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Predicting Job Satisfaction and Workers' Intentions to Leave at the bottom of the High Value Agricultural Chain: Evidence from the Ethiopian Cut Flower Industry

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Predicting Job Satisfaction and Workers' Intentions to Leave at the bottom of the High Value Agricultural Chain: Evidence from the Ethiopian Cut Flower Industry

While there is a large body of research focusing on working conditions in labour intensive industries, none has yet considered how workers themselves perceive their own working conditions. This paper draws on a sample of workers from the cut flower sector industry in Ethiopia to examine the extent to which workers are satisfied with their jobs and to explore the relationship between job satisfaction and intention to leave. Results suggest that a positive evaluation of extrinsic organizational rewards (wage, job security and healthy environment) contributes to workers' job satisfaction. Dissatisfied workers report higher intentions to leave their job in the flower farms. In addition to low levels of job satisfaction, having alternative livelihood strategies is a key determining factor in the intention to leave. Interestingly, being a member of an informal savings net organized at the work floor mitigates the intention to leave. The paper ends with some implications for managers and policy makers, along with limitations and suggestions for future research.

Keywords: job satisfaction, turnover intention, labour intensive industries, Ethiopia

1. Introduction

Globalization and global competition has led to a relocation of low technology, labour intensive industries towards countries where labour is cheaper (Scott, 2006). These industries are often referred to as engines of growth in developing countries, since they perform well in terms of job creation and generating foreign earnings (Scott, 2006; Ulrich, 2014). At the same time however, there is a growing concern that the contributions these labour intensive industries make to development are highly uneven distributed within these countries as the workers themselves often face long working hours for low wages under poor working conditions (Hale & Opondo, 2005; Riisgaard, 2009).

Past research has focused on the social and human consequences for workers employed in these industries. These studies mainly used objective measures of job quality in attempts to critically evaluate current working conditions (Hale & Opondo, 2005), analysing the existing disparities between current work practices and benchmarks for working conditions that are framed in several certification schemes, codes of conducts and in labour regulations (Barrientos & Smith, 2007; Locke, Amengual, & Mangla, 2009; Raynolds, 2012; Riisgaard, 2011; Yu, 2008) and researching the potential of different actors (including labour unions, local NGOs and accreditation bodies) to improve current working conditions (Lund-Thomsen & Nadvi, 2010; Riisgaard, 2009, 2011). To date, what is missing in this field of research is any inclusion of workers' own perceptions about their working conditions; how workers themselves evaluate the quality of their working life.

We consider this an important research gap in literature on working conditions at the bottom of global value chains, especially because several papers have demonstrated a clear link between workers' levels of job satisfaction and labour market behaviour (Mobley, 1977; Mueller & Price, 1990). Workers with high levels of job satisfaction are less likely to quit (Aguiar Do Monte, 2012;

Jiang, Baker, & Frazier, 2009), tend to show positive workplace behaviour and perform better (Ellickson & Logsdon, 2001). Conversely, low levels of job satisfaction result in higher absenteeism and labour turnover rates (Aletraris, 2010; Lee & Bruvold, 2003; Linz & Semykina, 2012). To our knowledge, the theorised link between job satisfaction and voluntary labour turnover has not yet been empirically examined in the context of labour intensive industries where low skilled workers have few alternative job opportunities to turn to.

This paper draws on the cut flower industry in Ethiopia, a sector chosen as it exhibits the key characteristics of a labour intensive industry. This paper addresses two research questions. What are the determinants of job satisfaction in cut flower farms in Ethiopia? And, does job satisfaction influence workers' intentions to leave their job? This study is unique as it directly investigates workers' own judgments about labour conditions at the bottom of a high value agricultural chain (in this case for roses). In a country where agriculture provides work to many households and contributes significantly to export earnings, it is highly relevant for employers and policy makers alike to consider job satisfaction levels and quitting behaviour.

From an employers' perspective, this study may offer valuable information about workers' labour market behaviour. Labour intensive industries are mostly part of buyer-driven value chains which means that key decisions about delivery, cost and quality of the products are taken by large retailers (Dolan & Humphrey, 2000). Adherence to these external requirements is decisive for companies inclusion within the chain, but requires a steady workforce, willing to work long hours and capable of providing high quality produce within specified delivery times (Riisgaard, 2009). Having satisfied workers with positive job attitudes (that is to say a steady and disciplined workforce) is a key ingredient in meeting these goals.

From the perspective of development policy, our findings highlight the importance of having policies that do not limit themselves to job creation as it would be a too narrow approach. Job satisfaction has been recognised to be an important component of individual well-being (Green, 2010; OECD, 2013; Sousa-Poza & Sousa-Poza, 2000). Hence, policy makers need to take into account both the objective (externally evaluated) and the subjective (as perceived by workers) quality of the jobs provided, but the latter is under-researched for workers at the bottom of agricultural value chains. Understanding what makes people (dis)satisfied with their jobs should be central to any employment-oriented development policy.

2. Theoretical background

This section introduces the theoretical considerations that underpin our research. First, we review the literature on job satisfaction and its determinants and we contextualize these theoretical underpinnings by applying them to the Ethiopian cut flower industry. Second, building from human resource management we explore the link between job satisfaction and labour turnover/decisions about quitting. We combine these insights with literature on livelihood strategies to identify the alternatives that workers have, which may play an influential role in their decision about quitting.

Job satisfaction

Job satisfaction has been defined in different ways, from the degree to which someone likes his/her job (Spector, 1997, p. 2), to the degree of fit between actual job rewards and workers expected job rewards (Clark, Oswald, & Warr, 1996), to job satisfaction as a positive (or negative) evaluative judgment one makes about one's job or job situation (Weiss, 2002, p. 6). Implicit in all definitions is the importance of on the one hand affect or feeling, and on the other hand cognition or thinking (Lan, Okechuku, Zhang, & Cao, 2013; Saari & Judge, 2004).

Much research has attempted to predict job satisfaction. Theory explaining the determinants of job satisfaction can be categorized into content and process theories. Content theories assume that all individuals have needs and values which need to be met for employees to be satisfied with their job. Content theories include Maslow's (1954) need hierarchy theory and Herzberg's two-factor theory (Herzberg, Mausner, and Snyderman, 1958). Process theories on the other hand, attach less importance to the role of needs, and focus on the overall or cognitive process leading to job (dis)satisfaction. Process theories include expectancy (Vroom, 1964) and equity theories (Adams, 1963).

Both needs and content perspectives agree that job characteristics are the most important predictors of job satisfaction. We separate job characteristics into extrinsic rewards and intrinsic rewards (Aletraris, 2010). Extrinsic rewards include work aspects not directly associated with the job activity itself, which are more a by-product of the work (Tietjen & Myers, 1998). They occur as a consequence of job performance. They include both organizational and social rewards (Mottaz, 1985). The organizational dimension covers those rewards that are provided by the organization to motivate task performance while the social dimension covers those rewards that are derived from interacting with others in the workplace (Mulinge & Mueller, 1998).

By contrast, intrinsic rewards are said to be related with the job activity itself (Aletraris, 2010). They satisfy a workers' immaterial needs by allowing for self-expression, giving a worker the feeling that they accomplish something worthwhile on the job (Linz & Semykina, 2012). Both sets of rewards are considered important in predicting job satisfaction (Abdulla, Djebarni, & Mellahi, 2011; Mottaz, 1985).

