they had with their housing, the majority of complaints revolved around the non-availability of water on tap, electricity and toilets in their homes. However, a number of other problems relating to the quality of the structures were also raised.

Quality of housing

- "There is no floor inside the house. It is only the soil" 30 year old man, North West
- → "The house is built with mud and can fall anytime" 56 year old man, KwaZulu Natal
- ➤ "The ceiling is damaged." 29 year old man, Free State
- "The walls are cracked" 42 year old woman, Western Cape
- ➤ "The house is leaking during the rainy season" 42 year old woman, Mpumalanga

The absence of windows, or bad quality windows, led to either a lack of light and ventilation, or a cold and draughty home.

Most farm dwellers in commercial agriculture live in homes that do not belong to them, and that they did not build. This indicates that the provision of housing by employers sometimes constitutes either a form of payment in kind, or a condition of employment. This is not always the case, however. Some employees pay rental for their houses. Employers generally bear the cost of construction of farm worker housing. As employers are also owners of the land, it is unsurprising that they, rather than, most frequently make investments in fixed assets such as housing.

Of those who reside on-farm, 21% reported that they pay rent, 77% said they do not and 2% did not know whether they do or not. 29 Of those who pay rent, more than half pay more than R91 per month, while 15 respondents pay between R91 and a R100 per month and 5 pay over R151 rent per month (see Figure 16 below). Interestingly, 21% of all the employees residing on farms reported that they do not consider that paying a rental is appropriate for the housing they are currently occupying. The majority of respondents reported a fair rental for the quality of housing they occupy would be between R1,00 and R50,00 a month.

Employees were also asked who is responsible for paying for maintenance on their housing on farms. Nearly three-quarters of respondents who live on-farm said that the employer maintains their houses. Thus, these employees were not expected to contribute towards maintenance costs. However, 27% of respondents said that they are expected to do so.

Of those employees participating in this study most lived on farms and in poor conditions. On the basis of the indicators examined here, the province in which the quality of housing appears to be of a generally higher standard is the Western Cape, followed by Mpumalanga. The provinces in which the worst housing conditions are apparent are the Northern Province, Free State, Gauteng, the Northern Cape and North West.

What is evident is that farm workers regard the size of a house as well as the services and facilities available as important. From the responses it was also clear that the quality of housing symbolises the dignity of People not only find poor quality housing inconvenient and unpleasant, but also degrading and dehumanising.

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A number of respondents could not say whether or not rent for their homes is deducted from their wages. Some women said they thought that rent is deducted from their husbands' wages but they were not sure.

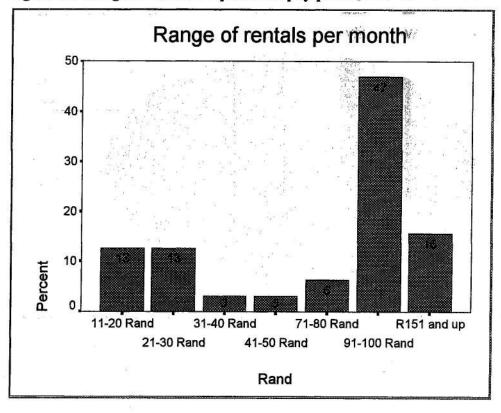


Figure 16: Range of rentals respondents pay per month

In the case of electricity provision (measured in terms of using electricity for lighting)the census suggests that, farm workers and other non-urban workers have identical access levels (44%). In contrast, urban workers are much better off with 82% making use of electricity for lighting. As was the case with direct water provision, when it comes to electricity access, the non-urban unemployed lag the most (25%).

By contrast, two thirds of the respondents in the primary field survey reported that they had at least electricity for lighting in their homes (see Figure 17). Those who did have electricity in their homes were asked to identify the purposes for which they used it. The responses are shown in Figure 18.

Of those who have electricity 65% use it for lights, 48% for cooking, 43% for TV and radios and 28% for household equipment such as refrigerators. As with tap water, the availability of electricity was variable across provinces. In this case as well, the Western Cape comes out as the province in which farm workers most frequently have access to serviced homes.

Few adults in the non-urban areas of the country have access to a telephone in their own homes. Moreover, a significant proportion of non-urban people indicated that they had no access to any form of telecommunications. Fewer than 10% of farm workers have access to a phone in their dwelling while 23% indicated they had no access to any telephone at all.

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Figure 17: Availability of electricity in the home

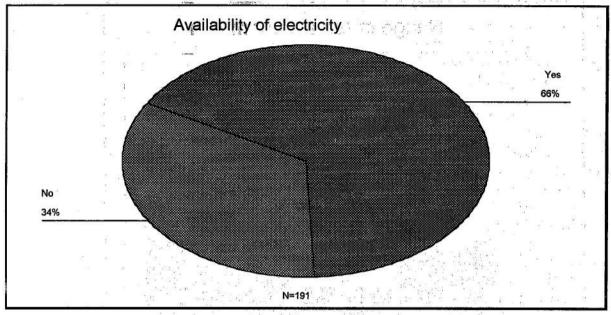
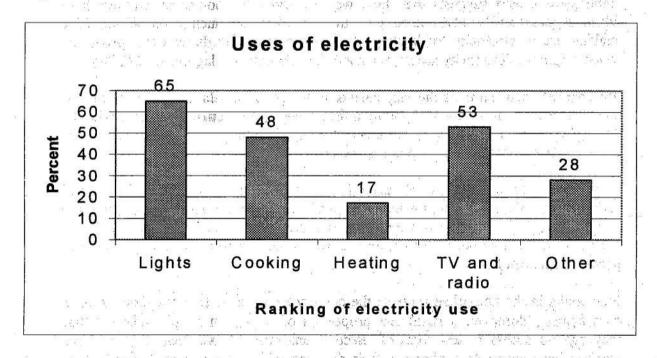


Figure 18: Uses of electricity



Access to specific household services on an individual basis does not provide a clear composite picture of the general trends in access for different types of households. To address this need, Statistics South Africa has developed a summary development index using the data from Census 96, called the household infrastructure index. This index, as the name implies, examines a household's access to different categories of

infrastructure³⁰. This index was used as the basis to develop the 'access to housing and services index' presented here. Seen in Table 9 below, this index, which ranges between 0-100, is the arithmetic mean of the individual components listed. A person who lives in a formal dwelling, has access to electricity for lighting, a flush or chemical toilet and a telephone in their dwelling scores 100 while a person with access to none of the above scores.

Table 9 shows that urban employed individuals are considerably better off with respect to housing and housing services than their non-urban and unemployed counterparts. Furthermore, a strong urban bias exists with respect to service provision, as the unemployed in urban areas are better off than individuals working in non-urban areas. While non-urban individuals have similar access levels, farm workers are marginally better off than other employed non-urban households and significantly better off than the non-urban unemployed.

While the average for farm workers is 35.5%, this figure shows considerable variation on a magisterial district basis. Few magisterial districts scored an average in excess of 60%, with most of these being in the Western Cape and in Gauteng.

Table 9. Housing and services: a summary index

	Farm Workers	Other Workers (urban)	Other Workers (non-urban)	Unemployed (urban)	Unemployed (non-urban)
Formal housing	69,72	79,06	64,80	62,63	44,56
Electricity for lights	44,60	81,76	47,05	66,56	25,18
Tap water inside	27,05	82,41	20,02	67,05	67,06
Flush or chemical toilet	26,73	71,96	23,41	49,58	6,12
Phone or cellphone	9,06	51,06	10,17	23,99	1,63
Average	35,43	73,25	33,09	53,96	28,91

Education and literacy rates

Literacy can be measured in a variety of ways. In this case, it is defined as the percentage of the population over the age of 13 who have completed the first five years of education. The data in **Figure 19** show that farmworkers or farmworkers' families have the lowest rates of literacy in the country when compared with all other labour groups. Moreover, a significant proportion of farm workers (33%) indicated that they had no formal education.

Changes in literacy levels can be measured by means of the average number of school years completed by age group. The data in Figure 20 confirm that the average level of education is generally higher for younger South Africans (<40 years). However, this age differential is lower for farm workers than for any of the other groups, including the non-urban unemployed. One possible explanation of this absolute and relative discrepancy is that agricultural employers place very little economic value on education, given that the unemployed non-urban population has higher education

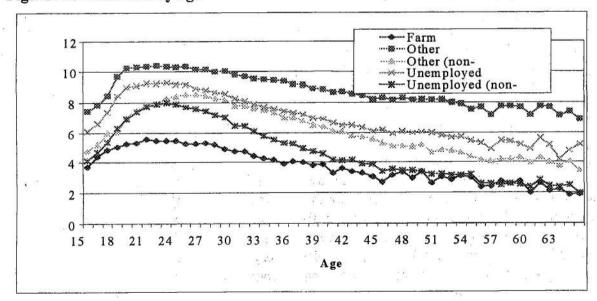
³⁰ The components of this index include: Living in formal housing; access to electricity for lighting; tap water inside the dwelling; a flush or chemical toilet; a telephone in the dwelling or a cellular phone; refuse removal at least 1 a week; the level of education of the household head, and monthly household expenditure.

levels compared to farm workers. A more likely explanation could be the localized character of agricultural labour markets that impedes its proper functioning. A survey conducted in 1997 among South African wine-grape farmers found, for example, that in most cases farmers employed workers recruited through the network of relatives and friends of workers already working on the farm³¹.

100% Grade 1 M None Grade 2 Grade 3 80% Grade 4 Grade 5 Ø Grade 5+ 60% 40% 20% 0% Unemployed Unemployed Farm Workers Other (urban) Other (non-(urban) (non-urban) urban)

Figure 19: Education and literacy levels





³¹ Ewert, J, J Hamman, N Tregurtha, N Vink, C Visser and G Williams, 1998. State and market, labour and land – the South African wine industry in transition. University of Stellenbosch, Unpublished research report

4. Farm worker wage and income levels

The 1996 Agricultural Survey found that the average cash wage paid to regular and casual workers in agriculture was R419,00 per month or R544,00 per month at current prices. At a provincial level there is also considerable variation. Employees in Gauteng were paid an average of R790,00 per month of while those in the Free State and Northern Province received R407,00 and R416,00 per month, respectively. These results are shown in **Figure 21** below.

Figure 21 also shows that aside from a cash wage, workers receive additional income under the heading of 'other remuneration'. Included in this category is the value of free housing and grazing provided to farm workers, and contributions to the Worker's Compensation Fund and Unemployment Insurance Fund made by farmers³². Contributions to pension and medical funds are also included under 'other remuneration' as well as in-kind payments received by them. Under 'payments-in-kind' the following items are specified; the value of rations such as maize flour, slaughter animals, meat, fish, milk, wine, bread coffee, sugar, tobacco, clothing, shoes, transport, training, medicine provided to farm workers and medical expenses paid on their behalf. While cash wages paid varied considerably across the provinces, the 'other remuneration' paid to farm workers was fairly constant in absolute terms, and averaged to about 20% of total remuneration.

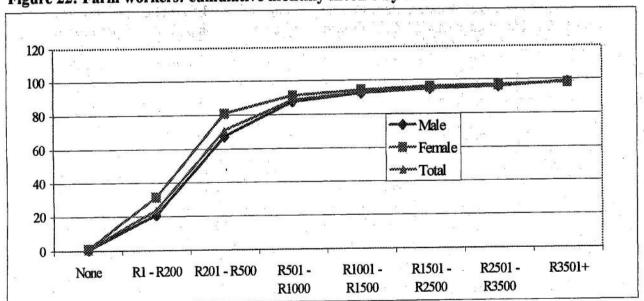
Average wage data hide the distribution of wages. This is a particular problem in agriculture, where the distribution of wages consists of a clustering of employees at the lower levels and a distinct tailing off at the upper end of the distribution. Data from the October Household Survey show that this phenomenon is most pronounced in South Africa in the case of agriculture where the mean wage rate per worker was calculated at R3,57 per hour and the median at only R1,68. Assuming a 48-hour workweek this translated into a monthly average wage of R648,53 and a median wage of R322,56. This means that 50% of all farm workers are earning R322,56 per month or less (see also **Table 10** below).

³² These last two are, of course statutory deductions, and thus do not form part of a workers income.

Northern Province M pum alanga Gauteng North West Cash. KwaZulu-Natal Other Remuneration Free State Northern Cape Eastern Cape Western Cape 600 700 800 1000 300 400 200 100 Rands per month

Figure 21: Average monthly wages by province

The cumulative monthly income distribution for male and female full-time farm workers can be seen in **Figure 22**. These data also show that 20% of farm workers earn between R0-R200,00 per month, 70% earn between R0-R500,00 per month while 87% earn less than R1000,00 per month.



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Figure 22: Farm workers: cumulative monthly income by sex

The provincial distribution of the wage categories also shows some variation. Workers in Gauteng and the Western Cape earn the highest wages while workers in the Free State earn the lowest.

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Household Monthly Income 1 110 100 90 80 70 60 Agriculture 50 Other(urban) 40 Other (non-urban) 30 Unemployed (urban) 20 ~ Unemployed (non-urban) 10

Figure 23: Household income by occupation category

The data on the distribution of incomes by occupation in Figure 23 show that it is only the personal income of the unemployed non-urban employees that is less than farm workers income. For example, the graph shows that 20% of employed urban workers earn between R500,00 and R1000,00 per month. The concomitant proportion for employed non-urban workers is 40%, for unemployed urban workers approximately 55%, for agriculture between 60 and 65%, and for unemployed non-urban workers it is between 75 and 80%.

Table 10: Mean and median hourly wages by industry, 1997

		Median (Rand)	Median as % mean	Agriculture as % e	
Agriculture	3.57	1.68	47	100.00	
Mining	11.95	7.67	64	29.87	
Manufacturing	13.07	8.73	67	27.31	
Electricity	16.08	11.11	69	22.21	
Construction	9.83	6.39	65	36.32	
Trade	10.77	7.07	66	33.15	
Transport	14.37	10.16	71	24.84	
Finance	18.26	11.46	63	19.55	
Services	17.87	13.85	78	19.97	
Domestic	4.10	2.60	63	87.10	

Source: Budlender (2000)

Table 10 shows the wage distribution by industry in South Africa. It is evident that farm workers and domestic workers earn the lowest wages in the country, while the financial services and electricity sector workers are paid the highest (this remains true even when the 20% estimated in kind payment is added to the agricultural wage). The skewed distribution of farm wages is also evident from these data. The ratio of mean

to median income in agriculture of below 50% is not found in any other sector of the economy.

Finally, Table 11 shows the relative rate of increases in real wages in the South African economy from 1970 to 1998. The data show that the growth rate in agricultural wages was higher than the average for the economy, and higher than all sectors except for mining. Real hourly wages in agriculture grew by 46. % between 1970 and 1998, at an average rate of 1.6% per annum.

Table 11: Growth rate in real wages per sector, 1970-1998 (%)

Sector	Total increase	Average real growth (% pa)		
Agriculture	46.14	1.65		
Total Mining	105.2	3.76		
Total Manufacturing	5.17	0.18		
Total Services	27.22	0.97		
Total Economy	40.55	1.45		

Despite this increase in the real wage, the unit cost of labour, measured as the ratio of the total cost of labour to the total value of output has remained relatively stable over time. In 1970, 16 cents was spent on labour for every R1,00 of output produced. This decreased to 13 cents in 1980, increased to 19 cents in 1994 and decreased to 17 cents in 1998

Data on wage levels and the distribution of wages from the primary survey tell much the same story. Yet the cash wages reported by employers and employes varied significantly. It is, therefore, necessary to examine:

- the range of wages reported by employers: the highest and lowest wages they
 pay, presented within race and gender categories; and
- the range of wages reported by employees: statistics on the raw wages reported
 by respondents, together with cross-tabulations of wages by the gender of the
 employee, the sector in which the employee is employed and the province in
 which the farm is located.

4.1. Survey data: wages reported by employers

Employers were asked to note the highest and lowest wages paid to permanent employees, by race and gender. The range of minimum and maximum wages reported by employers was between R6 and R60 a day for temporary workers, and R37 to R1200 a week for permanent workers.³³ The average wage for temporary workers was R24 a day.

There were only a small number of employers who reported employing permanent coloured and white workers in the sample. This, coupled with the absence of any employers who reported employing Asian workers, precludes an analysis of wage differentials by population group. However, an analysis of the range of wages paid to

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³³ R1 200,00 per week was reported for a white male permanent employee, who appeared to be a non-agricultural worker such as a farm manager, and therefore should be excluded from the existing range of wages.

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African workers provides insight into the variation, and specifically the gendered variation, of wage scales.

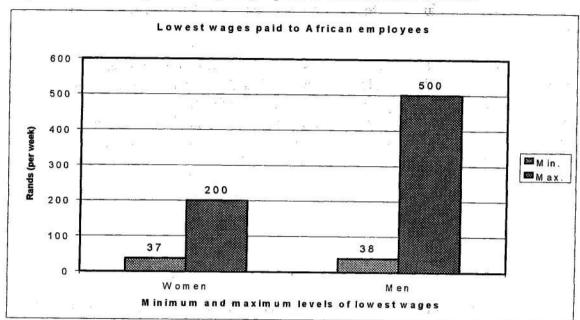


Figure 24: The range of weekly wages paid to African farm workers

Figure 24 above depicts the highest and lowest weekly wages paid to African men and women permanently employed on the farms. There is no substantial distinction between the lowest wages paid to African men and women – R37 for women and R38 for men, yet the highest wages reported by employers were R200 for women and R500 for men. However, it is clear that these wages are skewly distributed, with more workers earning the lower wages. This is especially true of women's wages, as is illustrated in Figure 25 below.

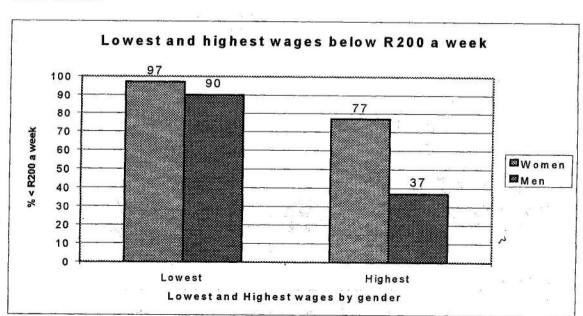


Figure 25: Percentage of employers citing lowest and highest wages lower than R200 a week

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Thus, the data show that while only 37% of employers reported that the highest wage they pay African men is below R200,00 a week, 77% pay all African women less than R200. This graph indicates that gender discrepancies are more exaggerated towards the top end of the spectrum (the highest paid employees) than at the bottom. Women's wages are more clustered towards the bottom end of the spectrum that men's wages.

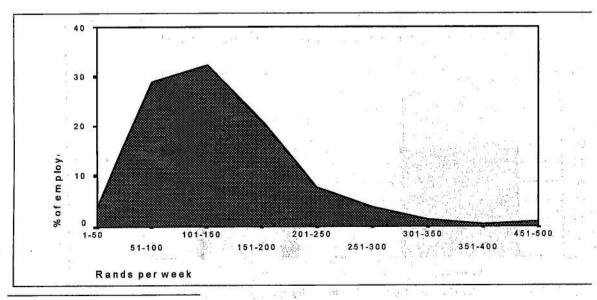
The survey data also showed that there was considerable variation in wages reported by employers between horticulture, field crop, livestock and mixed farm enterprises. It appears that wages paid by employers in the livestock sector were less varied than among employers engaged in horticultural or field crop production. This variation has implications for the sectoral determination. In those sectors and provinces in which wages are relatively dispersed (i.e. where the gap between the highest and lowest paid workers within enterprises is most significant), the introduction of a minimum wage may result in employers freezing the wages of higher paid employees in order to offset a potential increase in the wage bill.

Survey data: wages reported by employees 4.2.

The range of wages reported by employees was between R40 and R145 a week (R8 and R29 a day for a five day week) for temporary workers³⁴ and between R17.50 and R487 a week for permanent workers.35

Figure 26 shows the distribution of weekly wages among employees. It is clear that the distribution of wages is skewed to the left. The data show that 31% of employees earn between R101 and R150 a week, 86% earn R200 or less a week, and 98% earn R300 or less per week. The average wage of general workers in the sample is R139.59 a week or R560 per month.





³⁴ Given the small proportion of temporary workers interviewed, these figures are unlikely to reflect actual wage ranges.

There were some discrepancies between the wages reported by employees and those provided by the employer. In 31 cases - exactly half of the 62 cases in the sample - permanent employees reported being paid wages lower than the lowest wage cited by the employer. In addition, in 26 of the 62 cases employers said they did not employ any women on a permanent basis, yet on 12 of these farms CRLS fieldworkers interviewed women who reported that they were permanent employees. 36

To illustrate, on a particular farm in the Northern Province, the farmer reported that the lowest paid permanent employee on the farm received R88,00 per week in cash, but later that same day a fieldworker interviewed an employee who reported that her wage is R65,00 per week. On another farm in the same province, on which the employer reported the lowest wage paid to any permanent employee as R114,00, two permanent full-time employees were interviewed whose wages were reportedly R85,00 a week.

The anomaly between the range of wages reported by employers and actual wages reported by employees could result from the following:

- employers reported inflated wages
- employees referred to wages after, rather than before, deductions
- employers' definitions of what constitutes a permanent employee differed from the understandings held by employees and/or as framed by the law.

Given the conflicting definitions of categories of employment and the higher number of employees in the sample, data from employees has been used in the following discussion.

The major fault line along which wages vary appears to be the gender of the employee. Data from **Table 12** show that 97% of the women in the sample, compared to 82% of the men, earn R200,00 or less a month. More significantly, 53% of the women, compared to just 26% of the men, earn R100,00 or less a week.

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35 Except where otherwise indicated, all figures for wages refer only to full-time.

We provided working definitions to guide fieldworkers in clarifying such terms so that their use is consistent with the Basic Conditions of Employment Act (BCEA). A temporary employee was defined as "if you have an agreement (written or verbal) about when your service will come to an end. You are a permanent employee if you do not have an agreement about when you will stop being employed OR you have a reasonable expectation that you will continue to be employed by your employer". Fieldworkers were briefed on interpretations of a reasonable expectation (e.g. temporary employment on an annual basis), as clarified in CCMA judgments.

Table 12: Weekly wages by gender

Rand per week	Fe	male	Male % of			
	9	% of				
	. }	Cumulative		Cumulative		
1-50	9 3	- 1620	3	.3		
51-100	44	53	23	26		
101-150	30	83	33	59		
151-200	13 .	96	23	82		
201-250	2	98	10	92		
251-300			5	97		
301-350	2	100	. 1	98		
351-400			1	99		
451-500			1	100		
Average (Rand)	R105.91		R154.05			

This pattern is due to both direct and indirect factors. Firstly, women are paid less because of the gender division of labour operating on most farms - the tasks typically performed by women are viewed as less skilled tasks. Secondly, farmers tend to value women's labour at a lower level than men- women are paid less on average precisely because they are women. An indirect cause of the gender disparities in wage levels is the nature of contractual relations between the employers and employees. Employers often choose to view male employees as 'permanent' workers while female emloyees are viewed as 'casual' workers whose employment is contracted via a male partner and who are paid at lower rates.

This gender disparity in wages exists despite the fact that the women in the sample were, on average, more educated than men in terms of the number of years at school completed. However, women were much less likely to have undergone formal training to enable them to perform skilled tasks on the farm.

The limited sample size precludes any generalisations about provincial variations in wages being drawn on the basis of this study. This is also true of wages per commodity sector.

Cash income among farm workers is highly seasonal, fluctuating with periods of peak demand and 'slack time'. Employees were asked to indicate the months in which their household receives its highest and lowest incomes. This was a multi-choice answer in which employees could indicate more than one month.

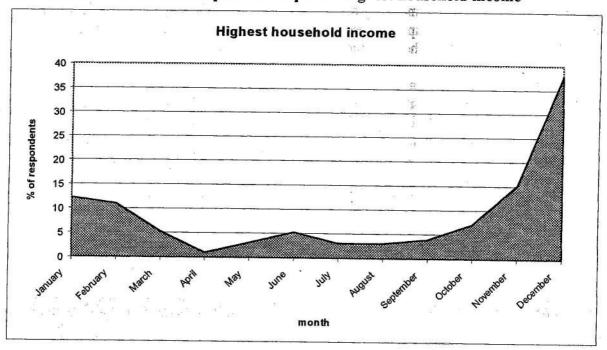


Figure 27: Months in which respondents reported highest household income

The month most frequently cited by employees, as the time of year in which their households have their highest incomes, was December (see Figure 27). This was explained as due to the additional income of bonuses – either a Christmas bonus or a harvest bonus, which employees receive at the end of the calendar year. However, Employees also noted receiving bonuses early in the year, at the end of a crop cycle, or after periods of high labour demand – particularly harvest and planting seasons - in which they worked overtime or at piece rates.

Thus, seasonal fluctuations in the incomes of farm workers and their households differ according to the sector in which they are employed. Almost all respondents believe that the reason for fluctuations in household income were due to a peak in labour demand resulting in additional income from piece rates, harvest or planting season bonuses, and the provision of seasonal employment to additional household members, particularly women and children.

The information gained through this study indicates that wages vary significantly within enterprises as well as between them. Some of the factors determining different wage levels within a farm are the gender of an employee and also sometimes (but not always!) the experience, length of service, level of responsibility and skill of an employee. Variations between farms appear to coincide to some extent with the type of production activities (the sector) and may do so across province though this is not evident from this study.

5. Payment in kind, benefits and deductions

The following discussion provides a breakdown of how farm workers are paid. This is critical for an understanding of the ways in which the cost to an employer may differ

from the benefit to an employee. Employers and employees understand remuneration in different ways. This is a compelling conclusion, when considering the disjuncture between the benefits which employers said they provided (during the past year) and those that employees reported they had received.

5.1. Level of payment in kind

Employers were asked to estimate what proportion of the total remuneration that they pay to permanent is accounted for by payments in kind. For this purpose they were asked to include under the category of 'payment in kind' all non-monetary benefits, including accommodation. The results are presented in Table 13. The average of all employers' responses was 28% - in other words, about a quarter of 'remuneration is paid in kind. Half of the employers reported that their payment in kind accounts for 25% or less of their payments to workers and 25% of employers indicated that payment in kind constitutes 40% or more of 'remuneration.

Table 13: Employers' estimates of payment in kind as a proportion of total

% Payment in kind	Responses		
	Count	%	Cumulative %
0	2	3	3
1-10	6	10	13
11-20	11 .	18	31
21-30	16	26	57
31-40	10	16	73
41-50	7	11	84
51-60	3	5	89
61-70	1 1	2	91
> 70	0	0	91
Don't know	6	10	100
Total	62	100	

Employers were also asked to indicate the cost to them of providing each benefit, in order to derive an estimated total. Employees were only asked to indicate what was provided to them.

The average annual cost to employers of payment in kind to permanent employees was R125 375. The minimum level was R0 (in other words, were paid in cash only) and the maximum level was R1 708 000,00. Among the employers 50% indicated that they spend R60 000,00 or more a year on payment in kind and other non-monetary goods and services for permanent employees. Although these figures were derived from a record or estimate of each expenditure item, it is possible that employers overestimated the cost to them, as there was a tendency to amalgamate items of farm expenditure together with the payment in kind (e.g. running costs like electricity, transport, etc.).

5.2. Types and incidence of benefits

Employers were asked to itemise their expenditure on benefits and payment in kind for permanent employees. Employeees were also asked to indicate what benefits and

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forms of payment they receive. In each case, a list was provided to prompt respondents and space was allowed for additional items not included in the list.

Figure 28: Benefits for permanent according to employers and

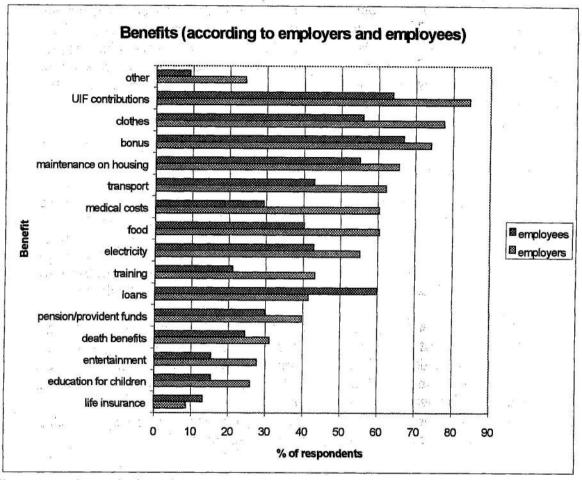


Figure 28 above depicts the contrast between employment benefits as reported by employers and by employees. Given that four employees were interviewed on almost each farm, one might expect the figures provided to coincide. However, there may be good reasons to explain the gap.

First, employers were asked to report their expenditure on benefits over the past year. This does not imply that the benefits were distributed uniformly among employees. Given that a range of employees on each farm were interviewed, it is possible that within our sample we captured a portion of those workers to whom these benefits were not available. This could explain the lower levels of benefits in most categories, for example:

- insurance of all kinds, including Unemployment Insurance Fund (UIF), accident insurance, life insurance, pensions and provident funds, which are mostly available to permanent workers
- education for children, which would not be a recognised benefit for all employees, since not all employees necessarily have children of school-going age

 employers noted what they spent on benefits, but it is clear that sometimes a portion of this financial outlay is recovered through deductions off employee's wages. Thus the same items mentioned by employers as 'benefits' are cited by their as 'deductions'. · VOEC.

Second, expenditure that contributes directly to production can be confused with benefits for employees. Clothing, for example, can only constitute a benefit if it is unrelated to employees' work. However, a number of employers who provided information on the cost of clothing clarified that this expenditure was for overalls and work boots. Many employees, therefore, who (correctly) do not consider this to be a benefit, did not cite clothing as a benefit they receive.

Third, since loans may not involve a financial contribution from an employer, but could in fact signify a source of revenue, it is unsurprising that loans were the single item which employees reported more frequently than employers did. Employers were asked to cite loans only if they provide loans on subsidised interest rates, whereas employees were asked to report whether employers provide loans - regardless of (a) whether interest is charged or not, or (b) whether the interest rate is lower or higher than commercial lending rates. The higher proportion of employees indicating that employers provide loans may mean that some employers provide cash advances (or interest-free loans), but also that some charge interest rates at or above bank rates.

The most frequently mentioned additional benefit cited by employers under the category 'other' was water, followed by firewood. The provision of grazing and dipping for cattle belonging to employees was cited as a benefit, although a few employers cited the amounts they charge for these services - R10,00 and R25,00 per head of cattle per month were amounts mentioned.

The provision of land for cultivation and the use of a tractor (partially to collect firewood) were also cited by employees as additional benefits.

5.3. Types and incidence of benefits by gender

The benefits that accrue to permanent employees seem to depend substantially on the gender of the employee. Figure 29 indicates the 'gender gap' in access to employment benefits.

Men reported receiving every benefit more frequently than women did. The gap between men and women varies across the different benefits, but for most categories, women reported receiving most categories of benefits between a third and a half as frequently as men did.

