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# THE WORKFORCE OUTCOMES REPORTING QUESTIONNAIRE (WORQ): PILOT FINDINGS

Prepared by Mousumi Sarkar with oversight and input from Rebecca Povec Pagel. This How-To Note was produced under United States Agency for International Development (USAID). The contents are the responsibility of Mousumi Sarkar through the Education Support Initiative managed by Dexis Consulting Group and do not necessarily reflect the views of USAID or the United States Government.

On the cover

Top left: Youth soft-skills training in the Philippines. Credit: Youth photographer in the Philippines

Top middle: Construction skills training in Rwanda. Credit: Youth photographer in Rwanda

Top right: A young entrepreneur in Honduras. Credit: Youth photographer in Honduras

Bottom left: Women stocking shelves in Rwanda. Credit: Youth photographer in Rwanda

Bottom middle: Man with a textile machine in Morocco. Credit: USAID

Bottom right: A quality manager at the Surtab factory, Port-au-Prince, Haiti. Credit: David Rochkind, USAID

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## ACRONYMS

| | |
|---|---|
| ILO | International Labour Organization |
| MEL | Monitoring, Evaluation, and Learning |
| NGO | Non-Governmental Organization |
| SDG | Sustainable Development Goal |
| USG | U.S. Government |
| USAID | United States Agency for International Development |
| WORQ | Workforce Outcomes Reporting Questionnaire |
| YWFD | Youth Workforce Development |

# INTRODUCTION

The Workforce Outcomes Reporting Questionnaire (WORQ) package of tools—developed by the U.S. Agency for International Development's (USAID) Office of Education—is designed to measure youth's employment and earnings. The data generated from the tools will enable USAID to understand the contribution of its youth workforce development (YWFD) programming to improving individuals' employment situations around the world. The two key indicators the tools are designed to measure are:

- EG. 6-11: Average percent change in earnings following participation in U.S. Government (USG)-assisted workforce development programs
- EG. 6-12: Percent of individuals with new employment following participation in USG-assisted workforce development programs

Activities may also use the tool to measure and report against ES. 1-46: Percent of individuals who transition to further education or training following participation in USG-assisted programs.[1]

To ensure the development of a reliable, validated tool that can be used across USAID YWFD activities, USAID piloted the survey in two countries. This report explains the methodology and findings of the pilot study.

# PILOT METHODOLOGY

The pilot was conducted in February 2019 with participants in USAID-sponsored YWFD activities in two countries:

- Kyrgyzstan, through The Enhancing Employability and Civic Engagement of Youth activity
- Rwanda, through The Huguka Dukore activity, which included graduates of the Akazi Kanoze activity

These activities and countries were selected using a convenience sampling strategy (based on availability of activities and the feasibility of conducting testing in those countries). Each of these activities provides 3- to 9-month training to youth and helps connect youth with jobs. All WORQ items, except for those related to transition to further education or training, were tested.

The pilot tested different administration approaches as well as the test/retest reliability of the tool to answer the following questions:

- Which mode of administration—self-administration or face-to-face interview—produces the highest data quality?
- Which iteration of an item is the most reliable and should be maintained for the final WORQ tool?

[1] Items related to this indicator were not tested for validity or reliability.

## DATA COLLECTION

To determine the best administration approach and the most reliable items for inclusion in the WORQ, USAID implemented three data collection activities through the pilot study: a pilot test plus debrief questions, an exit interview, and a test/retest (see Table 1).

**TABLE 1: DATA COLLECTION**

| DATA COLLECTION ACTIVITY | KYRGYZSTAN | RWANDA |
|---|---|---|
| Pilot Test | Self-administered on tablet | Interviewer-administered face-to-face using computer-assisted interviewing |
| Exit Interview | Interviewer-administered using paper copies | -- |
| Test/Retest Survey | Interviewer-administered over the phone using computer-assisted interviewing | Interviewer-administered face-to-face using computer-assisted interviewing |

### PILOT TEST

USAID implemented a pilot test of all WORQ items—including the WORQ, the Extra WORQ, and the Impact WORQ items—in order to gather the necessary data to determine the best administration mode and the most reliable items. In Kyrgyzstan, the WORQ items were self-administered on a tablet. In Rwanda, the survey was administered by trained interviewers in face-to-face interviews using computer-assisted personal interviewing (CAPI) software on a tablet.

At the end of the pilot test, respondents answered debrief questions. The debrief questions asked participants to rate the ease or difficulty of remembering information on the amount they had earned and the hours they worked on a scale of 1 to 10, where 1 equaled "Very Difficult" and 10 equaled "Very Easy." Participants were also asked to rate the accuracy of their responses on a scale of 1 to 10, where 1 equaled "Not at all Accurate" and 10 equaled "Very Accurate."

Differences in data quality between the Rwanda and Kyrgyzstan administrations as well as responses to debrief questions helped USAID to determine the best approach for administering the tool.

### THE WORQ PACKAGE

The WORQ package contains four surveys. All items in the WORQ package--regardless of in which tool they are included--were tested in the pilot study, with the exception of questions on transitioning to school or further training.

- The WORQ includes the questions required to measure and report the three key indicators
- The Extra WORQ includes all WORQ items as well as additional items that may provide helpful background information on participant's work lives
- The Impact WORQ includes items that capture information on secondary sources of earnings to allow for more accurate comparison between program participants and control or comparison group youth
- The Quick WORQ can be administered by activities to obtain trends over time and is particularly recommended for contexts in which seasonal work is common.

### EXIT INTERVIEW

USAID implemented exit interviews with a random sample of participants in Kyrgyzstan, who self-administered the tools. Exit interviews, implemented immediately after the pilot test, allowed USAID to check respondent answers and understand the utility of self-administration. Interviewers asked participants a subset of key items from the survey (employment status, employment type, time worked, and wages items) using paper copies of the survey, which they compared to the participant's responses in the self-administered version. Interviewers asked respondents to explain any discrepancies between their pilot responses and their exit interview responses.

### TEST/RETEST

In order to determine the test/retest reliability of the WORQ package of tools, interviewers contacted respondents one to three weeks after the pilot test to ask them the WORQ items again. In Kyrgyzstan, interviewers collected the test/retest survey data one week after the pilot test; interviews were implemented over the phone using computer-assisted telephone interviewing (CATI) software. In Rwanda, interviewers conducted face-to-face interviews using CAPI software on a tablet two to three weeks after the pilot test. Because of the timing of the survey administration, Kyrgyz participants answered the test/retest survey for the same time frame as the initial survey (January 2019 for both), while Rwandan participants answered for a different time frame during the test/retest survey (February 2019) compared to the initial survey (January 2019).

## SAMPLE DESIGN

A convenience sample of eligible youth from each activity was recruited to participate in the pilot. Recruited youth were randomly assigned one of two tools in the WORQ package—the WORQ or the Extra WORQ, which also included all additional items from the Impact WORQ. A total of 193 WORQ and 71 Extra WORQ + Impact surveys were completed, for a total of 264 surveys (see Table 2).

**TABLE 2: PILOT SAMPLING**

| CHARACTERISTICS | KYRGYZSTAN | RWANDA | TOTAL |
|---|---|---|---|
| Dates of interviews | Feb 2019 | Feb/Mar 2019 | Feb/Mar 2019 |
| Pilot Test | 178 | 86 | 264 |
| *WORQ* | *140* | *53* | *193* |
| *Extra WORQ + Impact* | *38* | *33* | *71* |
| Exit Interview *(subset of Pilot Test respondents)* | 33 | -- | 33 |
| Test/Retest Survey *(attempts were made with all Pilot Test respondents)* | 146 | 81 | 227 |

The 33 exit interview participants in Kyrgyzstan were randomly sampled from the pool of individuals who took the pilot test. A small stipend was paid to all participants.

**THE TEST/RETEST SURVEY WAS IMPLEMENTED WITH AS MANY PILOT TEST PARTICIPANTS AS COULD BE REACHED ONE TO THREE WEEKS AFTER THE PILOT TEST.**

**THE TEST/RETEST SURVEY WAS COMPLETED WITH 227 PARTICIPANTS (146 IN KYRGYZSTAN AND 81 IN RWANDA).[2] DATA ANALYSIS**

Data were analyzed using *Statistical Package for the Social Sciences* (SPSS). In addition to statistical tests such as frequencies and means, specific tests were used to understand test/retest reliability.

To calculate test/retest reliability for categorical variables, such as employment status and employment type, researchers used Spearman's rho ($r_s$).[3] For continuous variables, such as the amount of time worked and amount of money earned, a Pearson correlation (r) was used to assess the strength of the relationship between the pilot test and test/retest survey, and paired-sample t-tests were used to assess if differences between reported numbers were significant across the two surveys. For both categorical and continuous variables, the percentage of individuals changing their responses was also evaluated.

