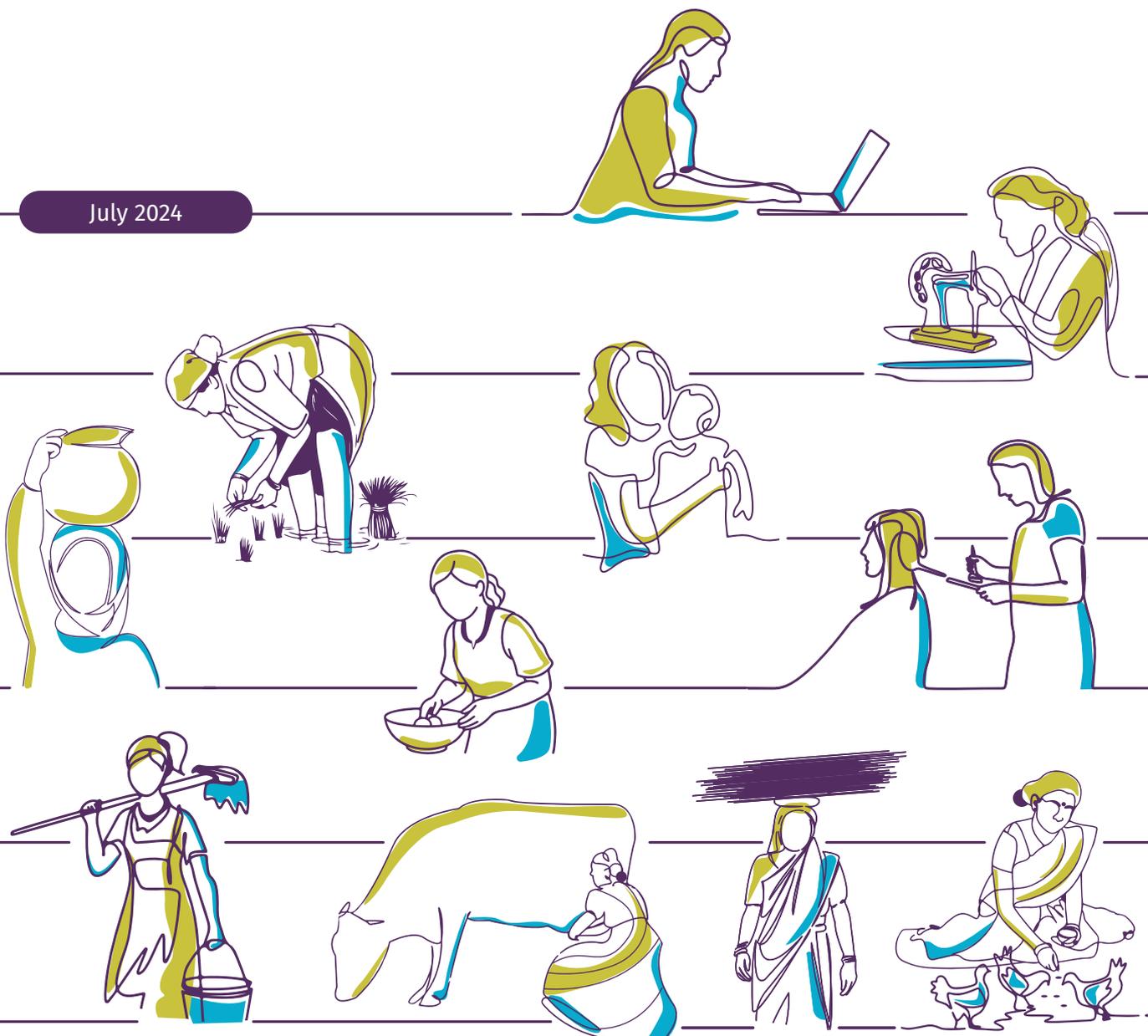


# CAPTURING WOMEN'S WORK TO MEASURE BETTER

## SUMMARY OF FINDINGS

July 2024



### About IWWAGE

Institute for What Works to Advance Gender Equality (IWWAGE) is an action-oriented research centre of IFMR Society (a not-for-profit society registered under the Societies Act). LEAD has strategic oversight and brand support from Krea University (sponsored by IFMR Society) to enable synergies between academia and the research centre.

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[www.iwwage.org](http://www.iwwage.org)

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# CAPTURING WOMEN'S WORK TO MEASURE BETTER



Women's work is inherently more diverse and complex due to the significant component of unpaid work they perform. This unpaid work often involves a wide variety of activities such as performing domestic chores and caring for the household and its members, including children, the elderly, and the sick. Consequently, measuring women's work becomes even more challenging. Conventional labour force surveys tend to collect data based on tools that typically do not emphasize on the questions that could uncover the types of work women perform, leading to gaps in understanding the amount of time spent or the magnitude of their work. Thus, such surveys often overlook or bypass the complexities associated with women's work, resulting in potential undercounting of the work performed by women leading to a non-recognition of women as 'workers'. It makes the labour force surveys gender blind and keep women invisible in most of the statistical estimates leading to their exclusion from policy discussions. IWWAGE attempts to engender the labour force surveys and shift away from conventional ways to collect data on women's work.

### In our study we attempted the following;

- 1** Develop better mechanisms for collecting data on women's work through newer probing techniques and innovative sampling frames
  - 2** Develop a framework for conducting women's surveys that could be potentially aligned with national Labour Force Surveys (LFS) to obtain better estimates of women's labour force participation
  - 3** Identify and highlight the extent of respondent bias that underestimates women's contribution to the economy, when the respondent is not the woman herself.
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01

# Innovative Sampling and Probing Techniques



For the study we adopted a **multi-stage stratified random sampling** using the **electoral rolls**. We surveyed around 4000 females and 800 males across two states of India, namely, Karnataka and Jharkhand during the period of November 2023 to January 2024. Four districts were selected from each state, with polling booths chosen to ensure proportionate rural and urban representation. Since the study required data from women from working age groups, electoral rolls provided a feasible method to identify the targeted respondents. Households with females aged between 18-60 years were listed and the sampling frame was stratified into three age cohorts: 18-24 years, 25-34 years, and 35-60 years using electoral rolls. The sample size for each cohort was proportionate to its population size according to electoral data.

For the survey, the employment module collected information from both male and female respondents on any activity females were involved in or supported for profit in the last 365 days (from the day of the survey). This is to **capture the informant bias** which often takes place in many national surveys where male respondents answer questions related to women. In our survey, in case of one-fifth of the selected households, a male member is also surveyed.

With an aim to capture women's work more comprehensively, we have defined the principal engagement in a broader manner. In IWWAGE'S study, the principal engagement refers to the activity the respondents pursued for the major time in the preceding year. This is less restrictive as compared to the definition PLFS follows as the criterion regarding the minimum number of days to be met for an activity to qualify to be a principal engagement is relaxed in this broader definition.

In addition to women's principal status, the survey collected data on **up to 5 subsidiary activities** within the last 365 days, whereas the Periodic Labour force Survey (PLFS) currently captures only one subsidiary activity.

