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REVISITING LABOUR CASUALISATION ON FRUIT FARMS IN THE WESTERN CAPE

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Revisiting Labour Casualisation on Fruit Farms in the Western Cape

Abstract

Du Toit & Ally's (2003) results on the casualisation of farm work in the Western Cape confirmed the worst fears of sociologists: Globalisation and/or labour laws increased casualisation in agriculture. New labour data and a study conducted in 1976 allow one to revisit the casualisation result for the table grape industry of the Hex River Valley. This paper resolves imprecise definitions of regular versus permanent status, and of casual versus seasonal status. It also examines casualisation and job shedding. Results show a decrease in the share of seasonal work and no change in the casual component of seasonal work. The job status of most farm women in the Valley improved as a result of legislative changes implemented since 1994. Outsourcing is present but insignificant at this point. On the whole data for the table grape industry of the Hex River Valley does not support the hypothesis that globalisation and labour market reform caused dramatic increases in casualisation.

Introduction

Previously unregulated farm labour markets in South Africa have been completely reformed since 1994. In 1997 the Basic Conditions of Employment Act (Act 75 of 1997) was expanded to include agriculture. Tenure arrangements of farm workers, who on the whole still live on the farms where they work, were also reformed in 1997 with the passing of the Extension of the Security of Tenure Act (Act 62 of 1997).

Du Toit & Ally (2003) produced the first results showing "a significant process of restructuring" and "the growing importance of temporary workers" on fruit farms in the Western Cape. This result is very important since it provides evidence for the theory that employers are forced into "harsh exploitation and a minimum of social investment" by falling profit margins (Du Toit & Ewert, 2002).

Falling product prices are due to a more competitive global market, which was made worse for local producers when South Africa's fruit export monopolies, KWV and CAPESPAN, were disbanded in the 1990s (Ewert & Du Toit, 2005). On the cost side, the fair trade requirements imposed by British and European supermarkets in a market oversupplied with fruit set high quality standards for South African producers (Barrientos & Kritzinger, 2004), while the Basic Conditions of Employment Act (Act 75 of 1997) further raised the cost of employment by introducing benefits like paid leave and statutory minimum wages.

The problem with casualisation is not so much that it lowers the possible income of farm workers, but that it increases "the precariousness of their existence" (Kritzinger et al, 2004). The main question is whether, and to what extent, labour market regulation makes farm workers worse off. The effect on seasonal workers is particularly interesting given the narratives of generating work for women in winter so that they are able to feed their hungry children. Did labour market reform bring about greater job security and better working conditions for seasonal workers or has outsourcing become the 'norm' here as in export agriculture the world over (Barrientos & Kritzinger, 2004)?

A dataset which extends back to the period before South Africa's re-entry into the world market, is needed to answer these and other questions. Du Toit & Ally (2003) use the 1994 survey of the Western Cape fruit industry (Vorster & Kritzinger, 1995) as a baseline for their 2000 survey. The Hex River Valley, which formed the main table grape stratum in both surveys, was also surveyed in 1976 for the SALDRU farm labour conference (Levy, 1977). This paper introduces new data for the Hex River Valley collected in 2004 and 2005 as part of the Western Cape labour panel survey conducted by the Centre for Social Science Research at the University of Cape Town. Part I of this paper discusses available labour data for Valley and Part II investigates various measures of casualisation for the period 1976 to 2005. The results surprisingly show little evidence of rising casualisation and at best circumstantial evidence of job shedding. The only piece of legislation which might have made an impact is the Extension of the Security of Tenure Act (Act 62 of 1997).

Defining Labour Casualisation in the Table Grapes Sector

Levy (1977: 87) suggested the following conceptual framework for classifying labour in seasonal production systems such as table grapes:

> "A useful mode of distinguishing between these three models of employment is to focus on the differences in the employment agreement in each case: the permanent worker is assured that, unless he is dismissed, employment – and thus earnings – will be provided on a regular basis (e.g. five of six days a week). The casual worker, on the other hand, does not have such certainty – employment is provided entirely at the discretion of the employer…. In general – although not necessarily – casual workers are paid on a daily basis. The seasonal worker may be employed either on a regular or a 'casual' basis for the duration of the season."

Table grapes are a deciduous crop tree crop i.e. dormant in winter, sprouts in early spring and bears a crop in autumn. While table grapes are dormant, very little labour (mostly pruning) is required. During the growing season a large quantity of thinning labour is needed in a short period of time before the benefits of thinning are lost. In the Hex River Valley table grapes must be thinned by early January and the fruit is too small to be thinned before middle November. Depending on cultivar mix and location the harvest season could start in late December or during January. At that point labour demand drops by about one third. The picking season continues until the end of April or middle May. Leaves drop soon after that, and winter pruning and a new production cycle can start again. If new orchards were to be planted, it takes place during winter as well.

Levy's classification system fits table grapes quite well. The size of winter labour demand determines the size of the permanent workforce. Permanent workers are engaged in pruning and or planting during winter. They also work flat out during the season, but additional labour has to be brought in to get all the thinning and picking done in time. A second tier of labour, regular seasonal workers, is employed during the entire growing season, from November to April In the past these workers were kept on at the end of the packing season if large orchard developments were planned for the oncoming winter. They often lived on the farm. During the peak thinning season a third tier of casual seasonal labour, is brought in, normally on six week contracts just to get the thinning done on time. In the past the wives of farm workers filled regular seasonal jobs, while school children and the relatives of farm workers on holiday from city jobs worked as casuals (Levy, 1977). Longer and shorter contracts still determine regular versus casual status for seasonal staff, but these days virtually all seasonal workers live in surrounding towns and squatter camps. Sometimes

seasonal staff is hired through a labour broker, but more often regular seasonal workers recruit the friends and relatives as casual thinning labour.