**LIMITATIONS**

WORQ pilot activities were planned to provide information on administration mode and survey items; however, some mitigating circumstances and gradual improvements to the survey limited researchers' ability to answer the two research questions. These limitations are presented below.

USAID worked with implementing partners to pilot the WORQ in existing YWFD activities; all survey respondents were activity participants. While a specific list of selection criteria governed respondent selection, respondents were not randomly selected from activity rosters and may therefore not be representative of a typical YWFD activity participant. Similarly, pilot activities were implemented in two countries, selected for their very different contexts, but that do not represent all countries in which USAID YWFD activities are implemented. Further piloting in new contexts may reveal more nuances to the WORQ package of tools.

The administration mode differed between Kyrgyzstan and Rwanda to allow researchers to determine if administration mode was a key driver of item reliability and accuracy. However, other differences between respondents in the two contexts may also drive differences in results. Where possible, this report notes when the presence of other confounding factors may be driving findings. Still, the fact that items were more reliable in interviewer-administered Rwanda, where respondents had more informal employment and lower socioeconomic conditions than in self-administered Kyrgyzstan, suggests that administration mode may be a meaningful source of this difference.

Test/retest was planned for one week after the pilot test in both Kyrgyzstan and Rwanda. Scheduling difficulties, however, meant that Rwandan respondents took their test/retest two to three weeks after their pilot test. By this point, the reference month (January in the pilot test) had changed (February in the test/retest); researchers decided not to change the test/retest reference month due to the cognitive burden it would place on participants. Thus, some differences in responses between the pilot test and

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[2] Test/retest interviews were completed with 31 additional participants, but initial interviews of the full survey were not conducted with these individuals. Hence, they were excluded from the analysis.

[3] Spearman's rho is a non-parametric test used with ordinal data to calculate the strength of association between two variables, with 1 meaning perfect positive association and -1 meaning negative association. This test was used to determine the association between the categorical variables (values of 0.40 or higher are considered moderate and better). Pearson correlation is used to calculate the strength of linear association between continuous variables with values ranging from +1 to -1, and values of |0.4| or higher being considered moderate or better. Note, all tests are reported at the $p < 0.05$.

test/retest for Rwanda may be driven by respondents providing data on a different reference month. Whenever this may be the case, it is stated below.

# FINDINGS

## PILOT PARTICIPANT DEMOGRAPHICS

A total of 264 individuals participated in the pilot—178 of whom lived in Kyrgyzstan and 86 in Rwanda. The participants were evenly divided by sex (52 percent female; 48 percent male); their average age was 22 years. Almost four in ten (39 percent) had less than a high school education, 44 percent reported being college graduates, and the remainder had either completed high school, some college, or were currently attending college or university (see Table 3).

At the time of the pilot test, 22 percent of the participants reported being in irregular or when-work-is -available wage employment; 23 percent said they were self-employed; 17 percent reported being in regular or set hours wage employment; and 12 percent reported helping with household enterprises (most of those were in Kyrgyzstan). Only 2 percent of the participants reported working for in-kind income. Almost one-quarter (23 percent) of the participants were unemployed and three (1 percent) reported not being in the labor force at all—one said it was not the right season, another was taking care of family, and the third was engaged in sporting activities (see Table 3).

**TABLE 3: PILOT PARTICIPANTS**

| CHARACTERISTICS | KYRGYZSTAN | RWANDA | TOTAL |
|---|---|---|---|
| TOTAL INTERVIEWS | 178 | 86 | 264 |
| Gender | | | |
| Male | 86 (48%) | 40 (47%) | 126 (48%) |
| Female | 92 (52%) | 46 (53%) | 138 (52%) |
| Education | | | |
| Less than high school | -- | 80 (93%) | 102 (39%) |
| High school | -- | 4 (5%) | 4 (2%) |
| Some college | 40 (22%) | -- | 40 (15%) |
| College graduate | 113 (63%) | 2 (2%) | 115 (44%) |
| Refused | 3 (1%) | -- | 3 (1%) |
| Average Age | *22.2 years* | *22.5 years* | *22.3 years* |
| Primary Type of Work | | | |
| Wage (regular/set hours) | 32 (18%) | 13 (15%) | 45 (17%) |
| Wage (irregular/set hours) | 30 (17%) | 28 (33%) | 58 (22%) |

| TABLE 3: PILOT PARTICIPANTS | | | |
|---|---|---|---|
| CHARACTERISTICS | KYRGYZSTAN | RWANDA | TOTAL |
| Self-employed | 33 (19%) | 27 (31%) | 60 (23%) |
| Household enterprise | 30 (17%) | 2 (2%) | 32 (12%) |
| Working for in-kind only | 5 (3%) | 1 (1%) | 6 (2%) |
| Student | -- | -- | -- |
| Unemployed | 45 (25%) | 15 (17%) | 60 (23%) |
| Not in labor force | 3 (1%) | -- | 3 (1%) |

## PILOT FINDINGS

The data obtained during the pilot were analyzed to ascertain the best mode of administration for the survey as well as to determine which items were reliable enough to include in the WORQ.

### ADMINISTRATION MODE

The survey was self-administered to participants in Kyrgyzstan using tablets, but implemented as a face-to-face interview in Rwanda by individuals trained to ask WORQ items and prescribed probes. Findings from the pilot test, debrief questions, exit interview, and test/retest suggest that the mode of administration is important to obtaining consistent answers in this survey, and that **self-administration of the survey should be avoided in favor of face-to-face interview-style administration**.

### SURVEY ADMINISTRATION TIME

Survey administration time was only available on the Rwanda data. The WORQ items, on average, took 20 minutes and 46 seconds to administer, with the minimum being 8 minutes and 38 seconds and the maximum being 50 minutes 56 seconds. Administering the entire survey, including the WORQ, Extra WORQ, and Impact WORQ items, took an average of 37 minutes and 34 seconds, with the minimum being 14 minutes and 55 seconds and the maximum being 1 hour 58 minutes and 18 seconds.

Note that the average time includes the time to administer the debrief questions, which means that the actual administration time will be shorter for the WORQ survey. It is anticipated that the final WORQ survey could be completed in an average of 15 minutes.

### PILOT TEST

An analysis of the non-responses in the pilot test data shows that non-response was higher in the Kyrgyzstan data, which was collected using a self-administered survey (see Table A-2 in Attachment A). For example, 12 percent of regular wage workers self-administering the survey did not provide information on the number of days they typically worked and 16 percent did not provide the hours per day they typically worked. Irregular wage workers self-administering the survey were even less likely to provide days worked (30 percent non-response for last week and 26 percent for the last month) and hours worked (25 percent non-response). Finally, 24 percent of those in own employment who self-administered did not report the number of days they worked in a typical week. There was almost no non-response among those who completed the survey with the help of interviewers.

DEBRIEF QUESTIONS

Debrief questions asked at the end of the pilot test indicate that respondents in Kyrgyzstan self-administering the survey found it more difficult to remember information for amount earned and number of hours worked and felt their responses were less accurate compared to those in Rwanda who completed the survey with interviewer assistance (see Figures 2A, 2B, 3A, and 3B). These data, too, argue against self-administration of the survey, as participants who self-administered were significantly more likely to find the survey difficult to complete and reported their responses to be less accurate.

