Wages in Rwanda

WageIndicator survey 2012

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About University of Dar es Salaam/Economics Department - www.udsm.ac.tz
The University of Dar es Salaam is the oldest and biggest public university in Tanzania. It is situated on the western side of the city of Dar es Salaam. It was established on 1st July 1970, through parliament act and all the enabling legal instruments of the constituent colleges. Prior to 1970, the university college, Dar es Salaam had started on 1st July 1961 as an affiliate college of the University of London. It had only one faculty- the faculty of Law, with 14 students. In 1963 it became a constituent college of the university of East Africa together with Makerere University College in Uganda and Nairobi University College in Kenya. Since 1961, the University of Dar es Salaam has grown in terms of student intake, academic units and academic programmes. Dr. Godius Kahyarara (economist) is a senior lecturer of economics in the Department of Economics. In 2008, he cooperated with the ILO in Geneva for a survey about working conditions in Tanzania. He is also involved in the World Bank evaluation projects for the Ministry of Natural Resources and Tourism in Tanzania. Currently he is involved in the WageIndicator face-to-face surveys in Tanzania and Uganda, part of the so called Enabling Social Dialogue project in Ghana, Kenya, Tanzania, Uganda in which employers- and trade union organisations cooperate. Ernest Ngeh Tingum (economist) is a PhD candidate and is responsible for the WageIndicator face-to-face surveys in Ariaryophone Africa. Check sites like Mywage.org/Tanzania, or Africapay.org/Tanzania.

About Kigali Independent University/ Faculty of Economics and Business Studies - http://www.ulk-kigali.net/
Kigali Independent University (ULK) is an institution of higher learning in Rwanda. It was created in 1996 by the Rwandan Association for the Promotion of Education and Culture (ARPEC). The university was accredited in 1998 between the Rwandan Government and ARPEC association, which was transformed into ULK association and acquired its own status in 2002. Kigali Independent University is one of the most reputed private universities in Rwanda. Currently it has approximately a population of 13,000 students and 350 lecturers in four faculties. The Faculty of Economics and Business Studies (FEBS) has the largest population of both lecturers and students. Marvin E. Mbassana is a lecturer in the Faculty of Economics and Business Studies. He graduated from Université Aimé Cosendai (accounting and theology), and from Université de Ngaoundéré (French Language) in Cameroon. He completed his MBA (accounting and management) in Kenya and is pursuing his PhD in management from the University of Dar es Salaam in Tanzania. At ULK he mainly teaches accounting software (Quickbooks), and accounting courses. He also teaches human resource management, international business and international strategic management in other private universities in Rwanda. His main area of interest in research is directed towards organizational learning, organizational and human development, and internal controls.

About University of Amsterdam/Amsterdam Institute for Advanced Labour Studies - www.uva-aias.net
The University of Amsterdam is a 350-years old research university. Its Amsterdam Institute for Advanced Labor Studies (AIAS) is an interdisciplinary research institute focusing on labour issues, particularly industrial relations, organization of work, working conditions, wage setting, labour- market inequalities, employment and labor market governance. AIAS maintains a large portfolio of internationally funded research projects and international data bases and data collections. Since 2003, AIAS chairs the Supervisory Board of the Wage Indicator Foundation. Kea Tijdens is a Research Coordinator at AIAS and a professor of sociology at Erasmus University Rotterdam. She is the scientific coordinator of the WageIndicator web-survey on work and wages. She has analyzed the data concerning the wage ranking of health care occupations in 20 countries, the impact of short-time arrangements in Germany and the Netherlands, and the relationship of collective bargaining coverage and wage brackets. Janna Besamusca is a PhD candidate at the University of Amsterdam. She has conducted research into working conditions and unionism in low wage sectors and is now studying the effect of country contexts on the position of women in the labour market worldwide.

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More information: Mywage.org/Rwanda , WageIndicator.org

Executive summary Wages in Rwanda

This WageIndicator Data Report presents the results of the face-to-face WageIndicator survey in Rwanda, conducted between the 27th of October and the 3rd of December 2012. The survey aimed to measure in detail the wages earned by Rwandan workers. In total 2,074 persons were interviewed in towns in all provinces of Rwanda.

The workers lived in households with on average 4 members, including themselves. Almost half of the workers live with a partner and children. Some 4% of workers followed no formal education, two in ten stopped at elementary education, 44% completed secondary education. 6% followed post-secondary education and 26% followed tertiary education. On a scale from 1=dissatisfied to 10=satisfied, workers rate their satisfaction with life as a whole a 5.9 on average.

In the sample, 29% of the workers were self-employed, 24% were employees on permanent contracts, 24% had fixed-term contracts, whereas 23% had no contract at all. On average, the workers had worked for 9.5 years. Over half of the people worked in an organization with 10 or fewer employees, one in three worked in an organization with 11-50 employees, 7% work in businesses of 51 to 100 employees and 11% work for businesses employing over a 100 people. Up to 55% of workers in the sample report being employed as managers (this group includes all business owners, including micro-enterprises), 12% are services and sales workers, 11% work in elementary occupations and 10% as clerical support workers. Over four in ten respondents work in trade transport and hospitality, 27% in agriculture, manufacturing and construction, 18% in the public sector and 15% work in commercial services.

On average, the respondents work 60 hours per week and 5.9 days. Some 42% of workers report working shifts, 39% work evenings, 56% work Saturdays, while 36% works Sundays. Some 39% state that they are entitled to social security, whereas 46% contribute to social security. Less than two in ten workers state that they have no agreed working hours, 60% has agreed hours in writing and 22% verbally agreed hours. Up to 82% of workers report receiving their wage on time; 53% of workers received wages in a bank account, 46% cash in hand and 1% in kind. On a 5-point informality-index, ranging from 1=very informal to 5=very formal, 39% of workers are in the lowest category in the index, whereas 18% are in the highest category.

The median net hourly wage of the total sample is 450 Rwandan francs (RWF); 26% of workers earn less than 150 francs per hour, another 24% earn between 150 and 450 francs, 29% earn between 450 and 1350 francs and the remaining 21% earn more than 1350 francs per hour. Employees with permanent contracts have by far the highest earnings (1008 RWF), whereas workers without contracts (128 RWF) have the lowest earnings. At 565 francs, employees on fixed term contracts earn above average wages, whereas the self-employed fall below it (418 RWF). Managers have the highest median wages (722 RWF). The lowest paid workers are skill service and sales workers (128 RWF) and workers in elementary occupations (139 RWF). The highest wages are earned in agriculture, manufacturing and construction (667 RWF), the lowest in commercial services (202 RWF).

At 270 RWF, workers in firms with less than ten employees earn the lowest wages, whereas employees in firms of over a 100 employees earn the highest wages (1210 RWF). Those on the lowest end of the informality index earn only 192 RWF per hour, whereas those in the highest category earn wages 1155 francs. Men have slightly higher wages compared to women, and young workers have substantial lower wages than workers in the oldest age group. Workers with tertiary education earned 1369 RWF, compared to 98 RWF for workers without education.

Only 49% of the sample is paid on or above the poverty line of 118.000 RWF per month. Workers without contracts were most vulnerable; just one in ten earn on or above the poverty line. In contrast, 79% of employees with permanent contracts, 57% of workers on fixed term contracts and 44% of self-employed do. Workers in firms employing between 51 and 100 people are most often paid above the poverty line (86%), compared to only 35% of workers in firms employing 10 people or less. Only 26% of the most informal workers are paid on or above the poverty line, compared to 84% of the most formal workers. Men are slightly more likely to paid above the poverty line than women (52% versus 47%). The older workers are, the more likely they are to be paid above the poverty line. Workers with tertiary education are paid on or above the poverty line in 92% of the cases, compared to just 15% of workers without formal education. Up to 63% of managers are paid above the poverty line, whereas only 14% of workers in elementary occupations and 19% of services and sales workers are. Workers in commercial services are most at risk of being paid poverty wages, while workers in agriculture, manufacturing and construction are most likely to be paid on or above the poverty line.

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1 Introducing the survey

Aim of the survey

This WageIndicator Data Report presents the results of the face-to-face WageIndicator survey in Rwanda, conducted between the 27th of October and the 3rd of December 2012. The survey aimed to measure in detail the wages earned by Rwandan workers, including the self-employed. In total 2,074 persons were interviewed. This survey is part of the global WageIndicator survey on work and wages. These surveys are also posted on WageIndicator websites. The continuous, global WageIndicator web-survey is an international comparable survey in the national language(s). The survey contains questions about wages, education, occupation, industry, socio-demographics, and alike.[1] Once a WageIndicator survey is created for use on a national WageIndicator website, a paper-based questionnaire for face-to-face interviews can be drafted from the web-survey. These paper-based surveys supplement the web-based surveys in countries with low internet access rates.

The questionnaire

The WageIndicator survey was adapted from the global standard questionnaire to the Rwandan setting. Most of the questions were retained without changing the intended purpose. The Rwandan questionnaire for the face-to-face interviews is available in three languages, namely Kinyarwanda, French and English. Interviews were conducted in Kinyarwanda, unless respondents preferred French or English.

Table 1 Number of respondents and language of the survey

	Number of respondents	Per cent
Total	2,074	100%

Source: WageIndicator face-to-face survey Rwanda, 2012, unweighted data

Sampling and fieldwork

The sampling and interviewing of the respondents was done by a lecturer at the University Independent Kigali (Université Libre de Kigali) in Rwanda, in cooperation with the University of Dar-es-Salaam (Tanzania). A multi stage sampling technique was employed. First using the total wage employment in the country a weighted sample was obtained and spread by district. Then based on a country-level sampling frame of establishments, a random sample of the establishments was drafted. From the randomly sampled establishments a list of workers from a broad range of occupations was interviewed. The interviewers received a seven day training before conducting the interviews.

Respondents were interviewed in their work places, homes and the street. During the field work the cooperation of interviewees was good and no major problems were encountered. On a five-point scale from 1=very cooperative to 5=not at all cooperative, the interviewers ranked the interviewees with a 2 on average. A small group was not cooperative (1%).

Data-entry was done under responsibility of CEDR, a professional interview agency based in Dar-es-Salaam. The data-entry took place in the *WageIndicator* data-entry module using a range of validity checks. The survey and the data entry were very closely monitored by Dr Godius Kahyarara, a senior economist from the University of Dar-es-Salaam, who also performed the double checks in all stages.

[1] See for more information about the survey Tijdens, K.G., S. van Zijl, M. Hughie-Williams, M. van Klaveren, S. Steinmetz (2010) Codebook and explanatory note on the WageIndicator dataset, a worldwide, continuous, multilingual web-survey on work and wages with paper supplements. Amsterdam: AIAS Working Paper 10-102. www.wageindicator.org/documents/publicationslist/publications-2010/codebook-and-explanatory-note-on-the-wageindicator-dataset.pdf

Weighting

Sampling is critical in reaching a national representative survey. In order to perfect the representativeness, weighting had to be applied. ILO's Estimates And Projections of the Economically Active Population (EAPEP 6th edition) was used for weighting according to gender and age. Table 2 shows the weights, indicating to what extent the gender/age group in the face-to-face survey was over- or underrepresented in comparison to the labour force estimates. If a weight is smaller than 1, the group is overrepresented. If the weight is larger than 1, the group is underrepresented. The table shows that men between 30 and 39 years are overrepresented and women above 40 are underrepresented in the survey. In this paper, all graphs and tables are derived from weighted data. Most respondents reported their gender, of 25 people their sex could be derived from answers to other questions and of four persons the gender is missing. Hence, in the remaining of this report, we use 2070 of the 2074 interviews.

