

Working Paper Series



RURAL WOMEN IN EGYPT: OPPORTUNITIES AND VULNERABILITIES

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Working Paper No. 1359

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October 2019

We acknowledge the support of the International Labour Organization (ILO), with the support of the International Fund for Agricultural Development (IFAD) through the "Strengthening gender monitoring and evaluation in rural employment in the Near East and North Africa" project. We also acknowledge the general support of the World Bank, the ILO, Agence Française de Développement, UN Women, and the Arab Fund for Economic and Social Development for the Egypt Labor Market Panel Survey 2018, on which this paper is based. We appreciate the comments of participants in the 2019 "The Egyptian Labor Market: A Focus on Gender and Economic Vulnerability" workshop, especially those of our discussant Maria Laura Sanchez Puerta.

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First published in 2019 by The Economic Research Forum (ERF) 21 Al-Sad Al-Aaly Street Dokki, Giza Egypt www.erf.org.eg

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Abstract

This paper investigates the lives and livelihoods of rural women in Egypt. Rural women have lower economic participation, by standard measures, than urban women or men. This paper introduced additional measures of economic participation and found that standard measures vastly underestimated the economic engagement of rural women. These additional measures also allowed us to better delineate the nature of women's contributions to the economy and society. Rural women were frequently engaged in tending livestock, in household non-farm enterprises, and domestic work. Rural women had distinct patterns of family formation, with higher rates of early marriage than urban women and higher fertility rates. Although gender role attitudes were equitable in some respects, such as gender equality in education, other aspects, such as attitudes towards work and domestic violence, showed rural women were particularly vulnerable.

Keywords: Female labor force participation, labor markets, demographics, rural, Egypt **JEL Classifications:** O18, J22, J10

1. Introduction

Sixty percent of Egypt's population lives in rural areas (Krafft, Assaad, and Keo 2019). In a young country overall, Egypt's rural population is even younger than the urban population, making economic and social challenges there of particular importance for the future of Egypt. Young rural women are triply disadvantaged globally, due to their age, gender, and location; uplifting this group can also be a powerful engine for growth and development (IFAD 2019).

This paper examines the status of women, their livelihoods, and opportunities, with a particular focus on rural women, and comparisons between urban and rural men and women. The paper uses the Egypt Labor Market Panel Survey (ELMPS) waves of 1998, 2006, 2012, and 2018 to understand how rural women's lives have evolved over time in Egypt, with a particular focus on their livelihoods.

A number of studies have looked at gender attitudes and the economic empowerment of women in Egypt (Assaad, Nazier, and Ramadan 2014; Cheong, Yount, and Crandall 2017; Drolet 2010; Henry 2011; Jensen 1994; Salem 2011; Salemi and Rashed 2015; Yount et al. 2016; Yount, Crandall, and Cheong 2018; Yount, Zureick-Brown, and Salem 2014; Yount 2005). Qualitative studies have looked at the relationship between micro credit and women's empowerment (Drolet 2010), and the perception of empowerment from a cultural perspective (Henry 2011). They show that women's work is often devalued by society unless women hold skilled formal jobs. Quantitative studies look at how factors such as education, marriage, household structure, or domestic violence influence gender preferences and attitudes (Yount 2005), market and nonmarket work (Salem, Cheong, and Yount 2015; Yount, Zureick-Brown, and Salem 2014), and family decision-making power (Cheong, Yount, and Crandall 2017; Salem, Cheong, and Yount 2015; Yount, Crandall, and Cheong 2018; Yount 2005). Household structure and living with marital kin (parents-in-law, brothers-in-law, and the husband) influences women's gendered attitudes. Women living with marital kin are less likely to express equal or favorable interest in female children (Yount 2005). More educated women, compared to uneducated women without experience in paid work, report weaker preferences for sons and greater family power in household decisions and decisions that pertain to children (Yount 2005).

In rural Egypt, Salem, Cheong, and Yount (2015) looked at three indicators of Egyptian women's agency: economic decision making, freedom of movement, and attitudes about women's roles and rights. They found that women who participated in subsistence work had similar gender attitudes and equal decision-making power as women who participated in market work. Freedom of movement had positive associations with both subsistence work and market work compared to not working.

Past research emphasizes the complex and contextualized factors that affect rural women's lives. Using data from the ELMPS waves of 1998, 2006, 2012 and 2018,⁵ we examine opportunities and

⁵ The ELMPS 2018 wave will be publicly available from the Economic Research Forum (ERF) Open Access Microdata Initiative at <u>www.erfdataportal.com</u> in late October 2019. Details on the data are available elsewhere (Assaad and Barsoum 2000; Assaad and Krafft 2013; Barsoum 2009; Krafft, Assaad, and Rahman 2019).

vulnerabilities for individuals and households, with a particular emphasis on rural women. We also nuance our understanding of rural women's lives by examining differences in outcomes by education, age group, and marital status. We examine outcomes for rural Egyptian women relative to men and urban women. Our paper investigates rural women's economic engagement, including not only standard measures of employment and labor force participation, but also engagement with farm- and non-farm household enterprises and domestic work. We find that adding individuals who worked on a family enterprise or farm to employment leads us to detect substantially more employment specifically among rural women, more than doubling the employment rate by one measure. We also explore family formation, including marriage and fertility, as an important phase of rural women's lives. Women's access to services and the gender role attitudes of their communities shape their opportunities and vulnerabilities and constitute a key focus of this paper. We conclude with a discussion of the implications of our results for understanding and supporting rural women's lives and livelihoods.

2. Economic engagement of women

2.1. Labor force participation and employment

The labor force participation (LFP) rate, also referred to as the economic activity rate, measures the percentage of the working-age (aged 15-64) population that is working or searching for work. The labor force therefore consists of two key components: the employed and the unemployed. "Standard unemployment"⁶ includes individuals who have not worked in the reference period (here, three months), who want to work, are available to start in two weeks, and have actively searched for work in the reference period. As people may become discouraged in their job search, a second definition of unemployment is often used to "relax" the active job search criterion: "broad unemployment" includes non-employed individuals who want to work, are available to work, but are not searching for work (within the past three months).

In terms of employment, the "market definition" of employment only includes those engaged in economic activity for the purposes of market exchange. The "extended definition" of employment also includes subsistence labor that involves the production or processing of primary commodities for own household consumption. Subsistence labor is particularly important to measure for this paper, as it can help us understand the economic activities that rural women undertake.⁷

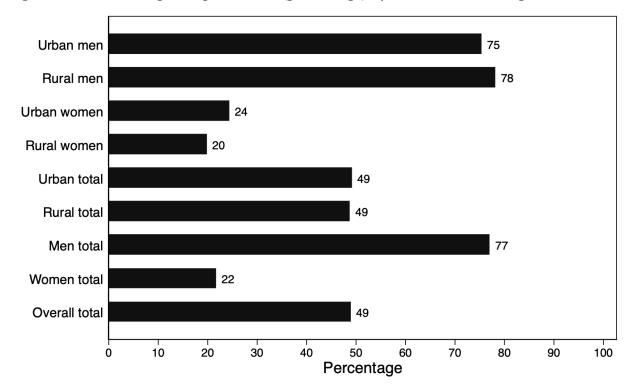
2.1.1. Labor force participation

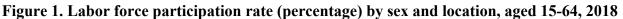
Figure 1 examines the standard (search required), market definition of LFP. In 2018, half (49%) of all working aged people (aged 15-64) participated in the labor force. This is a low rate by international standards and is largely due to the very low participation of women. Men's participation rates (77%) were in line with international rates (including from other Arab and lower-middle-income countries) (ILO 2019). However, only 22% of women were economically active. Women's LFP rate was 14 percentage points lower than the world average for lower-middle

⁶ As defined in by the International Conference of Labour Statisticians (ILO 2013) and operationalized in our data and paper. Most national statistical offices, including Egypt's, follow these definitions.