**Figure 2A: Ease of Remembering Amount Earned (Average Rating) (1=Very Difficult and 10=Very Easy)**

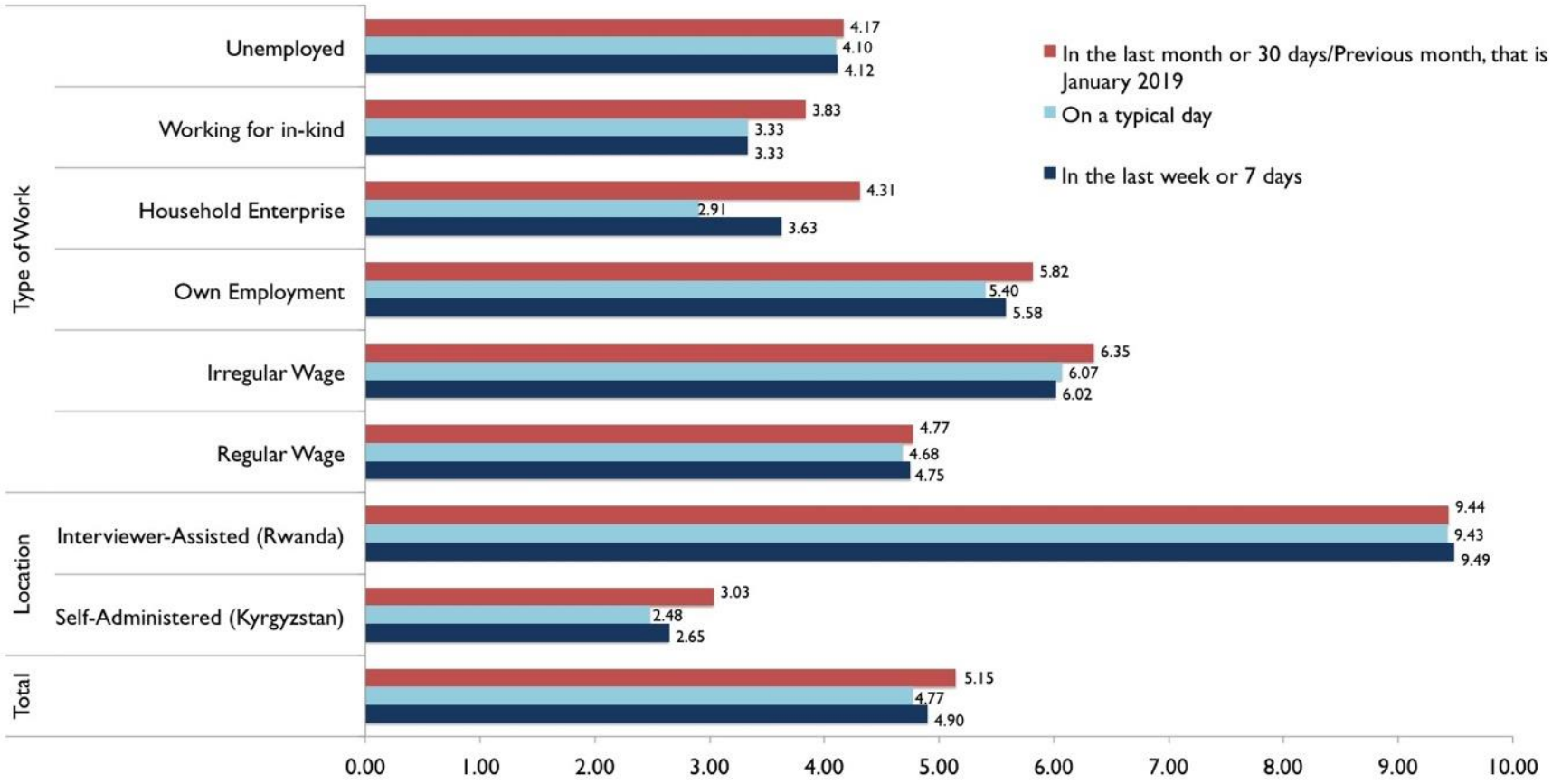
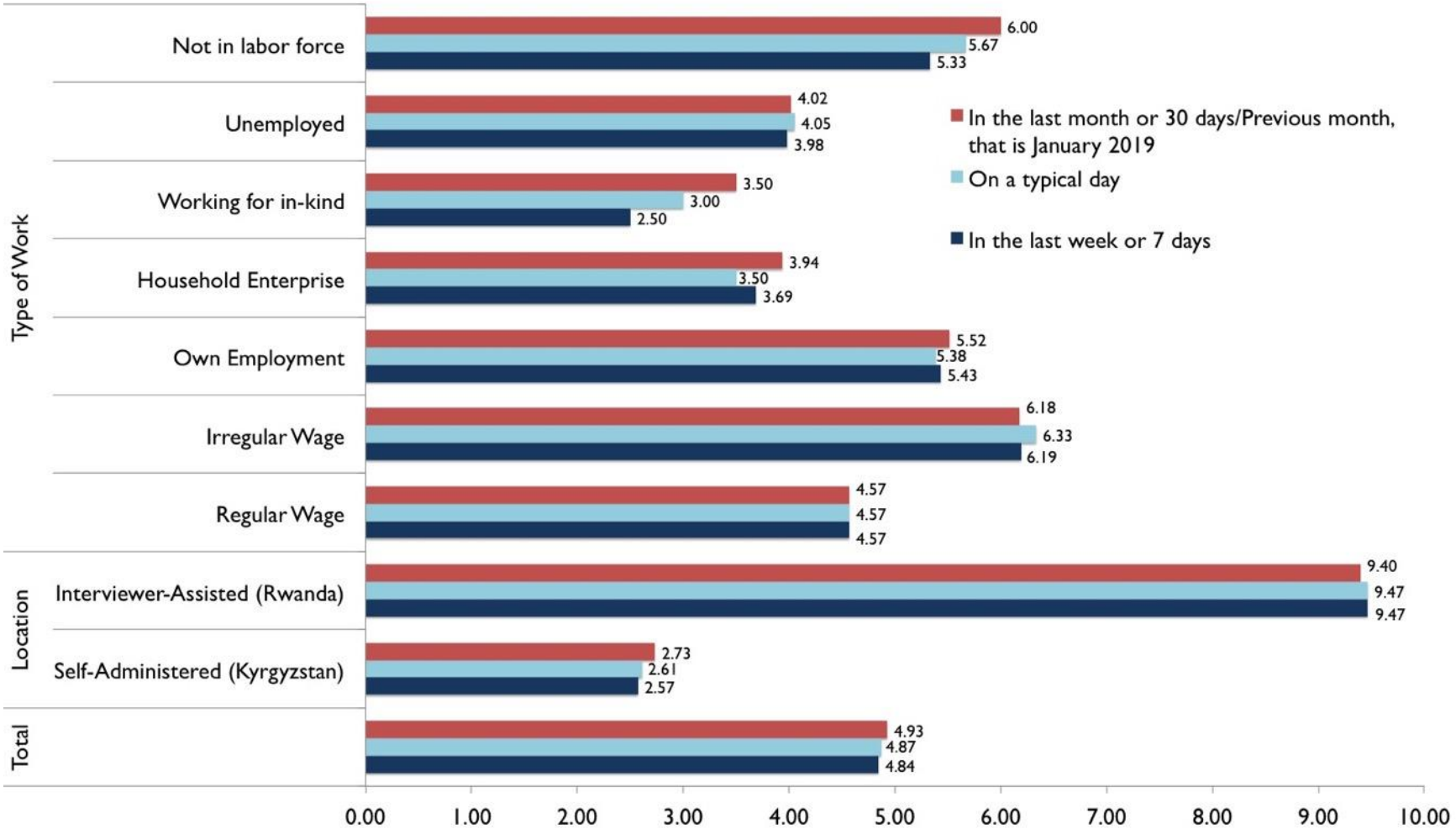


**Figure 2B: Accuracy of Remembering Amount Earned (Average Rating) (1=Very Difficult and 10=Very Easy)**



EXIT INTERVIEW

Exit interviews in Kyrgyzstan allowed researchers to check respondent's data by re-asking a core set of questions immediately after the pilot test. Interviewers probed for the reasons for any discrepancies. Discrepancies in key questions used to calculate employment status indicate that self-administration of the survey may result in some inconsistencies in the data. Notably, six of the 33 respondents (18 percent) changed their response to the question "In the previous month, did you do anything to earn money?" (Q1). Further, the largest variation in responses was seen in items on regular wage work (see Table A-1 in Attachment A for more details).

