J. of Modern African Studies, 46, 3 (2008), pp. 361–392. © 2008 Cambridge University Press
doi:10.1017/S0022278X08003340 Printed in the United Kingdom

Lifting the blinkers: a new view of power, diversity and poverty in Mozambican rural labour markets

CHRISTOPHER CRAMER, CARLOS OYA AND JOHN SENDER

School of Oriental and African Studies, Russell Square, London, WC1H 0XG, United Kingdom

Emails: cc10@soas.ac.uk, co2@soas.ac.uk, john.sender@gmail.com

ABSTRACT

This paper presents some results from the largest rural labour market survey yet conducted in Mozambique. Evidence from three provinces shows that labour markets have a significant impact on the lives of a large number of poor people, and that employers exercise considerable discretion in setting wages and conditions of casual, seasonal and permanent wage employment. The evidence presented comes from a combination of a quantitative survey based on purposive sampling with other techniques, including interviews with large farmers. The findings contrast with ideas that rural labour markets are of limited relevance to poverty reduction policy formulation in Africa, and the paper concludes with methodological, analytical and policy recommendations.

INTRODUCTION

This paper presents some results from the largest rural labour market survey yet conducted in Mozambique.[1] The survey shows that these labour markets play significant roles in the lives of a large number of poor people. Although some of the poorest Mozambicans are captured in this survey, not all of the men and women engaged in rural wage work live in similarly deprived rural households – their levels of education, wages and experiences of poverty are very diverse. The data show a range of labour market opportunities, characterised by great variations in barriers to entry, levels of pay, contractual terms, and conditions of work.

The findings presented in this paper contrast starkly with assumptions common to much of the recent literature on rural economies in sub-Saharan Africa and in Mozambique specifically.[2] It is often assumed that the rural poor do *not* have access to wage labour opportunities, especially to

better paid work, and that all those who do have such access to 'off-farm' wage employment are already non-poor. The implication is that the demand for wage labour is more or less static, and that the labour market is crisply bifurcated between those jobs available to *non-poor* rural Mozambicans and other wage employment that is so badly remunerated that it could not conceivably make a dent in poverty levels.[3]

The Commission for Africa (2005: 242) acknowledges the urgent need to build up more labour market information, but their report has hardly any discussion of *rural* wage employment.[4] NEPAD (2003) also fails to mention rural wage employment in its 'Comprehensive Africa Agriculture Development Programme'.[5] More recently, the World Bank (2007: 287) has belatedly recognised the limitations of previous research and analysis: 'Making the rural labor market a more effective pathway out of poverty is … a major policy challenge that remains poorly understood and sorely neglected in policy making'.

The results presented in this paper also contrast with the imaginings of most labour market theory. Orthodox, neoclassical, theory treats labour as a commodity like any other, and its exchange as determined by supply and demand, in conditions best analysed from the perspective of competitive markets. More sophisticated versions of neoclassical theory are still couched in terms of rational, utility maximising individual agents, though perhaps reacting to market imperfections and interacting ultimately to grind out equilibrium in a single labour market or in multiple, segmented labour markets.

There are many critiques of orthodox labour market theory, ranging from the radical to those following recent developments within neoclassical theory, including information theoretics insights. Thus, for example, Kaufman (2007) argues that the existence of transaction costs means there cannot logically be a frictionless, perfectly competitive labour market with a monotonic, linear demand curve. Segmented labour market theory – both in the radical tradition and in its more recent appropriation and reframing by neoclassical economists – often appears more suited to the variety of labour market 'outcomes' observed in developing countries. However, this literature too fails to capture the degree and kinds of variation in labour market relations, processes, and outcomes observed in this research. Moreover, segmented labour market theories tend to assume a generally applicable theory across discrete sectors divided by properties relatively homogeneous within each sector.

Rather, the findings presented in this paper confirm the assessment of those, very different, economists who emphasise a greater variety and complexity of labour markets and their interactions (with each other and

with other factors) than most theory has to date acknowledged. Thus, Fields (2007: 55) argues: 'Developing countries' labor markets are marked by distinct labor market sectors that work in different ways from one another and by complicated interrelationships among the sectors. Unfortunately, few existing labour market models begin to capture the rich empirical reality of developing countries' labor market conditions.' Meanwhile, Fine (1998: 251) emphasises that 'labour markets are not only structurally differentiated from one another in the limited sense of being separate or divided, but that they are internally structured in different ways. In other words, underlying socioeconomic determinants endow particular labour markets with particular labour market structures, relations and processes attached to their reproduction and/or transformation.'

The first section of this paper provides a detailed discussion of the rationale for and the methodology used in the Mozambique Rural Labour Market Survey (MRLS). The following sections then focus on presenting the survey evidence, covering both types and levels of payment for both agricultural and non-agricultural rural workers. It is argued that relationships between workers and employers cannot be understood within a simple framework of supply and demand, or in terms of information, supervision and transactions costs in imperfect markets. More fundamentally political processes, themselves influenced both by longer-run history (coerced labour force participation, migration flows between Mozambique and neighbouring countries, warfare within Mozambique, state-owned enterprises), and by recent events and interventions (including new cropping patterns, particular provincial government appointments, recent land concessions to incoming Zimbabwean farmers, individual farmers' strategies), help to account for much of the specificity of labour markets. This is especially so in a context in which, arguably, the relation of capital and labour and the social parameters of labour force participation are in flux, the 'rules of the game' are shifting, and power (exercised by employers over workers, by men over women) can be both brutal and paranoid.

The impact of employment on some simple measures of household welfare is also discussed. The evidence shows clearly that many Mozambicans who would by any criteria be considered among the very poorest in the country have been pitched into wage work. However, the evidence also suggests the potential for decent jobs to transform the living standards of even the poorest rural women.

SURVEY RATIONALE AND METHODOLOGY

The formation of a rural class depending on wage employment was already deeply rooted at independence (Castel-Branco 1983; O'Laughlin

2002: 517). After independence, the ruling Frelimo party, downplaying the heterogeneity of rural society, implemented policies on the basis of a crude dualist assumption, pitting a homogeneous subsistence-oriented peasantry against a 'commercial' sector. During the war, the class stratification of rural society continued, but differentiation processes were largely ignored by policy-makers and academics alike (O'Laughlin 1996: 1; Wuyts 2003).

Since the end of the war, new processes of economic and social change have begun to have substantial effects on rural inequality and the demand for wage labour. These changes have included: the rehabilitation of transport infrastructure; new foreign investment in agriculture; the immigration of farmers from Zimbabwe and South Africa (concentrated especially in Manica Province); the revival of tea plantations in Zambézia Province; the privatisation of other state-owned plantations; and the rapid integration of small- and middle-scale farmers into international commodity markets (especially the wage labour-intensive markets for tobacco and cotton). Similar dynamic influences on rural labour markets, in some cases even more pronounced, are a feature of many African societies. So the findings of this survey in Mozambique may well be relevant to other sub-Saharan African economies.[6]

Unfortunately, the data collected in recent household surveys are not useful for analysing the impact of these uneven developments on the market for wage labour. The usefulness of these household surveys is limited because they adopt international statistical conventions for measuring labour market participation that are ill-suited to the complex reality of labour transactions in poor rural areas.[7] Where new instruments have been developed to overcome the problems evident in conventional household survey data, they clearly demonstrate the large amount of labour market activity *missed* in the types of national surveys conducted in Mozambique (Lund 2004; Adato *et al.* 2004: 17).

The results from two recent household surveys in Mozambique, the *Inquérito Nacional aos Agregados Familiares* (IAF 2004) and the *Questionário de Indicadores Básicos de Bem-Estar* (QUIBB 2001), yield surprisingly different measures of the relative significance of wage labour, depending on the specific questions asked in each of these surveys and their interpretation (Table 1). In particular, conventional questions in both surveys about rural respondents' 'main' job suggest that wage labour is rare – only about 7·3% of household members in the QUIBB survey, or 4·7% in IAF, claimed to have been paid a wage or salary in their 'main' job.[8] In contrast, a much larger percentage of rural households (almost 21% of rural households in IAF, 17·4% in QUIBB) claimed that at least one household member had

TABLE 1

Responses to questions about wage labour at household and individual level

	Did any household/member work as seasonal or casual labourer last agricultural season? (% responding yes)	How was NAME paid in main job? (% responding with a wage/salary)
	INAF 2002/2003	
National	16·3	13·4
Rural	20·9	4·7
Urban	6·5	36·2
	QUIBB 2001	
National	14·0	15·3
Rural	17·4	7·3
Urban	6·3	39·6

Source: Authors' calculations from IAF 2004 and QUIBB 2001 database.

been *employed as an agricultural labourer* in the most recent agricultural season.[9]

If the IAF demographic extrapolations are accepted, then it may be concluded that at least 561,000 rural households (representing over 2·6 million rural Mozambicans) have one or more members employed as seasonal or casual agricultural wage labourers. The results from the IAF survey also suggest that households in the poorest quintiles are more likely to contain members who are temporary agricultural workers.

