A New System of Labour Management in African Large-Scale Agriculture?

PETER GIBBON AND LONE RIISGAARD

This paper applies a convention theory (CT) approach to the analysis of labour management systems in African large-scale farming. The reconstruction of previous analyses of high-value crop production on large-scale farms in Africa in terms of CT suggests that, since 1980–95, labour management has moved from a ‘domestic’ to a ‘market’ system. However, data collected by the authors from a sample of 11 large-scale rose farms in Kenya in 2011 (covering around 20% of national output) points to the adoption of systems that, in CT terms, combine ‘industrial’ and ‘civic’ elements. The paper concludes by suggesting a series of hypotheses that might explain this trend.

Keywords: labour, large-scale agriculture, Africa, convention theory

INTRODUCTION

This paper concerns systems for managing labour in large-scale agriculture (LSA) in Africa. Reference is made to new research on cut flowers in Kenya, but the analysis is framed in relation to labour-intensive production of high-value crops generally in Africa. Beyond cut flowers, this encompasses fresh vegetables, citrus and deciduous fruit, and table grapes and wine – production of which is found across a large number of countries across East and Southern Africa, as well as more patchily in West Africa.

Since the beginning of the 1990s a narrative has emerged, to which academics, NGOs and trade unions have contributed, problematizing labour conditions in this sector. The main concerns have been low wages, dangerous working conditions, forced overtime, insecure employment and types of labour control that combine paternalism and despotism. Interestingly, while some central features of this discourse have hardly changed over two decades, its implicit and sometimes explicit target has narrowed. Particularly in cut flowers in East Africa but also in respect of other crops elsewhere, it is often no longer sectors as a whole that are targeted, but ‘only’ (large numbers of) enterprises within them.

What does this tell us about the part of LSA that the discourse is no longer aimed at? That, perhaps as a result of adopting the language of corporate social responsibility, it has become better at dissembling? Or that it has genuinely cleaned up its act in a few sensitive areas while failing to do so in others? Or that it has externalized or outsourced problematic practices to third parties such as labour contractors? Or, more optimistically, that broad change of a progressive kind has occurred in how this part of the sector manages labour?
The academic literature critical of labour management systems in large-scale production of high-value crops in Africa mainly concerns high-value crops in South Africa rather than Kenya, although the background to its contribution is similar. Broadly, this literature proposes the second and third of these answers (often in combination) and mostly rejects the fourth.

This paper argues that, in the ‘leading’ part of the Kenya cut flower sector – a term that will be defined – the narrowing of the NGO criticism found, for example, in KHRC (2012) reflects dissemination of a new (for Africa) system of labour management.\(^1\) This emerged in the early 2000s but was only disseminated widely in the sector from ca 2005–6. Using the categories developed in convention theory, this system can be characterized as predominantly ‘industrial’ and ‘civic’ in character. This is in contrast to the system of labour management that traditionally dominated in large-scale agriculture in the former British colonies in Africa, known in the academic literature as ‘paternalism’, ‘domestic government’ or ‘family ideology’. It also differs from the ‘market’-style labour management system the emergence of which is detected in many South African studies since 2000, mainly but not only concerning high-value crops.

The paper comprises six subsequent sections. The first outlines in more detail the account of labour management found in the dominant strand of the academic literature, namely the partial or complete displacement of a ‘paternalist’/‘domestic government’-based system of labour management by a ‘market’-based one, as well as some reservations noted in relation to it. The second uses convention theory to elaborate a vocabulary of systems of labour management in large-scale agriculture. This involves generating more elaborate conceptualizations of ‘domestic’ and ‘market’ systems and adding ones concerning ‘industrial’ and ‘civic’ ones. The third briefly describes the authors’ research methods. The fourth and fifth present the results of the authors’ recent research on what Salais (2001) calls the ‘labour qualification’ and the ‘production/work moment(s)’ of systems of labour management in the cut flower sector of Kenya. The sixth section concludes on the nature of the sector’s currently dominant labour management system and presents a hypothesis concerning the factors driving its institutionalization.

PATERNALISM/DOMESTIC GOVERNMENT AND ITS MODIFICATION

While an academic literature critical of LSA in Africa existed from the 1940s (e.g. Hancock 1941; Brown 1968; Dunlop 1971; Wilson 1971; Palmer 1977; Bundy 1979; Kydd and Christiansen 1982; Mosley 1983), this focused near-exclusively on its relation to political power and on its farming systems. LSA was seen as for the most part dependent upon public interventions and, mainly because of land underutilization, inefficient. Where labour was considered in these analyses, this was also mainly in relation to political power. In this case, the focus was on public interventions aimed at easing labour recruitment, through alienation of land from native populations, restrictions on their physical mobility and/or measures taken to restrict accumulation within indigenous agriculture. Aside from work by a small number of historians dealing with slave- and forced labour-based systems of agriculture in coastal West and East Africa and the Congo prior to the 1960s (e.g. Cooper 1977, 1980; Fieldhouse 1978;\(^1\) For a history of NGO campaigns in the sector up to 2005, including the first stage of this narrowing, see Opondo (2006).

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Clarence-Smith 1979, 1985, 1990; Vail and White 1980; Daviron 2010), the organization of labour in terms of its qualification, deployment, payment and supervision was curiously largely ignored by academics until the beginning of the 1990s.2

The pioneer works in this area were Van Onselen (1992) from a historical perspective, and Du Toit (1993), Kritzinger and Vorster (1997) and Rutherford (2001) from a more contemporary one. Van Onselen and Rutherford dealt with maize and tobacco farms in north-eastern South Africa and Zimbabwe respectively, while Du Toit and Kritzinger and Vorster dealt with high-value crops in South Africa’s Western Cape province. Nonetheless, the labour management systems they describe are very similar.

The central feature of these systems was that relations between the farm owner and farm labour replicated familial relations. The farm was constituted as a private space, comprising the household of the farmer and the households of his workers located in a residential compound close to the farmer’s. The privacy of the farm and of the conduct of labour relations on it were underwritten in law by the Masters and Servants ordinances, forbidding servants to ‘desert’ and prohibiting them from joining clubs or associations, or trying to alter their conditions of work.3 The farmer’s role was a paternal one: he was the final authority on all matters of substance concerning the farm and its population, and was vested with the power to back this up using corporal punishment. In exchange for workers’ willing obedience, on the other hand, he was expected to bestow largesse. Alongside this paternal role, his wife might play a ‘maternal’ role in terms of edification – animating workers’ self-improvement through religion and/or measures concerning hygiene, health and education. On most day-to-day matters, the farmer delegated authority to boss boys or supervisors, as well as delegating power over members of workers’ families to heads of worker households. This enabled worker household heads to require their wives and children to supply labour to the farmer when their own labour needed supplementing.

This literature covers the employment relation in general, rather than labour management in detail. However, Rutherford (2001) argues that domestic government entailed specific approaches to most labour management issues, including recruitment, work deployment, payment systems and supervision. Recruitment relied entirely on the ‘internal labour market’. Work deployment reflected a familial division of labour and therefore specialization mainly in terms of age and gender. Work scheduling was subject to predominantly short-term (daily) planning. Historically, cash payment was irregular and made up only part of the wage, the level of which in any event was strongly influenced by the farm’s private system of fines and discretionary rewards. Supervision was essentially policing – pervasive and often violent, and lacking any technical content.

A number of modifications to this system became generalized in Zimbabwe around the time of majority rule (1980) and in the Western Cape a few years later (Du Toit 1993; Ewert and Hamman 1996, 1999; Kritzinger and Vorster 1997; Ewert et al. 1998; Rutherford 2001). Following extension of the coverage of employment legislation to the LSA employment

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2 An important exception was Wilson et al. (1977), a collection based on papers presented to a large conference organized by the Southern Africa Labour and Development Research Unit (SALDRU), which dealt somewhat unevenly with these subjects in South Africa. Another, non-academic, exception was a limited technical literature produced by government extension agencies orientated to LSA and aimed at disseminating norms concerning optimal levels of labour deployment for specific crops. This literature first emerged in Kenya in the 1950s, before spreading to Rhodesia and South Africa.

3 Near-identical ordinances were promulgated by the colonial authorities throughout British Africa and were generally abolished only in the run-up to independence.
sector in Zimbabwe, and in the context of rising pressure for reform in South Africa, male general workers resident on farms (and resident female general workers where these were household heads) acquired *de jure* or *de facto* permanent employment status. Parallel changes in the employment relation involved greater regularity in payment of cash wages and (locally) reductions in unpaid overtime work. Farm management was typically elaborated from a personal system to one where the farmer operated in tandem with a production manager or an educated African ‘farm clerk’, to whom responsibility for work planning and discipline might be delegated. This development was accompanied by redefinition of the issue of labour productivity from psychological terms (laziness and its remedies) to technical ones, involving a consideration for the first time of skills and training for general workers. On some larger farms, formalized channels were opened for communicating with workers. Amongst other things, in the Western Cape these were used to ‘sensitize’ workers to farm management principles. Use of corporal punishment fell sharply or ceased, and worker incentives were diversified to include more easily available credit, improved housing and certain other now formalized fringe benefits.

Interestingly, the sources cited all interpret these changes as entailing renewal of paternalism/domestic government rather than transition to a new system of labour management. Kritzinger and Vorster (1997), for example, refer to the emerging system as ‘neo-paternalism’. Paternalism was mitigated by some elements of bureaucracy/formalization and (in Zimbabwe) legalization, but the personal power of the farmer and the status of the farm as a private space was reinforced by the use of new patronage tools such as credit. In any event, the new dispensation was not to prove stable. In Zimbabwe, the land invasions beginning in 2000 led to a 75 per cent contraction in the area under LSA (Scoones et al. 2010). In South Africa, the deregulation of the early 1990s and the far-reaching legalization of the sector between 1994 and 2002 meant that some of the changes associated with ‘neo-paternalism’ evaporated, while others became integrated with new trends.

There is unanimous agreement amongst commentators that principal amongst these new trends in South Africa was a sharp decline in the overall size of the farm workforce (Du Toit and Ally 2003; Ewert and Du Toit 2005; Barrientos and Kritzinger 2004; Conradie 2007). Across South African LSA in general, this trend dates from the 1970s, but in high-value crop sectors it was delayed until the end of apartheid. Labour densities reported for table grapes in 1994 by Kritzinger and Vorster (1995) are almost identical with those reported in papers by Graaf and Levy to the 1977 SALDRU conference. By contrast, Du Toit and Ally’s figures for 2000 show a ∼25 per cent decline in numbers of ‘regular’ workers per hectare and a 20 per cent one in numbers of seasonal workers and casuals.

Du Toit and Ally also report data showing that provision of farm housing was falling in the Western Cape, and that 53 per cent of farms surveyed had used labour contractors to recruit (and sometimes supervise) casual labour. They do not report data on casual labour density or try to calculate changes in it over time. Notwithstanding this, the dominant interpretation of changes in the labour management system that arose in the wake of their study was that on-farm paternalism had been eroded in favour of a system in which the wage relation played a more central role and where, within this, casualization and labour contracting had become

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4 In the Western Cape in the 1980s, these emanated mainly from the ‘Rural Foundation’, a consortium of more enlightened farmers and social reformers meeting in the context of threats to export market share from international boycotts and disappointing results from using increased volumes of migrant African labour following the end of the Coloured Labour Preference policy (see Du Toit 1992; Ewert and Hamman 1996).

