

**THE WOMEN OF THE  
WEWORK COLLECTIVE,  
AND THEIR HOUSEHOLDS**

Baseline Survey Report

WaterSHED  
May 2017



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## Introduction

WaterSHED has developed a training and mentorship network of women, called “the WEwork Collective”, in which dynamic skills training is combined with peer mentorship. Since it is a proof-of-concept, it is key to understand the changes in participants over time. Surveys of the participating women are being conducted at baseline, mid-line and end-line and focus on general socio-economic circumstances, economic activities, household decision-making, self-efficacy, cognitive capacity, and their professional networks. We expect to see greatest change in these areas.

The baseline data collection was conducted during the recruitment drive for the program in early 2016 by a team of experienced female enumerators. In total, 300 interviews with an average duration of 66 minutes were conducted between 03 February and 07 April 2016. Table 01 shows details of the number of interviews, start and finish date of the interview and average duration by province.

Table 01: Summary of interviews, by province

Province	# of interviews	% of interviews	start date	finish date	average duration (in min)
<b>Battambang</b>	48	16%	29-Mar-16	30-Mar-16	62.8
<b>Kampong Chhnang</b>	21	7%	01-Apr-16	01-Apr-16	60.0
<b>Kampong Cham</b>	60	20%	03-Feb-16	18-Mar-16	70.4
<b>Kampong Speu</b>	52	17%	15-Feb-16	21-Mar-16	68.7
<b>Pursat</b>	30	10%	31-Mar-16	07-Apr-16	73.9
<b>Takeo</b>	61	20%	18-Feb-16	17-Mar-16	58.9
<b>Tbong Khmom</b>	28	9%	03-Feb-16	17-Mar-16	71.9
<b>Total</b>	<b>300</b>	<b>100%</b>	<b>03-Feb-16</b>	<b>07-Apr-16</b>	<b>66.3</b>

This report summarizes the information collected through these surveys and aims to draw a picture of the women who were interested and/or have joined a training and peer-mentorship network. All data reported in this document are frequencies and correlations. No causal attribution is made. To understand causal links between variables, the direction of the causation needs to be carefully theorized.

## The women of the WEwork Collective, and their households

In total 300 women applied to join the WEwork Collective. Table O2 gives an overview of basic descriptive statistics of characteristics of these women<sup>1</sup>.

### Individual Characteristics

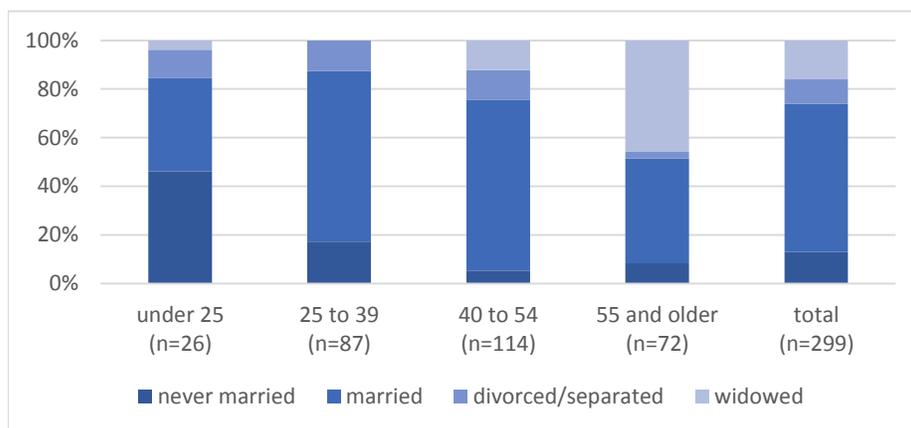
**Age.** The women’s ages range from 16 to 75 years with a mean of 44 years of age. The middle 50% of the participants are between 35 and 54 years old. Only 20% of the participants are younger than 25 years or older than 60 years. Age distribution varies slightly by province. In Battambang and Kampong Chhnang relatively more young people signed up for the program (19 and 24% of the applicants respectively). In Battambang the average age of the applicants (35 years) is much younger than that of the other provinces (45 years). In Tboung Khmum many older people have signed up for the WEwork collective with nearly half (46%) of the applicants being 55 years or older.

**Marital status.** The majority of the women are married (61%). 13% were never married and 10% have separated or divorced from their partner. 16% of the participants are widows. In Battambang the group comprises few widows (2%) and many never-married women (27%), while Tboung Khmum and Pursat the share of divorced/separated (21 and 23% respectively) and widowed applicants (29 and 20% respectively) is high.

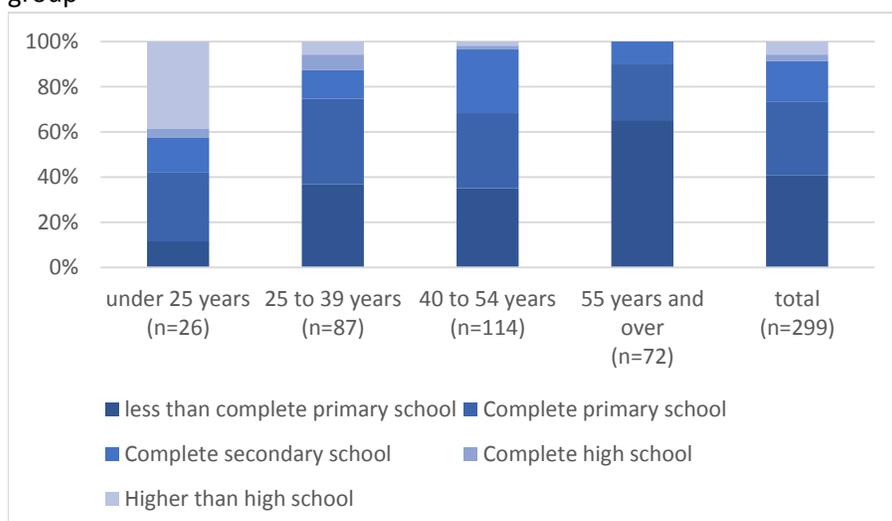
**Household composition.** The average household size is 4.6 members. 29% (63%) of the women live with at least one child under 5 (12) in the same household.

**Education.** 94% of the women say they are able to read and write in at least one language. 96% have attended any kind of school; 59% have completed primary education; 27% have completed secondary education. Younger women tend to be more educated. In the group under 25 years, 88% (58%) have

Graph O1: Marital Status of the WEwork women, by age group



Graph O2: % of women who completed primary/secondary education by age group



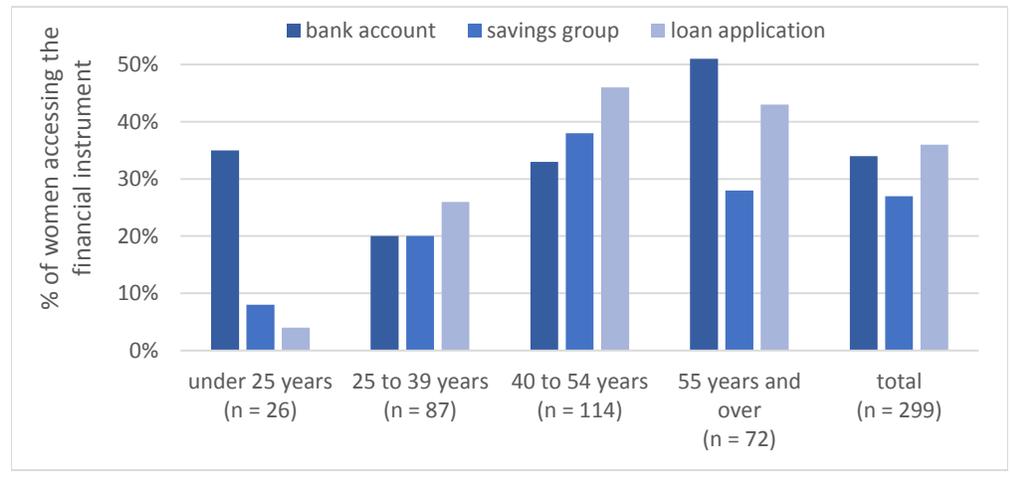
<sup>1</sup> For one participant, one part of the questionnaire is missing. Thus individual and household characteristics are only available for 299 of the 300 women.

completed primary (secondary) education. The rate among all other age groups is much lower (see Graph 02).