The aim of this study is to examine the determinants of job satisfaction among workers in the Ethiopian cut flower industry. In the following sub-section, we review how past studies on working conditions in the cut flower value chain have evaluated the extrinsic and intrinsic rewards associated with these jobs. Based on this discussion and the theoretical background, we then develop the hypotheses.

Job satisfaction in the Ethiopian cut flower industry

Labour conditions in high value agricultural chains have been subject to much criticism. This is especially true for the cut flower industry which has been regularly confronted with NGO campaigns, especially around Valentine's Day, demanding better labour conditions for workers in the South (Riisgaard, 2009).

Cut flower value chains are increasingly organised along vertical south-north lines (Melese & Helmsing, 2010). Producing countries are mainly situated nearby the equator, while consumers are mainly found in more affluent markets in the northern hemisphere. Flowers are a non-edible, perishable product and their production follows a seasonal demand. The demand for flowers peaks during western festivities such as Valentine's Day, Mother's Day and Easter, while the demand drops during the summer period in the northern hemisphere (Hale & Opondo, 2005).

Because of these features the labour conditions within the industry are quite distinct. Extrinsic organizational rewards are generally limited. Workers are often hired on a seasonal or even less secure basis (Riisgaard, 2011) and wages are considered to be low (Hale & Opondo, 2005). Workers in the Ethiopian cut flower industry earn between US\$0.78 and 1.67 a day, less than in other comparable flower producing countries (Melese & Helmsing, 2010). The industry makes intensive use of chemicals and fertilisers, more than are used on edible food products. Workers are often exposed to these agrochemicals which can pose a health hazard on them (Hale & Opondo, 2005; Riisgaard, 2011).

By contrast the extrinsic social rewards are said to be positive, especially for female workers who make up the workforce in most agricultural chains (Barrientos, Dolan, & Tallontire, 2003). Most job functions (60-70%) are taken up by women as they are said to be more productive, more skilled at handling delicate flowers with care and more socially flexible than their male counterparts (Barrientos et al., 2003). Much research has been done on the 'feminization' of this workforce. One theme to emerge from these studies is that women may have positive experiences of the new social relationships that come about through being in touch with other female colleagues or through committees organised at the workplace (for example a women's committee, a labour union) (Friedemann-Sánchez, 2006; Kabeer, 2002).

The intrinsic rewards appear to be mixed. On one hand, working in flower farms involves monotonous, repetitive work which requires little or no qualifications. The daily tasks for women consists of picking, sorting and packing the flowers while men are hired for jobs such as spraying, and maintaining and constructing the greenhouses (Melese & Helmsing, 2010). Equally, for most workers, it seems that this is their first experience with formal employment. Research has shown that wage employment in high value agricultural chains can be empowering and can increase women's bargaining power (Friedemann-Sánchez, 2006). As such these workers may well have a sense of accomplishing something and doing something worthwhile.

Following the lines of reasoning set out above, we might expect flower farm workers to evaluate the individual work facets related to intrinsic rewards and extrinsic social rewards as positive, but to report low levels of *overall* job satisfaction. Previous studies have shown that the importance of extrinsic organizational rewards should not be underestimated. In the absence of decent wages or a sense of job security, low levels of job satisfaction are often found. This is because extrinsic organizational rewards are related to satisfying one's basic needs and if these are not fulfilled, the other rewards may seem to matter less. Consequently, when basic needs such as income, job security and safety at the work place are met, workers will start to strive for more sophisticated needs related to extrinsic social rewards and intrinsic rewards (Centers & Bugental, 1966; Gruenberg, 1980).

Therefore, the following hypotheses have been developed:

H1: Job satisfaction is positively related to extrinsic organizational rewards

H2: Extrinsic rewards moderate the positive relationship between intrinsic rewards and job satisfaction, such that when extrinsic rewards are low these rewards are not related to job satisfaction but when extrinsic rewards are high they are positively related to job satisfaction

H3: Extrinsic rewards moderate the positive relationship between extrinsic social rewards and job satisfaction such that when extrinsic rewards are low these extrinsic social rewards are not related to job satisfaction but when extrinsic rewards are high, extrinsic social rewards are positively related to job satisfaction

Intention to leave

In the second part of the study we explore the link between job satisfaction and workers' intention to leave. Many scholars have argued that job satisfaction directly influences absenteeism, levels of stress, individual wellbeing and general life satisfaction (Aletraris, 2010; Lee & Bruvold, 2003; Linz & Semykina, 2012). Previous research has shown that workers' dissatisfaction often results in higher probability of quitting one's job (Mobley, 1977; Mobley, Griffeth, Hand, & Meglino, 1979). In the absence of high levels of job satisfaction, one might expect high rates of labour turnover, here defined as voluntary leaving a job. Hence, research in this area leads to the following hypothesis:

H4: Job satisfaction is negatively related to workers' intentions to leave.

However, it has also been noted that the link between job satisfaction and the quitting decision is complex and influenced by labour market variables (such as the availability of alternative job opportunities) (Lee, Mitchell, Wise, & Fireman, 1996). Labour turnover is generally seen as a consequence of low job satisfaction combined with alternative job opportunities that are perceived by an individual worker as having a higher utility (Jiang et al., 2009; Lambert, Hogan, & Barton, 2001; Mobley et al., 1979; Mueller & Price, 1990). While formal alternative job opportunities may be lacking for many of poorly educated workers in Ethiopia, there are other activities that workers can draw upon to build their livelihoods, and the availability of these may influence their decision to quit their jobs at the flower farm.

The availability of livelihood alternatives and the intention to leave in the Ethiopian context

Households are said to draw on a portfolio of activities and social support capabilities on which they build their livelihoods (Ellis, 1998). The choice and combination of activities differs between households as it is influenced by many different factors such as location, access to assets (for example land), barriers to entry or seasonality. The goal however is the same, to survive and to improve one's standards of living (Barrett, Reardon, & Webb, 2001; Ellis, 1998). The possibility of engaging in such activities can therefore play a role in each and every workers' intention to leave.

Urban and rural workers. The labour force is made up of both rural and urban workers (Mano, Yamano, Suzuki & Matsumoto, 2011). Rural workers come to the farms by foot, while urban workers are bussed in. Most of the rural workers live in households that rely on smallholder farming activities for their income and subsistence (Salami, Kamara & Brixioya, 2010). In the highlands, where the flower farms thrive, smallholder farmers cultivate teff on a seasonal basis (Aregu, Bishop-Sambrook, Puskur & Tesema, 2010). The land is prepared by the men during the rainy season (in June and July) while the women are responsible for weeding from September onwards. Both men and women join in the harvesting: a task which finishes at the end of January (Aregu, Bishop-Sambrook, Puskur & Tesema, 2010). For rural households close to flower farms, a job in these farms may be attractive during those periods when their labour isn't needed for their own farming activities. In other words, rural workers have alternative livelihood sources at certain periods of the year which the urban workers don't have. This may influence their intention to leave the flower farm. We hypothesize:

H5: Rural workers report higher intentions to leave than urban workers.