During 2002–3, fieldwork for the Mozambique Rural Labour Market Survey (MRLS) was completed in three provinces in the centre and north of the country: Manica, Nampula and Zambézia, where 2,638 wage-employed respondents (slightly less than half of them women) answered a lengthy questionnaire and provided information not only about themselves but also about other household members. As a result, the survey collected data on some 16,000 individuals in these provinces. The respondents were employed by a wide range of different types of establishment (around 900 separate employers), varying from very small farms, bars and market stalls to large plantations employing thousands of temporary workers. The wide range of types of employment/establishment covered in the MRLS allows an analysis that is much more disaggregated than is usual in the literature discussing the main sources of income for poor and rich rural households. For example, Tschirley and Benfica (2001) focus on the broad category of 'non-agricultural' wage income, ignoring the important differences between, for example, households dependent on

salaried office jobs in the rural bureaucracy (teachers, health workers, administrators, etc.) and households dependent on the wages of a waitress or cleaner in a roadside *barraca*.

The sampling was purposive rather than random. There was, of course, no reliable sampling frame on which to base a random sample of rural wage workers. The available official statistics not only fail to collect information on employees in enterprises employing fewer than ten workers, but also exclude many enterprises employing more than ten workers if, as is often the case, these enterprises are not legally registered. Ministry of Labour officials lack the resources, training or incentives to investigate employment, especially seasonal and temporary employment in many local firms.

The research team therefore used a wide range of sources to construct, as completely as possible, its own provincial sampling frames on the basis of existing agricultural censuses (TIA 2002 and the Agricultural Census 1999/2000 (INE 2000) on which TIA was also based), recent household survey lists (from the QUIBB 2001 database), and visits to all the relevant provinces and districts to assemble up-to-date and reliable lists of large and middle-scale farms;[10] lists of those enumeration areas that had recently experienced dynamic economic growth and structural change, but had *not* been covered by previous household surveys (IAF, QUIBB);[11] and the names and location of other large-scale employers in different districts of Nampula, Zambézia and Manica. The three central and northern provinces were selected because they account for the bulk of labour-intensive cash crop production (cotton, tobacco, sisal and tea), and Nampula and Zambézia contain a very large proportion of the Mozambican rural population.

This preliminary work to establish these sampling lists provided some assurance that the MRLS would not miss either the most significant rural employers, or those enumeration areas where wage employment had recently become particularly important in each of the provinces.[12] The sample purposively included a relatively large number of small- and middle-scale farmers.[13] The most successful of these farmers, who account for much of the demand for agricultural wage labour, are *non-randomly* distributed in rural Mozambique and there is, therefore, no guarantee that their wage workers would be included in conventional, randomised sample surveys of households. The range of occupations and of types of employer captured was large enough to ensure that sufficient diversity was achieved to make the results statistically relevant, and to obtain a well-targeted coverage of the most important rural labour markets within the selected provinces.[14]

TABLE 2

Sample distribution by province and employer category

		Province			Total
		Nampula	Zambézia	Manica	
Type of employer	National company/plantation	58	153	57	268
	Foreign company/farmer/plantation	9	1	217	227
	Local farmer/*privado*	628	509	530	1667
	Other (non-agricultural)	140	172	164	476
Size of employer	Small employer (1–10)	305	364	477	1146
	Middle employer (11–50)	258	291	242	791
	Large employer (50+)	272	180	249	701
Total		835	835	968	2638

Source: MRLS 2002/3.

TABLE 3

Sample distribution by province and category of non-agricultural labour

	Province			Total
	Nampula	Zambézia	Manica	
Hotel/hostel worker	13	12	6	31
Restaurant/*barraca* tender	34	10	34	78
Market stall	7	22	17	46
Domestic servant	41	59	65	165
Transport driver	4	6	7	17
Transport other (fare collector/*chova*)	11	12	18	41
Mason in construction	7	14	15	36
Construction others (assistant/apprentice)	2	0	4	6
Other	22	18	8	48
Total	141	153	174	468

Source: MRLS 2002/3.

The principle used in the purposive sampling in this research was that of ensuring 'maximum variation', so that the final sample size was a function of the extent to which 'saturation points' had been reached for several key strata of jobs (agricultural, non-agricultural, small-scale vs large-scale employers, local and foreign investors and so on). The combination of care taken to build appropriate sampling frames, the large sample size, and the principle of maximum variation provide grounds to believe that the MRLS is a fair representation of the wide range of different types of rural wage workers in the provinces selected, and of the various categories of employers (see Tables 2 and 3 for a breakdown).

TABLE 4
Assets and education compared: MRLS and INAF surveys

Percentage of poorest quintile (INAF)/tercile (MRLS)	Nampula		Zambézia		Manica	
Variable	INAF02	RLMS02	INAF02	RLMS02	INAF02	RLMS02
Bicycle (owns)	29	29	23	36	47	21
Radio (owns)	44	46	25	41	56	47
Watch (owns)	6	3	14	4	31	6
Meat eaten last week	24	14	15	9	31	15
Three meals per day	16	13	19	2	33	48
Primary education not completed	87	86	80	85	63	81

Sources: INAF 2004; MRLS 2002/03.

When the results of this research and the results of the nationally representative IAF survey (2002/03) are compared, it is clear that the purposive sampling of people working for wages in the MRLS succeeded in capturing many respondents who would certainly be classified by IAF as among the poorest Mozambicans. Thus, the bottom third of the MRLS sample, ranked according to a simple but robust household asset index,[15] is at least as poor as or poorer than the bottom quintile of households surveyed by IAF in the rural areas of the same provinces. As Table 4 shows, fewer of the poorest tercile of MRLS respondents in Manica own a bicycle, a watch or a radio than the poorest quintile of IAF respondents in that province. And in all three provinces, fewer MRLS respondents had eaten meat within the last week or owned a watch. Educational status is known to be closely associated with other measures of poverty in Mozambique (Simler *et al.* 2004); 80% or more of the poorest households in both MRLS and IAF (with the surprising exception of IAF respondents in Manica) failed to complete primary school. When other education statistics (and most of the demographic statistics) for the whole sample of rural wage workers in the MRLS were examined, the results were not statistically different from the IAF rural samples in the same provinces.[16] In sum, the purposively sampled survey is a policy-relevant *complement* to standard survey techniques; both the questionnaire design and the MRLS sampling procedures were planned specifically to fill in gaps that are common to household surveys in Africa (Sender *et al.* 2005).

This paper also reports findings from 120 respondents to a different questionnaire administered to a sample of small- and medium-scale

agricultural *employers*. In addition, the researchers conducted semi-structured interviews with thirty-three large-scale employers, all employing more than fifty workers at the peak of the agricultural year, and collected the life histories of fifteen female wage workers.[17] Thus, this paper aims to combine the quantitative findings of large- and smaller-scale purposive surveys with primary qualitative material to question both the policy conclusions reached in much of the current literature on rural Mozambique, and some of the methods commonly used.

VARIATIONS IN METHODS OF PAY: MONTHLY, DAILY AND PIECEWORK PAY

Payment arrangements in rural labour markets are extremely complex. They are difficult to investigate and summarise (Hatlebakk 2004; Rogaly 2005). The literature on piece-rate systems and farm wage differentials attempts to explain marked differences between how workers are paid, even when they are doing similar things and in comparable locations. The focus in this literature is often on the costs of labour recruitment and supervision faced by employers, and on the implications of different payment methods for labour productivity (often in the context of debates about 'efficiency wages'). There are also many other explanations, less firmly rooted in the neoclassical economic literature, for observed variations in payment methods (Bardhan & Rudra 1986; Newman & Jarvis 2000; Ortiz 1999; Rogaly 2005; Rubin & Perloff 1993; Wells 1996). In Mozambique, forms and levels of payment vary within provinces from one rural area to another; they appear to be influenced by the strategies adopted by individual employers, making any general statement about or explanation of prevailing methods on Mozambican farms questionable.

Table 5 shows the distribution of the main methods of payment in the MRLS sample, based on workers' responses to both coded and open-ended questions.[18] However, in many of these responses the distinction between (unwritten) contracts to purchase labour *time* and contracts to complete a specific *task* was unclear, so the classifications in Tables 5 and 6 should be regarded as 'best estimates', rather than definitive.