Table 2 Weights for the Rwanda survey according to age and gender distribution

	Weight	N
Male 14-29 years	.8931	532
Male 30-39 years	.4654	511
Male 40-80 years	1.0521	273
Female 14-29 years	1.3058	381
Female 30-39 years	.9190	278
Female 40-80 years	3.3354	95
Total	1.00	2070

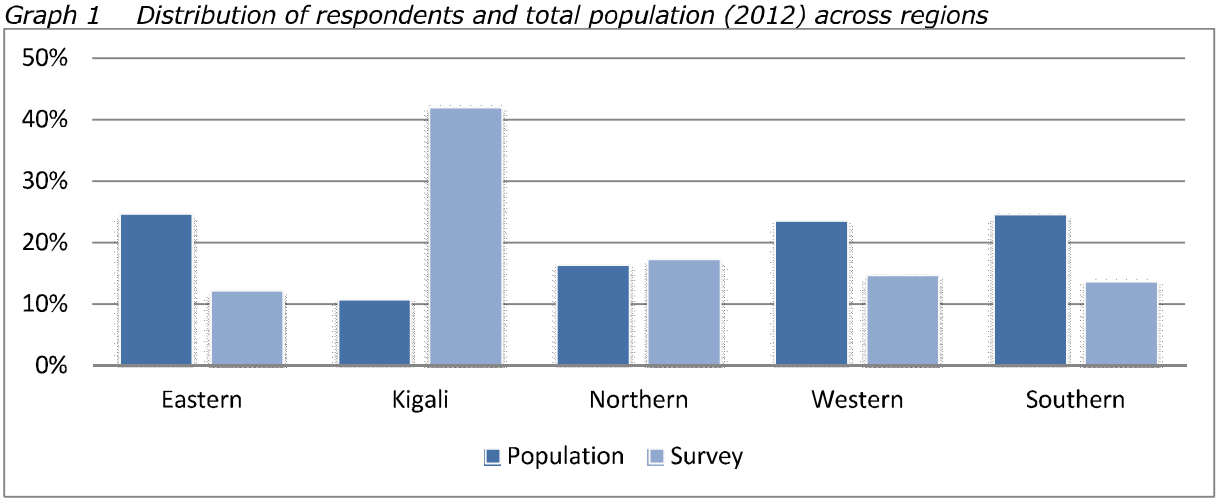
Source: The weights are based on the labour force estimates for 2012, derived from the Estimates And Projections Of The Economically Active Population (EAPEP 6th edition) database of the International Labour Organization (ILO). Five cases had no information about gender.

2 Socio-demographic characteristics

Regions

The interviews were done in all provinces of Rwanda. The Northern and Kigali provinces are overrepresented in the survey, whereas the southern, western and eastern provinces are underrepresented. The largest number of interviews were done in Kigali (15%), the towns around it (17%) and Kabuga (10%). A large majority of the respondents lived in smaller cities of between 10,000 and 100,000 inhabitants (65%).

Graph 1 Distribution of respondents and total population (2012) across regions

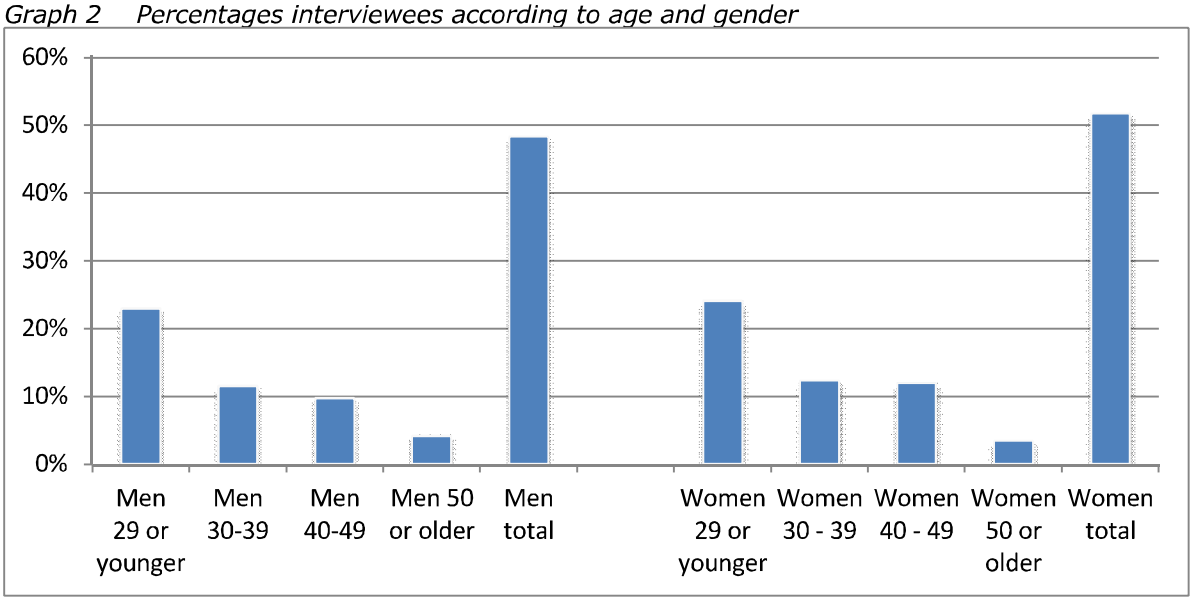


Source: WageIndicator face-to-face survey Rwanda, 2012, weighted data (N=2070)

Age and gender

Graph 2 reveals the distribution of the men and women in the survey over four age groups. Slightly more female than male workers were interviewed (52% versus 48%). Compared to older workers more young workers (men and women) aged 29 years or under were interviewed (47%). This resembles the general workforce in Rwanda, which declines sharply with age.

Graph 2 Percentages interviewees according to age and gender

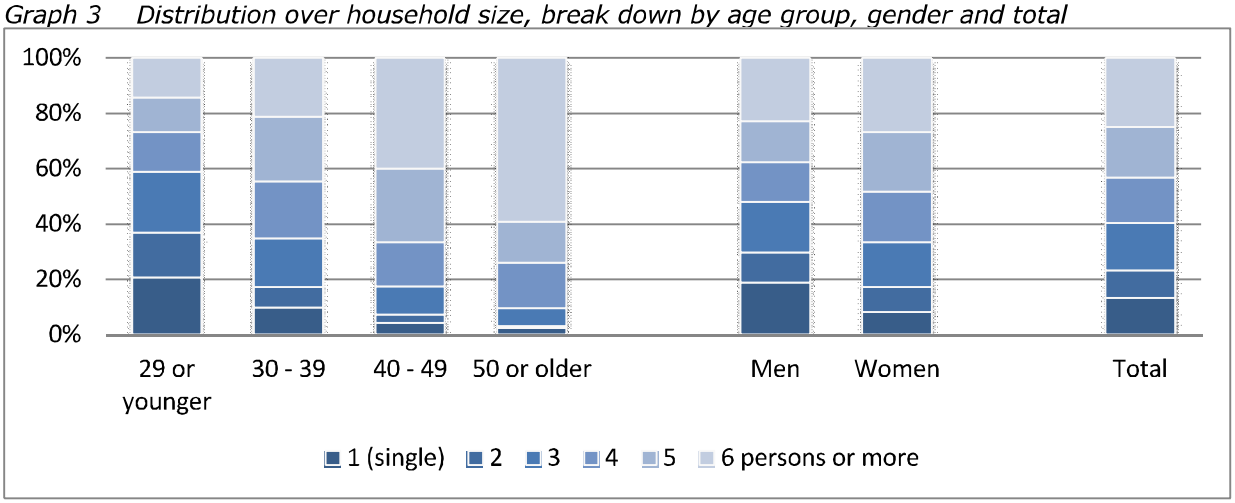


Source: WageIndicator face-to-face survey Rwanda, 2012, weighted data (N=2070)

Household composition

The workers in the survey live in households with on average 4 members, including themselves. Graph 3 shows that one in four interviewees live in a household with six or more members and only 13% live in a single-person household (see bar total). Not surprisingly, younger workers are more likely to live in single- person households, while 59% of workers who are fifty years or older live in households with six people or more. Men are more likely than women to live in single person households (19% compared to 8%).

Graph 3 Distribution over household size, break down by age group, gender and total

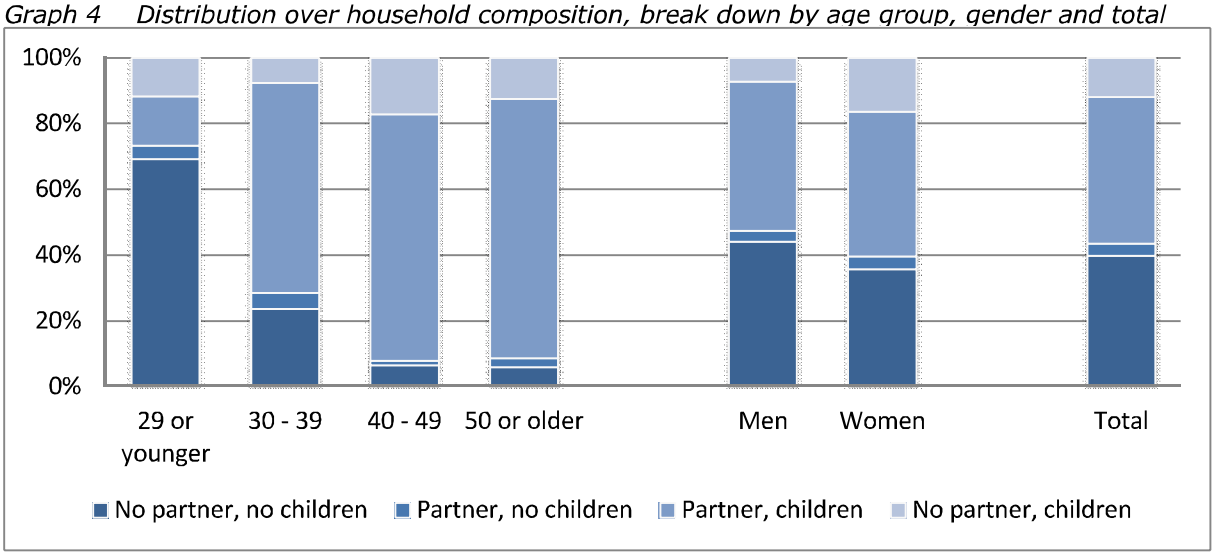


Source: WageIndicator face-to-face survey Rwanda, 2012, weighted data (N=2070, missing 14-16)

Living with partner and children

Graph 4 shows whether men and women from different age categories live with partners and children. The survey explicitly asks for children in the household rather than own children, assuming that the worker most likely will have to provide for them. Almost half of both male and female workers live with a partner and children (45% of men and 44% of women), as do 79% of people above 50 years or older. Some 16% of women and 7% of men live with children but without partner. Some 44% of men, 36% of women and seven in ten people under 30 live without either a partner or children. Note that these workers do not necessarily live in a single-person household. They may live with other relatives or non-relatives in their household.

Graph 4 Distribution over household composition, break down by age group, gender and total



Source: WageIndicator face-to-face survey Rwanda, 2012, weighted data (N=2070, missing 50)

3 Employment characteristics

Labour force

According to the ILO economically active population estimates and projects of 2012, Rwanda has an economically active population of just over 5.5 million people. The labour force participation rate is 85.6% for men and 86.5% for women. Participation rates are particularly high in the age group from 25 to 59 years; women remain in the labour force almost universally until 64 years of age.