The definition of casual work as something which cannot be depended on, suggests two parts to casualisation, namely a seasonal component and a winter, or off-season, component. Seasonal staff represents the main source of flexibility in the workforce, regardless of whether they are regular or casual. Some flexibility is needed simply because there is more work in summer than in winter, so one needs regular seasonal workers to supplement permanent staff during the entire growing season. Special flexibility is achieved by hiring additional casual seasonal workers during the peak thinning period in December. Part of the picking labour also has to be casual to adjust to the size of the crop from year to year. Winter work, consisting mainly of pruning and planting, is inherently more predictable than summer work where the weather plays more of a role. Farmers can either try to smooth the winter work and hire a regular staff large enough to cope with it, or they can do fewer larger developments and outsource the work. The second strategy will become more popular as the perceived and real costs of employing permanent staff rises.

Part I: Data and Methods

One must survey the same group of employers at various points in time to track casualisation properly. Surveys in 2004 and 2005 collected the beginnings of such employment panel data for the Hex River Valley. Before that only repeated cross-section data were available. However, given that these were random draws from a pool of homogenous farms, this data can give some indication of the direction of change in the employment pattern in the area over time. The most important requirement for implementing Levy's framework as a measure of casualisation is to ensure that definitions are used consistently. This section explores available data and describes the assumptions necessary to achieve consistent definitions.

Comparability

The Hex River Valley is an old and well-established table grape growing area. In 1976 it produced 60 per cent of South Africa's table grape crop (Levy, 1977) and today it still contributes 37 per cent of South Africa's table grape area despite large new developments along the Orange River (Deciduous Fruit Producers Trust, 2004). The total vineyard area in the Valley grew from 3000 hectares in 1976 (Graaff, 1976) to just over 4600 hectares in 2005 (Deciduous Fruit Producers Trust, 2004). Table grapes have been the dominant crop for at

least the last thirty years. According to Graaff (1976) 95 per cent of farm income was derived from table grapes in 1976, while the 2005 survey found that table grapes was the only crop on 95 per cent of farms in the area.

The table grape stratum in the Western Cape labour panel consists of forty farms randomly drawn from the 135-farm membership list of the Hex River Table Grape Growers Association, to which all farms in the area belong. The unit of observation is the farm business, which for the largest firm is made of ten production units of about twenty hectares each. The survey is limited to local businesses in the case where firms have expanded into other production regions. The farmers were first interviewed in August 2004 and visited again in August 2005. Initial refusals (7.5 per cent) were replaced from a longer list. Attrition in Year 2 was five per cent. Farms which split up are followed separately and when a farm is sold, the new owner or manager is interviewed.

The 1976 survey only covered the Hex River Valley. It collected data on eighteen farms sampled from the Deciduous Fruit Board membership list of 163 farms (Levy, 1977). In 1994 the Valley was one region of 101 farm survey of deciduous fruit farms in the Western Cape (Vorster & Kritzinger, 1995). Deciduous Fruit Board membership was again used to draw a nine per cent proportionally stratified sample (Kritzinger & Vorster, 1996). The 2000 survey collected data on seventeen table grape farms of which twelve were located in the Valley. Respondents were selected to match those in the 1994 survey (Du Toit & Ally, 2003).

Definitions

The various labour classifications, shown in Figure 1, are all based on some division of seasonal and non-seasonal jobs, but different labels are used in different years. Since the main shift in farm labour composition over the last thirty years concerned women, this group will be shown explicitly where possible.

The 1976 survey classifies jobs as ‘permanent’ or ‘seasonal’ employment, where permanent staff consists of ‘resident’ and ‘migrant’ men and seasonal staff consists of ‘farm women’, ‘farm children’ and ‘other’ seasonal workers (Levy, 1977). A detailed description is given of the tasks in which each class of labour is involved. Farm women were employed for the whole season (2 weeks in November + 6 weeks of thinning + 16 weeks of packing), and were considered regular seasonal labour. Farm children and ‘other’ seasonal workers, who were only employed in the peak thinning period, were considered casual seasonal labour.

The 1994 survey splits labour into ‘regular’ and ‘seasonal’, where regular labour consists of ‘permanent’ plus ‘temporary’ labour (Vorster & Kritzinger, 1995). Temporary jobs which were ‘more than just seasonal, but not full time’, were filled exclusively with farm women. This ‘temporary’ category is the first indication that the status of farm women were changing from strictly seasonal to something more permanent. According to Vorster & Kritzinger (1995) 28 per cent of permanent jobs were already filled with women by 1994, but most women still had seasonal jobs at this point. In nearby wine producing districts the category ‘temporary’ as used by Vorster & Kritzinger (1995) still exists today. Farmers justify winter work for women as something to ‘keep women busy’ or ‘put money in their pockets’. Under these circumstances women work half time in winter, which provides a useful assumption for calculating this group’s work contribution in the next section. Apart from the reference to temporary labour, no explicit descriptions of work spells are given for this dataset. Seasonal staff is assumed to be casual seasonal workers.

For reasons of compatibility the 1994 classification was adopted in the 2000 survey. Less than twenty per cent of permanent jobs belonged to women, temporary jobs were mostly held by farm women and 75 per cent of seasonal jobs belonged to women. Du Toit & Ally (2003) do not explicitly report work spells but describe a peak packing and thinning season which starts in November and continues until the end of February. March, April and October also have significant levels of seasonal employment. Seasonal staff is assumed to be casual seasonal workers in 2000 as well.

In the 2004 and 2005 datasets, employment is divided into ‘regular’ and ‘seasonal’ jobs, where regular refers to the off-season. In this classification rising casualisation will show up as a higher number of winter contract workers, or a lower number of permanent staff. Seasonal jobs are divided into seasonal workers who return to the same farm year after year (‘regular’) and other seasonal workers (‘casual’). Data is collected on the number of seasonal workers employed per month or half month from October to May. The distinction between regular and casual seasonal workers is made based on how many of the seasonal workers the respondent knows from previous seasons. The category ‘farm women’ has been absorbed into permanent or, to a lesser extent, part-time jobs.