Students. A job at a flower farm can also be attractive for students wanting to supplement the household income during the summer holidays. Ethiopia has made substantial improvements in terms of education and is on track to achieve the second Millennium Development Goal related to universal primary education (Wakiaga, Kibret, & Mamuye, 2014). Over the last decade Ethiopian households have increasingly chosen to invest in educating their children as a way of improving their future standard of living. The cut flower industry is a highly codified industry where different certification schemes and codes of conduct set strict social standards (Riisgaard, 2011). As a result, the farms are reluctant to hire workers under the age of 15. However at the end of the school year (at the end of May), many students aged 15 and older may try to find a short term job in the flower farms. Yet, at the end of May the cut flower season is almost over. Because of the low demand for cut flowers during the subsequent months (June until September), flower farms need less or even no temporary workers. Rather they prefer to hire workers who want to become permanent workers so that they can train these workers during this slack period and turn them into experienced workers by the time there is again a peak demand for flowers (e.g. Christmas period, followed by Valentine's day and Mother's day). Students know that managers are reluctant to hire them and tend to hide they are students only seeking a temporary job. Still, they probably plan to return to their schooling activities at the beginning of September, when school restarts. We hypothesize:

H6: Students report higher intentions to leave than workers who no longer attend school.

Social support. Workers at the flower farms have a very specific way of organizing themselves to create social support. They organize informal savings schemes called 'ikub' (sometimes spelled differently as 'iqub' or 'iqqub') at the work unit level (for example a single greenhouse). People can voluntarily join a group which involves committing themselves to making a monthly financial contribution. All contributions are brought together into one 'pot' and the money is distributed by

means of a rotation scheme (Baker, 1992). These ikubs are very common in Ethiopian society and have been described as the traditional means of savings (Begashaw, 1978). It implies that you -as a member- trust all the other ikub members and commit yourself for a lengthy period of time: one cannot simply leave the system without having made enough contributions. (Baker, 1992). As such, an ikub binds workers together but also binds them to the farm. Indeed if they want to benefit from an ikub they cannot leave. In other words, it can be said that these workers are embedded in their jobs (Allen, Bryant, & Vardaman, 2010). By job embeddedness we refer to '*a net or a web in which an individual can become stuck*' (Mitchell, Holtom, Lee, Sablynski, & Erez, 2001, p. 1104). Because ikub members are linked to other ikub members on the work floor, leaving their job would sever the established links with other ikub members. In line with previous studies on job embeddedness (Allen et al., 2010; Mitchell et al., 2001), we therefore hypothesize:

H7: Ikub members are more embedded in their jobs than non-members and therefore they report lower intentions to leave than non-members.

3. Methods

Data

The empirical data were collected through worker surveys undertaken in June-July 2013 in five floriculture farms in the Debre Zeit area. The total sample consisted of 375 responses. After removal of uncompleted questionnaires, we obtained a final sample of 358 cases (237 women, 121 men). The total number of flower farms at the time of research was estimated at about 80. Out of these, five farms were selected on the basis of comparability¹. They were located relatively close to one another. All five farms produced roses destined for export, were rather similar in size and they were all owned by Ethiopian investors. Within each farm, random sampling procedures were used to ensure an adequate representation of on average 75 workers who had different job functions within the farm. These job functions included packaging, grading, spraying, crop maintenance and supervising.

Due to time constraints of the research project, data was collected both on and off farm. We checked whether this biased between people's answers and found both on and off farm surveys to be reliable sources of information. The questionnaire was directly translated from English into Amharic or Oromo by Ethiopian Master's graduates who were trained before the data collection phase began. This training continued throughout the testing phase which lasted three days. At the end of this pilot test, we decided to exclude three survey questions which were meant to test workers' awareness and knowledge of the existence of private social standards because we received a high number of non-responses. The final questionnaire included questions on socio-demographics, working conditions, overall job satisfaction and job rewards.

To enhance the quality of the answers and to reduce common method bias (Podsakoff, MacKenzie, Lee, & Podsakoff, 2003), respondents were assured anonymity at the start of the study. We

emphasized that their responses were confidential and that individual responses were not communicated to their employer. We asked respondents to answer the questions as honestly as possible and that there were no right or wrong answers. To end, it was made explicit that their participation was voluntary, that they could choose not to answer a question or even choose to stop the discussion at any time.

In addition, we organised five focus groups with workers, one per farm. The purpose of these focus groups was to obtain a deeper understanding of workers' perceptions of their working life. The focus groups targeted female workers and included between 4 and 14 participants. Each focus group lasted almost two hours and took place on the participants' day off. Focus groups were conducted on the university campus and were held in a separate classroom. This location was chosen because of its proximity to the city centre and because it was a well-known location among the workers. Each focus group discussion was conducted by a moderator (an Ethiopian female Master's student, fluent in Amharic and Oromo) and assisted by one of the authors of this article. The Ethiopian moderator received training in how to conduct focus groups and at the end of each focus group, both moderators discussed the quality of the discussions and how to potentially improve the next focus group discussion. There was a discussion guide, which was not intended to be strictly followed but to aid the researcher and moderator during the discussions. A range of themes were discussed related to working conditions, workers' aspirations and needs and their perception of their ability to change their working conditions. The focus groups were tape recorded and transcribed into English, and during the focus group discussions the accompanying researcher took extensive notes. The survey data was quantitatively analysed and the focus groups provided qualitative data that enabled a deeper understanding and interpretation of the quantitative results.

Variables

Job satisfaction. There are two approaches to measuring job satisfaction. A single item may be used whereby individuals are asked to evaluate their overall job satisfaction by answering one single question, for example ‘how satisfied are you overall with your job, taking all facets into account?’ (Scarpello & Campbell, 1983; Sousa-Poza & Sousa-Poza, 2000; Wanous, Reichers, & Hudy, 1997). Alternatively job satisfaction can be constructed as the sum of the levels of satisfaction with specific job facets such as the wage and level of autonomy (Kalleberg, 1977; Skalli, Theodossiou, & Vasileiou, 2008). Several authors (Highhouse & Becker, 1993; Linz & Semykina, 2012) have argued that a single concept of job satisfaction might be preferred to a constructed measure as overall job satisfaction is more than just a combination of different facets. Equally, single-item measures appear to be less likely to be influenced by temporal factors such as today’s emotions linked to a particular job facet (for example the evaluation of the job facet ‘work load’ may vary as a deadline approaches). Following this reasoning, we used a single item measure of job satisfaction in this study. Respondents were asked to answer the question ‘How satisfied are you with your overall job, considering all the job’s facets?’ on a five point Likert scale (ranging from ‘very dissatisfied’ (1) to ‘very satisfied’ (5)).

Work environment factors. To identify those job attributes that contribute to job satisfaction, we included 10 aspects of work that are aligned with Herzberg et al. (1959) two-factor theory. We drew on commonly used questions and scales for measuring workers’ perceptions. The scales of the variables wage, job security, supervisory support, co-worker support, freedom at work, learning new skills and variation on the job were inspired by the work of Delobelle et al. (2011), the HILDA survey (2012) and Mulinge and Mueller (1998). Where ever possible each work aspect was measured using multiple items. Respondents were asked to rate each item on a five point

Likert scale. During the focus groups, two additional work aspects emerged which were also included in the analysis. The work aspect of a 'healthy environment' was included, as the use of pesticides and chemicals and their potential impact on workers' health was a theme which emerged during each of the focus group discussions and appeared to be a major concern among female workers. This work aspect was measured using a multiple item based on three questions which were rated on a five point Likert scale. Secondly, we included a dichotomous variable 'formal group cohesion' which provides information on whether a respondent is a member of a formal organization such as a labour union, women's committee or another type of committee. Appendix 1 gives a detailed overview of the different constructs for each work aspect.