**Figure 3A: Ease of Remembering Number of Hours Worked (Average Rating) (1=Very Difficult and 10=Very Easy)**

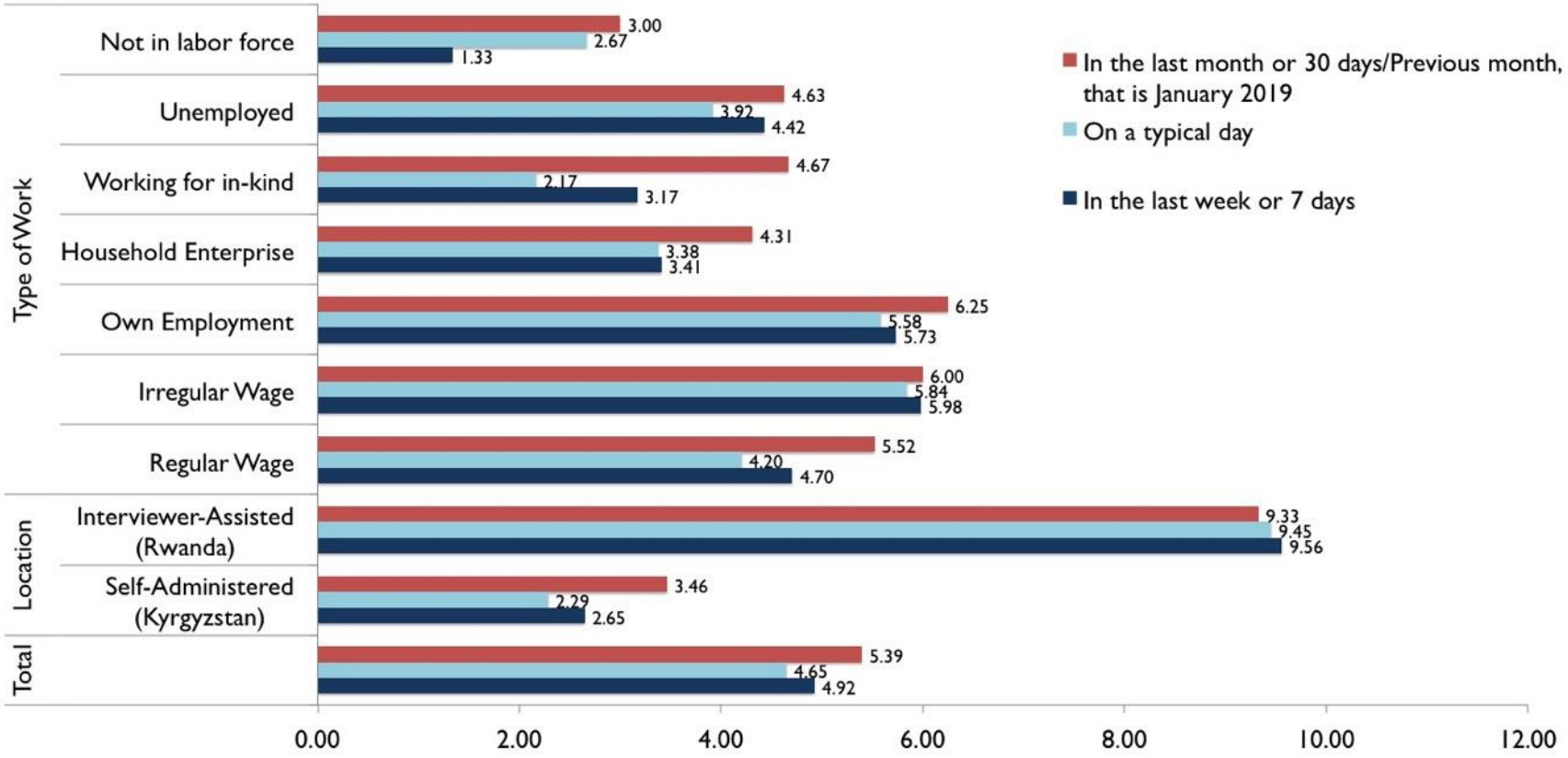
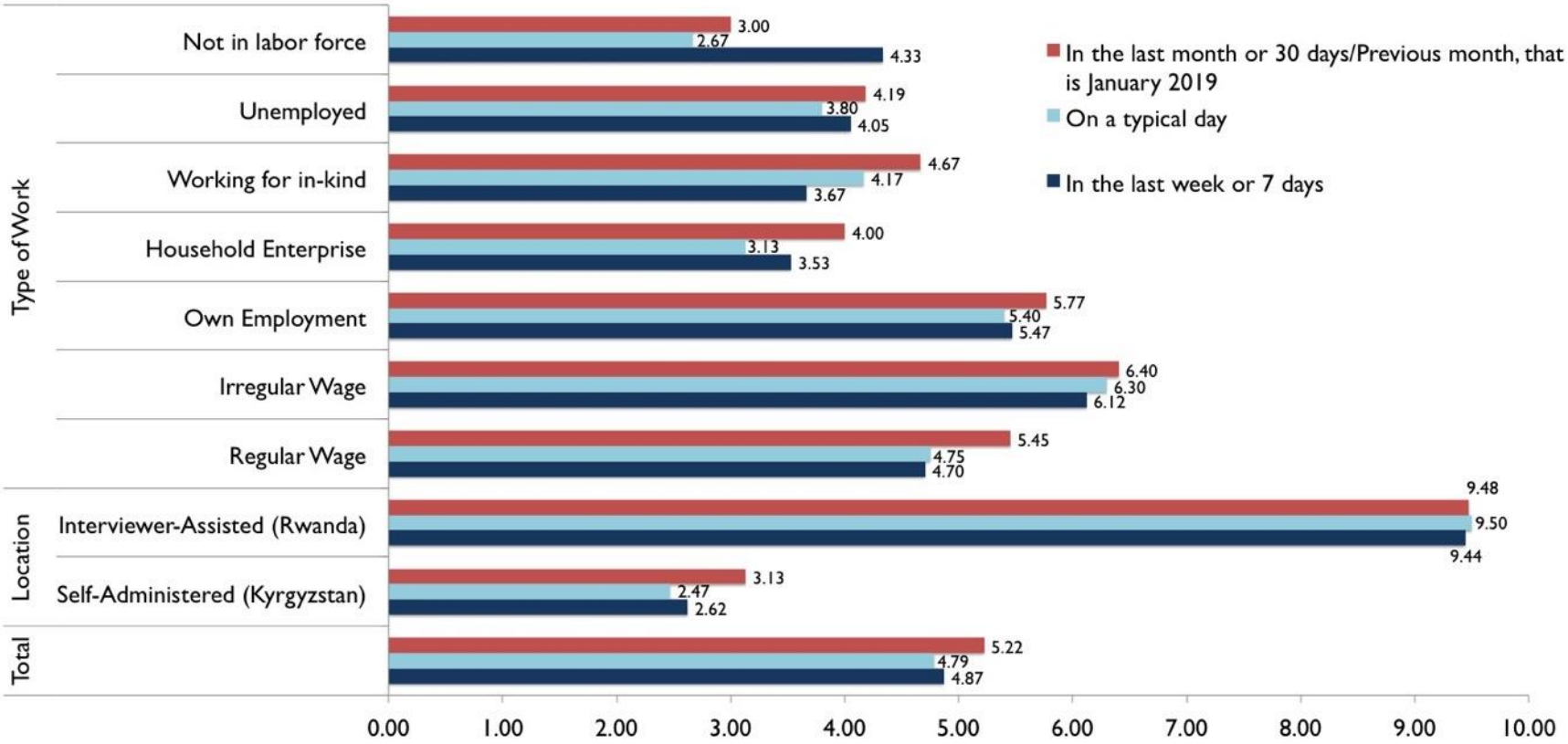


**Figure 3B: Accuracy of Remembering Hours Worked (Average Rating) (1=Very Difficult and 10=Very Easy)**



TEST/RETEST

The test/retest allowed researchers to examine test/retest reliability between the pilot test and the test/retest for both self-administered and face-to-face interview data. In Kyrgyzstan, the mode of administration changed between the pilot test (self-administration) and the test/retest (phone interview), whereas in Rwanda, the mode (face-to-face interview) remained the same. This allowed researchers to determine 1) if administration mode affected data reliability, and 2) if so, which administration mode had a higher rate of error. While other confounding, unobservable, cultural factors may be at work, findings suggest that survey administration plays a key role in reliability and accuracy of data.

In general, test/retest reliability—of the same items in each country—was stronger in Rwanda than in Kyrgyzstan, even though Kyrgyz participants took their test/retest within one week of the pilot test and Rwandan participants took their test/retest between two and three weeks after the pilot test. This difference in time frames meant that the time frame of questions remained the same for both the pilot test and test/retest in Kyrgyzstan but not in Rwanda, and still Rwanda had higher reliability.

Specifically, test/retest reliability for time worked and amount earned items was generally stronger, as measured by Pearson correlation (r) between pilot test and test/retest data, among those completing the survey with interviewer assistance (in Rwanda) compared to those self-administering the survey (in Kyrgyzstan):

- Number of hours reported by those in irregular wage work was more reliable in interviewer-assisted Rwanda even though the time frame for reporting was different ($r = 0.598$) compared to data obtained from those self-administering the pilot test in Kyrgyzstan ($r = -0.277$).

- Reliability for **number of days worked** by those in irregular wage work in the last week or seven days was low overall ($r = -0.053$), but was at acceptable levels in interviewer-assisted Rwanda ($r = 0.561$) compared to self-administered Kyrgyzstan ($r = -0.061$). A similar pattern in reliability is also seen for number of days worked in the last/previous month with the overall r being -0.017—but reliability was strong in interviewer-assisted Rwanda ($r = 0.795$) while it was weak in self-administered Kyrgyzstan ($r = 0.199$).