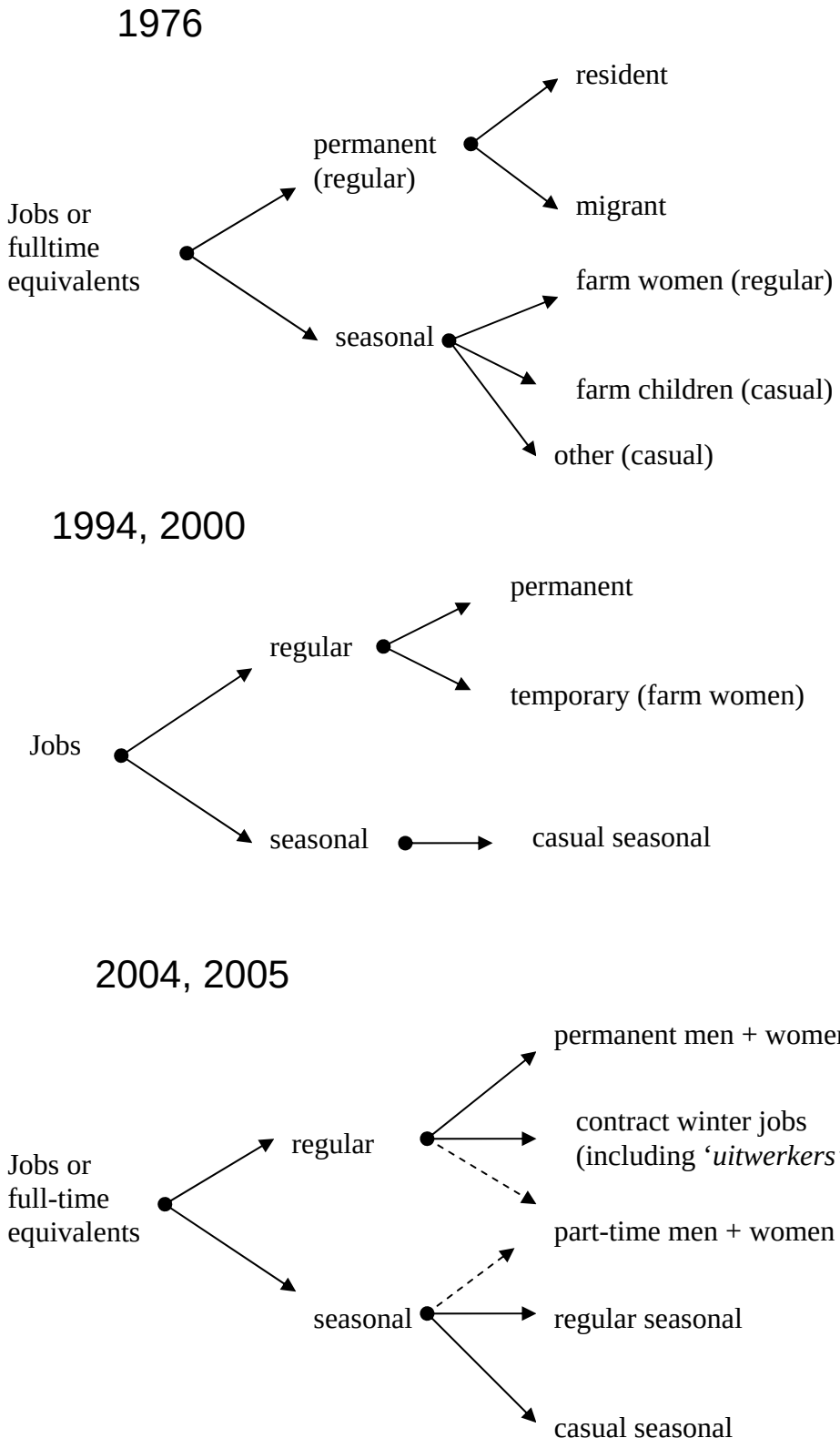

Figure 1: Classification of the labour force as used in each of the surveys

The part-time jobs are difficult to classify; they could be more temporary or more seasonal depending on the timing and duration of the contract. The actual incidence of part-time contracts is still very low. In 2004 two farms used part-time men and four farms used part-time women and in 2005 seven farms used part-time men and six farms used part-time women. The shortest contract was given for 28 weeks, in other words essentially the same as for a regular seasonal worker. The longest contracts were full-time. In 2004 part-time men on average had shorter contracts than part-time women but in 2005 the averages were much closer together at about six months each.

Comparable Estimates of Per-hectare Employment

Levy (1977) reports actual employment per farm from which average employment can be estimated. The average farm employed 36 permanent (male) workers, 38 farm women and 100 casual seasonal workers, for a total of 174 jobs per farm. Farm size is not reported for this sample. There are two possibilities: According to Graaff (1976) there were 163 farmers and 3000 hectares of grapes in 1976, which suggests an average farm size of 18.4 hectares. The other estimate comes from Levy (1977:90) who implies a farm size of 36 hectares:

> "Table 2 shows that 649 workers are employed permanently on the 18 farms visited, the mean number per farm being 36 workers. It was suggested as a rule of thumb that one permanent worker per hectare may be regarded as the optimum level of employment for table grape farms in the Valley."

The implications of both farm size estimates are given in Table 1. An average farm size of 18.4 hectares implies a workforce which consists of 1.96 permanent workers, 2.06 farm women in regular seasonal jobs and 5.41 casual seasonal workers per hectare, while a 36 hectare farm would have employed 1.00 permanent workers, 1.05 regular seasonal workers and 2.76 casual seasonal workers per hectare.