Demographic factors. Gender, age, educational level, work experience and rural-urban background have been theorised, and empirically shown, to be significant predictors of job satisfaction (Clark, 1997; Hunt & Saul, 1975; Mobley et al., 1979; Schuler, 1973) and/ or voluntary labour turnover (Lambert et al., 2001; Mobley, 1977; Mobley et al., 1979). Hence these five demographic were included and controlled for in this study.

Intention to leave. According to the literature, intent to leave is a good predictor of actual leaving (Jiang et al., 2009; Lambert et al., 2001). Intent to leave is the final cognitive step in the decision making process of quitting one's job (Mobley, 1977). For this reason most studies include the variable that measures one's intention to leave. In our study the variable reflecting one's intention to leave was captured by the statement 'I intend to leave my job in the near future' which was rated on a five point Likert scale (ranging from strongly disagree (1) to strongly agree (5)).

Livelihood activities and social support capabilities. A final area that was measured is the alternative livelihood activities workers have next to working in the flower farm and their social support capabilities. We included the variables 'Are you currently attending school?' (yes = 1/ no

= 0), ‘where do you live?’ (rural = 0/ urban = 1) and ‘are you a member of an ikub?’ (yes = 1/ no = 0).

Data analysis

The research objectives were analysed using Stata 13.0 software. Due to the ordinal nature of our dependent variable we used an ordered probit model to determine the effects of both work environment and demographic factors on overall job satisfaction. This is a commonly used approach in job satisfaction research (Aguiar do Monte, 2012; Carr & Mellizo, 2013; Ferrer-i-Carbonell & Frijters, 2004; Lange, Pacheco, & Shrotryia, 2010; Linz & Semykina, 2012; Litchfield, Reilly, & Veneziani, 2012; Sousa-Poza & Sousa-Poza, 2000).

The basic structure of the model is as follows (Liu & Nunnenkamp, 2011; Violette et al., 2013):

$$\gamma_i^* = X_i\beta + \varepsilon_i$$

$$\gamma_i = \begin{cases} 1 & \text{if } \gamma_i^* \leq \mu_1 \\ 2 & \text{if } \mu_1 < \gamma_i^* \leq \mu_2 \\ 3 & \text{if } \mu_2 < \gamma_i^* \leq \mu_3 \\ 4 & \text{if } \mu_3 < \gamma_i^* \end{cases}$$

Where γ_i^* represents the latent cardinal valuation of job satisfaction of the i^{th} worker, which is grouped into one of the four ordinal response options, γ_i , according to where γ_i^* falls relative to the unobserved cut points $\mu_1 - \mu_3$. X_i is a vector of explanatory variables. β is a vector of the parameters to be estimated and ε_i is the random error term.

The full set of independent variables (X) include the following five subgroups:

$$X_i = (X_i^{\text{extror}}, X_i^{\text{extrsoc}}, X_i^{\text{intr}}, X_i^{\text{demo}}, X_i^{\text{farm}})$$

Where X_i^{extror} refers to the extrinsic organizational rewards, X_i^{extrsoc} to extrinsic social rewards, X_i^{intr} to intrinsic rewards, X_i^{demo} to the demographic characteristics of the worker and X_i^{farm} to the farm's characteristics (see below).

We then used a probit model to identify the determinants of a workers' intention to leave. Because of the ease of interpretation, we decided to assign workers into two categories on the basis of their responses to the item 'I intent to leave my job in the near future'. Those who 'strongly agreed' (5) and 'agreed' (4) to the statement were considered most likely to leave the farm, while those who disagreed with the statement or answered neutral (score 1 to 3) were considered most likely to stay. This is a conservative approach as we considered those who answered 'neutral' were still undecided and therefore less likely to leave the farm, at least in the near future.

There may well be unobserved differences in working conditions between the five farms in the sample and these could explain differences in job satisfaction and intention to leave between the farms, which could, in turn, bias the coefficients of our variables. To rule this out, all the estimations included farm specific dummies. It turned out that including or excluding these dummies did not alter the results, only improving the fit of the models. For conciseness, only the estimations that include the farm specific dummies will be reported.

4. Results

Descriptive statistics

The descriptive data are summarised in table 1. The respondents' ages ranged from 12 to 60 years oldⁱⁱ, and 69% of the sample were 25 years or younger. Most workers did not receive any education at all or only some primary or secondary education. The length of employment at the flower farms was rather low. On average, respondents had worked on the farm for 18.5 months, and 67% of the

respondents indicated they had less than one year of work experience on their respective farms. This is an interesting finding as the Ethiopian labour law prescribes that any worker should receive a permanent contract after working in for 45 days. This rule appeared to be followed as 69% of our sample indicated they had a permanent contract. Low levels of work experience therefore indicate that there are high levels of voluntary labour turnover.

In general, our respondents were not particularly satisfied with their jobs. In total, less than half of our respondents (48%) reported to be satisfied overall. With regard to the evaluation of separate job facets we found that extrinsic social rewards were positively scored. However few respondents appeared to be a member of a formal group. This may be partially explained by our respondents' low levels of work experience. Intrinsic rewards -with the exception of 'variation on a job'- also received a relatively high score. Extrinsic organizational rewards of wage and healthy environment were negatively scored, while job security was positively scored. This may be related to most workers receiving a permanent contract after 45 days.

Table 2 summarizes the means, standard deviations and the intercorrelation matrix of our study variables. As none of the correlations are above 0.70, the problem of multicollinearity is low (Nunnally, 1994). Cronbach's α coefficients for the scales in the questionnaire was between 0.69 and 0.84 which indicates high internal reliability for the scales used in this study (see Appendix 1 for detailed overview of the different constructs for each work aspect).

Insert table 1 about here

Insert table 2 about here

Job satisfaction and its determinants

Table 3 shows the results of the ordered probit model which estimates the relative importance of both the work environment and demographic factors on job satisfaction. Results suggest that all three extrinsic organizational rewards were statistically significant predictors of job satisfaction ($p < 0.01$) while none of the extrinsic social rewards or the intrinsic rewards were significant determinants of job satisfaction. Hence, hypothesis 1 which postulated that low levels of job satisfaction was explained by a negative evaluation of extrinsic organizational rewards is supported.

Wage appears to be the most powerful determinant of job satisfaction. As Abdulla et al. (2011) notes, remuneration can mean different things in different contexts. For some it may be a source of recognition, for others it may mean security. We argue that workers in the flower industry put so much emphasis on the wages because of its large impact on their living standards. The industry provides minimum wages that are around the poverty line of 1 dollar a day. Losing this income stream would be devastating for many of these households.