The survey followed with challenges concerning not participation in the labour force, and probed deeply into not just women seeking work but also their **willingness to participate in the labourforce** to understand labour underutilization in a comprehensive manner.

In a rapid time-budget module to capture women's participation, the survey used a weekly recall method on seven broad key activities.<sup>1</sup> To make sure that women's participation in the activities over the week are captured accurately, the surveyors called out the list of activities for enhanced respondent understanding.

In addition to the informant bias in employment activities, the survey also enables to capture informant bias in other activities like unpaid economic work, unpaid domestic services, care work etc by asking male members about women's engagement in these activities and comparing it women's self-reporting on their engagement in these activities.

<sup>1</sup>Seven day recall for: paid economic and unpaid household production activities; and 24-hour recall for: unpaid domestic, caregiving and volunteer services, socialising and leisure

## 1.1 Comparing PLFS and IWWAGE Survey Results/Estimates

### 1.1 a Women's labour force/workforce Estimates

- According to the survey findings, the share of women participating in the labourforce over the reference period of one year is 74 per cent in Karnataka and 55 per cent in Jharkhand. The Female Labour Force Participation Rate (FLFPR) is relatively higher in rural areas as compared to the urban areas in both the states. In Karnataka, the FLFPR stands at 76 per cent in rural areas and 69 per cent in urban areas. In Jharkhand, 59 per cent of women are in the labourforce in rural areas, whereas in the urban areas the share is relatively low at 27 per cent. These trends are in tandem with the national trend of rural FLFPR being higher than the urban FLFPR as revealed by the PLFS rounds.
- The usual status estimates of women's labourforce/workforce participation from PLFS 2022-23, are comparatively lower than weighted estimates of women's labourforce/workforce participation from the IWWAGE study, except for rural Jharkhand.
- The Female Work Force Participation (FWPR) is higher in Karnataka as compared to Jharkhand and the share of unemployed is higher in Jharkhand as compared to Karnataka, which follows the trends provided by the PLFS as well.

Figure 1: WPR Comparisons between PLFS 2022-23 and IWWAGE Study

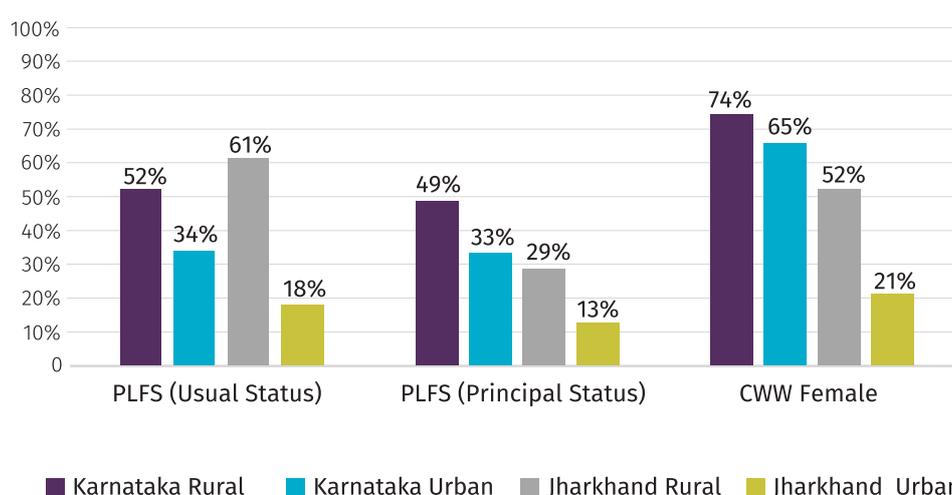
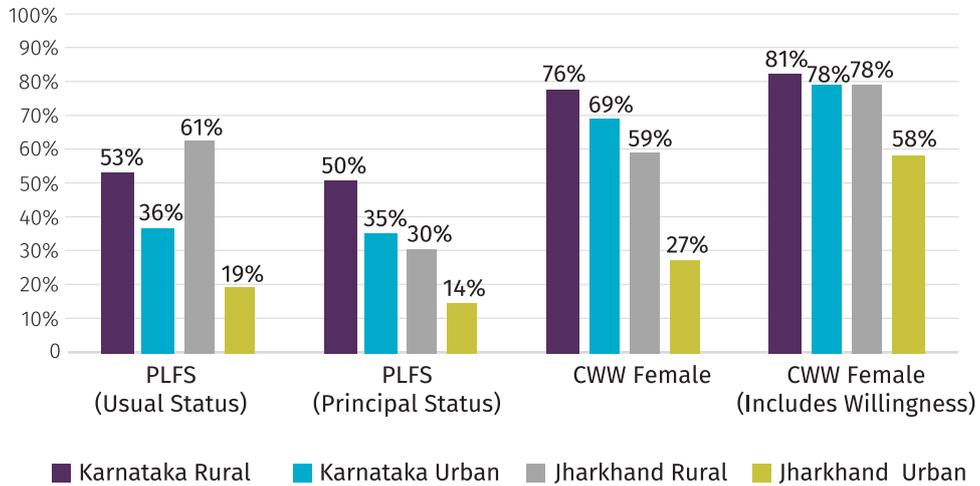


Figure 2: FLFPR Comparisons between PLFS (2022-23) and IWWAGE Study



### 1.1 b Industrial Distribution of Women's Work

- As per PLFS 2022-23, the percentage of women working in agriculture is 79 per cent in rural Karnataka and 83 per cent in rural Jharkhand. In the urban area, PLFS 2022-23 reports that 22 per cent and 7 per cent women engage in agricultural activities in Jharkhand and Karnataka, respectively.
- PLFS trends are consistent with IWWAGE's study. 68 per cent of women in rural Karnataka and 71 per cent of women in rural Jharkhand are engaged in agriculture and allied activities. Further, 11 per cent and 25 per cent of women are engaged in agriculture in urban Karnataka and urban Jharkhand, respectively.