**Financial inclusion.**

Approximately one third of the women has her own bank account. Bank account ownership is particularly low in Pursat (3%) and high in Kampong Cham (63%). 27% of the women are members of a savings group. Very few women from Tboung Khmum (4%) are part of a savings group, but many in Kampong Chhnang (43%) and Kampong Speu (38%). Approximately one third (36%) of the women have applied for a loan in the last 12 months. Loan application rates are particularly high in Kampong Speu (56%). Across all provinces none of the loan applications was unsuccessful.

**Graph 03: % of women accessing financial instruments, by type of financial instrument and age**



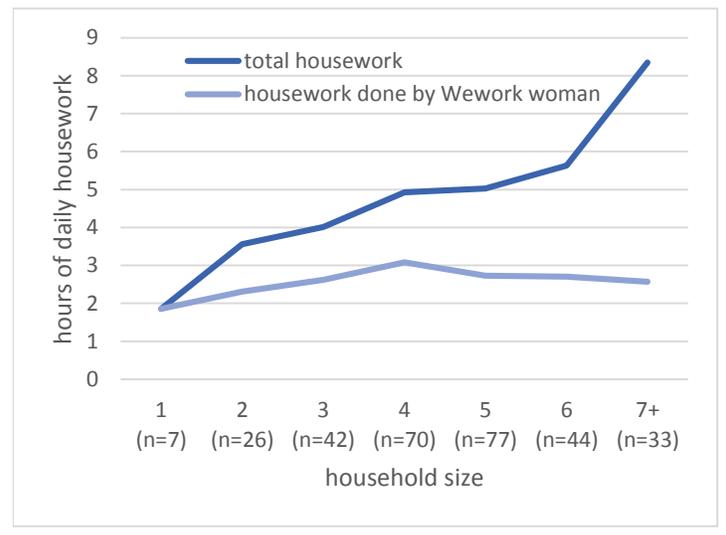
The correlation between using the three financial instruments, bank account, savings group and line of credit, is weak. In other words, using one of the three financial instruments is a weak predictor for using any of the other two. 65% of the women accesses at least one of the three financial instruments. Different than education, financial inclusion appears to be more advanced among older participants compared to their younger peers. Women under 25 years are rarely members of a savings group (8%) or have applied for a loan (4%).

**Income.** In the last 12 months prior to the interview, 76% of the women worked for a salary, 81% worked in agricultural activities and 36% worked in a household-owned business. Women from different provinces do not differ much in their economic activities, except among women from Tboung Khmum who work less frequently for a wage/salary (50%) and more for their own business (50%).

Only 9% of all women live in households relying on a single type of source of income. 40% of the households rely on all three types of income.

**Housework.** On average, each of the WEwork women did 2.7 hours of housework on the day previous to the interview. This number is equivalent to 61% of all housework in the household. The total amount of housework in a household increases with its size, but

**Graph 04: Hours of daily housework, by household size**



the share of housework the WEwork woman completes peaks at four household members. In other words, in big households more people help with the housework. Across all WEwork households, female members of the household do an additional hour of housework more than their male counterparts, regardless their education level.

**Table 02:** Basic descriptive statistics of the WEwork women and their households

Variable		mean	standard deviation	min	max	# of obs
age (in years)		43.6	12.75	16	75	299
<i>hh</i>	Household size	4.64	1.95	1	19	299
	Dependent children under 5	29%	0.46	0	1	299
	Dependent children under 12	63%	0.48	0	1	299
<i>education</i>	literacy rate	94%	0.23	0	1	299
	ever attended school	96%	0.20	0	1	299
	completed primary school	59%	0.49	0	1	299
	completed secondary school	27%	0.44	0	1	299
<i>finance</i>	has bank account	33%	0.47	0	1	298
	is member of savings group	27%	0.45	0	1	299
	loan application (last 12 months)	36%	0.48	0	1	299
	at least one of the above	65%	0.48	0	1	299
<i>work &amp; income</i>	housework (in hours)	2.72	1.54	0	10	299
	housework (share)	61%	0.28	0	1	298
	work for wage (last 12 months)	76%	0.43	0	1	299
	work in agriculture (last 12 months)	81%	0.39	0	1	297
	work for business (last 12 months)	36%	0.48	0	1	299
	contribute to household income	96%	0.19	0	1	299
occupies public post in the community		57%	0.50	0	1	299
has a disability		6%	0.23	0	1	299
uses a toilet for defecation		94%	0.24	0	1	299

### Household characteristics

The 299 WEwork applicants live with 1,081 other people in their respective households, an average of 4.6 people per household. Most commonly, the WEwork women live with their sons or daughters, their spouses, parents, grandchildren and siblings under the same roof. In short, the women share a households mainly with very close relatives<sup>2</sup>.

**Children.** On average each woman shares a household with 1.4 of her children. Their average age is 16 years old, ranging from 0 to 46 years. 98% of the children above the age of 5 have ever attended school; 64% currently attend school.

**Household income.** Of all 1,380 individuals living in the households of the 300 WEwork women, 912 contribute in one or the other way to the household income. The WEwork applicant and her spouse were most likely to contribute their household’s income, while less than half of their children and grandchildren contributed to their household’s income (see Graph 06). Relative to other members of their households, the WEwork applicant and her husband contribute the lion’s share to the household income. Children, grandchildren, siblings, parents, etc. appear to merely supplement the household income with smaller contributions. Of those household members that contribute to household income 54% contributes income from more than one sector (agriculture, wage/salary, household business).

Five percent of all households keep records of household income and spending.

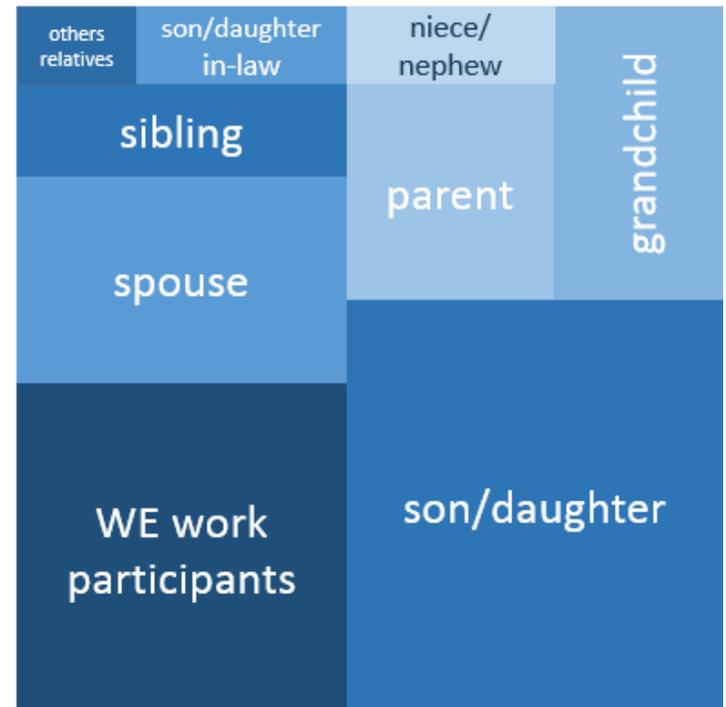
### Comparing the women to their husbands

In total, 180 (60%) surveyed women live with their husbands in the same household. The following analysis will compare husbands and wives of each of these 180 couples to detect gender differences.