5 As reported in Du Toit and Ally (2003).

6 As reported in Conradie (2007). For the SALDRU conference, see footnote 2.
dominant practices (see in particular Barrientos and Kritzinger 2004; Kritzinger et al. 2004). Labour contracting might reproduce some elements of paternalism in an ‘off-farm’ form (see in particular Du Toit 2004), but in general it was a ‘market’ model of labour management that now characterized high-value crop production in the Western Cape.

In concluding this discussion, it is worth noting two further developments in the literature. The first is a series of recent studies of labour management practices in South African LSA for crops other than high-value ones. These were carried out after the Sectoral Determination of 2002 introduced a minimum agricultural wage and placed ceilings on deductions that farmers could make for provision of non-wage benefits. Studies by Murray and Van Weelbeck (2007), Grub (2005) and Roberts (2009) all provide support for the view that the farmer–farmworker relation was subsequently redefined increasingly simply as a wage relation, as well as for the casualization thesis – although use of labour contractors is shown to vary considerably by crop.

The second development is a couple of additions to the high-value crop literature suggesting countervailing trends to those identified above. Conradie (2007), reporting survey data from 2004 and 2005, appears to show a slight recovery in the density of ‘regular workers’ per hectare of table grape production after 2000, accompanied by a continuing decline in densities of seasonals and casuals. She also reports anecdotal evidence of some farmers discontinuing use of labour contractors. Jespersen (2005), writing about pineapple production in the Eastern Cape, reports significant overall reductions in employment since 1994 but also very low current levels of seasonal and casual employment. Both these authors argue that, by allowing labour saving and/or labour ‘smoothing’, technological changes over the past decade have increased incentives to concentrate employment on permanent workers.

There is also an extensive literature on labour in horti- and floriculture in Kenya (Hughes 2000; Dolan and Sutherland 2003; Dolan et al. 2005; Opondo 2006; Riisgaard 2009, 2011; Tallontire et al. 2011). The focus of this body of work has been mainly on the successes and failures of social standards in limiting the impacts on workers (especially women workers) of what is found to be a general trend towards a ‘market’ model of employment and labour management – although one in which some despotic forms of paternalist authority are preserved. Several contributions note the prevalence of insecure employment, along with low wages, dangerous working conditions, forced overtime, gender discrimination and oppressive types of supervision (Hughes 2000; Dolan and Sutherland 2003; Dolan et al. 2005; Opondo 2006). As in the South African context, the authors emphasise casualization as a dominant practice. Dolan and Sutherland (2003), analysing 2001 employment data from one large fresh vegetable exporter, find that as many as 38.5 per cent of male and 63.1 per cent of female workers were either casual, seasonal or contract labourers.

The existing literature on labour management in LSA in Africa thus appears to concur in a finding of a movement away from comprehensive, classical paternalism, but is divided in its understanding of what has replaced it. Perhaps a majority of commentators, mainly but not only writing on high-value crop production, identify market-related principles as arbitrating the essential features of labour management today. However, these principles are typically found in hybrid forms where elements of paternalistic hierarchy and dependency survive or mutate. On the other hand, in contributions echoing some recent scholarship on high-value LSA in Brazil (Damiani 2003; Selwyn 2009), a more ‘industrial’ model of labour management emphasizing managerialism and employment stability is depicted. It is uncertain whether elements of paternalism are also preserved in these scenarios.

Clearly, uneven, conflicting as well as shifting pressures beset labour management in contemporary African LSA. This makes generalization difficult, as opposed to outlining the
emergent properties of specific combinations of commodity, technology, end market, local labour market and so on. But of equal importance to generalizability is the little-explored question of the internal coherence of specific trends. While most labour management regimes tend to be hybrid to one degree or another, there is a lack of attention with regard to how stable, resilient and reproducible particular hybrid combinations are. Convention theory suggests that this depends in part on the underlying compatibility of the principles on which their different elements rest. As will be seen, it also depends on how systematic is the intermeshing of these principles across different dimensions of labour management.

TOWARDS A VOCABULARY OF LABOUR MANAGEMENT SYSTEMS

Convention theory emerged in France during the 1980s, contemporaneous with the ‘New Institutional Economics’ (NIE) turn in Anglo-Saxon microeconomics and partially in critical reaction to it.7 Both focused upon issues of inter- and intra-firm coordination and both identified systematic differences between types of coordination. But whereas NIE and transaction cost analysis in particular explained differences in types of coordination in terms of individualized rational responses to variations in the configuration of specific utilities, convention theory saw such differences as reflecting collective normative orientations or normatively founded systems of collective expectations. It posited that a number of systematically differentiated normative orientations to coordination of markets and firms (economic conventions, or ‘orders of worth’) had emerged by the mid-nineteenth century and that groups of actors continue to draw on these. They express competing rationalities and have no intrinsic relation to real-world configurations of specific utilities. This is not to say that they lack a link to the economy or politics: the salience or lack of it of any single convention at a given moment is linked to the rise and fall of particular varieties of capitalism and specific social movements.

Convention theory has been applied to two areas of economic coordination. The first is the arbitration of product quality (cf. Daviron 2002 for a summary), while the second is arbitration of the quality of labour (Salais et al. 1986). In both cases the alternative conventions deployed are distinguished and described on the basis of their underlying principles (‘modes of evaluation’); the types of information they prescribe as salient (‘format of relevant information’); the objects the qualities of which they are most interested in verifying (‘qualified objects’); the practical questions that they most frequently ask in relation to these objects (‘elementary questions’); and their orientations to time (the respective relevance of the past, the present and the future) and space (including scale). Boltanski and Thévenot (2006) strongly emphasize the overlap between economic conventions and political rationalities (within shared ‘worlds of legitimate common welfare’) and for this reason it may be useful to add distinctions between and descriptions of political orientations to their elaboration.

In this paper, we aim to develop a theoretically grounded framework for characterizing labour management systems (and changes in these) while uncovering their underlying principles and rationalities. For this purpose, we find convention theory particularly useful with its focus on systems (conventions/worlds) of reciprocal expectations about the behaviour of others, where systems are distinguished by the underlying principles that they use for justifying and evaluating action (Boltanski and Thévenot 2006). Thus conventions are both guides for action and collective systems to legitimize those actions.

7 Forerunners of these perspectives – for example, Coase for NIE – date back considerably earlier than the 1980s of course.
Some applications of convention theory have been criticized for being simply a re-description of empirical categories that could equally be formulated without using them (Gibbon and Ponte 2005). However, these applications typically ignore the focus of convention theory on underlying principles and rationalities used to guide and legitimate actions. Convention theory has also been critiqued for a lack of explicit discussion of power, but perhaps can be better characterized as understanding power primarily in terms of the collective constraints embodied in normative orders. In so far as these orders are in turn embodied in institutions, they therefore also exercise power.

The consequences of such a heuristic framework for labour management suggest that: (i) practices of labour management are cognitively evaluated in different ways depending on which ‘world’ is used to justify and evaluate action; (ii) there is a direct link between understandings of ‘legitimate’ labour management practices and the organization of work and workers (providing limited parameters of choice); and (iii) given the overlap between economic conventions and political orientations, such understandings also have ramifications for the types of industrial politics that might be institutionalized.

While convention theory implicitly acknowledges power relations and possible sites of struggle, it is primarily concerned with issues of ‘how’ rather than ‘why’ labour is managed in particular ways. If one was to instead focus analysis primarily on the exploitation of labour for accumulation of agrarian capital – highlighting the highly unequal relations of production in LSA – a more traditional political economy perspective would be called for (e.g. Breman 1985; Loewenson 1992; Chatterjee 2001). In our view, however, the two approaches should be seen as complementary rather than mutually exclusive. Thus while it is legitimate to view exploitation of wage labour in LSA in the light of larger configurations of capital and power, everyday practices of exploitation also have normative and technical foundations that cannot be derived from material configurations alone. It is thus in its focus on internally consistent, systematic normative and technical orders that convention theory offers its main contribution.

On the other hand, it is worth underlining that, even at the level of elaborating the variety of normative and technical orders (co-)existing within capitalism, convention theory would benefit from incorporating certain insights contributed by the political economy literature. Mainly, this concerns acknowledgement that the same normative and/or technical principles that guide an enterprise’s approach across questions of labour organization and work organization also guide the manner in which the enterprise embraces or relates to the political realm, including but by no means confined to its relation to the state. As indicated, we call this dimension of labour management conventions ‘industrial politics’. Second, we have borrowed from political economy’s labour process literature in our elaboration of the normative and technical orders applied to work organization and worker deployment (see footnote 9). In sum, convention theory is not used as an generalized alternative to more traditional political economy in this paper, but as a tool for better discriminating the implicit constraints and opportunities (for labour) embodied in different labour management systems.

Different proponents of convention theory elaborate lists of between four and six economic conventions. Four specific conventions are found in almost all these lists, usually referred to as ‘domestic’, ‘industrial’, ‘market and ‘civic’. The fundamental principles of these conventions are ‘tradition’, ‘efficiency’, ‘cost’ and ‘welfare’ respectively. Table 1 differentiates

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8 Boltanski and Thévenot (2006), for example, also identify conventions relating to ‘inspiration’ and ‘fame’. These will not be discussed here.

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them in relation to the variables described just above (left-hand column), filling in the boxes on the basis of the convention literature (see the Table 1 sources). This in turn derives them from competing ‘applied’ literatures, historical and contemporary – guides, handbooks and so on – on, for example, standards (for quality) or training, skills, careers guidance and personnel management (for labour qualification). It should be noted that the literature accepts that, in most concrete circumstances, conventions are deployed in hybrid rather than pure forms. Thus, at any particular time and locality, there may be multiple justifications of actions operating at the same time – in the terminology of Boltanski and Thévenot (2006, 277), in the shape of ‘compromises’. Boltanski and Thévenot’s discussion of the ‘compromise’ between the industrial and the civic world (op. cit., esp. 325–30) is particularly interesting in the present context. Several contemporary coordination mechanisms embodying this compromise are noted, across different economic fields. These include human resource management, where ideal forms of work organization are seen as stabilizing improvements in productivity through promoting the solidarity of the work

<table>
<thead>
<tr>
<th>‘Mode of evaluation’</th>
<th>Domestic</th>
<th>Industrial</th>
<th>Market</th>
<th>Civic</th>
</tr>
</thead>
<tbody>
<tr>
<td>‘Format of relevant information’</td>
<td>Traditional reputation</td>
<td>Technical precision and efficiency</td>
<td>Price, ‘value for money’</td>
<td>Benefit to society (and the environment)</td>
</tr>
<tr>
<td>‘Qualified objects’</td>
<td>Exemplary, anecdotal, sometimes oral</td>
<td>Systematic, operational, quantified</td>
<td>Contemporary, practical, demand-orientated</td>
<td>Codes, norms, programmes, policies</td>
</tr>
<tr>
<td>‘Elementary questions’</td>
<td>Patrimony; specific tools and assets</td>
<td>Structures, universal systems, forecasts</td>
<td>Cost units</td>
<td>Associations, negotiations, distributional arrangements</td>
</tr>
<tr>
<td></td>
<td>Can it be trusted?</td>
<td>Is it functional? Can it be scaled up and stabilized?</td>
<td>Is it economic? What is its equivalent? Are we tied down to it?</td>
<td>Is it just, safe and healthy? How can it be regulated?</td>
</tr>
<tr>
<td>Human qualification</td>
<td>Personal acquaintance, experience, seniority</td>
<td>Education/training (competence)</td>
<td>Price, flexibility</td>
<td>Responsibility, motivation</td>
</tr>
<tr>
<td>Time orientation</td>
<td>The past and the (customary) present</td>
<td>The (planned) future, the business cycle</td>
<td>Immediate availability</td>
<td>The deliberative cycle</td>
</tr>
<tr>
<td>Space orientation</td>
<td>Proximity, private spaces</td>
<td>A technically predictable universe (Cartesian space)</td>
<td>Compartmentalized, adjustable space</td>
<td>(Homogenous) public space</td>
</tr>
<tr>
<td>Political orientation</td>
<td>Paternalism</td>
<td>Technocratic</td>
<td>Individualistic, contingent</td>
<td>Democratic or corporatist, legalistic</td>
</tr>
</tbody>
</table>

team, as well as managerialism in modern trade unions, where ideal forms of worker organization harness IT-based information-gathering and corporate planning techniques in order to more effectively promote their members’ interests.