In line with these arguments, job security was found to be an important predictor of job satisfaction. Job *insecurity*, meaning that workers perceive a potential threat to continuity, is known to be an important cause of stress (Heaney, Israel, & House, 1994). For this reason, job security has been found to be one of the work facets that can most often be used to predict job satisfaction (Aletraris, 2010; Clark, 2001). If workers in the cut flower industry lose their job, it may cause additional stress as their wages are considered too low to cope with a shock in their income stream.

A last job attribute that significantly contributed to job satisfaction was a positive perception of the healthy work environment. This did not come as a surprise, as many workers raised concerns about the health hazard implications of being exposed to agrochemicals. They frequently

mentioned health problems included skin irritation, headaches and respiratory problems. Focus group participants said that female workers feared not being able to get pregnant if they worked in greenhouses for too long periods and that they had seen male workers fainting while they were spraying.

With regard to the demographic characteristics our results suggest that higher educated workers tended to be less satisfied with their jobs than those who had received any education or only some primary education. These findings are in line with previous studies which have found that job satisfaction is higher among those individuals who are neither undereducated, nor overqualified for the job (Allen & De Weert, 2007; Peiró, Agut, & Grau, 2010). While most jobs provided in the cut flower industry are by nature low skilled, the industry does attract both skilled and unskilled workers. We argue that workers with higher educational levels are less satisfied with their job as these occupations are below their expectations.

The coefficients for age were also significant and suggested a U shaped relationship between age and job satisfaction. The turning point was found at the age of 26. Clark, Oswald, and Warr (1996) theorised that higher levels of job satisfaction among the younger workers may be explained by this being their first work experience and that they do not have enough information yet to compare their job with other jobs. Because of the novelty of the situation they may initially enjoy their job, but later they may discover that their expectations were too optimistic -which would explain the downward slope of the U shaped relationship. The rise in job satisfaction at an older age, the upward sloping part of the U shape, could be the result of declining aspirations (Clark et al., 1996).

Insert table 3 about here

Ordered probit models were also used to test hypotheses 2 and 3. These hypotheses state that intrinsic rewards and extrinsic social rewards only influence job satisfaction if the extrinsic organizational rewards are high. In other words, only if basic needs such as income, job security and safety at the workplace are met, will workers care about social and intrinsic rewards. To test this, overall scores for extrinsic organizational, extrinsic social and intrinsic rewards were calculated by summing up the underlying components. These overall scores range from 3 to 15 for the extrinsic organizational and intrinsic rewards and from 3 to 11 for the extrinsic social rewards. Hypotheses 2 and 3 are then tested by modelling job satisfaction in function of these overall scores and the usual set of control variables, while also including interaction terms between the overall scores. The results are presented in table 4. The first column shows the results of the ordered probit model without including interaction terms. This confirms that only extrinsic organizational rewards are strongly, positively related with job satisfaction. Farmers that are relatively satisfied with their wage, the quality of the workplace and their job security tend to be satisfied with their job too. The second column includes an interaction term between extrinsic organizational rewards and intrinsic rewards. The interaction term is positive and significant, implying that intrinsic rewards are positively correlated with job satisfaction, but only if the extrinsic organizational rewards are high. This is illustrated in figure 1, which shows the probability of being very satisfied with one's job in function of intrinsic rewards for low, medium and high levels of extrinsic organizational rewards. While intrinsic rewards are not positively related to job satisfaction at low levels of extrinsic organizational rewards, there is a strong positive correlation if extrinsic organizational rewards are high. This confirms hypotheses 2. The third column includes an interaction term between extrinsic organizational and extrinsic social rewards. This interaction is insignificant and we can therefore reject hypothesis 3.

Insert figure 1 about here

Insert table 4 about here

Intention to leave and its determinants

Table 5 shows the results of the probit model estimating the importance of job satisfaction, alternative livelihood activities and demographic characteristics on workers' intention to leave. As expected, all these factors are important predictors of the intention to leave the farmⁱⁱⁱ. The model fits the data well and correctly classifies 70% of the observations. Thus, hypotheses 4 to 7 were accepted.

The large, negative correlation between job satisfaction and intention to leave is remarkable. A one point increase in job satisfaction reduces, on average, the probability of leaving the farm by 9 percent points. Nonetheless, even at high levels of job satisfaction, access to alternative livelihood strategies still play an important role in explaining an intention to leave. This is illustrated in figure 2, which shows the probability of leaving the farm, with its 95% confidence interval, as a function of job satisfaction for different groups within the sample. Rural households were always more likely to leave than urban households (figure 2, left panel). For instance, nearly 60% of the rural workers reporting the highest level of job satisfaction intended to leave the farm, while only 29% of the urban households with the same level of job satisfaction intended to do so. Additionally, the

negative association between job satisfaction and intention to leave was less pronounced for rural than urban households due to the larger confidence intervals for the former group. Presumably, many rural households intended to quit their job to cultivate their land, even if they were satisfied with their job. Membership of an ikub also greatly reduced the probability of intending to leave the farm (figure 2, middle). This was to be expected as it could be argued that ikub members are more embedded in their jobs. They cannot easily quit their job as this implies breaking the trust between the members or losing one's contribution to the shared savings. It may, however, also be the case that only workers who had no intention to leave the farm committed to this informal saving device. Finally, most workers who still went to school intended to leave the farm (figure 2, right). These students were only looking for seasonal work during summer holiday to make ends meet, and most of them intended to go back to school when the academic year started again in September. Except for age, other demographic factors were significantly correlated with an intention to leave. The result suggests that, while both men and women reported similar levels of job satisfaction, women were more likely to leave the farm than men. A possible explanation for this may be found in how gender roles are socialised. Men may be more likely to stay in a job, even when they are dissatisfied with it, because they are seen as the primary breadwinner. At the same time, women may prioritise their household activities and taking care of children or other relatives over their job satisfaction and, as such, may report higher intentions to leave their formal wage employment (Lambert et al., 2001). Our findings also show that better educated workers were more likely to quit their job. Given that educational level had a negative effect on job satisfaction (table 3), educational level had both a direct and an indirect effect on people's intention to leave. Consequently, better educated workers reported higher intentions of quitting their job. This may

be because their education permits them to find more attractive, better paying jobs, as was confirmed in the focus groups.

Insert table 5 about here

Insert Figure 2 about here

5. Discussion

This paper addresses two research objectives. First it analyses levels of job satisfaction and its determinants for workers in the cut flower industry in Ethiopia. Second it investigates the link between job satisfaction and workers' intentions to leave their jobs at flower farms. Our findings showed that these workers were not particularly satisfied with their jobs, with half of the respondents reporting a high intention to leave their job in the near future.

Job satisfaction was mainly explained by extrinsic organizational rewards. These findings are in line with previous studies. Extrinsic organizational rewards are very much linked with meeting one's basic needs (Centers & Bugental, 1966; Gruenberg, 1980). It could be said that these needs are not being sufficiently met to allow other extrinsic social or intrinsic needs to matter very much.

Hence, our results suggest that human resource strategies focusing on increasing these extrinsic organizational rewards could help to obtain a more satisfied and subsequently more stable workforce. However, we realise that managers have few incentives to implement such strategies.