**Income generation.** Between husband and wife the contribution to household income is almost equal. In one third of the households (35%) with both husband and wife the couple contributed about half of the household income each. In another third of the households (32%), the husband contributes more than his wife and in the remaining third (33%) the wife contributes more than her husband.

**Financial inclusion.** Among the couples living together, the wife is four times more likely than her husband to be member of a savings group (OR=4.2). Likewise she was four times more likely to have made a loan

**Graph 05:** Household composition of the WEwork households



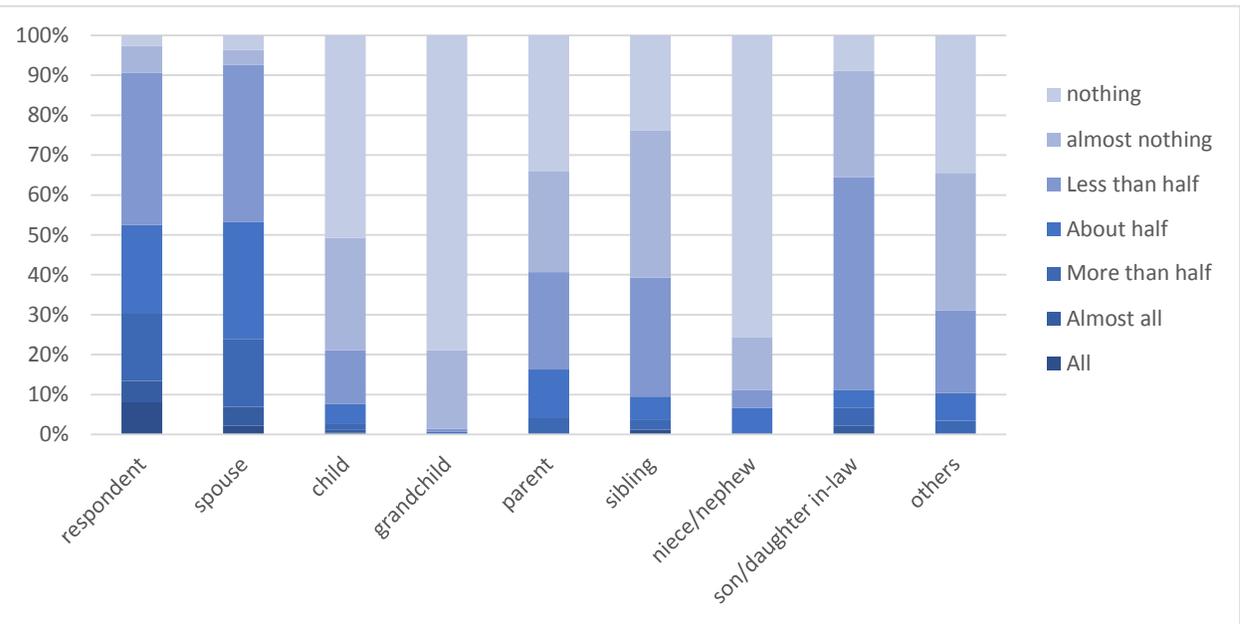
Note: the size of the surface of each square is proportional to the number of people living in the WEwork households, by relationship to the WEwork member

<sup>2</sup> Note: In rural Cambodia family ties do not necessarily need to be biological. When a relationship is considered close enough, people may refer to a close family friend as “brother” or “sister”.

application in the 12 months prior to the interview (OR= 4.1) and twice as likely to own a bank account (OR=2.1).

The above analysis holds true even if instead of the husband other male adults living in the household are taken for comparison with the WEwork applicant. There is no difference in bank account ownership, membership at a savings group or loan application between women living with husband or without husband.

**Graph 06:** contribution of income relative to other members of the household, by relationship to the WEwork woman



## Decision-making in the household

The survey asked about 15 specified decisions that the household had to make in the last 12 months, and whether the WEwork woman was involved in the decision-making process (a lot, a little, not at all), who took the final decision and whether this decision was aligned with her preferences. In total, the 300 households included in the data collection made 2,064 of these decisions in the past 12 months which is equivalent to 6.9 decisions per household. Table 03 summarizes the data about household decision-making.

*Women are involved.* Women were involved in 86% of the decision-making processes and in 89% of the decisions she participated in making the final decision. The women were most involved in decisions about obtaining healthcare for the children (90%), which contraception method to use (94%) and whether the household should save its income (91%). They were least involved in decisions about which crops to grow (78%), whether to migrate for work, spending on major household assets and selling household assets (81% each).

*Decisions align with women's preferences.* The women expressed that 99% of the decisions made were aligned with their preferences. Only decisions about migration for employment (94%) and opening a new business (97%) aligned slightly less with her preferences.

*Final decisions involve others.* Decisions appear to be made in a quite collaborative manner. Across all provinces and all decisions probed in this survey, 1.6 people were involved in making the final decision. 44% of the decisions involved only one person in the final decision. The WEwork applicant made 36% of the final decisions by herself. She most often decided on her own about spending on food (52%), obtaining health care for herself (47%) and whether to save household income (46%). She is least likely to make decisions related to income generation (to migrate for employment, 23%; which crops to grow, 27%; open a business, 27%) by herself.

**Table 03:** Summary statistics about household decision-making, her involvement in the decision-making process, the final decision and its alignment with her preferences

decision		decision made in the household in last 12 months		woman's involvement in decision-making process						final decision				
				a lot		a little		not at all		# of people involved	woman involved		aligned with her preferences	
		%	n	%	n	%	n	%	n		%	n	%	n
1	Up to what grade should the children attend school	54%	162	88%	143	10%	17	1%	2	1.6	88%	143	98%	158
2	Which school the children go to	41%	124	88%	109	12%	15	0%	0	1.6	90%	111	100%	124
3	Obtaining health care for yourself	64%	193	89%	172	11%	21	0%	0	1.5	91%	175	100%	193
4	Obtaining health care for children	55%	164	90%	147	10%	16	1%	1	1.6	91%	150	99%	162
5	How many children to have	28%	84	87%	73	13%	11	0%	0	1.6	88%	74	100%	84
6	Which contraceptive method to use	27%	80	94%	75	5%	4	1%	1	1.6	91%	73	100%	80
7	Spending on food	55%	165	84%	139	15%	24	1%	2	1.4	90%	149	100%	165
8	Spending on major household items	67%	200	81%	162	18%	36	1%	2	1.7	84%	168	100%	200
9	Selling household assets (including livestock)	47%	141	81%	114	18%	25	1%	2	1.7	87%	123	99%	139
10	Whether to save household income	52%	155	91%	141	9%	14	0%	0	1.5	94%	145	99%	153
11	Which crops to grow	68%	203	78%	159	20%	41	1%	3	1.7	85%	173	100%	202
12	To take loans	46%	138	87%	120	12%	16	1%	2	1.7	88%	122	99%	137
13	How to use loans	45%	134	88%	118	10%	14	1%	2	1.8	92%	123	99%	132
14	To migrate for employment	16%	48	81%	39	19%	9	0%	0	1.7	81%	39	94%	45
15	Open a new business	24%	73	88%	64	11%	8	1%	1	1.7	85%	62	97%	71
<b>Total</b>		<b>46%</b>	<b>2,064</b>	<b>86%</b>	<b>1,775</b>	<b>13%</b>	<b>271</b>	<b>1%</b>	<b>18</b>	<b>1.6</b>	<b>89%</b>	<b>1,830</b>	<b>99%</b>	<b>2,045</b>

## Household wealth and well-being

The next two sections will take a closer look at household wealth, housing conditions, household assets and the household's water, sanitation and hygiene (WASH) situation.