According to the 1994 survey, the average farm in the Valley employed 63 permanent workers, 12 part-time (temporary) farm women and 48 seasonal workers for a total workforce of 123 workers per farm (Vorster & Kritzinger, 1995). Per-hectare employment cannot be calculated since average farm size was not reported, but fortunately a per-hectare employment of 1.95 regular and 2.79 seasonal jobs are given for all table grapes.

The trouble with this industry-wide estimate is that it puts the share of regular (permanent + part-time farm women) work at forty per cent of total jobs, while farm level employment indicates that sixty per cent of jobs were regular in the

Hex River Valley. Per hectare employment was calculated by applying the Hex River Valley proportions (51% permanent, 10% farm women, 39% seasonal) to the average industry-wide employment per hectare of 4.74 jobs per hectare. An average farm size of 25.9 hectares was calculated by dividing 123 jobs per farm by 4.74 jobs per hectare. The 1994 estimate suggests that 18.4 hectares is a more likely farm size for 1976 than 36 hectares.

Du Toit & Ally (2003) report per hectare employment on table grape farms for a sample of twelve farms in the Hex River Valley and five farms in Berg River area. Average employment consists of 1.43 regular workers and 2.17 seasonal workers per hectare. Number of permanent jobs per hectare was calculated as a weighted average from reported permanent employment per hectare for a range of farm sizes. This spread puts average permanent jobs at 0.81 per hectare, and thus part-time farm women at 0.62 workers per hectare. An average farm size of 50.5 hectares was calculated by dividing Du Toit & Ally's (2003) Hex River table grape area (606 hectares) by the number of the farms in the Valley (12). Farm level employment (41 permanent, 31 farm women and 110 seasonal workers) was calculated by multiplying the calculated farm size with reported jobs per hectare.

The panel collected employment data at the farm level plus farm size from which per hectare employment can be calculated for 2004 and 2005. In 2004, the average farm size in the sample was 53.8 hectares. It employed 199 workers, 59 in permanent jobs, 52 in regular seasonal jobs, 78 in casual seasonal jobs and 9 in winter contract jobs. The average farm also employed two part-time workers in 2004 of whom more than three quarters were women. In 2005 the average farm size in the sample was only 47.9 hectares. The drop is mainly due to three large farms not reporting on their operations outside the Valley. This means that the 2005 estimate is a more accurate measure of farm size in the Hex River Valley itself. In 2005 the average farm employed 154 workers, 54 in permanent jobs, 34 in regular seasonal jobs, 53 in casual seasonal jobs and 11 people as contract workers during the off-season.

Per hectare employment controls for changes in average farm size. Permanent jobs per hectare fell by six per cent from 1.28 in 2004 to 1.2 in 2005 and seasonal jobs fell by four per cent from 0.82 per hectare to 0.79 per hectare. Casual seasonal jobs and winter contract jobs fell by fourteen and seventeen per cent respectively. Anecdotally we know that some farmers have tried contractors immediately after the introduction of minimum wages, and were disappointed. These employers hope to improve reliability and quality of seasonal work by establishing a closer and more long-term relationship between part-time workers and the farm.

Table 1: Jobs per hectare in the Hex River Valley, 1976 - 2005

Labour category	Description	Jobs	
		Per farm	Per ha
1976	Average farm size	18.4 – 36*	
Permanent	Permanent (no women reported)	36	1.00 – 1.96*
Part-time farm women	Regular seasonal	38	1.05 – 2.06*
Casual seasonal	Farm children + other seasonal	100	2.76 – 5.41*
		174	4.82 – 9.43*
1994	Average farm size	25.9*	
Permanent	Permanent (incl. 28% women)	63 (51%)	2.43*
Part-time farm women	Temporary farm women	12 (10%)	0.46*
Casual seasonal	Seasonal	48 (39%)	1.85*
		123	4.74
2000	Average farm size	50.5*	
Permanent	Permanent (incl. 18% women)	41*	0.81
Part-time farm women	Temporary farm women	31*	0.62
Casual seasonal	Seasonal	110*	2.17
		182	3.60
2004	Average farm size	53.8	
Permanent	Permanent (incl. 54% women)	59	1.28
Part-time	Part-time (incl. 78% women)	2	0.06
Regular seasonal	Seasonal staff known to owner	51	0.52
Casual seasonal	Balance of seasonal in December	78	1.50
Contract (winter)	Contract (winter)	9	0.18
		199	3.54
2005	Average farm size	47.9	
Permanent	Permanent (incl. 54% women)	54	1.20
Part-time	Part-time (incl. 66% women)	3	0.11
Regular seasonal	Seasonal staff known to owner	34	0.52
Casual seasonal	Balance of seasonal in December	53	1.25
Contract (winter)	Contract (winter)	11	0.15
		154	3.23

* assumption or based on assumption

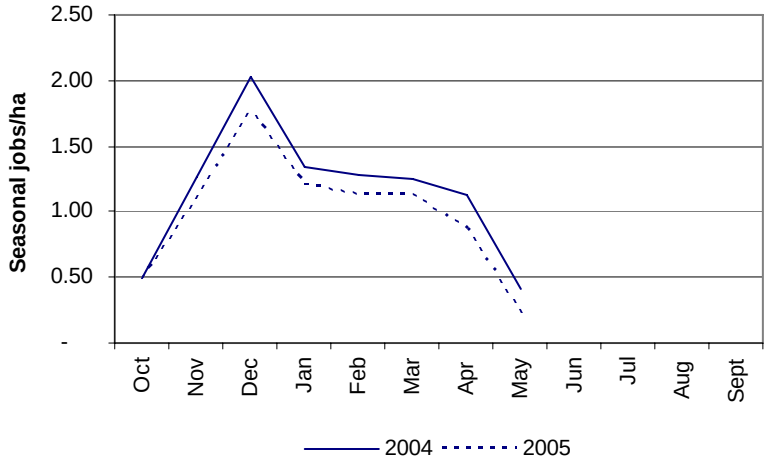

Figure 2: Seasonal jobs per hectare on farms in the Hex River Valley

The generally lower levels of employment observed in 2005 was due to a drought during the previous year. When farmers saw in December 2005 that the crop was going to be smaller, they simply did not hire the full complement of casual seasonal workers. Figure 2 compares a week by week use of seasonal labour for the two years. The current pattern of seasonal employment is very different from the one shown in Du Toit & Ally (2003) but quite similar to the pattern described in Levy (1977). Levy (1977) reports a higher jobs peak in December while Du Toit & Ally (2003) have a season starting in October and maintaining a peak from November to February.