⁷ See Krafft, Assaad, and Keo (2019) for a detailed analysis of labor force participation, employment, and unemployment by these different definitions.

income countries, although slightly higher than the average of 19% for lower-middle income Arab states. While rural men participated slightly more (78%) than urban men (75%), the opposite was true for women (20% of rural women participated while 24% of urban women did so).





Notes: The market standard (search required) definition of the labor force is based on a three-month reference period. Source: Authors' calculations based on ELMPS 2018.

2.1.2. Employment

A particularly concerning feature of the Egyptian labor market is that rural women's employment rate has fallen over time, even after accounting for the effect of increasing educational attainment. Figure 2 shows employment rates comparing the market and the extended definitions of employment over the waves of the ELMPS: 1998, 2006, 2012, and 2018, as well as the 1988 special Labor Force Survey (LFS).⁸

Urban women's employment has remained stagnant, at low levels, over 1998-2018, under both the market and extended definitions. Employment rates among both urban and rural men have also remained largely stable across the period. On the other hand, a dramatic decrease in employment rates was observed among rural women under the extended definition, particularly between 2006 and 2012, with only a slight recovery between 2012 and 2018. The substantial increase in rural

⁸ Only the extended definition is available in the LFS.

women's market employment between 1998 and 2006 was largely reversed to a between 2006 and 2018.

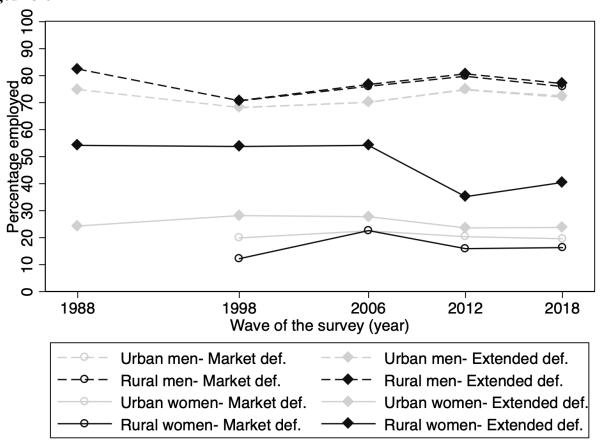


Figure 2. Employment rates (percentage) from 1988-2018 by sex, location, and definition, aged 15-64

Notes: The market definition only includes those engaged in economic activity for the purposes of market exchange. The extended definition of employment adds those involved in the production or processing of primary commodities for own household consumption (i.e. subsistence labor). Both the market and the extended definition of employment use a three-month reference period.

Source: Authors' calculations based on LFS 1988 and ELMPS 1998-2018.

2.1.3. Employment statuses

Using the market definition of work, Figure 3, focusing on 2018, differentiates among four different employment statuses: waged employee, employer, self-employed, and unpaid family worker. Wage employment was more extensive in urban (83%) than rural (73%) areas, whereas there were similar rates of self-employment in urban and rural areas (10-11%). Among employed rural women, 28% were unpaid family workers and 16% were self-employed. In contrast to 52% of rural women, 86% of employed urban women were waged employees.

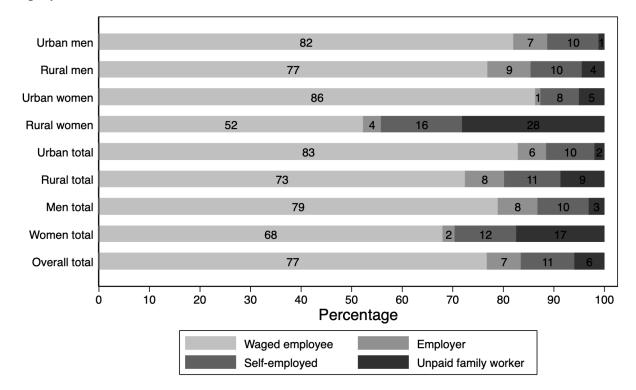


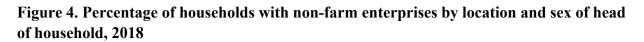
Figure 3. Employment status (percentage) by sex and location, aged 15-64 in market employment, 2018

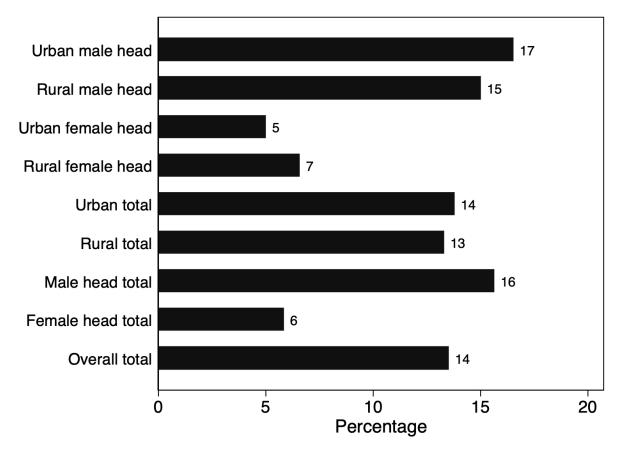
Notes: Market definition of employment with a three-month reference period. Source: Authors' calculations based on ELMPS 2018.

2.2. Farm and non-farm enterprises

2.2.1. Non-farm enterprises

Entrepreneurship in the form of household enterprises is an important part of Egypt's economy (Krafft 2016). ELMPS 2018 captures data on whether households ran non-farm enterprises. There were fewer female-headed households with non-farm enterprises compared to male-headed households (Figure 4). In rural areas, 7% of female-headed households had enterprises compared to 15% of male-headed households. Similarly, there were lower rates of non-farm enterprises among female-headed households (5%) in urban areas compared to male-headed households (17%).

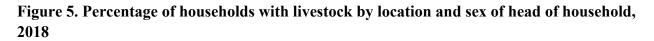


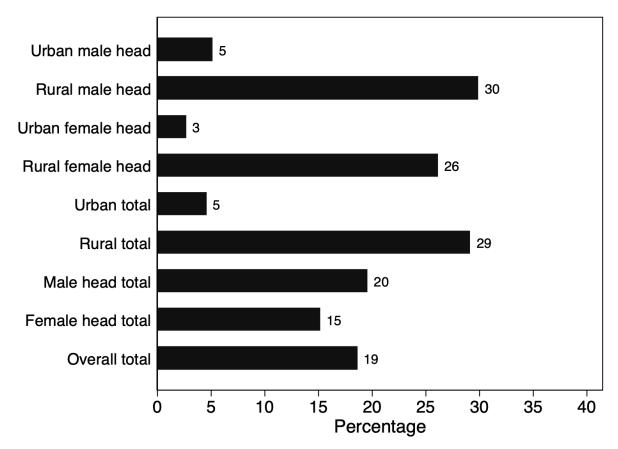


Source: Authors' calculations based on ELMPS 2018.

2.2.2. Livestock

In rural Egypt, agriculture plays a very important role for many households' livelihoods; 29% of rural households owned livestock (Figure 5). Comparatively, only 5% of urban households owned livestock. In terms of livestock, there was less of a disparity by the household head's sex than for non-farm enterprises. While 30% of rural households with male heads had livestock, 26% of rural households with female heads had livestock.





Source: Authors' calculations based on ELMPS 2018.

Rural women have a key role in livestock care in Egypt, contributing to their families' wellbeing and providing economic opportunities. Figure 6 shows that rural women were over twice as likely (24%) to be a primary caretaker of livestock compared to rural men (10%). Urban women were also slightly more likely (4%) to be the caretakers of livestock, compared to only 1% of urban men.