### Housing conditions

Most WEwork applicants live in acceptable housing conditions. 97% have a roof over their head made of clay or concrete tiles or iron sheets; 94% of the households set their foot on concrete, wooden or tiled floor. Only 4% live in houses with a mud floor. The outer walls of the dwelling are mainly made of wood (70%) or stone (6%). Other wall materials include iron sheets (13%) and thatch (4%).



### Household assets and wealth

The questionnaire includes questions of ownership and functionality of a series of 25 household items, ranging from charcoal stove to motorbike and toilet. A principal component analysis was used to summarize the household assets and create an index of wealth. According to this analysis, strong indicators for household wealth is ownership of the following items: gas stove, fan, motorbike, mattress, water pump, television, mobile phone, connection to an electricity grid, and no solar panels<sup>3</sup>. Participants in Takeo and Tboung Khmum score particularly high on this index meaning that households in this area are relatively more wealthy compared to other participants; applicants from Kampong Cham and Pursat particularly low. Separate and divorced women are less wealthy than women of any other marital status.

During the interview respondents were asked to compare their household's wealth with that of others<sup>4</sup>. The index of household wealth described above correlates very closely with the perceived household wealth. This might also indicate that whether a household is considered doing well or not is largely defined through its household assets in the eyes of local rural population.

### WASH situation of the households

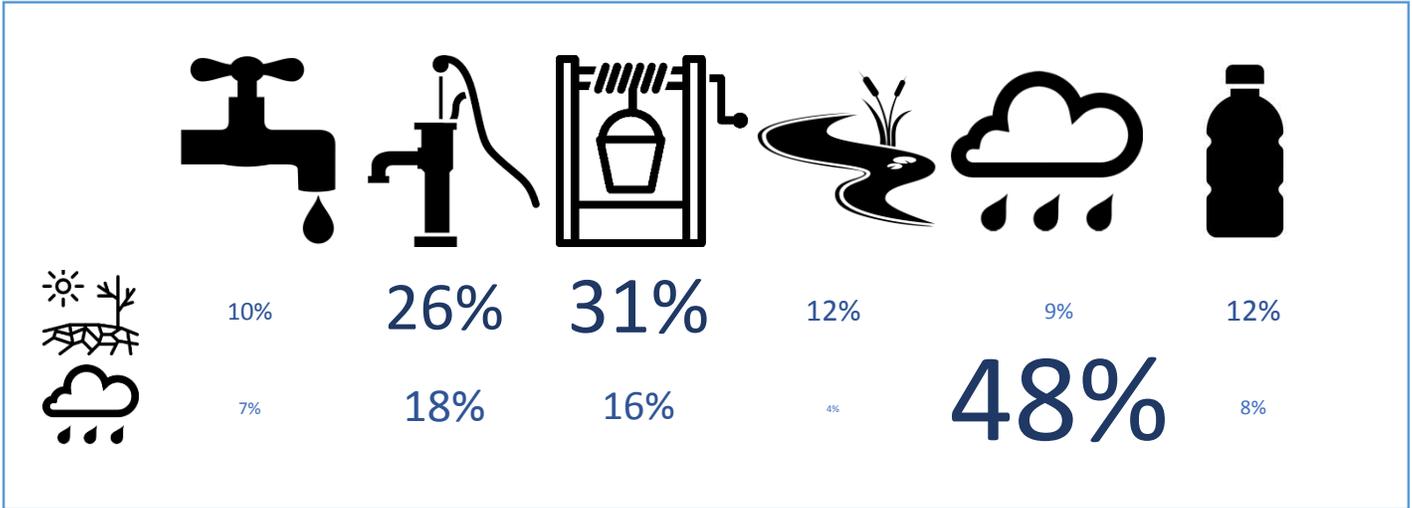
**Sanitation.** Of all people living in the WEwork households, 92% use a latrine for defecation regularly; 8% of the household members defecate outside and 1% use a diaper. Out of the 300 households surveyed 267 (89%) households own a functioning pour-flush toilet. Three additional households own a dry-pit latrine, but all three were not functional the day of the interview.



<sup>3</sup> A possible explanation for this is that the connection to a public or private electricity grid is the stronger indicator for wealth compared. Ownership of solar panels correlated negatively with being connected to an electricity grid ( $p < 0.001$ ). Only 6% of the households with connection to an electricity grid own solar panels, while 40% of the households without connection to an electricity grid own solar panels. Thus, solar panels appear to be a make-shift solution until the household is connected to an electricity grid.

<sup>4</sup> Exact question: Compared to other households, this household is ... much worse off/ ... a little worse off/ ... about average/ ... a little better off/ ... much better off.

**Source of Drinking Water.** Households fetch their drinking water from public and private taps and pumps, public and private wells, open waters<sup>5</sup>, from rainwater and drink bottled water. In the rainy season, almost half (48%) of all households report drinking rain water with pumps (18%) and wells (16%) playing a minor role during this season. During the dry season, households more frequently resort to wells (31%), pumps (26%), surface and bottled water (12% each) as sources of drinking water. Public or private taps do not play a major role as sources.



**Drinking water treatment.** 96% of the households treat their water before consumption or they buy bottled water. The most common methods of treatment are boiling (58%) and filtering (43%). There is a relatively large overlap between filtering and boiling. More than one third (35%) of the households that filter their water before consumption also boil it. An explanation could be that households do not trust that a filter will remove all pathogens. 4% of the households drink their water without prior treatment.