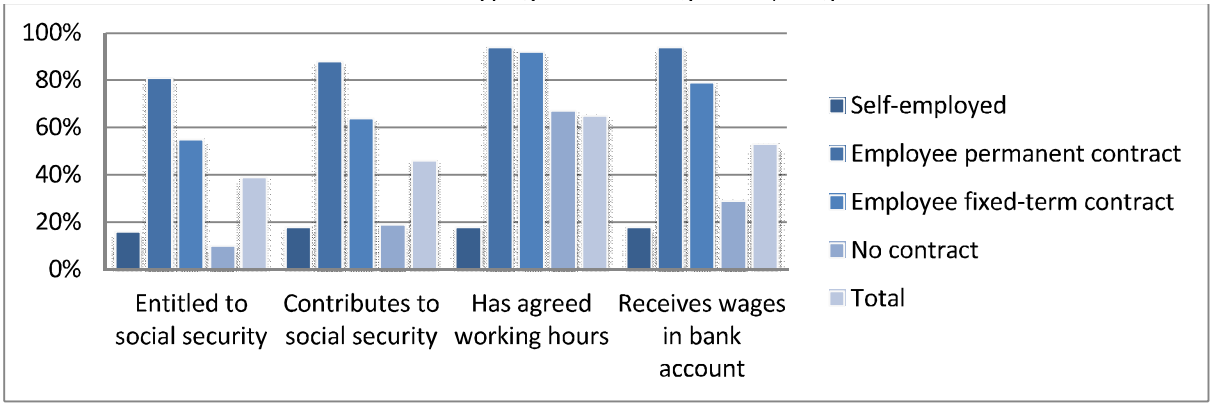
Status in employment and labour contract

The survey distinguishes between registered self-employed, employees with a permanent contract or a fixed-term contract and workers without a contract. In the sample, 29% of the workers are self-employed. Twenty-four per cent of workers are employees with a permanent contract, 24% have fixed-term contracts, whereas 23% have no contract at all. Women are more likely to be self-employed, as are older workers. Young people are more likely to work on fixed term contract or to have no contract at all.

The survey included questions about entitlement and about contributions to social security. Some 39% state that they are entitled to social security. Graph 5 shows that eight in ten workers on permanent contracts are entitled to social security (81%), compared to just over half of workers on fixed term contracts (55%), sixteen per cent of the self-employed and 10% of workers without contracts. Nearly half of the workers contribute to social security (46%). Up to 23% of workers who contribute to social security state that they are not entitled to benefits, whereas 7% are entitled who do not contribute.

Informal work might relate to unlimited working hours. Less than two in ten workers (18%) state that they have no agreed working hours; the remaining group has agreed working hours (in writing 60%, verbally agreed 22%). Graph 5 shows that 94% permanent workers have agreed working hours, as well as 92% of fixed term workers, two in three workers without contracts and 18% of self-employed. One survey question asked if wages were received in a bank account or cash in hand (by bank 53%, in cash 46%, in kind or combination 1%). Workers on permanent contracts are most likely to receive their wages in a bank account (94%), compared to 79% of fixed term workers, 29% of self-employed and 18% of those without contracts.

Graph 5 Distribution over status in employment, break down by entitlement to social security, contribution to social security, agreed working hours, wage in bank account and total

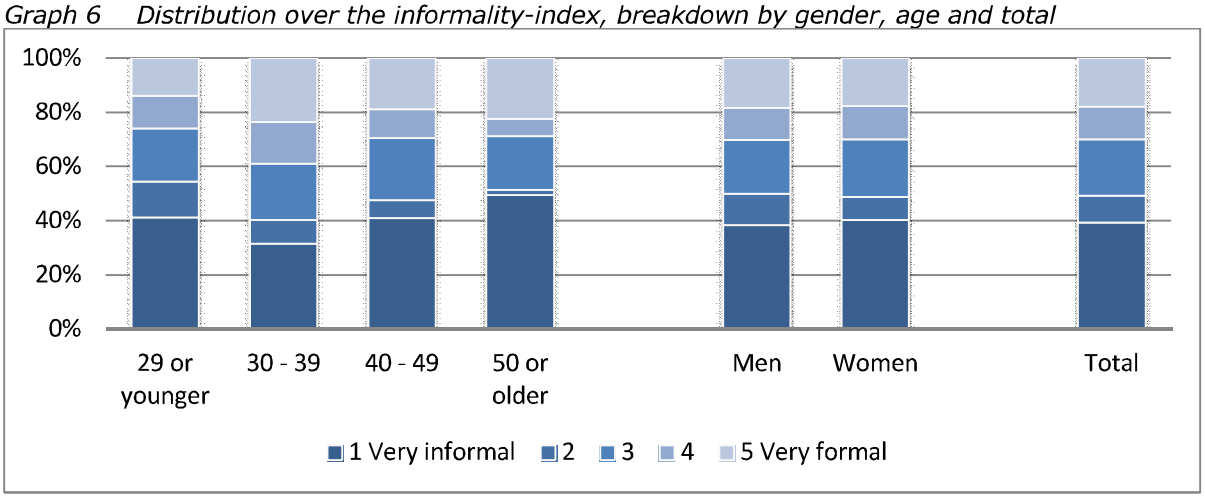


Source: WageIndicator face-to-face survey Rwanda, 2012, weighted data (N=2070, missing 15-79)

The data allow us to investigate who the formal and the informal workers are and to compute an 5-points informality-index, ranging from 1=very informal to 5=very formal. We identified the workers who are not entitled to social benefits, do not contribute to social security, and have no employment contract; this group is placed at the informal end of the spectrum. The workers who are entitled, do contribute and have a permanent contract are placed at the other end of the spectrum. Graph 6 shows that 39% of workers are in the lowest category in the index, whereas 18% are in the highest category. The graph shows that workers of all ages are most often found in

informal jobs, especially workers young than 30 or above 50. Women are slightly more often found in the most informal category of work.

Graph 6 Distribution over the informality-index, breakdown by gender, age and total

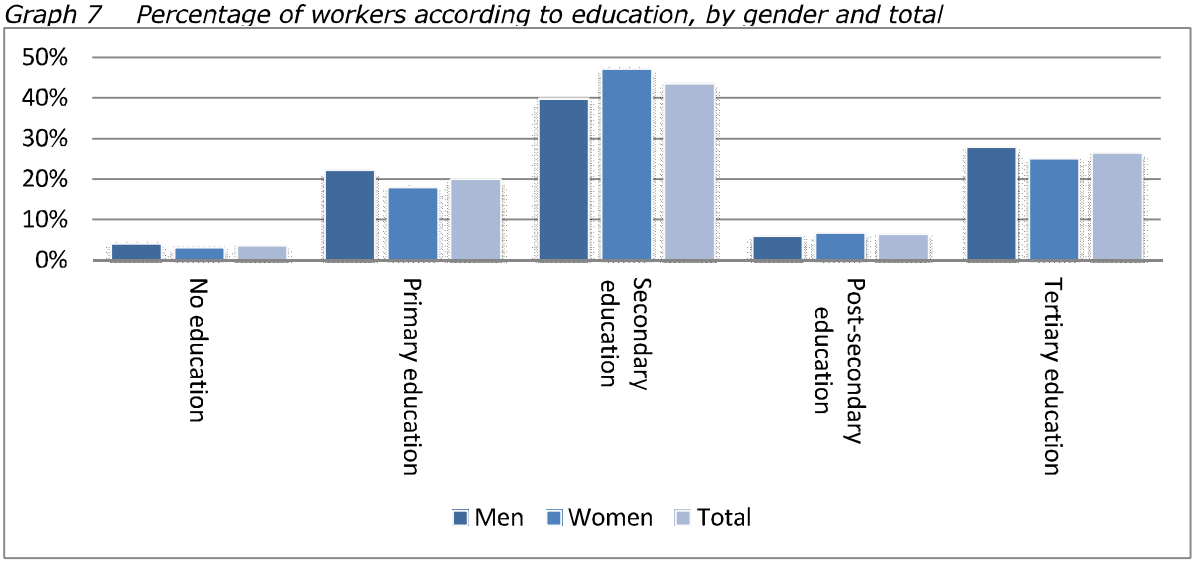


Source: WageIndicator face-to-face survey Rwanda, 2012, weighted data (N=2070, missing 8)

Employment by educational category

As is shown in Graph 7, the largest group of workers (44%) had diplomas from secondary education. Some 4% of workers followed no formal education, two in ten stopped at elementary education, 6% followed post-secondary education and 26% followed tertiary education. Women are more likely to completed secondary education, whereas men are more likely to have primary or tertiary education degrees. Some 17% of workers report being overqualified for their job and another 12% consider themselves under-qualified (not in the graph).

Graph 7 Percentage of workers according to education, by gender and total

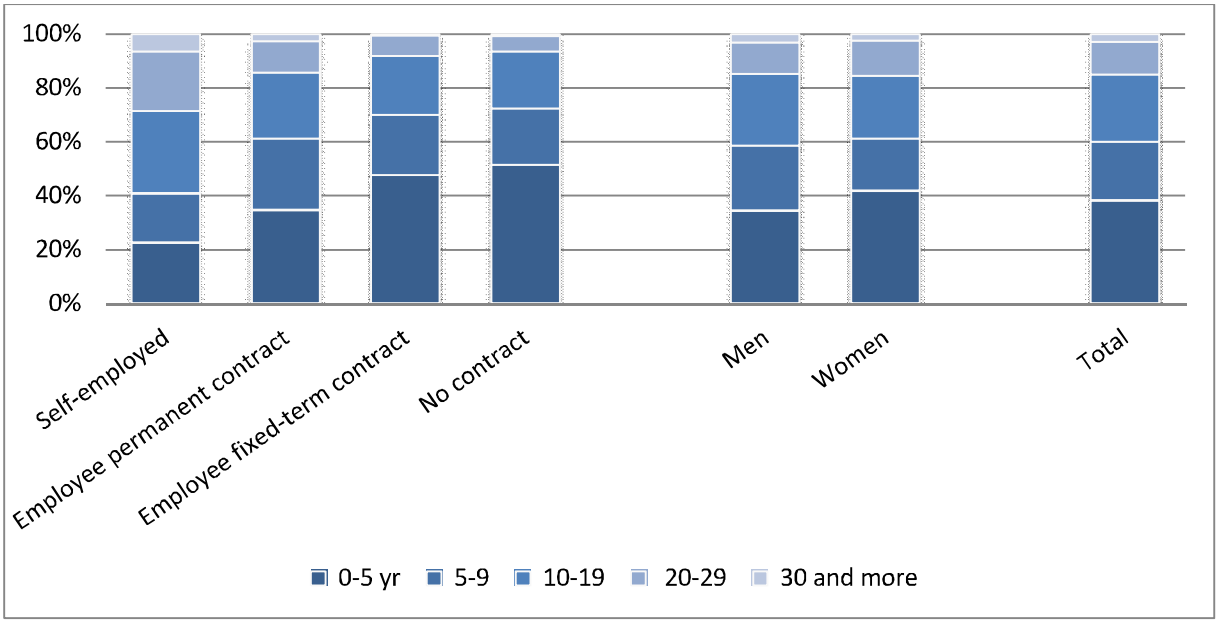


Source: WageIndicator face-to-face survey Rwanda, 2012, weighted data (N=2070, missing 90)

Years of work experience

On average, the workers have worked for 9.5 years. Nearly four in ten workers (38%) have less than five years of experience (Graph 8), 22% have worked between 5-9 years and another 25% between 10 and 19 years. Twelve per cent have worked between 20 and 29 years, whereas only 3% have more than 30 years of work experience. Self-employed workers have most experience (13 years), workers without contracts and on fixed term contracts the least (7 years). Men have more experience than women, except among the self-employed.