Figure 3: Sectoral Composition of women's employment in Karnataka from IWWAGE survey

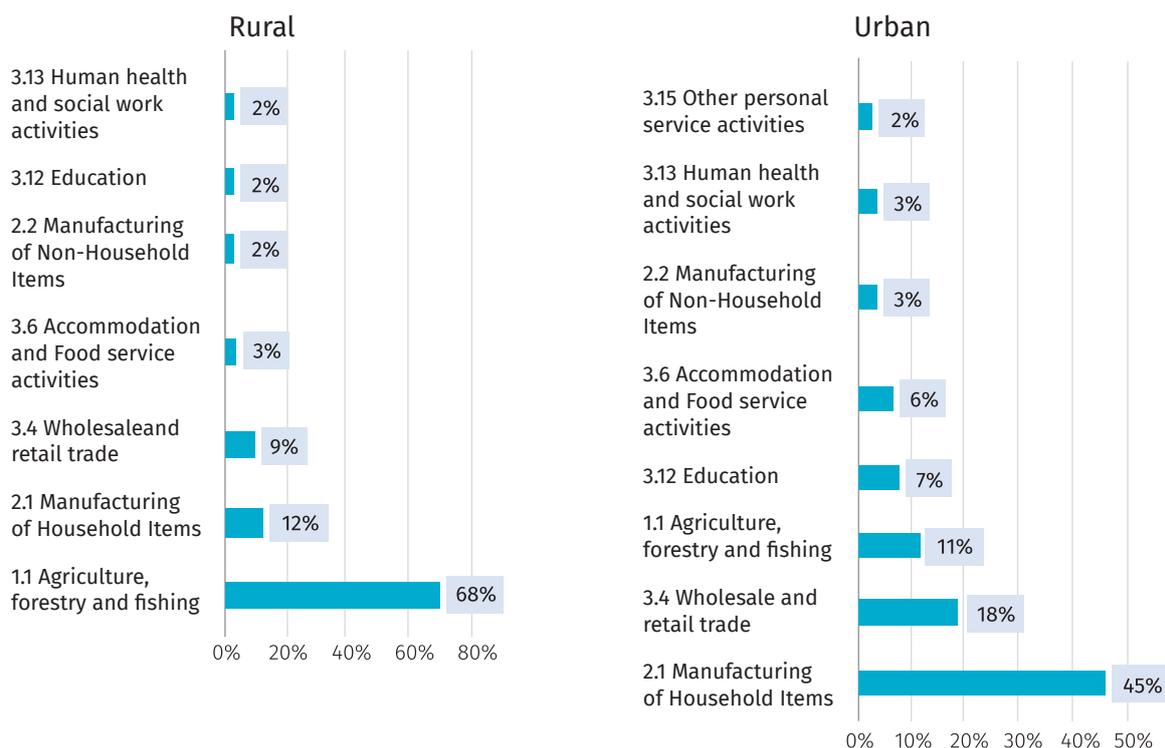


Figure 4: Sectoral Composition of women's employment in Karnataka from PLFS 22-23

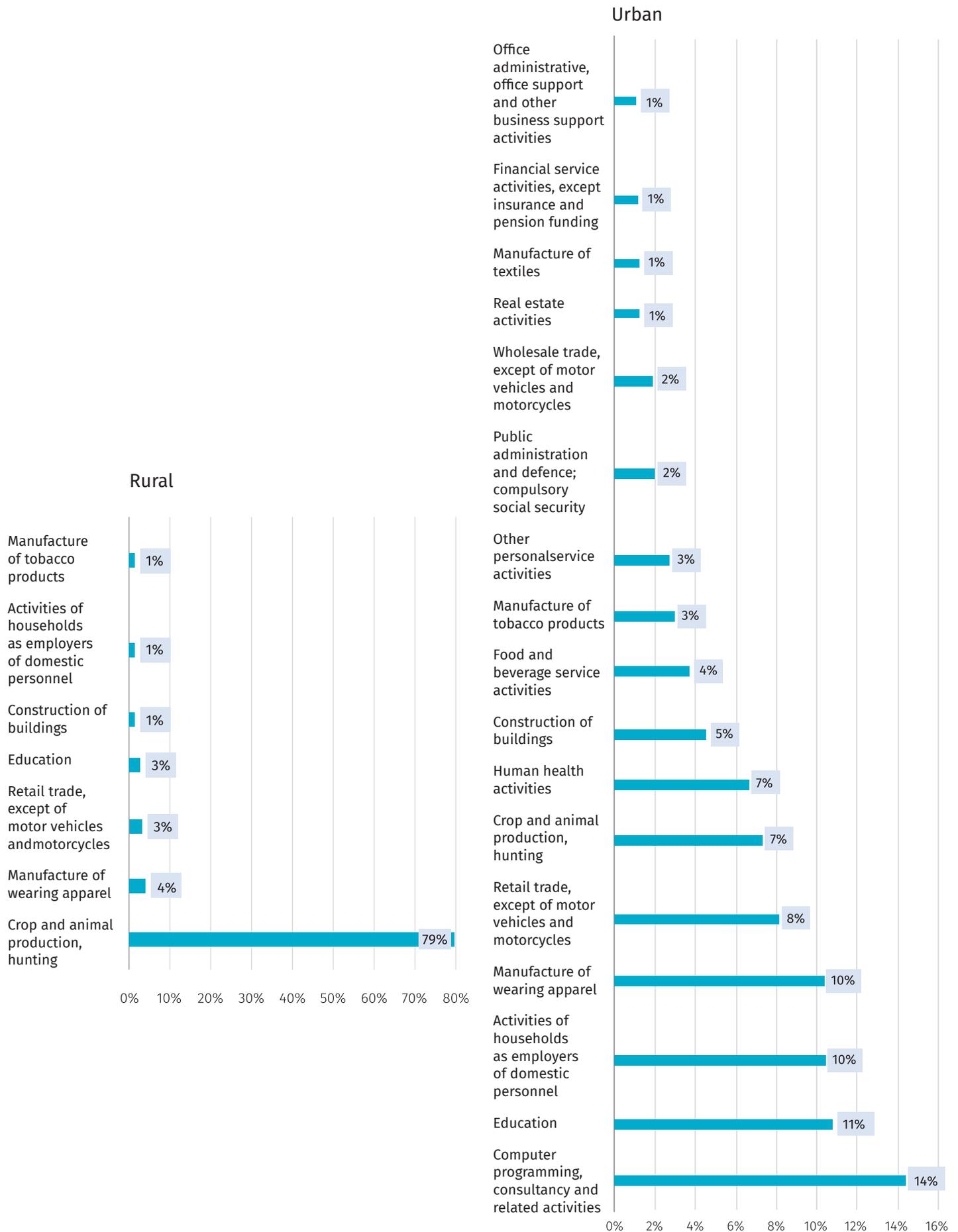


Figure 5: Sectoral Composition of women's employment in Jharkhand from IWWAGE Study