<sup>5</sup> Includes rivers, streams, lakes and ponds

## Political and Civic Participation

Most (92%) of the WEwork applicants participated in one form or another in political or civic life of their community in the last 12 months. 57% of the women hold some kind of public post, mainly as members of their commune or village council. In addition to that, 84% have participated in the construction of community works and 72% participated in an information campaign in the last 12

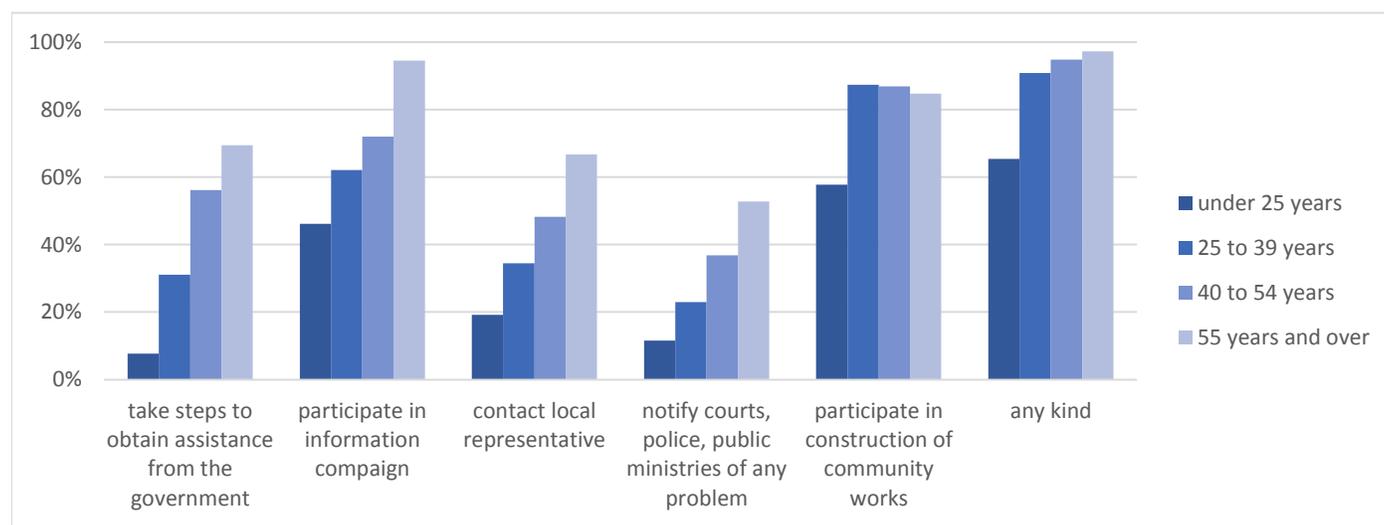
**Table 05:** Participation in different types of political and civic activities

Action	% of respondents participated
take steps to obtain assistance from the government	48%
participate in information campaign	72%
contact local representative	46%
notify courts, police, public ministries of any problem	34%
participate in construction of community works	84%
<b>any of the above kind</b>	<b>92%</b>

months. The women are less likely though to engage directly with government authorities through taking steps to obtain government assistance (48%), contacting a local representative (46%) or notifying courts, police or public ministries of any problem (34%).

As Graph 07 illustrates, the women are more likely to report civic engagement as they get older. While contributing to almost equal parts to community works, illiterate women are largely excluded from participating in political and civic life of their community. Women living in wealthier households are significantly more likely to have contacted a local representative or notified public authorities of any problem<sup>6</sup>. However, this difference might only be due to confounding factors, because it disappeared when controlling for age and illiteracy which appear to be stronger predictors of participation than wealth.

**Graph 07:** Women's participation in political and civic activities, by age group



<sup>6</sup> T-test compared the above described wealth index of women who participated in the respective ways with that of women who did not participated in those ways. Results are statistically significant at a level  $< 0.05$ . Remarkably, even taking steps to obtain government assistance is correlated with household wealth. Wealthier households are more like to have made an attempt to obtain government assistance, although the difference is small and only marginally significant ( $p < 0.10$ ).

## Economic Activities

As briefly described above, the WEwork women and their households engage in a diverse range of income generating activities. The following section will look more closely at salaried employment and household-owned businesses.

### Work for a wage/salary

Work for a wage or salary in this section refers to the twelve months prior to the interview. In 40 households none of its members works for a wage or salary. In total, members of the remaining 260 households worked in 677 jobs for a wage or salary.

The survey collected information about all income-earning employment activities of all household members, including (1) the number of hours worked per month in each employment, (2) remuneration per time interval, (3) total annual remuneration in kind, and (4) employment characteristics. From this information, the following variables were calculated which are used as main indicators in the following analysis:

- *Yearly wage*: Sum of all remunerations from work for a wage/salary in the 12 months prior to the interview
- *Total days worked*: calculated as equivalent of 8-hour working days (total hours worked in the previous 12 months divided by 8)
- *Daily wage equivalent*: Yearly wage divided by the total number of days worked over the same period of time

**The WEwork women's employment.** Of the 300 women, 226 (75%) worked in at least one form of employment. 99 (33%) of the WEwork women worked in more than one job. In comparison to other members in their household they are more likely to be employed and more likely to have worked in more than one position.

**Time dedicated to work.** On average, women worked 3.9 hours per day in one job. Other members of the household worked on average 7.3 hours per day in a given employment. In other words, women worked predominantly in part-time jobs, while other members of the household worked full-time. Women worked an equivalent of 90 full 8-hour workdays in the 12 months prior to the interview. Other members of her household worked on average 198 full 8-hour working days.

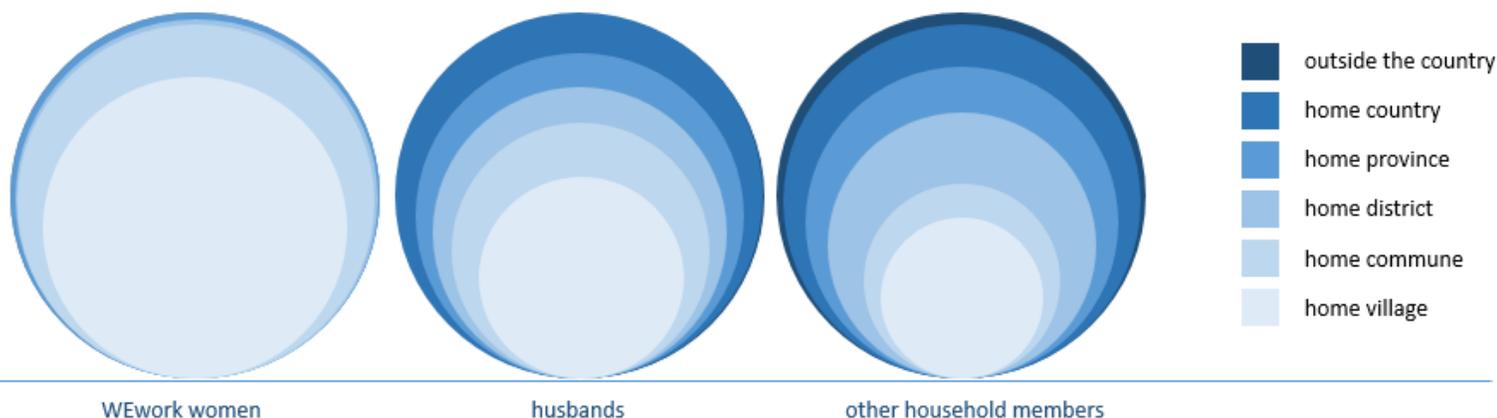
**Remuneration.** The WEwork women earned on average 832 USD from wage labor in the year prior to the interview, ranging from 25 to 3,696 USD. Other members of their household earned an average of 1,226 USD in the past 12 months, ranging from 0 to 7,800 USD. For each full 8-hour working day, women earned on average 18 USD, other members of her household 10 USD. In other words, she works less than other members of her household, but is more efficient in generating income with her economic activities.

Approximately 45% of all employments include some kind of in kind payments. On average these payments have a value of 175 USD per year. There is no difference in the likelihood that women receive in kind remuneration compared to men, but women's in kind remuneration is much lower than that of

their husbands (110 USD and 242 USD per year respectively). The most common kinds of in kind payment were transportation (46%) and meals (43%)<sup>7</sup>.