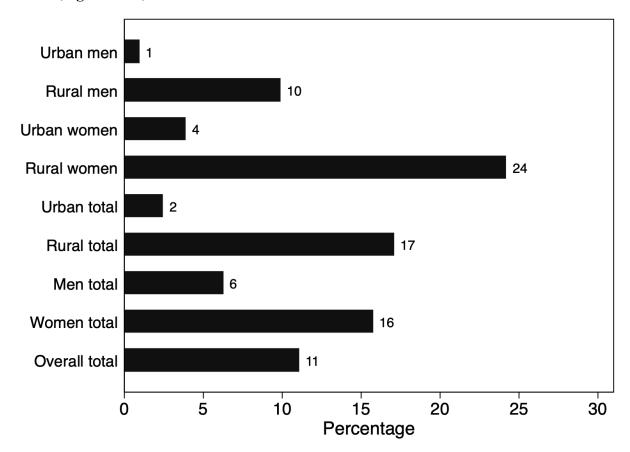


Figure 6. Percentage of individuals who were a primary caretaker of livestock, by sex and location, aged 15-64, 2018

Notes: Households with livestock had to report (up to) three primary caretakers for each livestock and these caretakers could be, but did not have to be, household members. Individuals were only considered working with livestock if they were one of the (up to) three primary caretakers for one or more livestock. The livestock included cows, poultry, goats, sheep, camels, donkey/mules, horses, buffaloes, or other animals. Source: Authors' calculations based on ELMPS 2018.

Figure 7 shows the percentage of rural women who tended livestock by age group. Women in older age groups were increasingly likely to tend livestock, up until the age of 49. Among rural women, 11% those aged 15-19 tended livestock, compared to 19% of rural women aged 20-29, 28% of women aged 30-39, and 33% of women aged 40-59.

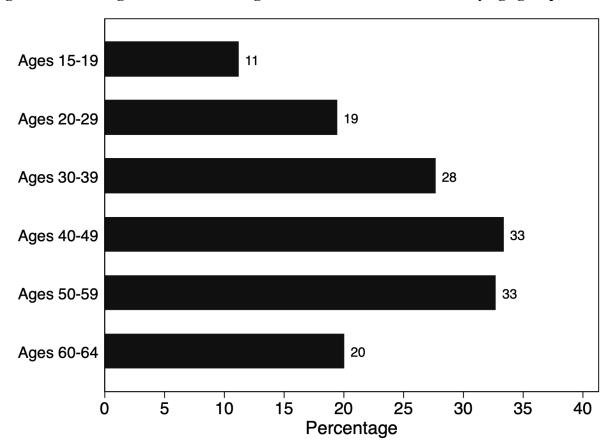


Figure 7. Percentage of rural women aged 15-64 who tended livestock by age group, 2018

Notes: Individuals were only considered working with livestock if they were one of the (up to) three primary caretakers for one or more livestock. The livestock included cows, poultry, goats, sheep, camels, donkey/mules, horses, buffaloes, or other animals.

Source: Authors' calculations based on ELMPS 2018.

Women in rural Egypt with less education were more likely to tend livestock (Figure 8). Nearly a third (31%) of rural women with less than basic education tended livestock (as one of up to three reported primary caretakers). Women with more education worked as caretakers of livestock at lower rates, but still to a substantial extent: 20% of rural women with basic education worked with livestock as a primary caretaker, 22% of rural women with secondary education and 15% of rural women with higher education. Livestock thus provided an important economic opportunity for older and less educated rural women but had a role in the lives of younger and more educated women as well.

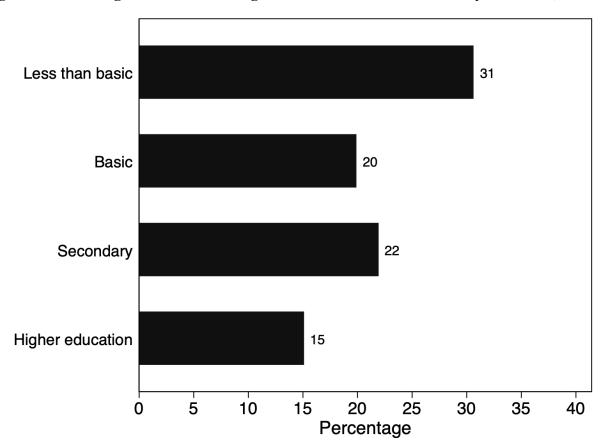


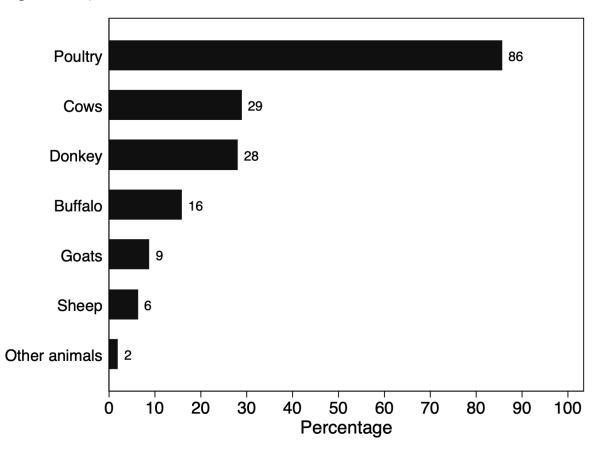
Figure 8. Percentage of rural women aged 15-64 who tended livestock by education, 2018

Notes: Individuals were only considered working with livestock if they were one of the (up to) three primary caretakers for one or more livestock. The livestock included cows, poultry, goats, sheep, camels, donkey/mules, horses, buffaloes, or other animals.

Source: Authors' calculations based on ELMPS 2018.

There were several types of common livestock in rural Egypt. Figure 9 shows, among rural households that had livestock, the (potentially multiple) types of livestock they had. Poultry (86%) was the most common livestock raised by rural households, followed by cows (29%) and donkeys (28%). Buffalo (16%), goats (9%), and sheep (6%) were also commonplace. Other animals, such as horses, camels, or anything else, were rare (2%). The predominance of poultry, which is likely to produce food for the household but has finite potential as an asset or for market sales, suggests that current livestock rearing patterns were unlikely to act as livestock-based livelihood development strategies or elevate families out of poverty.

Figure 9. Types of livestock owned by rural households (percentage of those households owning livestock)

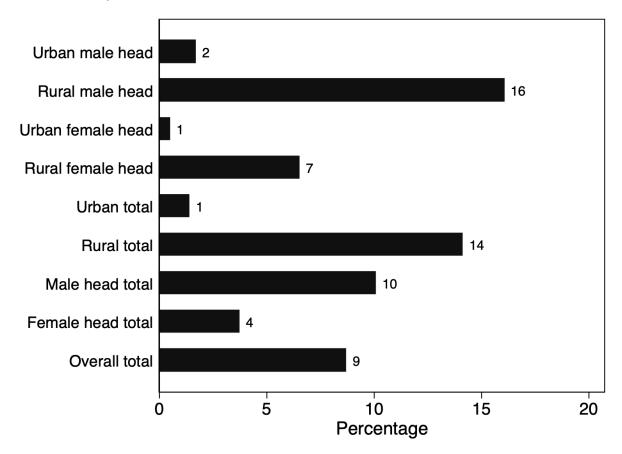


Notes: Adds up to more than 100% because households may own multiple types of livestock. Other animals category included the responses of: horses, camels, and other animals. Source: Authors' calculations based on ELMPS 2018.

2.2.3. Crops

In addition to owning livestock, working with crops was a substantial part of the agricultural sector in rural Egypt. In rural areas, 14% of households harvested or produced crops in the last year (Figure 10). Harvesting and producing crops was very uncommon for urban households (1%). Here, as with non-farm enterprises, crops were more common in male headed households. While 16% of rural male-headed households produced crops, only 7% of rural female-headed households did so.