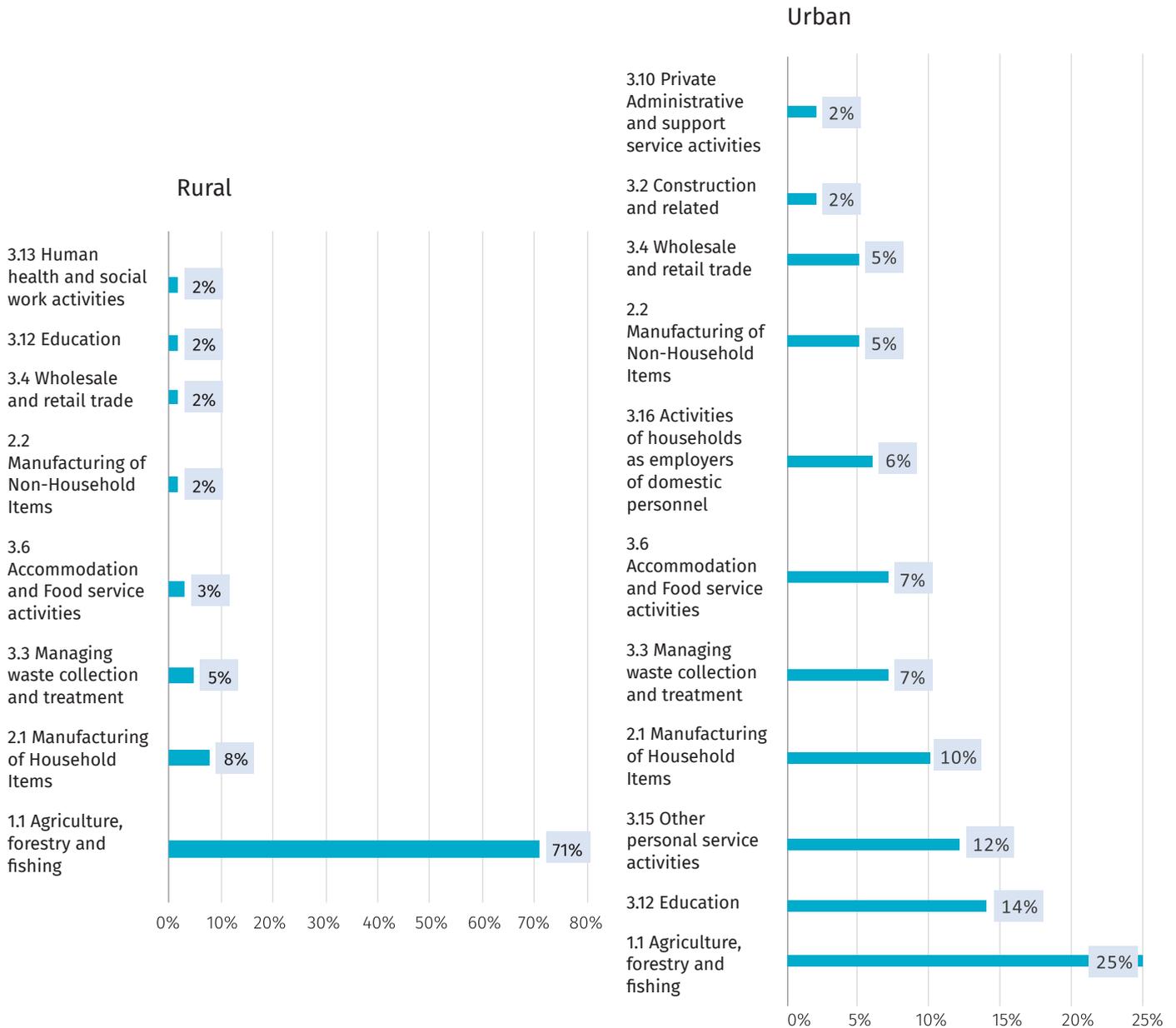
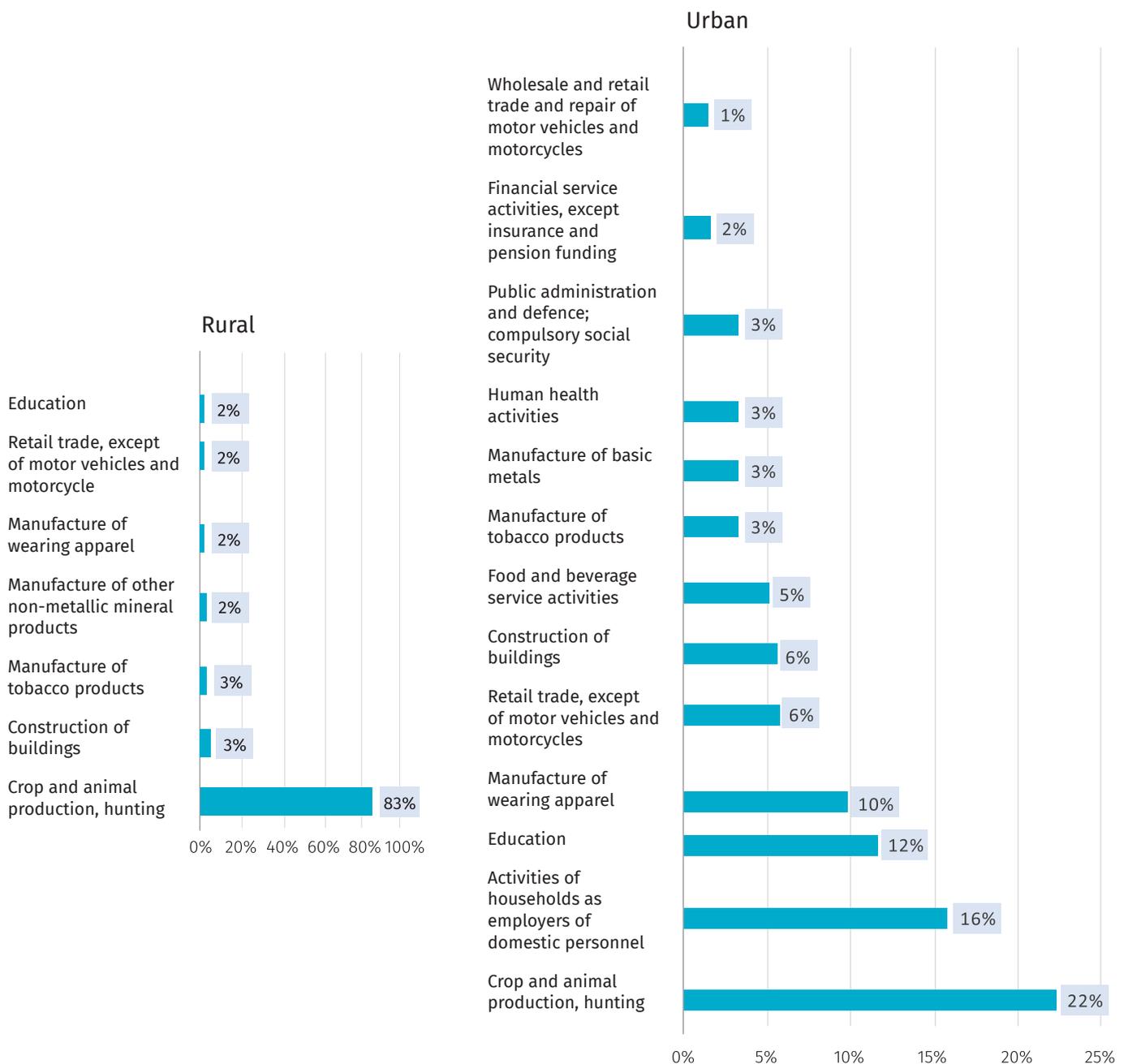