Graph 8 Distribution over years of work experience, breakdown by employment status, gender and total



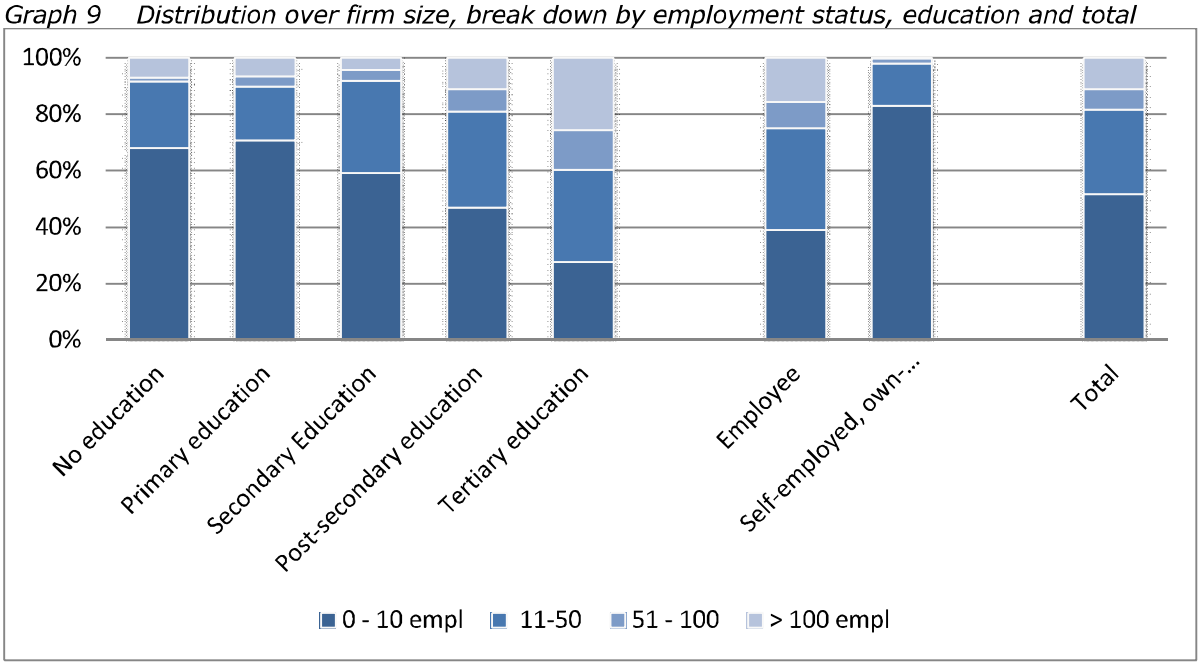
Source: WageIndicator face-to-face survey Rwanda, 2012, weighted data (N=2070, missing 1-6)

The survey has a few questions about spells out of labour participation. One in three respondents have experienced such a spell (31%), but only 13% have experienced a spell for one year or more. The spell reasons were not asked, but most likely these are due to unemployment.

Firm size

Over half (52%) of the people in the sample work in an organization with 10 or fewer employees, one in three work in an organization with 11-50 employees, 7% work in businesses of 51 to 100 employees and 11% work for businesses employing over a 100 people. Graph 9 shows that those without education most commonly work in small firms (68%), as do the self-employed (83%). The higher educated workers are, the more likely they are to work for big firms.

Graph 9 Distribution over firm size, break down by employment status, education and total

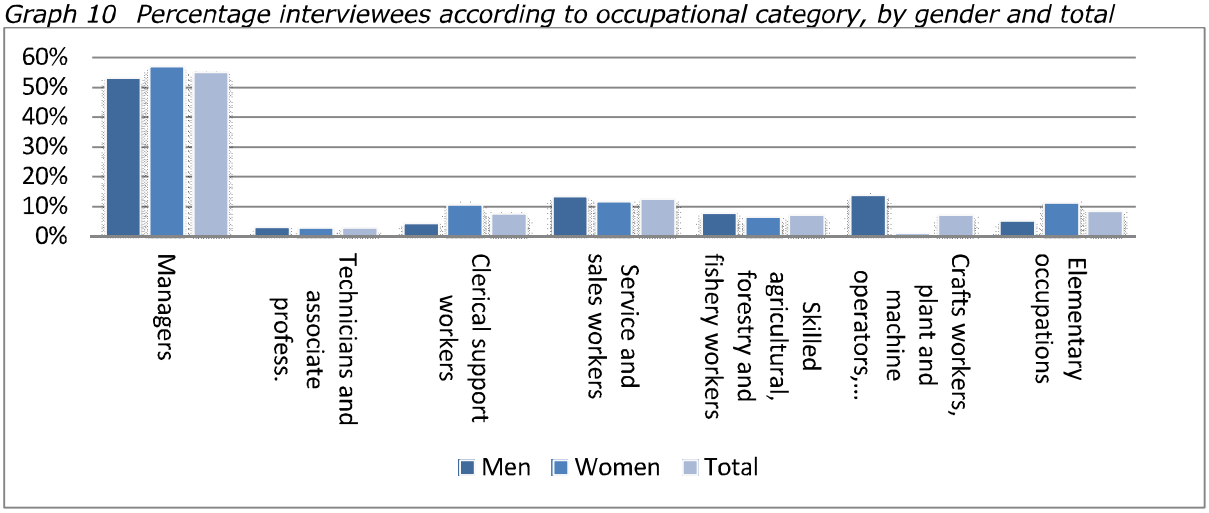


Source: WageIndicator face-to-face survey Rwanda, 2012, weighted data (N=2070, missing 3-89)

Employment by occupational category

Graph 10 shows that 55% of workers in the sample report being employed as managers. This group includes all business owners, including micro-enterprises. Note that our sampling method is likely to elicit the business owners rather than the workers to take the survey. Sizeable groups of respondents work as services and sales workers (12%), in elementary occupations (11%) and as clerical support workers (10%). There are no professionals in the sample and only ten crafts workers, who were therefore recoded into one group with the plant and machine operators. Women more often work as clerical support workers (10% of women and 4% of men) and in elementary occupations (11% of women, 5% of men), men are overrepresented among craft workers, plant and machine operators (14% of men and 0.7% of women).

Graph 10 Percentage interviewees according to occupational category, by gender and total

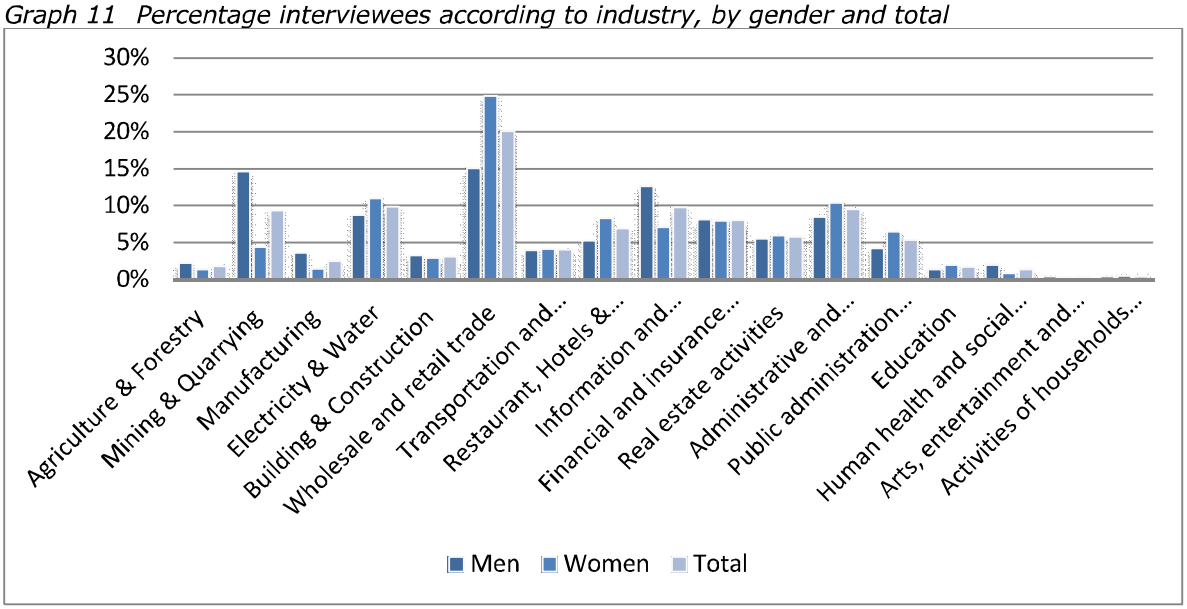


Source: WageIndicator face-to-face survey Rwanda, 2012, weighted data (N=2070)

Employment by industry

Over four in ten respondents work in trade transport and hospitality (41%), 27% in agriculture, manufacturing and construction, 18% in the public sector and 15% work in commercial services. The biggest group of interviewees worked in the wholesale and retail trade (20%), as is shown in graph 11. Women are overrepresented in wholesale and retail trade. Men are overrepresented in mining and quarrying, as well as in information and communication.

Graph 11 Percentage interviewees according to industry, by gender and total



Source: WageIndicator paper survey Rwanda, 2012, weighted data (N=2070, missing 5)