Amount of Work per Hectare

Crude estimates of changes in casualisation can be made based on jobs, but if part-time workers now work longer (or shorter) spells than in the past, one should ideally base casualisation claims on the amount of work done by each type of worker rather than jobs. Work done in fulltime labour equivalents of 49 person-weeks is based on the best estimate of jobs per hectare from Table 1. Estimates are presented in Table 2.

Good information on work spells is available for 1976. Permanent men worked full-time. Their wives provided regular seasonal labour for two weeks of pre-thinning, six weeks of peak thinning and 16 weeks of packing and farm children and other seasonal staff worked only for sixteen weeks during the peak thinning period in December (Levy, 1977). Converted to fulltime labour equivalents, per hectare employment varied from 1.84 to 3.63 fulltime equivalent labourers depending on which average farm size one assumes. Casual staff performed 18 per cent of the work and seasonal staff did 46 per cent of the work.

Table 2: Person-weeks per hectare in the Hex River Valley, 1976 - 2005

Category for comparison	Jobs/ha	Weeks	Work in 49-week FTEs
1976			
Permanent	1.00 – 1.96	49	1.00 – 1.96
Part-time farm women	1.05 – 2.06	24	0.51 – 1.01
Casual seasonal	2.76 – 5.41	6	0.34 – 0.66
	4.82 – 9.43		1.84 – 3.63
1994			
Permanent (28% women)	2.43	49	2.43
Part-time farm women	0.46	½(24) + ½(36)	0.28
Casual seasonal	1.85	6 *or* ½(6)+ ½(24)	0.23 – 0.57
	4.74		2.49 – 3.28
2000			
Permanent (18% women)	0.81	49	0.81
Part-time farm women	0.62	½(24) + ½(36)	0.40
Casual seasonal	2.17	6 *or* ½(6)+ ½(24)	0.27 – 0.66
	3.60		1.48 – 1.87
2004			
Permanent (54% women)	1.28	48	1.24
Part-time (78% women)	0.06	0.08	0.05
Regular seasonal	0.52	24	0.27
Casual seasonal	1.50	24, 4	0.48
Contract (winter)	0.18	0.04	0.00
	3.54		2.04
2005			
Permanent (54% women)	1.20	48	1.16
Part-time (66% women)	0.11	0.22	0.08
Regular seasonal	0.52	24	0.26
Casual seasonal	1.25	24, 4	0.34
Contract (winter)	0.15	0.04	0.00
	3.17		1.84

Vorster & Kritzinger (1995) did not report work spells for 1994. It was mentioned previously that the farm women in part-time jobs probably worked about half-time during the off-season. It is therefore assumed that half of regular seasonal workers (farm women) held 24-week contracts and the other half worked halftime during the off-season as well on 36-week contracts. It is not clear from the discussion what the average work spell of seasonal workers were in 1994. Table 2 shows two possibilities, namely that these workers were casual, in which case they would have worked for six weeks on average or that they were a mix of casual and regular seasonal workers. The first assumption reflects the 1976 scenario and the second what is currently observed. The work done by permanent staff amounted to 2.43 fulltime labour equivalents per hectare. Part-time farm women and seasonal staff respectively contributed 0.28 and between 0.23 and 0.57 fulltime labour equivalents per hectare.

The average work spell for seasonal workers is equally problematic in 2000. If the same assumptions are made as for 1994 seasonal staff contributed between 0.27 and 0.66 fulltime labour equivalents per hectare in 2000. The rest of the workforce consisted of 0.81 permanent workers and 0.40 part-time seasonal staff.

The data for 2004 and 2005 are actual week-by-week estimates of casual employment and an estimate by month of seasonal staff. Regular seasonal worker is given separately from casual seasonal workers. Interestingly, the amount of work done by regular seasonal workers is about one third less than the amount of work done by casual seasonal workers. The contribution of part-time staff is very small at 0.05 and 0.08 for 2004 and 2005 respectively. The women who were previously shown as part-time staff now show up as permanent staff. Overall labour use fell from 2.04 fulltime labour equivalents in 2004 to 1.84 fulltime labour equivalents in 2005 for the reasons outlined before. Contract workers currently contribute less than 0.01 of a fulltime labour equivalent.

Part II: Results and Discussion

The shares of permanent and various categories of staff are summarised in Table 3 below. Regardless of the measure investigated, the data for 1994 shows an unusually high level of permanent staff which then drops down to quite a low level of permanent staff in 2000. The number of permanent jobs per hectare for 1994 is fifty per cent higher than the high estimate for 1976, and twice as high as for 2005. Casual seasonal jobs represent at best only seventeen per cent of all work done, which is half the amount of work done by casual staff in 2005 and about one third of the work done by casual staff in 2006. Also, part-time staff

contributed between half and a third of work in 1994 that they have been reported to contribute in 2000.