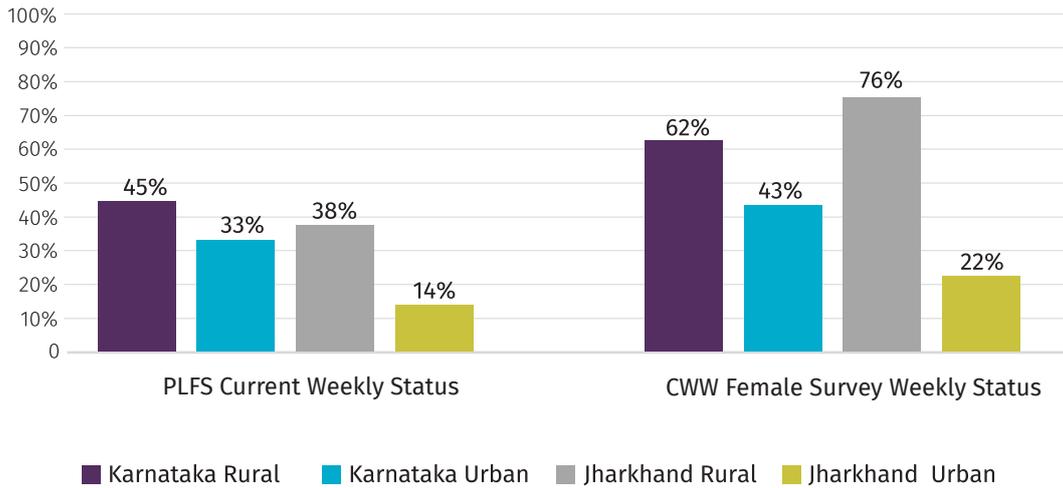
Figure 6: Sectoral Composition of women's employment in Jharkhand from PLFS 22-23



### 1.1 c FWPR as per Weekly Status

- The estimates of women's weekly workforce participation rates from IWWAGE's study are higher than PLFS 2022-23 estimates. As in the seven days reference period, calling out the activities during the survey has helped women to report their work better.

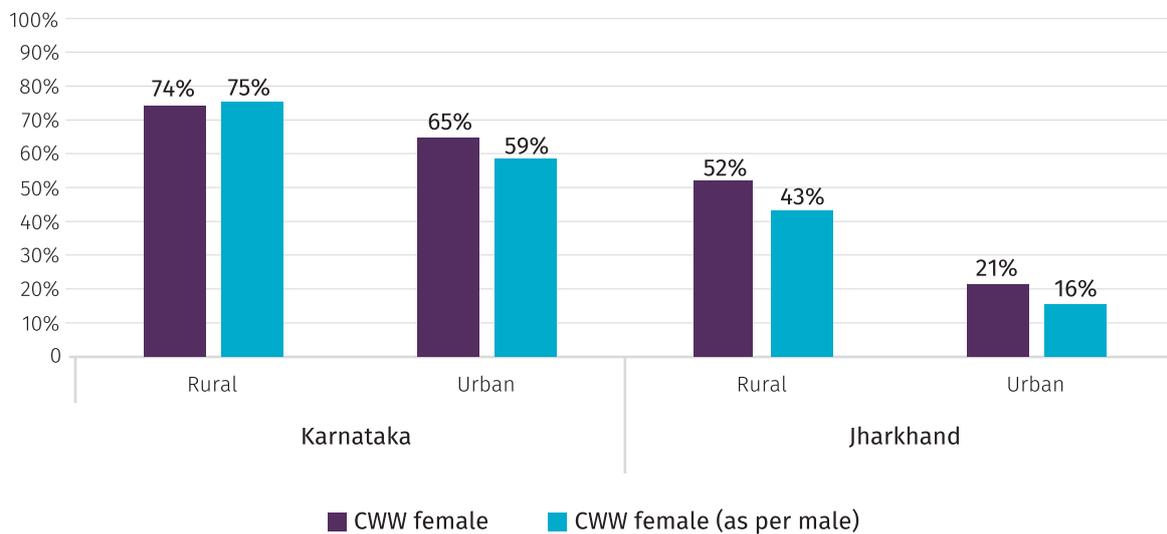
Figure 7: Weekly FWPR Comparison between PLFS 22-23 and IWWAGE study



### 1.2 FWPR as per Male Respondents

- Except for rural areas in Karnataka, men are under-estimating women's participation in the workforce everywhere else. The underestimation in FWPR when compared to self-reporting by women stands at 6 per cent in rural Karnataka, 9 per cent in rural Jharkhand, 5 per cent in urban Jharkhand.

Figure 8: Comparisons between men (reporting on women's behalf) and women's reporting on FWPR



02

## Framework for conducting women's surveys that could potentially be aligned with national Labour Force Surveys (LFS)

The survey intended to collect as much information as possible on 'what women do' and we tried to capture the complexity and multiplicity of those activities. The survey included questions on 'willingness' to work by women, which was different from 'whether seeking work' and also recorded women's involvement in multiple activities as subsidiary activities.



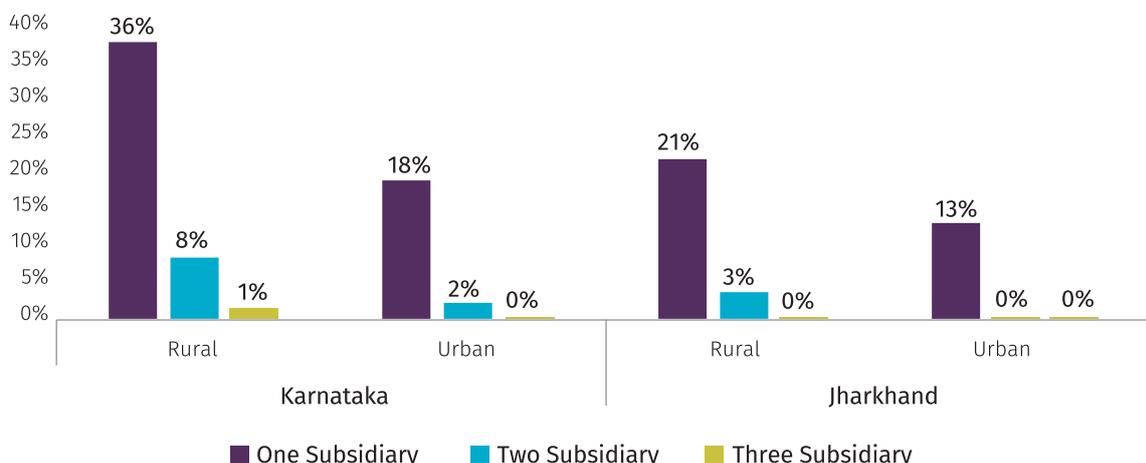
## 2.1 Women's Willingness to Work

- 'Willingness to work' is often perceived as a more comprehensive statistical measure of labour underutilization by international standards, in comparison to simple unemployment rates (19th International Conference of Labour Statisticians, 2013). It goes beyond the unemployed population and includes the potential labour force including unavailable job-seekers (who express interest to work but for whom the existing conditions create constraint for their active job search), available potential jobseekers (who are currently searching for a job but aren't available for a job); and the willing non-job seekers who are neither looking for job nor available for a job, but are willing to work. Whereas PLFS due to their sole focus on unemployment rate, stops at the question of 'seeking and/available for work', the CWW questionnaire probes further and asks whether the respondent is willing to work or not, even if not seeking or available; and if the respondent isn't willing to work, the respondent is asked about the factors hindering her willingness. This allows the study to capture labour underutilization more comprehensively.
- 8 per cent and 14 per cent of 'not-working' women reported that they were seeking work in Jharkhand and Karnataka, respectively. Among the 'not-working' women who were not seeking work, in Jharkhand, more than 50 per cent women reported willingness to work if it was provided to them as per their convenience of job location, and met other expectations of remunerations and non-remunerative benefits. The proportion of women willing to work was found to be slightly lower in Karnataka, which could be due to a higher proportion of women already in the workforce and remaining majority actively seeking work.