Tensions do remain a feature where this compromise is institutionalized and from the industrial perspective these mainly concern the introduction by civic priorities of ‘inefficient administrative procedures’ (Boltanski and Thévenot 1991, 271). However, compromises are much less common between the civic convention and worlds other than the industrial. Indeed, within the framework of the civic world, references to domestic relations are mostly critical, since civic values are defined precisely as relations freed from personal dependence (op. cit., 252). In the wide-ranging survey by Boltanski and Thévenot (1991), no examples of compromise between the civic and market conventions are found (op. cit., 325).

Table 2. ‘Domestic’, ‘industrial’, ‘market’ and ‘civic’ labour management conventions

<table>
<thead>
<tr>
<th></th>
<th>Domestic</th>
<th>Industrial</th>
<th>Market</th>
<th>Civic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hiring</td>
<td>Personal acquaintance; historical tie</td>
<td>Impersonal; technical/ educational qualifications</td>
<td>Impersonal, cost-based</td>
<td>‘Fair’ – quotas where necessary</td>
</tr>
<tr>
<td>Training and promotion</td>
<td>‘Sons work with their fathers’; seniority- or trust-based promotion</td>
<td>Trade apprenticeships; technical training; merit-based promotion</td>
<td>On-the-job training; promotion based on ‘drive’</td>
<td>Welfare-related (health and safety) and life-skill training; promotion based on personal responsibility</td>
</tr>
<tr>
<td>Retention</td>
<td>Stabilization through residence and patronage</td>
<td>Stabilization aimed at tacit skill accumulation through payment of above market-clearing wages</td>
<td>Casualization and outsourcing where feasible</td>
<td>Stabilization through employment security</td>
</tr>
<tr>
<td>Work organization</td>
<td>Gang system; deployment by physical attribute and internal hierarchy of favour</td>
<td>Scientific planning of work; interchangeable workers</td>
<td>Adjustable work organization; worker deployment according to demand</td>
<td>Responsibilities work organization; deployment by consensus</td>
</tr>
<tr>
<td>Worker deployment</td>
<td>Not only cash; strongly discretionary (bonuses, fines)</td>
<td>Rule-based (time- and productivity-)</td>
<td>Flexible piece rates where practical</td>
<td>Time-based only, ‘equal pay for equal work’</td>
</tr>
<tr>
<td>Payment systems</td>
<td>Supervisor as production monitor and technical problem-solver</td>
<td>Supervisor as production monitor and technical problem-solver</td>
<td>Despotism modified by pragmatism</td>
<td>Flat supervision (motivational, team building)</td>
</tr>
<tr>
<td>Supervision systems</td>
<td>Despotism; no distinction between work and social supervision</td>
<td>Despotism modified by pragmatism</td>
<td>Despotism modified by pragmatism</td>
<td>Flat supervision (motivational, team building)</td>
</tr>
<tr>
<td>Industrial politics</td>
<td>Paternalist; ‘this is my private space’</td>
<td>Corporatist, technocratic</td>
<td>Individualistic</td>
<td>Legalistic</td>
</tr>
</tbody>
</table>

*As in classical ‘Fordism’.

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Some efforts have been made in the convention theory literature – for example, by Salais (2001) and Storper (Storper and Salais 1997) – to broaden the application of conventions for arbitrating the quality of labour to also cover general systems for managing labour. Salais (2001) refers to ‘conventions of productivity’, which cover both what he calls the ‘moment’ (aspect) of labour qualification and the ‘moment of production’ (work). Salais and Storper also depart from mainstream convention theory by linking the incidence with which specific ‘conventions of productivity’ are deployed (and historical transitions in this) not to the rise of new varieties of capitalism or specific social movements, but to firm-level differences in product market orientation, and their success or failure in these markets.

Leaving aside causes of the real-world distribution of labour management conventions for a moment, the specific questions or subjects that labour conventions are used to arbitrate and coordinate under the general rubrics of labour qualification and production/work will be considered. Under the heading of labour qualification, the literature from the 1980s mainly focuses on hiring and training. Salais later refers also to labour retention. However, neither he nor Storper provide many details of the dimensions considered critical to the ‘moment of production/work’.

It is proposed here that those dimensions most critical to this ‘moment’ are work organization and worker deployment, payment, and supervision. Following the earlier argument concerning links between conventions and political rationalities, the political orientations that labour management conventions might mobilize also need to be included in the typology. Table 2 then provides a provisional elaboration of ‘domestic’, ‘industrial’, ‘market’ and ‘civic’ conventions for labour management, along the lines indicated. The literature on paternalism or domestic government in African LSA has been drawn on in filling out the ‘domestic’ column in the table, as has the ‘labour process’ literature considering so-called despotic forms of labour control – especially Edwards (1979). In Table 2, the labour process literature has been drawn on further in filling out the row on work organization and work deployment. The ambition is to devise a typology that can be applied equally to labour management in manufacturing, services and agriculture, rather than to agriculture alone.

RESEARCH DESIGN AND METHODS

Fieldwork was conducted on 11 large-scale rose farms in Kenya over a 2-month period in mid-2011. Roses represent around 80 per cent of Kenyan cut flower exports. The 11 farms represented the respondents to requests for access sent to a list of 20 farms, prepared with the assistance of Kenya Flower Council (KFC) and aimed purposively at coverage of the range of standards certification types and statuses in the sector, as well as at coverage of all the main production regions. In terms of standards certification types and statuses, the main emphasis was on capturing the variety of standards to which Kenyan farms were certified rather than to reflect the overall incidence of certification as such. As a result, only one of the 11 farms sampled was not certified to any standard. The aim of covering all the main production regions at the same time entailed that farms in Naivasha, the industry’s main geographical centre, were under-represented. Whereas around 60 per cent of all Kenyan flower farms are located in this region, only three of the 11 farms in the sample were.

9 Especially Taylor (1911), Braverman (1974) and Hounshell (1984) on ‘industrial’ systems of labour deployment; Edwards (1979) again on ‘domestic’ and ‘civic’ systems; and Burawoy (1985) on ‘market’ systems.

10 Only one of the farms traded cultivated flowers other than roses in significant volumes.
These biases limit the validity of the results reported in terms of their representation of the industry as a whole. On the other hand, there are good grounds for considering that they do fairly represent the situation with respect to a large segment of the industry – actually the largest part in terms of output and employment. Certification to one standard or another is very widespread in the sector. In 2011, of 177 separate large-scale flower farm units in the country (including farms that were part of larger groups), 78 were certified to at least one of the three most common standards in the sector – KFC’s own standard, the Dutch MPS standard or Fairtrade/FLO. The 46 farms certified to the KFC standard together had 1,417 ha under production, or around 59 per cent of what is generally reckoned to be the total area under large-scale cut flower production in the country.\(^\text{11}\) The 11 farms in the sample (or the wider groups that they were part of in two cases), had a combined 2010 output of 430 million stems and total employment of 11,262.\(^\text{12}\) The stem volume figure was equivalent to about 19 per cent of total Kenyan rose exports to the EU (Kenya’s overwhelmingly dominant end-market) the same year.\(^\text{13}\)

Hence, the author’s main methodological claim is that, while not representative of the Kenyan industry as a whole, their sample directly represents about one fifth of total production and is very probably representative of over half of the sector in terms of cultivated area, output and employment. Notwithstanding this, biases in respect of a small number of results may be present as a result of (i) the survey’s timing and (ii) the relative under-representation of the Naivasha region in the sample.

Because farms are simply too busy during peak production periods to receive researchers, the survey was timed for the low season (May–June). Because farms, and especially packhouses, take on more staff during production peaks, this timing necessarily coincided with employment of relatively few temporary workers. The researchers double checked farm employment data (including proportions of temporary workers) given by managers with farm audit information from standards bodies where available and the figures given here reflect this. Thus it may be that the aggregate employment of seasonal workers has been underestimated, although the authors do not believe that the bias that may have been imparted by the survey’s timing is a serious one.

This issue relates to another, deriving from the under-representation of Naivasha farms in the survey. In March 2012, the authors sought to validate their preliminary results by presenting them to meetings of growers held in Thika, Naivasha and Nairobi, and to meetings with local officials of the Kenya Plantation and Agricultural Workers Union (KPAWU) in Thika and Naivasha.\(^\text{14}\) On the basis of their local experience, union officials in Naivasha also

\(^{11}\) The data on which the total number of farms is based are derived from the Kenyan Horticultural Crop Development Authority (HCDA 2012 pers. comm.) and from Internet searches. Data on numbers of farms certified to specific standards are derived from KFC, MPS and FLO. In 2011, as well as 46 farms being certified to the KFC standard, 42 were certified to one or another variant of the MPS standard (including 17 to the social standard MPS-SQ) and 36 were certified Fairtrade. Data on the production area of KFC-certified farms is derived from KFC audit records.

\(^{12}\) Two of the 11 farms had annual production below 10 million stems, one between 10 and 19.9 million, four between 20 and 49.9 million, two between 50 and 99.9 million, and two between 100 and 200 million.

\(^{13}\) This calculation is based on a crude average of 40 stems per kilogram, used as a rule of thumb by the largest of the farms on which research took place. In the case of the two farms in the sample that were part of larger groups, managers reported that identical labour market practices were applied across the groups. Stem production data for one farm refers to 2009. Data on the Kenyan rose export volume to the EU are based on Comext data for EU imports from Kenya. This tallies roughly with HCDA data (2012 pers. comm.) for exports categorized by market destination.

\(^{14}\) Management from more than 20 farms attended the meetings with growers. Chief shop stewards from seven farms in Naivasha attended the Naivasha KPAWU meeting, as well as full-time officials.
expressed the belief that we had underestimated levels of non-permanent employment. Furthermore, both growers and union officers in Naivasha expressed the belief that the authors’ results overstated the overall level of unionization in the region. At the same time, it is worth underlining, first, that growers and union officials in Naivasha expressed the belief that our results were otherwise accurate; second, that growers and union officials in other regions expressed the belief that all our results were accurate; and, third, that union officials in Naivasha developed an explanation of the deviation of conditions in Naivasha concerning temporary employment and unionization from conditions in other parts of the country. This explanation will be returned to later. Suffice it to say here that including more Naivasha farms in the survey could have generated higher aggregate scores for temporary work and lower ones for unionization than are presented here, but because these qualifications are anecdotally founded, it is impossible to estimate these differences; and, moreover, that we are confident in the overall validity of our findings.