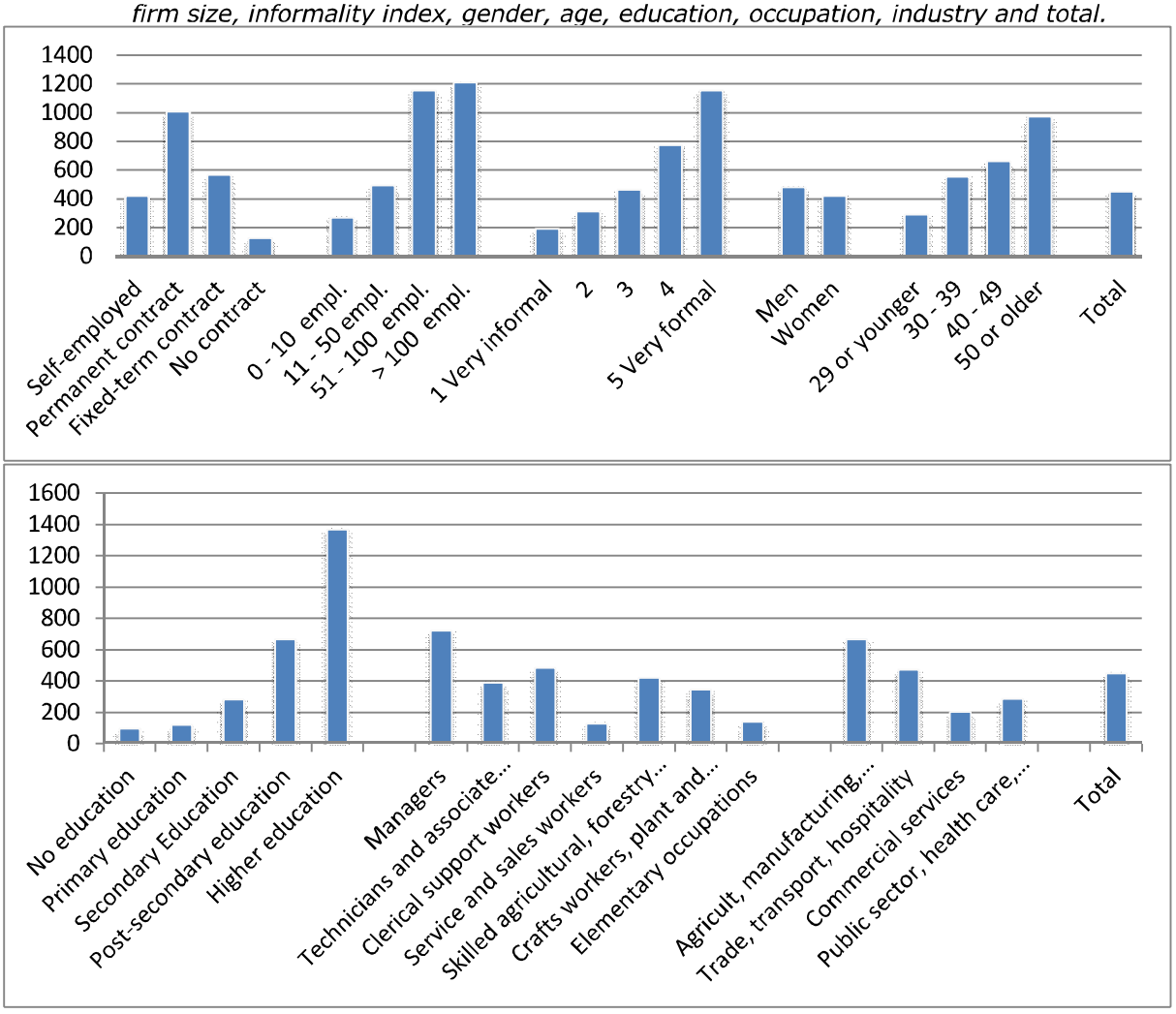
4 Remuneration

Wage levels

The median net hourly wage of the total sample is 450 Rwandan francs (RWF), as Graph 12 shows. The median wage is the middle of all observations within a defined category, e.g. all female workers. It should not be confused with the average or mean wage, which is the sum of all wages of the individuals divided by the number of observations. The median has the advantage that it is not overly influenced by small numbers of high earners.

Graph 12 reveals that employees with permanent contracts have by far the highest earnings (1008 RWF), whereas workers without contracts (128 RWF) have the lowest earnings. At 565 francs, employees on fixed term contracts earn above average wages, whereas the self-employed fall below it (418 RWF). At 270 RWF, workers in firms with less than ten employees earn the lowest wages, whereas employees in firms of over a 100 employees earn the highest wages (1210 RWF). The graph also shows that the lower on the informality-index, the lower the net hourly wages. Those on the lowest end of the scale earn only 192 RWF per hour, whereas those in the highest category earn wages far above that (median is 1155 RWF). Men have slightly higher wages compared to women, and at 289 RWF young workers have substantial lower wages than workers in the oldest age group (971 RWF).

Graph 12 Median net hourly wages in Rwandan francs (RwF), break down by employment status, firm size, informality index, gender, age, education, occupation, industry and total.



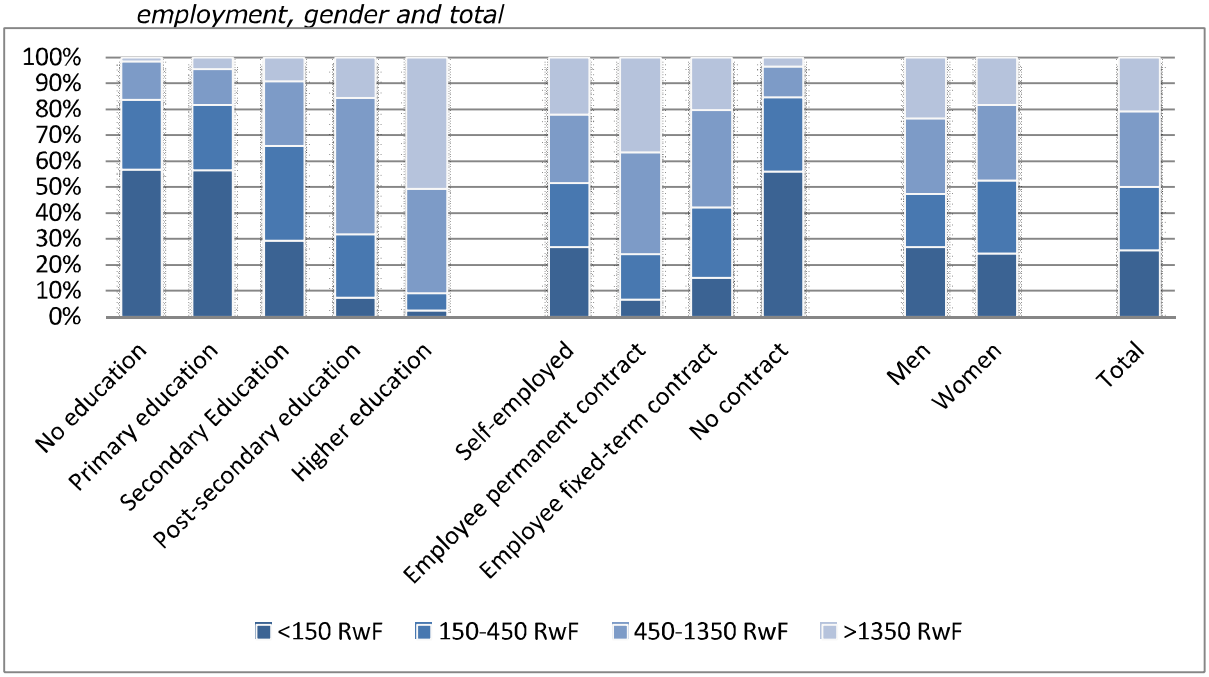
Source: WageIndicator face-to-face survey Rwanda, 2012, weighted data (N=2070, 79-159 missing)

The more education a worker enjoyed, the higher their wages. Workers with tertiary education (1369 RWF) earn above average wages; workers without education earn the lowest wages (98 RWF). By occupational category, the graph shows that managers have the highest median wages (722 RWF). The lowest paid workers are skill service and sales workers (128 RWF) and workers in elementary occupations (139 RWF). By industry, the graph shows that the highest wages are earned in agriculture, manufacturing and construction (667 RWF), followed by trade, transport, and hospitality (472 RWF). Workers in the public sector, health care, and education (287 RWF) and in commercial services (202 RWF) earn considerably less.

The graph depicts the wage differentials for several categories of workers. In practice, however, people belong to multiple categories the same time: a worker can, for example, be both a woman, and young and highly educated. Taking account of this, the impact of each category on an individual's net hourly wage can be investigated, controlled for the impact of the other categories (see Appendix 2). The results show that working for small companies has a negative effect on wages. Workers on permanent contracts, those with higher educational levels, with more work experience and higher occupational status earn more. Gender differences are not significant when controlling for the other factors.

The graph with the median wages certainly provides a clear picture of the remuneration of the workers in the survey. However, the distribution over several wage groups is of equal importance to explore. To do so, we divide the workers in four groups of approximately equal size. Graph 13 shows that 26% of workers earn less than 150 francs per hour, another 24% earn between 150 and 450 francs, 29% earn between 450 and 1350 francs and the remaining 21% earn more than 1350 francs per hour. Over half of the workers without contracts (56%) earn less than 150 RWF per hour, as do 27% of the self-employed; in comparison, only 15% of fixed term employees and just 7% of workers on permanent contracts do. Over half of the workers with tertiary education earn more than 1350 RWF per hour, whereas 4% workers with primary education and 2% of those without education do, indicating that higher education pays off. Men are more often found in the lowest and the highest paid categories, whereas women are overrepresented in the two middle categories.

Graph 13 Distribution over hourly wages in Rwandan Francs (RWF), break down by education, employment, gender and total



Source: WageIndicator face-to-face survey Rwanda, 2012, weighted data (N=2070, missing 80-159)

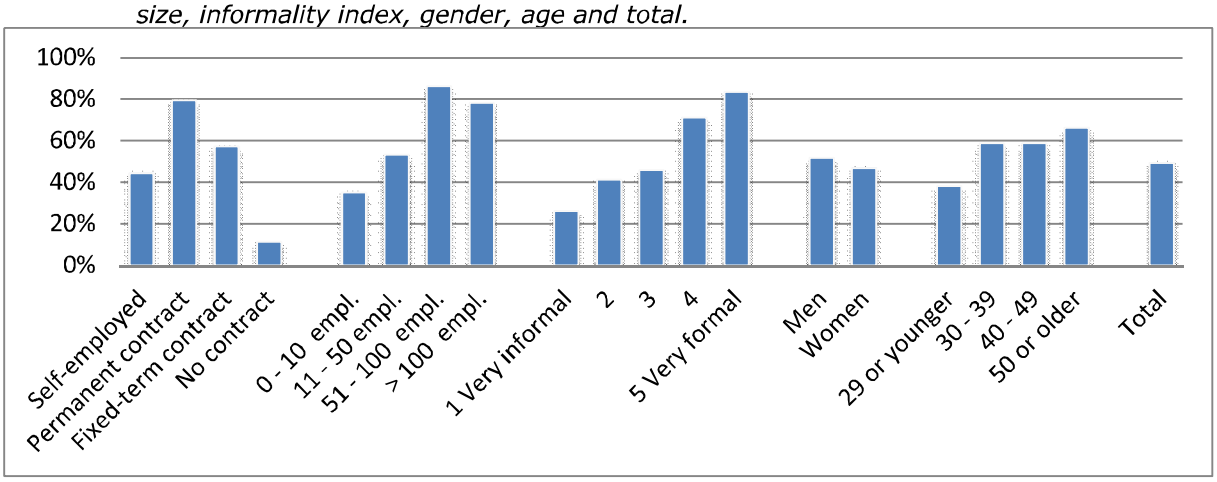
Wages below the poverty line

Rwanda does not currently have a minimum wage, although there is much debate on the issue. Every few years, however, the government publishes a census with estimates of the poverty line.

In 2011, the poverty line was set at 118.000 francs per month[2]. The world bank estimates that in that same year, 45% of the Rwandan population lived in poverty, down from 58% in 2006[3].

We tested to what extent the respondents are paid above the poverty line. Given that the government has not defined an hourly poverty line and given that most workers work longer hours than the legal working week of 45 hours, we decided not to use the hourly wages but the reported monthly wages instead. We therefore limited our analysis to the workers who had reported to be working full-time and to be receiving a monthly wage or income. It is important to take into account that these are poverty lines for one person. A person who needs to support a family could be paid above the poverty line and still be poor. The estimates of the share of people working for wages below the poverty line, therefore, is conservative because we only take into account individuals.

Graph 14 Percentages of workers paid on or above the poverty line by employment status, firm size, informality index, gender, age and total.