**Job location.** As Graph 08 illustrates, the WEwork applicants mostly do their work in the village where they live (68%) or their commune (94%). Very rarely, for only 6% of their work for wage or salary, the women move beyond their commune’s boundaries. By comparison, 51% of their husband’s jobs and 72% of the work of other members of their households are located beyond their commune’s boundaries.

Graph 08: Employment location, by relationship to the WEwork women

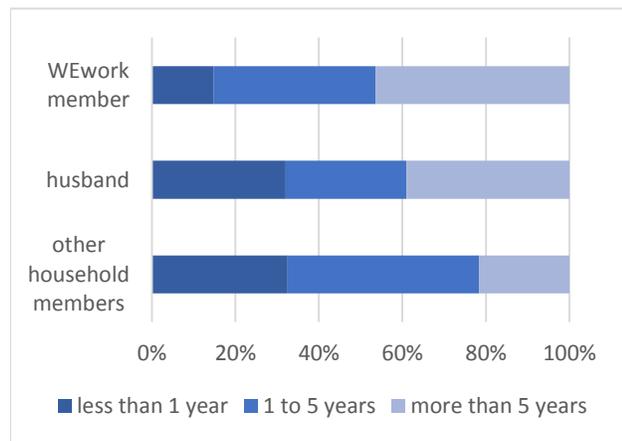


*Note:* Size of the surface of the circle is proportional to the percentage of individuals who do not leave this geographic areas for their work.

**Length of employment.** In general, employment working for a wage or salary appears to be relatively long-term. Of the employment relationships analyzed here, 522 (78%) of 673 have lasted more than one year, 262 (39%) have lasted more than 5 years. The WEwork women in particular work in stable jobs. Of the 379 jobs that the WEwork women work in, 176 (46%) have already lasted longer than five years.

**Quality of employment.** In general, individuals in the surveyed households are free to change the employer (95%), cannot be fired without prior notice (99%) and are not in debt with their employer (94%). 56% of the jobs reported include an entitlement to sick leave and 59% are skilled. Paid sick leave is offered at 71% of the skilled jobs, but only 35% of the unskilled jobs. Two thirds (67%) of the jobs of the WEwork women were skilled or semi-skilled according to their self-report.

Graph 09: Length of employment by relationship to the WEwork woman



Combining various criteria of job quality (freedom to change employer; not being in debt with the employer; minimum dismissal protection; entitlement to paid sick leave; being skilled work), one third (33%) of the jobs reported on in this survey can be considered quality employment. The WEwork women

<sup>7</sup> Multiple answers possible.

disproportionately work in quality employment compared to other members in their households: 42% of their work for wage or salary fulfills all the criteria mentioned above.

However, the quality of employment is related to a higher daily income only for the women's husbands or other members of the household, not for the women themselves. The same applies to the length of employment. For the women's husbands, daily wages increase with the length of employment, but not the WEwork women. The single best predictor of a higher daily wage/salary is paid sick leave.

**Employment and other socio-demographic factors.** About a third of the daily wage and days worked depends on unobserved household characteristics. In other words, the household someone lives in plays a significant role in determining how much this person earns per day worked and how many days per year s/he works. The survey suggest that part of these household characteristics are household size and the presence of children under five.

The employment data was overlaid with a number of other socio-demographic factors, including gender, education, literacy, household size, presence of young children in the households, marital status, financial inclusion, etc. Large and significant correlations are described below.

*Housework and Employment.* Housework is a large confounding factor for the time she spends at work, explaining about 9% of the variance in time dedicated to employment across individuals and 16% of the variance among individuals within the same household. Every additional hour of daily housework is associated with 30 days less remunerated work per year, controlling for differences between households<sup>8</sup>. The association between gender and time worked seemed to be entirely mitigated by the time dedicated to housework. However, the association between housework and time spent at work is slightly counterbalanced by a good education (complete secondary school or higher).

Daily income is negatively correlated with the total days worked, but positively associated with the hours spent on housework<sup>9</sup>. Further analysis shows clearly an economically inefficient allocation in household resources regarding earning income from work for a wage or salary. In short, while women have a higher income potential (higher daily wage/salary)<sup>10</sup>, they work fewer days and do more unpaid housework.

*Income and financial inclusion.* The strongest predictor of a high daily wage/salary appears to be financial inclusion. People who own a bank account, are members of a savings group or have made a loan application in the last 12 months report a daily wage/salary doubling that of financially excluded people

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<sup>8</sup> Fixed-effects linear regression model:  $\beta = -30.53$ ,  $p < 0.0001$ ,  $n = 500$

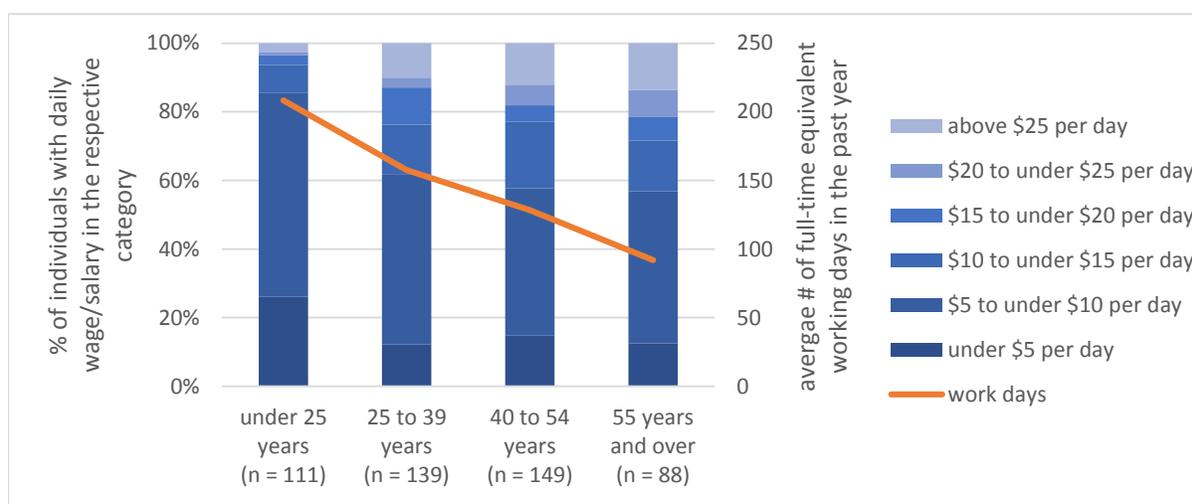
<sup>9</sup>  $r = -0.31$  ( $p < 0.001$ ) and  $r = 0.12$  ( $p = 0.008$ ) respectively

<sup>10</sup> The survey does not allow causal attribution regarding why women appear to earn a higher daily rate for their remunerated work than men. However, there are a few clues from this survey and additional qualitative interviews that allow the development of a few hypotheses. First, many women do part-time work and get paid, for example, for attending village and commune meetings or to hold village workshops by NGOs or government. Per hour these activities earn them more income than a full-time position, but by their nature these jobs cannot be full-time positions. Second, women might only chose remunerated work which allows them to earn income relatively efficiently, as choosing a job is a trade-off between earning income and housework and care duties. Third, her family's support for her economic activities might be higher if her income generation is more efficient, thus a lack of family support might prevent her from doing work for a lower daily remuneration. Fourth, because of her restricted mobility for work, she might not have access to a wide range of jobs in a competitive labor market, but rather concentrates her remunerated work on selling non-interchangeable knowledge and influence over people in her village.