The smallest gaps between women and men are evident in those benefits that frequently accrue to households rather than to individual employees. The frequency with which women and men reported receiving maintenance on housing, education for children, entertainment and education were most similar - i.e. the gender gap was smallest for these items.

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The gap between women and men who reported receiving UIF is the most substantial. This again points to the fact that some employers define only men as permanent employees, so that a distinction between the benefits provided to permanent and temporary employees is manifest as a gender distinction. The gap is especially serious as UIF provides for maternity benefits. Other items which few women received were training, medical services and pension or provident funds. Again, employers providing these benefits were likely to distinguish between men, who would qualify for these benefits as permanent employees, and women who, if seen as temporary employees, would not.

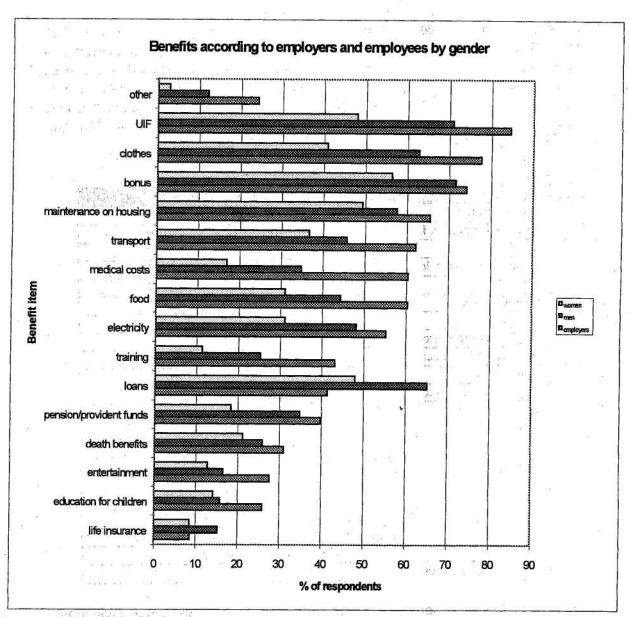


Figure 29: Benefits for permanent by gender

If employers do not simply see women as temporary and men as permanent employees, but see women as gaining indirect benefit through their partners, this poses an additional challenge to the drafting of the sectoral determination. With the imposition of a regulated wage floor, employers might remove benefits from workers whose status is most insecure, or to monetise those benefits.

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5.4. **Deductions**

Employees were asked to estimate the average size of weekly deductions from their wages. Half of them did not cite the size of their deductions, since 21% said they do not have deductions and 29% did not know the size of the deductions. Among those respondents who reported amounts were deducted, the most frequently reported size was R1,00 to R10,00, followed by R21,00 to R30,00. These deductions are significant as a proportion of wages, particularly as a few respondents reported deductions exceeding R100,00 a week. The average size of deductions wages was R21,45 a week.

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Employees were also asked to estimate the average amount of each deduction. This proved difficult, both because employees were unsure of the amounts and because of the irregularity in incidence and size. The question was therefore read as for what reasons are deductions regularly made from your wages? The answers are reflected in Table 14, which shows the ranking of the incidence of items for which deductions are being made, as reported by employees (e.g. most - 44% -reported that UIF was deducted from their wages).

Table 14: The incidence of deductions

Rank	Deduction item	Percentage
1	UIF contributions	44
2	Pension / provident funds	20
3	Food	17
4	Repayment of cash loans	14
5	Electricity	14
6	Rent for housing	13
7	Clothes	9
8	Days absent from work	9
9	Medical and healthcare	
10	Other	
11	Repayment of debt to farm shop	5
12	Life insurance	5
13	Burial costs	4
14	Damage to property	4
15	Education for children	3
16	Water	2
17	Accident insurance	1
18	Transport	1
19	Entertainment	0.4
20	Training	0.4
21	Maintenance on housing	0

A number of themes emerged in discussions with employees about deductions. Firstly, employees pointed to a cycle of debt either to farm shops or directly to the employer. This appears to be due to the isolation of farms and reliance on employers to provide transport into town so that workers can spend their money elsewhere. Many respondents said that employers keep stocks of basic goods that they sell to employees, leading to high deductions from wages and a situation in which employees have little scope for discretionary spending.

Secondly, they identified a phenomenon of what can be termed 'forced purchases' where the employer insists that they buy certain items, normally farm produce, at specific rates. There does not appear to be a clear distinction between payment in kind and forced purchases. The distinction may lie in the regularity of the transaction. For example, if an employer gives each employee half a sheep every month, this may be seen as payment in kind. If the farmer gives each employee half a sheep on an irregular basis and then deducts money from his or her cash wages to pay for it, this may be viewed as a 'forced purchase'. Some forms of payment in kind are highly seasonal (for example, after a harvest) and are not negotiated. In such cases, the employer sets the price, and employees may experience the transaction as less than fair.

5.5. Conclusions: payment in kind, benefits and deductions

In the course of conducting the fieldwork for this study, two conceptual issues emerged. First, there appears to be a lack of clarity among employers and employees on the distinction between payment in kind and benefits that form part of the conditions of employment. For example, farmer A explains to farm worker A that she will be paid R100 a week and that, as part of her package, she will receive a house in which to live on the farm. In this case, the house is part of an employment package and not a form of remuneration. Therefore, it does not constitute payment in kind. If farmer B, however, explains to farm worker B that, in lieu of rent, the employee will forfeit a portion of her wage and only receive R100 of the total in cash, housing may be considered a form of payment in kind.

Second, there appears to be a similar conflation of payment in kind and deductions. In practice, there may be substantial grey areas between the two, particularly in the case of accommodation and other goods and services for which deductions are made but at below a market rate.

6. Conditions of employment

During the course of the primary fieldwork working hours, annual, sick and maternity leave, unemployment insurance and child labour issues were also investigated. Thus, the study looks at the ways in which the agricultural sector complies with the Basic Conditions of Employment Act (BCEA).

6.1. Working hours

Employees were asked to state the maximum hours they work in a week during peak periods. Only 223 workers responded to this question, 70% of whom worked 41-60 hours per week. More than half of the workers indicated that they have worked for more than 48 hours during some part of the year.

The average maximum hours worked per week during peak periods for all workers were 56,3 hours- significantly higher then the provision made in the BCEA but does

fall within the 45 ordinary hours plus allowed overtime. More than two thirds of respondents reported that the maximum they work in any week is between 41 and 60 hours. The lowest figure cited was between 0-10 hours a week (a part-time employee) and the highest was 112 hours – a figure well exceeding the legal maximum of 45 hours a week stipulated in the BCEA.

Despite the fact that 54% of the workers worked longer hours than the legal limit some of them do not receive any compensation for working overtime. A number of respondents also referred to their unhappiness with long working hours. This was a problem because of the physical strain it involved but also because employees felt that the level of remuneration was not commensurate with the length of hours they are required to work What emerges is not only long hours but also unsocial and unhealthy hours.

- "It is difficult—we work many hours but we get little Sometimes we work from as early as 04h00 and knock off at 17h00" - 52 year old man, Mpumalanga.
- "We are not happy about working more than 48 hours for week. The
 employer once told us about 48 hours that we have to work in a week, but
 in actual fact it does not happen that way. We are aware that we work far
 more than 48 hours" 57 year old man, Free State
- "We are not happy about the long hours that we work" 29 year old man, Free State.
- "We wake up at 5 00am to start work (59 year old man, Gauteng).
- Waking up before 3am every day disturbs the body. It is very stressful" –
 18 year old man, KwaZulu-Natal.

The horticultural and field crop sector have 'high' season and crop cycles during certain months and workers in certain of the livestock subsectors work longer hours in particular months. 42% of all the workers in the field crop sector and 39% of workers in the live stock sector indicated working longer hours.

There was no substantial gender discrepancy between the maximum working hours cited by women and men in the sample. While 75% of men said that the maximum hours they worked in a week was 60 hours or less, this was the case for 80% of the women. Nevertheless, it is evident that there is a problem with enforcing maximum working hours/overtime during peak periods of labour demand. This problem is compounded by the situation regarding overtime payment.

6.2. Overtime payment

Figure 30 below shows the responses to questions regarding payment for overtime work. Only 39% of the respondents reported that they received any overtime payment, thus 61% said that they are not compensated when they work overtime. The majority of those who reported they get overtime payment believed that they are not compensated in full.

The forms of compensation for overtime work varied. Workers reported to be compensated with:

- cash payments. The majority of workers indicated there did not seem to be a set standard for overtime payment. Workers either receive the normal wage per hour, or an additional percentage of the normal wage per hour or they work at piece rate compensation. A great proportion of workers reported the employer decides what the overtime payment is going to be. The payments varied from an extra R1,00-R10,00 per overtime period, and are not calculated per hour
- bonus. Workers are compensated with a bonus at the end of the year or after the peak season
- off-days. Leave days are extended or workers are allowed to take days off if they work overtime or work fewer hours in winter
- payment in kind. Workers get extra food i.e. vegetables, fruit, meat or maize meal.

Due to fluctuating labour demand in various sectors workers is required to work longer hours in certain months. A substantial proportion of the employees worked longer hours during the months of October, November, December, January, February and June. Workers in the horticulture sector work longer hours during harvesting (December through to the end of February). Most forms of field crop production have two peak seasons, namely during the planting period in October and November and during harvesting in June.

Overtime payment

Yes
39%

No
61%

Figure 30: Overtime payment

6.3. Annual leave

As Figure 31 indicates, 27% of the 230 farm workers in the sample do not get annual leave even though they qualify under the BCEA for full or pro-rata leave.

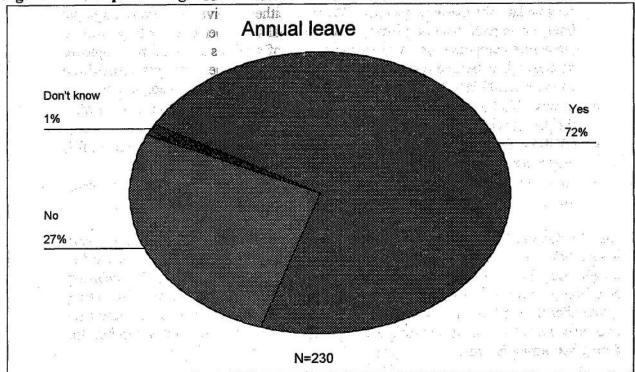


Figure 31: If respondents get annual leave

A further 1% of the workers interviewed said they do not know if they will get annual leave. One of the reasons given was that they have not been working sufficiently long on the farm to know whether they will be able to claim this condition of employment. This is indicative of a broader issue identified through the research: that many employees are not aware of their legal entitlements and that these are not made explicit between employers and employees at the time of employment.

Of the 211 farm workers who do get annual leave 25% said they get at least 21 days annual leave. Permanent full-time employees were more likely to get annual leave and to be paid for it - than part-time and/or temporary employees. Of the 218 employees in this category, 74% get annual leave. However a notable 25% reported that they do not.

62% of the permanent full-time employees reported that they get fewer days of annual leave than they are legally entitled to³⁷. By contrast, 40% reported that they get between 21 and 30 days a year, which is at or above the legal requirement. Among those who get annual leave the average duration is 17 days. Of those who are paid for leave. 87% said they receive a normal wage. However, a significant 13% of workers said they are not paid a normal wage.

It is clear that the condition of annual leave is differentiated along gender lines. Fewer women than men reported that they get annual leave. Traditionally women were not regarded as permanent workers and were - according to farmers - not entitled to annual leave. Although the BCEA provides for annual leave for all categories of

Some respondents only get public holidays off.

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workers, this tradition prevails and the study show that women are still struggling to realise the right to annual leave.

Of those women employed full time who indicated that they get annual leave, 28% indicated that they do not get paid for their days of leave, while 92% of the men reported they get paid annual leave.

Duration of annual leave by gender 50 45 40 37 of respondents 32 33 35 30 26 30 ■ Women 22 25 17 ■ Men 20 15 15 10 3 5 0 0 1-5 6-10 11-15 21-50 16-20 26 - 30Number of days

11.

Figure 32: Fully paid annual leave by gender

6.4. Sick leave

Another problem area with respect to compliance with the BCEA seems to be in the provision of paid sick leave. Many workers (66%) confirmed that they are paid for days they are absent due to illness, but only if they can produce a medical certificate. However, some respondents said that even if they produced a medical certificate they are often compelled to continue working or had to return to work before the period indicated by a doctor had expired. On further probing, it also appeared that of the 211 permanent full-time workers who reported they get sick leave, 31% said they do not get paid for this time off.

There was substantial variation in responses on the same farm, most but not all of which may be accounted for by gender. Payment for sick leave therefore appears to be treated by many employers as a privilege rather than an entitlement.

6.5. Maternity leave

We asked all employees, both women and men, whether women on the farm were able to take maternity leave, and if so, for what period of time and whether the woman

would be paid during this period. Respondents found questions regarding maternity leave particularly difficult to answer. More than half of all respondents did not know whether women on the farm get maternity leave. 51% of all the farm workers in the sample did not know how long the maternity leave period is for pregnant women on the farm, while 7% said women get no maternity leave and 13% said the question was not applicable for one of the following reasons:

- no women were permanently employed on the farm
- no women were employed throughout the year on the farm
- the situation had not arisen during the respondent's employment on the farm.

Of the remaining 28% most said women get less than 60 days of maternity leave. A very small proportion of the sample (3 respondents) reported that women take the 120 days maternity leave that the law permits.

Workers who receive leave do not necessarily get paid during the leave, those workers who indicated that women are paid during maternity leave clarified that the payment is received from the Unemployment Insurance Fund (UIF) rather than from their employers. The UIF pays a maximum of 45% of the worker's normal wage. The issue of contributing to the UIF is critical in understanding women's access to income during maternity leave.

Unemployment insurance 6.6.

Employees were asked whether they have 'blue cards' indicating contributions to the Unemployment Insurance Fund (UIF). More than 60% answered in the affirmative, 34% reported that they do not have UIF cards and 3% were not aware whether they do or not. Men were more likely to contribute to the UIF (70% of men compared to only 47% of women) even on the same farm. There may be a number of explanations for this rift. First, where women's employment status is seen as temporary, employers may not register them with the UIF. Second, if men are considered to be household breadwinners, and women's employment is considered to be a strategy merely to augment household income, employers may choose not to register women with the UIF as the loss of women's income is not seen in a serious light.

Even among permanent women employees, 52% do not have UIF cards and would therefore not be able to claim from the UIF during maternity leave. The gender disparities in access to UIF, coupled with a clear indication that few employers pay women during maternity leave, are cause for serious concern.

6.7. Child labour

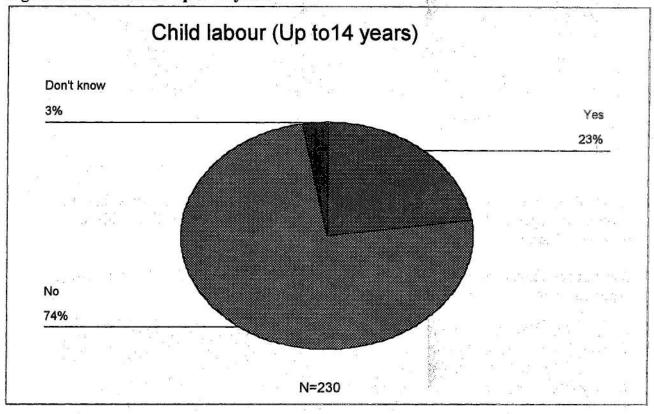
Employees were asked whether children of 14 years or younger, or those between 15 and 17 years work on the farm at any time. Where this was confirmed, they were then asked what was the maximum period in a year that a child in each age group was employed on the farm.

Children of 14 years and younger were reported to be working on farms in seven of the nine provinces, and 23% of employees confirmed that on the farms on which they

work, children of 14 years and younger are employed at some point during the year (see Figure 33).

A third of those respondents who indicated that children up to 14 years work on the farm reported that they work between 41-50 hours per week (i.e. full time) and a smaller proportion said the children work between 51-60 hours per week. The types of farm work which children in this age group were engaged in included weeding, picking, pruning, thinning, feeding of cattle, planting, ploughing, and changing irrigation sprinklers.

Figure 33: Child labour up to 14 years



Child labour seemed to be relatively less prevalent in the horticulture subsector and most prevalent on farms that farmed predominantly with field crops (see Figure 34).

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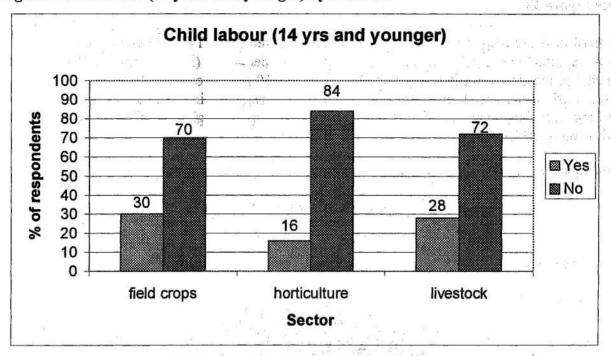


Fig. 34: Child labour (14 years and younger) by subsector

In addition, more than a third of the employees in the sample stated that children between the ages of 15 and 17 years old work on the farms. Most of these children between 15 and 17 years perform the same tasks as adult employees.

Some of the comments by respondents on the issue of child labour (15 to 17 years) are captured below.

- > "assist if employees are on leave during December" Women 41; Gauteng
- > "replace those absent" Man, 46; KwaZulu Natal (KZN)
- "clean the stables" Man 30 KZN
- > "operate the planter" Man, 46, North West
- > "picking fruit and vegetables" Man' 48, Western Cape
- > "planting of onions" Woman, 40; Western Cape
- > "dig up potatoes and fill bags"- Man, 37; Free State
- "feed calves, assist in milking" Man 71, North West
- "vineyard work one of the boys does women's work all year round" Woman, 31, Western Cape
- > "ploughing"- Women, 32; Eastern Cape
- > "spray and irrigation" Woman, 35; Western Cape

6.8. Other conditions

Employees were also asked whether they were given rest breaks during the working day. Almost two thirds were able to rest for more than an hour per day, with most receiving from 60 to 90 minutes' breaks. Employees were also asked whether they were expected to work on Sundays. Few were, apart from workers in the livestock subsector (mainly dairy).

6.9. Conclusion: conditions of employment

It appears that there is room for significant improvement in the adoption of existing labour legislation on farms in South Africa. Few employees seem to enjoy full labour rights, and women enjoy fewer rights than men. The position of pregnant women could be a particular cause for concern because many do not get paid maternity leave, and few are registered with the UIF. The prevalence of child labour, especially of those under 14 is a further cause for concern.

A further point to note is the absenteeism rates experienced by most employers. According to their answers, absenteeism was not a major problem, with 72% of employers saying that they do not lose more than 5% of labour time due to absenteeism.

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Chapter Seven

Income and capabilities

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The evidence raised in this Chapter is clear: most South African farm workers live in circumstances of absolute poverty. Moreover, when their standard of living is compared to that of other urban and non-urban workers, their relative poverty is also evident. Some form of policy intervention is therefore needed to redress the situation. Whether intervention is successful will depend on the extent to which the capabilities of these workers are improved.

Calculations based on the data presented here show that there is a clear correlation between farm worker income categories and their access to housing and household services, as well as between income and literacy levels. Thus, policies such as a minimum wage or an income supplement aimed at increasing the incomes of farm workers in South Africa could at the same time improve their capabilities. Yet this need not be the case, for a number of potential reasons:

- income supplements may end up in the hands of male workers, whose spending patterns are different to those of women. Improvement of capabilities requires investment in nutrition, education, health, etc. rather than in consumer goods
- a minimum wage that is set too high may benefit those who are able to retain
 employment, but could harm those who become unemployed. As the latter is
 more likely to include vulnerable groups such as women, the youth and nonSouth African workers, there is a limit to the extent to which a minimum wage
 can be used to take people out of poverty.

This latter effect can be illustrated by means of an example of the potential effect of a countrywide minimum wage of (a low level of) R200,00 per month. The analysis is done with reference to **Table 14**, where there is a comparison between the primary demographic characteristics of workers earning below R200,00 per month and those earning above R200 per month, together with the average for all farm workers. The demographic characteristics of the unemployed are also included to assess the degree of difficulty these workers will have in trying to get a job.

Table 15 shows that women, the youth and non-South African farm workers are the most vulnerable to unemployment. For example, the Table shows that comparatively more women earn less than R200 per month in relation to the total farm worker population (i.e. 59.5% of men earned less than R200 per month, while fully 73.6% of women earned less than R200 per month in 1996). Women in the economy also bear a disproportionate share of the unemployment burden. Table 11 also shows the extent to which younger farm workers, those aged 15-34 earn the least. Non-South African farm workers are also relatively more vulnerable.

Table 15: Comparative demographic profile

		<r 200<="" th=""><th>R 200+</th><th>Farm Workers</th><th>Unemployed</th></r>	R 200+	Farm Workers	Unemployed
Gender					
	Male	59.5	73.6	71.0	43.7
	Female	40.5	26.4	30.6	56.3
7.40		100	100	100	100
Cumulative Age	15-19	8.2	4.8	5.7	6.2
	20-24	25.6	19.5	21.1	27.6
	25-29	40.8	36.8	37.8	48.6
	30-34	54.1	52.1	52.6	64.8
	35-39	65.5	64.9	65.0	77.0
	40-44	75.1	75.8	75.6	85.7
***************************************	45-49	83.4	84.6	84.3	91.8
	50-54	89.6	90.7	90.4	95.6
	55-59	94.4	95.3	95.1	98.1
	60-64	97.3	98.0	97.8	99.2
	65+	100.0	100,0	100.0	100,0
Vationality	South Africa	94.8	97.8	97.0	99.5
The control of the co	Southern Africa	5.1	2.1	2.9	0.4
	Other	0.0	0.1	0.1	0.1

PART II

KEY CONSIDERATIONS IN THE INTRODUCTION OF A MINIMUM WAGE

Chapter 8

Theoretical perspectives

1. Minimum wages: microeconomic considerations

A 1979 survey of economists working at universities, in government and in the business sector in the United States³⁸ showed that 90% of them generally agreed, or agreed with provisions³⁹, with the statement that 'A minimum wage increases unemployment among young and unskilled workers.' This is unsurprising, given the relatively simple textbook 'proof' of the effect of a minimum wage⁴⁰. This standard proof has recently been supplemented by more sophisticated arguments that also include the deadweight losses that occur when the highest productivity firms cannot hire the lowest-wage workers and when firms with a high ability to evade minimum wages displace firms with a low ability, even though the latter may have higher productivity⁴¹.

The minimum wage was, originally proposed as a part of broad labour market policy, aimed at increasing labour productivity and achieving stability. However, in recent times the emphasis has shifted to the use of the minimum wage to fight poverty⁴². In this regard, Deepak Lal⁴³ provides a comprehensive summary of the standard economists' argument against the minimum wage as a tool for poverty alleviation. From the perspective of the poor as a group, a minimum wage that is set above the market equilibrium wage reduces employment in the sectors where the minimum wage applies⁴⁴.

Some poor people gain higher wages, but the loss amongst those poor people who become unemployed could be greater. Obviously, unless those who are paid higher wages are from amongst the poor, there is a good chance that a minimum wage will merely benefit low wage earners from wealthier households (i.e. teenagers, second income earners). Further, those who lose their jobs will seek employment in other sectors where there are no minimum wages. This excess supply will depress wages in those industries as well⁴⁵.

³⁹ Generally agreed: 68%; Agreed with provisions: 22%; Generally Disagree: 10%.

⁴¹ For a recent statement see Palda, Filip, 2000. 'Some deadweight losses from the minimum wage: the cases of full and partial compliance'. *Labour Economics* 7: 751 - 783

⁴³ Lal, D, 1995. The minimum wage. UCLA Department of Economics Working Paper No. 723. Los Angeles

⁴⁵ These findings are supported by Lang, K and S Kahn, 1998. 'The effect of minimum wage laws on the distribution of employment: theory and evidence'. *Journal of Public Economics* 69(1): 67-82 who

³⁸ Kearl, JR, CL Pope, GC Whiting and LT Wimmer, 1979. 'A confusion of economists?' American Economic Review, 69(2): 28-37

⁴⁰ Such textbook treatments are conventionally based on Stigler, G, 1946. 'The economics of minimum wage legislation.' *American Economic Review* 36, June

⁴² See Levin-Waldman, OM, 2001. The case of the minimum wage: competing policy models. New York, SUNY Series in Public Policy for an exposition for the reasons behind this shift in focus.

⁴⁴ The important exception is where employers are strong enough to determine wages (i.e. they are in a monopsonistic position). As this argument is raised later, the comparative static analysis is repeated in Annexure 1.

Nevertheless, there have always been dissenting theoretical voices. The theorists concentrated on issues such as the effects of different relative capital/labour ratios⁴⁶, the presence of dualism in developing countries⁴⁷, the case of trade between middle-income and rich countries⁴⁸ and the long-term positive growth effects occasioned by improved human capital⁴⁹.

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Another strand of economics literature that cannot be ignored in this debate is found in the thinking of the institutional economists, largely but not exclusively associated with the University of Wisconsin at Madison. One of the key figures in this debate was John R Commons⁵⁰. Institutional economists argued that the regulation of employment practices should not to be viewed as interfering with the efficient operation of the economy. Employers with unorganised work forces generally pay wages below the full social costs of labour, while legal measures could potentially force employers to pay wages at least equivalent to and more likely greater than the social costs of labour. If they were successful in doing so, the state, charitable institutions, and individual members of society would no longer need to subsidise low-paying producers by providing income or goods in kind to those earning wages below the social costs of labour. In the process the dynamic efficiency of firms would also be enhanced. As wages rise, managers are pushed to improve efficiency, thus lowering the effective cost of the rise in pay. At the same time, higher wages need not lead to lower employment. First, employers have a great deal of flexibility regarding wage levels. Firms faced with little competition could increase wages by sacrificing some of their high profits or by raising prices on their final products. Second, if increased productivity offsets increased labour costs, employers would have little inclination to reduce employment levels.

argue that, despite an increase in employment, increased competition from higher productivity workers makes lower productivity workers worse off.

⁴⁶ For example, if the sector covered by the minimum wage were more capital intensive than the rest of the economy, and if the demand for its goods were fairly elastic, a minimum wage would cause its employment and output levels to fall. Both capital and labour would move to the relatively less capital intensive parts of the economy. The added capital would make these sectors more capital intensive by definition, and thus wage rates would be higher (Johnson, HG, 1969. 'Minimum wage laws: a general equilibrium analysis.' *The Canadian Journal of Economics* 2(4))

⁴⁷ In this case a minimum wage can by definition only be set in the 'formal' economy. The extent of unemployment will then depend on the method of job search (Harris, JP and MP Todaro, 1970. 'Migration, unemployment and development: a two-sector analysis.' *American Economic Review* 60(1))

⁴⁸ Here it is argued that measures such as a minimum wage in a middle-income country may enhance welfare by moving it to a superior equilibrium (Rodrick, D, 1996. 'Coordination failures and government policy: a model with applications to East Asia and Eastern Europe.' *Journal of International Economics* 40(1-2): 1-22

This model is very close to the human capital theory. It states that, in an overlapping generations model with endogenous growth, high minimum wages can have positive effects on the growth rate and welfare by increasing the proportion of skilled workers (e.g. Cahuc, P., and P Michel, 1993. 'Minimum Wage, Unemployment and Growth', Actes du colloque international: Analyse économique des bas salaires et des effets du salaire minimum, 30 Sept.-1 Oct. 1993, Arles, France, pp. 167-199; and Acemoglu, Daron and Jörn-Steffen Pischke, 1999. 'Minimum wages and on-the-job training.' NBER Working Papers 7184. Cambridge, MA, National Bureau of Economic Research

⁵⁰ See Barbash, J, 1976. 'The Legal Foundations of Capitalism and the Labor Problem'. *Journal of Economic Issues* 10(4): 799-810; and Barbash, J, 1989. 'John R. Commons: Pioneer of Labor Economics'. *Monthly Labor Review* 112(5): 44-49.

Assuming no negative employment effects, an increase in wages would increase the overall demand for goods and services in the economy, allowing companies to expand production and, perhaps, reach lower points on their long run average cost curves.

In summary, the theoretical effects of a minimum wage seem to be ambiguous. The notion that the introduction of a minimum wage that raises the wages of some workers would automatically reduce the employment prospects of that particular category of workers is far from a dominant view. The alternative models suggest that the link is not automatically negative, and might be positive. It might be negative in certain circumstances, though weak as the evidence suggests, and nil or positive in other contexts.

These ambiguous conclusions are also reflected in the available empirical evidence⁵¹. Here, however, an interesting historical pattern emerges. Virtually all of the empirical studies conducted during the 1970s found fairly strong negative employment effects, while those conducted during the 1980s mostly found weak negative effects. The only explanation that economists had for the popularity of minimum wages was ignorance among the public⁵². During the first part of the 1990s, however, a body of empirical work has been published that tests and confirms the theoretical prediction of a positive relationship between a minimum wage and employment⁵³, while the late 1990s have seen a resurgence of studies that show a negative relationship⁵⁴.

Four potential explanations for this empirical confusion can be found in the literature:

• first, Herren⁵⁵ has analysed the evolution of thinking amongst staff of the Council of Economic Advisors in the USA on two key labour economics propositions, one being the employment effects of a minimum wage⁵⁶. The analysis shows that there are key differences between the analyses conducted during Democratic Administrations and those conducted during Republican Administrations. However, these differences have generally concerned

Youcef Ghellab (1998). Minimum Wages and Youth Unemployment. Employment and Training Papers, 26. International Labour Office Geneva) provides an exhaustive summary of review articles on the employment effects of the minimum wage from around the world.

An interesting footnote is the history of the editorial position of the New York Times on this issue. Before the 1970s the newspaper opposed minimum wages on technical grounds, then, during the 1970s and 1980s, favoured them, but largely on emotional grounds. By the 1990s the newspaper was opposed to the minimum wage on the basis of its negative economic implications (McKenzie, Richard B, 1994. *Times change: The minimum wage and The New York Times*. San Francisco: Pacific Research Institute for Public Policy). Thus, public ignorance cannot be blamed for the support for the Clinton Administrations' increase in the minimum wage in the 1990s.

The two most important examples are Card, D and AB Krueger, 1994. 'Minimum wages and employment: a case study of the fast food industry in New Jersey and Pennsylvania.' American Economic Review 48(4) and Machin, S and A Manning, 1994. 'The effects of minimum wages on wage dispersion and employment: evidence from the UK Wage Councils.' Industrial and Labour Relations Review 47(2).

See, for example, Partridge, MD and JS Partridge, 1999, 'Do Minimum Wage Hikes Reduce Employment? State-Level Evidence from the Low-Wage Retail Sector'. *Journal of Labor Research*; 20(3): 393-413

⁵⁵ Herren, RS, 1996. 'The Council of Economic Advisers: Selected Issues in Labor Economics'. *Journal of Economics*, 22(2): 49-55.