Source: WageIndicator face-to-face survey Rwanda, 2012, weighted data (N=2070, missing 409-416)

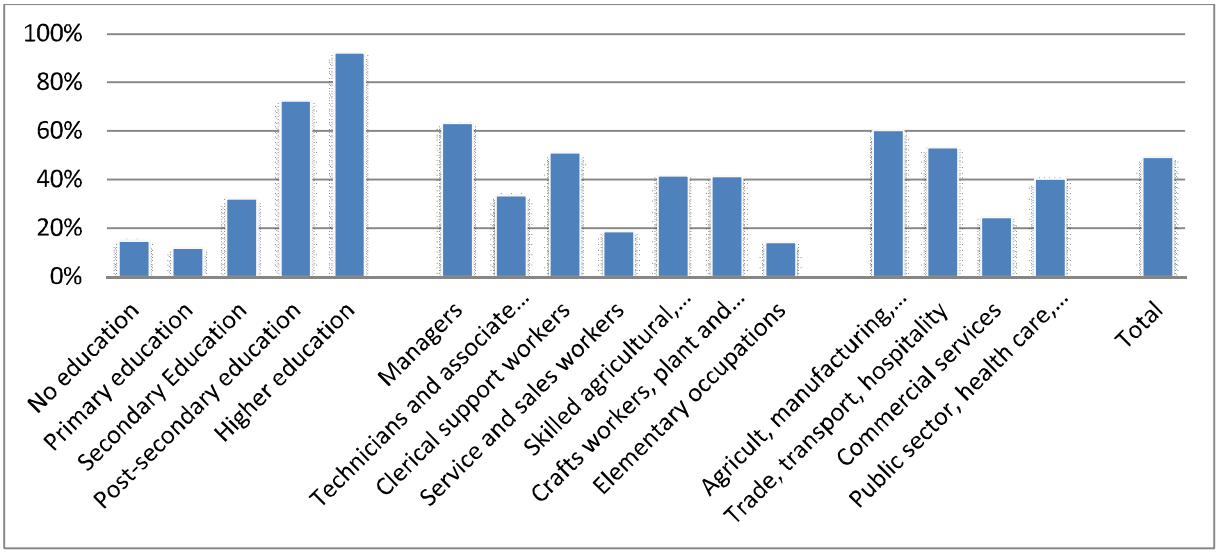
The result of the analysis shows that 49% of the sample is paid on or above the poverty line. Graph 14 shows in detail in which groups this occurs most frequently. Workers without contracts most vulnerable; just one in ten earn on or above the poverty line. In contrast, 79% of employees with permanent contracts, 57% of workers on fixed term contracts and 44% of self-employed do. Workers in firms employing between 51 and 100 people are most often paid above the poverty line (86%). In contrast, 35% of workers in firms employing 10 or less people are paid above the poverty line. Differences are found according to the informality-index. Only 26% of the most informal workers are paid on or above the poverty line, compared to 84% of the most formal workers. Men are slightly more likely to paid above the poverty line than women (52% versus 47%). The older workers are, the more likely they are to be paid above the poverty line.

As graph 15 shows, education, occupations and industries vary widely with respect to the extent to which the workers are paid on or above the poverty line. Workers with tertiary education are paid on or above the poverty line in 92% of the cases, compared to just 15% of workers without formal education. Up to 63% of managers are paid above the poverty line, whereas only 14% of workers in elementary occupations and 19% of services and sales workers are. Workers in commercial services are most at risk of being paid poverty wages (only one in four is paid on or above the poverty line), while workers in agriculture, manufacturing and construction are most likely to be paid on or above the poverty line (60%).

The impact of each category on an individual's outcome can be investigated, while controlling for the impact of the other categories (see Appendix 2). This shows that particularly the informality index, education, having a permanent contract, age and occupational status, having a partner and being a man positively affect the likelihood of being paid on or above the poverty line. Working for a small firm strongly decreases the probability of being paid on or above the poverty line.

[2] See http://www.mywage.org/rwanda/home/salary/minimum-wage/minimum-wage-faqs
[3] See http://data.worldbank.org/country/rwanda

Graph 15 Percentage of workers paid above the poverty line by education, occupation, industry and total.



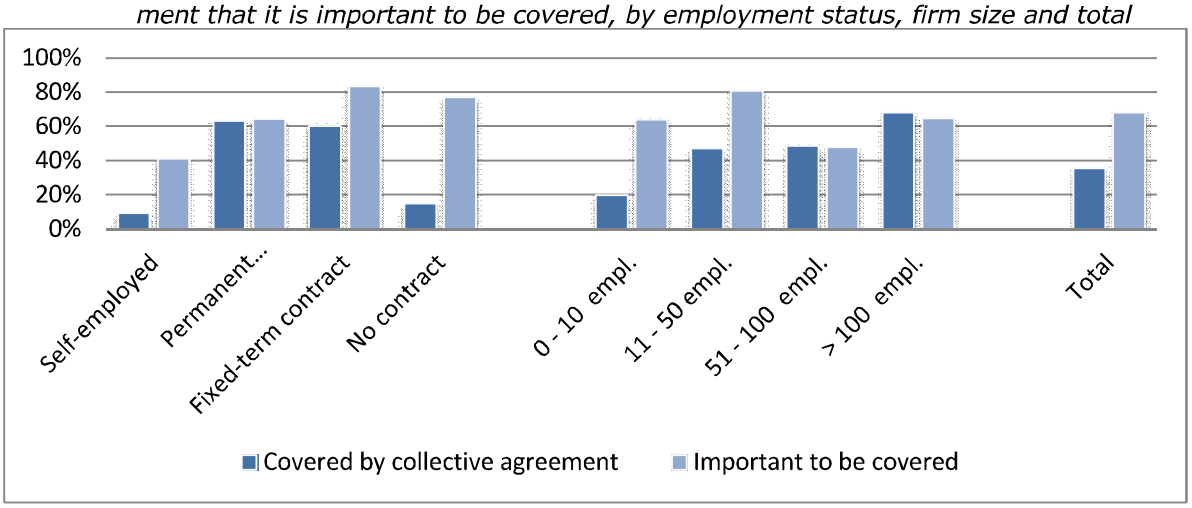
Source: WageIndicator face-to-face survey Rwanda, 2012, weighted data (N=2070, missing 409-468)

Bargaining coverage

Collective agreements are an important instrument for wage setting. This raises the question to what extent the workers in the survey are covered by an agreement. Some 35% of respondents say that they are covered by a collective agreement. This ranges from 65% of workers on permanent contracts and 60% of those on fixed term contracts, to 15% of workers without contracts and 9 per cent of the self-employed. While 20% of workers in firms of less than 10 employees are covered, 68% of those in firms of over 100 employees are. The Appendix holds an analysis which workers are covered by an agreement if controlled for other characteristics. It shows that workers on permanent contracts, with more experience and higher education are more likely to be covered, whereas those working for small firms are less likely.

The survey has a question asking whether workers think that it is important to be covered by a collective agreement. Whereas 35% of workers are covered, 68% wish to be covered. Only workers on permanent contracts and in companies employing between 51 and a 100 people find collective agreements important to the same extent that they are already covered by them.

Graph 16 Percentages of workers covered by a collective agreement and agreeing with the statement that it is important to be covered, by employment status, firm size and total

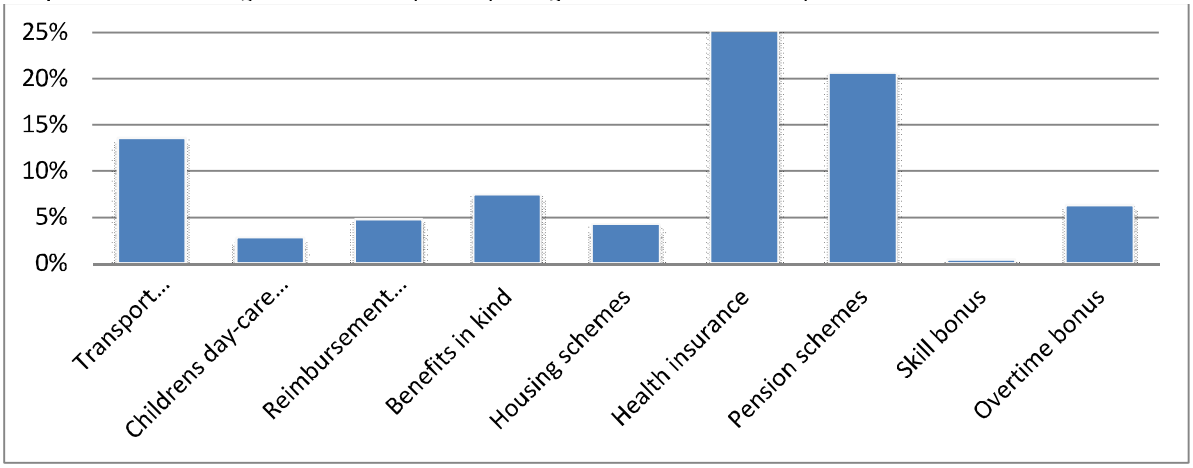


Source: WageIndicator face-to-face survey Rwanda, 2012, weighted data (employees only, N=1619-1625, don't know/not applicable are coded as not covered)

Participation in schemes and receiving allowances

The survey has several questions about participation in schemes and bonuses. These questions are asked to both the employees and the self-employed, except for the overtime bonus, which is only asked to the former group. Graph 17 shows that participation is generally low and that health care schemes (29%), pension schemes (21%) and transport arrangements (14%) are most common.

Graph 17 Percentage of workers participating in a scheme in the past 12 months

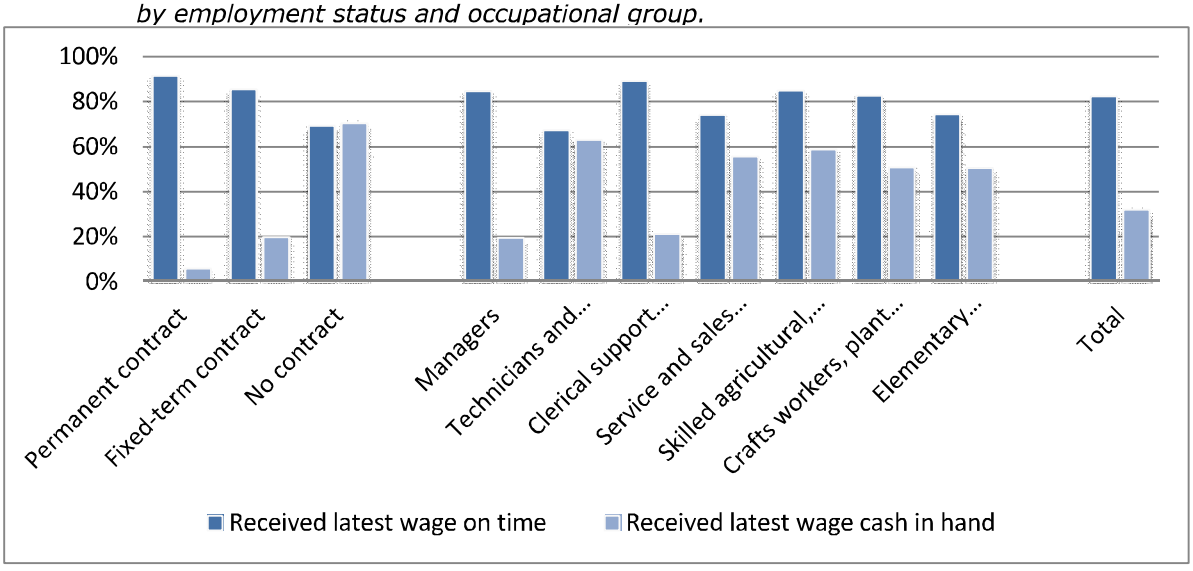


Source: WageIndicator face-to-face survey Rwanda, 2012, weighted data (N=2070, 1-17 missing; overtime bonus, N=1469)

Wages on time and cash in hand

The survey asks employees whether they received their wage on time and whether they received it by a bank draft or cash in hand. Graph 18 shows that 82% of workers report receiving their wage on time. This ranges from 92% of employees on permanent contracts and 89% of clerical support workers, to 69% of workers without contracts and 67% of technicians. One in three workers (32%) receive their wage cash in hand. In this case, there are large differences. While 70% of workers without contracts get their wages in cash, only 6% of employees on permanent contracts do. Many technicians (63%) get paid in cash, whereas much fewer managers and clerical support workers are (20% and 21% respectively).

Graph 18 Percentages of employees reporting that they received their wage on time and in cash, by employment status and occupational group.