First, the industry is relatively new in Ethiopia. Many of these start-up farms don't have a constant

production pattern (yet) but target high peak production moments such as Valentine's Day or Mother's Day. In this situation voluntary labour turnover may not be seen as problematic as employment fluctuations may give farms the flexibility to grow and decline over short time spans (Smith, Daskalaki, Elger & Brown, 2004). In the Ethiopian context where workers get a permanent contract after a probation period of 45 days, it may be that voluntary labour turnover actually reduces dismissal costs.

A second and more important argument is that flower farm managers can predict labour turnover fluctuations on the basis of three demographic characteristics. Our results showed that rural workers reported higher intentions to leave than their urban colleagues. We reasoned that this was because rural workers have their own farming activities to attend to at certain periods in time. Hence, being aware of where their workers come from -rural versus urban- can help managers to predict labour turnover. Secondly, workers who attended school during the academic year reported higher intentions to leave than their colleagues who already left school as they probably aim to return to school once the summer holidays are over. Again managers can take into account that those workers who apply for a job at the end of May are most likely students looking for a holiday job and probably will voluntarily leave at the beginning of the school year. And thirdly, our results showed that workers who participated in informal savings nets known as 'ikubs' reported lower intentions to leave than those workers who were not a member. Ikubs are organised at the work unit level. So again, identifying which greenhouses or pack houses have ikubs in place and how many members they have, can help to predict labour turnover. In sum, even though we've shown that there is a large, negative correlation between job satisfaction and intention to leave, it appears that these three livelihood strategies can help managers to foresee labour fluctuations and offset any potentially negative side effects of this.

Implications for theory and practice

This study contributes to an increased understanding of job satisfaction and intentions to leave of low skilled workers in the cut flower industry in Ethiopia. Whereas past research has focused on objective measures of job quality in attempts to evaluate working conditions at the bottom of global value chains, we introduced a subjective measure of job satisfaction into this field of study. Hence, this study provides important implications for academics, and policy makers.

For academics, our results show the importance to inject a more personal, subjective element into the study of working conditions at the bottom of value chains. Whereas past research has been successful to analyse the existing discrepancies between formal regulations and reality on the ground (Barrientos & Smith, 2007; Locke, Amengual, & Mangla, 2009; Raynolds, 2012; Riisgaard, 2011; Yu, 2008), most studies have neglected to include the voices of workers themselves into this research field. This paper has shown that workers are not simply passive victims of a capitalist system as has been argued elsewhere (Carswell & De Neve, 2013; Coe and Jordhus-Lier, 2010). Rather they are active agents who seek to improve their livelihoods by actively searching alternatives to the flower farm jobs because they are currently not satisfied with the extrinsic rewards offered in these jobs.

As for policy makers in Ethiopia, the insights of this study also provide important implications. The Ethiopian cut flower industry has received its share of applause as it has created direct jobs for over 20,000 workers (Melese & Helmsing, 2010). It is also true that there are few alternative wage employment for these, mainly, low skilled women. However in this paper we have shown that it is not sufficient to just focus on the number of jobs created but that, in order to have a large development impact, one also needs to look at the benefits for workers. What is needed is an institutional framework that facilitates the creation of a working environment which satisfies

workers, since satisfied workers have indirect and positive effects on society at large. Legislation over job security after 45 days employment is already in place and this is reflected in positive responses about job security. But there is room for legislation for a minimum wage and a strengthening of a tripartite system. The latter gives workers the rights to join a labour union – which is a way to express their grievances, to negotiate collective bargaining agreements and ensure that workers’ concerns are taken into account. In addition, trade unions can play an important role in disseminating information on occupational health and safety which may help to allay the existing concerns over this issue. According to one recent paper (Riisgaard & Gibbon, 2014) a revision in the Kenyan labour law, which made such a tripartite system possible, led to positive changes in the Kenyan cut flower. In other words, Ethiopia can learn some important lessons from its neighbour which has a longer history of flower production.

Limitations and future research

Our research results have several limitations, some of which can be addressed in future research.

First, some data limitations suggest that the results should be carefully interpreted. First, this study looked at intentions to leave rather than actual leaving. Second, our results are based on information gathered through oral interviews conducted by an interviewer. The rationale for this self-report data collection approach is very straightforward: we aimed to understand workers' job satisfaction and how this influenced workers' intentions to leave. At the same time however, having a single person assessing both independent and dependent variables in the same study can result in an upward bias. Ideally we would also have objective data on flower farms HR practices; however obtaining these objective assessments would have been extremely difficult. Moreover it would not necessarily have yielded better results (Chan, 2009; Stevens et al., 2006). Consequently, one of the caveats of this study is the possibility of self-reported bias affecting the measurement of the variables. Third, our results are limited to workers employed in the Ethiopian cut flower industry. Cross industry and cross country research is needed to further explore the differences or similarities that may exist among workers employed in labour intensive industries.

In considering other avenues for future research, it could be interesting to research how management practices can or do influence workers' levels of job satisfaction and subsequent intentions to leave these flower farms. Moreover as many labour intensive industries are highly codified industries it would be interesting to see how certification schemes and related actors (NGOs, accreditation bodies) influence workers' perceptions of their working environment.

Bibliography

- Abdulla, J., Djebarni, R., & Mellahi, K. (2011). Determinants of job satisfaction in the UAE: A case study of the Dubai police. *Personnel Review*, 40(1), 126-146.
- Adams, J. S. (1963). Towards an understanding of inequity. *The Journal of Abnormal and Social Psychology*, 67(5), 422-436.
- Aguiar do Monte, P. (2012). Job dissatisfaction and labour turnover: evidence from Brazil. *The International Journal of Human Resource Management*, 23(8), 1717-1735.
- Aletraris, L. (2010). How satisfied are they and why? A study of job satisfaction, job rewards, gender and temporary agency workers in Australia. *Human Relations*, 63(8), 1129-1155.
- Allen, D. G., Bryant, P. C., & Vardaman, J. M. (2010). Retaining talent: Replacing misconceptions with evidence-based strategies. *The Academy of Management Perspectives*, 24(2), 48-64.
- Allen, J., & De Weert, E. (2007). What do educational mismatches tell us about skill mismatches? A cross-country analysis. *European Journal of Education*, 42(1), 59-73.
- Aregu, L., Bishop-Sambrook, C., Puskur, R., & Tesema, E. (2010). *Opportunities for promoting gender equality in rural Ethiopia through the commercialization of agriculture*. IPMS (Improving Productivity and Market Success) of Ethiopian Farmers Project Working Paper 18, ILRI (International Livestock Research Institute), Nairobi, Kenya.
- Baker, J. (1992). The Gurage of Ethiopia: rural-urban interaction and entrepreneurship. *The Rural-Urban Interface in Africa: Expansion and Adaptation*, ed. Jonathan Baker and Poul Ove Pederson (Uppsala: Scandinavian Institute of African Studies, 1992), 125-47.
- Barrett, C. B., Reardon, T., & Webb, P. (2001). Nonfarm income diversification and household livelihood strategies in rural Africa: concepts, dynamics, and policy implications. *Food Policy*, 26(4), 315-331.
- Barrientos, S., Dolan, C., & Tallontire, A. (2003). A gendered value chain approach to codes of conduct in African horticulture. *World Development*, 31(9), 1511-1526.
- Barrientos, S., & Smith, S. (2007). Do workers benefit from ethical trade? Assessing codes of labour practice in global production systems. *Third World Quarterly*, 28(4), 713-729.
- Begashaw, G. (1978). The economic role of traditional savings and credit institutions in Ethiopia. *Savings and Development*, 2(4), 249-264.
- Carr, M. D., & Mellizo, P. (2013). The relative effect of voice, autonomy, and the wage on satisfaction with work. *The International Journal of Human Resource Management*, 24(6), 1186-1201.
- Carswell, G., & De Neve, G. (2013). Labouring for global markets: Conceptualising labour agency in global production networks. *Geoforum*, 44, 62-70.
- Chan, D. (2009). So why ask me? Are self-report data really that bad. *Statistical and methodological myths and urban legends: Doctrine, verity and fable in the organizational and social sciences*, 309-336. New York, NY: Routledge.
- Centers, R., & Bugental, D. E. (1966). Intrinsic and extrinsic job motivations among different segments of the working population. *Journal of Applied Psychology*, 50(3), 193-197.
- Clark, A. (1997). Job satisfaction and gender: why are women so happy at work? *Labour Economics*, 4(4), 341-372.
- Clark, A. (2001). What really matters in a job? Hedonic measurement using quit data. *Labour Economics*, 8(2), 223-242.
- Clark, A., Oswald, A., & Warr, P. (1996). Is job satisfaction U-shaped in age? *Journal of Occupational and Organizational Psychology*, 69(1), 57-81.