Figure 10. Percentage of households that harvested/produced crops in the last year by head sex and location, 2018

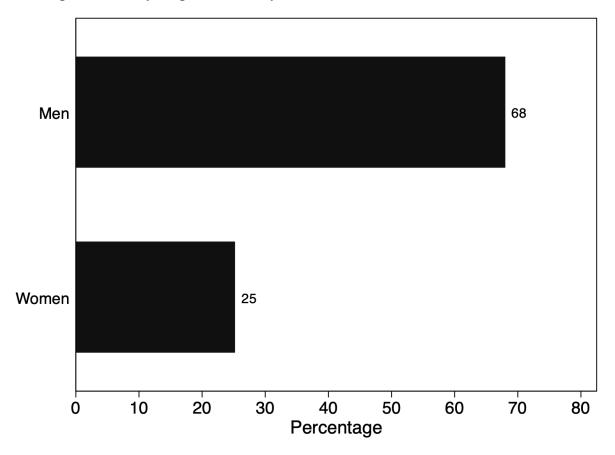


Source: Authors' calculations based on ELMPS 2018.

Whereas women were more likely to work with livestock than men, the opposite was true for crops. There is a gendered division of labor for working with crops (men) and with livestock (women). In households that harvested crops, 68% of rural men and 25% of rural women were listed as one of up to three primary caretakers of one or more crops (Figure 11).⁹

⁹ This percentage might be underestimating the percentage of people who work on crops. At most, households could report three primary caretakers for each crop. The greatest number of crops that any household reported was 9. Furthermore, among all of the reported crops (451 crops were reported by 328 unique households), there were 166 times that three people from a household were listed as a primary worker (and thus there might have been a fourth worker).

Figure 11. Working on crops (percentage) by sex, aged 15-64 in rural households that harvested/produced any crops in the last year, 2018



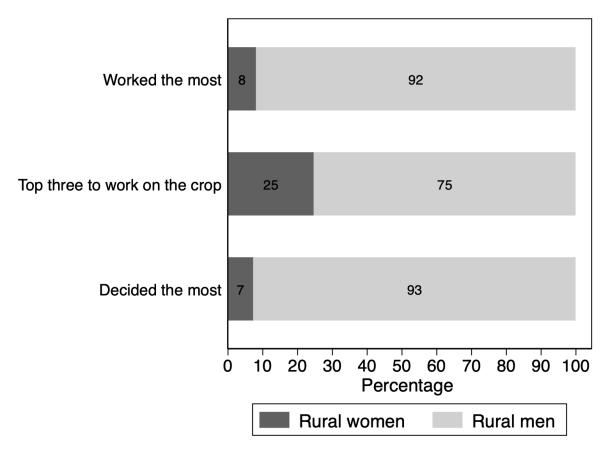
Notes: Households that harvested crops could report up to three household members who worked on each crop in order of who worked the most. Individuals were only considered working with crops if they were one of the (up to) three primary workers on one of more crops.

Source: Authors' calculations based on ELMPS 2018.

Focusing on those who worked on crops, Figure 12 shows the distribution, by sex, of primary workers on the crops, as well as the primary decision-makers.¹⁰ Among all people who were ranked as the primary worker on a crop, 92% were men and only 8% were women. However, if we extend to the top 3 workers (inclusive of those who were the primary worker) who were reported, 76% were men and 24% were women. In most instances, the primary worker of the crop was also the person who makes the most decisions for the crop. Therefore, the primary decision-makers on crops were predominately men (93%).

¹⁰ The question identifying the primary crop worker for each crop asked, "Who from the household worked the most on [this crop] in the past 12 months?" This question, with two additional questions that ask about who worked the "second most" and the "third most" identify the top three people who work on each crop. Finally, the question that identifies who decided the most is "Who from the household decided the most on [this crop] in the past 12 months?"

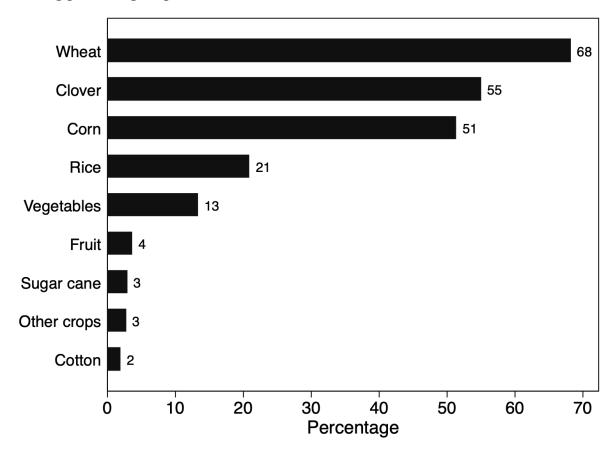
Figure 12. Distribution of crops' workers and decision-makers by sex (percentage), individuals aged 15-64 in households that harvested/produced any crops in the last year in rural households, 2018



Notes: Individuals were only considered working with crops if they were one of the (up to) three primary workers on one of more crops. Crop workers were reported in order of working the most. Source: Authors' calculations based on ELMPS 2018.

Households produced a variety of different crops. Figure 13 shows the types of crops that were grown by rural households that reported harvesting/producing crops. Households could potentially farm multiple crops. The most common crops that households harvested were wheat (68%), clover (55%), and corn (51%). Rice (21%) and vegetables (13%) were also fairly common. Less common crops included fruit (4%), sugar cane (4%), cotton (2%), and other crops (3%).

Figure 13. Types of crops (percentage of households producing crop), rural households harvesting/producing crops



Notes: Other crops included: Parsley, flowers, nuts, sesame, sunflower seed, forage, alfalfa, pharmaceutical plants Source: Authors' calculations based on ELMPS 2018.

Combining work with livestock and crops together with non-farm enterprises one can assess the percentage of people who worked on a family enterprise or farm. We restrict our definition of work here to those whose crops were sold or livestock sold, to parallel the market definition of employment (we did not restrict thus previously). The share was much higher in rural areas than urban areas (Figure 14). About a fifth of rural men (22%) and a quarter of rural women (27%) worked on a family enterprise or farm.

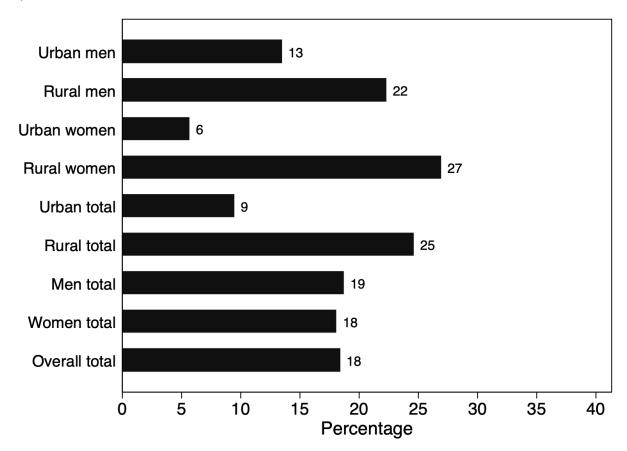


Figure 14. Worked on family enterprise or farm (percentage) by sex and location, aged 15-64, 2018

Notes: Individuals were only considered working with on a family enterprise or farm if they were one of the (up to) three primary workers for 1) one or more livestock that was sold, 2) one or more crops that was sold, or 3) one or more enterprises.

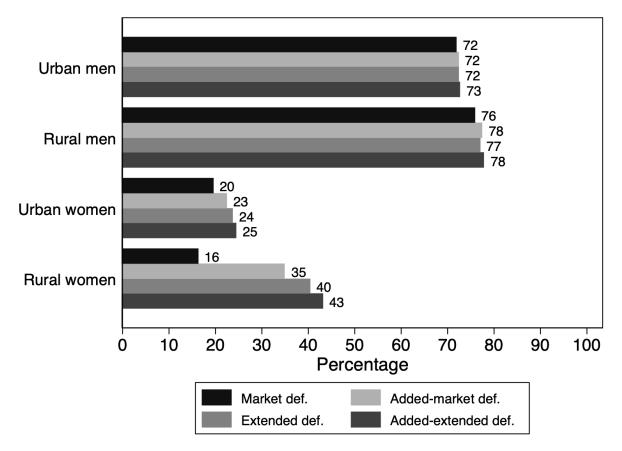
Source: Authors' calculations based on ELMPS 2018.