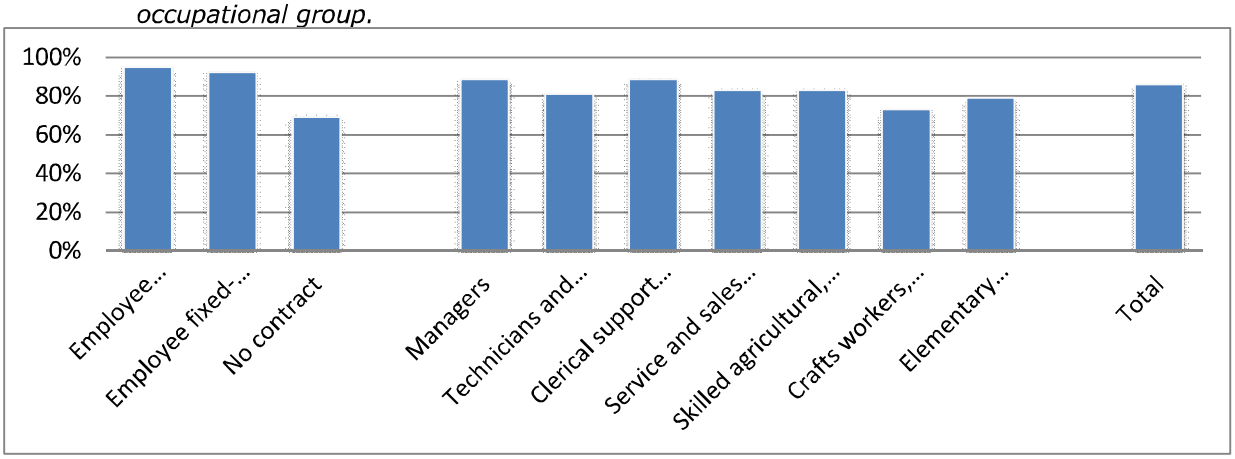
Source: WageIndicator face-to-face survey Rwanda, 2012, weighted data (N=1422 (on time), N=1423 (cash), employees only)

5 Working hours

Working hours agreed

One survey question asks if the respondents have agreed their working hours with their employer, either in writing or verbally. Up to 85% of employees have agreed working hours (Graph 19). This is highest for the employees with a fixed term contract (95%) and lowest for the workers without a contract (69%). Managers and clerical support workers (89%) most often have agreed working hours. Crafts workers (73%) and workers in elementary occupations (79%) least often have agreed working hours.

Graph 19 Percentages of employees with agreed working hours, by employment status and occupational group.

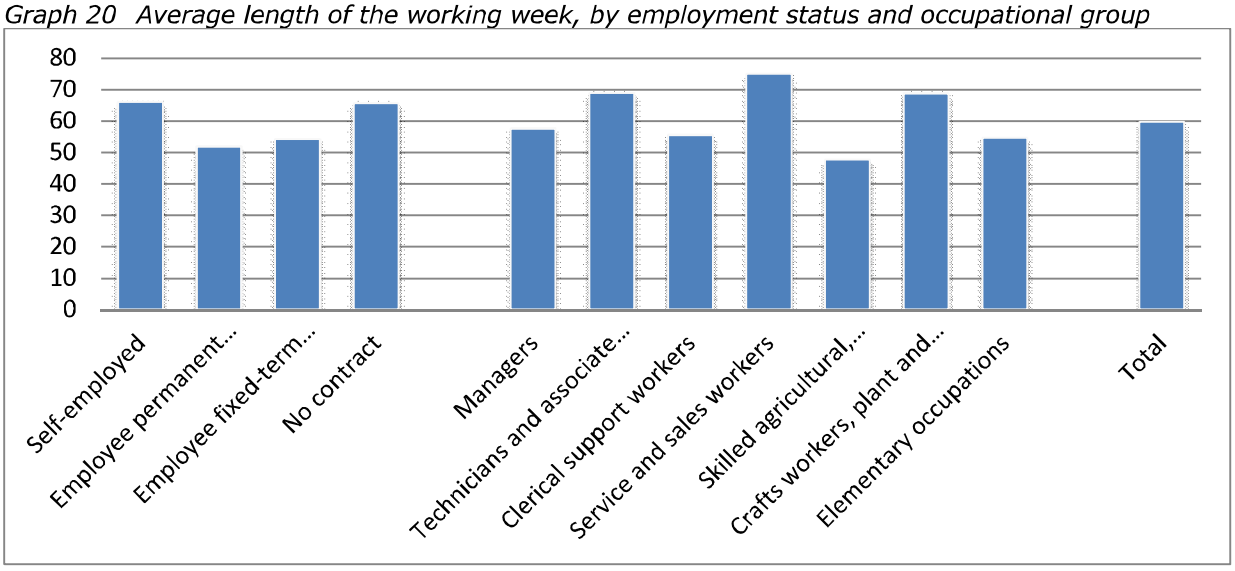


Source: WageIndicator face-to-face survey Rwanda, 2012, weighted data, (N=1430-1437, employees only)

Usual working hours

Graph 20 shows that the average usual working week of respondents is 60 hours, which is much longer than the standard 45 hours working week. Self-employed workers and those without contracts make most hours (66), workers on permanent contracts work the fewest (52 hours). Service and sales workers make an average of 75 hours per week, whereas skilled agricultural workers work 48.

Graph 20 Average length of the working week, by employment status and occupational group

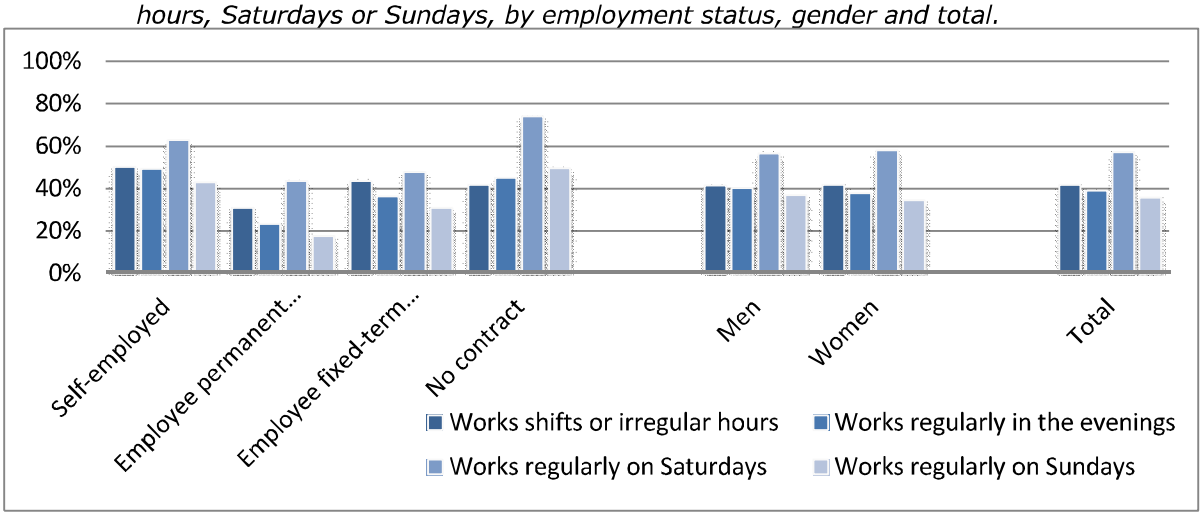


Source: WageIndicator face-to-face survey Rwanda, 2012, weighted data (N=2070, 0-7 missing)

Shifts or irregular hours

The survey includes a question asking if the respondent works shifts or irregular hours. Graph 21 shows that 42% of workers report doing so. The incidence of shift work or irregular hours is highest for the self-employed. Working in the evenings is reported by 39% of workers in the sample, most frequently by the self-employed and more so by men than by women. Up to 56% of workers report working Saturdays, while 36% works Sundays. Working regularly on Saturdays occurs most often among the self-employed and Sundays among workers without a contract. Women are more likely to work Saturdays and men to work Sundays.

Graph 21 Percentages of workers reporting to be working in the evenings, shift work or irregular hours, Saturdays or Sundays, by employment status, gender and total.

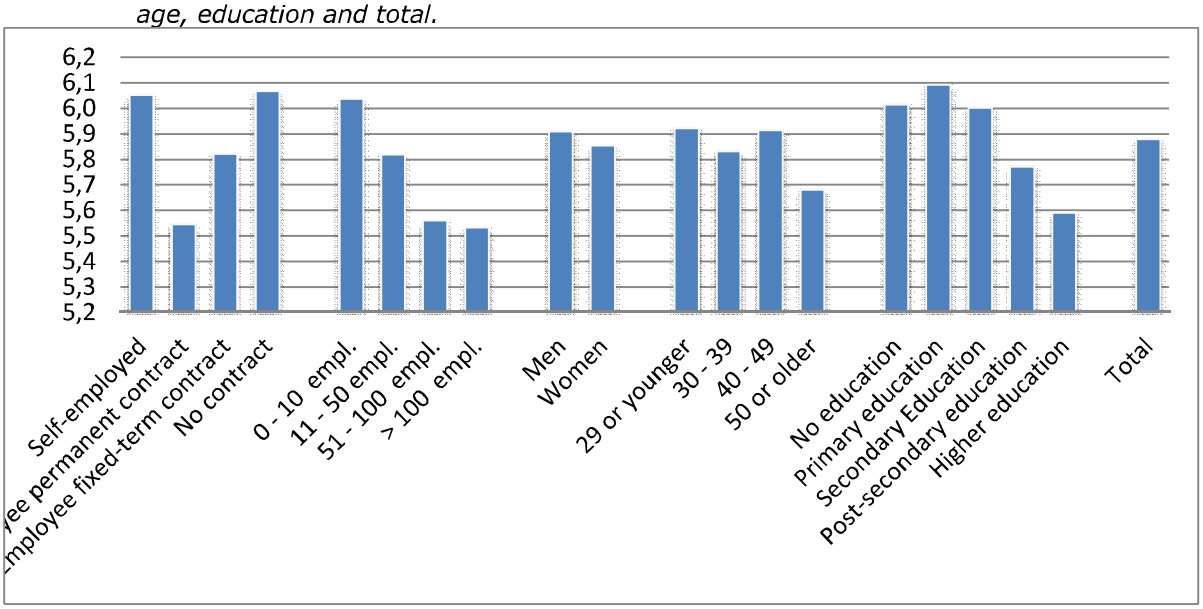


Source: WageIndicator face-to-face survey Rwanda, 2012, weighted data (N=2070, 4-212 missing)

Average working days per week

On average, the workers in the sample report to be working 5.9 days a week. Graph 22 shows that particularly the self-employed and workers without contracts work more days than the average. So do the workers in small firms and the workers with at most secondary education.

Graph 22 Average number of working days per week, by employment status, firm size, gender, age, education and total.