- Coe, N. M., & Jordhus-Lier, D. C. (2011). Constrained agency? Re-evaluating the geographies of labour. *Progress in Human Geography*, 35(2), 211-233.
- Delobelle, P., Rawlinson, J. L., Ntuli, S., Malatsi, I., Decock, R., & Depoorter, A. M. (2011). Job satisfaction and turnover intent of primary healthcare nurses in rural South Africa: a questionnaire survey. *Journal of Advanced Nursing*, 67(2), 371-383.
- Dolan, C., & Humphrey, J. (2000). Governance and trade in fresh vegetables: the impact of UK supermarkets on the African horticulture industry. *Journal of Development Studies*, 37(2), 147-176.
- Ellickson, M. and Logsdon, K. (2001). Determinants of job satisfaction of municipal government employees. *State Local Government Review*, 33(3), 173-184.
- Ellis, F. (1998). Household strategies and rural livelihood diversification. *Journal of Development Studies*, 35(1), 1-38.
- Ferrer-i-Carbonell, A., & Frijters, P. (2004). How Important is Methodology for the estimates of the determinants of Happiness?*. *The Economic Journal*, 114(497), 641-659.
- Foor, R. M., & Cano, J. (2011). Predictors of job satisfaction among selected agriculture faculty. *Journal of Agricultural Education*, 52(1), 30-39.
- Friedemann-Sánchez, G. (2006). *Assembling Flowers and Cultivating Homes: Labor and gender in Colombia*: United Kingdom: Lexington Books.
- Gebreeyesus, M., & Sonobe, T. (2012). Global value chains and market formation process in emerging export activity: Evidence from Ethiopian flower industry. *Journal of Development Studies*, 48(3), 335-348.
- Green, F. (2010). Well-being, job satisfaction and labour mobility. *Labour economics*, 17(6), 897-903.
- Gruenberg, B. (1980). The happy worker: An analysis of educational and occupational differences in determinants of job satisfaction. *American Journal of Sociology*, 247-271.
- Hale, A., & Opondo, M. (2005). Humanising the cut flower chain: confronting the realities of flower production for workers in Kenya. *Antipode*, 37(2), 301-323.
- Heaney, C. A., Israel, B. A., & House, J. S. (1994). Chronic job insecurity among automobile workers: Effects on job satisfaction and health. *Social Science & Medicine*, 38(10), 1431-1437.
- Herzberg, F., Mausner, B., & Snyderman, B. B. (1959). *The motivation to work*: New York: John Wiley & Sons.
- Highhouse, S., & Becker, A. S. (1993). Facet measures and global job satisfaction. *Journal of Business and Psychology*, 8(1), 117-127.
- HILDA survey. (2012). *Household, Income and Labour Dynamics in Australia (HILDA) Survey Annual Report 2012*. Retrieved from: http://www.melbourneinstitute.com/hilda/Reports/annual_report.html
- Huang, X., & Van De Vliert, E. (2003). Where intrinsic job satisfaction fails to work: National moderators of intrinsic motivation. *Journal of Organizational Behavior*, 24(2), 159-179.
- Hunt, J. W., & Saul, P. N. (1975). The relationship of age, tenure, and job satisfaction in males and females. *Academy of Management Journal*, 18(4), 690-702.
- Jiang, B., Baker, R. C., & Frazier, G. V. (2009). An analysis of job dissatisfaction and turnover to reduce global supply chain risk: evidence from China. *Journal of Operations Management*, 27(2), 169-184.
- Kabeer, N. (2002). *The Power to Choose: Bangladeshi women and labor market decisions in London and Dhaka*: Verso.

- Kalleberg, A. L. (1977). Work values and job rewards: A theory of job satisfaction. *American Sociological Review*, 124-143.
- Lambert, E. G., Hogan, N. L., & Barton, S. M. (2001). The impact of job satisfaction on turnover intent: a test of a structural measurement model using a national sample of workers. *The Social Science Journal*, 38(2), 233-250.
- Lan, G., Okechuku, C., Zhang, H., & Cao, J. (2013). Impact of Job Satisfaction and Personal Values on the Work Orientation of Chinese Accounting Practitioners. *Journal of Business Ethics*, 112(4), 627-640.
- Lange, T., Pacheco, G., & Shrotryia, V. K. (2010). Culture, industrialisation and multiple domains of employees' job satisfaction: a case for HR strategy redesign in India. *The International Journal of Human Resource Management*, 21(13), 2438-2451.
- Lee, C. H., & Bruvold, N. T. (2003). Creating value for employees: investment in employee development. *The International Journal of Human Resource Management*, 14(6), 981-1000.
- Lee, T. W., Mitchell, T. R., Wise, L., & Fireman, S. (1996). An unfolding model of voluntary employee turnover. *Academy of Management Journal*, 39(1), 5-36.
- Linz, S. J., & Semykina, A. (2012). What makes workers happy? Anticipated rewards and job satisfaction. *Industrial Relations: A Journal of Economy and Society*, 51(4), 811-844.
- Litchfield, J., Reilly, B., & Veneziani, M. (2012). An analysis of life satisfaction in Albania: An heteroscedastic ordered probit model approach. *Journal of Economic Behavior & Organization*, 81(3), 731-741.
- Liu, W.-H., & Nunnenkamp, P. (2011). Domestic repercussions of different types of FDI: Firm-level evidence for Taiwanese manufacturing. *World Development*, 39(5), 808-823.
- Locke, R., Amengual, M., & Mangla, A. (2009). Virtue out of necessity? Compliance, commitment, and the improvement of labor conditions in global supply chains. *Politics & Society*, 37(3), 319-351.
- Lund-Thomsen, P., & Nadvi, K. (2010). Clusters, chains and compliance: corporate social responsibility and governance in football manufacturing in South Asia. *Journal of Business Ethics*, 93(2), 201-222.
- Maslow, A. (1954). *Motivation and Personality*. New York: Harper & Row.
- Mano, Y., Yamano, T., Suzuki, A., & Matsumoto, T. (2011). Local and personal networks in employment and the development of labor markets: Evidence from the cut flower industry in Ethiopia. *World Development*, 39(10), 1760-1770.
- Mitchell, T. R., Holtom, B. C., Lee, T. W., Sablinski, C. J., & Erez, M. (2001). Why people stay: Using job embeddedness to predict voluntary turnover. *Academy of Management Journal*, 44(6), 1102-1121.
- Melese, A. T., & Helmsing, A. B. (2010). Endogenisation or enclave formation? The development of the Ethiopian cut flower industry. *Journal of Modern African Studies*, 48(1), 35-66.
- Mobley, W. H. (1977). Intermediate linkages in the relationship between job satisfaction and employee turnover. *Journal of Applied Psychology*, 62(2), 237-240.
- Mobley, W. H., Griffeth, R. W., Hand, H. H., & Meglino, B. M. (1979). Review and conceptual analysis of the employee turnover process. *Psychological Bulletin*, 86(3), 493-522.
- Mottaz, C. J. (1985). The relative importance of intrinsic and extrinsic rewards as determinants of work satisfaction. *The Sociological Quarterly*, 26(3), 365-385.
- Mueller, C. W., & Price, J. L. (1990). Economic, psychological, and sociological determinants of voluntary turnover. *Journal of Behavioral Economics*, 19(3), 321-335.