The 1994 estimates raises the question whether the high prevalence of permanent jobs in 1994 was real in any sense or whether was just the result of a measurement or sampling problem. One expects producers to keep production systems as flexible as possible during a period of uncertainty. If this was so, rates of casualisation should have been higher during the political transition of 1994 than at any other time since 1976. If, however, the mutual obligations arising from paternalism (proposed by Du Toit, 1993) caused farmers to protect 'their' mainly coloured workers from an uncertain transition to a black government, then the data makes sense. Alternatively the management movement championed by the Rural Foundation might have improved the pay, benefits and working conditions of workers in the fruit and wine industries of the Western Cape (Kritzinger & Vorster, 1996) for a short period of time which just happened to coincide with the end of Apartheid. If this is the case, it is important to note that neither introduction of the Extension of the Security of Tenure Act (Act 62 of 1997), nor extending the Basic Conditions of Employment Act (Act 75 of 1997) to agriculture could achieve the same level of job security brought about by peer pressure under the Rural Foundation.

Seasonalisation

Not surprisingly permanent staff is responsible for the majority of work and with the exception of 1994, the share of work done by permanent workers has remained remarkably constant. At the moment permanent workers hold roughly thirty per cent of the jobs and do just over sixty per cent of the work.

To understand the transition from many to relatively few seasonal jobs, one has to look more closely at the data for 2000. For that year seventeen per cent of jobs and between 21 and 27 per cent of work are classified 'temporary'. According to Vorster & Kritzinger (1995) these workers were farm women employed full-time during the season and on a part-time basis during the off-season. Temporary jobs can therefore either be counted to raise the share of permanent jobs or to increase the share of seasonal jobs. If temporary jobs are added to permanent positions, the share of permanent jobs rises from 21 per cent in 1976 to forty per cent in 2000, and then drops back to 35 per cent of total jobs in 2005. This effectively implies a doubling of the share of permanent jobs sometime during the 1980s and 1990s. The increase in the share of work is less marked, from 54 per cent in 1976, to between 70 and 76 per cent in 2000 to 63 per cent in 2005. If, on the other hand, temporary jobs are added to seasonal jobs in 2000, the share of seasonal jobs stays constant during the 1980s and 1990s and then drops sharply to 2000. This is highly unlikely since globalisation and

labour legislation are hypothesised to have had exactly the opposite effect. So, if one counts temporary labour as part of the regular or permanent workforce, changes in the temporary-permanent split gives an indication of whether workers benefited from falling under the Basic Conditions of Employment Act (Act 75 of 1997). This point is discussed further under casualisation of off-season labour.

Table 3: Trends in measures of casualisation for farm labour in the Hex River Valley, 1976 - 2005

Measure	**1976**	**1994**	**2000**	**2004**	**2005**
Jobs			**% of total jobs**		
Permanent	21	51	23	30	35
Seasonal	79	39	60	65	56
Casual seasonal jobs	57	39	60	39	34
Temporary / part-time	0	10	17	1	2
Winter contract	0	0	0	5	7
Work			**% of total work**		
Permanent	54	83 – 74	55 – 43	61	63
Seasonal	46	8 – 17	18 – 35	37	33
Casual seasonal jobs	18	8 – 17	18 – 35	24	18
Temporary / part-time	0	10 – 9	27 – 21	2	5
Winter contract	0	0	0	0	0

Casualisation of Seasonal Work

Seasonal jobs are still an important component of employment on table grape farms in the Hex River Valley, but its importance has decreased rather than increased over the last thirty years. In 1976, almost four out of five jobs were seasonal and almost half of the work was done by seasonal staff. By 2004, 65 per cent of jobs were seasonal jobs and 37 per cent of work was done by seasonal workers. During 2005, only 56 per cent of jobs were seasonal and a third of work was done by seasonal workers. In terms of work done, additional seasonal staff currently contribute around 35 per cent of total labour, compared to 46 per cent in 1976.

This result does not mean that the amount of work done in the growing season has decreased compared to the amount of work done during the off-season; it

simply means that permanent staff is taking on a larger share of seasonal work. The shift is due to the introduction of labour saving technologies during growing season, rather than the off-season. For example, thinning has to be done when the grapes are at a certain stage of development; it cannot be thinned if it is not there. The faster thinning goes, the smaller the thinning peak is and therefore the less need there is to bring in seasonal workers.

Casualisation of Off-season Work

The share of permanent staff gives some indication of casualisation of the regular off-season workforce, but it was just pointed out that temporary staff do the same work without the same job security. The two other groups which do the same work without the same job security are part-time and contract staff. There is really no difference between the terms of employment of part-time workers and temporary farm women, apart from the fact that part-time workers can also be men these days. Contract workers are slightly different, in that part-time workers are often related to or dependents of permanent staff while contractors normally do not have ties to a given farm. In 2005 part-time workers held only two per cent of the jobs and did five per cent of the work. This is down significantly from levels reported for 1994 and 2000. Contract staff held seven per cent of the jobs but still contributed less than one per cent of the work.

The presence of contract staff is the only support which currently exists for the casualisation hypothesis put forward by Barrientos & Kritzinger (2004) and Ewert & Du Toit (2005). As pressures mount, this category will grow, perhaps with an associated increase in casual seasonal labour. Curiously, according to Table 2, the number of contract jobs per hectare was down slightly in 2005 compared to 2004. This trend continued in 2006 and was accompanied by a rise in the number of part-time posts. Since Sectoral Agreement 13 allows more flexibility than the previous sectoral agreement for agriculture (Department of Labour, 2006), it will be interesting to see which of contractors or part-time workers become more popular over time. And, if part-time workers become the preferred non-permanent worker, the question arises whether the Basic Conditions of Employment Act (Act 75 of 1997) will have had any effect on working conditions on farms.

Impact of Legislation

It has been hypothesised that the profit squeeze caused by falling prices and rising labour costs would have caused employers to substitute expensive permanent staff with cheaper part-time or contract workers. Some evidence of emerging contractors was found, but farm women actually achieved greater job

security in this period, which suggests that something other than pure economics is at work.