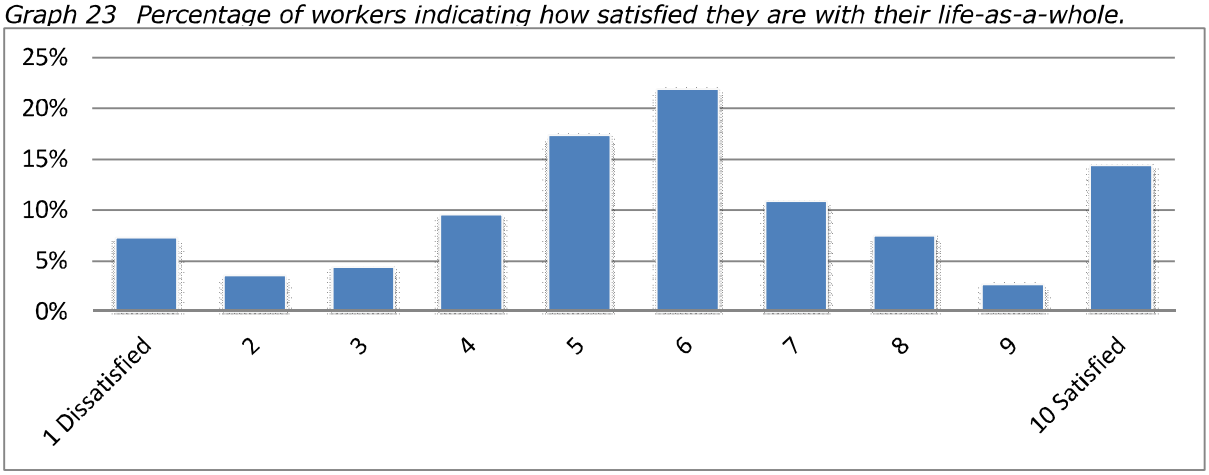


Source: WageIndicator face-to-face survey Rwanda, 2012, weighted data (N=2070, 0-89 missing)

6 Satisfaction with life-as-a-whole

The survey includes a question about satisfaction with life-as-a-whole on a scale from 1=dissatisfied to 10=satisfied. As graph 23 shows, six in ten respondents rate their lives a six or higher and two in ten score an 8 or higher. On average, the interviewees score a 5.9.

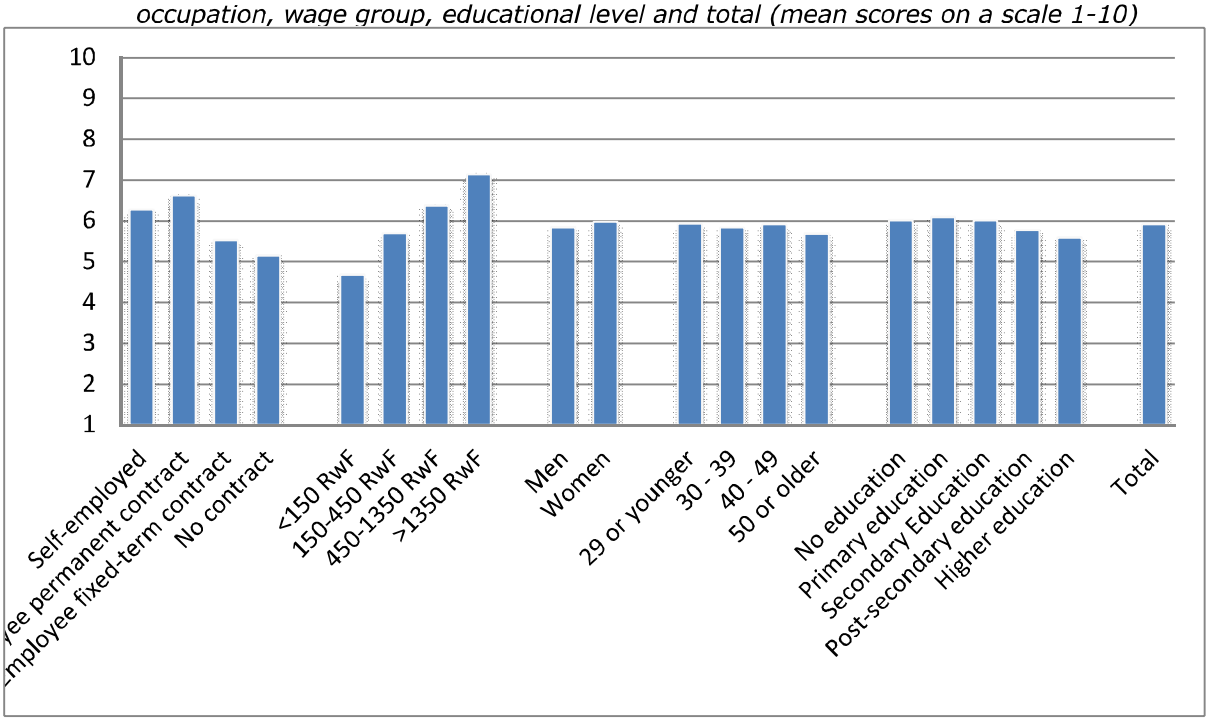
Graph 23 Percentage of workers indicating how satisfied they are with their life-as-a-whole.



Source: WageIndicator face-to-face survey Rwanda, 2012, weighted data (N=2070, 6 missing)

Groups do differ with respect to their life satisfaction as a whole. Graph 24 shows a breakdown for several groups. Workers earning more than 450 francs per hour, the self-employed and workers on permanent contracts are most happy. Workers earning less than 150 francs per hour are particularly unhappy. When explaining the variance in life satisfaction, wages, education and occupational status improve the likelihood of happiness.

Graph 24 Average satisfaction with life-as-a-whole, breakdown by employment status, gender, occupation, wage group, educational level and total (mean scores on a scale 1-10)



Source: WageIndicator face-to-face survey Rwanda, 2012, weighted data (N=2070, 6-95 missing)

Appendix 1 List of occupational titles

ISCO code	Occupational title	Unweighted Frequency
1120050000000	Technical department manager	41
1120060000000	Engineering department manager	29
1120070000000	Installation or repairs department manager	14
1120080000000	Manufacturing department manager	25
1211020000000	Financial department manager	212
1212020000000	Personnel department manager	79
1219030000000	Laboratory department manager	69
1219040000000	Housekeeping department manager	3
1219050000000	Administrative services department manager	50
1219070000000	Purchasing department manager	16
1219980000000	Department manager, all other	232
1221030000000	Marketing department manager	17
1221040000000	Sales department manager	149
1222020000000	Advertising department manager	16
1222030000000	Communications department manager	27
1222040000000	Public relations department manager	15
1223030000000	R&D department manager	28
1311060000000	Livestock farm manager	2
1324060000000	Road, rail, water or air transport company manager	5
1330020000000	IT department manager	58
1412010000000	Restaurant manager	42
1420050000000	Travel agency manager	5
3322000000000	Sales representative	50
3322260000000	Livestock dealer	4
3332030000000	Travel organiser	6
4120060000000	Secretary	75
4221020000000	Travel agency clerk	20
4226030000000	Receptionist, telephonist	41
4322050000000	Transport scheduling clerk	5
4412020000000	Courier	5
5113010000000	Travel guide	6
5120040000000	Food preparation worker	58
5131010000000	Waiter or waitress	50
5212010000000	Street vendor (food products)	43
5414010000000	Security guard	100
6111030000000	Field crop or vegetable farm worker	60
6121010000000	Dairy farmer	10
6121030000000	Livestock farm worker	2
6121040000000	Cattle farmer	7
6121050000000	Cow herder or shepherd	1
6129990000000	Livestock breeder, all other	1
6210010000000	Forestry worker	4
6210020000000	Logging worker	8
6210210000000	Tree feller	1
6310010000000	Subsistence crop farmer	14
6330010000000	Subsistence mixed crop or livestock farmer	25
7115010000000	Carpenter	11
8322020000000	Taxi driver	141
8332010000000	Truck driver	40
9112010000000	Cleaner in offices, schools or other establishments	113
9211020000000	Fruit, nut or tea picker	20
9212010000000	Cattle station helper	4
9212030000000	Livestock farm helper	3
9215010000000	Forestry helper	3
9313070000000	Carpenter helper	4

9333010000000	Freight handler, all other	5
	Total	2074

Appendix 2 Regressions

Dependent variable: log net hourly wages					
	B	Std. Error	Beta	t	Sig.
Constant	4,043	.104		38.734	.000
Female	.035	.052	.012	.669	.504
Educational level (0=lowest, .., 6=highest)	.439	.019	.482	22.548	.000
Employee permanent contract	.274	.069	.079	3.992	.000
Firmsize 1-5 empl	-.433	.072	-.143	-6.028	.000
Firmsize 6-10 empl	-.309	.083	-.077	-3.704	.000
Firmsize 11-20 empl	-.299	.079	-.080	-3.790	.000
Tenure (0-61 yrs)	.034	.003	.198	11.067	.000
Socio-Econ. Index of occ. status (ISEI 11=lowest, ..,76=highest)	.008	.001	.113	5.601	.000
N	1903				
R-square	.403				

Dependent variable: Paid up or above the poverty line yes/no						
	B	S.E.	Wald	df	Sig.	Exp(B)
Informality index (1=very informal, .., 5=very formal)	.151	.062	5.860	1	.015	1.163
Firmsize 1-5 empl	-.971	.197	24.321	1	.000	.379
Firmsize 6-10 empl	-.581	.214	7.408	1	.006	.559
Firmsize 11-20 empl	-.778	.198	15.365	1	.000	.459
Employee on permanent contract	.579	.204	8.063	1	.005	1.785
Educational level (0=lowest, .., 6=highest)	.078	.006	197.285	1	.000	1.081
Female	-.424	.139	9.309	1	.002	.655
Lives with partner	.481	.195	6.108	1	.013	1.618
Lives with child	-.085	.209	.163	1	.686	.919
Age (13-66 yrs)	.047	.009	24.606	1	.000	1.048
Socio-Econ. Index of occ. status (ISEI 10=lowest, ..,79=highest)	.016	.004	16.437	1	.000	1.016
Constant	-4.942	.415	141.856	1	.000	.007
N	1584					
-2 Log Likelihood	1361.781					

Dependent variable: Covered by a collective agreement yes/no (don't know answers coded as no)						
	B	S.E.	Wald	df	Sig.	Exp(B)
Employee on permanent contract	.851	.129	43.410	1	.000	2.341
Educational level (0=lowest, .., 6=highest)	.029	.004	51.958	1	.000	1.030
Female	-.002	.109	.000	1	.983	.998
Firmsize 1-5 empl	-1.523	.152	100.334	1	.000	.218
Firmsize 6-10 empl	-.557	.159	12.311	1	.000	.573
Firmsize 11-20 empl	-.168	.149	1.265	1	.261	.846
Tenure (0-61 yrs)	-.018	.007	7.493	1	.006	.982
Socio-Econ. Index of occ. status (ISEI 11=lowest, ..,76=highest)	.006	.003	3.212	1	.073	1.006
Constant	-1.396	.216	41.620	1	.000	.248
N	1956					
-2 Log Likelihood	2039.272					

Dependent variable: Satisfaction with life as-a-whole (1 – dissatisfied to 10 – satisfied, excluding values 1 and 10 in the analyses)					
	B	S.E.	Beta	t	Sig.
Constant	5.396	.207		26.053	.000
Employee on permanent contract	-.092	.099	-.024	-.931	.352
Education level (0=lowest, .., 6=highest)	.012	.003	.119	3.642	.000
Female	.018	.077	.006	.237	.812
Less than 150 RwF	-1.292	.146	-.367	-8.862	.000
150 - 450 RwF	-.919	.132	-.255	-6.986	.000
450 - 1350 RwF	-.351	.118	-.099	-2.983	.003
Living with a partner	-.018	.109	-.006	-.161	.872
Living with a child	.172	.116	.053	1.478	.140
<29 years	-.004	.102	-.001	-.039	.969
30-39 years	-.034	.058	-.028	-.580	.562
40-49 years	.103	.058	.087	1.775	.076
Socio-Econ. Index of occ. status (ISEI 11=lowest, ..,76=highest)	.008	.002	.105	3.880	.000
N	1442				
R-squared	.201				

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