⁵⁶ The other is how changes in marginal tax rates affect aggregate labour supply.

differing interpretations of empirical findings and not differences in underlying economic theory

- second, the literature shows that, although the mode of implementation of a minimum wage differs between countries, most have implemented rather cumbersome processes for bringing about amendments. Thus, in most countries the real minimum wage was eroded by inflation during the 1970s and the 1980s. This could explain the weakened effect on employment found in the literature
- third, an important recent paper⁵⁷ examines the relationship between the stated goals of minimum wage policy and the actual wage rates that are implemented in the USA. The author rejects the hypothesis that actual minimum wage policy has been driven by a desire to achieve these goals and finds that a simple interest group model best explains the historical path of the minimum-wage rate
- fourth, empirical analysis shows that the institutional framework matters. For example, the effects of a minimum wage on youth unemployment seem to be related to specific labour market institutions, as the results of recent cross-country research⁵⁸ as well as a comparison of labour market institutions between the USA and France⁵⁹ show.

These conclusions are probably best summarised by Wood⁶⁰ who examined the rhetoric employed in arguments 'for' and 'against' national minimum wages in the UK hospitality industry. He found that a key aspect of the debate was the protagonists' reliance on economic studies, which for the most part demonstrate either a positive or a negative effect. He concludes that, much like the cumulative evidence from the economic research, such strategies are flawed, making moral predisposition rather than rational choice the only basis on which to argue about the desirability or otherwise of a national minimum wage.

Two other effects of a minimum wage that could be important for agriculture are the evidence that it compresses the distribution of wages in different earnings classes⁶¹; and the evidence that the disemployment effect is larger among small firms than among large firms⁶²

⁵⁷ Sobel, RS, 1999. 'Theory and Evidence on the Political Economy of the Minimum Wage'. Journal of Political Economy, 107(4): 761-85

Neumark, David, 1999. 'A cross-national analysis of the effects of minimum wages on youth unemployment'. NBER Working Paper 7299. Cambridge, MA National Bureau of Economic Research

See e.g. Abowd, John M, Francis Kramarz and David N Margolis, 1999. 'Minimum wages and employment in France and the United States'. *NBER Working Paper 6996*. Cambridge, MA National Bureau of Economic Research

Wood, RC, 1997. 'Discussion paper. Rhetoric, reason and rationality: the national minimum wage debate and the UK hospitality industry'. *International Journal of Hospitality Management*, 16(4): 329-344

⁶¹ Dickens R, S Machin and A Manning, 1999. 'The Effects of Minimum Wages on Employment: Theory and Evidence from Britain'. *Journal of Labor Economics* 17(1):1-22

⁶² See, e.g. Rama, Martin, 1996. 'The consequences of doubling the minimum wage: the case of Indonesia. World Bank Research Paper, Washington, DC, IBRD

2. Minimum wages: macroeconomic considerations

The literature on the macroeconomic effects of minimum wages is weak. None of the few published references in this genre explicitly measure the total employment effects of a minimum wage when the effects in the upstream and downstream industries are also accounted for. It is, however, logical that any increase in employment that results from a minimum wage will lead to a larger increase in total employment as the spending patterns of those who benefit directly from the minimum wage indirectly create new opportunities.

This has been modelled by Manning⁶³ who shows that in an efficiency wage model in which there is involuntary unemployment, a binding minimum wage may increase employment. A general equilibrium matching model is presented in which there is involuntary unemployment but wages are below market-clearing levels and raising wages can reduce unemployment. The empirical evidence on employment and wage determination is just as consistent with this model as with models in which wages are at or above market-clearing levels. Cubitt and Heap⁶⁴ also present a two period general equilibrium, model in which agents foresee how the second period outcome is determined by the investment decisions that they make in the first period, *inter alia* when there is a minimum wage in the second period. In equilibrium, this policy increases both types of investment. There is a range of values of the minimum wage at which the increases in investment are obtained without any reduction in period 2 employment.

Finally, Roberts et al⁶⁵ also study the impact of group interests in a general equilibrium model with a dual labour market where the union sector is characterised by two-stage bargaining whereas firms set wages in the non-union sector. Firms and unions of the union sector have a common interest in extending the minimum wage to the non-union sector, although the union sector does not seek to increase the non-union wage above the market-clearing wage. In fact, it is optimal for the union sector to impose a market-clearing wage on the non-union sector.

3. The implications for agriculture

The international literature on the impact of minimum wages in agriculture is also rather limited, yet it yields some important insights. The experience of the UK, for example, is instructive, as there was a period during the early 1990s when the agricultural sector alone was covered by a minimum wage. The modern origin of this minimum wage starts with its reintroduction in 1924. Empirical research shows that employment was reduced, and that the employment effect increased during the 1930s (i.e. the time of the Great Depression when farm profits were under severe pressure)⁶⁶.

⁶⁴ Cubitt, RP and SPH Heap, 1999. 'Minimum wage legislation, investment and human capital'. Scottish Journal of Political Economy, 46(2): 135-57.

⁶⁵ Roberts, MA, K Staehr and T Tranaes, 2000. 'Two-stage bargaining with coverage extension in a dual labour market.' *European Economic Review*, 44(1): 181-200.

⁶⁶ Gowers, R and TJ Hatton, 1994. The Origins and Early Impact of the Minimum Wage in Agriculture.
Centre for Economic Policy Research, Discussion Paper: 1021

⁶³ Manning, A, 1994. How do we know that real wages are too high? London School of Economics Centre for Economic Performance Discussion Paper: 195.

However, a later study in the UK showed that the average earnings of farm workers were consistently higher than the minimum wage. Econometric tests of the data show that the level of the minimum wage is 'caused' by the average wage. Thus, the Agricultural Wages Boards have been reactive, and minimum wages have had no impact on average earnings⁶⁷. Yet it may have had a positive effect on total employment⁶⁸ and on the most vulnerable workers.. These authors show that, since the abolition of the Wages Councils in September 1993, agriculture is the only sector in the United Kingdom covered by any form of minimum wage legislation. They conclude, contrary to the previous paper, that the minimum wages set by the Agricultural Wages Boards are important determinants of the average level and distribution of earnings. They also conclude that there is no evidence that minimum wages have reduced the level of employment in agriculture, finding instead a weak positive effect on employment. In particular, the authors conclude '...they (minimum wages) have raised the pay of low paid workers without adversely affecting their employment. If the Agricultural Wages Boards were to (be abolished), low paid workers would be relatively worse off without enhancing their long-run employment prospects.'

Two papers from the USA are also relevant to this debate. In the first, Perloff⁶⁹ shows, *inter alia* that wages in agriculture rise significantly with the number of hours worked per week, and that there are some large demographic differentials which lead to large earnings differentials. Thus, urban-rural wage and income gaps should not readily be used to justify government intervention in product markets and in the labour market (e.g. minimum wages). In the second, Kebede and Gan⁷⁰ evaluate the potential of vegetable production to enhance the declining farm income of limited resource farmers. One of the results is that, as vegetable production is labour intensive and sensitive to change in labour cost, an increase in the minimum wage might adversely affect the return from vegetable production for these vulnerable farmers.

India is one of the few countries with long experience in the implementation of a minimum wage. Much of the Indian literature is focused on implementation issues rather than on the impact on employment⁷¹. There seems to be a consensus that the minimum wage is one of the instruments required to alleviate poverty among farm workers (together with land reform, unionisation and other social security measures,

⁶⁷ Tiffin, R and PJ Dawson, 1996. 'Average Earnings, Minimum Wages and Granger-Causality in Agriculture in England and Wales'. Oxford Bulletin of Economics and Statistics, 58(3): 435-47

⁶⁸ Dickens, R, S Machin, A Manning, D Metcalf, J Wadsworth and S Woodland, 1995. 'The Effect of Minimum Wages on UK Agriculture'. *Journal of Agricultural Economics* 46(1): 1-19.

⁶⁹ Perloff, JM, 1986. Union and Demographic Wage, Hours and Earnings Differentials in the Agricultural Labor Market. University of California at Berkeley Department of Agricultural and Resource Economics (CUDARE) Working Paper: 387, January 1986

⁷⁰ Kebede E and JB Gan, 1999. 'The economic potential of vegetable production for limited resource farmers in south central Alabama.' Journal of Agribusiness, 17(1): 63-75

Recent examples include Parthasarathy, G, 1997. 'Minimum Wages within Agriculture: A Review of Indian Experience.' *Indian Journal of Labour Economics*, 40(4): 731-42; Srinivasan, MV, 1997. 'Minimum Wages in Agriculture: An Analysis of Secondary and Village Survey Data.' *Indian Journal of Labour Economics*, 40(4): 743-57 and Gill, SRS and VK Lohumi, 1997. 'Administration of Minimum Wages in Agriculture: An Appraisal.' *Indian Journal of Labour Economics*, 40(4): 759-69

etc.), largely because there is a close correlation between the caste system and agricultural labourers, with the majority of labourers belonging to Scheduled Castes⁷².

Another interesting perspective is provided by evidence from Morocco⁷³. Here a positive relationship is found between wheat production and the level of the agricultural minimum wage by applying a version of Stigler's monopsony model. The resulting econometric equation passes a large number of tests on Moroccan data over 1971-89. An increase in the minimum wage, where the productivity of the labourers depends on their consumption level and where wage incomes are shared among family members to fund consumption, entails a labour movement in favour of the dominant employer. The resulting positive impact on output is not rejected by econometric tests on the case of Morocco.

Finally, only one publication on the possible effect of a minimum wage in South African agriculture exists⁷⁴. The authors conducted a survey in 1995 among 135 commercial farmers in KwaZulu-Natal to analyse labour remuneration and farmers' perceptions about the impact of labour legislation. Farm labour remuneration normally includes cash wages and payments in kind (such as rations, housing, land use rights and clothing). The study suggests that, all things being equal, farmers who pay relatively lower cash wages tend to provide more rations per worker and allocate more land use rights. Most respondents agreed that there is some need for labour legislation in agriculture, but the majority perceived the present legislation to be timeconsuming and costly, and wanted the legislation to be less ambiguous, more flexible. and less extensive. Labour legislation has increased transaction and wage costs in farming and could lead to the substitution of own machinery, contract machinery or contract labour for own labour. Survey respondents indicated that, if minimum wages were imposed, cash wages would be paid and perquisites would be charged for. If the minimum wage were set above present wages, labour would be replaced with machinery and contractors. Respondents would prefer an industrial council to determine minimum wages (if they are imposed), accounting for enterprise and regional differences.

4. Conclusions

There are at least five broad implications from this theoretical argument about the effect of minimum wages for the agricultural sector. First, the minimum wage cannot be opposed purely on the grounds of its adverse effects on employment. Theoretically, there will be a negative effect in the case of a free market without monopsony powers. However, the magnitude of the employment effect depends on the degree to which the wage is set above the equilibrium wage rate. When the minimum wage is set below the average rate in the industry, a minimum wage could compress the wide range of wage rates found in a sector, increasing the wages of the lowest-paid workers without increasing unemployment. Second, the empirical evidence on the poverty alleviating

⁷² Thangaraj, M, 1995. 'Socio-economic conditions and problems of agricultural labourers.' Social Change, 25(4): 44-55

Azam, J-P, 1997. 'Efficiency Wage and the Family: An Explanation for the Impact of the Agricultural Minimum Wage in Morocco.' Kyklos; 50(3): 369-82.

Newman RA; Ortmann GF; Lyne MC, 1997. 'Farm labour remuneration, labour legislation and commercial farmers' perceptions in KwaZulu-Natal.' Agrekon, 36(1): 73-84

effects of a minimum wage is as ambiguous as the evidence on the employment effects. From a purely economic view, it is better to provide direct income transfers to the poor rather than to manipulate market prices (wages)⁷⁵. Thus, the aim of a minimum wage should be clearly set out. Poverty is the result of low incomes, and the relationship between incomes and wage rates is not necessarily direct⁷⁶. Third, the agricultural sector is diverse, and existing wage differentials can often be explained by differences in the number of hours worked rather than by different wage rates. Fourth, resource poor farmers are especially vulnerable to the cost of labour when they are engaged in labour intensive commodity production. Fifth, successful implementation may call for a decentralised system of wage determination (as in the UK). However, the experience in India, which also faces implementation capacity constraints, shows that simple implementation systems are preferable. This does not, however, negate the need for differential minimum wages in different regions or for different commodity production systems.

⁷⁵ Agricultural economists have generally argued in favour of income transfers to farmers rather than price supports as a mechanism of farm subsidies, yet politicians have, until recently, preferred the latter. Economists have turned to public choice theory to explain this paradox.

⁷⁶ Governments have likewise tried to manipulate the prices of agricultural commodities in order to achieve stability and to combat the relative poverty of farmers. The problem is that farmers need higher and more stable incomes, and there is no direct relationship between commodity prices and incomes.

Chapter nine

The South African agricultural economy

1. The policy environment

Deregulation and liberalisation have been a fact of life in the agricultural sector of South Africa since the 1980s. The story of this process in the period after the early 1980s has been well documented⁷⁷. The main policy shifts experienced during the period up to 1994 included:

- deregulation of the marketing of agricultural products in terms of the Marketing Act, 1968 and other legislation. A major part of this exercise was the liberalisation of price controls over agricultural products
- changes in the fiscal treatment of agriculture, including the abolition of many of the tax breaks that favoured the sector, and a reduction in direct budgetary expenditure on the sector
- a start to the processes of land reform, reform of labour legislation, and trade policy reform, which included the tariffication of farm commodities as a precursor to compliance with the country's obligations under the Marrakech Agreement.

This decade-long process can be characterised as deregulation and liberalisation within the existing public sector institutional structure. The main role players involved in the sector: the Department of Agriculture, the Control Boards charged with responsibility for marketing of farm products, etc. remained in place despite the general relaxation of State intervention in the sector. The Government of National Unity (GNU), elected in 1994, ushered in a new era of policy changes across the entire range of government functions. In agriculture, however, at least some direct policy changes had to wait until 1996, i.e. until after the withdrawal of the National Party from the GNU. The most important policy initiatives taken subsequent to this time include:

- institutional restructuring in the public sector. This included the 'provincialisation' of the Department of Agriculture, a change in the relationship between the Department and farmer lobby groups⁷⁸, the establishment of the Agricultural Research Council in 1993, the restructuring of important statutory bodies with a development mandate in the rural areas generally such as the Development Bank of Southern Africa and the Land Bank, and the changes in the Marketing Act discussed below
- the promulgation of the Marketing of Agricultural Products Act, No 47 of 1996. This new Act represented a radical departure from the marketing regime to which farmers had become accustomed in the period since the 1930s. While

⁷⁸ Until the 1990s the policy of the Department of Agriculture was to negotiate with one representative body of farmers, namely the South African Agricultural Union (SAAU, now known as Agriculture South Africa or Agri-SA).

⁷⁷ See Vink, N, JF Kirsten and L Hobson. 'Agricultural and agribusiness sector policy in South Africa: A Review of the literature.' A Report for USAID. University of Stellenbosch, January 2000 for appropriate references.

far reaching, the deregulation that had taken place since the 1980s was piecemeal, uncoordinated, and accomplished within the framework of the old Marketing Act, with the result that any policy changes could easily be reversed. The new Act changed the way in which agricultural marketing policy would henceforth be managed in South Africa

- trade policy reform. The new South African government embarked on a process of trade policy reform that aimed to reverse decades of 'inward industrialisation' strategies. The distinguishing characteristic of the reform policy was a willingness to expose businesses in the country to tariffs that were often below the bound rates negotiated in the Uruguay Round of the GATT. Whereas agricultural trade had been managed through quantitative controls, the Marrakech Agreement called for the tariffication of all agricultural goods, and a phased reduction in the tariffs. South Africa also participated in the renegotiation of the Southern African Customs Union treaty, agreed to the new SADC trade protocol, and negotiated a free trade agreement with the EU. In all these cases, the country agreed in principle to liberalise agricultural trade further. Finally, the country gained membership of the Cairns Group, thus signalling its intention to unilaterally liberalise its trade regardless of the progress made by the developed countries in withdrawing farm support programmes
- labour market reform. While labour legislation governing working conditions, wage rates, etc. has progressively become applicable to the agricultural sector over a period of more than a decade, certain aspects of the land reform programme have also impacted on the manner in which labour is managed in the agricultural sector. Here specific mention should be made of the introduction of legislation that governs the occupational rights of workers who live on farms. Further labour market reform is also expected, especially with the application of the Basic Conditions of Employment Act to agriculture

The purpose of these policy reforms was to correct the injustices of past policy, principally through land reform, to get the agricultural sector on a less capital-intensive growth path and to enhance the international competitiveness of the sector. The impact of these reforms is discussed in the next three Sections. The discussion starts with an elaboration of the main trends in input use in the agricultural sector.

2. The resource base

2.1. Land

South Africa's natural potential for agricultural production, and the extent to which this potential is being exploited, is illustrated in **Tables 16 to 18** below. From these data it is evident that South Africa has a relatively poor natural resource base for crop and horticultural production. **Table 16** shows that, in terms of physical size, South Africa is second only to Angola in the region. However, Angola, Mozambique, Tanzania and Zambia have more arable land than South Africa. Less than 20% of South Africa's total agricultural land is potentially arable compared to Angola (25%), Mozambique (52%), Tanzania (51%) and Zambia (34%). In addition, South Africa's potential for expansion in crop and horticultural production is limited. South Africa already uses some 80% of

its arable agricultural land, compared to Angola, Mozambique, Tanzania and Zambia, who all use less than 20% of their arable land at present.

South Africa's arable resources are also relatively poor. Table 17 shows that half of our arable resource is of medium potential, and 78% of medium to low potential. The prime arable land is geographically concentrated. Table 17 shows that 90% of the high potential arable land is found in two regions of the commercial farming areas, namely Mpumalanga and KwaZulu Natal. The medium potential land is more evenly distributed, with the Free State, Mpumalanga and North West Provinces jointly making up 62% of this category.

Table 16: Agricultural potential in the SADC states

Country	Land area (°000 ha)	0/64			Arable land used (2000 ha)	9%5	
Angola	124670	18,3	31500	18,7	3500	11,1	
Botswana	58537	8,6	5330	3,2	1330	25,0	
Lesotho	3035	0,5	861	0,5	361	42,0	
Malawi	9408	1,4	3273	1,9	2273	69,0	
Mozambique	78409	11,5	40409	24,0	3080	7,60	
Namibia	82329	12,1	-	-	662	-	
South Africa ²	122320	17,8	13337	7,9	10615	80,0	
Swaziland	1720	0,3	364	0,2	161	44,2	
Tanzania	88604	13,0	45030	26,7	5030	11,2	
Zambia	74071	10,8	24998	14,8	4998	20,0	
Zimbabwe ³	38667	5,7	3524	2,1	2524	71,6	
Total	681770	100	184346	100	37093	20,1	

Source: Adapted from Rwelamira and Kleynhans, 1997

Notes: 1 Excludes the former Zaire and the Seychelles, the newest members of SADC.

² South African data were taken from Abstract, 1997.

⁴Country total as a percentage of regional total

Table 17: Crop production potential in South Africa

Province ¹	High potential		Medium p	Medium potential:		Low potential	
	Hectares	%	Hectares	%	Hectares	%	Hectares
A: Western Cape	0	0	8 974 63	12,5	639 437	15,0	1 536 900
B: Northern Cape	0	0	0	0	331 109	7,8	331 109
C: Free State	0	0	2 133 106	29,6	1 219 906	28,7	2 255 906
D: Eastern Cape	283 521	8,8	387 958	5,4	376 297	8,8	1047 776
E: KwaZulu Natal	1 539 400	47,9	440 000	6,1	70 000	1,0	2 049 400
F: Mpumalanga	1 359 711	42,3	1 170 738	16,3	34 176	0,8	2 564 625
G: Northern Province	20 051	10,6	156 761	2,1	595 951	14,0	772 763
H: Gauteng	6 496	0,2	834 657	11,6	165 817	3,9	1006 970
J: North West	0	0	1 161 727	16,2	896 219	19,0	896 219
Total	3 208 909	22,0	7 182 410	49,0	4 238 912	29,0	14 630 231

Source: Soil and Irrigation Research Institute, 1986.

Notes: ¹ These are the 'development regions' of the 1980s and not the modern provinces of South Africa. However, the borders correspond broadly. Data include 'commercial farming areas' only. There are an additional 2 413 414 hectares of arable land in the former homelands, bringing the total to some 17m hectares.

³ Weiner *et al* report a lower land use pattern in the commercial (higher potential) areas. For Mashonaland they estimated that about 33% of the arable land was cropped in 1981-1.

⁵ Arable land used as a percentage of potentially arable land per country.

Finally, although there is a limited scope for horizontal expansion of crop and horticultural production in South Africa, some provinces use relatively fewer of their resources than others. At the one extreme, Table 18 shows that the Western Cape seems to have reached the limits of its horizontal expansion potential, while the Northern Province uses less than 50% of its available arable land. The growth potential for crops and horticultural products, however, depends on vertical as well as horizontal expansion. It is clear that there is considerable scope for vertical expansion in the commercial farming areas as well as the former homeland areas (Table 18). This is especially relevant for horticultural products, which are relatively less land using than either crop or livestock production. Nevertheless, one of the remaining anomalies in South African agriculture remains the fact that the country is a net importer of red meat, despite the relatively abundant grazing resources at our disposal.

Table 18: Land utilisation in South Africa, 1991

Province	Total farm land	Potentially arable land	%1	Arable land used	% ²	Arable land in the former homelands	% ³
Western Cape	11 466 956	1 600 537	14,0	1 776 858	111	<u>-</u>	111
Northern Cape	29 094 172	454 465	1,6	331 872	73	· •	73
Free State	11 674 811	4 221 423	36,2	3 281 486	78	34 900	78
Eastern Cape	14 518 725	1 172 901	8,1	555 282	47	529 400	86
KwaZulu Natal	7 168 844	1 199 675	16,7	726 575	61	360 700	87
Mpumalanga	5 595 618	1 734 896	31,0	1 215 635	70	137 898	76
Northern Province	9 016 621	1 700 442	18,9	557 804	33	530 700	48
Gauteng	774 265	438 623	56,7	293 571	67		67
North West	9 628 749	3 360 459	34,9	1 876 903	56	951 975	78
Total	98 938 761	15 883 421	16,1	10 615 986	67	2 545 573	80

Notes: 1 Ratio of arable to total farming land per province

2.2. Water⁷⁹

South Africa's water resources are scarce and limited. The international benchmark for chronic water scarcity is 1 000 cubic meters per capita per year of renewable freshwater resources. South Africa, with an annual per capita availability of 1 200 m³ per annum, is already close to this threshold. The following factors relating to South Africa's water situation are self-explanatory:

- low average annual rainfall: 497 mm compared to a world average of 860 mm.
- unevenly distributed rainfall: 65% of the country receives less than 500 mm of rain annually and 21 percent receives less than 200 mm
- rainfall variability: long-term cycles of 18 to 20 years have been demonstrated for the summer rainfall region
- average annual potential evaporation (between 1 100 mm and more than 3 000 mm) in excess of the annual rainfall
- very low conversion of rainfall to runoff (water that reaches our rivers).

² Ratio of arable land used to potentially arable land in the province

³ Ratio of arable land used to potentially arable land in the commercial farming areas of the province

⁷⁹ This section is based on Lombard, J, 1998. 'The physical-biological environment.' <u>In Spies</u>, PH (Ed.) Agrifutura 1997/8. University of Stellenbosch, Agrifutura Project

- as a consequence of the topography and rainfall distribution, the natural availability of water across the country is very unevenly distributed, with more than 60 percent of the river flow coming from only 20 percent of the land area. South Africa is also poorly endowed with groundwater as it is mainly underlain by hard rock formations that, although rich in minerals, do not contain any major groundwater aquifers
- of the total average annual surface runoff of 50 150 million m³, about 20 045 million m³ (40 %) is already being used. It is estimated that an additional 13 245 million m³ per annum (26 %) could be available for use, mainly through the provision of further storage. The remaining 33 % represents water lost to evaporation as well as spillage of flood waters (in excess of what can be controlled by dams). Because of the highly variable nature of river flow and the infrequent occurrence of large floods, greater regulation to limit spillage is not economically viable, since much of the flood waters which may be stored will be lost to evaporation.

Most of the main metropolitan and industrial growth centres in South Africa developed around mineral deposits and harbour sites, and are thus remote from major river courses. Some of the irrigation developments are also located in sub-optimal regions, having been established when water was still relatively abundant. Most of the water drainage is in the eastern and south-eastern parts of the country, while the greatest need for water is in the central region and adjoining areas. In some parts the use of water already significantly exceeds the resource potential. Supply and needs have thus had to be balanced by intensive interbasin transfers of water. Total storage capacity of about 27 000 million m³ has been created by the construction of large dams, holding more than half of the mean annual runoff for the country.

Table 19: Sectoral water utilisation for various regions in South Africa, 1996

Region	Urban, domestic	Mining. industrial	Irrigation, forestry	Environment	Total	
(million m ³ per annum)						
North	704	433	1 861	375	3 373	
Eastern Inland	150	44	1 826	300	2 320	
Eastern Coastal	508	589	2 217	2 290	5 604	
Southern Coastal	137	41	1 350	240	1 768	
South Western	351	105	1 570	370	2 396	
Karoo	65	10	2 173	307	2 555	
Central	256	376	1 347	50	2 029	
South Africa	2 171	1 598	12 344	3 932	20 045	
Proportion (%)	10,83	7,97	61,58	19,62	100,00	

A sectoral breakdown of the total use of water is given in Table 19. Irrigation remains the dominant user/consumer of water. Much of the irrigation occurs in the drier parts of the country, such as the Orange basin, the Crocodile (Limpopo) basin, the lower Vaal basin, the Sundays/Fish basins and the Western Cape area. Afforestation, which uses large quantities of water before it reaches the streams or rivers (approximately 8 % of the total), is more dominant in the wetter, eastern parts of the country. The domestic and general urban use of water constitutes about 11 % of the total usage,

which is larger in magnitude than the approximately 8 % currently used by mining and certain large industries outside municipal areas.

The relative importance of the various sectors is, however, expected to change. While irrigation and afforestation will remain the dominant user/consumer of freshwater, the urban and domestic sector will increase its share.

It is not only the quantity but also the quality of water that is a matter of concern in South Africa, largely due to salination and to a lesser extent to eutrophication and pollution by trace elements and micropollutants.

Effective management of water on all levels of decision-making is necessary to ensure sustainable development. The water law reform process was set in motion in 1995 and culminated in the promulgation of a new Water Act, No 36 of 1998. Some of the changes in the decision-making environment of agriculture stemming from the new proposals are as follows:

- higher priority for water used/consumed by humans and the environment.
 Depending on population growth, migration and technology, the absolute amount of water available for irrigation and industrial use/consumption will be limited in future sooner rather than later for certain regions within South Africa
- the termination of the riparian principle of water rights and the proposed time-bound authorisation of water use will probably affect agricultural land values and possibly the pattern of crop production and land use in certain areas of South Africa. Depending on the length of the time-bound authorisation (permit), the effect will be seen in decision making on perennial crops, where a large capital investment is needed for an economic life span of between 20 to 30 years
- water quantity and quality are to a greater or lesser degree affected by land use practices (agricultural and non-agricultural). The need for an integrated approach to water and land management is thus obvious. The implementation of an integrated catchment management system will hopefully lead to greater efficiency and equitable water use/consumption
- irrigation is generally considered to be an inefficient user of water, and less than 50% of all irrigation water reaches the crop it is designed to water. Subsidisation of water is an international phenomenon, yet there are clear indications that the price of water in South Africa will be adjusted upwards to better reflect the cost of supply. This could have significant impacts on the economics of irrigation and the use of modern technology.
- greater international co-operation between Southern African countries could imply different sectoral water consumption/use patterns in future. A change in the allocation of water for irrigation in Southern Africa, based on the irrigation potential of land and the water use efficiency of crops, could even imply less water for irrigation in South Africa in the long run.

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3 Capital and intermediate goods

In the following discussion the major trends in the value of capital and intermediate goods used in South African agriculture are described. In this discussion two major input items (tractors in the case of capital goods and fertiliser in the case of intermediate goods) are analysed in greater detail for illustrative purposes.

3.1. Capital formation

Figure 35 below shows the trend in the total value of capital assets on commercial farms in South Africa. The graph shows that the value of these assets has declined consistently in real terms since 1960, i.e. that these values have increased at a lower rate than the rate of inflation.

This trend in capital use in South African agriculture can be illustrated with respect to the relationship between tractor use, tractor prices and the value of the capital stock in tractors in the country. Figure 36 shows the growth rates in tractor prices for the period 1965 - 1999. It is evident that, while the rate of price increases declined after the period 1985 - 1989, there has been little relief for farmers. However, Figure 37 shows how farmers reacted to the changes to farm profitability brought by deregulation and these price increases. The volume of sales of tractors reached a staggering 25 000 per year in 1981, which was roughly double the average annual sales between 1963 and 1981. Since then, sales have declined consistently, and have been less than 6000 per year since 1990^{80} .

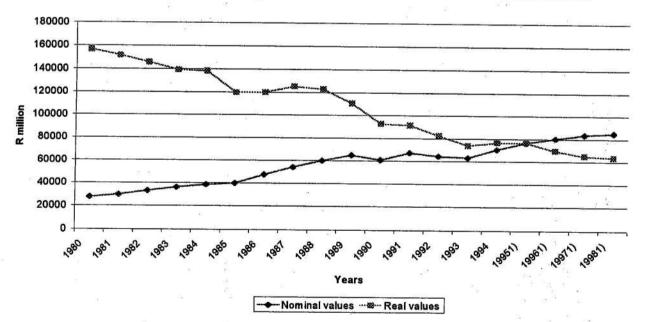


Figure 35: Total value of capital assets on commercial farms in South Africa

⁸⁰ However, this does not seem to have resulted in a restructuring of the industry. In 1998 there were 27 different tractor suppliers in the market, providing a total of at least 319 different tractor models.

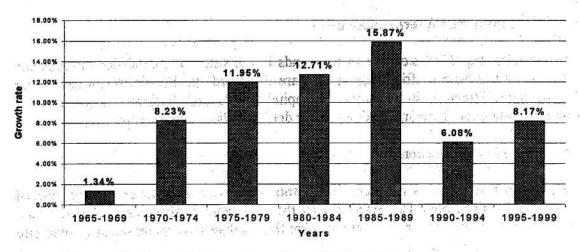
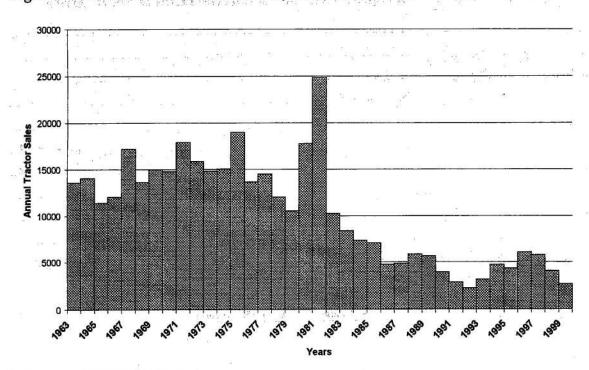


Figure 36: Growth in tractor prices, 1965 - 1999

Thus, farmers adapted by buying fewer new tractors. This was made possible by new technology (inter alia larger tractors⁸¹), by increasing the average age of the tractor fleet and by improved productivity of the existing fleet. It is also evident that, by keeping tractors for longer, the cost of maintenance would increase. Figure 38 shows that the absolute number of tractors in use in agriculture declined by roughly half, from around 200 000 units in 1983 to some 90 000 units in 1999. Figure 39 shows a similar trend in the number of harvesters and threshers in use in the sector. These numbers peaked at almost 40 000 in the early 1980s⁸², while there are only some 12 000 in use at present.