- Usual take-home pay reported in currency by regular wage workers varied by 30 percent between the pilot test and test/retest in Kyrgyzstan compared to a 5 percent variation among those reporting in Rwanda; the difference between pilot test and test/retest among self-administered participants' data was statistically significant at the 90 percent confidence level. This suggests that the variation may be due to the differences in modes, rather than due to the question or the context, as variation was low in Rwanda where the survey was administered by interviewers in both instances using prescribed probes. In Kyrgyzstan, where the variation was much larger, the only difference between the two iterations was the mode of data collection (self-administration versus telephone interview).

Data entry error in self-administration was high. For example, the variation in number of hours worked by regular-wage workers between the pilot test and test/retest was 2.93 hours in Kyrgyzstan compared to 0.25 hours among interviewer-assisted participants in Rwanda. Most of the high variation in Kyrgyzstan could be attributed to outliers in the data, which appeared to be data entry errors by the participants self-administering the survey.

Based on the findings from the pilot test, exit interview, debrief, and test/retest, USAID recommends that the survey not be self-administered, but be administered, preferably face-to-face, using trained interviewers.

## DETERMINING MOST RELIABLE ITEMS

In order to discern and maintain only reliable items, the pilot test tool often included different versions of the same item. Items were tested for their test/retest reliability; findings determined which items were maintained for the final WORQ package and which were discarded. Key items, their reliabilities, and any changes made between the pilot test and the final version of the WORQ tool are discussed below.

### EMPLOYMENT STATUS AND TYPE

The main items—Q1, Q2, and Q2A in Table 4A below—used to calculate employment status and determine the type of employment in which the participant was engaged in the previous month have acceptable levels of test/retest reliability. Test/retest reliability for these individual items was higher among self-administered survey takers (as in Kyrgyzstan) compared to those completing interviewer-assisted interviews as in Rwanda, as shown in Table 4A. This may be due to Rwandan respondents using a different reference month for the pilot test and test/retest and/or to the higher incidence of the more volatile self-employment and irregular wage work that characterized Rwandan respondents disproportionately. Regardless, test/retest reliabilities are within the acceptable range for both countries respectively and combined.

**TABLE 4A: TEST/RETEST RELIABILITY OF RELEVANT CATEGORICAL ITEMS (SPEARMAN'S RHO)**

| ITEMS | SELF-ADMINISTERED (KYRGYZSTAN) | INTERVIEWER-ASSISTED (RWANDA) | COMBINED TOTAL |
|---|---|---|---|
| TOTAL INTERVIEWS | 146 | 81 | 227 |
| Initial time-frame | Feb 2019 | Feb 2019 | Feb 2019 |
| Test/Retest time-frame | Feb 2019 | Mar 2019 | Feb/Mar 2019 |
| Q1. In the last month or last 30 days/previous month, meaning in [insert previous month year], did you do anything to earn money? | 0.611 | 0.543 | 0.598 |
| Q2. Now, think about what you did to earn most of your income in the last month, that is, the last 30 days/[insert previous month year]. Was that:<br>• helping in a business that is run by someone who is related to you and lives with you; or<br>• was it running a business that you own alone or you own with someone else, that is, working for yourself [to earn money]; or<br>• was it working for someone else [to earn money]? (only asked if Q1 is Yes) | 0.673 | 0.520 | 0.625 |
| Q2A. Is the work you did for someone else in the previous month, meaning in the last month, that is, last 30 days/[insert previous month year]:<br>• Regular, that is, something you do for a set number of hours every week, or<br>• something that you did when work was available? (only asked if Q2 is Wage Employment) | 0.572 | 0.512 | 0.558 |

As a part of determining the consistency of participants' responses, the percentage of participants changing their responses about their employment status between the two survey iterations was also evaluated (see Table 5). Participants' employment status could have changed between the time of the initial survey and the test/retest survey, a period ranging between one and three weeks. Of those who participated in both surveys, 37 percent reported changes in their work status, with the change being larger among those completing it with interviewer assistance as in Rwanda (40 percent), possibly due to the different time periods for which participants responded in the two surveys, and the larger proportion of those in irregular wage work or in own-employment whose employment status can generally be more volatile, compared to those self-administering as in Kyrgyzstan (37 percent).

**TABLE 5: CHANGE IN EMPLOYMENT STATUS BETWEEN INITIAL AND TEST/RETEST SURVEYS**

| EMPLOYMENT STATUS AT INITIAL PILOT TEST | EMPLOYMENT STATUS AT TEST/RETEST (%) | | | | | |
|---|---|---|---|---|---|---|
| | NOT WORKING | REGULAR WAGE | IRREGULAR WAGE | OWN BUSINESS | HOUSEHOLD ENTERPRISE | TOTAL |
| TOTAL INTERVIEWS | 60 | 34 | 60 | 49 | 24 | 227 |
| Not Working | 71 | 3 | 12 | 10 | 3 | 100 |
| Regular Wage | 11 | 51 | 30 | 5 | 3 | 100 |
| Irregular Wage | 12 | 6 | 65 | 12 | 4 | 100 |
| Own Business | 2 | 19 | 12 | 63 | 4 | 100 |
| Household Enterprise | 23 | -- | 13 | 7 | 57 | 100 |
| Total | 26 | 15 | 26 | 22 | 11 | 100 |

Based on these findings, no changes were made to the survey items, though acceptable but not superb reliability statistics suggest the importance of using interviewer probes to obtain the most accurate data possible.

RELIABILITY OF DATA ON THE EMPLOYED

The other items of interest were related to details about employed individuals' employment. Thus, the reliability analysis was restricted to the 63 percent of the sample whose employment status and type of employment had not changed between the pilot test and test/retest. This is because time worked and earnings would most likely be different for those who had a different employment status or type of employment.

The different employment types—regular wage work, irregular wage work, own/self-employment, and helping in a household enterprise—are used to organize the findings from the analysis. Within each employment type, information on the consistency of the data are presented for the amount of time worked (days and hours) and the amount of money earned.

Table A-3 in Attachment A shows the percent of cases reporting change in these items between the initial and the test/retest surveys. Table A-4 in Attachment A shows the average and median differences

in the values given by individuals whose work status, including the type of employment they engaged in, did not change between the two iterations of the survey.

### *Regular Wage Work*

*Amount of Time Worked*

The **number of days worked** by regular wage workers was highly reliable with a Pearson's r of 0.916 (0.957 among self-administered survey participants in Kyrgyzstan and 0.577 among interviewer-assisted ones in Rwanda—the discrepancy most likely because of the different time periods for which the participants in Rwanda responded to the item). Of those reporting the number of days worked in both iterations, 17 percent overall changed their answers. While it is possible that the last week they worked was different from a typical week, the difference in the number of days they reported was 0.17 on average (0.14 for self-administered Kyrgyzstan and 0.25 for interviewer-assisted Rwanda); this variation between the iterations was minor and was not statistically significant.

While reliability was poor overall for **number of hours worked**, differences were small and not statistically significant. Overall, reliability was low with r = 0.152 (r = 0.095 in self-administered Kyrgyzstan but r = 0.986 in interviewer-assisted Rwanda). There was large variation in the responses, with 50 percent overall reporting changes between the pilot test and test/retest in the number of hours they worked in a typical day. The average difference in the number of hours reported, however, was 2.33 (2.93 for self-administered Kyrgyzstan and 0.25 for interviewer-assisted Rwanda), which was not statistically significant. When an outlier in the Kyrgyzstan data, resulting from a typo during the self-administration of the initial survey, is removed, then the average difference decreases to 0.76 hours (0.92 for Kyrgyzstan), which is less than one hour, thus indicating that variation between the iterations was minor and not statistically significant. It is possible the mistyped data by those self-administering the survey also resulted in lower reliability for this item among those self-administering the survey.

*Amount of Money Earned*

When it came to **usual take home pay**, the Pearson correlation (r) was strong at 0.856, thus indicating strong reliability for this item (r = 0.588 in self-administered Kyrgyzstan and could not be computed due to a lack of cases in interviewer-assisted Rwanda).

Reliability for the **time covered by the payment** was moderate, with the $r_s$ being 0.671 (-0.267 in Kyrgyzstan and not enough cases for computation in Rwanda). The cognitive interviews had indicated some issues with comprehension of this item, as many participants answered based on the day they were paid or the time the money lasted.

Based on these findings, a definition was added to the survey to explain "period of payment" for those respondents who might need this definition. Additional interviewer instructions were also added to ensure that interviewers were obtaining information based on the correct definition.

During interviewer training, implementers should provide additional instructions to interviewers to ensure they are capturing information on "usual" or "typical" or "normal" days and hours worked, and pay taken home.