2.3. Measuring rural women's employment

There are concerns in the labor and development literature that those who work in agriculture, especially women, sometimes underreport their employment, an issue that has been identified in Egypt as well (Langsten and Salem 2008). Figure 15 shows employment to population ratios (employment rates) by sex and location for four different definitions of employment. In addition to the market and extended definitions of employment, mentioned previously, we have created two "added" definitions. The added-market definition adds to the market definition of employment those individuals who worked on a family enterprise or farmed crops or tended livestock that *were sold*. The added-market definition allows us to measure whether there was underreporting of market work. Similarly, the added-extended definition adds individuals who worked on a family enterprise or farmed crops of livestock were sold) to the extended definition of employment. This allows us to measure whether there was underreporting of subsistence work. Although the measures have slightly different time frames,

they do suggest a new, additional method for detecting employment, particularly among rural women. Employment for rural women more than doubled using the added-market definition of employment (35%) compared to the market definition (16%). The added-market definition of employment did not affect employment rates for urban women or men very much (at most a 3 percentage point increase). Rural women also experienced small increases in their employment when looking at the added-extended definition (43%) compared to the extended definition (40%).

Figure 15. Employment to population ratios (percentages) when adding individuals who worked for a family enterprise or farm to the market and extended definitions by sex and location, aged 15-64



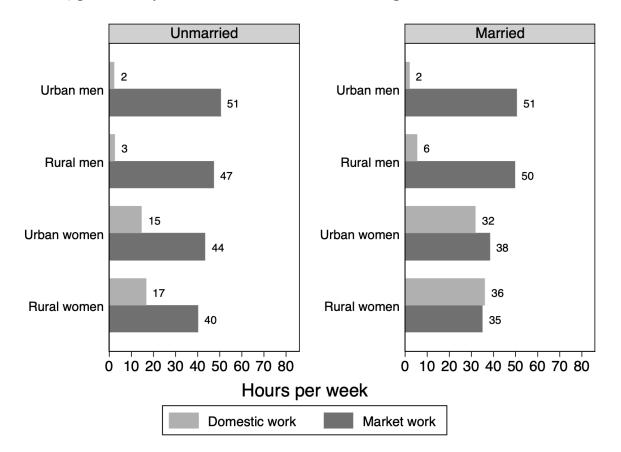
Notes: The added-market definition of employment adds individuals who worked on a family enterprise or farm that *sold* crops or livestock they worked with to the market definition of employment. The added-extended definition of employment adds individuals who worked on a family enterprise or farm (not conditional on selling crops or livestock) to the extended definition of employment. Individuals were only considered working on a family enterprise or farm if they were one of the (up to) three primary workers for one or more livestock, crop, or non-farm enterprise. Source: Authors' calculations based on ELMPS 2018.

2.4. Market and domestic work

In addition to their underestimated engagement in the market economy, rural women engage in important domestic work. Domestic work includes tasks such raising poultry or livestock, collecting firewood or other fuel or water, cooking, managing or cleaning your household, and taking care of children. It is thus a more expansive definition than subsistence work, which is focused on primary commodities.

Domestic work was overwhelmingly carried out by women (Figure 16). For unmarried individuals, rural women spent the most time doing domestic work each week (17 hours), followed by urban women (15 hours). Domestic work increased substantially with marriage for women. For rural women, domestic work was over double as time consuming for married women (36 hours) compared to those who were unmarried (17 hours). Likewise, married urban women spent on average 32 hours per week doing domestic work compared to 15 hours per week for unmarried urban women. Domestic work for men was always low (2-6 hours). The additional time women spent on domestic work was a "second shift" if they engaged in market work. For married women, market work (averaging 35 hours in rural areas and 38 in urban areas) was as time consuming as domestic work (averaging 32 hours in urban areas and 36 in rural areas). While unmarried women worked more comparable hours of market work to unmarried men (40-44 hours for women versus 47-51 for men), married men worked longer hours in market work (50-51) than married women (35-38). Challenges reconciling the "second shift" of gendered domestic responsibilities, which increase at marriage, with market work may be why women frequently leave market work at marriage (Assaad, Krafft, and Selwaness 2017; Selwaness and Krafft 2018).

Figure 16. Hours spent doing domestic work (all individuals) and market work (employed individuals) per week by sex, location and marital status, aged 15-64, 2018



Notes: The reference period for both domestic work and market work was the last seven days. Unmarried included never married, contractually married, divorced, and widowed. Domestic work included: agricultural activities or raising poultry or livestock; producing ghee, butter, cheese or non-food goods; collecting firewood or other fuel or water; cooking; washing dishes; doing laundry and ironing; managing your household; cleaning your house; construction/repairs; shopping (food, clothing, etc.); caring for sick or elderly (only); and taking care of children (only).

Source: Authors' calculations based on ELMPS 2018.

The amount of time spent doing domestic work increased with age, to a peak for urban women aged 40-49 and a peak for rural women aged 30-39 (Figure 17). Rural women aged 30-39 spent on average 39 hours doing domestic work per week and urban women aged 40-49 spent on average 33 hours per week doing domestic work. These peak hours likely represented peak caregiving responsibilities.

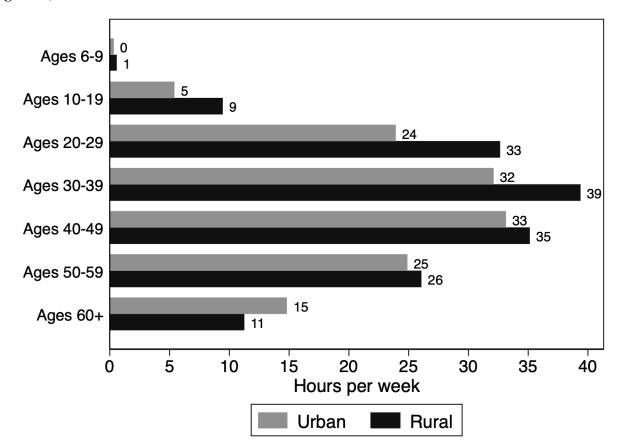
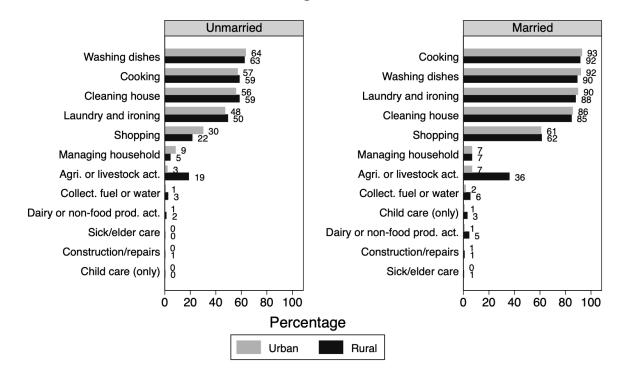


Figure 17. Hours spent doing domestic work per week by age group and location, women aged 6+, 2018

Notes: The reference period was the last 7 days. Source: Authors' calculations based on ELMPS 2018.

With the exception of tending livestock, within marital status there were only subtle differences in the nature of domestic tasks performed by rural or urban women (Figure 18). Nearly all married women (85-93%) spent time doing each of washing dishes, cooking, doing laundry and ironing, and cleaning house. Unmarried women also sometimes spent time doing these activities (48-64%). Additionally, 61-62% of married women spent time shopping. The ubiquity of these activities for married women, regardless of location, as well as the time they consumed suggests that labor-saving technologies were not widely available, affordable, or adopted by women; encouraging their spread might help address the "double burden" (Krafft and Assaad 2015).