More than two thirds of the respondents employed as agricultural labourers were *not* paid on a monthly basis. An even larger proportion (almost 80 %) of the agricultural workers employed by local farmers (small Mozambican farmers or medium-scale private farmers known as *privados*) were paid either by task or on a daily basis. In contrast, over 80 % of agricultural workers employed on foreign-owned firms were paid monthly wages.[19]

TABLE 5
Wage payment methods for agricultural and non-agricultural workers, by type of employer

Data in %	Agricultural labour[a] (2152)	Non-agricultural labour (468)	National company/ plantation (268)	Foreign company/ *privado* (227)	Local farmer/ *privado* (1657)	Total (2620)
Daily wage	20	4	36	9	18	17
Weekly wage	2	0	0	2	2	1
Monthly wage	30	86	44	81	21	40
Based on specific contract/work	2	5	2	1	2	2
Piece/task rate	47	4	17	7	57	39
Other	0	2	0	0	0	0
Total	100	100	100	100	100	100

Note: [a] Number in brackets shows the total number of observations for each category. Note that the total 2620 differs from the 2638 reported in Table 2 as a result of some missing values for pay modalities. The total of agricultural labourers may slightly differ from the same total in other tabulations due to missing values in some of the categories used.
Source: MRLS 2002/3.

TABLE 6
Wage payment methods by size of establishment (agricultural workers)

	Category of employer by no. of workers at peak			Total
	Small employer[a] (723)	Middle employer[b] (754)	Large employer[c] (694)	All employers (2171)
Daily wage (%)	14	18	28	20
Weekly wage (%)	1	2	2	2
Monthly wage (%)	15	33	42	30
Based on specific contract/work (%)	3	1	1	2
Piece/task rate (%)	67	46	26	47
Total	100	100	100	100

Notes: [a] 1–10 workers; [b] 11–50 workers; [c] 50+ workers.
Source: MRLS 2002/3.

Payment methods on the larger farms, particularly on 'foreign' or 'national' corporations, were more clearly defined than on other types of farm, where the variation in payment methods and rates was particularly large. Table 6 shows that larger farming enterprises are more likely to

TABLE 7
Daily pay for weeding by selected large and mid-scale employers in Nampula (Meticais)

Employer	Daily rate for casual labourers	Weeding task per day
Tobacco mid-scale local farmer – Manica	20,000	50 × 20 'steps'
Sisal company – Nampula	21,577	3 'lines'
Mid-scale local farmer – Nampula	15 fishes or 2kg sugar or 2 bars soap	50–100 × 2 metres
Mid-scale cotton farmer – Nampula	20,000	6/7 lines
Large local farmer – Nampula	10 fishes	15–20 × 2 metres
Large local farmer – Nampula[a]	20,000	5 lines
Large local farmer – Nampula[b]	10,000	10 lines

Notes: [a] For tough weeding; [b] for lighter weeding.
Source: MRLS 2002/3.

employ monthly paid workers than smaller farmers. However, many of the large employers recorded as paying a monthly wage to temporary workers were, in fact, applying a daily rate (often derived from the legal monthly minimum rate), although the number of days of work required per month was at the discretion of individual employers.[20]

Larger farms also need to employ a great many temporary workers for one to three months to meet seasonal labour peaks. These workers are usually required to complete the task set by their employers before they receive a 'daily' payment. The tasks involved varied, as did the judgement of what could be done in a day and how many hours a casual worker should be expected to work. On some farms there was a stable daily wage paid for seasonal tasks, but these tasks would vary in intensity. Yet on other farms the daily wage varied according to the task set. For example, on a large joint venture farm in Nampula Province growing sisal and cotton, day workers were paid MT31,347 a day for a set task (cutting ninety-eight piles of sisal leaf), but for clearing weeds in sisal fields the task rate was MT21,577 (for three 'lines' of weeding). Thus, among large-scale employers, even when a 'daily rate' applied, this could vary depending on the specific task involved. Table 7 gives some idea of the latitude for setting differing wage rates for weeding.

On the larger farms in the sample, with hundreds of casual workers at peaks of the agricultural cycle, employers often paid a bonus for work well done or for regular attendance. Although some respondents only performed an occasional day of *ganho ganho* (casual) labour on these farms, employers appeared to prefer offering longer (unwritten) contracts,

typically for one to three months, to 'daily' labourers. For example, on one farm the employer offered MT5,000 per day on top of the daily wage, payable on the last day of an agreed span of work and conditional on the employee having turned up regularly. In many cases it was left to field supervisors to judge whether a task had been done satisfactorily or whether a bonus had been earned.

Local farmers/*privados* rely much more heavily on task-based payment systems. The tasks their workers have to perform are even less clearly defined than on the large farms and require widely varying amounts of time and effort to complete, making it extremely difficult to calculate the wage received per day or hour.[21] One important advantage of task-based payment systems is that they allow *privados* to incorporate the labour efforts of additional female and child labour without having to contract (or pay) these workers directly. Thus, a woman who has difficulty completing the task set by her employer will bring along her children and female relatives to 'help' with the work.

Payment methods are determined not only by the size and ownership characteristics of farms, but also by the crop and the farming operation. An analysis of 733 responses to open-ended questions concerning agricultural tasks (mainly from the sample in Nampula province) suggests the following patterns: work in cultivating maize, cashew and rice is almost always paid by task or piece-rate; where tobacco, sisal and horticulture are the main crops, the proportion of more regular monthly-paid workers is much higher than for other crops; tasks like weeding and harvesting are more likely to be paid on a piece-rate basis, whereas clearing and sisal stumping are usually paid on a daily or monthly basis.

VARIATIONS IN RATES OF PAY FOR AGRICULTURAL WORK

How much people can earn on different types of farm enterprise also varies. The median *monthly* wage ranges from a low of MT250,000 for people working for local farmers or neighbours, through MT381,000 earned on the farms of *privados*, up to MT460,000 on Mozambican-owned companies and plantations, and MT525,000 on foreign enterprises.[22] The range of daily, as opposed to monthly, wage payments is more compressed, varying from a low median rate of MT10,000 per day paid by local or neighbouring farmers to a high of around MT15,000 paid by national and foreign agricultural companies. The modal as well as the median daily payment rate (MT10,000) was equivalent to about 42 cents/day, at the exchange rate prevailing during the main period of fieldwork.[23]

TABLE 8
Payment rates by size of agricultural employer

Size of employer, by no. of workers at peak		Daily wage	Monthly wage
Small employer (1–10)	N	99	115
	Mean	13,885	285,257
	Median	10,000	250,000
Middle employer (11–50)	N	156	272
	Mean	11,422	371,763
	Median	10,000	350,000
Large employer (50+)	N	210	358
	Mean	15,691	463,913
	Median	15,000	460,000
Total	N	465	745

Source: MRLS 2002/3.

Distinguishing employers by size (defined in terms of the number of workers employed at the peak of the agricultural year), rather than by ownership type, reveals a similar pattern of variation in rates of pay, as seen in Table 8.[24] The fact that larger enterprises tend to pay their workers more is hardly surprising (Idson & Oi 1999). However, the widespread belief that concentrating resources on small farm agriculture and food production will reduce African poverty ignores the fact that some of the poorest rural people are particularly dependent on earnings from agricultural wage labour.[25] Small farmers in the MRLS, especially food producers, do *not* offer very high or regular wages to their workers; virtually all of them ignore government minimum wage legislation.

Workers engaged in the production of some crops are more highly paid than workers on other crops, given a similar type of employer. For example, tobacco out-growers paid higher wages than the SME respondents growing other crops in the same area (Manica Province). Work on sisal and cotton growing enterprises is relatively highly paid (at a median daily rate of MT14,000 and MT25,000, respectively), compared to work on food crops such as rice, maize, groundnuts or sesame (typically paid at the rate of MT10,000 per day). Men usually cut sisal and this work is arduous, involving risks of cuts and snake-bites. Thus, some combination of gendered job segregation and the need to provide incentives for dangerous and unpleasant work may account for relatively high payment rates on sisal plantations. However, higher payments for sisal and cotton cultivation are also probably a result of the fact that, in the MRLS, these crops

TABLE 9
Piece-rates on a cashew-nut farm for harvesting (Nampula)

	Frequency	%	Cumulative %
MT2,000	1	5·3	5·3
MT2,500	1	5·3	10·5
MT3,000	6	31·6	42·1
MT5,000	6	31·6	73·7
MT10,000	5	26·3	100·0
Total	19	100·0	

Source: MRLS 2002/03.

were often grown on larger farms or plantations, usually owned and managed by national *privados* or corporations,[26] which tend to pay higher (daily or monthly) wages.

A small sub-sample of workers employed to harvest cashew nuts, all paid on a piece-rate basis and working on the *same* farm in Nampula, also showed a surprising degree of variation in rates of payment (Table 9).[27] These differences in task payments could not be explained by reference to the gender, levels of education or age of the workers. This simple case illustrates the idiosyncratic spread of payment rates, and suggests the difficulties involved in using standard Mincerian equations to explain variations in these rates.[28]

It is also difficult to account for the variation in monthly wage payments received by another sub-group of workers, all of whom were male, semi-skilled and working on large scale farms. Some of the interviews with large farmers yielded information on the range of salaries they had decided to pay their tractor drivers. The lowest reported monthly wage for a tractor driver was MT600,000 and the highest was MT1·5 million. Most drivers were reported to earn around MT800,000, though a few were earning less and a handful were paid more than MT1 million monthly.