## 2.2 Women's Subsidiary Engagements<sup>2</sup>

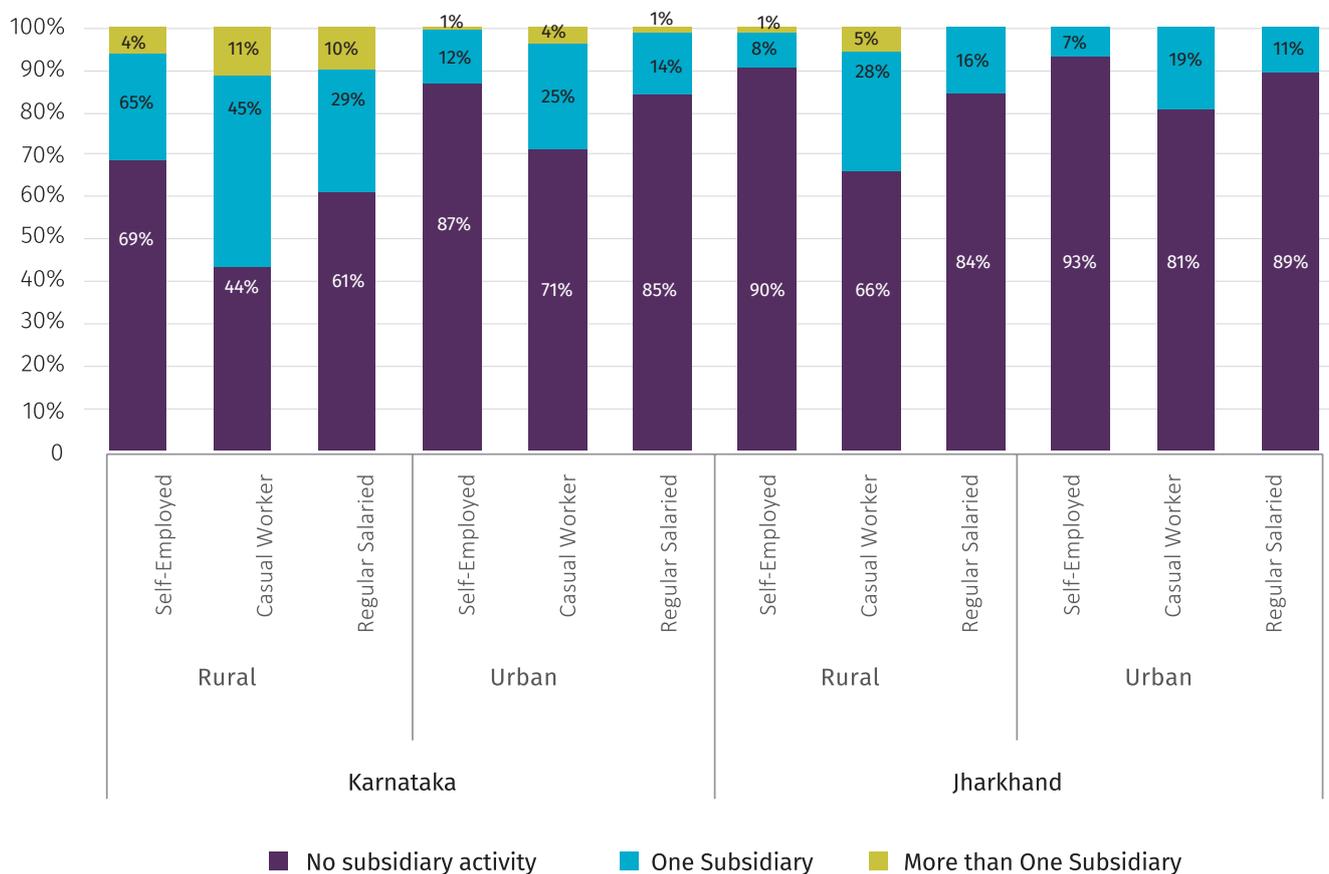
- Women's subsidiary engagement is higher in Karnataka as compared to Jharkhand, higher among rural women as compared to urban women, and higher among women in lower-asset classes as compared to upper-asset classes. Women's subsidiary engagements consist mainly of self-employment and casual work. The subsidiary engagements are higher among women engaged in regular and casual work as compared to self-employment.

Figure 9: Women's engagement in subsidiary activities



<sup>2</sup> The subsidiary engagement refers to any income-generating activity the respondents engage in, other than the principal activity.