Figure 18. Domestic tasks performed in the last week (percentage performing task) by location and current marital status, women aged 15-64, 2018



Notes: Activities were over the last 7-day reference period. Unmarried includes never married, contractually married, divorced, and widowed. Due to challenges in translation that asked for only "full time" the statistics for child care and sick/elder care were likely incorrect.

Source: Authors' calculations based on ELMPS 2018.

3. Access to services

Access to public services, such as education and healthcare, has a particularly important effect on the lives of women. Long travel times are one of several potential service access barriers, particularly for households in rural areas. Figure 19 shows the average travel time¹¹ in minutes to basic services for urban and rural households. Travel times were similar for both primary and preparatory schools between urban and rural households (12-14 minutes). Travel to secondary schools in rural areas was 5 minutes longer (23 minutes) than in urban areas (18 minutes). Proximity to government health centers or clinics was comparable for rural households and urban households based on travel time. However, travel time to a local hospital was more than 50% longer in rural areas; on average rural households had to travel for 32 minutes to reach the nearest hospital compared to 20 minutes for urban households.

¹¹ Households reported commute times in minutes via their most used mode of transportation to each service. For example, while individuals in urban areas might walk 17 minutes to a health clinic, individuals in rural areas might drive 19 minutes to a health clinic, with a two-minute difference in their travel time. The most commonly used modes of transportation to services included: walking, public transportation, microbus/private minibus, taxi, toktok, bike/motorcycle, private car, school bus, different modes, and other.

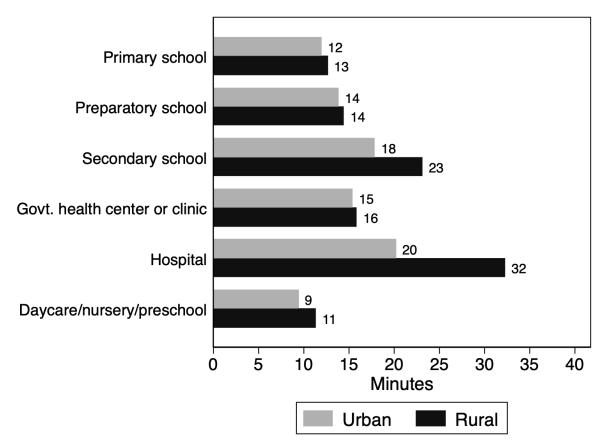


Figure 19. Average travel time (in minutes) to basic services by location, households, 2018

Source: Authors' calculations based on ELMPS 2018.

Across Egypt, the vast majority of households had access to modern sanitation; 98% of urban households and 97% of rural households had toilets inside their house that were either connected to a public network or connected to a tank (Figure 20). In urban areas, 92% used a toilet that was connected to a public network, and in rural areas 58% did. In rural areas, toilets that were connected to tanks (39%) were nearly as common as those connected to public networks (58%). Although the mode of sanitation and role of public networks varied, overall urban and rural residents had equitable access to modern sanitation.

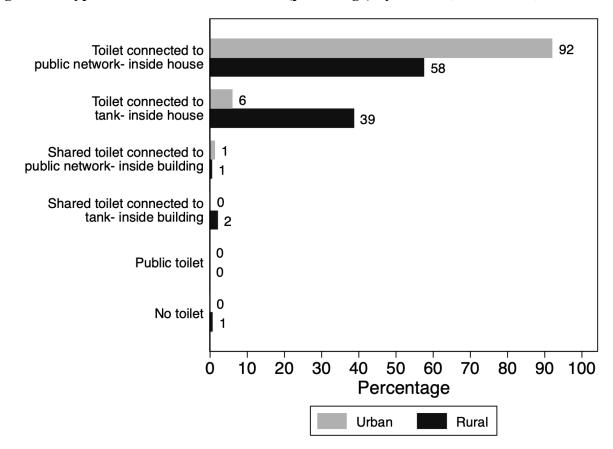


Figure 20. Type of sanitation facilities used (percentage) by location, households, 2018

Source: Authors' calculations based on ELMPS 2018.

4. Family formation

4.1. Early marriage and age at marriage

Women began family formation and married earlier in rural areas. The median age of marriage was 20 for rural women and 23 for urban women (Figure 21). Early marriage, or child marriage (i.e. marriage before the age of 18), was more common in rural than urban areas of Egypt. In urban areas, 8% of women aged 15-49 in 2018 were married before the age of 18, in comparison to 19% of women aged 15-49 in rural areas. The gap between the proportion of urban and rural women married at some ages was as large as 0.25. By the age of 30 years old, however, nearly 90% of both rural and urban women were married, although rural women slightly more so.

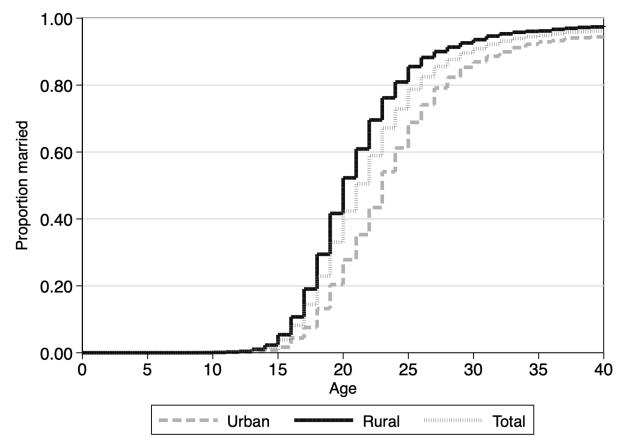


Figure 21. Proportion married by age and location, women aged 15-49, 2018

Notes: Showing through age 40 based on sample aged 15-49. Based on Kaplan-Meier failure estimate. Source: Authors' calculations based on ELMPS 2018.

4.2. Fertility

Fertility in Egypt, after rising to 3.5 births per woman (total fertility rate (TFR)) in 2012-2015, has fallen back to 3.1 births per woman in 2018 (Krafft, Assaad, and Keo 2019; Ministry of Health and Population, El-Zanaty and Associates, and ICF International 2015). There were large differences in fertility across rural and urban areas in 2018: births per woman were 2.6 in urban areas and 3.5 in rural areas (Figure 22).¹² In urban areas fertility decreased with educational attainment, although not very sharply. The fertility rate for urban women with basic education (2.4) was not very different from that of tertiary graduates (2.2). More counterintuitively, educational attainment was not related to fertility at all in rural areas. Women with no education and women with higher education had essentially the same fertility rate (3.7-3.8), in line with the fertility rates of illiterate urban women.

¹² Fertility calculated with the STATA program tfr2 (Schoumaker 2014).