Turning from design to methods, three main techniques were deployed. The first was semi-structured interviews with farm CEOs or MDs, production managers, HR managers (where these existed), and chairs or secretaries of farmworkers’ committees or joint bodies and farm-level union branches (where these existed). The second was questionnaire-based surveys of general workers and supervisors. On each farm, 9–12 general production workers were selected at random from greenhouses and packhouses. Selection was by the researchers themselves as they walked around unaccompanied, from workers present at the time. Three or four supervisors from greenhouses and packhouses were selected on each farm on the same basis. Worker and supervisor interviews always took place out of earshot and direct observation of managers. The sizes of the two samples were 113 and 39, respectively. Third, focus group (FG) discussions were organized on all farms using standardized instruments covering a narrower range of issues than the questionnaires. In most cases, one FG of six comprising both male and female permanent workers with a minimum of 3 years’ experience, and – in order to ensure adequate depiction of temporary workers’ conditions – another of six female temporary workers, was organized. In all, 17 FG discussions were held on the 11 farms. Clearly, larger worker and supervisor samples would have been desirable, but the resources at the authors’ disposal did not allow for this. Instead, triangulation of techniques through inclusion of a significant number of FG discussions hopefully provides some compensation for this.

THE MOMENT OF LABOUR QUALIFICATION

Hiring

On average, the workers surveyed were 25 years old when they first obtained employment in the sector. A large majority (76.1%) had experience of the sector only from their current

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farm. Only 3.8 per cent had a parent who had worked in the sector and none had been born on a cut flower farm.\textsuperscript{19}

While a sizeable minority was recruited through personal contacts with someone already employed on the same farm, a majority were recruited by impersonal labour market mechanisms (Table 3). Likewise, a substantial majority (62.1\%) had never had relatives employed on the farm where they now worked.\textsuperscript{20}

It is not clear how novel the dominance of recruitment via impersonal labour market mechanisms is. Some ex-managers with experience from the 1990s told the authors that recruitment through personal contacts or relations with supervisors played an important role at that time, and that in the latter case this was linked to devolution of the hiring function for general workers to supervisors. But this was not confirmed in the parallel survey of supervisors. In this, of 23 supervisors who had worked in the sector for 10 years or more, only five stated that supervisors had sole responsibility for worker recruitment when they first started in the sector.\textsuperscript{21}

Table 3 also indicates that one in seven of the workers surveyed were recruited after writing a formal letter of application. Normally this occurred in response to advertisements by farms in local shopping centres. Where letters of application were required, it was normally expected that they would be accompanied by applicants’ examination certificates. This suggests a trend for farms to take advantage of Kenya’s over-supply of labour in order to recruit a more literate and numerate (and hence more productive) stratum of workers, even for largely routine wage work.

The worker survey did not contain a question on educational background, but HR managers on two farms mentioned that since 2008 they had adopted a standard employment requirement of completion of (Secondary School) Form Four. One HR manager claimed that almost three quarters of her farm’s entire workforce were Form Four graduates, but this share was probably unique. Even so, there is independent evidence that the workforce is surprisingly well educated. Reporting results apparently based on estimates by farm managers, Ksoll et al. (2011) state that the proportion of Kenyan cut flower workers with Secondary School as their last stage of education\textsuperscript{22} averaged 45.9 per cent across 74 farms in 2008.\textsuperscript{23}

\textsuperscript{19} Based on 103 observations.
\textsuperscript{20} A proportion of 30.1 per cent currently had relatives employed on the same farm and 7.8 per cent had once had relatives employed on the same farm, but no longer did so (number of observations, N = 103).
\textsuperscript{21} Only two of the 23 stated that supervisors now had this role on the farm where they were employed.
\textsuperscript{22} Note that this is not the same as having completed Form Four.
\textsuperscript{23} Some recent studies of Zimbabwean migrant farm labour in South Africa suggest similar figures (Rutherford and Addison 2007; Theron 2010), but these diverge sharply from those applying to native South African farm labour.
Training and Promotion

Data was collected from seven of the 11 farms surveyed on the number of general workers who had been trained in 2010 and on farm training budgets that year. There was a high degree of inter-farm variance. The largest farm surveyed had a dedicated training department and had spent KES 10.7 million (~US$135,000) training over 2,000 workers. At the other end of the scale were some smaller and middle-sized farms, where training fell under the remit of the human resource manager or even the general manager, where less than KES 0.5 million (US$6,250) was spent on training in 2010 and where training was provided for only a small proportion of the workforce. The median 2010 training budget for the seven farms was KES 1.2 million (US$15,000).

Training provided in 2010 mainly fell into four main categories:

- induction training for new recruits;
- training related to statutory requirements and the requirements of standards, such as training of Health and Safety Committees, First Aid and Fire Officers; training of sprayers in Safe and Effective Use of Pesticides (SEUP);
- technical training for supervisors and managers; and
- technical training for workers.

All these categories of training except induction training for new recruits, and types of technical training for workers delivered at workstations by company staff, are reimbursable from government. All farms, including the four for which records were not obtained, undertook the first two types of training. Most had also undertaken some training of supervisors since 2008 (see below) and a handful sponsored participation by senior staff in expensive professional courses such as BASIS and FACTS for farm-level management of plant protection and fertilizer use respectively. Post-induction technical training of workers training was also quite widely undertaken, but it was generally conceptualized as updating induction training and, as will be seen, its content and duration were rather limited.

Even on the largest farms, training in the second (statutory and/or standards-related) category alone accounted for more than half of all that performed in terms of both budget and numbers of workers covered. Most of this type of training is relatively new and has been introduced either in connection with certification to new standards or tightening (or tightened enforcement) of existing standards and legislation.

On Fairtrade-certified farms, certain additional types of training were also undertaken. These were all financed out of Fairtrade premium and determined by the farm Joint Body, although farms themselves sometimes made independent contributions to them. This invariably included training for Joint Body worker members in leadership, communication and financial management skills, but sometimes technical training in transferable skills such as lorry driving (focused on retrenched workers, for example) was also provided. On two of the farms sampled, training of ‘Gender committees’ had taken place in the previous year, or was scheduled for short-term implementation. It was unclear whether this was the result of initiatives by the farm or (as both farms were Fairtrade-certified) their Joint Bodies.

24 Three of the other farms did not have a formal training budget or keep full records of training. One had such a budget but was unable to retrieve it.
25 KES 300,000+ (US$3,750+) per person.
26 Fairtrade-certified farms are required to have a Joint Body of managers and workers, of whom workers must form a majority and be elected by a general assembly of all workers. The purpose of Joint Bodies is to determine how the premium should be spent.
Workers surveyed were asked when they had last received any post-induction training; if so, what topics had been covered; whether training received in the past 2 years had involved learning to carry out functions previously performed by a supervisor; and whether any training received over the past 2 years had been associated with movement into a higher-paid job category or grade for the worker receiving it.

Given that a large majority of workers had been employed for at least 2 years, a surprisingly high proportion reported never having received training since induction (Table 4).

In 48 of the 56 cases of workers who had received training since their induction, this involved learning ‘a new way of doing an existing task’ – such as a greenhouse worker learning a new cut point or a packhouse worker learning to bunch with overlapping stems. In five cases, the training received related to SEUP or some other statutory requirement; only in three did it relate to learning a completely new work task. Furthermore, in only six of the 56 cases did the training received involve what could be called ‘vertical’ job enlargement; that is, learning to carry out an activity previously performed by a supervisor or worker in a higher-paid grade.

The finding of lack of investment in technical training was paralleled by low levels of intra-farm job mobility. Only 15.9 per cent of workers surveyed had moved from one job to another since becoming employed on their current farm.27 Intra-farm mobility was particularly restricted for women workers.28

The low level of intra-farm mobility partly reflects a generally low level of differentiation between farm jobs. For example, within greenhouses there are very large numbers of general workers and a handful of scouts, sprayers, fertigation or irrigation workers and supervisors.29 Moreover, other than in the case of supervisors (and quality controllers in packhouses), these jobs do not attract large wage increments.30 The category of ‘semi-skilled’ worker provided for in the sector collective bargaining agreement (CBA) is generally little utilized and where pay grades do exist, they are mainly based on seniority.31

Based on 113 observations.

28 A negative correlation between gender and ‘changed job on farm’ was statistically significant at the 10 per cent confidence level.

29 With the exception of supervisors, these jobs are all de facto reserved for men, as is cold store work in packhouses.

30 Only four workers employed in spraying, scouting or irrigation were included in our worker sample, making generalization dangerous. But in all cases, their pay for May 2011 was below the mean for the farms on which they worked. It appears to have been depressed by lack of opportunities to work overtime or earn bonus.

31 At least five of the 11 farms visited operated seniority systems, whereby for each additional 3 years’ service (up to say, 12 years), workers received a wage increment of KES 500–600 (about US$7) per month. One farm allocated workers to different pay grades according to the results of annual individual performance appraisals, although details of this system are lacking.
There is a disjunction between the typical scope of present training and intra-farm job mobility on the one hand and farms’ ambitions for the future on the other. The latter are expressed in demands that workers entering the industry have educational qualifications (as described above) and in the development during 2010, with the Department of Industrial Training,32 of an ambitious ‘Skill Upgrading Course in Floriculture’ intended to serve as a common national curriculum for in-house technical training up to and including management level. A 78-page curriculum has been written with the active participation of specialist training providers such as Real IPM and managers from Oserian and Sian, two of the largest producers in the country. The course’s minimum entry requirement will be Form Four (O-level) or KPCE33 plus 5 years’ experience.

Retention

The worker survey conducted suggested a high degree of employment stability, at least amongst permanent workers. Three quarters of all workers surveyed had spent 2 years or more on the farm where they were currently employed, half had spent 4 years or more, and a quarter had spent 8 years or more. The mean length of current employment was 5.8 years.34 This picture is confirmed by payroll data for provided by one of the farms surveyed. According to this, 71.2 per cent of permanent workers employed in greenhouses and the packhouse had been on the farm for 4 years or more and 11.9 per cent had been employed on the farm for 12 years or more.

When the sector first emerged in the 1980s and early 1990s, it was common for farms to provide housing to workers as a means of stabilizing the workforce. But by 2008, as Ksoll et al. (2011) report across 74 farms, the average proportion of workers with on-farm housing was only 11.2 per cent. In the authors’ own survey, only two of the 11 farms provided accommodation to more than a handful of workers (a third had discontinued large-scale provision 3–4 years previously35). The present authors nonetheless found a high level of residential stabilization off-farm. Half of all workers surveyed had resided for at least 5.5 years ‘in the place where they currently stay’ and 25 per cent had resided there for at least 11 years. Workers’ mean length of residence in ‘the place they currently stay’ was 8.1 years.36

The main way in which farms had now stabilized their workforces appeared to be through providing security of employment. According to management-supplied data (corroborated in most cases by audit reports), workers designated as ‘permanent’ made up the great majority of non-salaried workers on all farms surveyed, except one where all workers had temporary or seasonal status. The mean for the 11 farms surveyed was 79.2 per cent and the median 88.5 per cent (Table 5).