### *Irregular Wage Work*

*Amount of Time Worked*

Irregular wage workers initially answered two questions on time worked: number of days worked in the last week or seven days, and number of days worked in the last 30 days. After a review of cognitive test data in Kyrgyzstan, "number of days worked in the last 30 days" was changed to "the last month, as in January." As a result, in Rwanda, the test/retest referenced a different month (February) than the pilot test (January). While analysis focused on determining whether or not to drop one of the two questions with different time horizons, because of the wording change that changed the reference month from Rwanda, test/retest reliability may be the result of a different reference month and, therefore, "days worked in the last 30 days" is excluded from the below discussion.

The **number of days worked** in the last week or seven days by irregular wage workers had low reliability with a Pearson's r of -0.053, though reliability is much higher when self-administered Kyrgyzstan is excluded (-0.061 among self-administered survey participants in Kyrgyzstan and 0.561 among interviewer-assisted ones in Rwanda). Of those reporting the number of days worked in the last week or seven days, 66 percent overall changed their answers (73 percent in self-administered Kyrgyzstan and 61 percent in interviewer-assisted Rwanda). The difference in number of days reported, on average, varied by 1.03 days for the week or seven-day period (1.18 days in Kyrgyzstan and 0.94 days in Rwanda), which was not statistically significant. Yet the variation in the data for the week represented a change of 15 percent over a seven-day time period, while the variation in the data for the month represented a change of 10 percent over a thirty-day time period.

Analysis of the initial survey data indicated that collecting the number of days worked in the last week or seven days may not be adequate for understanding the number of days the participant worked during the month, because many of these participants worked only when work was available. The average number of days reported during the initial survey for the week was 3.93 in Kyrgyzstan, which would represent 15.7 days in a month, but the average number of days reported for the month was 13.6 days. Similarly in Rwanda, the number of days reported for one week, on average, was 3.04, which would translate into 12.2 days in a month, but the average number of days reported for the month was 14.2 days. When the Rwanda and Kyrgyzstan data are combined, however, the data was closer with the week-long average being 3.49, which would translate into 13.96 days in a month, and the monthly average was 13.89 days.

Based on these findings, implementers are encouraged to ask respondents to answer both timeframes—the last seven days and the last month—as some respondents can answer one better than the other, and researchers can determine which item works better in their context.

A similar level of variation was observed in the **hours worked** when participants last worked at that job. Sixty-two percent of the participants (55 percent in self-administered Kyrgyzstan and 67 percent in interviewer-assisted Rwanda) changed their answer between the survey iterations, which is to be expected because the question asked about the last time they worked at that job, and it is possible that the hours worked would change as these participants reported working an irregular schedule or when work was available. Still, the average difference in hours reported was just 0.28 hours (-0.73 hours in self-administered Kyrgyzstan and 0.89 hours in interviewer-assisted Rwanda), which was not statistically

significant and well within expected natural variations. Test/retest reliability for number of hours worked was low overall (r = -0.17), but was strong in interviewer-assisted Rwanda (r = 0.598) compared to self-administered Kyrgyzstan (r = -0.277).

**Amount of Money Earned**

Reliability for both earnings in the last week or last seven days (r = 0.676 overall; 0.742 in self-administered Kyrgyzstan and 0.556 interviewer-assisted Rwanda) and in the last/previous month (r = 0.921 overall; 0.787 in self-administered Kyrgyzstan and 0.911 interviewer-assisted Rwanda) was strong, with the earnings reported for the last/previous month being more reliable.

YOUTH'S PERSPECTIVES ON LAST WEEK VS. LAST MONTH

In responding to debrief questions that asked respondents to rate the ease and accuracy of reporting hours worked and amount earned over the last week vs. the last month, those in Kyrgyzstan found it easier and more accurate to answer based on a one-month time frame compared to a one-week or typical day time frame. Rwandan participants found answering the questions for any of the three time frames to be similarly easy and similarly accurate. See Figures 2A-B and 3A-B above.

The average difference in **earnings from the last week** reported by these participants was Kyrgyzstani som (KGS) 974 in Kyrgyzstan and Rwandan franc (RWF) 2,840 in Rwanda—the difference was statistically significant in Kyrgyzstan but not so in Rwanda (if combined, the difference in earnings reported across both countries is statistically significant). The average difference in weekly earnings (KGS 974 in Kyrgyzstan and RWF 2,840 in Rwanda) represents 54 percent of the average initial weekly earnings reported in Kyrgyzstan (KGS 1,784 in initial survey), and represents 37 percent of the average initial weekly earnings reported in Rwanda (RWF 7,719 in the initial survey).

The average difference in **earnings from the last or previous month** reported by these participants was 1,770 (KGS -142 in Kyrgyzstan and RWF 3,044 in Rwanda)—these differences were not statistically significant. This difference represents 1.7 percent of the average earnings in Kyrgyzstan as reported in the initial survey (average earnings was KGS 7,995), and represents 14 percent of the average earning in Rwanda (average earnings was RWF 22,243 in the initial survey).

Based on this analysis it can be concluded that the number of days and the hours worked variables are performing consistently. But when it comes to earnings, it may be best to just ask for the monthly earnings due to the large variation in the weekly earnings and the higher reliability in both contexts for monthly earnings.

Based on these findings, the item asking about earnings for the last week or last 7 days was deleted.

***Own-Employment***

*Amount of Time Worked*

For self-employment questions, reliability was high for the **number of days** typically worked, with r being 0.856 overall (r = 0.866 in self-administered Kyrgyzstan and 0.844 in interviewer-assisted Rwanda). The response for the number of days typically worked changed for 23 percent of the self-employed participants (15 percent in self-administered Kyrgyzstan and 28 percent in interviewer-assisted Rwanda).

However, the average difference among those who changed their response was quite small, at 0.16 days (-0.08 days in self-administered Kyrgyzstan and interviewer-assisted 0.33 days in Rwanda), which was not statistically significant. This small difference could be attributed to natural variations in days worked and are not significant differences, thus indicating the consistency of the item.

Reliability was also high for **number of hours** typically worked, with r being 0.849 overall (r = 0.907 in self-administered Kyrgyzstan and 0.850 in interviewer-assisted Rwanda). A larger number of participants (45 percent) changed the number of hours they typically worked (40 percent in self-administered Kyrgyzstan and 50 percent in interviewer-assisted Rwanda), but the difference were small: the average difference was 0.24 hours (1.07 hours in self-administered Kyrgyzstan and -0.44 hours in interviewer-assisted Rwanda). The difference was statistically significant in self-administered Kyrgyzstan, but the variation may be due to mistakes in self-reporting versus interviewer-assisted data collection.[4] These small differences may be attributed to natural variations in hours worked in the own-employment context and are not large differences, thus indicating that the item is consistent.

**Amount of Money Earned**

When it came to **earnings**, reliability was high in both testing contexts for earnings in the last week: r equaled 0.998 in self-administered Kyrgyzstan and 0.612 in interviewer-assisted Rwanda. Reliability was poor for monthly earnings, with r equaling 0.250 in self-administered Kyrgyzstan, but reliability was moderate in Rwanda (r = 0.491).

Among those reporting earnings in both iterations, 75 percent reported changes in their weekly earnings (73 percent in self-administered Kyrgyzstan and 76 percent in interviewer-assisted Rwanda). For earnings in the last or previous month, responses changed for 68 percent of participants (50 percent in self-administered Kyrgyzstan and 82 percent in interviewer-assisted Rwanda, though participants in Rwanda were responding to a different time period).

In Kyrgyzstan, the average difference was KGS 3,127 for the weekly earnings and KGS -5,585 for monthly earnings, which represent more than 100 percent variation of the KGS 2,899 average weekly earnings reported in the initial survey, and 56 percent of the average monthly earnings of KGS 9,964 reported initially. Even though these variations appear to be large, especially in Kyrgyzstan, the differences are not statistically significant, and it is possible the variation is due to differences in the mode in which the initial and test/retest surveys were administered.

In Rwanda, the average difference was RWF 1,890 for the week and RWF 5,015 for the month, which represent 16 percent each of the average weekly and monthly earnings reported in the initial survey (RWF 11,868 and RWF 30,768, respectively)—these differences, too, are not statistically significant.

These analyses indicate that in some instances, it may be easier for participants to report their earnings based on the last week or last seven days time frame, while other participants might find it easier to answer for the previous month.

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[4] In order for researchers to understand the true error rate despite its cause, responses that appeared to be errors were not fixed for these analyses, so errors in numbers reported were allowed to stay in the data. Mistakes in reporting were less likely to occur when the survey was interviewer-administered.