Figure 37: Tractor sales in South Africa, 1963 - 1999



⁸¹ Data from the South African Agricultural Machinery Association (SAAMA) show that the average size of tractors sold in South Africa remained relatively constant until 1992, mainly as a result of the protection afforded to Atlantis Diesel Engines under the import substitution programme. Atlantis Diesel sold mainly four cylinder engines. After this protection was lifted in 1993 the average size of tractors increased from 58,5kW to 70kW in 1997.

⁸² This peak coincides with the bumper maize crop of 1981, and was not harmed by the tax regime that allowed farmers to write off capital purchases in the year of acquisition.

The impact of this reduction in the size of the tractor fleet on the structure and performance of the agricultural machinery sector bears noting, as it is illustrative of the backward linkages between agriculture and the input supply sectors. Data from the IDC show that the agricultural machinery subsector has strong ties with the rest of the world, with an import penetration of around 70% of the market, but also an export propensity of above 40%. Imports are mainly from the USA, Germany and France, and exports to Zimbabwe, Zambia, the USA, Brazil and Australia. Thus, while the industry has suffered from the decline in South African sales (domestic demand is expected to continue to decrease and imports to increase by more than 4% per year) it has succeeded in penetrating export markets, and exports are expected to increase at above 6% per year through 2001. The current tariff on imports is 0.6% as opposed to the bound rates under the GATT of 7.6%.

Figure 38: The size of the tractor fleet in South Africa

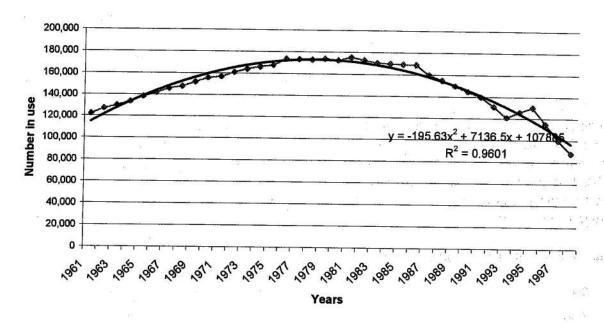


Figure 39: The number of harvesters and threshers in use, 1961 - 1998

One of the major reasons for the decline in the real value of all capital assets was the decline in the real value of land and fixed improvements. On the other hand, the gross value of machinery, implements, motor vehicles and tractors increased, at least since 1995, while the real value of livestock has also decreased after increasing in the early 1990s. The net result of these changes seems to be that total annual gross capital formation in agriculture, while still subject to considerable fluctuation, is at a lower average level now than in the period 1973 – 1983 (see Figure 40).



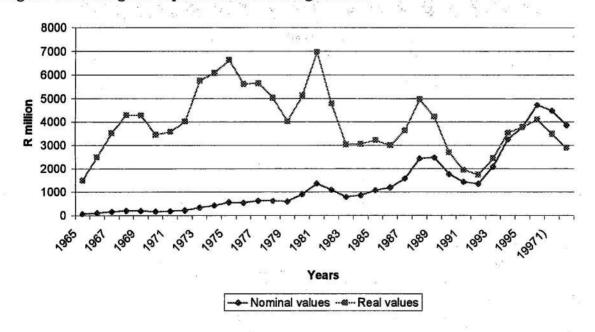
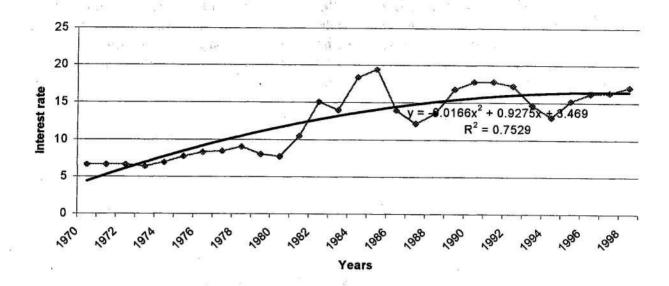


Figure 40 shows a part of the reason for this lower level of capital formation, namely the trends in interest rates since the early 1970s. Negative real interest rates were maintained through much of the 1970s, and again during the second half of the 1980s

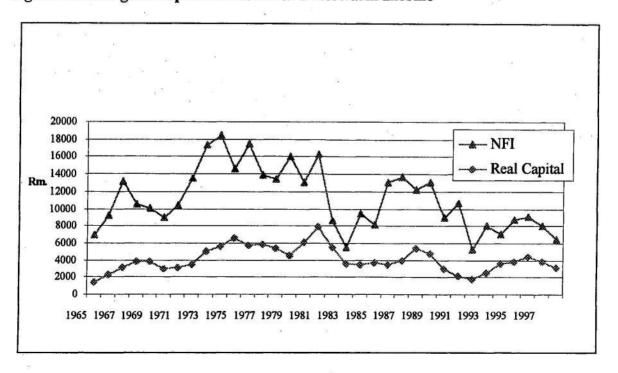
(1987 - 1989). Figure 40 shows that the rate of capital formation increased considerably during these periods.

Figure 41: Annual weighted interest rate index: Land Bank



Finally, the relationship between the rate of growth in real gross capital formation and the rate of growth in Net Farm Income (NFI) as an indicator of profitability in the sector is shown in Figure 42 below. The relationship between these two trends is evident: changes in NFI growth track changes in gross capital formation, while both of these variables are at a lower level now than in the preceding decades. This confirms the point made above, namely that the profit rate and the general level of interest rates are more important determinants of the rate of capital formation than the prices of the capital items.

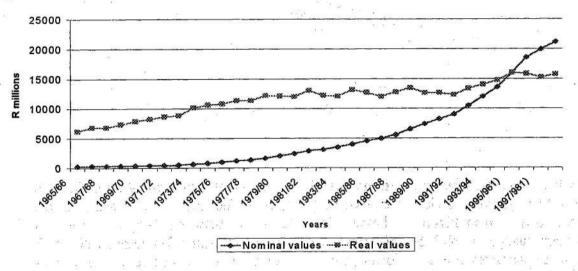
Figure 42: Real gross capital formation and Net Farm Income



3.2. The use of intermediate goods

While the real value of capital assets in commercial agriculture in South Africa has declined in recent years, the value of intermediate goods used has increased in real as well as nominal terms. The combined value of intermediate goods used is reflected in Figure 43. From this graph it is evident that the combined real value of intermediate goods has remained in the range of R10billion to R16billion for the past two decades, and that purchases of intermediate goods have been increasing since the beginning of the 1990s. However, this combined value hides considerable fluctuations in the rate of use of different types of intermediate goods.





Trends in the use of intermediate goods can be illustrated with reference to the fertiliser subsector. Figure 44 shows the changes in the prices of fertiliser used on South African farms for the past three decades, while Figure 45 shows the growth rates in these prices. The latter shows how the rate of price inflation decreased with the general decline in the inflation rate since around 1990. Fertiliser prices rose at a relatively lower rate than the prices for other intermediate goods in this period. The net result is shown in Figures 46 and 47. Commercial farmers reacted to these changes by using less fertiliser. Figure 46 shows that the value of fertiliser use declined from almost R3bn per year in the early 1980s to some R1,5billion annually in the late 1990s. This trend is confirmed in Figure 47, which shows that the unit sales of fertiliser have decreased from a level of above 1m tons per annum in the early 1980s to below 800 000 tons per annum since 1993.

Figure 44: Nominal price of fertiliser

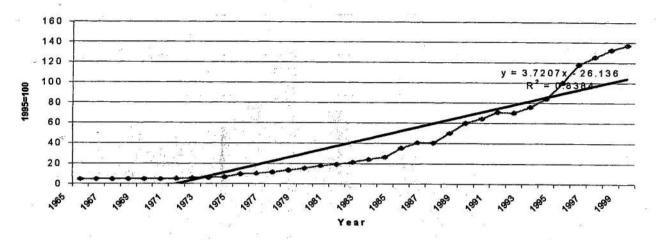


Figure 45: Rate of growth in fertiliser prices

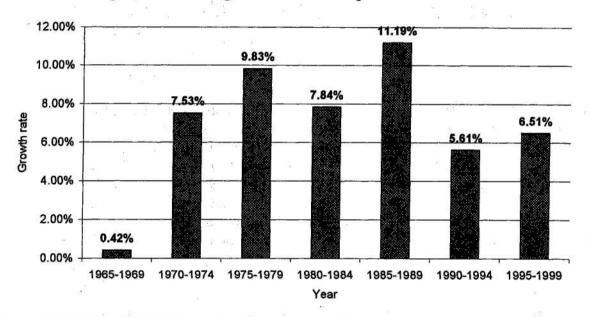
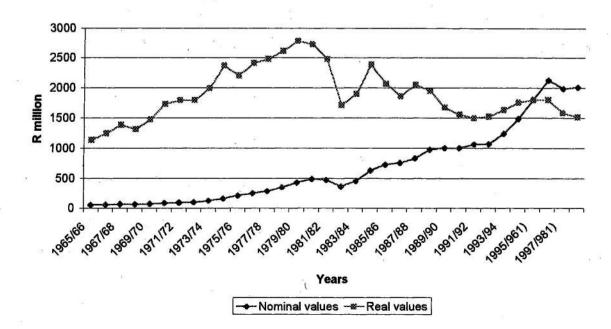


Figure 46: Value of fertiliser used



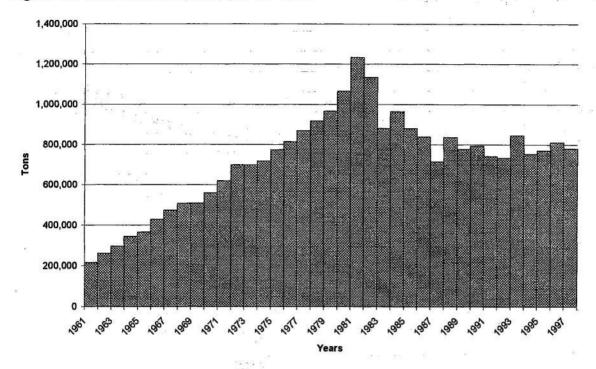


Figure 47: Unit sales of fertiliser, 1961 - 1997

The decline in fertiliser sales to the domestic agricultural sector has also forced fertiliser producers to look for export markets. The fertiliser and pesticides subsector reacted to the decline in domestic sales with a strong export drive in the first part of the 1990s, when exports increased by 26% per year, with exports making up a third of total industry sales⁸³. The main export destinations were neighbouring countries, Australia, Asia and South America. The industry also imports about a fifth of requirements, with imports and exports used to cover peak demand for products in domestic and foreign markets. The weighted average import tariff for fertilisers and pesticides is currently 0,9% compared with the bound rate to the GATT of 11,4%.

Finally, Figure 48 shows the relationship between the changes in real expenditure on intermediate goods over time, and farm profitability as measured by Net Farm Income. Here it is evident that farmers have continued to purchase production goods from the market despite a general decline in NFI. Nevertheless, the graph shows that purchases of intermediate goods and NFI tend to move in the same direction: increased profitability tends to be associated with greater purchases of intermediate goods.

⁸³ Data from the IDC.

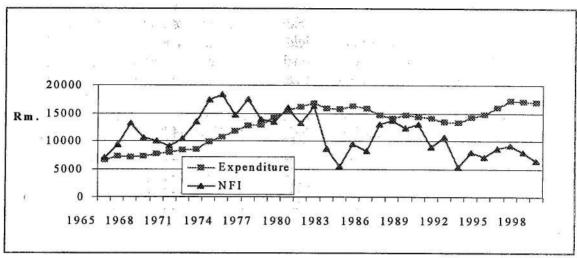


Figure 48: Real NFI and real expenditure on intermediate goods and services, 1965-1998

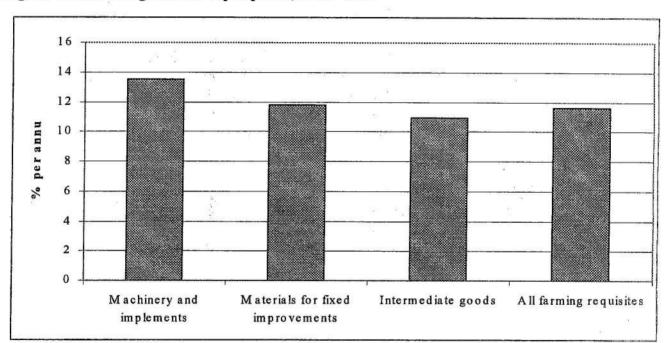


Figure 49: Relative growth in input prices, 1980 - 1999

The detailed description of input use in commercial agriculture in South Africa shows that the total capital stock has declined in value, largely as a result of the decline in the real value of land and fixed improvements, and that the real value of intermediate goods used in the sector has increased, over the past two decades. The relative rates of growth over the past two decades are shown in **Figure 49**.

4 Output

Table 20 shows the rates of growth for the three main categories of agricultural production, namely field crops (principally maize, wheat, sorghum and oilseeds, and mostly produced on dry land); horticulture (fruit and vegetables, mostly produced

under irrigation); and livestock products. Total agricultural output has grown by an average of close to 2,5% per year since 1947. However, the rate of growth has slowed since 1980, largely because of the decline in field crop production since that time, and a more recent decline in growth rates for animal production. By contrast, growth in horticultural output has accelerated to almost five percent per year during the 1990s.

Table 20: Annual real growth in the gross value of production

	Field Crops	Horticulture	Animal production	Total
1947-1996	2,37	3,60	1,78	2,40
1947-1980	4,06	3,22	·	3,01
1980-1996	-1,02	4,37	1,78	1,15
1990-1996	-0,51	4,77	0,55	0,98

4.1. Field crop production

Table 21 shows that the yields for the major field crops have increased considerably since the middle of the Twentieth Century, and that this increasing trend continued in the period after liberalisation began. The trend was maintained despite the decline in the use of tractors and fertiliser and the increase in the value of intermediate inputs used, as shown in the previous section. Thus, crop farmers have adapted to higher prices by changing their production methods. However, these higher physical yields could have resulted from so-called 'cropping pattern effects' rather than higher productivity. The evidence on the area planted to the main field crops, shown in Figure 50, tends to support this conclusion. The decline in the area planted to maize and wheat could have been the result of a reallocation of production out of more marginal areas, thus causing an increase in industry average yields.

Table 21: Average crop yields, 1950-1999

	1950-1959	1960-1969	1970-1979	1980-1989	1990-1998
Maize	1,02		1,92	1,88	2,14
Wheat	0,60		0,93	1,24	1,68
Sorghum	1,02	0,84	1,72	1,68	2,08

The net result of these changes has been both improved productivity and lower gross value of production. To confirm this point, Figure 51 shows the long-term trend in the physical volume of production of maize and wheat, the two major field crops in South Africa. It is evident that there has been no discernible change in the output trend over the past three to four decades. Thus, the decline in the gross value of production has been as a result of changing prices rather than a change in the volume of output.

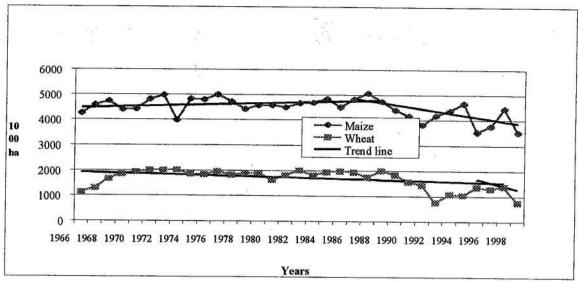


Figure 50: Area planted to maize and wheat, 1966 - 1998

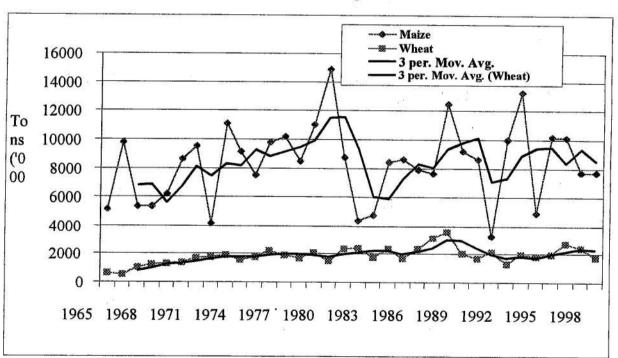


Figure 51: The physical volume of maize and wheat production in South Africa

4.2. Export growth

The data in **Table 22** show the main trends in farm exports from South Africa. Agricultural exports have kept pace with the generally strong trend in export growth from the country. However, the 'commodity balance' has weakened, with agricultural imports growing faster than the exports of unprocessed agricultural products. Thus, the increase in exports has largely come from processed farm products, which now make up almost 60% of total agricultural exports, up from 51% 20 years ago. Agricultural imports have also increased from 2,6% of the total import portfolio of the country to 6,4%.

Table 22: Trends in South Africa's agricultural exports, 1994 - 1998

	1980	1990	1998
Exports Total South African exports	19-915,4	60 770,0	156 184,2
Total agricultural exports	2 052,5	5 289,8	13 394,1
Unprocessed farm exports (Rmillion)	1 008,9	2,378,7	5 741,6
Processed farm exports (Rmillion)	1 043,6	2 911,1	7 652,5
Processed exports/total agricultural exports	51	55	57
Agricultural exports as % of total exports	10,3	8,7	8,6
Imports Total SA imports (Rmillion Agricultural imports (Rmillion)	14.381,3 369,2	44 141,5 2 203,3	146 805,1 9 345,2
Agricultural imports/total imports (%)	2,6	5,0	64

Field crops are not conventionally grown in South Africa for the export market. One of the legacies of the Control Board era was the use of the export market as a way of clearing the domestic market in an attempt to maintain higher price levels. This is confirmed by the data in **Table 23**, which shows the variability in exports of field crops such as maize and sugar. **Table 23** also shows the rapid growth in fruit exports, across the full range of deciduous, citrus, and canned fruit. While exports of subtropical fruit have historically been much smaller, the table also shows the strong recent growth in the exports of avocados.

Table 23: Major South African agricultural export categories (Rm), 1994 - 1998

	1994	1995	1996	1997	1998
Total horticultural exports	2 623,0	3 121,4	3 027,7	3 843,1	4 757,5
Horticulture as % of agriculture	32,8	38,9	26,0	31,4	35,5
Fresh deciduous, table grapes Preserved fruit and jam Citrus fruit Avocados	1 035,2	1 412,6	1 141,3	1 646,7	2 028,1
	768,0	918,1	1 104,4	1 190,7	1 236,3
	763,8	722,2	696,6	910,7	1 385,0
	56,0	76,9	57,3	90,6	184,5
Wool	321,7	325,3	366,6	369,1	387,3
Hides and skins	272,4	350,1	477,7	468,0	455,5
Maize	1 696,7	642,2	1 715,7	1 226,6	980,1
Cane sugar	434,0	545,7	1 320,1	1 187,7	1 738,1
Wine	246,7	332,9	797,6	799,6	992,2

5 The profitability of agriculture

When the prices of farm inputs change the profitability of the agricultural sector also changes. In the longer term farmers adapt to such changes by either decreasing their level of input use, by increasing output from a constant level of input use or by some combination of these. In each case, productivity has been increased. In this section, historical trends in factor productivity are analysed first. This is followed by an analysis of the flexibility in input substitution in the sector, and finally by an analysis of the existence of scale economies. In all three cases the long-term trends are elucidated to show the interaction between policy and competitiveness in the sector.

5.1. Growth in Total Factor Productivity⁸⁴

Any dynamic analysis of the effects of an increase in input prices has to account for the fact that farmers will react to profit pressures in a number of different ways. **Table 24** shows that real gross annual capital formation, which was fairly stagnant in the period from 1980, has increased at a higher rate since 1990. Thus, farmers have reacted positively to political changes, greater access to international markets and to positive real interest rates since the beginning of the decade (the table also shows that this has been accompanied by a decline in employment in the sector).

Table 24: Growth in employment and capital formation 1947-1996

	Total No of farm employees	Real Gross Capital Formation
1947-1996	0.160471	2.005
1947-1980	1.155652	2.654999
1980-1996	-1.86128	0.677346
1990-1996	-4.22271	7.785498

The physical yields that were reported in **Table 21** are merely a partial measure of productivity. The Total Factor Productivity (TFP) ratio provides a more comprehensive measure of productivity growth in agriculture. The trend in TFP growth for commercial agriculture in South Africa is shown in **Table 25** and **Figure 52**.

Table 25: Trends in TFP, 1947 - 1996

	Terms of Trade ¹	TEP	Net Farm Income
1960-1980	-0,18	2,05	4.03
1980-1990	-2,58	0,96	-3.73
1980-1996	-1,80	1,19	-2.23
1990-1996	-0,91	1,56	0.32
1960-1996	-1,01	1.66	1,20

A number of important conclusions can be drawn from the data presented in **Table** 25:

- the domestic terms of trade for intermediate and capital goods for commercial farmers were negative throughout the period 1960-1996, thus the input prices they paid were rising faster than the output prices they received throughout the period
- the rate at which the domestic terms of trade turned against commercial farmers worsened during the first phase of deregulation (roughly from 1980), and improved subsequently, but still at a far higher rate than during the period 1960 - 1980
- the terms of trade measure only the rate of changes in the prices of intermediate
 and capital goods relative to the rate of change in output prices. Total Factor
 Productivity measures the relative rate of growth in the value of all inputs
 (including land and labour) and outputs (i.e. it accounts for the volume of
 inputs and outputs as well as the prices). The data show that TFP growth
 slowed during the first phase of deregulation, then increased again thereafter

An index that measures the total value of agricultural outputs divided by the total value of agricultural inputs.

during the period 1980 - 1990, when inflation rates in South Africa had reached their peak and TFP growth was at its weakest, Net Farm Income growth was negative (i.e. commercial farmers' profit margins grew thinner every year) (see also Figure 53). However, by 1990 TFP growth had recovered sufficiently to cause a positive annual growth in Net Farm Income in the period up to 1996.

Figure 52: TFP growth, 1947 - 1996

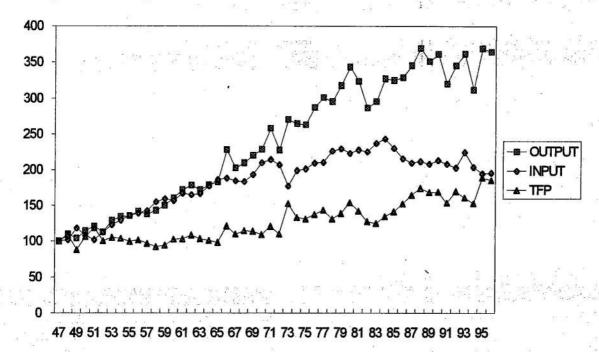
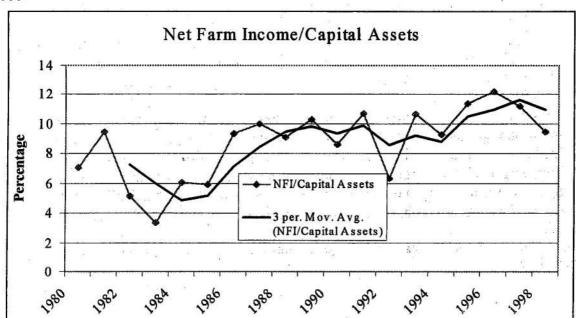


Figure 52 supports these data. In this graph, the input index includes land and labour, thus input use shows a steady decline from the 1980s, while output has increased from a low point in the drought years of the early 1980s. The result is a relatively high rate of TFP growth since the beginning of the era of deregulation.

Figure 53:Ratio of real Net Farm Income to the real value of capital assets, 1980 -1999



While Net Farm Income has declined over the past year, Figure 53 shows that the trend in the ratio of real Net Farm Income to the real value of capital assets has been increasing since the mid-1980s,

5.2. Elasticity of input substitution

The TFP results reported above measure the extent to which farmers have reacted to the cost-price squeeze. It is clear that one of the principle solutions was to change not only the volume of inputs used, but also the particular input mix. Thus, their ability to adopt new modes of production depends on their ability to substitute inputs in reaction to relative price changes. Some years ago research showed that farmers' ability to substitute inputs was severely constrained by state intervention in the sector, but that this had improved as a result of the first stages of deregulation during the 1980s⁸⁵. The tables below show these trends, updated to the present⁸⁶.

Table 26: Elasticities of substitution between input pairs

	Capital :	Labour	Intermediate goods	Land
1970 – 1973				2.,,,,,,
Capital	-1,0933	1,2628	0,2654	0,1776
Labour		-2,0651	-0,7927	-1,6747
Intermediate goods			-0,5080	0,5512
Land	7 7 7			7,4453
1994 - 1998	2			7,4433
Capital	-1,7567	1,3670	0,2697	0,3900
Labour	186 - 1	-2,4619	-0,0292	-1,1572
Intermediate goods			-0,4943	0,5149
Land				0,9274

The data in **Table 26** shows the elasticity of substitution between input pairs in South African agriculture between 1970 - 1973 and 1994 - 1998. When the sign of the elasticity is positive, the two inputs are substitutes. Thus, for example, the Table shows that if the price of labour increases, the use capital will increase and *vice versa*. When the sign of the elasticity is negative, the two inputs are complements. Thus, the Table shows that if the price of labour increases, the use of both intermediate goods and of land will decrease. The following comparisons can be made between the two periods 1970 - 1973 and 1994 - 1998:

• the ability of farmers to react to changes in the price of an input by using less of that input has generally improved, as shown by the own price elasticities. For example, as the price of capital (i.e. the interest rate) increases, so less capital is used. The data show that the elasticity of substitution for capital declined from -1.0933 to -1.7567, and for labour from -2.0651 to -2,4619

⁸⁵ Both articles from *Development Southern Africa* (Van Zyl and Groenewald, Vol. 5 No 1; and Sartorius von Bach and van Zyl, Vol 8 No 3).

The calculations were provided by D Poonyth, University of Pretoria. All averages have been subjected to various statistical tests such as the Wald test and the Log Likelihood Test. All parameters reported are statistically significant.

between the periods 1970 – 1973 and 1994 – 1998. Land provides an interesting exception, where price increases lead to increased sales, possibly in the expectation of further increases. The extent of this reaction has, however, tempered considerably since the early 1970s, as can be seen from the decline in the elasticity from 7.4453 to 0.9274

- the elasticity of substitution between capital and labour has increased from 1,2628 to 1,3670, thus farmers' ability to substitute capital for labour has improved, albeit marginally
- the degree of complementarity between labour and intermediate goods has dropped from -0,8 to -0,03. The conclusion is that, where labour and intermediate goods used to be complementary, there is now very little connection between them. Thus, farmers' flexibility has improved
- there has been almost no change in the substitutability between capital and intermediate goods, and between land and intermediate goods.

Thus, there is some evidence of improved flexibility in input substitution in South African agriculture. This result is confirmed by the data in **Table 27**, which show the shadow elasticities of substitution between input pairs, i.e. the percentage adjustment in input ratios to changes in factor price ratios. The following observations can be made:

- the extent of the adjustment between capital and labour has increased, albeit only slightly, from 0,6592 to 0,6608 (the change from 1982 1985 to 1994 1998 was larger, namely from 0,5228 to 0,6608)
- the substitutability between capital and land has increased considerably, from 0,1027 (i.e. they were relatively weak substitutes) to 0,6148 (i.e. they have become relatively strong complements)
- the complementarity between capital and intermediate goods has improved from 0,3865 to 0,4249
- land and intermediate goods have also switched from being weak substitutes (-0,0596) to being relatively strong complements (0,3718).

Table 27: Shadow elasticities of substitution

	Capital	Labour	Land	Intermediate goods
1970 – 1973				
Capital	. 0	0,6592	-0,1027	0,3865
Labour		0	0,3644	0,3530
Land	:		0	-0,0596
Intermediate goods			**	0
1994 - 1998			* -	
Capital	0	0,6608	0,6148	0,4249
Labour		0.	0,3762	0,2809
Land	1 1 1 1 1 2	120.00	0 '**' '	0,3718
Intermediate goods			, , , , , , , , , , , , , , , , , , , ,	0

While these results point to increased flexibility in input substitution, they have to be interpreted with care, as there is an evident factor bias toward capital intensity in South African agriculture. The extent of this bias, and the way in which it has changed over time, is discussed in the next section.

5.3. Economies of scale

There has been much debate on the extent of scale economies in South African agriculture. To estimate the extent to which they exist, it is necessary to measure per commodity for relatively homogeneous production systems, and to adjust for resource quality. The data reported in **Table 28** cover the entire agricultural sector and have, obviously, not been adjusted for land quality. The only valid conclusion that can be drawn from this table is, therefore, the trend in scale economies over time. In this respect, the data show relatively unambiguously that scale economies in South African agriculture have declined continuously since 1970.

This result is confirmed by the data in **Table 29**, which shows the bias in input shares in the agricultural sector in South Africa. From these data it is evident that the bias has been capital using and labour, land and intermediate good saving. At average factor shares for the entire period, the bias of technological change has been capital using at + 0,193 annually, and labour, land and intermediate good saving at -0,0139 %, -0,0227 %, and -0,1598 % respectively.

The bias toward capital using has decreased at times, but never on a sustained basis. For example, the extent of the bias decreased after the early 1980s when simultaneous financial market deregulation and the withdrawal of overt interest rate subsidies from agriculture resulted in positive real rates of interest. However, the advent of negative real rates of interest in the economy at large during 1987 – 1989 resulted, as expected, in an increase in the bias toward capital intensity.

Table 28: Scale economies in South African agriculture

Year	Scale economies	Year	Scale economies
1970	0,9417	1985	0,8280
1971	0,9347	1986	0,8432
1972	0,9335	1987	0,8387
1973	0,9245	1988	0,8246
1974	0,9138	1989	0,8110
1975	0,9044	1990	0,8048
1976	0,8971	1991	0,8056
1977	0,8913	1992	0,8051
1978	0,8879	1993	0,8094
1979	0,8888	1994	0,8116
1980	0,8843	1995	0,7998
1981	0,8636	1996	0,7935
1982	0,8442	1997	0,7903
1983	0,8451	1998	0.7848
1984	0.8301		***************************************

A similar increase in the bias is found in the early 1990s, when interest rate subsidies were targeted to agriculture as part of the drought assistance schemes that were introduced during that time. The factor bias toward capital using increased from 0,1797 in 1992 to 0,2174 in 1994, after which it again started a slow decline.