(19 USD and 9 USD respectively,  $p < 0.0001$ ). Especially loan applications and bank account ownership drive this correlation. While financial inclusion and efficient working seem to go hand in hand, the direction of this relationship is unclear.

*Employment and age.* As in previous analyses, age appears to be a significant confounder for income from wage labor. Graph 10 illustrates the relationship between age and daily wage. Of the young people under the age of 25 years, 86% earn on average less than \$10 per day in their jobs, independently from their schooling. In the age groups above 40 year, more than 40% earn a daily wage of \$10 or more respectively. On the other hand, the average number of days of full-time equivalent work decrease with age from 208 days among people below the age of 25 to 92 days among the age group 55 years and above. In short, young people work more, but less efficiently than their older counterparts.

**Graph 10:** Average number of full-time equivalent working days in the past 12 months and daily wage, by age group



### Household-run businesses

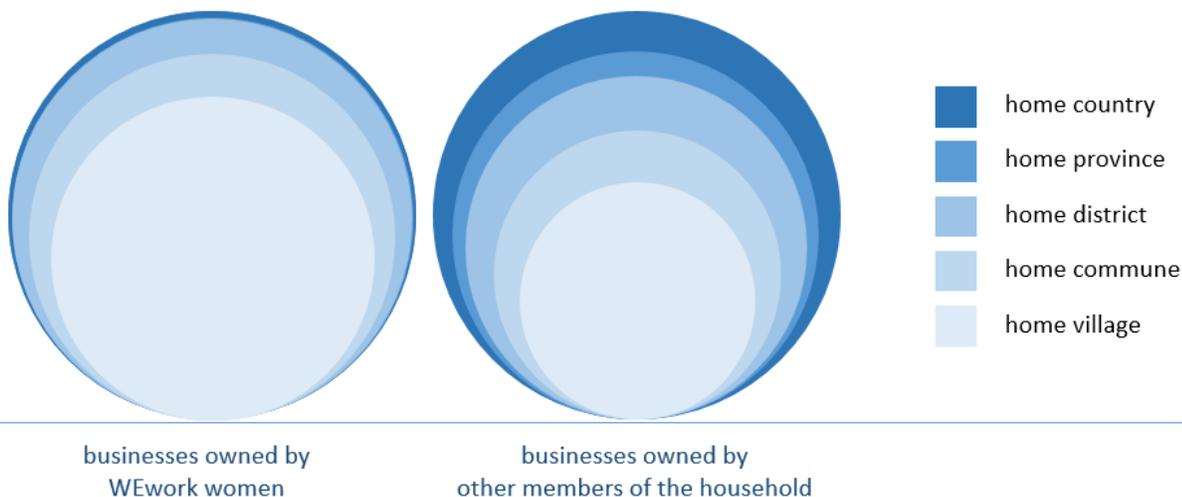
168 (56%) of the WEwork applicants live in a household that runs at least one business of any size and kind. Businesses are mainly owned by only one member of the households. Only six (2%) businesses are reported to be co-owned by husband and wife. 100 (60%) of these businesses are owned by the WEwork women.

**Who runs a business?** Women who run a business tend to live in slightly wealthier households, they are more somewhat likely to be literate and have access to at least one financial instrument. All other socio-demographic variables such as age, education, household composition, marital status, political and civic participation, cognitive abilities and self-efficacy do not appear to be correlated with business ownership.

**Workers.** 102 (61%) of the 168 businesses operated during the whole year prior to the interview. 27% of the businesses have hired at least one employee in the 12 months prior to the interview.

**Geographic area.** As with employment, the geographic area where female-owned businesses operate is significantly smaller than that of male-owned businesses. 63% (81%) of the WEwork woman-owned businesses sell their products and services only in the village (commune) where they live. While 50% of the businesses run by other household members sell their products and services beyond their commune's boundaries, only 19% of the WEwork women's businesses do so.

Graph 11: Geographic area in which the business offer its products and services, by business ownership



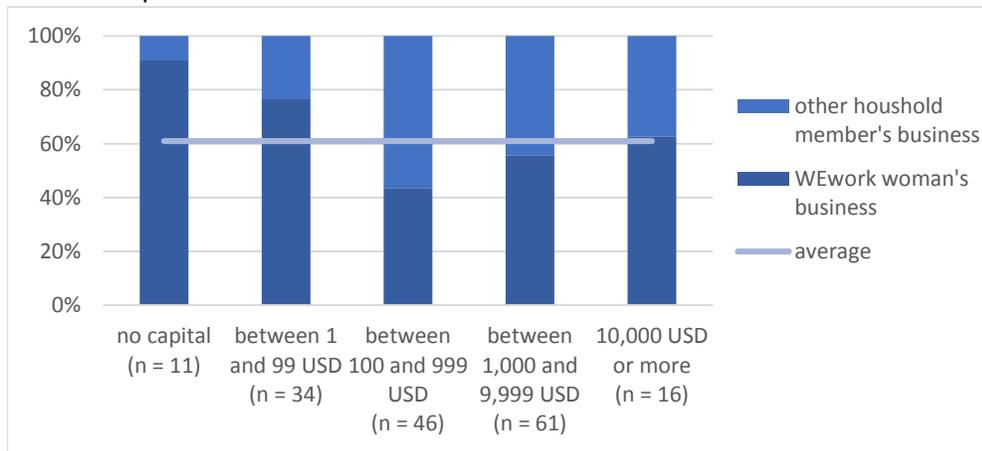
*Note:* Size of the surface of the circle is proportional to the percentage of business that offer their products and services not beyond in this area

**Inventory.** 105 (63%) household businesses had some kind of inventory stock at the day of the interview. The WEwork woman's businesses were slightly more likely (69%) to have inventory stock than businesses run by other household members. 48% of the business had a current stock worth less than \$100 on the day of the interview. 80% had a stock worth less than \$1,000. Female-run household businesses and others do not differ significantly in keeping stock and the value of their stock.

**Business capital.** Median business capital is around 700 USD. This means 50% of all household businesses operate with capital of less than 700 USD.

Women-owned businesses compared to businesses owned by other members of the households tend to have either large or very limited business capital, but are underrepresented among medium-sized businesses, as

Graph 12: % of business owned by the WEwork women, by amount of current business capital



Graph 12 illustrates. Eleven household businesses operate entirely without business capital, 10 of which are owned by the WEwork women.

As with business ownership, no socio-demographic factor seems to be significantly related to the size of the business, measured as the size of the business capital.

**Bookkeeping.** Ten percent of the household businesses have a bookkeeping system. For roughly 43% of the business the WEwork women knew with certainty how much profit the business made in the month previous to the interview. For another 25% of the businesses the women were not even able to guess the business profits.

**Decision-making.** In total, this survey collected data on 221 decisions households made related to their household businesses in the past 12 months, including 136 decisions about businesses owned by the WEwork women. Compared to her high involvement in household-related decision-making, she is less involved in decision-making about businesses, even it is concerns her own business. In only 55% of the decisions relating to her own business she was involved a lot. As comparison, she was involved a lot in 86% of household decision-making. In decision-making about household businesses that are not her own, she is even less involved.

## Self-efficacy and Cognitive Abilities

### Self-efficacy

Self-efficacy of the WEwork women was measured using the Generalize Self-Efficacy Scale (GSE)<sup>11</sup>. To generate the scale, the respondents are asked a series of 10 questions about their perceived self-efficacy. High scores on the GSE means high self-efficacy and are found to correlate with emotions such as optimism and work satisfaction, low scores correlate with depression, stress, health complaints and anxiety. Scores range from 10 to 40 on the GSE. The mean score from various international survey was found to be 29.