Data on the share of permanent employment in total employment in 2006 was only available for farms number 10 and 11 (from audit reports). These shares were 85.5 per cent

32 Ministry of Labour.
33 Kenya Primary Certificate Examination.
34 Standard deviation 4.5 years, based on 112 observations.
35 In FG discussions on this farm, workers reported their satisfaction with this change, which was introduced in order to obtain Fairtrade certification (existing housing was located too near to production areas for certification to be obtained). Workers experienced on-farm residence as socially and economically restrictive.
36 Standard deviation 7.2, based on 103 observations of workers who lived off-farm. There was a statistically significant relation at the 5 per cent level between the length of time that workers had worked in the industry and the length of time that they had ‘stayed in the same place’. Workers’ residential stability does not detract from many of them being seen as ‘foreigners’ in their districts of residence and employment. Most flower farm workers in Naivasha are either first- or second-generation migrants from western Kenya, to where a significant number were temporarily forced back in the post-election violence of 2008.
and 56.6 per cent respectively, indicating that significant increases in the share of permanent workers in these farms’ workforces had occurred since this date. It may be that the main increase occurred in 2006–8: Ksoll et al. (2011), reporting on a survey from that year, give a mean share of permanent employment on 74 farms of 84.4 per cent.

Permanent workers are today recruited exclusively from seasonal or temporary workers employed on the same farm. On the farms where research was conducted, it was now normal for this progression to occur after 3 or 8 months, at the end of a temporary or seasonal worker’s first or second contract. This is in contrast with the position a few years ago in Kenya, reported by Barrientos et al. (2005) and Dolan et al. (2005), when progression from temporary or seasonal to permanent status was slower and in some cases never happened.

Workers surveyed in 2011 were asked whether progression to permanent worker status had become more or less easy or rapid to obtain since they started employment in the sector. Their answers should be considered in relation to the sample’s length of total employment in the sector (average 6.9 years, median 5.0 years37). Of those surveyed, 54.9 per cent stated that since they started in the sector, it had become easier or faster to progress to permanent employment, while 28.4 per cent stated that it was ‘about the same’.38 Confirmation of acceleration in progression to permanent employment status was provided in FG discussions and interviews with union representatives and/or workers committees and joint bodies. On eight out of the ten farms where this issue was discussed, a higher percentage of the workforce was reported to enjoy permanently status than in the recent past, while the period taken by progression was reported to be shorter and more clearly specified.39 Note that the proportion of permanent employees in the authors’ worker survey was, at 85.0 per cent, comparable with the proportions for farm employment generally, reported by managers; and that on almost all farms surveyed a separate temporary worker FG was held.

Stabilization through employment security was provided to male and female workers equally, as far as can be determined. Women made up a mean of 55.7 per cent and a median of 55.1 per cent of the overall non-salaried workforces of the farms surveyed. The proportion of women amongst all permanent workers on these farms was ‘almost identical’ (Table 6).40

The earlier Kenyan studies by Barrientos et al. (2005) and Dolan et al. (2005) do not provide precise data allowing a contrast over time in the gender composition of the sector’s

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<tbody>
<tr>
<td>Permanent workers/all wage workers</td>
<td>74.8</td>
<td>100.0</td>
<td>0</td>
<td>73.2</td>
<td>88.5</td>
<td>96.6</td>
<td>66.6</td>
<td>88.8</td>
<td>100.0</td>
<td>96.9</td>
<td>85.5</td>
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Source: Interviews with farm management and audit reports.

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37 Based on 103 observations.
38 A proportion of 16.7 per cent stated that it had become harder (number of observations, N = 102).
39 On a ninth farm, workers reported that they had always been made permanent after 3 months. On the remaining farm, all workers were now, and always had been, on 6 month rolling contracts.
40 Mean 55.1 per cent and median 57.1 per cent. The proportion of women amongst all employees in the authors’ worker survey was, at 73.5 per cent, slightly higher than the figures given by managers; these compare with Ksoll et al.’s (2011) mean of 62.0 per cent for 74 farms surveyed in 2008.
workforce. However, for farms 10 and 11, data is available from audit reports for 2006. In 2006, women workers were 33.2 per cent of all workers and 33.6 per cent of permanent workers on farm 10 and 43.0 per cent of all workers and 47.1 per cent of permanent workers on farm 11. This suggests that, in so far as stabilization was managed earlier through employment security, this was not in a way that discriminated against women.

Permanent employment status does not only guarantee employment security, although this is its main benefit – especially for women workers. FG discussions indicated that it typically also resulted in higher basic pay relative to seasonal employment, through triggering access to annual increments (see below), and that it improved workers' creditworthiness in the eyes of banks and providers of hire purchase credit.

As indicated earlier, union officials from Naivasha challenged the reliability of the study’s findings on the extent of permanent employment in the sector and the speed and regularity with which temporary workers achieved permanent status – at least for the Naivasha area. According to them, the share of permanent workers in the workforce did indeed rise to levels described when farms in the region first mostly adopted standards and implemented national laws in the mid-2000s. Subsequently, however, they have fallen. Without further research, it is impossible to assess how accurate this criticism is.

In any event, it should be noted that, for some groups of workers, provision of employment security was not the only, or even perhaps the main, labour stabilization strategy. Although the industry generally cannot be said to stabilize its workforce through a strategy of paying high wages, almost all farms considered it necessary to provide packhouse workers with the opportunity to earn high wages in order to retain them. The payroll data referred to earlier indicates the existence of a retention problem for this group of workers. This data shows that, on the individual farm concerned, 37.7 per cent of all permanent packhouse workers (N = 98) had started work in 2008 or after, compared to only 17.7 per cent of

Table 6. Share of women employees in total and permanent employment, 2011 (%)

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<th>10</th>
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</tr>
</thead>
<tbody>
<tr>
<td>Women workers/all workers</td>
<td>Data missing</td>
<td>70.0</td>
<td>57.1</td>
<td>51.9</td>
<td>45.3</td>
<td>55.1</td>
<td>Data missing</td>
<td>75.2</td>
<td>64.0</td>
<td>36.4</td>
<td>46.8</td>
</tr>
<tr>
<td>Women workers/permanent workers</td>
<td>Data missing</td>
<td>70.0</td>
<td>Not applicable</td>
<td>49.4</td>
<td>46.2</td>
<td>57.1</td>
<td>67.5</td>
<td>73.4</td>
<td>64.0</td>
<td>35.7</td>
<td>47.0</td>
</tr>
</tbody>
</table>

Source: Interviews with farm management.

*No permanent workers.

41 Technically, seasonal workers are entitled to take maternity leave without prejudice to their contracts, but in practice some employers view their doing so as de facto resignation. No permanent workers experience this problem.

42 Increasing the weighting given to Naivasha farms in reporting results would not really address this issue, as the Naivasha farms in the sample had above- rather than below-average shares of permanent employment in all employment.
permanent greenhouse workers ($N = 79$). Similar differences in labour turnover were referred to anecdotally elsewhere. Differences between packhouse and greenhouse workers’ pay and payment systems will be returned to below.

**THE MOMENT OF PRODUCTION**

This section reports in turn findings on work organization and worker deployment; on payment systems; and on supervision systems. It also discusses the ‘industrial politics’ of the part of the sector considered, before summing up.

*Work Organization and Worker Deployment*

Outlines of the worker deployment systems now common in Kenyan cut flower production first emerged at the end of the 1990s, as did the wage and incentive systems that will be discussed in the next section. This section will describe first deployment systems in greenhouses and then in packhouses.

*Greenhouse deployment systems*

Up to around 2000, the two largest categories of greenhouse workers were harvesters and those carrying out general crop maintenance tasks. Both groups were organized in task-specific and often greenhouse-specific gangs, who rotated continuously between beds in the individual greenhouse where they were deployed. Alongside them were much smaller gangs of workers specializing in scouting, spraying and irrigation, rotating continuously between several greenhouses. Finally, there were one or two workers in each greenhouse who were responsible for transporting flowers and waste by trolley or donkey cart.

According to Thoen et al. (1999), at the end of the 1990s there was a Kenyan ‘industry standard’ for deployment of workers in rose production, of 12 production workers per hectare. This was in a context in which greenhouses were mostly low wooden (‘Spanish’) structures, with some areas difficult to use for production. At the same time, sprayers and other workers operated in a context in which controls over types of chemical used and chemical exposure were few and poorly enforced.

Today, greenhouses are typically very large (usually 1 hectare) steel–poly structures allowing better space utilization and ventilation. At the same time, strict re-entry limits are applied for all workers after spraying and sprayers themselves can only work continuously for limited periods. In this context, work has been comprehensively reorganized. Three sets of changes will be highlighted in this connection.

Chronologically, the first (mostly completed by 2005–6) and organizationally the most far-reaching has been a shift from single-function gang-based work organization to so-called ‘scheme harvesting’. This involves combining the functions of harvester and crop maintenance worker into a single job, where the worker is given unique and continuous responsibility for a fixed number of beds in a single greenhouse. He or she harvests from all their beds during the first part of their working day, then during the remainder carries out intensive crop maintenance tasks such as weeding (in soil systems), removing dry leaves and buds, bending (in hydroponic systems) and cleaning between beds, on one or two beds in daily rotation. These workers are termed ‘crop attendants’, or more graphically ‘bed owners’.

It appears that this figure does not include sprayers, irrigation/fertigation workers or transporters.
The second (subsequent to this) has been definition and implementation of standard operating procedures (SOPs) for specific tasks or parts of tasks. Along classic Taylorist lines (cf. Taylor 1911, 25–9 on bricklaying) this involves breaking a job into elements, defining how each element is best performed, analysing their optimal sequence and finally implementing the resulting changes. For example, one large farm had broken harvesting down into a sequence of six identifiable tasks, the implementation of which was intended to increase the number of stems workers could harvest in a given space of time, minimize damage to harvested flowers and (by incorporating into harvesting some functions earlier carried out in packhouses, such as sizing) allow accelerated grading and bunching of the product in the packhouse.44

The third (and subsequent again) has been reduction in the number and intensity of interventions external to the production process such as spraying, which because of strictly enforced re-entry periods is associated with increasing downtime.45

Following the introduction of these three methods, a fall since 2005 in the numbers of greenhouse workers deployed per hectare could be observed on four of the eight farms where comparable data is available for both this year and 2011, as against only one change in the other direction (Table 7). These observations are based on surveyed greenhouse workers’ reports of the number of beds they were responsible for under scheme harvesting systems in 2005 and 2011, re-based to a common bed length of 100 metres.46 The fall occurred despite the transfer of some packhouse functions to crop attendants’ jobs on some farms, as noted. The table also shows a convergence in greenhouse labour densities across farms.47 Indeed, a de facto industry standard of ∼10.4 crop attendants per hectare has emerged – this density was not only the mode across farms in 2011, but also the median and the mean.