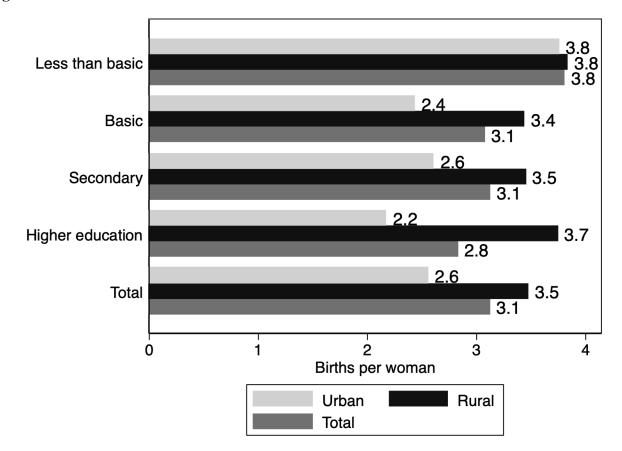
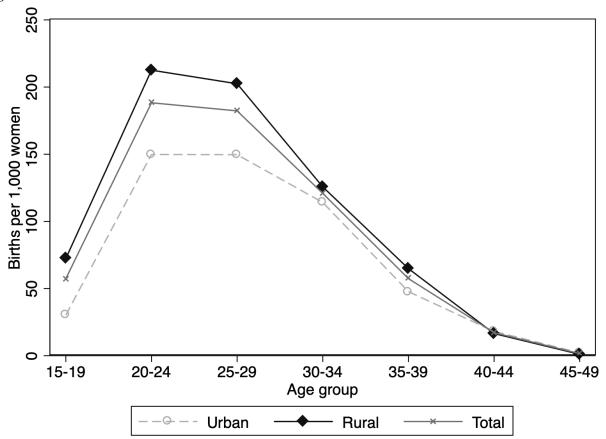


Figure 22. Total fertility rates (TFRs, births per woman) by location and education, women aged 15-49

Source: Authors' calculations based on ELMPS 2018.

The age-specific fertility rates (ASFRs) for rural women aged 15-39 were higher than for urban women (Figure 23). For those aged 15-19, rural women had on average 72 births per every 1000 women, compared to 30 births per every 1000 for urban women. Rural women's peak ASFR was in the 20-24 age range, at 213 births per 1000 women. Urban women's fertility peaked between 20 and 29 years of age, at 150 births per thousand women at both ages.

Figure 23. Age-specific fertility rates (ASFRs, births per 1000 women) by location, women aged 15-49



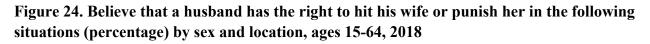
Source: Authors' calculations based on ELMPS 2018.

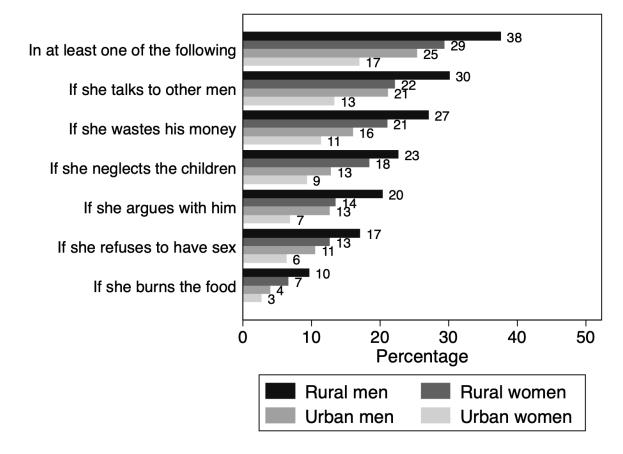
5. Gender role attitudes

The different activities of men and women in Egyptian society, particularly the disproportionate domestic work of women, are tied to gender role attitudes (Hoodfar 1997). These attitudes shape the beliefs and behaviors of Egyptians on both a societal level and an individual level. This section explores attitudes towards domestic violence, the role of women, decision-making, and women's mobility.

The ELMPS 2018 captured attitudes towards domestic violence by asking both men and women if a husband has the right to hit or punish his wife under a variety of circumstances. Responses demonstrated substantial differences in attitudes towards domestic violence by sex and location (Figure 24). First, men were more likely to justify domestic violence than women in both rural and urban areas. Second, domestic violence was considered justified more frequently among rural residents than urban residents. In at least one of the given situations (if she burns the food, if she neglects the children, if she argues with him, if she talks to other men, if she wastes his money, or if she refuses to have sex with him) 38% of rural men and 25% of urban men believed that it was justifiable to hit or punish a wife compared to 29% of rural women and 17% of urban women. Of

the six situations, the single situation in which the highest percentages of people reported that a husband has a right to hit or punish his wife was if she talks to other men (13-30%). Of the six situations, the single situation in which the lowest percentages of people reported that a husband has a right to hit or punish his wife was if she burns the food (3-10%).



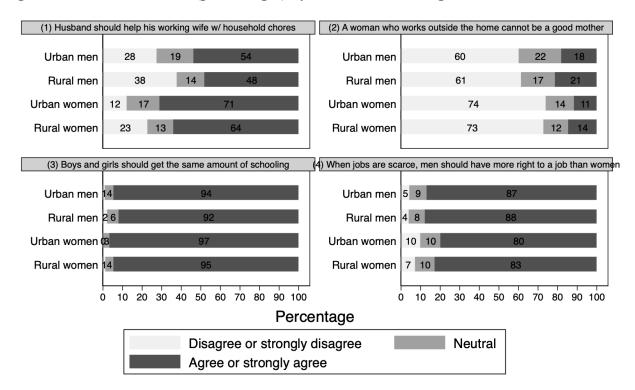


Source: Authors' calculations based on ELMPS 2018.

Figure 25 shows gender role attitudes around four issues: household chores; reconciling motherhood and work; access to education; and access to employment opportunities. Above (Figure 16) we saw that urban and rural men do very little domestic work. These low rates of contribution to domestic work contradict the fact that 54% of urban men and 48% of rural men agreed that husbands should help their wives with household chores. Beliefs around education were overwhelmingly egalitarian. The majority (92-97%) of people across sex and location agreed or strongly agreed with the statement that boys and girls should get equal schooling.

A large majority of both urban and rural men (60-61%) agreed a woman can be a good mother *and* work outside the household. Overall the finding runs counter to the common argument that women's low economic participation is due to normative, cultural preferences (World Bank 2013). Yet, a substantial minority of men (18-21%) and women (11-14%) held the opposite belief.

Negative attitudes towards women working were compounded by the economic context. Only 4%-10% of individuals disagreed with the proposition that "when jobs are scarce, men should have more right to a job than women." In times of economic challenges, or in local areas with high unemployment, particularly vulnerable women may be limited in their economic opportunities due to these attitudes.



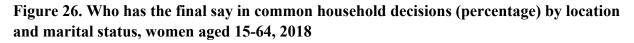


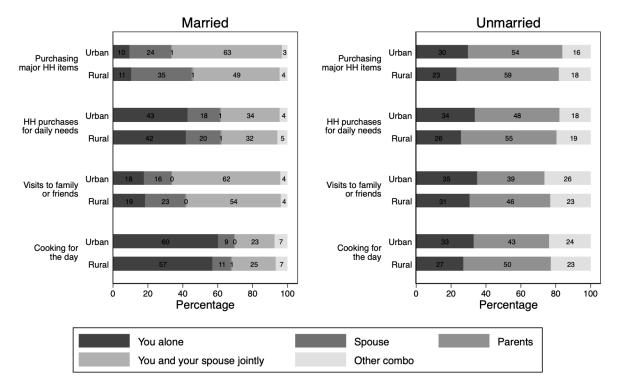
Decision-making power within their household is an important element of the economic agency of women. Women aged 15-64 were asked who in the household has the final say about household decisions such as purchasing a major household item, making household purchases for daily needs, visits to family or friends, or cooking for the family. Figure 26 shows the distribution of who has the final say in each situation. The deciders could be: you alone; spouse; parents; you and spouse jointly; or other combinations. For women who were not married, it was most common that their parents made the household decisions (39-59%). It was slightly more common that parents of rural unmarried women (46-59%) had the final say than for urban unmarried women (39-54%).

The final decider in common household decisions for married women has more variation across decisions. When it comes to purchasing major household items, 24% (urban) and 35% (rural) said that their spouse has the final say, and 63% (urban) versus 49% (rural) said that they and their spouse make the decision jointly. Visits to family or friends were often made jointly by women and their spouses (62% urban, 54% rural). Yet, a substantial percentage (16% urban, 23% rural) of women said that their spouse has the final say about visits to family and friends. However, in

Source: Authors' calculations based on ELMPS 2018.

decisions about cooking for the day, 57% of married women in rural households said that they alone were able to make the decision, as well as 60% of married women in urban households. Household purchases for daily needs were often (32-34%) women's own decisions as well. While major decisions appear to be a joint or spouse decision, daily decisions were more likely to be women's own decisions – or their own responsibility, in that they were largely responsible for tasks such as cooking.