VARIATIONS IN PAYMENT RATES FOR NON-AGRICULTURAL WORK

Table 10 summarises the survey results for the monthly wages reported by 391 respondents employed by rural non-agricultural enterprises. During the survey period, the non-agricultural minimum wage was set at MT812,163 (roughly $34·26) a month. So, median monthly earnings of MT150,000 ($6·33) for working on a market stall, or the MT200,000 median amount earned by the 159 domestic servants (*empregadas*) in the survey, are not only extraordinarily low, but also illegal. Payments

TABLE 10

Monthly wages of non-agricultural rural workers (MT)

Categories of non-agricultural labour	N	Mean	Median	Std. error of mean
Hotel/hostel	30	488,900	475,000	41,371
Restaurant/*barraca*[a]	74	379,649	300,000	31,583
Market/*banca*[b]	42	231,071	150,000	43,514
Domestic servant	159	242,440	200,000	14,494
Transport driver	14	975,000	875,000	175,078
Transport other (*cobrador/chova*)[c]	24	517,167	500,000	45,946
Pedreiro in construction[d]	5	780,000	750,000	135,536
Construction others (*servente*)[e]	4	707,500	700,000	47,148
Other	39	449,615	350,000	65,702
Total (paid in monthly wages)	391	361,486	280,000	16,184
Total non-agricultural sample	458	n.a.	n.a.	n.a.

Notes: [a] An informal, 'street' bar. [b] Market stall. [c] Ticket collector or cart-boy. [d] Bricklayer/mason. [e] Assistant.
Source: MRLS 2002/3.

reported by *empregadas* were remarkably consistent, having the lowest standard error of the mean wage among the categories surveyed. By contrast, people (usually males) working in the transport and construction sectors in the same rural towns could earn substantially more, although there was a relatively large variation around the mean wage for drivers and bricklayers. The fourteen drivers interviewed had the highest median monthly wage (MT875,000).

A CLASSIFICATION OF JOBS AND PAYMENT METHODS

The analysis above has shown that rural Mozambicans experience a complex range of methods and rates of payment for wage labour. A crude dichotomy between privileged 'labour aristocrats' and all other rural workers cannot capture this reality. The MRLS allows for a more nuanced, although still rather simple, taxonomy of wage employment. Thus, Table 11 identifies five main types of wage employment obtained by rural Mozambicans, using a mixture of quantitative and qualitative criteria. The classification contrasts the characteristics of workers who are relatively (un)successful in the labour market, in terms of earnings and some aspects of working conditions (e.g. access to trade unions and compensation for working overtime).

Table 11 shows that some (770) workers enjoy access to 'good' jobs that guarantee a relatively decent and more or less regular flow of income.

TABLE 11

Better and worse jobs – payment methods and rates

Types of jobs	Good 1 Monthly paid and regular income (770)	Good 2 Monthly paid, regular income in agriculture (472)	Bad 1 Performed *ganho* casual work for less than 15 days per month (708)	Bad 2 Same as bad 1 and no seasonal contracts or no access to any good job (591)	Bad 3 Domestic servant + below agricultural minimum wage (145)	Other (non classified)	Total sample (2628)
Paid monthly wages							
% within job type	100	100	10	1	100	57	40
Paid on piece or task rate basis							
% within job type	0	0	68	80	0	33	39
Median payment (daily)							
(number of cases in brackets)	15,400 (16)	15,000 (15)	10,000 (142)	10,000 (96)	n.a.	12,500 (328)	12,000 (484)
Median payment (monthly wage)							
(number of cases in brackets)	400,000 (761)	450,000 (466)	300,000 (78)	300,000 (9)	150,000 (145)	350,000 (318)	360,000 (1145)
Median payment (task)			15,000 (336) *SD/mean*	15,000 (333) *SD/mean*		15,000 (488) *SD/mean*	15,000 (824) *SD/mean*
(number of cases in brackets)	n.a.	n.a.	*ratio* = 1·6[a]	*ratio* = 1·6	n.a.	*ratio* = 4·5	*ratio* = 4·8
Received payment in kind							
% within job type	0	0	29	34	0	11	13

Note: [a] SD = Standard deviation.
Source: MRLS 2002/3.

A similar number of workers (708) only succeeded in finding casual or very low-paid ('bad') jobs. The five types of employment identified in the table are not mutually exclusive. For example, the second is a fraction of the first. Categories 'bad 1' and 'bad 2' are also partly overlapping, and a few workers with access to 'good' jobs also perform some of the 'bad' jobs on the side.

Although the median wage of all the agricultural workers classified as having 'good' jobs is still below the statutory minimum, the 'good 2' category workers do receive 13% more than 'good 1' category workers, and over 25% more than other monthly-paid unclassified workers. Moreover, these agricultural workers are more likely to have access to trade union representation than workers in any other type of job (Table 12). However, the benefits they derive from union representation are not clear. One or two of the biggest agricultural employers stated that in the past unions were combative and even aggressive; of late they have only been 'helpful'. This was confirmed by other employers (and by provincial union officials) who said that union officials either never visited farms or that they did visit from time to time but would only do so if they could get a lift from the farmer – in other words, one major constraint on union officials organising on farms is the lack of transport facilities. Clearly, the disorganisation of unions – chiefly the *Sindicato Nacional de Trabalhadores Agro-Pecuários e Florestais* (SINTAF) – and the failure of both government and international donors to invest in increasing their capacity, allow for the high degree of employer discretion in setting wages and their composition in terms of money wages, benefits and payments-in-kind.

Among monthly-paid workers, the 145 domestic servants receiving less than the minimum wage are particularly disadvantaged, since half of them earned below MT150,000 per month. The median daily rates of the agricultural workers employed on a casual basis (*ganho ganho*), whether they are classified as having a 'bad 1' or 'bad 2' job, are consistently lower than the daily rates for any other type of worker.

Moreover, workers with bad jobs were more likely to be paid in kind (usually with food) than any other worker (Table 11). The most common substitutes for money wages reported in interviews with large farmers were dried fish, sugar, soap, maize or cassava flour, and *capulanas* (the cloth wraps worn by women). For example, a woman worker might work for four days to earn a *capulana* 'worth' (according to the farmer) MT35,000. Obviously, precise estimates of an imputed money wage (or the employer's wage costs) are difficult when payments are made in kind. The lack of precision appears to increase employers' control over the terms on which they acquire labour.

TABLE 12

Employment tenure and other work conditions, by types of job

Types of jobs	Good 1 Monthly paid and regular income (770)	Good 2 Monthly paid, regular income in agriculture (472)	Bad 1 Performed *ganho* casual work for less than 15 days per month (708)	Bad 2 Same as bad 1 and no seasonal contracts or no access to any good job (591)	Bad 3 Domestic servant and below agricultural minimum wage (145)	Other (non classified)	Total sample (2628)
Months of tenure with same job/employer (median)	12	12	5	4	9	6	7
Number of days worked as seasonal contract workers (median)	208 (395)	208 (118)	207 (107)	n.a.	n.a.	210 (291)	208 (749)
Number of days worked as casual *ganho* (median)	58 (390)	60 (108)	20 (706)	21 (591)	n.a.	78 (735)	45 (1508)
Meals provided at work (% within job class)	42	19	17	16	90	22	27
Housing provided by employer (% within job class)	23	21	3	2	45	7	11
Loans (wage advance) provided (% within job class)	35	29	17	17	42	28	28
Compensation for overtime work (% within job class)	46	53	17	4	6	35	39
Presence of Labour Union at workplace (% within job class)	13	21	2	0	0	11	9

Source: MRLS 2002/3.

TABLE 13
Workers by employer categories and job types (% of workers within each employer category)

Type of job	Good 1 Monthly paid and regular income (%)	Good 2 Monthly paid, regular income in agriculture (%)	Bad 1 Performed *ganho* casual work for less than 15 days per month (%)	Bad 2 Same as bad 1 and no seasonal contracts or no access to any good job (%)
National company/plantation	32	32	7	1
Foreign agricultural employer	67	63	9	2
Local agricultural employer	14	14	39	35
Small	31	8	31	28
Medium	24	21	30	26
Large	32	32	17	9

Source: MRLS 2002/3.

In all types of rural wage employment, job tenure appears to be insecure. Even for those workers who have a 'good' job, half report spending twelve months or less in their present job. More than half of the workers with the worst jobs (bad jobs 1 and 2) only manage to find twenty days or less of wage work per year. An increase in the number of days per year when they can find employment would have a dramatic impact on their standards of living.[29]

Small-scale employers and especially Mozambican-owned small farm enterprises are unlikely to offer 'good' jobs to their workers, while almost two thirds of workers employed by foreign agricultural investors enjoy good jobs in agriculture (Table 13). Many workers with relatively 'good' jobs suffer from employment conditions that are below statutory minimum standards. For example, about half of them do not receive any compensation for working overtime (Table 12).[30] Nevertheless, they are more likely than workers with 'bad jobs' 1 and 2 to be provided with housing, meals and credit by their employers.