The bias toward labour saving (i.e. towards decreased employment in agriculture) is also unambiguous throughout the period, but has changed in magnitude over time. Here the data predictably show almost the same inflexion points as the capital-using bias. For example, the bias decreased in the early 1980s (from -0,0169 in 1983 to -0,0134 in 1989) as the effects of the first phase of deregulation of the sector were felt. However, the bias toward labour shedding increased again after the reintroduction of negative real interest rates to farmers in the form of drought relief subsidies.

Finally, the data also reveal the change in factor shares in favour of the use of intermediate goods that was brought about by the increase in exports, especially from the horticultural sector, after 1990. The bias toward the saving of intermediate goods decreased from -0.1762 in 1991 to -0.1318 in 1998.

The analysis in this section shows that the agricultural sector has become more efficient and more flexible as a result of the processes of deregulation that have taken place. Not only has the productivity of the sector increased, but so has the ability of farmers to adjust production processes to changing relative prices. However, the results also show that there are remaining inefficiencies in the system. The most important of these seems to be a persistent bias toward the use of capital that is unwarranted in terms of the factor proportions available to farmers. Nevertheless, it is also important from a policy perspective to establish the extent to which the input (and output) prices to which farmers are reacting are still distorted by market imperfections or by government intervention.

6 Policy distortions in South African agriculture

Farmers make decisions on what to produce and on what inputs to use in production on the basis of the relative prices of different product combinations, of different input combinations and of different input-output combinations. If, for example, farmers are following production practices that result in a level of capital intensity that is not warranted by the availability of labour relative to (scarce) capital, it is because the price of capital and/or of labour has been distorted by perceptions on government policy or by some inherent imperfection in the market. Thus, policy makers need to be aware of the extent of these distortions.

Table 29: The bias in technological change in South African agriculture

	Capital	Labour	Land	Intermediate goods
ear	<u></u>			
1970	0,1667	-0,0110	-0,0363	-0,1897
1971	0,1550	-0,0121	-0,0354	-0,1931
1972 .	0,1628	-0,0117	-0,0309	-0,1924
1973	0,2201	-0,0103	-0,0297	-0,1595
1974	0,1931	-0,0110	-0,0324	-0,1663
1975	0,1935	-0,0118	-0,0344	-0,1570
1976	0,1955	-0,0118	-0,0342	-0,1553
1977	0,1965	-0,0119	-0,0334	-0,1548
1978	0,1959	-0,0156	-0,0167	-0,1657
1979	0,2014	-0,0161	-0,0199	-0,1496
1980	0,1923	-0,0167	-0,0208	-0,1503
1981	0,1891	-0,0166	-0,0215	-0,1513
1982	0,1719	-0,0169	-0,0197	-0,1694
1983	0,1611	-0,0169	-0,0195	-0,1826
1984	0,1856	-0,0149	-0,0191	-0,1690
1985	0,2045	-0,0145	-0,0184	-0,1594

1970 - 1998	0,1930	-0,0139	-0,0227	-0,1598
1998	0,2060	-0,0170	-0,0268	-0,1318
1997	0,2086	-0,0161	-0,0261	-0,1344
1996	0,2117	-0,0153	-0,0255	-0,1372
1995	0,2132	-0,0144	-0,0241	-0,1422
1994	0,2174	-0,0137	-0,0229	-0,1454
1993	0,2115	-0,0138	-0,0227	-0,1483
1992	0,1797	-0,0139	-0,0206	-0,1756
1991	0,1811	-0,0139	-0,0200	-0,1762
1990	0,1863	-0,0138	-0,0197	-0,1737
1989	0,1987	-0,0134	-0,0197	-0,1662
1988	0,2134	-0,0139	-0,0181	-0,1587
1987	0,2017	-0,0140	-0,0190	-0,1622
1986	0,1993	-0,0143	-0,0188	-0,1627

Table 30 shows the magnitude of state intervention in South African agriculture, measured in terms of the Producer Support Estimate (PSE) calculation as prescribed by the OECD. While a partial measure of government intervention, it has the advantage of allowing cross-country comparisons, as the application of the method is monitored internationally.

Table 30: Total domestic support to South African agriculture (PSE)

	1990/1	1991/2	1992/3	1993/4	1995/6	1996/7	1997/8
Total PSE (Rbillionn)	2 848	3 904	7 499	4 119	0,536	3,574	1,351
Percentage PSE	13,69	16,74	31,04	14,50	2,28	8,87	2,72

The increase in PSE in 1992/3 was the result of the final pay-off of drought-related subsidies that were granted during the previous decade. The updated PSEs show (see Table 31) that the degree of subsidisation for South African agriculture has reached levels that are lower than those for Australia, and comparable with New Zealand, traditionally the lowest agricultural subsidisers in the world. The conclusion that can be drawn from these data is that the output prices that South African farmers receive are market prices, i.e. that they are relatively undistorted by government intervention. This much can be expected after the extensive deregulation of agricultural marketing that has taken place.

Table 31: Global comparison between % PSEs

Country	% PSE			
Iceland	68,9			
Japan	63,2			
EU	45,3	E		
USA	21,6			
Czech Republic	17,5			
Mexico	16,7			
Canada	16,1			
Hungary	11,8	300 321 - 3		
Australia	6,8			
South Africa	2,7			
New Zealand	0,8			

7 Policy implications

The main policy implications of the analysis in this report can be summarised as follows:

- economic competitiveness is determined by the degree to which a network of
 factors and participants can be deployed behind a common goal, namely to
 penetrate specific domestic and/or international markets. While the conditions
 in the different components of the supply chain, such as the use of inputs in
 agricultural production, are important, they cannot determine competitiveness
 on their own. Thus, this analysis can do no more than describe the
 contribution to competitiveness of conditions in farm input markets
- South African agricultural markets have been extensively deregulated, and
 farmers face competition in both their domestic and in foreign markets. Macrolevel analyses show that the sector as a whole has benefited from this
 process; however, there have been winners and losers in the process
- one of the more important effects of deregulation has been the shift in factor shares used to produce agricultural output in the country. The share of labour and capital has declined, and the share of intermediate goods has increased as production has shifted away from field crops to more intensive horticultural production
- the 'cost-price squeeze' is a familiar phenomenon to South African farmers. When output prices increase at a slower rate than the price of farm requisites, as has been the case in South Africa throughout the past five decades, farm profits are squeezed. Nevertheless, farm profits are determined not only by the relative prices of inputs and outputs, but also by the value of inputs used and outputs produced. Thus, the quantities of inputs used and of outputs produced are as important as the prices
- the total capital stock used in commercial agriculture in South Africa has
 declined in value, largely as a result of the decline in the real value of land and
 fixed improvements, and the real value of intermediate goods used in the
 sector has increased, over the past two decades.
- during the period 1980 1990, when inflation rates in South Africa had reached their peak and TFP growth was at its weakest, Net Farm Income growth was negative (i.e. commercial farmers' profit margins grew thinner every year). However, by 1990 TFP growth had recovered sufficiently to cause a positive annual growth in Net Farm Income in the period up to 1996
- field crop producers have reacted to the price signals engendered by deregulation by reducing the area of land planted and switching to higher quality land, which has resulted in higher average industry yields; and by reducing the amount of capital and intermediate goods used in production. The net result has been both improved productivity and lower gross value of production. As there has been no discernible change in output trends, the decline in the gross value of production has been as a result of changing prices rather than a change in the volume of output.
- there is strong evidence of improved flexibility in input substitution in South African agriculture. The extent of the adjustment between capital and labour has increased, the substitutability between capital and land has increased, the complementarity between capital and intermediate goods has

- improved and land and intermediate goods have switched from being weak substitutes to being relatively strong complements
- there is an evident bias toward capital using technology in South African agriculture. At average factor shares for the entire period, the bias of technological change has been capital using, and labour, land and intermediate good saving
- farmers make decisions on what to produce and on what inputs to use in
 production on the basis of the relative prices of different product combinations,
 of different input combinations and of different input-output combinations.
 Thus the bias towards capital intensity is probably policy-induced. Various
 analyses show that policy distortions are strongest in field crop production in
 the commercial farming sector and in capital-intensive production in the former
 homelands.

80.0

Chapter Ten

Farmer and worker perceptions

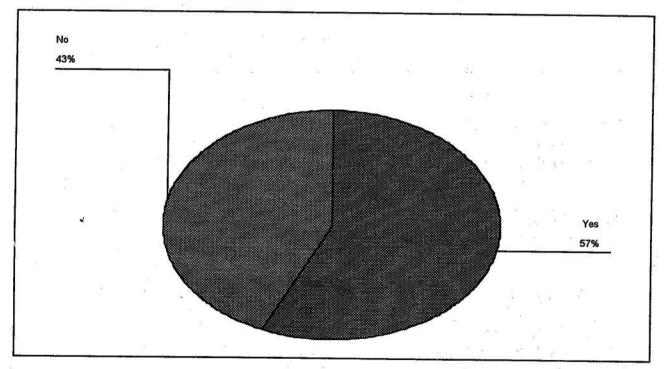
1. Expected changes in the size, organisation and composition of the labour force

The primary research by the CRLS also focused on labour trends from the employers' and the employees' perspective. The topics covered were whether the permanent labour force is of an optimal size, how it has changed over the past three years, the employment of temporary labour, labour contracting, farm finances and absenteeism rates.

Optimality of the labour force

Employers were asked to assess whether the size of their permanent labour force was optimal and if not, to state whether they were currently employing 'too many' or 'too few' permanent workers relative to the type and scale of production in which they were engaged.

Figure 54: Whether the labour force is optimal



All respondents answered this question, with 57% saying that their labour force was of an optimal size (see Figure 54.). This does not appear to be differentiated across the sector – approximately 55% of employers in each subsector said that their labour force is optimal.

Of those who said their labour force size was sub-optimal, 62% reported that they had 'too many' permanent workers. A breakdown by subsector (see Figure 55) shows that

half of the employers in the horticulture and livestock sectors indicated that they employ too few permanent workers. However, more than three quarters of the field crop employers said that they currently employ too many permanent employees for the type and scale of production in which they are currently engaged.

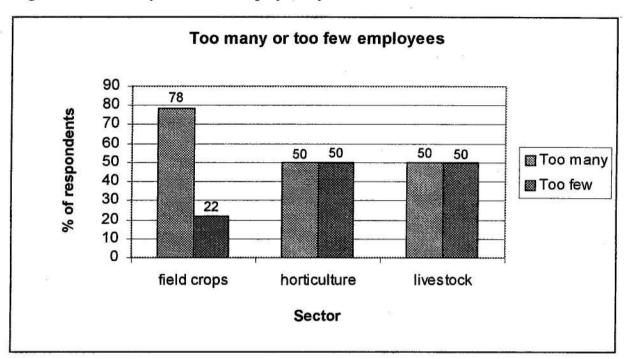


Figure 55: Too many or too few employees by subsector

The most common reason cited by farmers for their **employment of more workers** than would be 'optimal' was a sense of obligation and responsibility towards workers and their families. Farmers therefore commented as follows.

Eployment of more workers

- ➤ "Because the rate of unemployment is too high and I want to help them." grain and vegetable farmer, Free State
- > "The families have been here for generations and their adult children have difficulty finding work." grain farmer, Free State
- > "I can't afford them, but still, I cannot just chase them away." grain farmer, Northern Province
- > "Retrenchment is not an option due to national unemployment. The workers have lived here all their lives." pineapple farmer, Eastern Cape

A second most frequent reason why the size of the labour force was greater than necessary was a change in the operational requirements of production, and therefore the demand for labour on the farm.

"We have mechanised a lot and I can get by with a smaller labour force." – vegetable farmer, Western Cape

➤ "Because I needed them to take care of my livestock but now I have sold most of it" - sheep and grain farmer, Free State

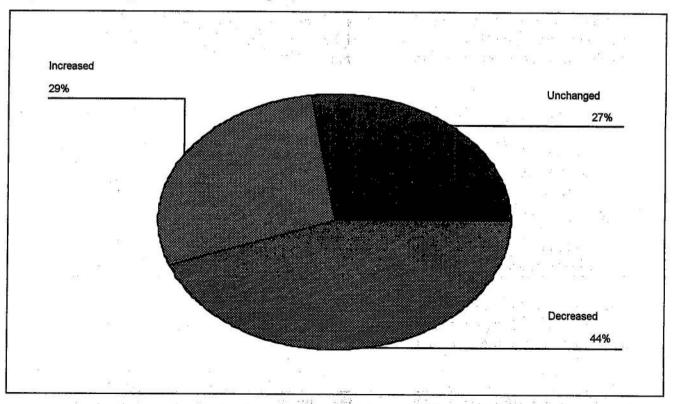
A less common theme referred to by farmers was that the seasonality of labour demand allowed for a greater proportion of temporary labour. On the other hand, among those farmers who reported that their labour force was smaller than the optimal size, almost all cited a lack of financial resources as the prime reason. In some cases, this was coupled with comments on the quality of labour, including the level of productivity among those employees already employed, the costs involved in training new employees, and the cost of labour relative to declining commodity prices.

Quality of labour

- "I decreased the labour force for financial reasons. I can fetch more from town but it's not the same." - vegetable farmer, Western Cape
- > "I am not able to afford a higher wage bill at the current low banana price." banana farmer, KwaZulu-Natal
- > "People come here knowing almost nothing; after a few years of experience they leave for other jobs." -citrus farmer, Gauteng

Employers were also asked to provide information on the current size of their permanent labour force and to specify how many permanent employees they had employed in 1999, 1998 and 1997.

Figure 56: Changes in the size of the permanent labour force since 1997



Less than half of the employers reported that the permanent labour force on their farms is smaller now than it was three years ago, 29% said it had increased, and 27% said it was unchanged (see Figure 56). Comparing responses on whether the labour force is optimal and whether it has increased or decreased over the past three years, it appears that 27 of the 62 employers are set to retrench workers or freeze positions regardless of the introduction of a minimum wage.

2. Temporary labour

The employment of employees on a temporary basis is a major strategy by which employers in agriculture cope with the seasonal fluctuations in labour demand. Employers were asked to calculate their total level of employment of temporary labour over the past year by considering the periods in which they had employed people on a temporary basis, and the number of people employed during these periods. The results are estimates in many cases but nevertheless indicate a high level of dependency on temporary labour to supplement permanent labour during periods of peak demand – planting and harvesting in the field crop sector, planting, harvesting and pruning in horticulture, shearing in livestock production.

About half of the employers said that they employ less than 5 000 person days of temporary labour per year, while 17% employed none. A few large enterprises employ enormous numbers of temporary employees during peak periods – the maximum person days employed on a single farm was 234 925. The average number of temporary person days employed was 13 638.

2.1. Labour contracting

Temporary labour is a key feature of labour regimes in South African agriculture. Increasingly, though, it appears that farmers are choosing to remove themselves from direct employment relationships with temporary employees by working through labour contractors to source both temporary and permanent labour.

Eleven of the 62 employers reported that they use labour contractors to source temporary labour during peak seasons. Most of these were large enterprises with high, and fluctuating, labour demand. It is beyond the scope of this study to conclude whether or not labour contracting is increasing⁸⁷. It is, however, clear that employers in agriculture are making use of labour contractors or labour brokers and that this is seen as an option whereby employers are able to avoid the 'hassle factor' of labour as well as, possibly, to circumvent labour regulations.

The issue of labour contracting emerged again in discussion on what employers would do if a minimum wage increases their wage bill. Resorting to the use of labour contractors, however, does not appear to be motivated entirely by a need to cut costs: the rates charged by contractors have been increasing rapidly in some areas.

⁸⁷ For further information on labour contracting in agriculture, see Centre for Rural Legal Studies (2001): Briefing Paper on Labour Contracting in Agriculture; CRLS; Stellenbosch and Centre for Rural Legal Studies (2001): Research Report on Labour Contracting in the Western Cape; CRLS; forthcoming.

From the employees' perspective, labour contracting means decreased job security, as evident in the following comments.

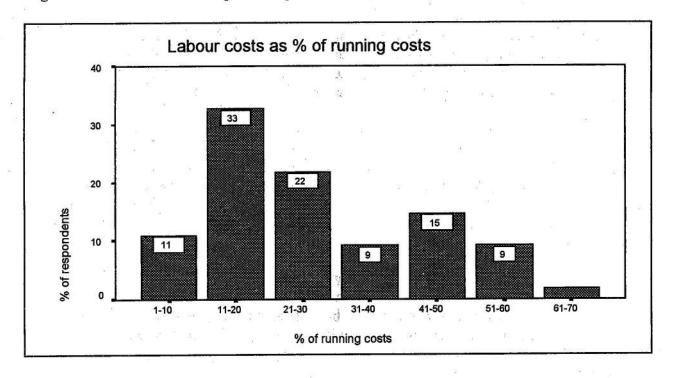
5 70

- ➤ "People lose their jobs here Every year the company employs a lot of new people." 39 year old man, Mpumalanga
- ➤ "Other people were forced to take retirement packages before they became 60 and after the permanent jobs were cancelled. Now we work permanently but under contractors. This reduced our salaries." 32 year old woman, Mpumalanga

Employers were asked to disclose information regarding the finances of their farm enterprises. A number of employers refused to do so, even though it was clarified prior to the interview that this information was required in order for the farm to be used as a case study.

The spread of labour costs as a percentage of running costs is illustrated in Figure 57 below. Here one can see that the total labour costs of 66% of employers account for 30% or less of total running costs. Only 10% of respondents reported that labour accounts for more than half of their running costs and this despite the good representation of labour intensive farms, particularly in the horticultural sector, in the sample. Even within the small sample it seems that labour costs form a relatively small portion of running costs in the livestock sector, and a more substantial proportion of running costs for field crops and horticultural enterprises.

Figure 57: Labour costs as a percentage of running costs



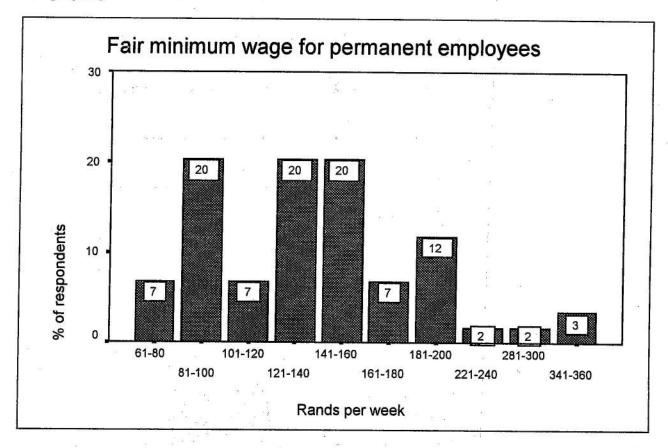
Employers were asked to state what they would consider to be a 'fair minimum wage for permanent workers who are general workers' as well as what would be a 'fair minimum wage for temporary workers'.

3. Employers: minimum wage for permanent workers

Three employers refused to answer this question. Among those who did answer, many found it difficult to cite a figure, either because they did not agree with the principle of instituting a minimum wage, or because what would be 'fair' would depend on the level of payment in kind. We asked employers to cite a minimum wage that would be 'fair' given the current level of payment in kind they offer.

This was a leading question to employers: even those who did not agree with the introduction of a minimum wage cited a minimum wage (weekly for permanent and daily for temporary workers). The responses are given in **Figure 58**.

Figure 58: Fair minimum wage per week for general workers (according to employers)



The average response from employers was R144,97 a week (R579,88 per month), the minimum R63,00 per week (R252,00 per month) and the maximum R350,00 a week or R1400,00 per month. The most frequently mentioned figure was R100,00 a week.

A staggering 43 out of 62 employers cited a 'fair minimum wage' for permanent general employees that was higher than the lowest wage that they currently pay. In

other words, 43 employers appeared to indicate that the lowest wages that they pay at present are not 'fair' and that, if a minimum is imposed, it would need to be high enough to force them to increase wages, thereby affecting their labour costs.

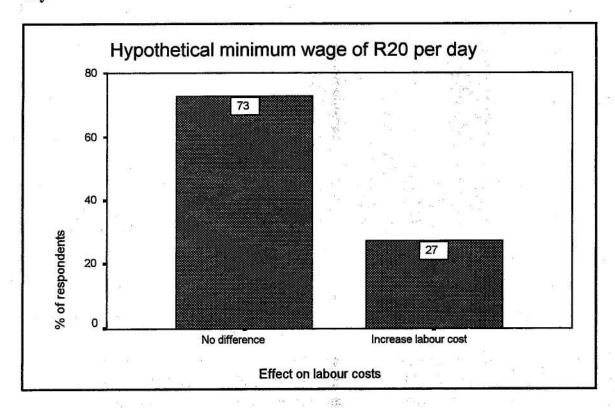
The average fair minimum wage for temporary employees, cited by employers, was R24,36 per day (R487,20 per month), although the median wage suggested was lower (56% of respondents put it at less than R20 per day). The lowest level mentioned was R10 a day and the highest was R50 a day.

3.1. Minimum wage and labour costs

Employers were asked if their labour costs would increase, or remain unaffected, if a minimum wage were set at intervals above R20,00 per day (or R400,00 per month). The results are shown in **Figures 59 and 60.**

Nearly three quarters – 73% - of the respondents said that their labour costs would be unaffected by a minimum wage of R20,00 a day, applicable to all workers. Less than half of the employers – 34% - said that they would be unaffected by a minimum wage of R30,00 a day. These results indicate that the point at which half the employers in our sample perceive that they would be affected, and half unaffected, by a minimum wage is in the region of R25,00 a day or R500 per month.

Figure 59: Effect on labour costs of a hypothetical minimum wage of R20,00 a day



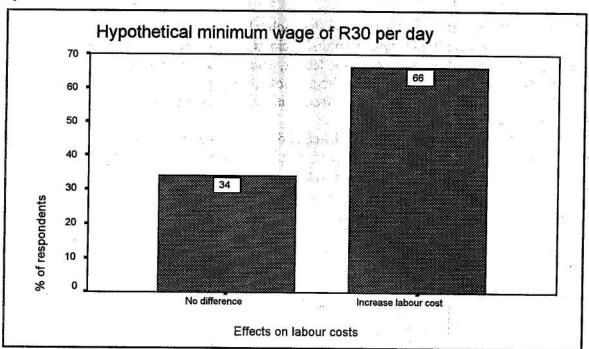


Figure 60: Eeffect on labour costs of a hypothetical minimum wage of R30,00 a day

3.2. Employer responses to a minimum wage

Employers were asked what they would do if their labour costs were to increase as a result of a minimum wage. 88 The responses may be clustered within the following themes, in the order of frequency with which they were mentioned.

- (a) Mechanisation of production to substitute for labour
- (b) Rationalisation of the labour force through:
 - the contraction of productive (especially labour intensive) activities
 - cross-subsidising workers' wages
 - increased reliance on temporary labour
 - increased reliance on labour contractors to provide labour
- (c) Better use of labour through:
 - increased investment in skills
 - better planning of production activities
 - creation of incentives to improve productivity.
- (d) Reduction of benefits and payment in kind
- (e) Cease farming.

As this was the final open question in the interview, many employers took this opportunity to 'speak to government' on a number of issues of concern, unrelated to the question of a minimum wage. These responses are summarised in Appendix 4.

A selection of responses for each of these categories is listed below.

Mechanization

- > 'Most of the people used will lose their jobs, because everything will be done by machines and controlled by computers' citrus farmer, Mpumalanga
- ➤ 'I would substitute machinery for labour, and substitute chemicals for labour. It won't change my business, but I would look at doing the above-mentioned things I would reconsider any future investments in agriculture' sugar cane farmer, KwaZulu-Natal
- > 'I will have to reduce my labour force and look at new methods of improving my production, e.g. increase the use of machinery and/or the use of chemicals' citrus and deciduous fruit farmer. Gauteng
- > 'Mechanise the business as far as is economically viable. It will not allow for the growth or enlargement of the business, therefore there would be no increase in workers' livestock farmer, North West
- ➤ 'Mechanisation will be the solution for the high standard minimum wage, like weeds control, ploughing, applying fertilisers will be done by machines' sugar cane farmer, Mpumalanga
- ➤ 'I would farm with less labour intensive products, i.e. grain, maize. I would decrease my labour force by 30%. I would scale down my whole farming enterprise' vegetable farmer, Western Cape
- > 'If the minimum wage is too high then the more productive and experienced workers will suffer because they will be subsidising the less efficient workers Farmers will not be able to keep the same variation in wages if the bottom rung's wages have to go up' deciduous fruit and ostrich farmer, Western Cape
- ➤ 'We will use more temporary labour, but the hassle factor is big, so we will use labour contractors so that we shift the supervision role onto someone else. I have no problem with the minimum wage, but 80% of our community does' wheat farmer, Western Cape
- > 'Change my system of farming so that I can manage with less workers, e.g. (a) increase cattle numbers and reduce arable area, (b) invest in bigger machinery.[and] retrench surplus labour' wheat and maize farmer, Free State

A number of employers indicated a willingness to pay higher wages but insisted that wages needed to be linked to the productivity of employees. Some argued that this meant that the setting of wage levels therefore needed to remain the prerogative of employers rather than being regulated by government.

Productivity

- > 'Reduce labour and manage the remaining workers better for higher productivity and reward them better accordingly' fruit and wine farmer, Western Cape
- > 'If the government wants to set the minimum cash wage it should be connected to productivity... the labourers should be paid looking at whether they are working or loitering. For those who are working, they should be paid more and those that are not, less' vegetable farmer, Mpumalanga
- > '... I am willing to pay a minimum wage of R1 500 to people who are willing to work' citrus farmer, Eastern Cape

'We cannot mechanise more in our type of production. We would get much more serious about productivity and performance. We would have to cut our labour force, but will weed out slower workers and pay the better workers more to keep up the incentives' – deciduous fruit and ostrich farmer, Western Cape

The most important thing is to ensure that the workers are being productive and to make sure that they are paid well Because of the scale I operate on, it would not be cost-effective to mechanise I would certainly stick with the labour I have'.

vegetable farmer, Western Cape

> 'At the end of the day it would mean working with fewer well-educated, well-motivated staff members who draw higher wages. But I do feel that people are

entitled to a fair wage' - dairy farmer, KwaZulu-Natal

→ 'At the moment I employ a relatively unproductive portion of society – mostly women and older men. I would keep my total wage bill the same and employ whatever I could now afford in more productive people' – banana farmer, KwaZulu-Natal

➤ 'There should be minimum wages for workers with different levels of skill' — deciduous fruit farmer, Western Cape

- I will keep my eye on production and cut on expenses like clothes, transport and facilities. This farm is still not profitable we have not got the first harvest. Farms in this area are for sale because of bankruptcies' mixed produce farmer, Western Cape
- All benefits they get will fall away I will drop the number of people employed. It's a wrong approach to specify minimum wages because it will lead to. (1) unemployment, (2) exploitation of labour (only contractors will benefit)' dairy farmer, KwaZulu-Natal
- > '... the people are given houses free, and free electricity and water, but the government doesn't see that' citrus farmer, Mpumalanga
- 'If labour costs increase, everyone's benefits must come down' sheep farmer, Northern Cape
- 'Close down the enterprise as soon as the government decides on the minimum wage that would impact negatively on labour costs' cattle farmer, North West
- Close down because it would increase my expenses and I already worked on a loss in the past year. If I get financial assistance I will change from crop to stock farming, and this means that I would have to reduce my personnel' sorghum farmer, North West
- 'Sell out, and my very loyal labourers would lose their homes, work and cattle grazing rights. The farm school would close. The problem is no-one would want to farm' - dairy farmer, KwaZulu-Natal

Among the black farmers interviewed, a few pointed out that government is pursuing apparently contradictory policies of supporting the emergence of black commercial farmers, on the one hand, while instituting regulations which undermine their profitability, on the other.

'The government should stop interfering with the agricultural workers because this will result in more people losing their jobs Government should allow farmers, especially the small-scale and small commercial farmers to use cheap labour for the next 20 years. That will make all the farmers to be at the same level. Then the government is no more subsidising the farmers like before. People who are members of NAFU are the least when coming to production and profit-making'—citrus and banana farmer, Mpumalanga

Employers also provided sector-specific information regarding their labour requirements and how this should be accounted for in a sectoral determination.

Labour requirements

- ➤ 'For this type of farming you can't average working hours over less than five weeks. 16 hours a day for three weeks is the minimum at planting time. We don't have a problem with labour costs, and we pay the workers well. Other rising input prices are a problem essential items like diesel and fertiliser force us to cut labour costs. We plan to have only 1 worker on the farm in the next 10 to 15 years' wheat farmer, Western Cape
- ➤ 'Rule of thumb for labour needs in this type of farming is: one worker for every four hectares, plus a tractor driver and mechanic' wine and grape farmer, Western Cape
- '... banana farmers... would have to take drastic action if a minimum wage of more than R15,00 a day were imposed' - banana farmer, KwaZulu-Natal
- ➤ 'I don't have a problem with a minimum wage as long as it is market-related and realistic. I would like to have a minimum wage equal to the pension that is paid by government, i.e. R500,00 a month. The government assumes people in town can get by with R500 and they still have to pay their house. ' vegetable farmer, Western Cape

3.3. Employees' responses to a minimum wage

Workers were also asked to cite what they would consider to be a fair minimum wage. The average 'fair minimum wage' cited by workers was R247,00 a week (R988,00 per month), almost exactly R100,00 higher than the average among employers. The lowest minimum wage proposed was R70,00 and the highest was R750,00. Half of all respondents quoted a wage above R237,00 a week (R948,00 per month). It is worth noting that workers defined a greater range of wages as 'fair' than did employers. The distribution of workers' responses by province merely shows that in those areas where people are poorly paid at present their expectations of a minimum wage are low and vice versa. As expected, therefore, workers in the livestock subsector and women had lower expectations of a minimum wage than men. The average given for a 'fair wage' was R205,58 among women and R265,25 among men. The minimum and maximum were R75,00 and R400,00 among women, and R70,00 and R750,00 among men, respectively.

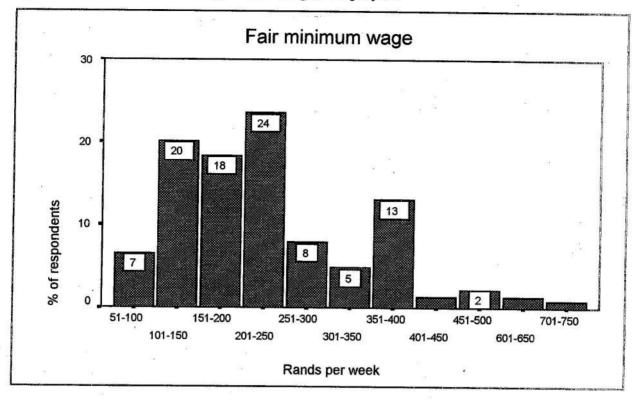


Figure 61: Fair minimum wages according to employees

Figure 62 shows women's responses clustered towards the bottom end of the scale, with 50% of women saying that they would consider a figure of R200,00 or less to be a 'fair wage' for them. Men's responses, on the other hand, were fair more dispersed across the scale, with 37% of men citing a figure of R200,00 or less.