Based on these findings, implementers are encouraged to ask participants about their earnings in the last seven days as well as for the previous month. Researchers must then determine which data best suits their context.

***Household Enterprise***

*Amount of Time Worked*

Data comparing the initial and the test/retest survey were only available for Kyrgyzstan. These data show that 45 percent of the participants reported changes in the **number of hours** in which they helped with a household enterprise on a typical day. The average difference in number of hours was 0.80, which is a small and not statistically significant variation, and reliability was moderate (r = 0.473).

**Amount of Money Earned**

For **earnings** in the last or previous month, 55 percent of participants changed their responses. The average difference was KGS 947, which represents 10 percent of the average earnings (KGS 9,510) reported in the initial survey, and was not statistically different. Reliability for the item was good (r = 0.676).

Based on these findings, an item asking about the number of days worked in a typical week was added back to the survey to allow for more accurate estimates of time spent in household enterprises.

# CONCLUSION

Overall the survey questions worked well, especially when administered by an interviewer. The pilot confirmed the test/retest reliability of most items in the survey, and variability observed in the data can mostly be explained by the different times of administration of the initial and test/retest survey and the differences in the modes of administration. Minor changes to the survey were made based on these findings.

Regular Wage Work: A definition was added to explain "period of payment" for those respondents who might need this definition. Additional interviewer instructions were also added to ensure that interviewers were obtaining information based on the correct definition.

Irregular Wage Work: Researchers deleted an item asking about earnings for the last week or last seven-day period.

Helping in Household Enterprise: Researchers added back an item on number of days worked in a typical week.

# ATTACHMENT A: ADDITIONAL TABLES

**TABLE A-1: DISCREPANCIES BETWEEN SELF-ADMINISTERED AND INTERVIEWER-ASSISTED EXIT INTERVIEW**

| ITEMS | # OF KYRGYZ RESPONDENTS WITH DISCREPANCIES |
|---|---|
| TOTAL INTERVIEW | 33 |
| EMPLOYMENT STATUS AND TYPE | |
| Q1A. In the last month, that is, in the last 30 days/previous month, that is January/February 2019, did you do anything to earn money?* | 6 |
| Q2. Now, think about the activity in which you earned most of your income in the last month, that is, in the last 30 days. Was that activity:<br>helping in a business run by someone who lives in your household [to earn money]; or<br>was it running a business that you own alone or you own with someone else [to earn money]; or was it working for someone else [to earn money]?* | 0 |
| Q2a. Is the work you did for someone else in the last month, that is, in the last 30 days:<br>Regular, that is, something you do for a set number of hours every week, or<br>was it Irregular, that is, something that you did when work was available?* | 0 |
| REGULAR WAGE WORKER | |
| W3X2. In a typical week or seven-day period, how many days do you normally work at this job? | 8 |
| W3X3. On a typical day, approximately how many hours per day do you work at this job? | 1 |
| W4b. How much is your usual take home pay? | 2 |
| W4d. What period of time does that payment of your wage cover? | 9 |
| IRREGULAR WAGE WORKER | |
| W3a1. How many days did you work at this job in the…<br>LAST WEEK OR LAST SEVEN DAYS | 2 |
| W3a1. How many days did you work at this job in the…<br>LAST MONTH, LAST 30 DAYS (K)/PREVIOUS MONTH, THAT IS, JANUARY/FEBRUARY 2019 (R)? | 2 |
| W3aHRS. When you last worked at this job, how many hours did you work that day? | 2 |
| W4NEW. How much money did you receive as pay for doing this work in the…<br>LAST WEEK OR LAST SEVEN DAYS? | 2 |
| W4NEW. How much money did you receive as pay for doing this work in the…<br>LAST MONTH, LAST 30 DAYS (K)/PREVIOUS MONTH, THAT IS, JANUARY/FEBRUARY 2019 (R) | 1 |
| OWN/SELF EMPLOYMENT | |

**TABLE A-1: DISCREPANCIES BETWEEN SELF-ADMINISTERED AND INTERVIEWER-ASSISTED EXIT INTERVIEW**

| ITEMS | # OF KYRGYZ RESPONDENTS WITH DISCREPANCIES |
|---|---|
| OBX2. In a typical week, how many days do you do this work? | 1 |
| OBX3. In a typical day, how many hours do you do this work? | 1 |
| OB5f. How much did you earn from this work in the …<br>LAST WEEK OR LAST SEVEN DAYS? | 0 |
| OB5f. How much did you earn from this work in the last month, that is, in the …<br>LAST MONTH, LAST 30 DAYS (K)/PREVIOUS MONTH, THAT IS, JANUARY/FEBRUARY 2019 (R)? | 0 |
| HOUSEHOLD ENTERPRISE | |
| HBX3. In a typical day, how many hours do you work on this business? | 0 |
| HB4. How much money did you receive as pay for doing this work in the last month, that is, the last 30 days(K)/previous month, that is, January/February 2019? | 0 |

**TABLE A-2: NON-RESPONSE IN ITEMS**

| ITEMS | SELF-ADMINISTERED (KYRGYZSTAN) | INTERVIEWER-ASSISTED (RWANDA) | TOTAL |
|---|---|---|---|
| EMPLOYMENT STATUS AND TYPE | 130 | 71 | 201 |
| TOTAL INTERVIEW | | | |
| Q1A. In the last month, that is, in the last 30 days/previous month, that is January/February 2019, did you do anything to earn money?* | 0 | 0 | 0 |
| Q2. Now, think about the activity in which you earned most of your income in the last month, that is, in the last 30 days. Was that activity:<br>• helping in a business run by someone who lives in your household [to earn money]; or<br>• was it running a business that you own alone or you own with someone else [to earn money]; or was it working for someone else [to earn money]?* | 0 | 0 | 0 |
| Q2a. Is the work you did for someone else in the last month, that is, in the last 30 days:<br>• Regular, that is, something you do for a set number of hours every week, or<br>• was it Irregular, that is, something that you did when work was available?* | 0 | 0 | 0 |
| REGULAR WAGE WORKER | | | |
| W3X2. In a typical week or seven-day period, how many days do you normally work at this job? | 5 (12%) | 0 | 5 (9%) |
| W3X3. On a typical day, approximately how many hours per day do you work at this job? | 7 (16%) | 0 | 7 (13%) |
| W4b. How much is your usual take home pay? | 0 | 0 | 0 |
| W4d. What period of time does that payment of your wage cover? | 0 | 0 | 0 |
| IRREGULAR WAGE WORKER | | | |
| W3a1. How many days did you work at this job in the…<br>LAST WEEK OR LAST SEVEN DAYS | 13 (30%) | 0 | 12 (17%) |
| W3a1. How many days did you work at this job in the LAST MONTH, LAST 30 DAYS (K)/PREVIOUS MONTH, THAT IS, JANUARY/FEBRUARY 2019 (R)? | 11 (26%) | 0 | 11 (16%) |
| W3aHRS. When you last worked at this job, how many hours did you work that day? | 11 (25%) | 0 | 11 (15%) |
| W4NEW. How much money did you receive as pay for doing this work in the…<br>LAST WEEK OR LAST SEVEN DAYS? | 0 | 0 | 0 |

**TABLE A-2: NON-RESPONSE IN ITEMS**

| ITEMS | SELF-ADMINISTERED (KYRGYZSTAN) | INTERVIEWER-ASSISTED (RWANDA) | TOTAL |
|---|---|---|---|
| W4NEW. How much money did you receive as pay for doing this work in the LAST MONTH, LAST 30 DAYS (K)/PREVIOUS MONTH, THAT IS, JANUARY/FEBRUARY 2019 (R) | 0 | 0 | 0 |
| OWN/SELF EMPLOYMENT | | | |
| OBX2. In a typical week, how many days do you do this work? | 8 (24%) | 0 | 8 (13%) |
| OBX3. In a typical day, how many hours do you do this work? | 2 (6%) | 0 | 2 (3%) |
| OB5f. How much did you earn from this work in the LAST WEEK OR LAST SEVEN DAYS?[5] | 0 | 1 (4%) | 1 (2%) |
| OB5f. How much did you earn from this work in the last month, that is, in the LAST MONTH, LAST 30 DAYS (K)/PREVIOUS MONTH, THAT IS, JANUARY/FEBRUARY 2019 (R)? | 0 | 0 | 0 |
| HOUSEHOLD ENTERPRISE | | | |
| HBX3. In a typical day, how many hours do you work on this business? | 2 (7%) | 0 | 2 (6%) |
| HB4. How much money did you receive as pay for doing this work in the last month, that is, the last 30 days(K)/previous month, that is, January/February 2019? | 5 (21%) | 0 | 5 (19%) |

[5] The response was a Don't Know and not a refusal.