The amount and quality of these non-wage benefits, as revealed in interviews with large farmers and in the quantitative surveys, is variable and discretionary. Benefits can be and are withdrawn, whenever the employer feels this is appropriate. Moreover, almost all the women captured in the MRLS were denied access to the most basic non-wage benefits. Thus, only about 3% had paid maternity leave; less than 4% of all female

wage workers were given paid holidays by their employers and less than 10 % were given paid sick leave or any medical benefits.

THE POLITICAL ECONOMY OF LABOUR CONTROL

Employer discretion over labour contracts is exercised within a context of widespread poverty, a generally weak presence of trade unions and labour inspectors, low levels of literacy and education and, by the accounts of large farmers, a huge excess in the supply of labour. As local monopsonists, most rural employers are in a strong position to shape labour relations by using an array of discretionary gambits in setting wage levels, imposing payment methods, offering and threatening to withhold incentives, and by choosing what combination of male and female permanent, seasonal and casual labour to employ.

Although very few of the workers in the survey are aware of the minimum wage for agricultural labour, and none of the provincial officials working for the trade union or the Ministry of Labour could quote the current rate accurately, nevertheless many employers feel constrained to follow prevailing norms for daily wage rates, or to calculate payment rates by reference to the legal minimum wage; they often feel themselves to be embattled and hemmed in by hostile local interests.

Large and medium-sized commercial farmers, both Mozambican and foreign, are constantly embroiled in social tensions and legal conflicts, and face encroachment onto their land. These conflicts may involve long-standing claims to landownership or grazing access rights that clash with recently granted land concessions to large-scale farmers. The conflict can play itself out in different ways: through legal challenges and bureaucratic tangles; insinuations of the engagement of spirits and curses; and aggressive encroachments onto the concession.[31] Recently arrived *boere* farmers in Manica, for example, not only complain of the bribes they have to pay to provincial officials, but also that the locals frequently burn their crops and sabotage their farm equipment.[32] One response to routine theft and trespassing is to locate selected permanent workers on smallholdings along the perimeter, or border area, of the farm. This response has the advantage not only of promoting local social and political allies who are expected to help in the struggle to secure contested property rights,[33] but also, when it takes the form of smallholder out-growers surrounding a nucleus estate, of acquiring the labour inputs of women and children for tobacco and cotton production without having to employ additional wage labour directly.

The interviews with large-scale farmers shed some light on their preference for hiring casual workers on very short-term contracts, rather than

permanent workers. The largest agricultural enterprises (and generally also foreign-owned enterprises) cite the complexity of the labour law and the inflexibility of the fines for firing workers as the main disincentive to hiring more permanent workers. Smaller farmers (and nationals) are more likely to explain a relatively low number of permanent relative to temporary workers in terms of either insufficient resources to pay permanent workers while 'idle', or of the workers' own preferences.

Both the gender composition of the labour force and its division into permanent or casual employees are presented (in interviews with employers) either as an employer choice or as a worker (and worker's family) choice. For example, some employers might say that they rely on temporary workers because they want to evade the perils of a prying bureaucracy and a complex labour law, or to reduce supervision costs,[34] while others might say that their dependence on temporary workers is driven entirely by the fact that 'they prefer it that way'. Thus, one very large employer, on a tea plantation in Zambézia Province, claimed that he needed 1,400 permanent workers but could not get them (he had only about seventy) because local people do not want permanent employment, they lack 'ambition', and have only intermittent need for cash.

These stereotypical prejudices are also evident in some of the large-scale farmers' explanations for the gendered division of labour on their farms, and for the fact that men are more likely to be permanently employed than women. The standard explanation is couched in terms of physical abilities and/or skills. Many agricultural tasks are physically demanding, e.g. pruning cashew trees or cutting sisal, and require male strength. And many farm jobs depend on the kind of skills that are assumed to be male preserves (driving tractors, working as mechanics, acting as supervisors). Yet employers commonly make assessments of the relative superiority of women for other, less well-remunerated, types of job. Most tobacco-grading and bundle-tying, for example, is done by women. Most employers explain this in terms of women 'having better eyesight' or being more 'nimble-fingered', or women liking to sit and chat while patiently working, whereas men get bored and wander off from the work in hand.

Sometimes, rather more general assertions are made. Some farmers claim that women are better at jobs 'needing care', or that women are better at 'ensuring quality'. Others argue that women 'are more serious', while men either work for a month or two, and then leave, or 'pretend to work' while actually slacking, taking cigarette breaks furtively, etc. Women are often said to be 'more trustworthy': for example, one farmer claimed that women are better to employ for harvesting because 'they steal less than men'. Finally, men were said by one farmer to be more

likely to 'run to the labour department to make complaints'. These statements suggest that employers generally aim to hire at least a certain number of women and girls chiefly because they are regarded as more compliant. Yet some employers also had a clear sense that the choice was not theirs to make freely. As one (expatriate) farmer put it, the situation in 'our community' is delicate: hiring women causes tension in an area where there is enormous male need for wage labour. Other employers claimed, more convincingly, that they would like to hire more women but that husbands often prevented their wives from working for wages.

Larger farmers often invoke the idea that they are 'developing the local population', claiming that 'we are doing this to help people', 'nobody round here had anything, not even any soap, till we started farming here', and so on.[35] These avowals of paternalist intent are partly a means to justify the presence of large farmers in a context in which many of them, especially foreign investors, face overt or covert local threats to their property. Thus, allocating food production plots along the borders of the farm to favoured permanent workers is cited as evidence of concern for workers' nutrition and welfare. Similarly, a cotton farmer in Nampula grew maize and beans as well as his principal crop, but only 'to distribute' to the local population, i.e. to sell them locally. One well-established practice, usually represented by farmers as evidence of paternalistic concern for employees' welfare, is the sale of food and other basic consumer goods to workers through farm shops at 'fair prices', or on credit repaid through deductions from wages. However, these practices can also be seen as further evidence of employers' discretion in manipulating real wage rates, or as adding to workers' difficulties in understanding, or complaining about, the relationship between their net wages and hours of work.

SOME CHARACTERISTICS OF THE POOREST WORKERS AND THEIR LABOUR MARKET PROSPECTS

It is not surprising that most of the worst jobs ('bad 2') are performed by workers living in the poorest households. One third of the surveyed households lack even the most basic of the material possessions (a paraffin lamp, a clock or watch, a radio cassette, a bed, pairs of shoes, access to some form of toilet) used to calculate the household asset score. Table 14 contrasts the experience of these extremely poor and deprived households with 'less poor' rural households achieving a much higher asset score. A far greater proportion of the 'good' and a very low proportion of 'bad 2' jobs (only 10%) are done by members of the richer households. Similarly, the majority of 'bad' jobs were done by workers who lived in households

TABLE 14

The share of different types of household and worker in 'good' and 'bad' jobs

Types of jobs	Good 1 Monthly paid and regular income (770)	Good 2 Monthly paid, regular income in agriculture (472)	Bad 1 Performed *ganho* casual work for less than 15 days per month (708)	Bad 2 Same as bad 1 and no seasonal contracts or non-agricultural job (591)	Bad 3 Domestic servant and below agricultural minimum wage (145)	Total sample (2628)
Possession index group (poorest) (% within job type)	15	18	48	53	21	33
Possession index group (richest) (% within job type)	47	40	14	10	41	27
Nobody in HH ever completed primary school (% within job type)	37	42	56	56	39	48
Respondent never attended school (% within job type)	15	20	36	39	15	27
Females (% within job type)	35	25	60	68	62	47
Respondent divorced/separated widow female (% within job type)	17	15	20	22	13	18

Source: MRLS 2002/3.