Table 7. Bed attendants’ work task magnitudes and N production workers per hectare, 2005–11
(number of observations for 2011, N = 65; number of observations for 2005, N = 27)

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<tbody>
<tr>
<td>Number of beds, 2005</td>
<td>n/a</td>
<td>7</td>
<td>6</td>
<td>n/a</td>
<td>9–10</td>
<td>7–8</td>
<td>14</td>
<td>9–10</td>
<td>7</td>
<td>9</td>
</tr>
<tr>
<td>Number of beds, 2011</td>
<td>11–12</td>
<td>11</td>
<td>8</td>
<td>13</td>
<td>9–10</td>
<td>8–9</td>
<td>9–10</td>
<td>9–10</td>
<td>7</td>
<td>11</td>
</tr>
<tr>
<td>Implied number of attendants per hectare, 2005</td>
<td>n/a</td>
<td>14.3</td>
<td>16.7</td>
<td>n/a</td>
<td>10.4</td>
<td>13.3</td>
<td>7.1</td>
<td>10.4</td>
<td>14.3</td>
<td>11.1</td>
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<tr>
<td>Implied number of attendants per hectare, 2011</td>
<td>8.3–9.1</td>
<td>9.1</td>
<td>12.5</td>
<td>7.6</td>
<td>10.4</td>
<td>11.8</td>
<td>10.4</td>
<td>10.4</td>
<td>14.3</td>
<td>9.1</td>
</tr>
</tbody>
</table>

Source: Authors’ worker survey.
The data in the table report modal figures from interviews with bed attendants. Historical data for farm 7 refers to 2008, not 2005. Farm 11 was not included in this part of the survey.

The second (subsequent to this) has been definition and implementation of standard operating procedures (SOPs) for specific tasks or parts of tasks. Along classic Taylorist lines (cf. Taylor 1911, 25–9 on bricklaying) this involves breaking a job into elements, defining how each element is best performed, analysing their optimal sequence and finally implementing the resulting changes. For example, one large farm had broken harvesting down into a sequence of six identifiable tasks, the implementation of which was intended to increase the number of stems workers could harvest in a given space of time, minimize damage to harvested flowers and (by incorporating into harvesting some functions earlier carried out in packhouses, such as sizing) allow accelerated grading and bunching of the product in the packhouse.44

The third (and subsequent again) has been reduction in the number and intensity of interventions external to the production process such as spraying, which because of strictly enforced re-entry periods is associated with increasing downtime.45

Following the introduction of these three methods, a fall since 2005 in the numbers of greenhouse workers deployed per hectare could be observed on four of the eight farms where comparable data is available for both this year and 2011, as against only one change in the other direction (Table 7). These observations are based on surveyed greenhouse workers’ reports of the number of beds they were responsible for under scheme harvesting systems in 2005 and 2011, re-based to a common bed length of 100 metres.46 The fall occurred despite the transfer of some packhouse functions to crop attendants’ jobs on some farms, as noted. The table also shows a convergence in greenhouse labour densities across farms.47 Indeed, a de facto industry standard of ∼10.4 crop attendants per hectare has emerged – this density was not only the mode across farms in 2011, but also the median and the mean.

44 ‘1. Move down the pathway, cutting stems from one side of the bed only; 2. Go to the sizing table with less than 30 stems; 3. Lay on the table and cut off the hooks; 4. Size into buckets of up to 100 stems; 5. Loosely tie; 6. Count number of stems in bucket and label.’ Similar SOPs exist for other operations.
45 Reduction of spraying – in favour of IPM – has the additional advantage of saving on recurrent costs and of reducing the stress experienced by plants.
46 Because not all greenhouse workers interviewed were employed in 2005, the number of respondents providing recall information for this year’s cases was typically only between two and four. The numbers do not include ‘reserves’ kept on the payroll to cover for absence.
47 The standard deviation for the implied N attendants per hectare fell from 9.1 in 2005 to 3.8 in 2011.
Writing in the late 1990s, Thoen et al. (1999) described packhouse work organization as follows:

The main post-harvest functions are grading, bunching and packing. Grading involves eliminating damaged, diseased and malformed blooms and sorting by stem length and quality. Most packhouses . . . manually grade flowers, yet several large growers have recently introduced conveyors . . . After grading flowers are bunched in corrugated cardboard. Bunch sizes are determined by the market but mostly consist of 10–20 stems. After bunching flowers are placed in buckets with treatment solutions, packed in cartons and kept in cold storage before transport.

Apart from omitting the function of defoliation, then performed mechanically prior to grading or not performed at all where production was for the auction, Thoen et al. fail to describe how grading and bunching were themselves organized. Managers with experience from this period interviewed by the authors stated that, at this time, these functions were typically carried out consecutively by the same individual (called a grader), rather than separately by different workers in a team. Moreover, where conveyors were used at this time, this was only to move buckets containing stems from the receiving store to graders’ individual work tables.

The beginning of the 2000s saw some large farms introduce packhouse team work, or ‘table manufacture’ as it was called. In this system, a defoliator fed a single grader, who sorted by length and quality and then fed two specialized bunchers. From around 2006, also on a few very large farms, conveyors were introduced with integrated mechanical functions for defoliation and grading by stem length. These successive developments sped up production. According to one observer, packhouses reorganized in this way required 25 per cent fewer workers to pack the same output relative to the situation in the 1990s.

Considering the farms studied in 2011, though, it seems that the evolution described above had been generalized only patchily or in some places even reversed. Of the ten farms covered in this part of the survey, packhouse workers were organized into small teams on only four. Even where this was the case, the division of labour within these teams was not consistent across farms. Conveyors were being used in packhouses on only two of the farms surveyed, including one that had been amongst the first in Kenya to use a conveyor, where some functions mechanized and integrated into its operation earlier were now performed by hand.

On some farms where packhouses are (still) organized in small teams, this is associated with a breakdown of the previously undifferentiated grading function into a succession of two more specialized and therefore more carefully performed functions – sorting by stem length and sorting by quality/eliminating diseased or deformed blooms. Clearly, however, unless there is an effective level of coordination within such teams, throughput will decline. Together with greater demand for more complex bunching – for example, in mixed colours, which is difficult to integrate with team grading – this has led some farms to return to individually based packhouse work organization.48

On one farm surveyed, an element of specialization had been reintroduced into an individually based version of this system, through organization of grader–bunchers into conveyor-fed ‘lines’, distinguished according to product type on the one hand and operator ability on

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48 In such systems, defoliation may be also (re)integrated into individual grading and performed by hand, along with guillotining after bunching.
the other. The farm had four lines made up of 25–30 graders: a fast one for auction products, a slower one for direct sales, an elite one for ‘high care products’ and a fourth line reworking reject s from the other three lines into saleable form (again for the auction).

On all except one of the farms, a daily output target was applied to packhouse workers, expressed either as the number of bunches or of individual stems to be handled by a team or individual, depending on the system (Table 8). While most farms applied fixed targets, in two cases where the product mix changed frequently these were adjusted up or down. Where team targets were specified, for purposes of comparison these have been re-based in individual terms.

Table 8 shows high and persistent variance between farms, both in target magnitudes and in the physical (stems, bunches) and time units in which they are specified. Thus in the case of packhouses there is no evidence of a process of convergence towards a common industry standard of labour deployment and implied physical productivity. The main similarity across both packhouses and greenhouses is that, for around half of the farms surveyed, an increase in work task magnitudes has occurred. In the case of packhouses, this has been in the absence of strictly technological change, although as noted some work previously performed in packhouses is now commonly performed as ‘pre-grading’ by greenhouse workers instead.

Payment Systems

Except on one farm where packhouse workers were paid entirely using piece rates, all workers on all farms received a monthly flat rate based on a 46-hour week, plus a housing allowance. However, how workers were paid over and above this rate varied systematically according to whether they were deployed in greenhouses or packhouses (Table 9).

In May 2011, almost three quarters of packhouse workers received piece- or productivity-based pay for part or all of their work. By contrast, only a small minority of greenhouse workers received piece-rated pay.

Table 8. Graders’ and bunchers’ task magnitudes, 2005–11 (re-based individually: number of observations for 2011, \(N = 35\); number of observations for 2005, \(N = 17\))

<table>
<thead>
<tr>
<th>Farm</th>
<th>Physical unit</th>
<th>Time unit</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Bunch</td>
<td>Bunch</td>
<td>n/a</td>
<td>Bunch</td>
<td>Stem</td>
<td>Bunch</td>
<td>Stem</td>
<td>Stem</td>
<td>Stem</td>
<td>Stem</td>
<td>Stem</td>
<td></td>
</tr>
<tr>
<td>2005 target</td>
<td>n/a</td>
<td>97</td>
<td>None</td>
<td>21</td>
<td>1,500</td>
<td>80</td>
<td>2,500</td>
<td>2,250</td>
<td>2,200</td>
<td>7b</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2011 target</td>
<td>175</td>
<td>150b</td>
<td>None</td>
<td>23</td>
<td>1,200</td>
<td>100</td>
<td>2,500</td>
<td>2,800</td>
<td>2,200</td>
<td>8b</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Authors’ worker survey.

The data in the table reports modal figures from interviews with graders and bunchers. Historical data for farm 7 refers to 2008, not 2005. Farm 11 was not included in this part of the survey.

*No comparable system existed in 2005.

Adjustable downwards according to product type.

In one case, the target was specified in terms of buckets. Workers had a rule of thumb for translating this into bunches, and it is this measure that has been used in Table 8 for this case.

Note, however, the very small number of observations (1–3 per farm) on which the 2005 data in Table 8 are based.

Fifty-six hours for security guards, ‘herders and stockmen’ (CBA 2010, Appendices II and IV).
workers received such payments. Where packhouse workers worked overtime, in about half of the cases this was also paid by the piece rather than on a time basis. Greenhouse workers who worked overtime, in contrast, were almost always paid for this on a time-rate basis. Meanwhile a significant minority of greenhouse workers received discretionary bonuses unrelated to a transparent target, whereas only a handful of packhouse workers did. In summary, packhouse workers were mostly paid by the piece, either in addition to a basic wage or (in the case of one farm) instead of it, while greenhouse workers were mostly paid by a basic wage supplemented by overtime and (in some cases) discretionary bonuses.

**Greenhouse pay**

Of the ten farms surveyed in this part of study, only two paid their greenhouse workers using discretionary bonus systems, while two others paid them using productivity bonuses, with piece-based payments triggered when production targets were exceeded. On the two farms where discretionary bonuses were paid, most eligible workers received them in May 2011. On the two paying productivity-based bonuses, only one third of eligible workers received them in May 2011.

Productivity-based bonuses were triggered when individual and/or greenhouse monthly stem output targets were exceeded. These targets were varied up and down according to season, variety and greenhouse size and incremental bonuses were paid for each 5 per cent interval by which a target was exceeded. The systems followed transparent rules, but these were complex and referred to targets that workers thought seemed ambitious.