The WEwork women reported an average score of 33 on the GSE. Only one respondent was unable to complete all of the questions. Among the WEwork women, high scores on the GSE correlate with household wealth<sup>12</sup> and the woman's individual income from wage labor<sup>13</sup>, a good level of education<sup>14</sup> and older age<sup>15</sup>.

### Cognitive Abilities

The cognitive ability of the WEwork applicants was tested using three short cognitive tasks. First, respondents were asked "You are participating in a race. You overtake the person in second place. What

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<sup>11</sup> Further information about the GSE are described elsewhere: [http://userpage.fu-berlin.de/~health/faq\\_gse.pdf](http://userpage.fu-berlin.de/~health/faq_gse.pdf)

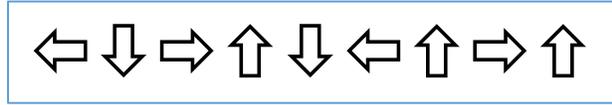
<sup>12</sup>  $r = 0.11$ ,  $p = 0.051$

<sup>13</sup>  $R = 0.17$ ,  $p = 0.013$ ,  $n = 226$

<sup>14</sup> T-test comparing women without complete secondary education with those that completed secondary education,  $p = 0.025$ ,  $n = 298$

<sup>15</sup>  $r = 0.27$ ,  $p < 0.0001$ ,  $n = 298$

position are you in?” 27% of the women were able to solve this question correctly. Second, respondents were given a card with a series of nine arrows pointing in different directions. The respondents were asked to read out loud the direction in which the arrow points from left to right, and then from right to left. They were timed by the enumerator while completing this task. If the respondent made a mistake, she had to start again from the beginning. Six women were unable to complete this task.



Reading from left to right required the women an average of 12.0 seconds; reading from right to left an average of 10.8 seconds.

After completing these tasks, the women were asked to self-evaluate how well they performed in these tasks compared to other women who applied for the program. 19 (6%) women thought they did worse than the average, 228 (76%) estimated they performed about average and 52 (18%) thought they did better than the average.

**Objective vs. subjective performance.** Respondents are grouped into three groups according to their performance in the cognitive tests. The “high performance” group includes all individuals who answered the first question right and scored among the top quartile in both arrow reading tasks. The “low performance” group includes all individuals who answered the first question wrong and scored among the bottom quartile in both arrow reading tasks. The “average performance” group consists of all who scored in the middle 50% of the arrow reading task, but answered the race questions wrong. 182 of the 300 women fall into one of these categories.

Real performance and perception of performance appear to be somewhat disconnected. In particular, recognizing low performance might be a challenge for the WEwork women. Table 06 illustrates that only five (8.5%) of the 59 women who performed low on the tests also self-evaluated their performance as below average. On the other hand, 11 of those who consistently scored low self-evaluated as high performing.

Table 06: Performance in cognitive tasks by self-evaluation of performance in cognitive task among 182 women

self-evaluation of performance in cognitive tasks	performance in cognitive tasks			
	<i>low</i>	<i>average</i>	<i>high</i>	<i>total</i>
<i>low</i>	5 (8.5%)	3 (2.8%)	0 (0%)	8 (4.4%)
<i>average</i>	43 (72.9%)	86 (80.4%)	10 (62.5%)	139 (76.4%)
<i>high</i>	11 (18.6%)	18 (16.8%)	6 (37.5%)	35 (19.2%)
<i>total</i>	59 (100%)	107 (100%)	16 (100%)	182 (100%)

Note: Chi<sup>2</sup> = 7.39, p = 0.117

Women with higher cognitive ability are younger, live in wealthier households, work more days per year, work in better quality jobs, earn more income and do less housework. The performance in the cognitive test was independent of her self-efficacy, but women with high self-efficacy evaluated their low performance more positively than women with lower self-efficacy.

## Professional Networks

85 (28%) of the WEwork women were part of a professional network at baseline.

In a more detailed analysis, the women were asked to name everyone who they had asked for business or employment-related advice in the past three months prior to the interview, and anyone that had asked them for such advice. The frequency of this advice was recorded and the level of trust the respondent had in this person.

44 (15%) WEwork women reported to exchange business or employment related advice with nobody. 73 (24%) exchanged advice with one person, most frequently their husband. 91 (30%) and 92 (31%) women exchanged advice with 2 to 3 and 4 and more people respectively.

In general, the professional networks of the women are small. If 50% of the WEwork women do not share business or employment-related advice with more than two people, this means that information and knowledge about business and employment opportunities, manufacturing technologies, sales techniques, etc. do not spread quickly or easily. However, product and process innovation rarely happen in a social vacuum.

None of the socio-demographic factors collected and analyzed in this report appears to correlate with the size of her professional network.

## Conclusions and Recommendations

Most WEwork women live in relatively safe living and housing conditions, generate a reasonable income from a diverse range of activities and are engaged in their community and household. There are several important conclusions from this baseline data analysis which influence further project development and research.

**Diverse range of participants.** The WEwork participants' age spans from 16 to 75. Considering the diverse range educational backgrounds, life experience and future potential, it will be of particular importance for the WEwork collective to accommodate this diversity and leverage the strengths of each woman to contribute to the collective outcome.

**Civic engagement is high.** Most women participate in the political or civic life of their community in one way or the other. More than half of the women occupy a public post in their village or commune. In these positions the women are perfectly placed to influence their peers to make a positive change.

**Good household WASH situation.** Most households use a latrine and treat their drinking water before consumption. In rural Cambodia where open defecation rates are still around 50%, this means that the women lead by example in their community on WASH related matters.

**Burden of unpaid house and care work.** Women do significantly more unpaid housework and care for young and elderly people in the household. The amount of housework she does correlates negatively with the time she spends working for a wage/salary and adds on top of her time commitment in a running household business. Considering that her income potential might be just as high, if not higher, than that of other people in her household, the WEwork collective should consider working with key members of the household to understand income opportunities for women and resource allocation of households better.

**Limited mobility.** For both business and employment activities, women tend to be confined mainly to their village or commune boundaries. Very rarely does their economic activity reach beyond. While being deeply rooted in the community is positive to prevent a "brain drain" from rural to urban area, the limited mobility is a strongly limiting factor for the growth and breadth of her economic activities, which needs to be addressed.

**Women earn higher daily income than men.** Although the difference is quite pronounced, it is unclear why women earn more income per day worked. A few hypotheses were formulated, but further research is needed to explore her income potential, especially considering her very limited mobility.

**Household bookkeeping is a rarity.** Very few households report having a bookkeeping system to keep track of household income and expenses. This is a key area the WEwork training gears its efforts towards.

**Unpredictable business ownership.** There appears to be no socio-economic factors that alone or in combination can predict women's business ownership. On the one hand, this means that anyone can be a business owner, but also it speaks little to nothing about the motivators, barriers and success factors for women setting up businesses in rural Cambodia. Thus, more in-depth research is needed to explore why some women set up businesses while others do not.

**Weak business-related decision-making power.** Compared to household decision-making, women are less involved in business-related decision-making, including decisions about their own businesses. A

central task of the WEwork collective is to help women to be able to actively engage in these decision-making processes.

**Small professional networks.** Professional networks among the WEwork women are very small. This means information and innovation spread slowly. Extending the professional networks of these women is a central objective of the WEwork collective.