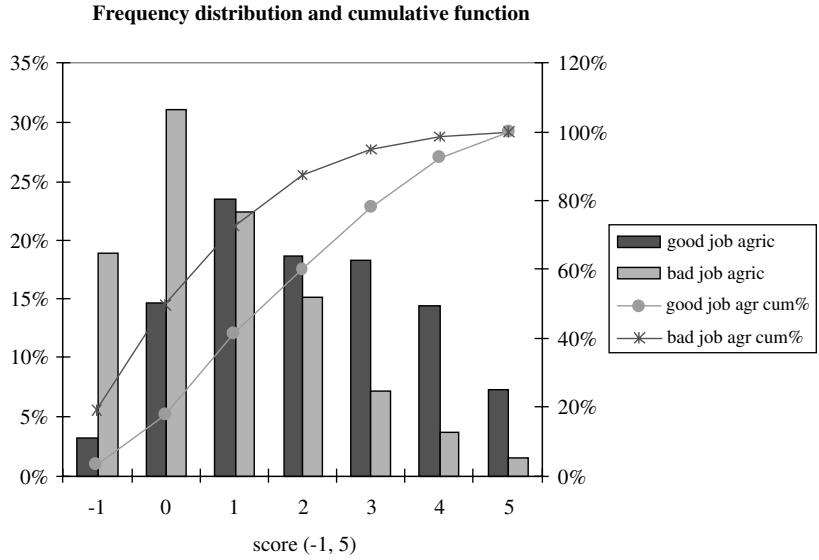

FIGURE 1
Possession scores by type of job in agriculture. *Source*: MRLS 2002/3.

in which no one had completed primary school. In contrast, most of the 'good' jobs (over 80%) were held by respondents who had attended school.[36]

Table 14 suggests that there may be an association between household socio-economic status and the ability of household members to avoid employment in the worst types of rural jobs. 'Better-off' people in rural areas are likely to have very significant advantages compared with very poor people in searching and bargaining for the best available employment because of their education, ability to move, household connections and previous work experience.[37] At the other end of the spectrum, the strong relationship between household possession scores and participation in the worst type of insecure casual agricultural labour is graphically illustrated in Figure 1.[38]

However, the direction of causality is not obvious. As Table 14 shows, by no means all of the 'good' jobs are monopolised by a 'labour aristocracy' comprising members of richer and more educated households. Table 14 also shows that although the worst jobs are much more likely to be performed by women, a significant proportion of the better jobs on farms are filled by female workers; and even some of the women with the weakest bargaining position in the labour market, divorced/separated and

widowed women, have been able to find decent work. Thus, entry barriers into 'good' jobs are not always insuperable for the poorest households, and when such a job is obtained, the impact on standards of living can be dramatic, even in the short term.[39] After all, access to good jobs also depends on historically contingent combinations of interventions and actions by the state, unions, farmers and so on that help increase demand, tighten rural labour markets and have a positive influence on the prospects for the poor.[40]

❀ ❀ ❀

Rural labour markets remain on the periphery of policy discussions for growth and poverty reduction in sub-Saharan Africa.[41] However, evidence from the largest rural labour market survey to be conducted in Mozambique adds to other research in showing that these labour markets have become central to the lives and prospects of significant numbers of poor rural Africans. Wage labour is not only associated with large plantations, agri-businesses or kulak farmers, but is also widespread among small- and medium-scale farmers, though these tend to offer much lower wages and worse working conditions than larger employers. Rural non-farm wage employment is *not* restricted to members of the wealthiest households, but involves domestic servants, restaurant, market and other workers from extremely poor rural households. Rural labour markets also play an important part in the lives of many people who differ in terms of household background, sex, age, education and degrees of poverty. This paper has shown how and why complementary and innovative survey methodologies can shed more light on the significance of wage labour relations in rural Mozambique. The combination of quantitative survey methods with qualitative techniques also facilitates the task of making sense of complex wage labour arrangements in poor rural areas, and investigating issues surrounding the unequal bargaining power of employers and workers.

The paper has methodological lessons. The types of questionnaire typically applied in large and statistically 'representative' surveys are unlikely to reveal the complex and multiple payment patterns, employment practices and working relations that have emerged from the findings of the MRLS research. Often these patterns, practices and relations are specific to individuals or particular types of employer. Thus, first, other investigative techniques are necessary to make sense of observed differences or apparent inconsistencies within quantitative data sets. Second, survey questionnaires themselves need to be designed, and enumerators trained,

to capture the nuances of differences in payment methods and wage rates. They need to be able to pick up a great deal of detailed information on 'tasks' or piece-rates and their variation. And questionnaires need to be redesigned to escape the artificial vision of rural society imposed by questions framed exclusively in terms of 'main activity' over the past week or month. Third, representative sampling should be complemented by purposive sampling to add information on what are likely, especially in the dynamic contexts of rural Africa, to be non-randomly distributed trends, for example in labour demand. Fourth, surveys (and complementary techniques) need to be designed also to identify, as a matter of urgency, the scale and characteristics of rural non-agricultural employment in small rural towns, including the employment of domestic servants.

Labour market research in rural Mozambique has other implications. Ideas of 'fairness' are not universally shared values of a moral economy but, rather, are part of the armoury of employers who are often embroiled in social and political conflicts at local and other levels. Meanwhile, 'norms' of payment and working conditions may have developed over time and are influenced by minimum wage legislation. However, employers in practice exercise a great deal of discretion in implementing these norms. The relatively weak bargaining power of wage workers, especially agricultural workers and domestic servants, means that a large proportion of them live on pitiful and irregular wages with no protection or non-wage benefits. However, this paper has shown that some types of employer are able to offer better working conditions than others, despite enjoying similar bargaining power. Some employers offering decent jobs, typically larger employers, are also more visible and exposed to control over their employment practices, in spite of the generally weak enforcement of labour laws by unions and labour inspectors.[42] While this paper has argued that the diversity of conditions and dynamics within rural labour markets is greater than, and different from, the divisions mapped by segmented labour market theory, its evidence also suggests that this diversity is not purely contingent or random.

These characteristics of rural labour markets have policy implications. Incentives (fiscal, credit, infrastructural, etc.) can be devised to generate demand for labour among the types of employer most likely to offer decent working conditions, instead of being distributed to small 'family farms' or to the party/bureaucratic elite.[43] Not only journalists, human rights activists and NGOs, but also foreign donors, should press governments and trade unions to implement existing legislation more effectively, and should provide much more support for them to do so – analytically, administratively and in resource allocations. The evidence suggests that even

poorly implemented minimum wage legislation does have some influence on the level around which employers exercise discretionary power. Finally, there is a strong case for significant expenditure on public information and education, for example by radio, on rural women's legal rights on wages and working conditions.

NOTES

1. This study was funded by the National Directorate of Planning and Budget of the Ministry of Planning and Finance (now Ministry of Planning and Development) in Mozambique. The authors acknowledge André Noor's help in data entry programming, as well as the work of the research team in Mozambique, particularly Claudio Massingarela and Virgulino Nhate.

2. There is, however, an earlier literature providing rich historical evidence of the effects of colonialism, regional integration and post-independence policy in fomenting rural socioeconomic differentiation and increasing wage employment in Mozambique: see, for example, Bowen 1989; Covane 2001; First 1983; O'Laughlin 1996; Vail & White 1980; Wuyts 1989. More recent relevant work includes Waterhouse & Vijfhuizen 2001.

3. For Mozambique, see Brück 2004; Tschirley & Benfica 2001: 338. More generally, Binswanger *et al.* 1989 is a widely cited reference to support this view. A clear and recent statement of the dualist perspective identifying 'high' and 'low' rural segments is provided by Davis *et al.* 2007: 11–12. A survey of some rather dated and inappropriate evidence concludes that 'non-market forms of labour exchange remain very common throughout rural Africa. There is only limited evidence of these being displaced by wage labour' (White *et al.* 2006: 11). These authors cite a former World Bank chief economist for Africa who 'crossed out any sections of African poverty assessments referring to rural labour markets since these did not exist' (p. 3).

4. On the inadequacy of African data on agricultural wage labour see Mwamadzingo 2003: 31 and FAO-ILO-IUF 2005: 21.

5. Many other proposals to promote agricultural development in Africa, even those that do focus on such wage labour-intensive crops as cotton, fail to mention the importance of the income currently earned through rural wage employment for the survival of the poorest Africans, e.g. Boughton *et al.* 2003.

6. For some examples see Barrett *et al.* 2001; Gabre-Madhin & Haggblade 2004; Humphrey *et al.* 2004; Peters 2004; Sender 2003; Wiggins 2000.

7. These limitations are discussed in detail in Sender *et al.* 2005.

8. Most standard survey questionnaires ask questions about the 'main' activity, and focus only on those activities undertaken during a very short reference period, i.e. the last seven days.

9. The gap between the IAF and QUIBB results is one of a number of anomalies in the QUIBB data on rural wage employment. For example, examination of the raw data revealed that 80 % of households farming very large areas, i.e. households cultivating more than 20 hectares and several cultivating more than 100 hectares, made the implausible claim that they *never* employed any hired labour.

10. While constructing these sampling frames at the provincial level, we discovered that a significant number of large and middle employers listed in the 1999 agricultural census did not exist or were not operational. Several other employers were captured who were not included in any of the censuses available, despite the fact that some of them had been in operation before 1999.

11. In these areas as well as other districts covered in the MRLS, several villages were also randomly selected, where enumeration teams listed households with members active in the local labour markets. This enabled a significant number of *ganho ganho* workers (casual agricultural labourers working in small farms) to be captured.

12. In 1998, an allegedly representative survey of 960 rural households in Nampula, Zambézia, Sofala and Manica only managed to cover about six households deriving an income from wage work on company farms, presumably because the sample was narrowly confined to those particular rural areas in which NGOs had established activities (Tschirley *et al.* 2000; Tschirley & Benfica 2001). In contrast, the MRLS covered 495 workers employed on company farms and 701 working for large-scale employers (with peaks of fifty or more workers at any given time).

13. This employer category is often neglected in studies of agricultural wage labour. According to data from TIA 2002, a large proportion of middle-scale agricultural farms (42–80 %) employ temporary workers (seasonal or casual), who by definition are not officially registered for the purposes of employment records.