>

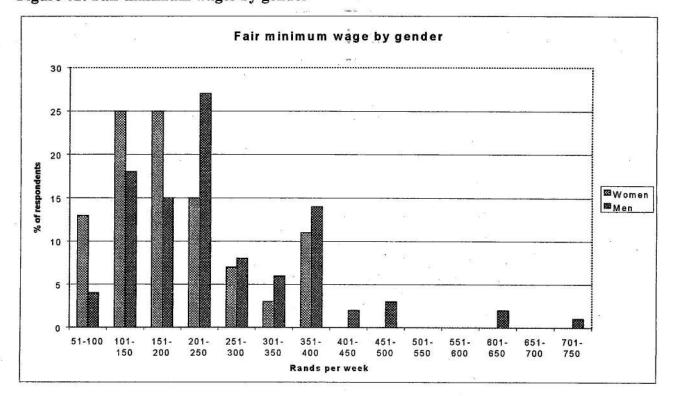


Figure 62: Fair minimum wages by gender

3.4. Justifications for minimum wage

Employees were asked to explain or justify the minimum wages they consider fair. A comment that summed up employees' justifications of the minimum wages they proposed was:

'The cost of living is too high and we work very hard and deserve better than what we are earning now. The wages are depressingly low. I can hardly afford to take care of the needs of my big family.' - 63 year old man, Free State

Employees justified the 'fair wage' they cited as being 'fair' in four distinct ways:

- the cost of living
- investments: this is what is needed to improve one's life and one's children's future
- the value of labour: this is what our work is worth
- an awareness that farm workers' labour produces profit.

Each theme is explained in turn below, together with a selection of quotes.

Cost of lving

> 'The money we are getting now is too little I will buy my kids clothes and send them to school. If it were not for poverty I would not have worked here. These people promised us a lot of things but when we arrived here there is little. We work like slaves ... '- 27 year old woman, Mpumalanga

- ➤ 'The cost of living is too high. We cannot cope with the ever-decreasing value of our wages' 22 year old, Northern Province
- ➤ 'The money we are getting is too little for a family. You cannot buy children clothes or even send them to school' 27 year old woman, Mpumalanga
- ➤ 'It is a reasonable amount because the cost of living is very high' 44 year old man. Free State
- ➢ 'Because sometimes I cannot afford to pay my accounts and then I have to borrow from others.' − 27 year old man, Eastern Cape
- ➤ 'It is understandable because, although it is not enough, I will be able to buy food every month.' 30 year old woman, Northern Province
- ➤ 'To afford life.' 41 year old woman, KwaZulu-Natal
- > 'Because there's nothing we get after deductions. It is difficult to afford to do things. We need money '- 32 year old man, KwaZulu-Natal
- ➤ 'No-one can live with what we are living on now. I have two children that I am supporting in school and I need money.' 32 year old woman, Western Cape
- ➤ 'I need to pay so many things, especially my children's schooling and I don't have enough money. It is very stressful.' 23 year old woman, Western Cape
- ➢ 'It is the minimum farm workers need to survive.' 30 year old man, Western Cape
- ➤ 'You can buy food and come out clean without debts' 34 year old man, Western Cape
- ➤ 'Households with few people have problems. You can't live on one piece of break and milk every evening. We must eat '-33 year old woman, Western Cape
- ➢ 'Because now we cannot meet our basic needs, but if we happened to earn R500,00 a month our living condition would improve ' − 23 year old man, North West
- → 'The wage we get now does not meet our social and economic needs.' 27 year old man, Eastern Cape
- ➤ 'So that I can start my own business so I can send my children to tertiary institutions.' 32 year old woman, Mpumalanga
- ➤ 'We will be able to build ourselves houses at home and send our children enough money to pay for school fees' 46 year old man, Mpumalanga
- → 'I want to build my family a house With that money I will be able to buy building materials.' 32 year old man, Mpumalanga
- ➤ 'Then I could carry on spending R100,00 a week and save R50,00 and eventually have my own house.' 19 year old man, Western Cape

The value of labour

- ➤ 'I work hard on the farm. I want to see what I work for What do we work for? If we walk away from this farm, we don't have anything. It makes me sad to know I slave my whole life and I still have nothing to show.' 42 year old man, Montagu, Western Cape
- 'The job is dangerous. There are lots of things that can happen to us in the field.' 33 year old man, Mpumalanga
- ➤ 'Because we work too hard and we deserve better.' 57 year old man. Free State
- ➤ 'Women do just as much work as men, sometimes more.' 32 year old woman, Eastern Cape

- ➤ 'We do exactly the same work as the men...' woman, unknown age, Western Cape
- ➤ 'I want to be paid for my sweat and hard work' 42 year old man, Western Cape
- 'I am working a very dangerous job with chemicals.' 22 year old man, Northern Province
- ➤ 'I am experienced in farm work.' 39 year old man, Northern Province.
- → 'I am responsible for many things on the farm.' 31 year old man, Northern Province
- Our work is worth it. We are answerable to our employer.' 46 year old man, Western Cape
- ➤ 'The money he gives is too small. It is not enough, especially to someone trying to take care of a family' 52 year old man, North West
- ➤ 'I am trained in welding and also do general work. I should be paid for my speciality, not the same as general workers' 27 year old man, KwaZulu-Natal
- ➤ 'Farm work has become more complicated. We have technical training for working with vines. Workers deserve more pay ' 37 year old man, Western Cape
- ➤ 'Because our work makes profit.' 41 year old man, KwaZulu-Natal
- 'We work very hard and the farmer makes lots of profit' 46 year old man, KwaZulu-Natal
- ➤ 'The work is too difficult and it's only the employer makes a profit' 42 year old man, KwaZulu-Natal
- → 'There's too much work and too little pay. Our salary is not worth our work and
 the farmer gets a lot out of us.' 18 year old man, North West

Three of the 230 employees interviewed explicitly took into account the benefits and payment in kind they receive, and said they cited a lower minimum wage than they would have had they been paid in cash alone.

3.5. Conclusion: minimum wages

Employees could risk losing their jobs through the introduction of a minimum wage which the majority of employers could not afford. Employers repeatedly pointed this out, indicating the ways in which they could substitute for labour or change their production activities in order to minimise their labour requirements. An incentive to invest in the skills and productivity of employees could be a positive by-product of the minimum wage.

Most employees pointed out that the minimum wages they ask for are modest in relation to their current wages. They provided ample justification for why they believed a minimum wage should raise their income, motivated both by what they need and what they deem to be fair. There is substantial overlap between the minimum wages proposed by employers and employees.

4 Social and working environment

Employees were asked: is there anything else that you would like to tell me about your life as a farm worker?' Most employees used this opportunity to raise issues of general concern as well as to describe the particularities of 'farm life'.

The qualitative information gained from the qualitative research points overwhelmingly to the fact that existing legislation has not been enforced in the agricultural sector. This implies a challenge for our Department as well as for the Department of Land Affairs.

4.1. Freedom of association

Employees raised two problems in relation to freedom of association. Firstly, some employees expressed a desire to join unions and noted how employers prevented them from doing so. Secondly, respondents cited their employers' refusal to allow family and friends to visit them on the farm or restrictions - which were perceived as unfair - being placed on visits.

- ➤ 'People are not allowed to join unions. When union reps visit to inform us the managers send them away or tell the supervisors to tell the reps that people do not want unions...' 32 year old woman, Mpumalanga
- ➤ 'We do not have a union. We want to join a union because people are dismissed sometimes by [the] managers of the contractors...' - 50 year old man, Mpumalanga
- ➤ 'There is still oppression here on farms I only work because I need to put food on the table. I cannot have visitors, but if ever they are allowed, their cars are not allowed on the farm's premises. I am not allowed to be a member of a union.' 30 year old man, North West
- ➤ 'Life has been the same since I came to this farm no visitors and friends are allowed; the owner does not treat us fairly and equally '- 35 year old man, North West

4.2. Health and safety

A number of respondents complained about poor health and safety conditions. In a few cases, employees cited workplace accidents that had resulted in injury – sometimes permanent – for which they had not been compensated. The use of pesticides and other chemical substances were among the causes. Employees working on livestock farms talked about fearing for their safety, particularly due to the threat of armed stock thieves.

- ➤ 'We are risking our lives here because we work also as security for the farm. We need to make sure that livestock does not get stolen.' 60 year old man, Free State
- ➢ 'People are bitten by snakes and wild animals enter the farm many times...' 39 year old man, Mpumalanga

- > 'There are people who are hurt or who broke their legs in the forest but they are not paid. If they are retrenched, they are not given compensation for those who are injured at work' 50 year old man, Mpumalanga
- There is a friend of mine who once worked here on the farm and was attacked by a cow. He is now paralysed and his life is very saddening. He was never compensated except his UIF fees, but I think he deserved much better than this.'—30 year old man, North West

4.3. Violence and abuse

A number referred to verbal abuse in the workplace but did not specify the nature of this abuse. One respondent indicated that these practices had ceased. None referred to physical violence of any kind.

- ➤ 'One thing that has changed here is that the farmers don't hit or abuse the workers physically because the government has been very strong on that point.' 35 year old man, Western Cape
- ➤ 'A farm worker like me is not treated like a human being. We work long hours, are paid less [little], and are under strict supervision with the farmers always shouting at us.' 48 year old man, Northern Province
- 'Sometimes they insult us especially the farmer's son. We are not allowed to complain about anything. I started in 1986 but the conditions are still terrible.'—38 year old man. Free State
- ➢ 'I don't have anything to tell. I am just scared.' 24 year old woman, Northern Province.

4.4. Favouritism and punitive practices

Employees identified practices that they see as being unfair and arbitrary in employers' treatment of employees. The issues that were cited included:

- favouritism: providing benefits to some employees for no apparent reason (eg. bonuses, leave and pensions)
- punishment of employees by withholding bonuses for reasons which employees see as unrelated to their work performance – for poor harvests, for (unsolved) thefts and for fires.
- ➤ 'We are not treated the same, some are favourites and others are not.' 27 year old woman. Free State
- ➤ 'I am always under pressure because when I have a complaint it is not taken [seriously] but others are taken seriously. There is favouritism. Sometimes we do not get a bonus if something is missing on the farm.' 27 year old man, Free State
- ➢ 'If we borrow money from the farmer we have to pay 50% interest rate over one week.' 35 year old woman, Western Cape
- ➤ 'I am too old not to wonder if I will get a pension because some do and some don't, it depends on who the farmer likes...' 70 year old man, KwaZulu-Natal

- ➤ 'Some months we do not get our salaries, not because the money is not there, but because the farmer thinks there is little work in those months. Even when there's a bad season for crops, he has enough to pay our monthly salary' 52 year old man, North West
- 'We are in jail. We don't get a bonus if there has been a fire on the farm, so this year we won't get any. '- 46 year old woman, KwaZulu-Natal

4.5. Tenure security

Employees expressed extreme concern over their security of tenure. A number, particularly in the Western Cape, referred to fellow farm employees who had been evicted. Others expressed fear that, towards the age of retirement, they would be 'put out on the road'. While a few were aware of the Extension of Security of Tenure Act (ESTA), none showed familiarity with its provisions and those who were aware of it did not see how it could help them. It was particularly in the context of tenure rights that fieldemployees were asked to provide legal advice.⁸⁹

- ➢ 'If people get evicted, they must have some other place to stay. People shouldn't
 just be put out on the road.' − 29 year old man, Western Cape
- People work here for the whole of their lives, when they reach 65 years they are told to leave the farm even though some stayed here even before the farmer. '-42 year old woman, Mpumalanga
- and then when they don't want me anymore, they'll just put me out on the road and tell me to go. What happens if we stay here for years and then the farmer tells you to pack your things and go? Some people have been kicked off the farm, and this is the most important thing we want to know. Is this allowed? Because it is not fair' 33 year old woman, Western Cape
- ➤ 'A whole family got kicked off this farm because the man stopped working, even though his wife was working full-time with us. They had to go in just one day and they had nowhere to go.' 33 year old woman, Western Cape

Employers, on the other hand, raised the issue of tenure security as a disincentive to employ and to provide housing to employees. Comments from employers on the issue included the following.

- We are not very concerned about a minimum wage unless it drastically changes things. The new ESTA law is a bigger problem. It is very bad for the workers, this law. We want to do more, but if they stop working, you can't get them off the farm.' deciduous fruit farmer, Western Cape
- 'The farmers around here are so angry about ESTA they are bulldozing houses now' - wheat farmer, Western Cape

⁸⁹ Fieldworkers were briefed not to provide legal advice on particular matters, but to refer interviewees to relevant sources of assistance – e.g. a local advice office or non-governmental organisations.

4.6. Labour tenancy and land reform aspirations

A few employees in KwaZulu-Natal and the North West expressed a desire to be able to own and graze livestock — and/or to have access to a small patch of land to grow vegetables — on the farms on which they work. Others saw the fieldworkers as representatives of government, coming with false promises of farms for employees.

- ➤ 'We are not allowed to own livestock. We do not have arable land. We are like visitors who just depend on the farmer...' 41 year old man, KwaZulu-Natal
- ▶ 'People like you [referring to the fieldworker] came previously but nothing was changed. So please, let it be that changes do take place. Today many white farmers are being killed and if that should happen on our farm, where will I go?' 40 year old man, North West
- 'People come here desiring money and promising us our own farms but the next thing is you don't even know where they disappeared.' - 71 year old man, North West
- → 'He [employer] has a vast amount of water and land to produce those vegetables. My wish is that I can do subsistence farming on pigs.' – 32 year old man, Eastern Cape

4.7. Gender discrimination

Many respondents – largely women – referred to the inequitable treatment of female employees. This was expressed in two ways:

- firstly, that women are not treated the same as men: that women do not have contracts, do not get paid leave, and receive lower wages for doing the same, or similar, work
- secondly, that women are treated the same as men: that pregnant women do not
 get special consideration, that women are made to do heavy physical labour
 together with men and are made to perform tasks which are culturally taboo
 (particularly working with livestock).

Respondents also articulated the problem of women's employment being 'tied' to their male partners'. Thus, women living with male employees sometimes do not have a choice but to make their labour available to the farmer as and when this is required – even if only during a particular season. This prevents women from seeking other work."

- ➤ 'Wat nie so lekker is, is wanneer ons nie kan werk nie, byvoorbeeld as dit reën, want op dié dae word ons vroumense nie betaal nie.' 33 year old woman, Western Cape
- ➤ 'We women don't get paid if it rains.' 35 year old woman, Western Cape
- ➤ Women don't get paid for maternity leave, not even from UIF. We want to be paid for maternity leave and sick leave. And we want to be paid for the annual leave like the men are. 30 year old woman, Western Cape

- ➤ 'Women on neighbouring farms earn R200,00 a week. I am not allowed to seek work there. I have to work on this farm as long as my husband works here.' 31 year old woman, Western Cape.
- ➤ 'Women are working under strenuous conditions, with picks and shovels even when they are pregnant.' - 22 year old man, Northern Province
- ➤ 'Women are treated badly. We do not get the same wages even though we have worked the same number of days. He (employer) keeps promising that he would give us bonuses, but he never does. He promised blue cards but he never got them.' 38 year old woman, Free State
- ➤ '... We want to get the same as the men on the farm. At least that would be a good start. They have contracts and the women don't. They get leave and we don't. They get paid much more. Is it fair like that?' 33 year old woman, Western Cape.
- Women do just as much work as men, sometimes more... The work I do is too much and I suffer because my house is not good. Workers are expected to work in all weathers for long hours. Women, especially, are treated the same as men? 32 year old woman, Eastern Cape

4.8. Quality of employer-employee relationships

A number of employees specifically referred to good practices by farmers and the benefits of investing in a good relationship with one's employer, especially as the employer was frequently also the landlord. Among the comments was recognition of the social safety net that 'farm life' provides to farm employees and dwellers. Those who explicitly spoke about poor relationships with employers emphasised a lack of communication – particularly about wages and benefits – and pointed to the lack of trust and low morale that this generates.

- > 'The owner seems to have a knack for maintaining good relationships, has regular meetings, sorts out problems, has fair wages.' 30 year old woman, Eastern Cape
- ➤ 'I wouldn't say I have a bad life. The farmer treats me with dignity. If I ever get
 the opportunity to do something else I would, but for now I have a job and I can
 provide for my family.' 30 year old man, Western Cape
- ➤ 'Sometimes life on the farm is good and sometimes we are not treated well. It is very demotivating.' 26 year old man. Western Cape
- 'We are being treated badly because we have no say in what is right or wrong.' 22 year old woman, North West
- 'The farmer does not treat us with respect and we cannot always live like this.' 23 year old man, Western Cape
- ➤ 'Much is being dictated rather than being communicated or discussed. When you ask questions you are regarded as a troublemaker and soon you'll be intimidated. If you ask too many questions you will not stay long in your job.' 18 year old man, North West

4.9. Conclusion: social and working environment

Enforcement of labour legislation remains a challenge in the agricultural sector. The provisions of the Labour Relations Act (LRA), Basic Conditions of Employment Act (BCEA) and Employment Equity Act (EEA) appear to have had little impact in practice on the farms included in this study. This implies the need for new additional methods to be developed for the enforcement of the sectoral determination, to inform employees of their entitlements in terms of the law, but also to inform employers of their obligations and to invest in monitoring and evaluation in the agricultural sector.

The qualitative information derived from the research indicates the extent to which employment in agriculture differs from employment in other sectors, in terms of:

- the extent of dependence of employees on employers (for continued access to goods, services and especially homes, as well as for employment)
- the isolation of employees from sources of information and social support beyond the farm
- the significant obstacles to enabling employees to exercise their labour rights –
 even when they are informed of them.

Chapter 11

Macroeconomic considerations

1 Introduction

This section of the report is aimed at developing minimum wage scenarios for the agricultural sector, and to test the hypothesis that a minimum wage will impact negatively on the agricultural sector and the economy as a whole. The section begins with a discussion of the potential factors impacting on agricultural employment and wages. It also provides an econometric analysis of the factors impacting on agricultural employment and wages in South Africa. Econometric estimation of the determinants of agricultural output, exports and investments has also been undertaken. The report proceeds with a simulation of the effects of different minimum wage scenarios on the agricultural sector and the economy as a whole.

2.1. Survey data analysis

The National Institute for Economic Policy was commissioned to assist in establishing the potential determinants of agricultural employment and in particular, to test the significance of the relationship between average wage categories and agricultural employment.

It is also aimed at establishing the variations in effects of average wage categories on employment for the different agricultural sub-sectors. This analysis will provide a basis for the development of minimum wage scenarios and their potential effects on agricultural employment

The 1993 Census of Agriculture was used for the survey analysis. The Census provides information for 70 statistical regions in South Africa for 1993. The census also provides a breakdown of the data by sub-sectors, namely field crops, horticulture and animal production across statistical regions. For each statistical region and for each sub-sector, the following variables are provided:

- Number of farms
- Total farm area (hectares)
- Total number of paid labourers
- Total wages and salaries paid
- Other remuneration
- Total gross farm income
- Total capital expenditure
- Total current expenditure
- Total farming debt

Other variables were generated for each of the 70 statistical regions. These include:

- Total remuneration (the sum of wages paid and remuneration);
- Average wage rate (total remuneration/number of paid labourers);

- Net farm income (gross farm income minus current expenditure);
- Labour productivity (the ratio of gross farm income to the number of paid labourers);
- Farm income per hectare (the ratio of gross farm income to average farm size).

3. Statistical analysis of the effects of wages on employment

The Census data described above were used to run a cross-sectional Analysis of Covariance (ANCOVA) model of employment. The ANCOVA model is a regression model with both quantitative and qualitative variables.

The average annual wages were grouped into four categories and used as dummies in the regression. These categories are:

- R0-R3000 = category 1 (dummy 1)
- R3001-R6000 = category 2 (dummy 2)
- R6001-R9000 = category 3 (dummy 3)
- R9001 and over = category 4 (dummy 4)

All the variables that could affect employment were included in the regression. However, those that were found to be insignificant were dropped. The dummyl of the wage category was dropped from the regression. This is a requirement for the ANCOVA model. Coefficients of the dummies are therefore explained in relation to the first wage category.

The results of the analysis are presented in Table 33 below. The regression results of the survey analysis indicate that the variation in farm employment among statistical regions and sub-sectors is explained by variations in farm incomes, investment, the number of farms, farm area and wages. These variables are also common to all the sub-sectors with the exception of total farm area, which affects only mixed farming.

Farm incomes, investment and the number of farms have positive effects on agricultural employment. This implies that an increase in any of these variables will lead to an increase in agricultural employment. These relationships are as expected. According to the results, a 1% increase in farm income will lead to a 0,5% increase in employment, while a 1% increase in investment and farm units will lead to a 0,23% and 0,32% increase in farm employment respectively.

The regression results further show that the variations in average wage categories explain the variations in employment. As indicated in Table 33, average wage categories affect employment negatively. Movement of average wage from the lowest category to a higher category may imply labour shedding. Increasing the average wage of farm workers in the lower average wage category (R0-3000) to the next average wage category (R3001-6000) will lead to a decline of 39% in the number of farm workers in the lower average wage category. In other words, fewer people will be employed in agriculture if wages are adjusted upwards. This also confirms the effects of wages on employment.

Table 32: The determinants of agricultural employment (ANCOVA regression results)

Independent variables	Sub-Sectors				
- 12 × 1	Total Agriculture	Field Crops	Horticulture	Animal Production	Mixed Farming
Log of Farm Income	0,50**	0,45**	0,46**	0,48**	0,42**
Log of Investment	0,23**	0,13**	0,15**	-	0,30**
Log of No. of Farm	0,32**	0,46**	0,45**	0,50**	0,40**
Dummy2	-0,39**	-0,24**	-0,34**	-0,43**	-0,27**
Dummy3	-0,83**		-0,33**	-0,83**	-0,17
Dummy4	-1,57**	-1,38**		-0,62**	-2,75**
R ²	0,99	0,99	0,99	0,99	0,99
No. of Observations	272	67	65	70	70

Notes

The dependent variable is the log of employment

4. Impact analysis of minimum wage scenarios in agriculture

Different scenarios of minimum wages were established and their effects on the average wage were determined through their effects on the different wage categories. The average wage categories from the Census were used to simulate the effects of minimum wages on the movement of farm workers from a lower average wage level to a higher average wage level. They were also used to determine how the average wage will change with changes in the minimum wage.

The increase in the average wage rate from the survey analysis as a result of a given minimum wage scenario was then used as an exogenous shock to the average wage equation of the agricultural sector in the a macroeconomic model developed by NIEP. The purpose was to determine the effects of the different minimum wage scenarios on the agricultural sector and on the economy as a whole. These effects were then analysed in terms of their impact on agricultural employment, output and prices. The effects of the average wage shocks on employment, output, price and consumption in the total economy were also simulated simultaneously.

These elaborate variable linkages in the NIEP macroeconomic model allow for an impact analysis of both the direct and indirect effects of the minimum wage scenarios on the agricultural sector and on the economy as a whole.

Table 33 below indicates the distribution of average wages among farm workers according to the 1993 Agricultural Census. As indicated, 52% of all farm workers worked in statistical regions where the average wage was R3000/year or less (R250/month) in 1993. Only 1,8% of all farm workers were located in statistical regions where the average wage was more than R9000/yr (R750/month). However, this varied across sub-sectors. For example, 73% of all farm workers in mixed farming were located in statistical regions where the average wage was R3000/yr or

Significant at 5% level of significance

^{**} Significant at 1% level of significance

less, whereas in horticulture only 25% of farm workers were located in such statistical regions.

Table 33: The distribution of farm employment by wage category, 1993

Wage /year (Rand)	Number of farm workers						
	Total agriculture	Field crops	Horticulture	Livestock	Mixed farming		
0-3000	561 056	137 524	6 5448	151 286	206 798		
3001-6000	453 960	86 030	187, 307	106 907	73 716		
6001-9000	26 934	0	8 629	13 998	4 307		
9001+	19 671	38	0	19 353	280		
		e la come		the second second			
Total	1 061 621	223 592	261 384	291 544	285 101		

Source: Statistics South Africa, Census of Agriculture, 1993

4.1. Formulation of minimum wage scenarios

It is assumed that real wages have remained relatively constant since 1993. Wages in 1993 were therefore adjusted by the inflation rate to 2000. These adjusted wages were used as the base scenario. The resulting average annual wage is R4633.60, with the lowest average wage at R628.00. The base scenario also shows that 20% of the farm workers are located in statistical regions where the average annual wage is not more than R3000 and 84% are located in statistical regions where the average annual wage is not more than R6000 (R500 per month).

This base scenario was used to represent a case of no change in the minimum wage. It is also used as the reference in determining the potential implications of changes in the minimum wage. Three scenarios were developed for this analysis.

Scenario 1

Provide a minimum average wage of R6000/yr (or R500/month). This also implies that farm workers whose wages are below R6000/yr will have their wages adjusted to R6000/yr, whereas wages that are above R6000/yr will remain unchanged.

Scenario 2

Provide a minimum wage of R8000/yr (or R667/month). This implies that farm worker's whose wages are less than R8000/yr will have their wages adjusted to R8000/yr. However, wages which are more than R8000/yr will not be adjusted.

Scenario 3

Provide a minimum average wage of R12000/yr (or R1000/month). This also implies that farm workers whose wages are below R12000/yr will have their wages adjusted to R12000/yr, whereas wages that are above R12000/yr will remain unchanged.

5. Implications of minimum wage scenarios to the Average wage

Table 34 below illustrates the effects of different scenarios on the average wage. The larger the wage adjustments, the stronger the effects on the average wage and the wage bill will be.

As shown in Table 34, Scenario 3 will have the biggest impact on average wage. This scenario will increase the average wage by 161,7%. Scenario 1 has the smallest impact on average wage and leads to a 39% increase in the average wage.

.......

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Table 34: Percentage change of average wages over the base scenario

	Total	Field crops	Horticulture	Animals	Mixed farming
Scenario 1	39,0%	50,7%	23,2%	36,0%	53,4%
Scenario 2	78,1%	98,6%	56,8%	67.7%	100,9%
Scenario 3	161,7%	197,9%	133,5%	136,8%	199,7%

The scenarios have different implications to the average wage of sub-sectors. The mixed fanning and field crop sub-sectors are generally most affected by the minimum wage scenarios. For example, in Scenario 1, the average wage of mixed farming and field crop will increase by 53,4% and 50,7% respectively, whereas the same scenario leads to increases of 23,2% and 36% for horticulture and animal production respectively. As indicated in Table 7, Scenario 1 leads to 50,7% increase in the average wage of the field crop sub-sector, whereas the same scenario leads to 23,2% increase in the average wage of the horticultural sub-sector.

6. Implications of minimum wage scenarios to income distribution.

Table 35 below illustrates changes in income distribution among farm workers with minimum wage scenarios. The scenarios will not change the distribution. However, these scenarios will ensure a minimum average wage to all farm workers and will reduce income inequality among farm workers.

Table 35: Percentage distribution of farm workers among income categories-

total agriculture

		Income Categories (per month)			
	≤ 6000	6001 - 12000	> 12000		
Base	84,14	14,01	1,85		
Scenario 1	84,14	14,01	1,85		
Scenario 2	0,00	98,15	1,85		
Scenario 3	0,00	98,15	1,85		

With scenarios 1 and 2, all farm workers in the lower wage band will earn a wage of R6000/yr and R8000/yr respectively. However, the number of farm workers in statistical locations with average wage of R6000/yr or less will be the same as in the base scenario (84,14%).

Scenarios 2 and 3 will move all farm workers from the lower wage category (6000/yr) to the next wage category.

Scenario 2 ensures a minimum average wage of R8000/yr (R667/month). This will also result in no farm worker earning a wage less than R8000/yr and 98,15% of all farm workers earning a wage of between R8000/yr and R12000/yr. The proportion of

 farm workers earning an average wage of more than R12000/yr will be the same as in the base scenario (1,85%).

Scenario 3 will have the same distribution as scenario 2. However, scenario 3 will ensure a minimum average wage of R12000/yr.

7 Implications of minimum wage scenarios-macro-simulation results

In this section, the macro-simulation results of the effects of minimum wage scenarios on employment, output, price and disposable income are discussed.

The imposition of a minimum wage in agriculture has marginal effects on the agricultural sector, other sectors and the economy as a whole.

7.1 Minimum Wage Scenarios and Employment

Setting a minimum wage in agriculture over and above the current level can have implications for both agricultural employment and total employment.

As indicated, the minimum wage scenarios can lead to a reduction in agricultural employment. The higher the level of the minimum wage, the larger the effects on agricultural employment. Providing a minimum wage of R500/month (scenario 1) will result in a decline in agricultural employment of 8.6%. This could translate into job losses of 70747. Raising the minimum wage to R1 000/month (Scenario 3) could cause a decline of 17.6% in agricultural employment.

Agricultural wage adjustments can also lead to a slight decrease in total economic employment. Total economic employment will decrease by 1.2% and 2.4% if a minimum wage of R500/month (scenario1) and R1000/month (scenario 3) respectively are set for the agricultural sector.

Although the minimum wage scenarios can lead to job shedding in the agricultural sector as well as the total economy, in terms of the model it can result in an increase in employment in the manufacturing sector. For example, under Scenario 3, employment in the manufacturing sector can increase by 2,37%. These can be explained by the substitution of capital for labour. The increase in the minimum wage can lead to an increase in labour cost relative to capital cost. This may result in an increase in the demand for capital. Such capital is acquired from the manufacturing sector and thus can lead to an increase in employment in the manufacturing sector.

Although the minimum wage scenarios can lead to increases in manufacturing employment, these increases does not compensate for decreases in employment in agriculture and other sectors³ of the economy thus leading to a general decline in total economic employment.

³ Apart from manufacturing and agriculture, other sectors of the economy are included in the model. The macro-simulation indicates very marginal declines in employment of some sub-sectors of the economy. These marginal declines add up to give a general decline in total employment. Only the significant results of the macro-simulation have been reported in this report.

The minimum wage scenarios can have larger impacts in future years. For example, with scenario 3, about 1,2% of total employment can be lost in 2001 as opposed to total employment losses of 1,53% in 2004. Agricultural employment on the other hand, can decline at a constant rate over time.

7.2 Minimum Wage Scenarios and Output

The model indicates that the minimum wage scenarios may not have any significant impacts on agricultural output. One would have expected that employment declines will negatively affect agricultural output. The absence of impacts can, however, be attributed to the fact that the wage adjustments may lead to an increase in labour productivity which could have compensated for the potential losses in output from the reduction of the labour force.

The minimum wage scenarios, however, may impact marginally on total economic output. Total output will increase by 0,01% across all the wage scenarios. This could translate into R53,7 million. Economic output is not very sensitive to the different minimum wage levels. In other words there are no significant differences in impacts of wage scenarios on total economic output.

7.3 Minimum Wage Scenarios and Disposable Income of Households

Current income of households may increase by more than 0,7% with the wage scenarios. It could increase by 0,87% if the minimum wage in agriculture is set at a Rl000/month. This may translate into an increase of about R3,2billion in households' disposable income. The degree of impacts of minimum wage scenarios on income and expenditure declines at a small rate over time.