Discretionary bonus systems, on the other hand, involved managers subjectively assessing workers each month on six aspects of performance relating to crop and bed maintenance and observation of correct cut points. On one farm, workers had to pass on all six aspects to obtain the bonus, while on the other there was a mini-bonus for each test passed, plus a supplement if all six were passed. On both farms, managers stated that ‘we use our judgement so that most workers can get the bonus’. In the case of both systems, where a bonus was received it was small (KES 507 on average).^{52}

**Packhouse pay**

Productivity-based pay has been used in packhouses in the sector since the 1990s, albeit somewhat unevenly. On some older large farms, it was abandoned for a time in the early

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52 Based on 14 observations. Standard deviation KES 163.
2000s due to problems with product quality as well as problems in recording individual or team output. In such cases, these systems gave way to payment for overtime. However, this too was found to be problematic. Hourly output slowed when overtime became freely available and, from around 2005, most standards disseminated in the sector included overtime limits. Thus by 2011, productivity-based pay had become general again. Of the ten farms included in this part of the survey, one paid packhouse workers entirely on piece rate and eight paid workers a combination of basic wage and piece rate, with piece payment triggered by production over the daily target.\textsuperscript{53}

The eight farms paying by the piece after the daily target was reached offered workers an equivalent of KES 0.75–7.50 per bunch.\textsuperscript{54} However, this was in relation to targets that also varied greatly (Table 8). If the daily target was set high, some workers would never reach it and mean piece rate payments would be low, even if the piece rate was high. On two farms, all packhouse workers interviewed had received a piece-based productivity bonus the previous month, but on three others less than a quarter had done so.\textsuperscript{55} The mean monthly piece payment for workers who received productivity-based pay in May 2011 was high (KES 3,416), not only in relation to greenhouse bonus payments but also to basic monthly pay (see below). However, its variance was also high, with a standard deviation only just below the mean.\textsuperscript{56}

\textit{Aggregate wage levels}

Wages in the sector are subject to two forms of external regulation – the Kenyan statutory minimum monthly wage for agricultural work and the higher monthly rate specified by the sector Collective Bargaining Agreement (CBA) (in May 2011, KES 5,100, including a housing allowance\textsuperscript{57}). Seven of the farms surveyed were members of the Agricultural Employers’ Association and hence applied either the national CBA or a local one with a higher monthly rate.\textsuperscript{58} But almost all paid rates in excess of the CBA, and overall inter-farm variation in pay was not significant when other factors were controlled for.

The mean May 2011 take-home wage (including all types of bonus payment)\textsuperscript{59} for the workers surveyed was KES 6,947 and the median KES 6,480.\textsuperscript{60} Variance from the mean was
fairly low.\textsuperscript{61} It should be recalled that May falls in the low season, and that wages (especially piece and overtime payments\textsuperscript{62}) for some other months during the year are likely to be higher.

Reliable 2011 data for wage rates in other sectors, particularly other agricultural sectors in Kenya, are not readily available.\textsuperscript{63} It is therefore not possible to consider whether or not the part of the cut flower sector surveyed was paying ‘high’ wages. All that can be said with certainty is that farms made consistent provision that packhouse workers be paid a significantly higher wage than other workers. A regression analysis of determinants of individual pay (see the Appendix) shows four factors having the largest impact: when the farm employer was Fairtrade certified and when the worker worked in a packhouse, pay increased in each case by around a quarter controlling for other factors; when the farm was located in Naivasha, pay increased by 13 per cent; and when the worker had received post-induction training, pay increased by 11 per cent. Note that permanent employment, gender and education (using ‘applied in writing with a certificate’ as a proxy) all had no significant effects on take-home pay.\textsuperscript{64}

**Supervision and Discipline**

Employees who now were supervisors joined the industry when they were 27 years old on average and became supervisors when they were 33.\textsuperscript{65} Just over two thirds of those interviewed were women and over 80 per cent had at least Secondary School Form Four education. As in the case of ordinary workers, a large majority (69.2\%) had experience only on the farm on which they worked. The average length of employment on their current farm was 9.2 years, of which 6.0 years had been spent as a supervisor.\textsuperscript{66} Eighty-five per cent lived off-farm.

Most farms operated supervision systems with two lower tiers of supervisors (often with job titles such as ‘team leader’ or ‘controller’) plus an upper tier with managerial or quasi-managerial status.\textsuperscript{67} The management or quasi-management status of the upper tier was a recent trend, which will be returned to below.

Supervision tiers were differentiated in terms of how many workers or how large an area was supervised, pay scales and often also different colour overalls. In greenhouses, the median density for the lowest tier of supervision was uniformly one per hectare, while that for the middle tier was one for every two hectares. A member of the upper tier was deployed every 10 hectares. In packhouses, despite the diversity of worker deployment systems, the supervision systems were also rather similar. There was typically a supervisor from the lowest tier, working together with a quality controller, for every 15–25 graders and bunchers, and a supervisor from the middle level for every 40–50. There would only be one supervisor in the upper tier per packhouse.

\textsuperscript{61} The standard deviation was KES 2,182.
\textsuperscript{62} A proportion of 46.1 per cent of workers surveyed reported having performed no overtime at all in the reference month (based on 102 responses).
\textsuperscript{63} The figures appearing in *Kenya Economic Survey 2011*, particularly for agricultural work, seem highly inflated.
\textsuperscript{64} The regression method used was to start from a long list of variables and eliminate from this list on the basis of an analysis of collinearity. In this process, certain variables with a strong intuitive relation to pay, such as farm size, were eliminated because of their collinearity with several other variables, including the district dummies (the own collinearity of which was otherwise much lower).
\textsuperscript{65} All results in this section are based on 39 observations unless stated otherwise. The standard deviations for the last two values cited were 4.8 and 4.6 years, respectively.
\textsuperscript{66} Standard deviations 4.5 and 4.4 years, respectively.
\textsuperscript{67} This tier had job titles ranging from ‘Company Officer’ and ‘Assistant Section Manager’ to ‘Head of Department’.

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Two thirds of the supervisors interviewed were from the lowest supervisory tier. For respondents as a whole, the median number of workers supervised was 15. The median number of workers supervised by respondents at the time they first became supervisors was 13.

The supervisor survey mainly addressed supervisors’ own perceptions of their main tasks, and the division of labour between supervisors and managers. Supervisors were invited to consider a number of statements and identify which best described their job in 2011. They were also asked which statements best described the supervisor role when they were first employed in the sector. The statements provided were intended to indicate allocation of individuals to tasks, coordination of workflow, motivation, discipline and ‘pastoral care’ functions, respectively. Of the supervisors interviewed, 23 had worked in the sector for 10 years or longer. For this reason, it was considered that they would have the best foundation for making long-term comparisons. The three statements that this group selected most frequently to describe the job, respectively, 10 years ago and currently are shown in rank order in Table 10.

While detailed task allocation and coordination of workflow remained important throughout, the main perceived change evident was a decline in the salience of the disciplinary function (mentioned by only 21% of supervisors as applying in 2011) and a rise in that of the motivational one (mentioned by only 17% as applying in ca 2000).

In a 2003–4 study covering several Kenyan flower farms, reference is made to the widespread nature of fines and summary dismissals instigated by supervisors at this time (Smith et al. 2004, 10). The study also refers to generally poor worker–supervisor relations and communication (op. cit., 19). Supervisors’ current emphasis on their motivation role may not, however, reflect only real changes in their job but also training that supervisors have been exposed to in the recent past. According to staff of the Kenya Department of Industrial Training, as well as of two training firms interviewed, supervisor training in the sector had increased since 2008 to a greater extent than any other type of non-statutory and non-standards-related training. All but two of 39 supervisors had received training over this period, 85 per cent of it lasting more than a day and 28 per cent lasting longer than 5 days. The most frequently mentioned topics covered were ‘motivation’ (mentioned by 84% of those receiving training), and record keeping (mentioned by 78%).

No direct attempt was made to corroborate the rise of ‘motivational’ supervision with workers. However, a question was asked of workers to see whether, and if so what type of, discipline was applied to them in the case of non-attainment of work targets (Table 11). The findings reported support the view that discipline and direct supervision of work performance are now largely de-linked.

In terms of the division of labour between supervisors and managers, supervisors were given a list of nine distinct decisions, referring to work planning, worker selection and promotion, and providing access to discretionary payments and privileges. They were asked whether these decisions were now normally taken by managers, supervisors or managers in consultation with supervisors – as well as who took them when the supervisor first started work in the sector. It quickly became apparent during the survey that a fourth option needed to be added to the three referred to already: namely, that rather than the decision in question...
being taken by one or another of these actors, it was ‘made automatically’ as a result of its subsumption under a formal procedure. As in the case of Table 10, Table 12 records the answers provided by the 23 supervisors who had been employed in the sector for 10 years or longer, in terms of the numbers of decisions that they attributed to each of these options in the two periods concerned.

The findings suggest that between 2000 and 2011, declines occurred in the discretionary power both of supervisors and managers (although the decline was slightly greater for man-
agers). There were corresponding increases in the number of decisions made by managers with some input from supervisors, and in the number of ‘decisions’ processed bureaucratically without anyone exercising discretion. This confirms the contention that supervisors are today more integrated in management than a decade ago (or at least see themselves as being so), as well as pointing to bureaucratization of some aspects of both supervision and management.

Industrial Politics

At least in the part of the sector surveyed, industrial politics has moved clearly and systematically in the direction of ‘legalization’. The reliability of one of our findings in this regard, concerning rising union densities, was challenged by both farm managers and union officials in Naivasha. However, even if this finding is disregarded, the overall picture of legalization remains. The sample’s level of standards certification was described in the methodology section, while its level of adherence to the sector CBA is referred to earlier in this section. The broader picture is one of a norm of secure employment (including freedom from arbitrary dismissal and freedom of association) and application of nationally negotiated wage rates; improved observance of health and safety standards; provision of maternity leave and special provisions for pregnant and nursing mothers; and restrictions on overtime.

A complementary trend is the marginalization or separation off of classic corporatist and ‘domestic’ farm-level institutions. Prior to unionization, several farms had other workers’ representation fora, such as works councils, workers’ committees or worker welfare committees. While unionization on some farms has meant the scrapping of existing workers’ committees, on others these committees have been maintained – although in most such cases an uneasy tension with union structures has ensued. At the same time, surviving ‘domestic’ practices have been stripped away or, where Fairtrade certification has occurred, externalized to Fairtrade Joint Bodies. On the surveyed farms certified to Fairtrade, Joint Bodies had taken over provision of ‘in kind’ benefits such as loans and bursaries, contributions to local social infrastructure such as schools and sometimes housing. In the words of one farm manager, the latter process had led to ‘depersonalising of our relations to the workers, because we are now told to do things, whereas before we voluntarily carried out a range of welfare projects’.

CONCLUSION

Here, we sum up in theoretical terms the analysis of the ‘moments’ of labour qualification and production for the part of the Kenyan cut flower sectors analysed, before returning to the Southern Africa discussion and hypotheses concerning the differences detected. Our analysis in convention theory terms is summarized in Table 13, with findings of which conventions applied to which dimensions indicated by bold type.

Labour recruitment on the farms surveyed is based mainly on impersonal labour market mechanisms. It is conducted via centralized farm HR systems rather than being delegated to supervisors, and educational qualifications are increasingly an employment requirement. On the other hand, a large minority of the workforce has been recruited through relations with the existing workforce, and there is no evidence that educational qualifications have greater salience than cost in hiring decisions.