14. The MRLS included 120 domestic servants. The quantitative importance of the wage work of domestic servants has been obscured in many African surveys by the tendency to record non-kin-related residents in households as 'unpaid family workers', when it would be more appropriate to classify them as domestic servants, receiving irregular and small amounts of pocket money, food and lodging as a wage for cleaning, cooking and childcare.

15. Sender, Oya & Cramer 2006 discuss the asset index methodology.

16. The main demographic peculiarity of the MRLS sample was the large proportion (40 %) of separated, divorced or widowed women among female respondents, which was an important finding raising new analytical issues discussed in Sender & Oya 2008.

17. Sender *et al.* 2006 discuss in detail the life histories of six of these women.

18. Mixed research methods were important here. For example, in some enterprises apparently inconsistent figures were reported as 'daily payments', which, according to the open responses, actually referred to specific tasks that would amount to different daily payments, depending on the number of tasks performed.

19. A 'foreign company/*privado*' is defined as an establishment run by foreign managers and/or mostly owned by foreign investors. 'Local farmers/*privados*' encompass a more heterogeneous mix of national and local small- and medium-scale individual farmers employing workers for wages.

20. Most of the thirty-three large-scale employers interviewed by the research team claimed to use the national minimum wage of MT560,000 a month as a reference for pro rata, daily wage, rates for unskilled labourers. However, some used MT565,000 or MT575,000 as a reference rate, while one used MT500,000 a month. The most common form of variation in daily payment rates reported by these employers was in the number of the days (between twenty-six and thirty-one) used to divide into the monthly wage reference rate.

21. Maninha, whose life story is discussed in Sender *et al.* 2006, was often set tasks for MT10,000 by small-scale farmers that were so strenuous that they could not be completed in a day, especially if she took a break for a meal. Maninha was often obliged to return the following day in order to complete the set task and earn the MT10,000 quoted as the daily wage by the small farmers who employed her. In contrast, a larger farmer paid her MT50,000 for a task she could complete in a day.

22. Note that most of these reported monthly wage rates were actually below the statutory minimum agricultural wage per month (MT560,000 at the time of the survey). The minimum wage for industry and services was increased from MT665,707 to MT812,163 per month in May 2002 (AIM 2002, 20 May).

23. The mean exchange rate for May 2002 to the beginning of February 2003 was about $1 = MT23,700.

24. Only 15 % of the small–middle employer sample employ permanent (male) workers on a monthly paid basis; the wages they pay average MT273,000 per month (median = MT250,000), i.e. less than the median monthly wages paid by the larger employers and less than 50 % of the minimum wage.

25. This is confirmed by micro studies elsewhere in Africa suggesting that the poorest rural households in the Ivory Coast and Kenya are far more dependent on unskilled farm wage income than the richest households; in Rwanda, dependence on unskilled wage labour is higher in female-headed and illiterate households (Barrett *et al.* 2001: 12, 26). It is also confirmed by a broader data set covering fifteen countries that concludes that 'agricultural wage labour activity shows a clear association with wealth status … poorer rural households are more likely to participate in agricultural wage employment. Similarly, the share of income from agricultural wage labour is more important for poorer households' (Davis *et al.* 2007: 14).

26. In Mozambique, cotton is most often produced by SMEs on out-growing schemes but, in the MRLS, workers employed by large-scale cotton growers were also included.

27. In fact, the range of payments on this farm was even larger than shown in the table, which excludes outliers (all payments of more than MT10,000 per task and one of MT30,000 per task).

28. On the inability of standard neoclassical wage functions to explain agricultural wages in terms of worker attributes see Datt 1996: 66–7.

29. This argument about how living standards could be improved is supported by strong evidence from India, where the move from *casual* forms of rural wage employment to more *regular* rural wage

employment, implying higher annual real wages, has been decisive in reducing poverty (Ghose 2004: 5112).

30. Interviews with large farmers suggest that they have considerable discretion regarding compensation payments for long hours of work. For example, some pay double time for overtime, some pay time and a half, and others do not pay for overtime.

31. On the various forms of conflict that arise in the course of increasing inequality in land holdings and the emergence of new capitalist forms of farming, see André & Platteau 1998; Cramer 2006; Peters 2004.

32. In Nampula, there are disputes between a long-established plantation company and a more recently arrived subsidiary of a major international tobacco firm. This conflict involves using political levers at the national level of policy-making, and also efforts to manipulate smaller local farmers over whom the two firms vie for influence.

33. Another means of securing local allies is to co-opt the local 'traditional' rulers by paying them and giving them the responsibility, as in the colonial period, for recruiting workers. This strategy was adopted by a new Zimbabwean-owned enterprise in Manica that refused to employ anyone who had not been sent to the farm by the local chief.

34. Permanent workers are legally entitled to various benefits apart from compensation for lay-offs, including the right to paid annual holidays and maternity leave. A typical employer strategy is to lay off casual workers on the 25th of the third month of employment (for three days) and then to offer them a new casual contract. Large-scale and foreign-owned agri-businesses adopt this practice to prevent workers demanding permanent status after three months continuous employment.

35. Smaller farmers also boast of their charity towards their workers. Breman 1985: 277 observed similar claims in rural Western Gujarat, where 'wage settlement has taken on the character not so much of a business transaction, as that of granting a favour'.

36. Work in the best construction, transport and other non-agricultural jobs, which fell under the 'good 1' rubric, was largely the preserve of relatively well-educated men, living in households with higher asset index scores.

37. The MRLS data show that by far the most important channel for obtaining employment was through 'relatives and friends'.

38. Figure 1 shows that workers with access to only 'bad jobs' in agriculture (notably casual *ganho ganho*) have a significantly lower average household possession score.

39. The life stories of successful women wage workers confirm the transformation in the prospects for children and in household welfare that can be achieved after their mother has obtained a decent job (Sender *et al.* 2006).

40. See Sen & Ghosh 1993 and Damiani 2003 for examples in India and Brazil respectively.

41. See also Fields 2007: 5, who argues that the 'status of labor market analysis and labor market policy in the development economics community now is similar to the status of poverty analysis and anti-poverty policy two or three decades ago', and who argues for a far greater attention to theory and empirical research in this field.

42. One particularly visible employer, the former Minister of Foreign Affairs, recently suffered the indignity of an inspection of his farm by the General Inspector of Labour accompanied by a police unit. When this official saw how disgracefully his ninety-four employees were being treated, he 'decided to suspend all activities of the company' (Agência de Informação de Moçambique, Maputo, 7.11.2007).

43. On policies to stimulate demand for labour more generally see Godfrey 2003.

REFERENCES

Adato, M., F. Lund & P. Mhlongo. 2004. 'Methodological innovations in research on rural poverty: a mixed method longitudinal study in KwaZula-Natal, South Africa', paper for 'Q-Squared in Practice: a Conference on Experiences of Combining Qualitative and Quantitative Methods in Poverty Appraisal', Centre for International Studies, University of Toronto, 15–16 May.

Agência de Informação de Moçambique (AIM). 2002. '22 percent rise in minimum wage', AIM Report 232, 20.5.2002, http://www.poptel.org.uk/mozambique-news/newsletter/aim232.html

Agricultural Census. 2000. Maputo: Instituto Nacional de Estatística (INE).

Amnesty International (AI). 2002. 'AI open letter to the UN Security Council', 17.10.2002.

André, C. & J.-P. Platteau. 1998. 'Land relations under unbearable stress: Rwanda caught in the Malthusian trap', *Journal of Economic Behaviour and Organization* 34, 1: 1–47.