**Figure 10: Women's Participation in Subsidiary Engagement as per their Principal Status Type of Employment**

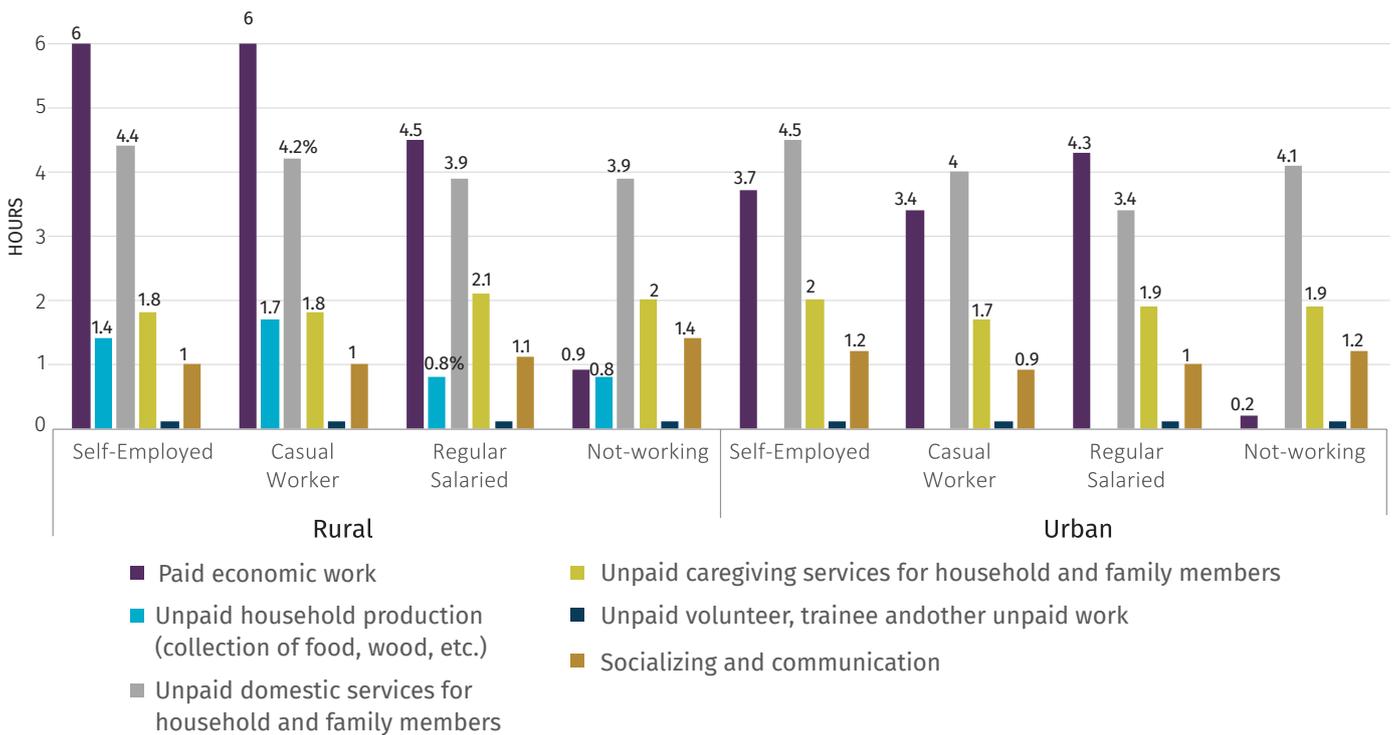


## 2.3 Rapid Time Budgets

- In both states, women who reported to be "not working" in case of the yearly recall method, reported spending a few minutes to almost an hour daily on paid economic work<sup>3</sup> in case of the weekly recall method and the list of activities being called out. This is particularly true for women engaged in remunerative work in livestock management. In case of Jharkhand, such women who are 'non-working' according to their response on yearly recall period, reported spending 2.4 hours in rural areas and 0.5 hours in urban areas on paid economic activities according to their responses on weekly recall.

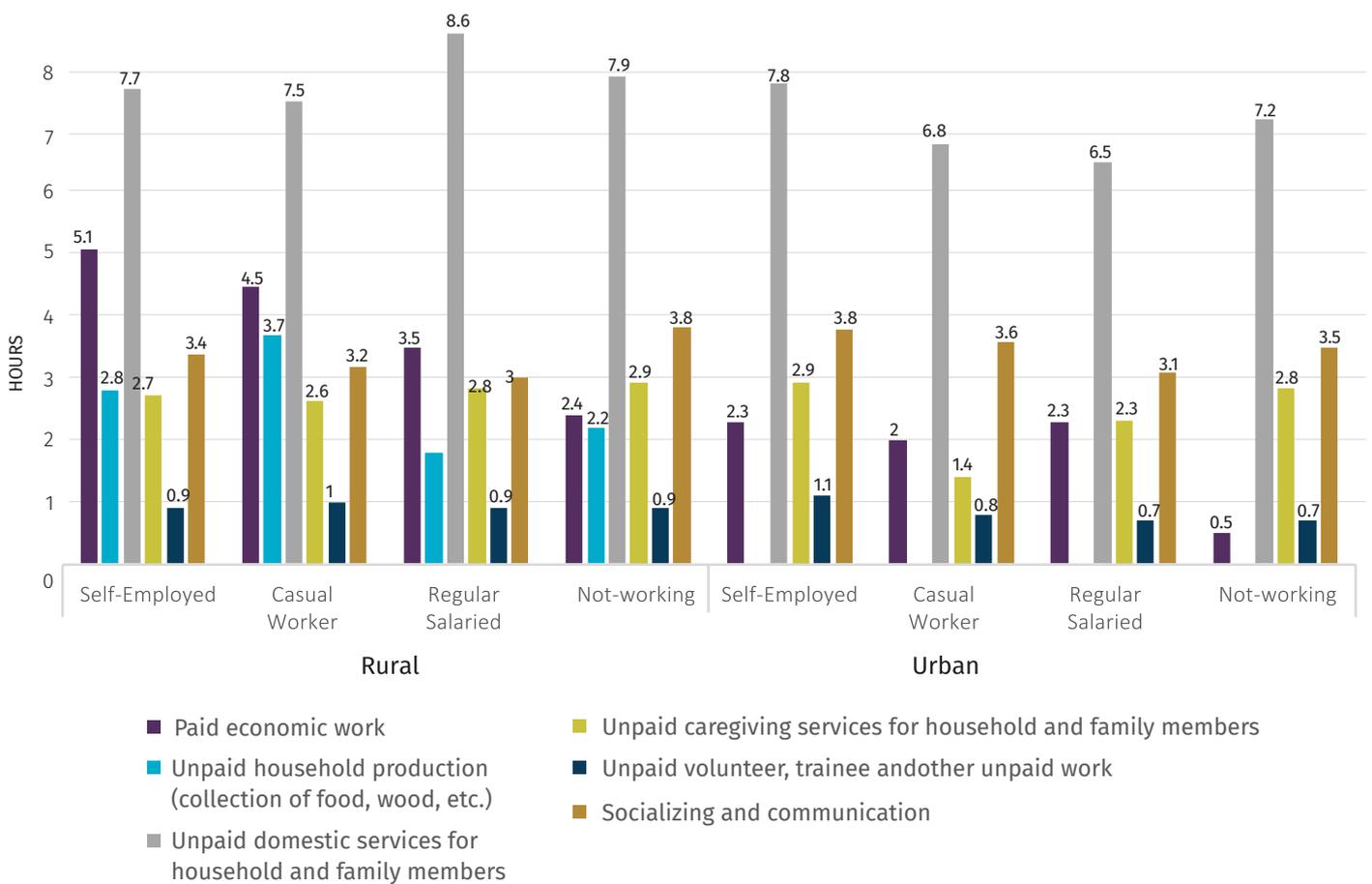
<sup>3</sup> Employment activities that contribute to the production of goods and services for pay or profit and fall within the Systems of National Accounts (2008) production boundary which include: self-employed (agriculture, rearing of livestock, or household business), regular wage salaried employees and casual wage labourers (agricultural, non-agricultural and MGNREGS).