Notes: Other combo includes responses: Parents, in-laws, relatives; you, your spouse, with parents or in-laws; you and your parents; and others.

Source: Authors' calculations based on ELMPS 2018.

Focusing only on responses from married women aged 15-64, Figure 27 first shows the distribution of who has the final say in personal decisions such as going to the doctor or buying personal clothes. For each situation it was most common that women either have the final say in the decisions or participate in the final decision-making jointly with their spouses. For instance, most women (51-54%) made the decision about going to the doctor jointly with their spouses and many made the decision alone (22-34%). However, a substantial percentage of married women do not get to participate in the final say for these personal decisions. Spouses alone had the final say in decisions about going to the doctor for 12-18% of married women.

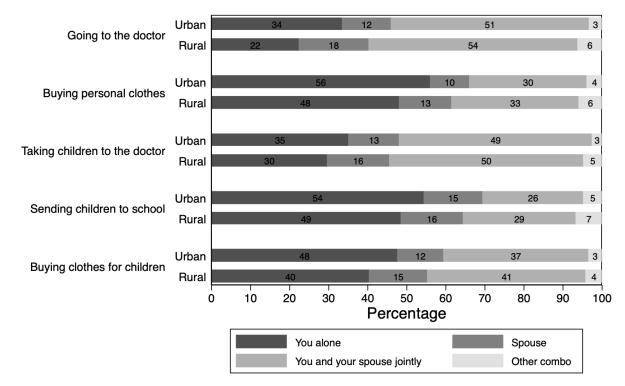


Figure 27. Who in the household has the final say in decisions about self and children (percentage) by location, married women aged 15-64, 2018

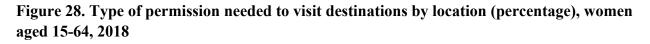
Notes: Other combo includes responses: parents; parents, in-laws, relatives; you, your spouse, with parents or in-laws; you and your parents; and others.

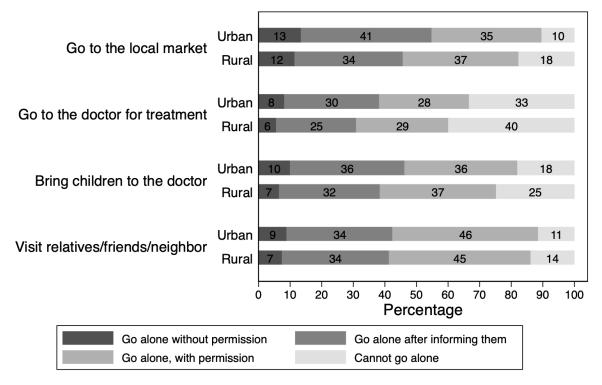
Source: Authors' calculations based on ELMPS 2018.

Figure 27 also shows who has the final say in decisions for children such as taking children to the doctor, sending children to school, or buying clothes for children. Decisions about children were often made solely by married women or by married women jointly with their spouses. In rural areas, nearly half (49%) of women had the final say about sending children to school, and 26% of women made the decision jointly with their spouses. Comparatively, 54% of married urban women made the decision alone and 29% of married women in urban areas made the decision jointly with their spouses. Comparatively, 54% of married urban women made the decision alone and 29% of women did not get to participate in the decision about sending children to school because the decisions were made solely by their spouses. Similarly, it was most common that married women had the final say about buying clothes for their children (40-48%), followed by women who make the decision jointly with their spouses (37-41%). Women had the most solo decision-making power in buying their own clothes (48% rural, 56% urban) and the least in going to the doctor (22% rural, 34% urban), with most of the rest of decisions made jointly, yet some still made solely by spouses. Comparing the results in 2018 to the patterns in previous waves of the ELMPS (Assaad, Nazier, and Ramadan 2014), women have experienced increases in decision-making power over time, including an increase in both solo and joint decisions.

Another important element of a woman's economic agency is measured in her freedom of movement. Figure 28 shows whether permission is needed and the type of permission needed for

women aged 15-64 to visit common destinations such as the local market, the doctor (for self or children), or relatives, friends and neighbors. Very low percentages of rural (6-12%) and urban (8-13%) women go to any of the destinations alone without permission, but a sizeable share of urban (30-41%) and rural (25-34%) go after informing family. Across destinations, 28-46% of rural and urban women will go alone with permission. Finally, some women reported that they cannot go alone to these destinations. A slightly higher percentage of rural women could not go alone destinations in comparison to urban women. Going to the doctor for treatment has the highest percentages of rural (40%) and urban (33%) of women saying that they cannot go alone.





Source: Authors' calculations based on ELMPS 2018.

6. Discussion and Conclusions

Egypt's rural population is a substantial share of its economy and society—a particularly young population, whose future will drive the direction of Egypt. Globally, increases in education tend to translate into decreases in fertility (e.g. Cygan-Rehm and Maeder 2013; Kim 2010; Osili and Long 2008). While historically the education-fertility relationship held in Egypt (Ali and Gurmu 2018), as of 2018 this relationship held only in urban areas. In rural areas women with no education and women with higher education had essentially the same fertility rate (3.7-3.8), in line with the fertility rates of illiterate urban women. The breakdown of the education-fertility relationship merits further research, especially since rural areas are also where most of the population growth occurs.

While rural Egyptian women do face some important vulnerabilities, in comparison to men and their urban counterparts, they also have a number of unique opportunities and strengths. While less likely to be wage workers than urban women, rural women were much more likely to engage in subsistence work or market work in a farm or non-farm enterprise. Women were particularly engaged in livestock, such that policies and programs that support livestock opportunities could disproportionately benefit women (IFAD Independent Office of Evaluation 2017).

Women, and especially rural women, face challenges due to gender role attitudes and high domestic workloads. Almost everyone agreed that girls and boys should receive equal education, an egalitarian attitude that is increasingly realized in terms of educational attainment (Elbadawy 2015; Krafft 2012; Krafft, Assaad, and Keo 2019). While most men and women agreed that working did not prevent a woman from being a "good" mother, a substantial minority disagreed. Moreover, the vast majority of Egyptians agreed that men should have employment priority when jobs are scarce. These attitudes may contribute to their low rates of economic activity and particularly marginalize women in areas with limited employment opportunities.

Only 24% of urban and 20% of rural women were "economically active" according to the international definition. A particularly important finding was how, despite using the best practices in design including keyword detection questions, we showed that standard measures were severely underestimating rural women's participation in market work. Half of women who engaged in a non-farm enterprise or producing a crop or livestock for market (in the past year) did not report market work in the past three months. While some of this difference may be due to different time frames, further research on seasonality and the applicability of this approach—capturing different economic activities, if they involved market transactions, and who participated in them—is merited.

An important factor limiting women's participation in the market economy was their substantial "second shift" domestic workloads, 32-36 hours per week for married women, compared to 2-6 hours for men. In the long term, for women to increase their participation in the labor force, they will need to be able to reduce their second shift. This can be done through an increase in men's participation in domestic work, possibly incentivized with paternity leave, as well as through access to services that such as child and elder care and labor-saving devices (Krafft and Assaad 2015; World Bank 2018). Work that is more reconcilable with women's domestic responsibilities, such as part-time work or work from home, may also help. Stagnant, segmented, and even falling (female) labor demand has contributed to women's low participation (Assaad et al. 2018; Assaad, Yassin, and Krafft 2018; World Bank 2018). Stronger (female) labor demand, coupled with reductions in the second shift of domestic work, will be an important part of any future increase in women's participation in market work.

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