- Mulinge, M., & Mueller, C. W. (1998). Employee job satisfaction in developing countries: the case of Kenya. *World Development*, 26(12), 2181-2199.
- Nunnally, J.C. (1994). *Psychometric Theory*. New York: McGraw Hill.
- OECD. (2013). *OECD Guidelines on Measuring Subjective Well-being*: OECD Publishing.
- Peiró, J. M., Agut, S., & Grau, R. (2010). The relationship between overeducation and job satisfaction among young Spanish workers: The role of salary, contract of employment, and work experience. *Journal of Applied Social Psychology*, 40(3), 666-689.
- Podsakoff, P. M., MacKenzie, S. B., Lee, J. Y., & Podsakoff, N. P. (2003). Common method biases in behavioral research: a critical review of the literature and recommended remedies. *Journal of applied psychology*, 88(5), 879.
- Raynolds, L. T. (2012). Fair Trade flowers: Global certification, environmental sustainability, and labor standards. *Rural Sociology*, 77(4), 493-519.
- Riisgaard, L. (2009). Global value chains, labor organization and private social standards: Lessons from East African cut flower industries. *World Development*, 37(2), 326-340.
- Riisgaard, L. (2011). Towards more stringent sustainability standards? Trends in the cut flower industry. *Review of African Political Economy*, 38(129), 435-453.
- Riisgaard, L., & Gibbon, P. (2014). Labour Management on Contemporary Kenyan Cut Flower Farms: Foundations of an Industrial–Civic Compromise. *Journal of Agrarian Change*, 14(2), 260-285.
- Saari, L. M., & Judge, T. A. (2004). Employee attitudes and job satisfaction. *Human resource management*, 43(4), 395-407.
- Salami, A., Kamara, A.B., & Brixioya, Z. (2010). *Smallholder agriculture in East Africa: trends, constraints and opportunities*. Tunis, Tunisia: African Development Bank.
- Scarpello, V., & Campbell, J. P. (1983). Job satisfaction: are all the parts there? *Personnel Psychology*, 36(3), 577-600.
- Schuler, R. (1973). Worker background and job satisfaction: Comment. *Industrial and Labor Relations Review*, 26(2), 851-853.
- Scott, A. J. (2006). The changing global geography of low-technology, labor-intensive industry: clothing, footwear, and furniture. *World Development*, 34(9), 1517-1536.
- Skalli, A., Theodossiou, I., & Vasileiou, E. (2008). Jobs as Lancaster goods: Facets of job satisfaction and overall job satisfaction. *The Journal of Socio-Economics*, 37(5), 1906-1920.
- Smith, C., Daskalaki, M., Elger, T., & Brown, D. (2004). Labour turnover and management retention strategies in new manufacturing plants. *The International Journal of Human Resource Management*, 15(2), 371-396.
- Sousa-Poza, A., & Sousa-Poza, A. A. (2000). Well-being at work: a cross-national analysis of the levels and determinants of job satisfaction. *The Journal of Socio-Economics*, 29(6), 517-538.
- Spector, P. E. (1997). *Job satisfaction: Application, assessment, causes, and consequences* (Vol. 3). Sage publications.
- Stevens, M. J., Oddou, G., Furuya, N., Bird, A., & Mendenhall, M. (2006). HR factors affecting repatriate job satisfaction and job attachment for Japanese managers. *The International Journal of Human Resource Management*, 17(5), 831-841.
- Tietjen, M. A., & Myers, R. M. (1998). Motivation and job satisfaction. *Management decision*, 36(4), 226-231.
- Ulrich, A. (2014). Export-Oriented Horticultural Production in Laikipia, Kenya: Assessing the Implications for Rural Livelihoods. *Sustainability*, 6(1), 336-347.

- Violette, W. J., Harou, A. P., Upton, J. B., Bell, S. D., Barrett, C. B., Gómez, M. I., & Lentz, E. C. (2013). Recipients' satisfaction with locally procured food aid rations: Comparative evidence from a three country matched survey. *World Development*, 49, 30-43.
- Vroom, V. H. (1964). *Work and Motivation*. New York: John Wiley & Sons.
- Wakiaga, J., Kibret, H., & Mamuye, R. (2014). Ethiopia: United Nations Development Programme Country Economic Brief Analysis Issue No.1/Feb. 2014: UNDP Ethiopia's Policy Advisory Unit.
- Wanous, J. P., Reichers, A. E., & Hudy, M. J. (1997). Overall job satisfaction: how good are single-item measures? *Journal of Applied Psychology*, 82(2), 247-252.
- Weiss, H. M. (2002). Deconstructing job satisfaction: Separating evaluations, beliefs and affective experiences. *Human Resource Management Review*, 12(2), 173-194.
- Yu, X. (2008). Impacts of corporate code of conduct on labor standards: A case study of Reebok's athletic footwear supplier factory in China. *Journal of Business Ethics*, 81(3), 513-529.

ⁱ A first round of qualitative data collection at management level took place in September 2012 and included over 20 flower farms. On the basis of this we carefully selected five farms located in the same cluster.

ⁱⁱ While flower farm managers said that they did not hire workers under the age of 15, our sample counted 2 respondents who admitted to be younger than this. It is not clear to what extent the flower farm managers were aware of this or whether these minors presented themselves as older than they really were.

ⁱⁱⁱ We also researched whether job satisfaction moderated the relationship between alternative livelihood strategies (of rural workers, students and ikub members) and intention to leave, such that when job satisfaction is low the relationship between alternative livelihood strategies and intent to leave is high and when job satisfaction is high, there is no relationship between alternative livelihood strategies and intent to leave. However, in all three types of livelihood strategies we did not find such moderating effects.