7.4 Minimum Wage Scenarios and Prices

The model indicates that the minimum wage scenarios will have no significant impacts on the price level in the agricultural sector and the economy. This is probably because the agricultural sector is very small compared to the total economy. Agricultural employment is only 11% of total employment and agricultural wages only account for 2,2% of total economic remuneration.

8. Summary and conclusions

This report has shown the declining trend of agricultural labour. It has further shown that agricultural labour is lowly paid compared to other sectors in the economy. Although agricultural wage rate grew at a faster rate than many sectors of the economy, the gap between the wage rate in agriculture and other sectors continue to increase. Agricultural wage on the other hand is important for rural households, as it constitutes on average 39% of rural incomes.

This study has, however, shown that wage increases could have a detrimental effect on employment. The wage elasticity of labour is estimated at —0,10. This implies that a 1% increase in the average agricultural wage rate will lead to a 0,1% decline in agricultural employment.

The macro-simulation results indicate that providing a minimum wage of R500/month may lead to 8,6% decline in agricultural employment. This would translate into job

losses of 70747. The higher the minimum wage, the higher the disemployment effects. Increasing the minimum wage in agriculture could also translate into a general decline in total economic employment. The analysis has indicated that providing a minimum wage of R500/month could lead to a 1,2% decline in total economic employment.

The imposition of a minimum wage in agriculture could have some indirect positive effects in the economy. This study has shown that the wage scenarios may lead to greater economic output and an increase in disposable income of households. Total economic output and household incomes may increase by R53,7 million and R2,57 billion respectively if a minimum wage of R500/month is imposed. Increasing agricultural minimum wage above its current levels may also have a positive effect on employment in the manufacturing sector. Employment in manufacturing sector may increase by 1,95% if a minimum wage of R500/month is imposed.

The higher the minimum wage, the higher the effects on employment and household incomes. Economic output, however, is not sensitive to changes in the minimum wage.

PART III

Minimum wages

CHAPTER Twelve

The case for a minimum wage in South African agriculture

1. Introduction

Only half of South Africa's potential labour force is able to find employment in the formal economy. Women, the less skilled and those who live in rural areas are more likely to be poor, and less likely to find formal sector employment. In this regard, the farm labour force sits at the junction between the formal and informal economies. Farm workers earn more than those engaged in informal activities in urban and non-urban areas, yet they earn less than any other workers in the formal economy do.

Among farm workers there are also more vulnerable groups. Our research has highlighted the precarious position of women. Many women work on farms alongside their partners, yet never share the benefits of full-time employers such as unemployment insurance, provident funds, etc. If for some reason her partner leaves the employ of the farmer through dismissal, retrenchment, retirement, etc. she often also loses her right to accommodation on the farm even if she has worked there for many years.

The theoretical literature on minimum wages is not helpful. There is much ambiguity around the actual effects of a minimum wage, to the extent that almost any optimistic or pessimistic view on the benefits or costs of a minimum wage can (and has been) justified in theory. In the same manner, the empirical literature is riddled with qualifications regarding the validity of the data, etc. rendering most of the results from empirical studies inconclusive.

There is only one honest way to pose the question: why should there be a minimum wage in South African agriculture? The honest answer relates to the precarious position of farm workers in this country. The evidence shows that the agricultural sector should be able to carry these wages, and because the political will exists to introduce the minimum wage exists.

The first two components of this answer have been analysed extensively in this report, and will be revisited briefly below after the following section, where the aims of a minimum wage are discussed.

2. Aims of a minimum wage in agriculture

The theoretical justification for a minimum wage has shifted over time. Earlier, it was justified in terms of its use as an instrument to achieve greater productivity and greater stability in the labour market. However, later other aims, such as the alleviation of poverty, were added. In the South African context, a minimum wage should not be seen in isolation from other measures to improve basic conditions of employment, not least because these issues are covered by the same legislation. Thus, there are a number of (potentially conflicting) aims that can be pursued through the use of these instruments:

- the purpose could be to improve the conditions of employment on average for all farm workers, on the supposition that conditions are so bad that such a course is justified. Our analysis has shown that the conditions of employment of farm workers are in some respects acceptable in a modern society, but that they leave much to be desired in other, important, respects. Our analysis has also shown that a minimum wage may not be the best instrument to reach this goal, and that existing labour legislation is virtually unenforced
- the purpose could be to reduce inequality between agriculture and the rest of the economy. Our analysis has shown that farm worker wages lag far behind the rest of the formal sector, even though their real growth has been above average since 1970. Raising farm wages to levels commensurate with the urban economy could lead to adverse consequences for farmers and farm workers alike. Historically, many countries have experienced such a rural-urban wage differential. In addition, basic conditions of employment have been negotiated for the agricultural sector because of the peculiarities of its production process. While these will now be promulgated under the same legislation as holds for the rest of the country, the actual conditions can justifiably remain geared to the needs of employees and employers in the sector
- the minimum wage and basic conditions of employment could be used as part of a rural development strategy generally, or as a particular part of an agricultural growth strategy. In either of these cases the argument would be that an increased wage bill in agriculture would increase the purchasing power of rural consumers. However, this is contingent on the employment effects of the minimum wage. Thus, a minimum wage that is set at levels that are too high, could lead to a reduction in the size of the wage bill
- finally, the purpose could be to reduce inequality within the agricultural sector. In this respect, our analysis has shown that wage differences between farms are often more the result of the enterprise mix on farms than of any other factor. Thus, the labour market differs significantly between horticulture and extensive livestock farming. Nevertheless, large wage differentials are found in relatively small geographic areas, and even on individual farms.

The analysis presented in this report leads to the conclusion that:

- the primary goal of a minimum wage should be to address inequalities within the agricultural sector
- to this end, the minimum wage has to be accompanied by enforcement of basic conditions of employment, including programmes such as UIF and other measures, to protect the interests of women, who consistently earn less than men, and who are less likely to be employed as permanent workers
- the introduction of a minimum wage and basic conditions of employment could contribute significantly to a rural development strategy to the extent that other programmes aimed at rural upliftment accompany their introduction.

Such other programmes include:

 the revised land reform programme of the Departments of Land Affairs and the National Department of Agriculture. Dissatisfaction with the pace of implementation has resulted in a redesigned system of grants. The new proposals aim to provide a more flexible, demand driven and decentralised programme, and to better accommodate the needs of new commercial farmers. Implementation, including the approval of grants, is to take place at the local rather than the national level

- local economic development initiatives as part of the integrated development planning responsibilities of the newly-constituted municipalities in the third sphere of government in South Africa
- small business support programmes, largely the responsibility of the Centre
 for Small Business Promotion of the Department of Trade and industry. The
 key agencies are Khula, which provides financial services to small businesses,
 Ntsika, which plays an active role in support of small business development,
 and a network of small business support centres throughout the country
- programmes to ensure access to rural financial services for small and emerging commercial activities throughout the agricultural supply chain. The key institution in this regard is the refocused Land Bank. Instruments such as the Step-up programme, the envisaged 'Land Bank Social Discount Product' and conventional Land Bank participation in the financing of farmers, cooperatives, etc
- the refocusing of the Agricultural Research Council and the repositioning of institutions of higher education to better reflect the technology development needs of the country. This includes special research funding programmes of the Department of Trade and Industry (the THRIP programme) aimed at technology development, and of the National Research Foundation, that further the broader development objectives of South Africa. It also includes financial assistance to students of viticulture and oenology at college, undergraduate and post-graduate level
- the creation of the National Agricultural Marketing Council, which has been charged with the task, among others, of facilitating access to market opportunities for new entrants in the farming sector
- the export promotion programmes of the Department of Trade and Industry, partly administered by the Industrial Development Corporation. This includes financial assistance for export market development (e.g. financial support to visit potential markets and to design and produce promotional material, etc.) and project finance at concessionary terms for the expansion of exportable production from the IDC
- various national and provincial level initiatives to promote foreign and domestic tourism
- the new Water Act and especially the provisions made therein for preferential access to irrigation water for small farmers
- health policies, which are aimed at redressing the imbalance between preventative and curative health services delivery and improving access to health services, especially for the rural poor
- social policies, including welfare, housing, youth, gender, recreation etc. policies.

Finally, the question has to be asked whether a minimum wage, accompanied by basic conditions of employment, is the best instrument for achieving these goals. Our research has shown that economists have traditionally favoured lump-sum transfers as

and the desire of the

the most efficient form of subsidisation. Thus income grants are, for example, more preferred than a minimum wage. In the real world, however, those responsible for the plight of farm workers in South Africa have no authority to provide income grants. Further, the minimum wage is expedient, as the mechanisms for its implementation are already in place.

3. The minimum wage: a matter of principle?

Our research leads to the conclusion that it would be incorrect to measure the impact of a minimum wage against specific poverty levels, whether they are some absolute measure of poverty or a relative measure, as is often done in such policy processes. Farm workers are the poorest of all formally employed South African workers. A minimum wage that sets out to lift all of them out of poverty will in all likelihood increase the disparities among farm workers, and between farm workers and other rural people. Yet our research has shown that there is common ground among employers and employees on what constitutes a fair minimum wage.

A further question that needs to be addressed is whether the agricultural sector can absorb the effects of a minimum wage. It is evident that there is little realistic chance that consensus will be obtained on this issue. Farm workers questioned during the course of our field research pointed to their contribution to the profitability of the farm as justification for a minimum wage. However, this was a secondary justification: their primary argument focussed on their own needs. Further, while farm owners and farm workers did not differ significantly in their opinion of the level of a fair minimum wage, farm owners were generally reluctant to even consider the question lest they provide legitimacy to the issue.

For this reason our analysis of the profitability of the agricultural sector provides important pointers. There is little doubt that, when looked at from a long-term perspective, the agricultural sector is healthier now in the post-deregulation era than before. This is partly because of the need to become competitive as domestic support was taken away from farmers, and partly because of the opening up of international opportunities in the post-sanctions era.

Yet, two points of concern have to be raised:

- any process of change such as that engendered by the economic and political liberalisation of South African agriculture creates winners and losers even though the net effects are positive. Those made worse off by the policy shifts of the past decade are more vulnerable to pressure from new changes in policy, such as would be the case with a minimum wage
- the success of a minimum wage is more dependent on the future health of the agricultural sector than on its past performance. In this respect, there can be no single future scenario, not least because the sector is not homogeneous. Nevertheless, our analysis shows that there is every reason to believe that the agricultural sector will continue with its secular decline (i.e. it will grow, but at a slower pace than the economy as a whole) and that it will continue to shed labour in that process. Our analysis also shows that, despite some weakening in

short term indicators of farm profitability, the long run prognosis for the sector is positive.

However some adverse consequences must be anticipated. These include job losses, especially among more vulnerable groups such as women; a more marked shift to the use of seasonal workers, workers who live off farm, and to contract labour; and greater use of (illegal) foreign workers.

The minimum wage: a matter of practice?

Probably the most important issue here is whether a single minimum wage can be set for the whole of the agricultural sector. While a more rigid instrument, a single minimum wage is easier to implement, and will place less of a burden on implementation structures. Yet it is obvious that a single minimum wage for agriculture would have to be set so low in order to accommodate the interests of workers in the extensive livestock sector as to be meaningless; or alternatively so high to accommodate the needs of workers on fruit and wine farms, that the rest of the sector will not be able to pay such wages. Thus a four-tier structure of minimum wages is proposed below. The argument starts with the data in Table 35, which are summarised from the data presented...

Each magisterial district was ranked according to three measures of human capabilities, namely the proportion of people earning a cash wage of less than R200 per month, the average number of school years passed by farm workers in that district, and the index of household services calculated earlier (see Table 9). A composite rank was then calculated from these three separate indicators, and districts were grouped into four roughly equal-sized groups in terms of the number of districts.

Table 36 also shows the average wage paid in each group of districts. The figure in brackets is the 1996 wage inflated to 2001 values, with 20% added to reflect payments in kind and benefits90. The last column shows the number of workers in each group. The results are interesting, as human capabilities are explicitly taken into account in the ranking of the districts. However, this grouping was found to be less than optimal, because:

- marketing deregulation since 1997 has changed the calculus in many areas (e.g. parts of the Western Cape and North West provinces that have become marginal for wheat and maize production respectively)
- it is evident from the original spread of districts that areas where the farm labour force consists predominantly of African workers score lower on the household services and education indices than wage conditions lead one to predict
- some districts in the former homeland areas (Keiskammashoek, Thabamoopo, Thoyohandou) score high because of the state-funded agricultural projects in

⁹⁰ As usual these data must be treated circumspectly. Respondents in the 1996 Census were asked how much they earned. Some included payments-in-kind, while many included cash wages only. Thus, these averages could be overstated. However, the 1.48% average annual real growth in wages was left out here, which could mean that these wages are underestimated.

the former homeland areas, where supposed small farmers are paid civil service salaries

• there is considerable intra-district variation.

For this reason the districts were regrouped to give more weight to current wages, while maintaining the influence of the ranking system. magisterial districts in Group 1, 2 and 3 whose average cash wage was more than about 10% lower than the average cash wage for that group were reclassified into Group 2, 3 or 4 respectively, while magisterial districts in Group 2, 3 or 4 whose average cash wage was more than about 10% higher than the average cash wage for the relevant Group were reclassified into Group 1, 2 or 3 respectively. The cut-off point between Groups 1 and 2 was taken as R550, between Groups 2 and 3 as R400, and between Groups 3 and 4 as R350. The new Groups are shown in **Table 37**.

Other matters in relation to the minimum wage that have to be accounted for include special measures to accommodate small businesses and new entrants to farming, special measures for the youth, special provision for seasonal as opposed to permanent workers, the manner in which exceptions will be dealt with, and enforcement measures.

Table 36: Ranking of Magisterial Districts by human capabilities

Table	36: Ranking of Magisterial Districts by human capabilities		Number of
Group	Magisterial Districts	Wage	Workers
4	Beaufort West, Bellville, Boksburg, Brakpan, Bredasdorp, Butterworth, Caledon,	583.14	203595
1	Calitzdorp, Calvinia, Cape, Ceres, Chatsworth, Clanwilliam, Cradock, Cullinan, Durban,		
	Fort Beaufort, George, Goodwood, Gordonia, Graaff-Reinet, Hankey, Heidelberg,		
	Hermanus, Hopefield, Humansdorp, Inanda, Joubertina, Kempton Park, Kenhardt,		
	Knysna, Krugersdorp, Kuilsrivier, Ladismith, Laingsburg, Lions River, Malmesbury,		
	Mapulaneng, Mdantsane, Middelburg, Middeldrift, Montagu, Moorreesburg, Molteno,		1
*	Mossel Bay, Murraysburg, Namakwaland, Nongoma, Oudtshoorn, Paarl, Peddie,	9 N	
	Pietermaritzburg, Piketberg, Pinetown, Port Elizabeth, Pretoria, Prieska, Prince Albert	5 m 2	
	Randburg, Randfontein, Riversdal, Roodepoort, Robertson, Simdlangentsha	9.0	İ
	Simonstown Somerset West, Soweto, Stellenbosch, Steynsburg, Steytlerville, Strand	200 99	
	Sutherland, Swellendam, Tarka, Tulbagh, Uitenhage, Umlazi, Uniondale, Var	2,0	E- 80
	Rhynsdorp, Viljoenskroon, Vredenburg, Vredendal, Wellington, Williston	1 10	
*	Wonderboom, Worcester, Wynberg, Zastron		
. 	Aberdeen, Adelaide, Albert, Alberton, Alexandria, Benoni, Bloemfontein, Bothaville	468.77	149557
2	Botshabelo, Brits, Britstown, Bronkhorstspruit, Bultfontein, Cala, Camperdown	58 20	1
	Carnarvon, Cofimvaba, Dannhauser, De Aar, Delmas, East London, Edenburg		
	Fraserburg, Ga-Rankuwa, Groblersdal, Hay, Heidelberg, Hewu, Hoëveldrif, Hofmeyer	,	
	Honetown Impendle, Jansenville, Johannesburg, Keiskammahoek, Kentani, Kirkwood	,	
× ,	Lady Frere Lady Grey, Libode, Lower Tugela, Lower Umfolozi, Lusikisiki, Mankwe	,	
	Mbibana Mdutiana Mhlabathini, Mitchells Plain, Mkobola, Mqanduli, Mooi River	,	1
	Nelspruit New Hanover, Ngamakwe, Parys, Pearston, Philipstown, Pietersburg, Pilgrim	5	
	Rest Port Shepstone, Potchefstroom, Potgietersrus, Qumbu, Richmond, Richmond	,	
	Sasolburg Seshego, Somerset East, Soshanguve, Springs, Sterkstroom, Temba	,	1
1	Thebamoone Umbumbulu Umtata, Umyoti, Umzimkulu, Umzinto, Vanderbijipark	,	
	Vereeniging, Vredefort, Warmbad, Waterval Boven, Westonaria, Willowmore	,	
	Willowyale Witrivier Wodehouse, Zwelitsha		
3	Albany Alfred, Amersfoort, Babanango, Balfour, Bedford, Bergville, Bethlehem	, 382.97	154756
•	Bethulie Bizana Brandfort, Carolina, Christiana, Colesberg, Delareyville, Dewetsdorp	,	
	Dundee Dzanani Ferstehoek, Engcobo, Eshowe, Fauresmith, Flagstaff, Germiston	,	
	Glencoe Hanover Hartswater, Heilbron, Hennenman, Herbert, Hoopstad, Jacobsdal	,	
	Jagersfontein Kimberley King William's Town, Koffiefontein, Koppies, Kranskop	,	
	Kroonstad Kuruman Kwamhlanga, Ladybrand, Letaba, Lichtenburg, Malamulela	,	
	Manumulo Messina Middelburg, Mmabatho, Mokerong, Moretele, Mount Free	,	1
	Mhala Mpofii Mthonianeni Mtunzini, Namakgale, Nebo, Nigel, Noupoort, Nsikazi	,	
	Odendealerus Petrushurg Phalaborwa Philippolis, Postmasburg, Queenstown	,	1
	Reddersburg Rustenburg Smithfield, Soutpansberg, Tabankulu, Thaba Nchu	ι,	
	Thehazimbi Thohovandou Trompsburg, Tsolo, Ubombo, Ventersdorp, Ventersdorp,	١,	1
	Victoria West, Vryburg, Waterberg, Welkom, Wepener, Wesselsbron, Witbank	5,	
	Witneshook	-	100756
4	Alineal North Barberton Barkley East, Barkley-West, Bathurst, Belfast, Betha	l, 328.77	129756
	Bookum Bolobedu Boshof Cathcart Clocolan, Elliot, Elliotdale, Ellistas, Efficie),	1
	Esteourt Excelsion Ficksburg Fouriesburg Frankfort, Giyani, Harrismun, Hidolse	l,	
	Ulangapani Hubudi Idutywa Indwe Ingwayuma, IXODO, Klerksdorp, Klipityle	,	
<u> </u>	Vomas Kriel Kudumane Lindley Lulekani, Lydenburg, Maclear, Madikwe, Malut	i,	1
	Morgand Mount Avliff Mount Currie Mount Fletcher, Moutse, Msinga, Mulai	1,	
	Ndwedwe Naphuno Newcastle, Ngotshe, Ngqueleni, Nkandia, Nkomazi, Nquu	1,	
l	Ntabathemba Oberholzer, Paulpietersburg, Phokwani, Piet Retier, Poleia, Port St John	5,]	F (2)
	Poitz Ritavi Rouxville Schweizer-Reneke, Sekgosese, Sekhukhuneland, Seneka	1,	1
1	Standerton Sterkspruit, Stutterheim, Theunissen, Tsomo, Underberg, Utrech	ι,	1
	Ventersburg, Victoria East, Virginia, Volksrust, Vrede, Vryheid, Vuwan Wakkerstroom, Warrenton, Weenen, Winburg, Wolmaransstad	1,	
		- 1	• 6.5

Table 37: Ranking of Magisterial Districts by income and human capabilities

Group	Magisterial Districts
1	Alberton, Amersfoort, Balfour, Bellville, Benoni, Bizana, Boksburg, Botshabelo, Brakpan, Bredasdorp, Bronkhorstspruit, Butterworth, Cala, Caledon, Camperdown, Cape, Ceres, Chatsworth, Cofimvaba, Cullinan,
	Dannhauser, Dundee, Durban, Dzanani, Engcobo, Flagstaff, Fort Beaufort, Ga-Rankuwa, George, Germiston,
1	Giyani, Goodwood, Groblersdal, Heidelberg (G), Hermanus, Hewu, Hoëveldrif, Hopefield, Humansdorp,
1	Impendle, Inanda, Ingwavuma, Johannesburg, Keiskammahoek, Kempton Park, Knysna, Krugersdorp,
	Kuilsrivier, Kwamhlanga, Lady Frere, Libode, Lower Tugela, Lusikisiki, Malamulela, Malmesbury, Mankwe,
	Mapulaneng, Mbibana, Mdantsane, Mdutjana, Mhala, Mhlabathini, Middelburg (MP), Middeldrift, Mitchells
1	Plain, Mkobola, Mokerong, Moorreesburg, Mossel Bay, Moutse, Mpofu, Mqanduli, Namakgale, Nebo, Nigel,
	Nongoma, Nqamakwe, Nqutu, Nsikazi, Oudtshoorn, Paarl, Peddie, Pietermaritzburg, Piketberg, Pinetown, Port
1	Elizabeth, Port St Johns, Pretoria, Qumbu, Randburg, Roodepoort, Sekgosese, Seshego, Simdlangentsha,
1	Simonstown, Somerset West, Soshanguve, Soweto, Springs, Stellenbosch, Strand, Tabankulu, Temba,
1	Thabamoopo, Thaba 'Nchu Thohoyandou, Ubombo, Uitenhage, Umbumbulu, Umlazi, Umtata, Umzimkulu
	Umzinto, Vanderbijlpark, Vereeniging, Victoria East, Vredenburg, Vuwani, Warmbad, Wellington, Willowvale
	Witsieshoek, Wonderboom, Wynberg, Zastron, Zwelitsha
2	Aberdeen, Adelaide, Albert, Alfred, Alexandria, Beaufort West, Belfast, Bergville, Bethal, Bethlehem,
	Britstown, Bultfontein, Calitzdorp, Calvinia, Carolina, Christiana, Clanwilliam, Cradock, Delmas, East London,
	Eerstehoek, Elliotdale, Ermelo, Eshowe, Estcourt, Gordonia, Hankey, Heidelberg (WC), Hlanganani, Idutywa,
	Joubertina, Kenhardt, Kriel, Ladismith, Laingsburg, Lions River, Lower Umfolozi, Middelburg (EC),
I	Mapumulo Mmabatho, Molteno, Montagu, Mooi River, Mount Ayliff, Msinga, Mthonjaneni, Mtunzini,
	Murraysburg, Namakwaland, Nkandla, Ntabathemba, Phalaborwa, Phokwani, Prince Albert, Prieska, Port
6	Shepstone, Potchefstroom, Potgietersrus, Randfontein, Ritavi, Riversdal, Robertson, Rustenburg, Sasolburg,
1	Schweizer-Reneke, Sekhukhuneland, Standerton, Sterkstroom, Steynsburg, Sutherland, Swellendam, Tarka,
	Tsolo, Tsomo, Tulbagh, Umvoti, Uniondale, Van Rhynsdorp, Viljoenskroon, Vredendal, Vryburg, Waterval Boven, Williston, Witbank Worcester
3	Aliwal North, Barkley-West, Bloemfontein, Brandfort, Brits, Carnarvon, De Aar, Edenburg, Frankfort,
	Fraserburg, Glencoe, Graaff-Reinet, Hartswater, Hay, Hlabisa, Hofmeyer, Hopetown, Huhudi, Kimberley, King
	William's Town, Kirkwood, Klerksdorp, Koffiefontein, Kranskop, Kuruman, Lady Grey, Lulekani, Maluti,
	Mapumulo, Moretele, Mount Frere, Nelspruit, New Hanover, Ngqueleni, Nkomazi, Oberholzer, Odendaalsrus,
	Parys, Philipstown, Pietersburg, Pilgrims Rest, Queenstown, Reitz, Richmond (KZN) Somerset East,
	Thabazimbi, Underberg, Vryheid, Wakkerstroom, Welkom, Westonaria, Wolmaransstad
4	Albany, Babanango, Barberton, Barkley East, Bathurst, Bedford, Bethulie, Bochum, Bolobedu, Boshof,
	Bothaville, Cathcart, Clocolan, Colesberg, Delareyville, Dewetsdorp, Elliot, Ellisras, Excelsior, Fauresmith,
1	Ficksburg, Fouriesburg, Hanover, Harrismith, Heilbron, Hennenman, Herbert, Hoopstad, Indwe, Ixopo,
1	Jacobsdal, Jagersfontein, Jansenville, Kentani, Kliprivier, Komga, Koppies, Kroonstad, Kudumane, Ladybrand,
	Letaba, Lichtenburg, Lindley, Lydenburg, Maclear, Madikwe, Marquard, Messina, Mount Currie, Mount
	Philippelis Piet Petief Pelela Pertuachura Peldandura Pietusoura (NO) Pertuachura Pendandura Pietusoura (NO) Pertuachura Pendandura Pietusoura (NO) Pertuachura Pendandura Pietusoura (NO) Pertuachura (NO) Pertuachur
	Southansherg Sterkennuit Stertlerville Stutterheim Thomassen Tramphone Viewalt, Smithfield,
	Ventersdorn Venterstad Victoria West Virginia Volksrust Vrede Vredefort Workers West and West Virginia Volksrust Vredefort Workers Virginia Volksrust Vredefort Workers Virginia Volksrust Vredefort Vredefort Virginia Volksrust Virginia Volksrust Vredefort Virginia Volksrust Virginia Virginia Volksrust Virginia Virgini
	Wenener, Wesselsbron, Willowmore, Winburg Witrivier Wodehouse
3	Bothaville, Cathcart, Clocolan, Colesberg, Delareyville, Dewetsdorp, Elliot, Ellisras, Excelsior, Fauresmith, Ficksburg, Fouriesburg, Hanover, Harrismith, Heilbron, Hennenman, Herbert, Hoopstad, Indwe, Ixopo, Jacobsdal, Jagersfontein, Jansenville, Kentani, Kliprivier, Komga, Koppies, Kroonstad, Kudumane, Ladybrand, Letaba, Lichtenburg, Lindley, Lydenburg, Maclear, Madikwe, Marquard, Messina, Mount Currie, Mount Fletcher, Mutali, Ndwedwe, Naphuno, Newcastle, Ngotshe, Noupoort, Paulpietersburg, Pearston, Petrusburg, Philippolis, Piet Retief, Polela, Postmasburg, Reddersburg, Richmond, (NC), Rouxville, Senekal, Smithfield, Soutpansberg, Sterkspruit, Steytlerville, Stutterheim, Theunissen, Trompsburg, Utrecht, Ventersburg, Ventersdorp, Venterstad, Victoria West, Virginia, Volksrust, Vrede, Vredefort, Warrenton, Waterberg, Weenen, Wepener, Wesselsbron, Willowmore, Winburg, Witrivier, Wodehouse

PART III

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RECOMMENDATIONS

Chapter 13

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Recommendations

1. Scope of application

- 1.1. The sectors to which this sectoral determination applies are
 - (a) primary and secondary agriculture
 - (b) mixed farming
 - (c) horticulture,
 - (d) animal products
 - (e) field crops, and
 - (f) aqua farming.
- 1.2. The conditions of the sectoral determination apply to all people who work in the agricultural sector except those who are self-employed. A self-employed person is one who controls the means and manner of his/her work in that he or she:
 - (a) Provides the tools (if any) with which he/she works and
 - (b) Is not supervised in any way and
 - (c) Determines the timing of his/her work and
 - (d) Determines the methods if his/her work.
- 1.2. Any person who only works for a single employer for at least 2 months in one year may not be classified as being self-employed.
- 1.3. Any person who works or supplies personal services on a farm or in the agricultural sector should be regarded as a farm worker unless the work is entirely unsupervised or is supplied to a client or customer of a profession or business undertaking carried on by the individual.
- 1.4. Domestic workers and security guards on farms should be classified as farm workers and would be entitled to the same basic terms and conditions of employment as other farm workers.
- 1.5. Any person who works on a farm, but is covered by another sectoral determination or by a bargaining council agreement, shall have their terms and conditions of employment determined by the other determination or the agreement concerned. For instance, an employee employed in a bed and breakfast establishment on a farm would be covered by the agricultural determination, unless there is a determination or a bargaining council agreement regulating the hospitality sector covering bed and breakfast establishments.
- 1.6. A person who works in the agricultural sector is covered by the sectoral determination regardless of his or her status as:
 - (a) An indefinitely employed full-time employee;
 - (b) A fixed-term full-time employee;
 - (c) An indefinitely employed part-time employee; or
 - (d) A fixed-term part-time employee.

Part-time employees shall be entitled to the minimum wage applicable in their magisterial district, and to all terms and conditions of employment specified in the sectoral determination, on a pro-rata basis as set out in Table 33 above.

2. Minimum wages

- 2.1. The minimum wages to be paid to employees in the agricultural sector, where the Magisterial Districts are grouped as in the Table above, are:
 - (a) R750,00 per month in the magisterial districts in Group 1;
 - (b) R600,00 per month in the magisterial districts in Group 2;
 - (c) R500,00 per month in the magisterial districts in Group 3;
 - (d) R400,00 per month in the magisterial districts in Group 4.
- 2.2. Piece rates may be applied only if the amount paid results in a wage which is not lower than that prescribed. Piece rates may therefore represent a productivity incentive over and above the minimum wage, and not an alternative to it.
- 2.3. The resulting wages are presented in the Table below and compared with current wages. This shows that the current average wage in magisterial districts in Group 1 is R950.00, which is 1/3 above the average for the country, and includes 35.61% of the farm workers in South Africa. The proposed minimum wage for Group 1 is R750.00, or R34.63 per day for workers who are not paid on a monthly basis, and so forth for each of the four groups.

Table 38: Recommended minimum wages

Group	Average Wage (R per Month)	% Of Country Average			Proposed minimum wage (R per Month)	Proposed Daily Wage (R per day)
ī	950,00	134,00	227044	35,61	750	34,63
2	695,00	97,89	164849	25,85	600	27,70
3	588,00	82,82	84955	13,32	500	23,08
4	450,00	63,38	160816	25,22	400	18,48
All	710,00	100,00	637644	100,00		

The Table below provides some further background to these proposed minimum wages. The calculations were based on the 1996 Census, thus the proposed minimum cash payment in 2001 had to be deflated to 1996 (3rd column). The average wage in 1996 for that group of Magisterial Districts before and after the introduction of the minimum wage is presented in the next two columns, while the absolute and percentage increase is provided in the two columns thereafter. It is important to note that this absolute and relative increase in average wages represents the **minimum** expected increase. Farm worker income data were only available in broad income ranges. In all cases only the wages of workers earning from R0-R200 were adjusted. The last column shows how many workers' wages will be affected in each of the Groups. Thus, it is estimated that 10.6% of the workers in Magisterial Districts in

Group 1 are presently being paid at a rate below the proposed minimum wage, while almost half (48.8%) of those in Group 4 earn less than the proposed minimum wage. This table shows the minimum cash wages where the maximum level of deduction has been made for payments in kind (see section 4 below).