**TABLE A-3 PERCENT OF PARTICIPANTS REPORTING CHANGE IN TIME AND EARNINGS ITEMS FOR THOSE WHOSE EMPLOYMENT STATUS AND TYPE DID NOT CHANGE BETWEEN TEST AND RETEST**

| ITEMS | SELF-ADMINISTERED (KYRGYZSTAN) | INTERVIEWER-ASSISTED (RWANDA) | TOTAL |
|---|---|---|---|
| Initial time-frame | Jan 2019 | Jan 2019 | Jan 2019 |
| Test/Retest time-frame | Jan 2019 | Feb 2019 | Jan/Feb 2019 |
| REGULAR WAGE WORKER | | | |
| W3X2. In a typical week or seven-day period, how many days do you normally work at this job? (N=18) | 2 (14%) | 1 (25%) | 3 (17%) |
| W3X3. On a typical day, approximately how many hours per day do you work at this job? (N=18) | 8 (57%) | 1 (25%) | 9 (50%) |
| W4b. How much is your usual take home pay? (N=18) | 5 (36%) | 3 (75%) | 8 (44%) |
| IRREGULAR WAGE WORKER | | | |
| W3a1. How many days did you work at this job in the LAST WEEK OR LAST SEVEN DAYS? (N=29) | 8 (73%) | 11 (61%) | 19 (66%) |
| W3a1. How many days did you work at this job in the LAST MONTH, LAST 30 DAYS (K)/PREVIOUS MONTH, THAT IS, JANUARY/FEBRUARY 2019 (R)? (N=22) | 6 (86%) | 15 (100%) | 21 (95%) |
| W3aHRS. When you last worked at this job, how many hours did you work that day? (N=29) | 6 (55%) | 12 (67%) | 18 (62%) |
| W4NEW. How much money did you receive as pay for doing this work in the LAST WEEK OR LAST SEVEN DAYS? (N=30) | 8 (57%) | 11 (69%) | 19 (63%) |
| W4NEW. How much money did you receive as pay for doing this work in the LAST MONTH, LAST 30 DAYS (K)/PREVIOUS MONTH, THAT IS, JANUARY/FEBRUARY 2019 (R) (N=30) | 7 (58%) | 14 (78%) | 21 (70%) |
| OWN/SELF EMPLOYMENT | | | |
| OBX2. In a typical week, how many days do you do this work? (N=31) | 2 (15%) | 5 (28%) | 7 (23%) |
| OBX3. In a typical day, how many hours do you do this work? (N=33) | 6 (40%) | 9 (50%) | 15 (45%) |
| OB5f. How much did you earn from this work in the last month, that is, in the LAST WEEK OR LAST SEVEN DAYS? (N32) | 11 (73%) | 13 (76%) | 24 (75%) |
| OB5f. How much did you earn from this work in the last month, that is, in the LAST MONTH, LAST 30 DAYS (K)/PREVIOUS MONTH, THAT IS, JANUARY/FEBRUARY 2019 (R) (N=31) | 7 (50%) | 14 (82%) | 21 (68%) |
| HOUSEHOLD ENTERPRISE | | | |

**TABLE A-3 PERCENT OF PARTICIPANTS REPORTING CHANGE IN TIME AND EARNINGS ITEMS FOR THOSE WHOSE EMPLOYMENT STATUS AND TYPE DID NOT CHANGE BETWEEN TEST AND RETEST**

| ITEMS | SELF-ADMINISTERED (KYRGYZSTAN) | INTERVIEWER-ASSISTED (RWANDA) | TOTAL |
|---|---|---|---|
| HBX3. In a typical day, how many hours do you work on this business? (N=15) | 7 (47%) | -- | 7 (47%) |
| HB4. How much money did you receive as pay for doing this work in the last month, that is, the last 30 days(K)/previous month, that is, January/February 2019? (N=11) | 6 (55%) | -- | 6 (55%) |

**TABLE A-4: CHANGE IN TIME AND EARNINGS ITEMS (AVERAGE AND MEDIAN CASE-BY-CASE CHANGE) FOR THOSE WHOSE EMPLOYMENT STATUS AND TYPE DID NOT CHANGE BETWEEN TEST AND RETEST**

| ITEMS | SELF-ADMINISTERED (KYRGYZSTAN) AVERAGE (MEDIAN) | INTERVIEWER-ASSISTED (RWANDA) AVERAGE (MEDIAN) | TOTAL AVERAGE (MEDIAN) |
|---|---|---|---|
| Initial time-frame | Jan 2019 | Jan 2019 | Jan 2019 |
| Test/Retest time-frame | Jan 2019 | Feb 2019 | Jan/Feb 2019 |
| REGULAR WAGE WORKER | | | |
| W3X2. In a typical week or seven-day period, how many days do you normally work at this job? | 0.14<br>(0) | 0.25<br>(0) | 0.17<br>(0) |
| W3X3. On a typical day, approximately how many hours per day do you work at this job?[6] | 2.93<br>(0) | 0.25<br>(0) | 2.33<br>(0) |
| W4b. How much is your usual take home pay? | KGS -2,999<br>(0) | RWF 1,000<br>(2,000) | -2,110<br>(0) |
| IRREGULAR WAGE WORKER | | | |
| W3a1. How many days did you work at this job in the LAST WEEK OR LAST SEVEN DAYS? | 1.18<br>(0) | 0.94<br>(0) | 1.03<br>(0) |
| W3a1. How many days did you work at this job in the LAST MONTH, LAST 30 DAYS (K)/PREVIOUS MONTH, THAT IS, JANUARY/FEBRUARY 2019 (R) | 2.86<br>(0) | 3.35<br>(0) | 3.21<br>(0) |
| W3aHRS. When you last worked at this job, how many hours did you work that day? | -0.73<br>(0) | 0.89<br>(0) | 0.28<br>(0) |
| W4NEW. How much money did you receive as pay for doing this work in the LAST WEEK OR LAST SEVEN DAYS? (N=31) | KGS 974<br>(200) | RWF 2,840<br>(0) | 1,970<br>(0) |
| W4NEW. How much money did you receive as pay for doing this work in the LAST MONTH, LAST 30 DAYS (K)/PREVIOUS MONTH, THAT IS, JANUARY/FEBRUARY 2019 (R) (N=31) | KGS -142<br>(0) | RWF 3,044<br>(2,000) | 1,770<br>(0) |
| OWN/SELF EMPLOYMENT | | | |
| OBX2. In a typical week, how many days do you do this work? | -0.08<br>(0) | 0.33<br>(0) | 0.16<br>(0) |
| OBX3. In a typical day, how many hours do you do this work? | 1.07<br>(0) | -0.44<br>(0) | 0.24<br>(0) |

[6] One outlier in Kyrgyzstan resulting in a difference of 29, which was most likely a typo during the initial self-administration of the survey (the initial survey value was 35), results in the higher average for Kyrgyzstan. When that one data point is eliminated, the average for Kyrgyzstan declines to 0.92 and the overall average declines to 0.76.

**TABLE A-4: CHANGE IN TIME AND EARNINGS ITEMS (AVERAGE AND MEDIAN CASE-BY-CASE CHANGE) FOR THOSE WHOSE EMPLOYMENT STATUS AND TYPE DID NOT CHANGE BETWEEN TEST AND RETEST**

| ITEMS | SELF-ADMINISTERED (KYRGYZSTAN) AVERAGE (MEDIAN) | INTERVIEWER-ASSISTED (RWANDA) AVERAGE (MEDIAN) | TOTAL AVERAGE (MEDIAN) |
|---|---|---|---|
| OB5f. How much did you earn from this work in the last month, that is, in the LAST WEEK OR LAST SEVEN DAYS? | KGS 3,127<br>(1,200) | RWF 1,890<br>(500) | 2,470<br>(750) |
| OB5f. How much did you earn from this work in the last month, that is, in the LAST MONTH, LAST 30 DAYS (K)/PREVIOUS MONTH, THAT IS, JANUARY/FEBRUARY 2019 (R)? | KGS -5585<br>(0) | RWF 5,015<br>(0) | 228<br>(0) |
| HOUSEHOLD ENTERPRISE | | | |
| HBX3. In a typical day, how many hours do you work on this business? | 0.80<br>(0) | -- | 0.80<br>(0) |
| HB4. How much money did you receive as pay for doing this work in the last month, that is, the last 30 days (K)/previous month, that is, January/February 2019? | KGS 947<br>(0) | | KGS 947<br>(0) |