The Extension of the Security of Tenure Act (Act 62 of 1997) is responsible both for the growing presence of contractors and part-time staff and for the greater job security found by farm women. While the Act merely protects households who live on farms from unlawful eviction and regulates the conditions of lawful evictions, farmers perceive the Act to award rights to the land. Their response to this legislation was to immediately cap the number of households on the farm and to meet additional demand for off-season labour by employing part-time or contract labour. In 2005, almost three quarters of respondents in the Valley said that they will not hire more permanent workers, or even replace workers who retire or leave. Of those who still consider expanding their permanent workforce, many will not permit new workers to live on the farm as they would have done in the past. Farmers are in the process of moving permanent staff off the farm slowly. Ten out of forty farms had at least one permanent employee who lived elsewhere, but only two farms attempted a large-scale eviction of permanent staff in 2004.

While part-time staff and contractors were worse off due to the legislation, women benefited. In the past winter, pruning was used as the excuse for why women could not be given permanent jobs. In 1994 only thirty per cent of women interviewed were used in pruning, since apparently farmers did not think they were skilled or interested enough to learn (Kritzinger & Vorster, 1996). In the minds of farmers, the Extension of the Security of Tenure Act (Act 62 of 1997) meant that hiring additional permanent men, who would each bring an extra family onto the farm, would be relatively more expensive than hiring farm women who, besides pruning, already did everything else at that point. As a result, the employment status of farm women was changed from temporary to permanent. This is more evidence that the jobs considered suitable for women are often just an excuse to maintain a flexible labour supply (Collins, 1993).

Job Shedding

It is possible that the changing labour environment did not primarily cause the substitution of permanent labour with casual labour, but that it caused mechanisation. Figure 3 summarises the data on jobs per hectare presented in Table 1 and labour requirement per hectare presented in Table 2. Both panels of the graph divide labour into its permanent and non-permanent components; the bottom panel illustrates job shedding and the top panel shows changes in the amount of work required per hectare to grow table grapes in the Hex River Valley.

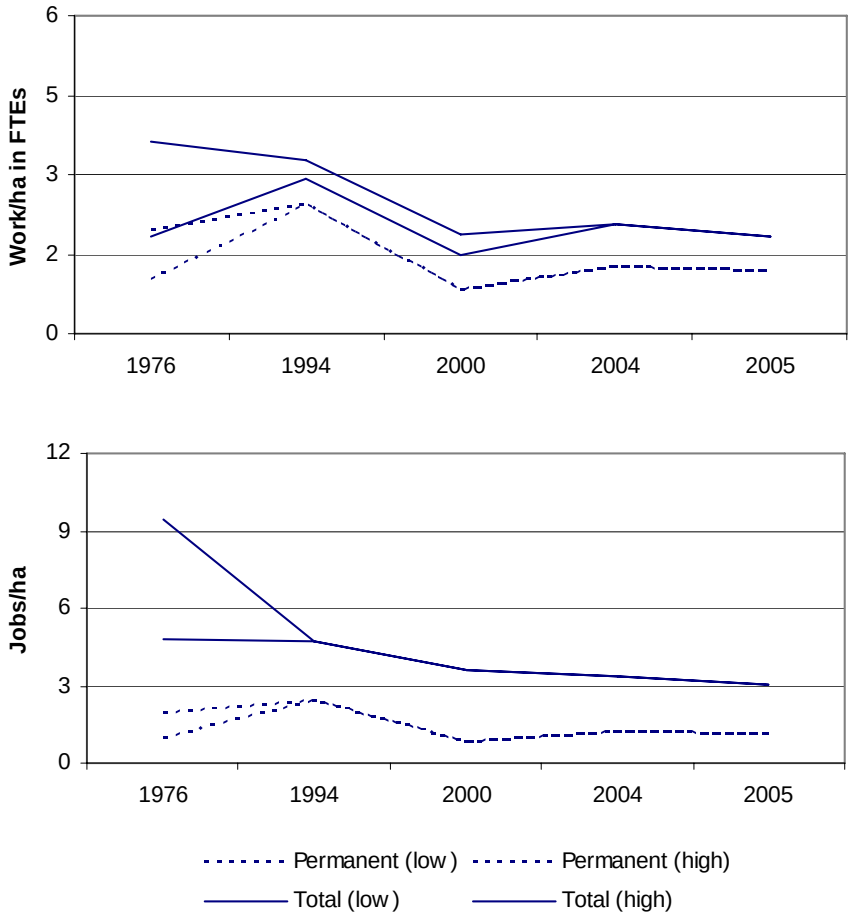

Figure 3: Jobs per hectare employment in the Hex River Valley, 1976 – 2005

Jobs per hectare have gone down regardless of which assumptions are made regarding farm size for 1976 and the work spells for 1994 and 2000. If the average farm size for 1976 was 18.4 hectares, the number of jobs per hectare fell from 9.4 in 1976 to 3.6 jobs per hectare in 2000. Data for 2004 and 2005 show further reductions. If on the other hand, the average farm size for 1976 was 36 hectares, total jobs per hectare only decreased by a tenth of a job from 4.81 in 1976 to 4.74 in 1994, after which a quarter of the jobs were lost between 1994 and 2000. In terms of work required per hectare the result critically depends on the assumption about farm size for 1976. If average farm size was 36 hectares in 1976, the amount of work required per hectare has stayed the same for the past thirty years, but if the average farm size in 1976 was 18.4 hectares, the amount of work has decreased by half from 3.63 fulltime labour equivalents to 1.84.

The impact of job shedding on labour productivity depends on output per hectare. According to the farm census, table grapes yield on average 9.7 tons per hectare in 1981, 14.5 tons per hectare in 1988 and 16.8 tons per hectare in 1993. Figure 3 may therefore imply significant increases in labour productivity over

the last thirty years. Regardless of the inconclusive evidence on labour shedding, there are many technical examples of rising labour productivity.

Prior to 1976 productivity gains were made possible by the introduction of herbicides and fixed irrigation systems (Graaff, 1976). Weed control was done manually by digging over vineyards once a year; today a single operator can spray several hectares in a single day. Fixed irrigation systems, which are now commonplace and need virtually no labour, were preceded by flood irrigation and moveable sprinkler systems that required a fulltime attendant or a team of six to ten workers to move sprinklers between each 6-hour set..