Table 39: The implications of the recommended minimum wage

Group	Proposed Cash Minimum Wage	Equivalent 1996 amount	Average Wage (before)	Average Wage (after)	Rincrease	% increase	Minimum % of workers affected
1	600	456,48	609,17	634,93	25,76	4,22	10.6
2	480	365,19	445,54	498,88	53,34	11.97	17.4
3	400	304,32	377,51	460,14	82,63	21.89	32,1
4	320	243,46	287,73	414,48	126,75	44,05	48,8

3. Payment in kind

Most farm workers in South Africa receive a portion of their payment "in kind". The single largest item of payment in kind is most commonly the provision of accommodation (followed by food). However, the quality is highly variable. The sectoral determination therefore needs to define minimum standards for the purposes of determining whether accommodation provided to an employee may be considered to be payment in kind.

In order to build on and improve existing practices, and to prevent the withdrawal of such payments, the sectoral determination needs to define and regulate payment in kind. This should allow for employers to pay a reduced cash wage to employees receiving payments in kind, while setting a minimum cash wage that must be received.

- 3.1. Accommodation or food provided by an employer to an employee should only constitute payment in kind if:
 - a. It is provided by the employer at his or her cost;
 - b. It is provided on a consistent and regular basis as a condition of employment
- 3.2. Payments in kind must be valued on the basis of the cost to the employer of supplying goods and services to employees subject to these restrictions:
 - (a) The total payment in kind may not be deemed to constitute more than 20% of the total wage and
 - (b) The maximum value of payment in kind to an employee who only receives accommodation or food is 10% of the total wage paid; and
 - (c) No additional deduction may be made from the employee's cash wage for a payment in kind.

- 3.3. Housing may be considered to constitute payment in kind only if no rental is charged for the house in which the employee is resident and if it meets the following specifications:
 - (a) A roof which does not leak is in place and
 - (b) Glass windows have been installed and can be opened and
 - (c) Electricity is available inside the house and
 - (d) Water is available on tap inside the house and
 - (e) A flush toilet or pit latrine is available in, or in close proximity to, the house and
 - (f) The size of the house is not less than 54 square meters or 10 square metres per adult resident, whichever is greater.
- 3.4. Supply of accommodation may not be a payment in kind unless the employee is ordinarily resident on the farm.
- 3.5. Where more than one employee occupies a single house, and that house is considered to constitute a form of payment in kind, the value of the use of the house must be deducted from the wages of all adult employees resident therein, on an equally proportionate basis. However an employer may not deduct more than a total of 20% of one employee's wage in respect of the same house.
- 3.6. Housing may not be considered to constitute payment in kind in the case of employees under the age of 18.
- 3.7. The cost of supplying fuel, electricity or water may be included in the cost of accommodation.
- 3.8. Fuel may be considered to be payment in kind, insofar as the employer provides the employees with electricity and/or firewood and/or a flammable liquid fuel. Water provided to an employee may be valued as the average cost of water provision for domestic use by the employee and any dependants of the employee.

4. Sick leave and medical certificates

In many rural areas, access to medical and health services is a difficulty for farm workers that is compounded by lack of independent transport and public transport (or the financial means to use public transport). The requirement that employees produce a medical certificate to claim sick leave therefore poses practical problems.

In some instances, therefore, it may assist farm workers if the law were to expand the range of health practitioners who are authorised to provide such a medical certificate. At present, levels of qualification among traditional healers and community health workers have not been confirmed within the National Qualifications Framework (NQF). The sectoral determination therefore needs to specify that, in addition to the recognised professions of doctors, nurses and psychologists, traditional healers and community health workers may provide medical certificates. It is proposed that:

Employees shall be entitled to sick leave on the terms specified in the BCEA, subject to the provision that medical certificates may be provided by any of the following:

- (a) A medical doctor/general practitioner or
- (b) A clinical nurse practitioner 91 or
- (c) A traditional healer or
- (d) A community health worker or
- (e) A psychologist or
- (f) Any other health practitioner authorised to diagnose a medical condition.

5. Working time

Subject to the comments made below, it is proposed that the provisions in the BCEA should apply to agricultural sector.

5.1. Ordinary hours of work

In terms of section 9(1) of the BCEA, the normal maximum ordinary working week (i.e. excluding overtime) for an employee is 45 hours in a week. In terms of item 5 of Schedule 3 to the BCEA, for a period 12 months after its commencement the ordinary maximum hours of farm workers were 48 hours.

Section 55(6)(c) provides that a sectoral determination may not reduce the protection afforded to employees by section 9. Accordingly, it is not possible for a sectoral determination to permit an ordinary working week in excess of 45 hours.

Certain aspects of minimum standards in agriculture are still regulated by the Basic Conditions of Employment Act 3 of 1983. These provisions are section 6A (extension of working hours), section 10(2A) (pay for work on Sundays) and section 14(4A) (rights during notice period). These provisions were introduced by the BCEA Amendment Act 104, 1992 with effect from 1 May 1993 following a tripartite negotiation process in the now defunct National Manpower Commission.

⁹¹ As defined in section 38(a) of the Nursing Act, No. 50 of 1978, a clinical nurse practitioner is equipped with clinical curative skills.

Their appropriateness for inclusion in the sectoral determination is considered below. These provisions remain in force until such time as the matters regulated by these provisions are regulated by a sectoral determination applicable to farm workers (item 3 of schedule 3 to the BCEA).

5.2. Extension of working hours for farm workers

Section 6A of the BCEA of 1983 permits a variation of ordinary hours of work to accommodate seasonal fluctuations in the demand of work. Paraphrased, it provides as follows: -

- "1. A worker and an employer may conclude a written agreement to extend the farm worker's ordinary hours of work by not more than four hours per week for a period not exceeding four months in any continuous period of twelve months provided that the ordinary hours of work are reduced by the same number of hours during a period of the same duration in the same period of twelve months.
- 2. The agreement may not extend the farm worker's ordinary daily hours of work to more than ten hours on a day.
- 5. The employer must pay the farm worker during any period of extended or reduced hours of work, the wage the farm worker would have received for normal ordinary hours of work.
- 6. If the farm worker's employment terminates for any reason at a time when he or she has worked the extended hours but not the equivalent number of reduced hours in terms of the agreement, the employer must pay the worker for the extended hours worked at the prescribed overtime rate."

This permits an averaging of working hours over a 12-month cycle based on an ordinary working week of 48 hours. It accommodates seasonal fluctuation in the demand for work while at the same time giving the employee a regular income. For the employer, it results in savings on overtime during busy periods such as harvesting.

It is **proposed** that the above provisions should be retained but adjusted to operate on a 45-hour week. An extension of five hours per week should be permitted. This would allow for an ordinary working week of 50 hours during peak seasons.

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5.3. Work on Sundays

Section 10(2A) of the BCEA, paraphrased, provides as follows: -

"1. The employer of a farm worker who is required to perform work on a Sunday in the ordinary course of events must pay the worker an amount calculated in accordance with the following table:

Time worked on a Sunday	Payment
Less than I hour	Double the ordinary wage for one hour
Longer than I hour but less than 2 hours	Double the ordinary wage for time actually worked
Longer than 2 hours but less than 5 hours	The employee's ordinary daily wage plus a ordinary working day off in the following week without remuneration
Longer than 5 hours	The greater of double the wage payable in respect of time worked (excluding overtime) or double the ordinary daily wage plus a ordinary working day off without remuneration in the following week".

This provision was introduced to deal with forms of agricultural work in which employees are required to work for a short period on each day of the week such as milking cows, setting irrigation equipment etc. It represents an exception to the rule reflected in section 16(2) of the BCEA of 1997 that an employee who works on a Sunday (no matter how short the period) is entitled to at least a full day's pay. It is **proposed** that this provision be incorporated into the sectoral determination.

5.4. Night work

Section 17 of the BCEA, 1997 introduced protections for employees who perform night work. Sections 17(3) – (5) contain provisions that have particular relevance to the protection of the health and safety of employees who regularly perform shifts at night. These provisions require employers to inform employees of the health and safety hazards associated with their work and give the employees a right to a medical examination concerning these hazards. In terms of the BCEA, these protection apply to employees who work for a period of longer than one hour after 23h00 and before 06h00 at least five times a month or fifty times per year.

Item 3(2) of the transitional provisions to the BCEA varies this provision by providing that, until there is a sectoral determination for agriculture, the protection in section 17(3) only applies to farm workers who work after 20h00 and before 04h00 at least 5 times per month or 50 times per year. The reason for this provision was that it

was considered inappropriate to apply the protections in section 17(3) to employee's who might start work extremely early to perform functions such as milking cows etc but who do not work night shift.

It is proposed that this provision be retained in the sectoral determination.

5.5. General considerations

In drafting the sectoral determination, it must be borne in mind that certain provisions in the BCEA are phrased in general terms and their interpretation can give rise to some uncertainties. Where appropriate, the sectoral determination should seek to clarify the circumstances in which agricultural employees are entitled to these benefits.

It is proposed that this be done in respect of the definition of emergency work in terms of section 6(2) of the Act and the circumstances under which employees can be required or permitted to work during their meal intervals (section 14(2) of the Act).

5.6. Termination of employment

The general rules applicable to termination of employment in the BCEA should apply to the agricultural sector. In particular, this would require that a contract of employment terminable at the instance of a party to a contract may be terminated on notice of not less than: —

- (a) one week, during the first four weeks of employment of farm workers;
- (b) four weeks thereafter.

Presently section 14(4A) of the BCEA, 1983 provides rights in respect of accommodation, crops and cattle for farm workers whose services have been terminated. It states that the farm worker shall be entitled:

- (i) To the accommodation for the period to which he (sic) would have been entitled under his contract of employment if the contract of employment had been terminated with the required notice or for a period of 30 days from the date on which the contract of employment was terminate, whichever period is the longer;
- (ii) To his(sic) livestock being kept on the land of the employer for the period stipulated in his contract of employment or for 30 days from the date on which the said contract was terminated, whichever period is the longer;
- (iii) To tend to his (sic) standing crop on such land, which forms part of his remuneration, and harvest and remove it within reasonable time after it has become ready for harvesting unless the employer pays the farm worker for such crop the amount they have agreed upon

Three proposals are made in respect of termination of employment.

Firstly, it is proposed that the rights in respect of accommodation during periods of notice should be the same as other workers in terms of section 39 of the BCEA.

Secondly, it is proposed that the provisions currently included in section 14(4A) of the BCEA of 1983 giving employees rights in respect of cattle and crops should be retained in an appropriate form in the sectoral determination.

Thirdly, it is proposed that the sectoral determination should specifically state that the provisions related to termination do not affect the right of a dismissed farm worker to dispute the lawfulness of an eviction or any other action taken in terms of the Extension of Security of Tenure Act (ESTA).

5.7. Small businesses and new enterprises

While the research did not look specifically at the impact of minimum wages on small businesses and micro-enterprises, there was an assumption that a significant number of agricultural employees are working on small farms. In particular, the position of small farmers (farmers on communal lands in the former homeland areas, and beneficiaries of the land reform programme) needs to be accounted for.

Thus, it is proposed that the minimum wage should not apply to all employers who employ five or less employees at any time of the year. However, all employers should comply with the basic conditions of employment recommended here, regardless of how many people they employ.

In practice this will mean that virtually all of the small farmers, whether on communal lands or under the land reform programme, will be exempt from paying minimum wages. At the same time new entrants who are start on a small scale will also be exempt in practice.

5.8. Special measures for vulnerable groups

Our research has shown that women, the youth and foreign workers constitute the most vulnerable groups among the farm labour force. Yet it is not easy to protect their interests through the provisions of labour legislation in the absence of effective enforcement mechanisms., The following is recommended:

- special steps should be taken to enforce the prohibition of child labour on farms, and that special conditions of employment be set for the youth (those less than 18 years old, and more than 14). These should at least include a ban on night work (including the herding of livestock); a 35 hour work week; and a prohibition on working with agro-chemicals, even if the prescribed protective clothing, etc. is available
- that a premium be included in the minimum wage paid to seasonal and temporary workers who are paid a daily rate. These have been included in the calculations in Table 37 above. Such a measure is expected to favour women workers

5.9. Exceptions and time period before implementation

Our recommendations cover a minimum wage for each of four groups of Magisterial Districts in the country. However, we are aware that conditions can vary greatly within a Magisterial District. Therefore, we recommend that:

a six-month period should be allowed between the time of promulgation of
these recommendations and their coming into force. During this time appeals
should be made to the Employment Conditions Commission to regroup
Districts where there is sufficient evidence that this is justified in terms of the
criteria used to make these recommendations (i.e. where conditions are so
skewly distributed that the averages distort the true case)

In addition, any farmer can utilise the variation provisions spelt out in Section 50 of the BCEA. In terms of these provisions, an individual farmer or group of farmers who can prove hardship, can be given a variation for a defined period.

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5.10. Enforcement

Our field research has shown that existing labour legislation is rarely enforced on farms in South Africa. Enforcement is more likely to occur in those rare cases where workers are unionised. Due particularly to the geographical distance that separates farms from each other and urban centres, conventional mechanisms provided in labour legislation are very difficult to apply.

In this respect there are at least four current initiatives that could serve the same purpose, but without placing too large a burden on the thinly stretched resources of the State. These include:

- voluntary efforts between employers and employees to create a code of conduct for a specified group of employers (farmers). Such Codes are being discussed at the level of the Provincial Agricultural Unions, and are supported by AgriSA
- proposals to use access to State support institutions as a lever to reward farmers
 for following fair labour practices. The proposed Social Product of the Land
 Bank falls into this category, and has the added advantage of providing rewards
 for responsible labour management rather than the conventional reliance on
 penalties only
- industry agreements to support fair labour standards in excess of those required by the State. A case in point is the recent adoption of the Winetech Vision 2020 empowerment strategy that commits the industry to bettering these standards, for example by adopting a minimum wage in excess of the prescribed wage
- external interventions such as those that fall under the heading of fair trade or ethical trade practices, where foreign buyers prescribe, among others, fair labour standards from those whose produce they buy

The Minister of Labour has recently launched an initiative together with major national employer organisations and trade unions entitled: "Vision for Agricultural Relations". It sets out a commonly agreed vision for labour relations on farms as well

as implementation steps. This initiative can also assist in respect of improving enforcement.

It is proposed that the Department of Labour at a national, provincial and local level should liase with all relevant parties to such above mentioned agreements in order to find synergies in the enforcement of agreed conditions of employment. This should include participation as neutral experts in deliberations where the parties request their participation. In taking this initiative the Department should encourage all parties to make special provision for the position of women as independent labourers in their own right.

5.11. Supply of farm workers by third parties

There is an increasing trend towards "outsourcing" in terms of which third parties supply farmers with their labour requirements. Farm workers supplied by these agencies are a vulnerable group within farm workers and often face particular difficulties in enforcing their rights.

The determination should define and regulate two types of agencies that supply farm workers to farmers. The first of these is "employment services" or "labour contracting". This is a person who conducts a business of providing to a client other persons to render services or work and who remunerate those persons. (This category is referred to in the Labour Relations Act and Basic Conditions of Employment Act as "temporary employment services", although its scope is not confined to persons who provide temporary employees.)

The employment service and the client are jointly and severally liable to comply with the relevant labour legislation. Thus, where the employment service does not pay the workers concerned, the client becomes liable for that obligation. This has resulted in farmers using the services of reliable employment services that comply with the legal obligation in the law. It is proposed that the determination should provide that if the employment service is in default of its obligations to remunerate the workers for a period of thirty days, the client concerned becomes liable to make the payment.

The second category of agencies that supply labour are what are termed "labour brokers". They differ from employment services in that, while they conduct a business of providing workers to employers, they do not remunerate employees and thus are not employers. In this case, the client is the employer and pays remuneration to the workers concerned. This category of labour supply is not regulated by either the Labour Relations Act or the Basic Conditions of Employment Act. It is proposed that the sectoral determination should regulate it and that the joint and several liability should apply between the employer and the labour broker. This would prevent labour brokering from being used as a device to avoid compliance with the law.

Bibliography

- Abowd, John M, Francis Kramarz and David N Margolis, 1999. 'Minimum wages and employment in France and the United States'. NBER Working Paper 6996. Cambridge, MA National Bureau of Economic Research.
- Acemoglu, Daron and Jörn-Steffen Pischke, 1999. 'Minimum wages and on-the-job training.' NBER Working Papers 7184. Cambridge, MA, National Bureau of Economic Research.
- Azam, J-P, 1997. 'Efficiency Wage and the Family: An Explanation for the Impact of the Agricultural Minimum Wage in Morocco.' Kyklos; 50(3): 369-82.
- Barbash, J, 1976. 'The Legal Foundations of Capitalism and the Labor Problem'. Journal of Economic Issues 10(4): 799-810.
- Barbash, J, 1989. 'John R. Commons: Pioneer of Labor Economics'. Monthly Labor Review 112(5): 44-49
- Beukes, E.P (1989). 'Theories of economic development an overview and some implications'. In J.K. Coetzee (Ed.), Development is for People. Johannesburg, Southern Book Publishers p225.
- Boltvinik, J, (1999). Poverty Measurement Methods An Overview. SEPED Series on Poverty Reduction. New York: UNDP.
- Card, D and AB Krueger, 1994. 'Minimum wages and employment: a case study of the fast food industry in New Jersey and Pennsylvania.' American Economic Review 48(4).
- Cubitt, RP and SPH Heap, 1999. 'Minimum wage legislation, investment and human capital'. Scottish Journal of Political Economy, 46(2): 135-57.
- Centre for Rural Legal Studies (2001): Briefing Paper on Labour Contracting in Agriculture.
- CRLS; Stellenbosch and Centre for Rural Legal Studies (2001): Research Report on Labour Contracting in the Western Cape; CRLS; forthcoming.
- Development Southern Africa (Van Zyl and Groenewald, Vol. 5 No 1; and Sartorius von Bach and van Zyl, Vol 8 No 3).
- Dickens, R, S Machin, A Manning, D Metcalf, J Wadsworth and S Woodland, 1995. 'The Effect of Minimum Wages on UK Agriculture'. *Journal of Agricultural Economics* 46(1): 1-19.

Dickens R, S Machin and A Manning, 1999. 'The Effects of Minimum Wages on Employment: Theory and Evidence from Britain'. *Journal of Labor Economics* 17(1): 1-22.

Glover, J (1995). 'The research programme of development ethics'. <u>In</u> Nussbaum, M and J Glover (Eds.), *Women, culture and development. A study of human capabilities.* Oxford: Claredon Press.

Gore, C (1993). 'Entitlement analysis and 'unruly' social practices: a comment on the work of Amartya Sen. Journal of Development Studies, 29(3): 429-460.

Gill, SRS and VK Lohumi, 1997. 'Administration of Minimum Wages in Agriculture: An Appraisal.' *Indian Journal of Labour Economics*, 40(4): 759-69.

Goulet, D (1995). Participation in development: new avenues. In VK Pillai and LW Shannon (Eds.) Developing areas: a book of readings and research. Oxford, Berg Publishers.

Gowers, R and TJ Hatton, 1994. The Origins and Early Impact of the Minimum Wage in Agriculture. Centre for Economic Policy Research, Discussion Paper: 1021.

Harris, JP and MP Todaro, 1970. 'Migration, unemployment and development: a two-sector analysis.' American Economic Review 60(1).

Herren, RS, 1996. 'The Council of Economic Advisers: Selected Issues in Labor Economics'. *Journal of Economics*, 22(2): 49-55.

Hettne, B (1995). Development theory and the Three Worlds. Essex, UK: Longman Scientific and Technical.

Johnson, HG, 1969. 'Minimum wage laws: a general equilibrium analysis.' The Canadian Journal of Economics 2(4)).

Kearl, JR, CL Pope, GC Whiting and LT Wimmer, 1979. 'A confusion of economists?' American Economic Review, 69(2): 28-37.

Kebede E and JB Gan, 1999. 'The economic potential of vegetable production for limited resource farmers in south central Alabama.' Journal of Agribusiness, 17(1): 63-75.

Korten, DC (1984). 'People-centred development: towards a framework'. <u>In DC</u> Korten and R Klauss, (Eds.) People centred development: contributions towards theory and planning frameworks. Connecticut, Kumarian Press.

Lal, D, 1995. The minimum wage. UCLA Department of Economics Working Paper No. 723. Los Angeles.

Lang, K and S Kahn, 1998. 'The effect of minimum wage laws on the distribution of employment: theory and evidence'. *Journal of Public Economics* 69(1): 67-82.

Leibbrandt M. and I Woolard (1999). 'A comparison of poverty in South Africa's nine provinces'. Development Southern Africa 16(1): 28-54.

Levin-Waldman, OM, 2001. The case of the minimum wage: competing policy models. New York, SUNY Series in Public Policy for an exposition for the reasons behind this shift in focus.

Lombard, J, 1998. 'The physical-biological environment.' <u>In</u> Spies, PH (Ed.) Agrifutura 1997/8. University of Stellenbosch, Agrifutura Project.

Manning, A, 1994. How do we know that real wages are too high? London School of Economics Centre for Economic Performance Discussion Paper: 195.

Marglin, S (1990). 'Towards the decolonisation of the mind'. <u>In Apffel Marglin, F and S Marglin (Eds.)</u>. *Dominating knowledge: development, culture and resistance*. Oxford, Claredon Press.

May, J, M Carter and D Posel (1995). The composition and persistence of poverty in rural South Africa: an entitlements approach. Policy Paper No 15, Johannesburg: Land and Agriculture Policy Centre.

Machin, S and A Manning, 1994. 'The effects of minimum wages on wage dispersion and employment: evidence from the UK Wage Councils.' *Industrial and Labour Relations Review* 47(2).

McKenzie, Richard B, 1994. Times change: The minimum wage and The New York Times. San Francisco: Pacific Research Institute for Public Policy).

Miles, I (1992). 'Social indicators for real-life economics'. <u>In</u> P. Ekins and M. Max-Neef (Eds.), Real life economics: understanding wealth creation. London, Routledge.

Neumark, David, 1999. 'A cross-national analysis of the effects of minimum wages on youth unemployment'. *NBER Working Paper 7299*. Cambridge, MA National Bureau of Economic Research.

Newman RA; Ortmann GF; Lyne MC, 1997. 'Farm labour remuneration, labour legislation and commercial farmers' perceptions in KwaZulu-Natal.' Agrekon, 36(1): 73-84.

Palda, Filip, 2000. 'Some deadweight losses from the minimum wage: the cases of full and partial compliance'. Labour Economics 7: 751 – 783.

Parthasarathy, G, 1997. 'Minimum Wages within Agriculture: A Review of Indian Experience.' Indian Journal of Labour Economics, 40(4): 731-42.

Partridge, MD and JS Partridge, 1999, 'Do Minimum Wage Hikes Reduce Employment? State-Level Evidence from the Low-Wage Retail Sector'. *Journal of Labor Research*; 20(3): 393-413

- Perloff, JM, 1986. Union and Demographic Wage, Hours and Earnings Differentials in the Agricultural Labor Market. University of California at Berkeley Department of Agricultural and Resource Economics (CUDARE) Working Paper: 387, January 1986.
- P Michel, 1993. 'Minimum Wage, Unemployment and Growth', Actes du colloque international: Analyse économique des bas salaires et des effets du salaire minimum, 30 Sept.- 1 Oct. 1993, Arles, France, pp. 167-199.
- Rama, Martin, 1996. 'The consequences of doubling the minimum wage: the case of Indonesia. World Bank Research Paper, Washington, DC, IBRD.
- Roberts, MA, K Staehr and T Tranaes, 2000. 'Two-stage bargaining with coverage extension in a dual labour market.' European Economic Review, 44(1): 181-200.
- Rodrick, D, 1996. 'Coordination failures and government policy: a model with applications to East Asia and Eastern Europe.' *Journal of International Economics* 40(1-2): 1-22.
- Sachs, W (1992). 'Poor not different'. In P. Ekins and M. Max-Neef, (Eds.) Real Life Economics: Understanding Wealth Creation. London, Routledge p56.
- Sen, A. (1993). 'Poor, relatively speaking'. Oxford Economic Papers 35.
- Sen, A (1986). 'Development: which way now?' In R. Althorpe and A. Krahl (Eds.), Development Studies: Critique and Renewal. Leiden, E.J. Brill. p39.
- Sen, A (1984). Goods and people. <u>In S. Sen (Ed.)</u>, Resources, values and development. Oxford, Basil Blackwell.
- Sen, A (1988). 'The concept of development'. <u>In</u> H Chenery and TN Srinivasan (Eds.) Handbook of Development Economics Volume 1. Amsterdam, North Holland, p15.
- Sen, A (1989).' Development as capability expansion'. Journal of Development Planning 17: 41-58.
- Sen, A (1995). 'Food, economics and entitlements.' In Dreze, J and A Sen, The Political Economy of Hunger Vol. III. Oxford, Claredon Press, p63.
- Stigler, G, 1946. 'The economics of minimum wage legislation.' *American Economic Review* 36, June.
- Srinivasan, MV, 1997. 'Minimum Wages in Agriculture: An Analysis of Secondary and Village Survey Data.' *Indian Journal of Labour Economics*, 40(4): 743-57.
- Sobel, RS, 1999. 'Theory and Evidence on the Political Economy of the Minimum Wage'. *Journal of Political Economy*, 107(4): 761-85.

Thangaraj, M, 1995. 'Socio-economic conditions and problems of agricultural labourers.' Social Change, 25(4): 44-55.

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Tiffin, R and PJ Dawson, 1996. 'Average Earnings, Minimum Wages and Granger-Causality in Agriculture in England and Wales'. Oxford Bulletin of Economics and Statistics, 58(3): 435-47.

UNDP (1993). Human Development Report 1993. New York, Oxford University Press.

Streeten, P., 1994. Human Development: Means and Ends. American Economic Review: Papers and Proceedings, 84(2: 232-237.

Van Zyl, JC (1995) Needs-based development strategy and the RDP: Some Broad Issues. Halfway House, Johannesburg: DBSA..

Vink, N, JF Kirsten and L Hobson. 'Agricultural and agribusiness sector policy in South Africa: A Review of the literature.' A Report for USAID. University of Stellenbosch, January 2000.

Verholst, T., 1987. No life without roots: culture and development. London, Zed Books.

Weaver, J and K Jameson (1981). Economic Development: Competing Paradigms. Lanham, New York and London: University Press of America.

Wood, RC, 1997. 'Discussion paper. Rhetoric, reason and rationality: the national minimum wage debate and the UK hospitality industry'. *International Journal of Hospitality Management*, 16(4): 329-344.

Youcef Ghellab (1998). Minimum Wages and Youth Unemployment. Employment and Training Papers, 26. International Labour Office Geneva).

Glossary

ANACOVA: Analysis of covariance, a technique used to measure the relationship between two or more variables (e.g. wages and employment)

King Cont. King San San Balan

Capabilities: The notion that people's well-being should be measured in terms of their capability to function, rather than merely in terms of their income alone.

Cost price squeeze: When input prices rise faster than output prices, the producer is said to experience a cost price squeeze.

HDI: Human Development Index

NFSC: National food Consumption Survey

OLS: Ordinary least squares, also a technique used to measure the relationship between two or more variables (e.g. wages and employment0

PQLI: Physical Quality of Life Index

PSE: Producer Support Estimate

Total Factor Productivity (TFP): The total value of output divided by the total value of inputs used to produce the output.

UNDP: The United Nations Development Programme



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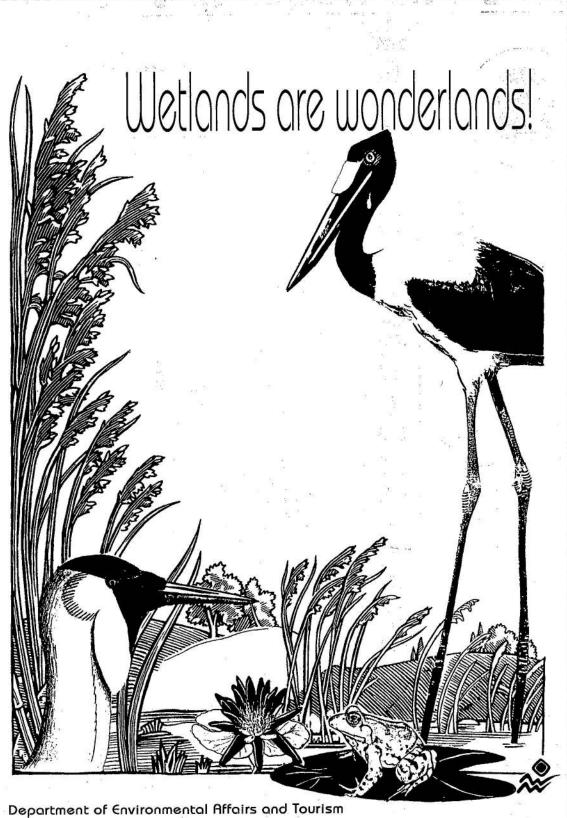
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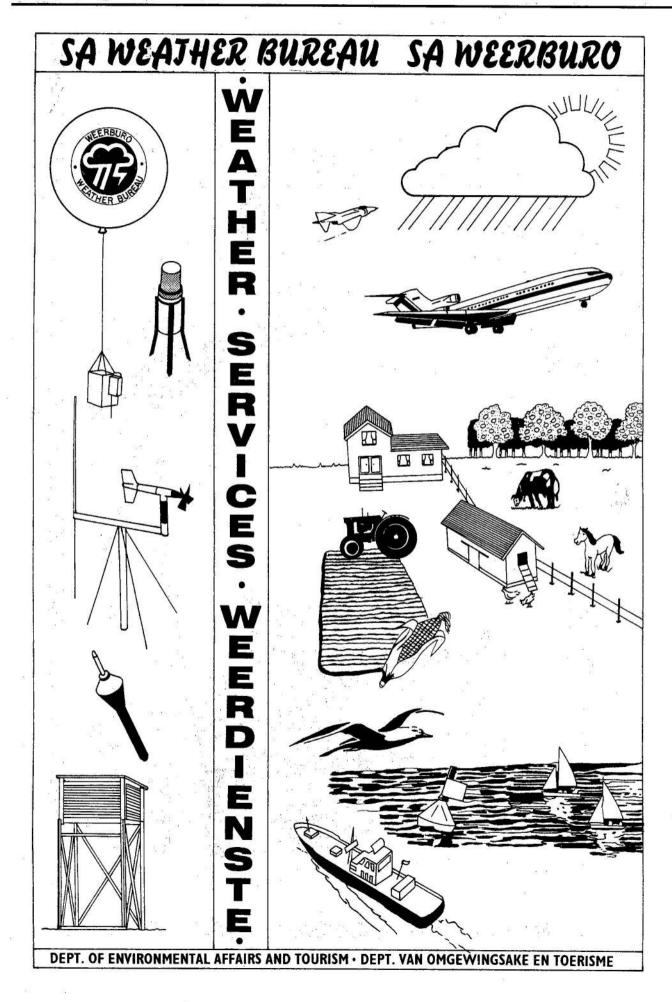
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