70 The median union density for the 11 farms surveyed was 50 per cent. Union densities had risen over the previous year in at least four cases. Only one farm had no union members.
Table 13. Application of labour management conventions in the Kenya cut flower sector

<table>
<thead>
<tr>
<th></th>
<th>Domestic</th>
<th>Industrial</th>
<th>Market</th>
<th>Civic</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Hiring</strong></td>
<td>Personal acquaintance; historical tie</td>
<td>Impersonal; technical/educational qualifications</td>
<td>Impersonal, cost-based</td>
<td>‘Fair’ – quotas where necessary</td>
</tr>
<tr>
<td><strong>Training and promotion</strong></td>
<td>‘Sons work with their fathers’; seniority- or trust-based promotion</td>
<td>Trade apprenticeships; technical training; merit-based promotion</td>
<td>On-the-job training; promotion based on ‘drive’</td>
<td>Welfare-related (health and safety) and life skill training; promotion based on personal responsibility</td>
</tr>
<tr>
<td><strong>Retention</strong></td>
<td>Stabilization through residence and patronage</td>
<td>Stabilization aimed at tacit skill accumulation through payment of above market-clearing wages</td>
<td>Casuallization and outsourcing where feasible</td>
<td>Stabilization through employment security</td>
</tr>
<tr>
<td><strong>Work organization</strong></td>
<td>Gang system; deployment by physical attribute and internal hierarchy of favour</td>
<td>Scientific planning of work; interchangeable workers</td>
<td>Adjustable work organization; worker deployment according to demand</td>
<td>Responsibilizing work organization; deployment by consensus</td>
</tr>
<tr>
<td><strong>Worker deployment</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Payment systems</strong></td>
<td>Not only cash; strongly discretionary (bonuses, fines)</td>
<td>Rule-based (time- and productivity-)</td>
<td>Flexible piece rates where practical</td>
<td>Time-based only; ‘equal pay for equal work’</td>
</tr>
<tr>
<td><strong>Supervision systems</strong></td>
<td>Despotic, with little or no power devolved to supervisor; no distinction between work and social supervision</td>
<td>Supervisor as production monitor and technical problem-solver</td>
<td>Despotism modified by pragmatism</td>
<td>Flat supervision (motivational, team building)</td>
</tr>
<tr>
<td><strong>Industrial politics</strong></td>
<td>Paternalist; ‘this is my private space’</td>
<td>Corporatist, technocratic</td>
<td>Individualistic</td>
<td>Legalistic</td>
</tr>
</tbody>
</table>

‘As in classical ‘Fordism’.

Training on the job and welfare-related training predominate over more formalized types of technical training, and although a few farms currently offer trade apprenticeships, this is confined to their maintenance departments. Compression of employment grades means that there is little opportunity for farms to use internal labour markets for promotion purposes, except in the cases of progression to permanent employment and promotion to supervisor grades.

While union officials have expressed doubts concerning its reliability on this point, our survey data indicates that workforce retention is attained mainly through provision of security...
of employment. At the same time, however, virtually all farms recognize that it is necessary to provide packhouse workers with an opportunity to earn a significant wage premium. Only on a few farms is residence an important part of labour stabilization policy and there is little or no evidence of use of contract labour.  

Across the ‘moment of labour qualification’, approaches combining ‘industrial’, ‘market’ and ‘civic’ elements are applied in almost equal measure. Approaches to recruitment appear to be a mixture of industrial and market ones (with domestic residues); approaches to training and promotion appear to be mainly market ones in respect of technical training and civic ones in respect of other training; while approaches to stabilization appear to be a mixture of civic (for all workers) and industrial (for packhouse ones).

Work organization in greenhouses was based on scientific work planning and resulted in labour deployment systems that were rigid in the short to medium term. In the case of greenhouses, very similar systems of labour deployment were found across the whole sample. These systems all made use of individual worker ‘responsibilization’, but in a context where all workers performed near-identical jobs.

Packhouse deployment systems also reflected scientific work planning and labour deployment systems that were rigid until specific scientific plans were found wanting. In some cases, these plans also allocated enhanced responsibility to workers, but these were by no means general. Indeed, no system had so far emerged that could be stabilized across the sector as a whole.

Workers within this system were interchangeable, but mostly only in a highly proximate sense. Seventy per cent stated that they could be asked to cover for a worker performing the same task at the same work station, but only 41 per cent stated that they could be asked to change work station, even where this was to an identical greenhouse next door to their own. There was no interchangeability at all between greenhouse and packhouse workers.

Across both greenhouses and packhouses, individual task magnitudes had increased over recent years, although this trend was not systematic and it is even unclear if it has been pursued deliberately.

Payment systems were fully monetized and based mainly on time rates, although this was combined with piece rates where this was most likely to have an impact on productivity (in packhouses). At the same time, although the piece rate systems used in packhouses were normally devised using work study, they also embodied ad hoc assumptions, and variation between them was great. Discretionary bonuses continued to be paid, but these had become very much a residual both in terms of incidence and magnitude.

Aggregate take-home pay was not subject to high levels of variance, but it had some fairly clear drivers. One was standards, particularly Fairtrade standards. A second, almost as important, was retention–incentivization of packhouse workers, as already referred to. A third was local labour shortages, as in Naivasha.

In the case of supervision and discipline, the main development evident has been an increasing salience of modern HR management practices, including separation of discipline from work performance, increased resort to a discourse of motivation, and bureaucratization of decision-making in areas previously the province of managerial or supervisory prerogative.

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71 On one of the 11 farms, security guards were hired through an external contractor. On another, management had used an external contractor but found that theft subsequently increased and so internalized the function again.

72 In most cases, the output of the fastest workers had been used as a reference, with targets being set by subtracting from this. But the magnitude of the subtraction applied often appeared to be arbitrary.
The supervisor’s role in practically coordinating production nevertheless remains central, and there is both a high level of standardization in supervision densities and apparently consistent pressures to reduce these densities.

Meanwhile, the industrial politics of the part of the sector surveyed has moved decisively in the direction of legalization – in terms of employment conditions and collective bargaining – at the expense of both paternalistic and corporatist institutions and practices.

Across the ‘moment of production’, it is thus a hybrid of ‘industrial’ and ‘civic’ approaches that are evident. Industrial approaches, usually more systematic in their elaboration than in their application, dominate for work organization and for payment systems, though with civic qualifications, while civic approaches appear to dominate for supervision (though with industrial qualifications) and for industrial politics.

Taking the two moments of labour management in Kenya in combination, industrial and civic approaches are dominant overall. Instances of ‘compromise’ between these two conventions, in many cases novel ones, proliferate. The multiple instances or layers at which the conventions combine suggest stabilization of a coherent combination of industrial and civic principles. Market and domestic approaches can also be detected, but except in regard to recruitment they are effectively residual. The sample of farms that this result is based upon was not designed to be statistically representative and has a bias towards larger and multiple certified farms, but it is certainly representative of a significant part of the sector – probably encompassing more than half of total output. Furthermore, the finding of hybrid industrial and civic approaches to labour management is systematic across location (in Kenya), farm size and market outlet.

The South and East African literature discussed earlier also identified a turn away from paternalistic forms of labour stabilization and labour control (including what are depicted as the ‘industrial’ and ‘civic’ glosses on paternalistic control adopted in the run-up to majority rule in South Africa). But the main thrust of this literature has been the advance of casualization, labour contracting and ‘flexibilization’ at the expense of secure employment.

A number of hypotheses may be considered in relation to why the Kenyan trajectory should be so different. One refers to the crop(s) grown and their production systems. Greenhouse cut flower production is year-round, with output peaks determined by demand rather than by the crop cycle. Thus, as in Jespersen’s (2005) case of hormone-propagated pineapple, labour demand can be smoothed. This should eliminate the need for hiring in contract workers and confine demand for casual labour to one or two annual demand peaks. Demand for contract workers should be further depressed once farms stop growing in size; that is, when the sector nears maturity. Thus, a stabilized cut flower production system should favour industrial and civic forms of labour management – without, of course, guaranteeing them.

Second, changes in the market are likely to be important. Two changes in particular come to mind here. The first concerns the shift in demand in the international rose trade towards a greater emphasis on product quality and (away from so-called sweethearts) towards varieties that demand progressively more attention and care. This should also encourage changes in labour management, aimed at building up workers’ skills, either through training or simply by retention of more experienced workers who are likely to have accumulated large amounts of tacit knowledge. This in turn may trigger changes in supervision systems.

A second market-related change concerns increased market demand for certification to standards, including social standards. In the case of Fairtrade certification, this demand is reflected in a premium; otherwise, it is becoming a requirement for market access, not necessarily into the Dutch auctions but into direct channels – particularly supermarket ones.
It is this demand that seems likely to be behind much of the legalization trend described above.

Legalization, on the other hand, also seems likely to be driven by domestic pressures in Kenya. In part, this refers to the pressures created by ‘civil society’; but partly also pressures within Kenyan management, especially HR management. As the sector has stabilized, and its management has professionalized, so HR managers are likely to exercise greater sway in the labour management policies followed.

It may be also that other hypotheses should also be considered. The apparently increasing salience of education in recruitment to the sector, which facilitates institutionalization of industrial systems, reflects changes in labour availability in the Kenyan labour market and, in particular, a growing surplus of Secondary School graduates. Thus the presence of a relatively cheap pool of literate and numerate labour from which recruitment can occur suggests another hypothesis worth developing and testing. These issues will be explored further in another paper.

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APPENDIX

Linear Regression of Factors Contributing to Variance in Individual Monthly Pay
(Number of observations, $N = 103$)

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>Robust standard error</th>
<th>Probability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>-.0453229</td>
<td>.0490188</td>
<td>0.358</td>
</tr>
<tr>
<td>Length of current employment</td>
<td>.0197427</td>
<td>.006976</td>
<td>0.006***</td>
</tr>
<tr>
<td>Length of past employment in the sector</td>
<td>.016052</td>
<td>.0070141</td>
<td>0.024**</td>
</tr>
<tr>
<td>Work in packhouse</td>
<td>.234687</td>
<td>.0532482</td>
<td>0.000****</td>
</tr>
<tr>
<td>Received post-induction training</td>
<td>.1087416</td>
<td>.0459968</td>
<td>0.020**</td>
</tr>
<tr>
<td>Work on Fairtrade-certified farm</td>
<td>.2726885</td>
<td>.0622554</td>
<td>0.000****</td>
</tr>
<tr>
<td>Applied in writing with certificate</td>
<td>-.0969155</td>
<td>.0672151</td>
<td>0.153</td>
</tr>
<tr>
<td>Permanent worker</td>
<td>-.0745663</td>
<td>.0801828</td>
<td>0.355</td>
</tr>
<tr>
<td>Farm located in Thika</td>
<td>-.013955</td>
<td>.0733244</td>
<td>0.849</td>
</tr>
<tr>
<td>Farm located in Nanyuki</td>
<td>-.1235</td>
<td>.0728449</td>
<td>0.093*</td>
</tr>
<tr>
<td>Farm located in Nakuru</td>
<td>-.0576466</td>
<td>.0927778</td>
<td>0.536</td>
</tr>
<tr>
<td>Farm located in Naivasha</td>
<td>.1313327</td>
<td>.0664647</td>
<td>0.051*</td>
</tr>
<tr>
<td>Constant</td>
<td>8.454278</td>
<td>.0893902</td>
<td>0.000****</td>
</tr>
</tbody>
</table>

$R^2 = 0.5353$.
Significance level: *, 10%; **, 5%; ***, 1%; ****, 0.1%.