In the past thirty years the most important labour savings occurred during the growing season. Some evidence of this can be seen in Figure 3 which shows a flatter thinning peak and seasonal staff staying on into the packing period compared to the 1976 pattern. There are several reasons for this development. First, cultivar mix changed from predominantly seeded varieties, which need to be thinned by hand, to predominantly seedless varieties, which can be thinned chemically. Second, new varieties and newly-developed parts of the Hex River Valley extend the season thereby smoothing the labour demand over a longer period. Third, the trellising system was changed from factory roof system which requires extensive canopy management to a flat roof system which needs less canopy work during the labour intensive summer months. By changing trellis design, row spacing was increased to permit tractor access, which saves time during spraying. Previously the spray cart was left in the service path at the end of each row and the actual spraying was done with handheld hoses which had to be dragged down each row. Today the spray gun operators ride on the back of the spray cart as the tractor drives through the vineyard, or more often spraying is completely automated by mounting a spray bar on the front of the tractor or a fan on the back of the spray cart. With tractor access fruit also does not have to be carried out of the vineyard, but can be driven out. Finally, in the pack shed major labour savings were made when palletising and the use of forklifts became common.

It is important to note that the cost of labour is not the only factor driving technological change. Mechanised spraying is also healthier and more effective. Fixed irrigation systems also use less water and flat roofed trellising is cheaper and easier to manage. This is not to imply that rising labour costs will not affect technology adoption but merely that technology will not respond as directly as we think to rising labour costs.

Changing technology has implications for skills, which might explain the observed bias towards permanent work. On the other hand, farmers insist that most of the orchard operations can be taught to an unskilled worker with no previous experience within the space of a morning. In addition, the fact that a

casual worker has a short tenure on a particular farm does not mean that she is inexperienced; she may have worked on table grape farms her whole life. If farmers are confident that a reliable pool of relatively experienced casual workers exists in their area, they may not feel any need to employ these workers permanently.

So why does resident status matter?

This paper has argued that workers can have a regular source of income without living on a farm and that a community of seasonal workers meet labour demand in the area. This means that resident status is largely irrelevant in the casualisation debate. The only reason for knowing a worker's resident status is that it is a proxy for a whole set of cash benefits which might fall as the cash wage rises.

Non-cash benefits provided to workers on fruit farms range from housing to medical aid to free electricity. Graaff (1976) reported a small average cash wage of R39.60 per month (R166 per month in 2005 terms) supplemented with food and wine rations and other services such as medical and funeral benefits. Even more comprehensive benefits were available in 1994. Vorster & Kritzinger (1995) reported free or subsidised day-care facilities on 69 per cent of farms and medical benefits on 75 per cent of farms. All houses were electrified at that point and 85 per cent of houses had running water inside. Workers did not pay for water or electricity. By 2005 higher cash wages had slowly eroded the free benefits that were available to resident farm workers in the past. Only 36 per cent of farms still offer free electricity and only 9 per cent still offer medical benefits (Conradie, 2005). Work clothes, still provided free on 87 per cent of farms, are given to resident and non-resident staff alike. The only anomaly is day-care facilities which are still available to the children of resident staff in 77 per cent of cases. In some cases the day-care facility is closed during the off-season, but even so one has to conclude that the cost of a day-care facility is lower than the benefit of having the mothers available to work.

Conclusion

This analysis produced several important results, the most important of which is that for the Hex River Valley the 1994/2000 comparison is not at all representative of the longer period. This means that other claims of casualisation deserve a second look. Perhaps paternalism is protecting South Africa's farm workers to a degree which is not true for Brazil or California.

The most important shift in farm labour is that women were upgraded from seasonal to permanent jobs. The shift happened gradually but towards the end of the period studied, which suggests that legislation or globalisation or both might have been responsible for it. Anecdotal evidence points towards the Extension of the Security of Tenure Act (Act 62 of 1997). It deserves a second look too. The benefit of greater jobs security for women may have come before the cost of the greater job insecurity for the emerging class of contract workers.

Third, this paper produced at best circumstantial evidence for job shedding. Besides it is not clear if much could, or should, be done about what is essentially a process of technological development. More efficient farms, which make better use of scarce agricultural resources, will be able to survive more competition in the international market. On the other hand, irrigated land is quite scarce in the Western Cape. As less land remains to be developed, it will be more difficult to redeploy farm workers displaced as a result of productivity gains, in agriculture. This means that agriculture will be less and less able over time to create significant numbers of semi- and unskilled jobs.

Fourth, constant levels of casual seasonal jobs should not lull one into believing that outsourcing is not present and on the rise. At the moment the use of winter contract workers is too low still to register on the radar screen, but it is happening and the process is largely irreversible. It is important that we collect good data on contract labour and monitor it carefully. There is less reason to believe that the seasonal component of the labour force is growing, but it is as difficult to measure accurately as contract workers. Future farm surveys should recognise the fact that off-farm labour is an erratic category for which numbers change from season to season and from Monday to Wednesday in the same week. Ideally one wants to record actual daily employment by origin of worker. If that is not feasible, the official statistics should at least distinguish between ideal labour demand and labour use, which could, for example, be much less on child grant days. A practical solution is to standardise and record the actual use by origin of casual and regular seasonal workers on a certain date, or dates, during the growing season.

Finally, even when we have consistent data much work remains to be done to understand farm employment decisions. For example, it is not clear why farmers still insist on employing more expensive permanent workers when they have access to cheaper migrant labour in squatter camps on their doorsteps. Vorster & Kritzinger (1995) found that farm size did not significantly affect the size or composition of the labour force, but it is possible that a farmer’s perception of the regulatory environment and economic conditions could affect his employment strategy.

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