Bardhan, P. & A. Rudra. 1986. 'Labour mobility and the boundaries of the village moral economy', *Journal of Peasant Studies* 13, 3: 90–115.
Barrett, C. B., Mesfin Bezuneh, D. C. Clay & T. Reardon. 2001. 'Heterogeneous constraints, incentives and income diversification strategies in rural Africa', Ithaca, NY: Cornell University Department of Applied Economics and Management, working paper, WP 2001–25.
Binswanger, H., J. McIntire & C. Udry. 1989. 'Production relations in semi-arid Africa', in P. Bardhan, ed. *The Economic Theory of Agrarian Institutions*. Oxford: Clarendon Press.
Boughton, D., D. Tschirley, B. Zulu, A. Osorio Ofiço & H. Marrule. 2003. 'Cotton sector policies and performance in sub-Saharan Africa: lessons behind the numbers in Mozambique and Zambia', East Lansing, MI: Michigan State University, Department of Agricultural Economics.
Bowen, J. 1989. 'Peasant agriculture in Mozambique: the case of Chokwe, Gaza Province', *Canadian Journal of African Studies* 23, 3: 355–79.
Breman, J. 1985. *Of Peasants, Migrants and Paupers: rural labour circulations and capitalist production in South India*. Oxford University Press.
Brück, T. 2004. 'Coping strategies in post-war rural Mozambique', Sussex: Households in Conflict Network Working Paper No. 2.
Castel-Branco, C. N. 1983. 'Trabalho assalariado e pequena produção mercantil na estratégia de socialização do campo', Dissertação, Centro de Estudos Africanos, Maputo: UEM.
Commission for Africa. 2005. *Our Common Interest: report of the Commission for Africa*. London: Commission for Africa.
Covane, L. A. 2001. *O Trabalho Migratório e a Agricultura no Sul de Moçambique (1920–92)*. Maputo: Promédia.
Cramer, C. 2006. *Civil War is not a Stupid Thing: accounting for violence in developing countries*. London: Hurst.
Damiani, O. 2003. 'Effects on employment, wages, and labor standards of non-traditional export crops in northeast Brazil', *Latin American Research Review* 38, 1: 83–112.
Datt, G. 1996. *Bargaining Power, Wages and Employment: an analysis of agricultural labour markets in India*. New Delhi: Sage.
Davis, B., P. Winters, G. Carletto, K. Covarrubias, E. Quinones, A. Zezza, K. Stamoulis, G. Bonomi & S. DiGiuseppe. 2007. 'Rural income generating activities: a cross country comparison', Rome: FAO, ESA Working Paper No. 07–16.
Elbers, C., P. Lanjouw, J. Mistaien, B. Ozler & K. Simler. 2003. 'Are neighbours equal? Estimating local inequality in three developing countries', Helsinki: United Nations University/World Insitute for Development Economics Research, Discussion Paper 2003/52.
FAO-ILO-IUF. 2005. *Agricultural Workers and their Contribution to Sustainable Agriculture and Rural Development*. Rome: FAO-ILO-IUF.
Fields, G. 2007. 'Labor market policy in developing countries: a selective review of the literature and needs for the future', Washington, DC: World Bank, Policy Research Working Paper 4362.
Fine, B. 1998. *Labour Market Theory: a constructive reassessment*. London: Routledge.
First, R. 1983. *Black Gold: the Mozambican miner, proletarian and peasant*. Brighton: Harvester.
Gabre-Madhin, E. Z. & S. Haggblade. 2004. 'Successes in African agriculture: results of an expert survey', *World Development* 32, 5: 745–66.
German Agro Action (GAA). 2003. 'Situation report Ituri, 1–16 September 2003', Bunia, unpublished.
Ghose, A. K. 2004. 'The employment challenge in India', *Economic and Political Weekly*, 5107–16. 27 November.
Godfrey, M. 2003. 'Youth employment policy in developing and transition countries: prevention as well as cure', Washington, DC: World Bank, Social Protection Discussion Paper No. 0320.
Hatlebakk, M. 2004. 'Attached labor in Nepal: a field-study of landlord-labor relations that are misrepresented in the Nepal-LSMS data', paper presented at the 75-years of Development Research Conference, Cornell University, <http://www.arts.cornell.edu/econ/75devconf/papers/hattlebak.doc>
Humphrey, J., N. McCulloch & Masako Ota. 2004. 'The impact of European market changes on employment in the Kenyan horticulture sector', *Journal of International Development* 16, 1: 63–80.
Idson, T. L. & W. Y. Oi. 1999. 'Workers are more productive in large farms', *American Economic Review* 89, 2: 104–8.
ILO. 2003. 'Decent work in agriculture', ILO-Bureau for Workers' Activities, background paper for International Workers' Symposium on Decent Work in Agriculture, Geneva: ILO.
Inquérito Nacional aos Agregados Familiares sobre Orçamento Familiar 2002/3 (IAF). 2004. Maputo: INE.

Kaufman, B. E. 2007. 'The impossibility of a perfectly competitive labour market', *Cambridge Journal of Economics* 31, 5: 775–87.
Kevane, M. 1994. 'Village labor markets in Sheikan District: Sudan', *World Development* 22, 6: 839–57.
Lund, F. 2004. 'Livelihoods (un)employment and social safety nets: reflections from recent studies in KwaZulu-Natal', Pretoria: Southern African Regional Poverty Network, <http://www.sarpn.org.za/documents/d0000925/index.php>
Mwamadzingo, M. 2003. 'Assessing the decent work deficit in African agriculture: priority issues', ILO, Sub-Regional Office for Southern Africa, Discussion Paper 21, Geneva: ILO.
New Partnership for Africa's Development (NEPAD). 2003. *Comprehensive Africa Agriculture Development Programme*. Midrand, South Africa: NEPAD.
Newman, C. & L. Jarvis. 2000. 'Worker and firm determinants of piece rate variation in an agricultural labor market', *Economic Development and Cultural Change* 49, 1: 137–70.
O'Laughlin, B. 1996. 'Through a divided glass: dualism, class, and the agrarian question in Mozambique', *Journal of Peasant Studies* 23, 4: 1–39.
O'Laughlin, B. 2002. 'Proletarianisation, agency and changing rural livelihoods: forced labour and resistance in colonial Mozambique', *Journal of Southern African Studies* 28, 3: 511–30.
Ortiz, S. 1999. *Harvesting Coffee, Bargaining Wages: rural labour markets in Colombia, 1975–1990*. Ann Arbor, MI: University of Michigan Press.
Peters, P. E. 2004. 'Inequality and social conflict over land in Africa', *Journal of Agrarian Change* 4, 3: 269–314.
Questionário de Indicadores Básicos de Bem-Estar (QUIBB). 2001. Maputo: INE.
Reardon, T. 1997. 'Using evidence of household income diversification to inform study of the rural nonfarm labor market in Africa', *World Development* 25, 5: 735–47.
Rogaly, B. 2005. 'Agrarian capital, wage-workers and space', mimeo, Department of Geography, University of Sussex.
Rubin, D. K. & J. M. Perloff. 1993. 'Who works for piece rates and why?', *American Journal of Agricultural Economics* 75, 4: 1036–43.
Sen, A. & J. Ghosh. 1993. 'Trends in rural employment and the poverty employment linkage', ARTEP Working Papers, Delhi: ILO.
Sender, J. 2003. 'Rural poverty and gender: analytical frameworks and policy proposals', in H.-J. Chang, ed. *Rethinking Development Economics*. London: Anthem, 401–20.
Sender, J., C. Cramer & C. Oya. 2005. 'Unequal prospects: disparities in the quantity and quality of labour supply in sub-Saharan Africa', Social Protection Discussion Paper no. 0525. Washington, DC: World Bank.
Sender, J., C. Oya & C. Cramer. 2006. 'Women working for wages: putting flesh on the bones of a rural labour market survey in Mozambique', *Journal of Southern African Studies* 32, 2: 313–33.
Sender, J. & C. Oya. 2008. 'Divorced, separated and widowed female workers in rural Mozambique', *Feminist Economics* (forthcoming).
Simler, K., S. Mukherjee, G. Dava & G. Datt. 2004. 'Rebuilding after war: micro-level determinants of poverty reduction in Mozambique', Research Report 132, Washington, DC: IFPRI.
Trabalho de Inquerito Agricola (TIA). 2001–2. Maputo: Ministerio de Agricultura e Desenvolvimento Rural (MADER).
Tschirley, D., D. Rose & H. Marrule. 2000. 'A methodology for estimating household income in rural Mozambique using easy-to-collect proxy variables', Maputo: Ministry of Agriculture and Fisheries Directorate of Economics, Research Paper Series, Research Report No. 38.
Tschirley, D. & R. Benfica. 2001. 'Smallholder agriculture, wage labour, and rural poverty alleviation in land-abundant areas of Africa: evidence from Mozambique', *Journal of Modern African Studies* 39, 2: 333–58.
Vail, L. & L. White. 1980. *Capitalism and Colonialism in Mozambique: a study of Quelimane District*. Minneapolis, MN: University of Minnesota Press.
Waterhouse, R. & C. Vijfhuizen, eds. 2001. *Estratégias das Mulheres, Proveito dos Homens: género, terra e recursos naturais em diferentes contextos rurais em Mocambique*. Maputo: Universidade de Eduardo Mondlane.
Wells, M. 1996. *Strawberry Fields: politics, class, and work in California agriculture*. Ithaca, NY: Cornell University Press.
White, H., J. Leavy, M. Mulumbi, G. Mulenga & V. Seshamani. 2006. 'Rural development and labour markets in Africa: preliminary findings from a research project in Northern Province, Zambia', mimeo, discussion draft, Brighton: IDS.

Wiggins, S. 2000. 'Interpreting changes from the 1970s to the 1990s in African agriculture through village studies', *World Development* 28, 4, 631–62.
World Bank. 2007. *World Development Report 2008: agriculture for development*. Washington, DC: World Bank.
Wuyts, M. 1989. *Money and Planning for Socialist Transition: the Mozambican experience*. Brookfield, VT: Gower.
Wuyts, M. 2003. 'The agrarian question in Mozambique's transition and reconstruction', in T. Addison, ed. *From Conflict to Recovery in Africa*. Oxford University Press, 141–54.