Figure 11: Women's Time-Budget across Employment Status - Karnataka



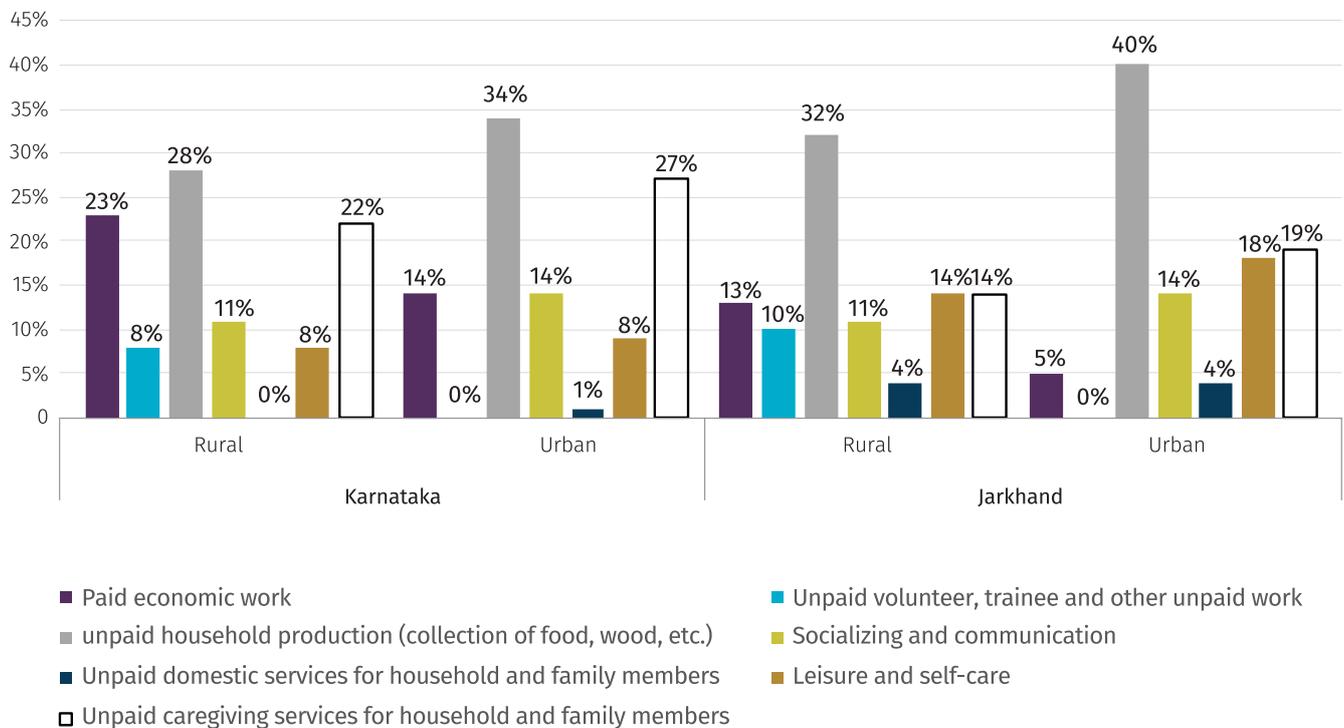
The time spent on paid economic work by women in Karnataka varies based on the type of employment. However, both rural and urban women consistently spend significant time on domestic services and caregiving, regardless of their employment status. Similar to Karnataka, all working and non-working women in Jharkhand spend a substantial amount of time on domestic services, averaging over 7 hours for most women, except for urban regular salaried and casual worker women.

Figure 12: Women's Time-Budget across Employment Status - Jharkhand



In both Karnataka and Jharkhand, on an average day, women spent the largest portion of their time on unpaid domestic services for their household and family members like preparing and serving meals, washing dishes and clothes, cleaning of house etc. In urban Jharkhand, 40 per cent of women's time is devoted to these tasks, compared to 34 per cent in urban Karnataka, and 32 per cent in rural Jharkhand versus 28 per cent in rural Karnataka. Care work and services for household members, such as caring for and looking after the children and the elderly, also occupy a substantial portion of women's time in both states.

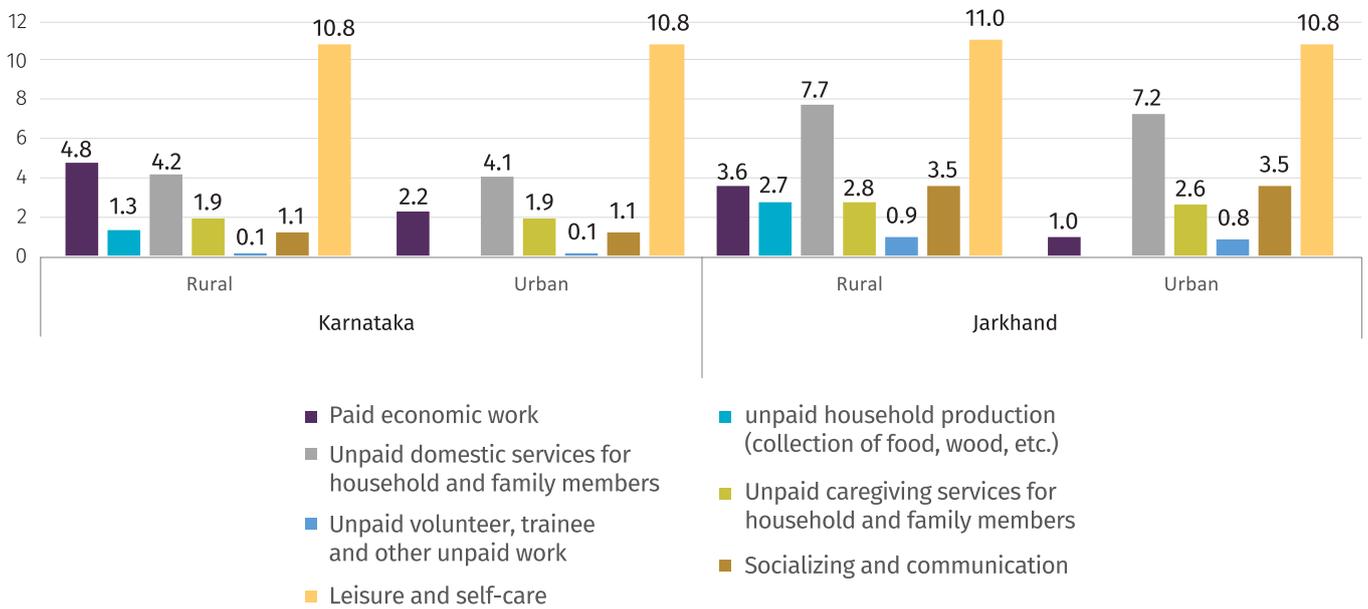
**Figure 13: Distribution of Women's Time on a usual day (excluding sleep)**



- Women in Jharkhand devote significantly more time to domestic work compared to those in Karnataka. Women in rural Jharkhand spend an average of 7.7 hours daily on domestic chores, whereas women in Karnataka spend about 4.2 hours. Clearly, less number of hours spent on unpaid work allows women in Karnataka to engage more in paid economic work. Additionally, women in rural Jharkhand spend more time on unpaid household production<sup>4</sup>. The disparity may also be explained by differences in household infrastructure, such as access to piped water and toilets, and asset possession between the two states.

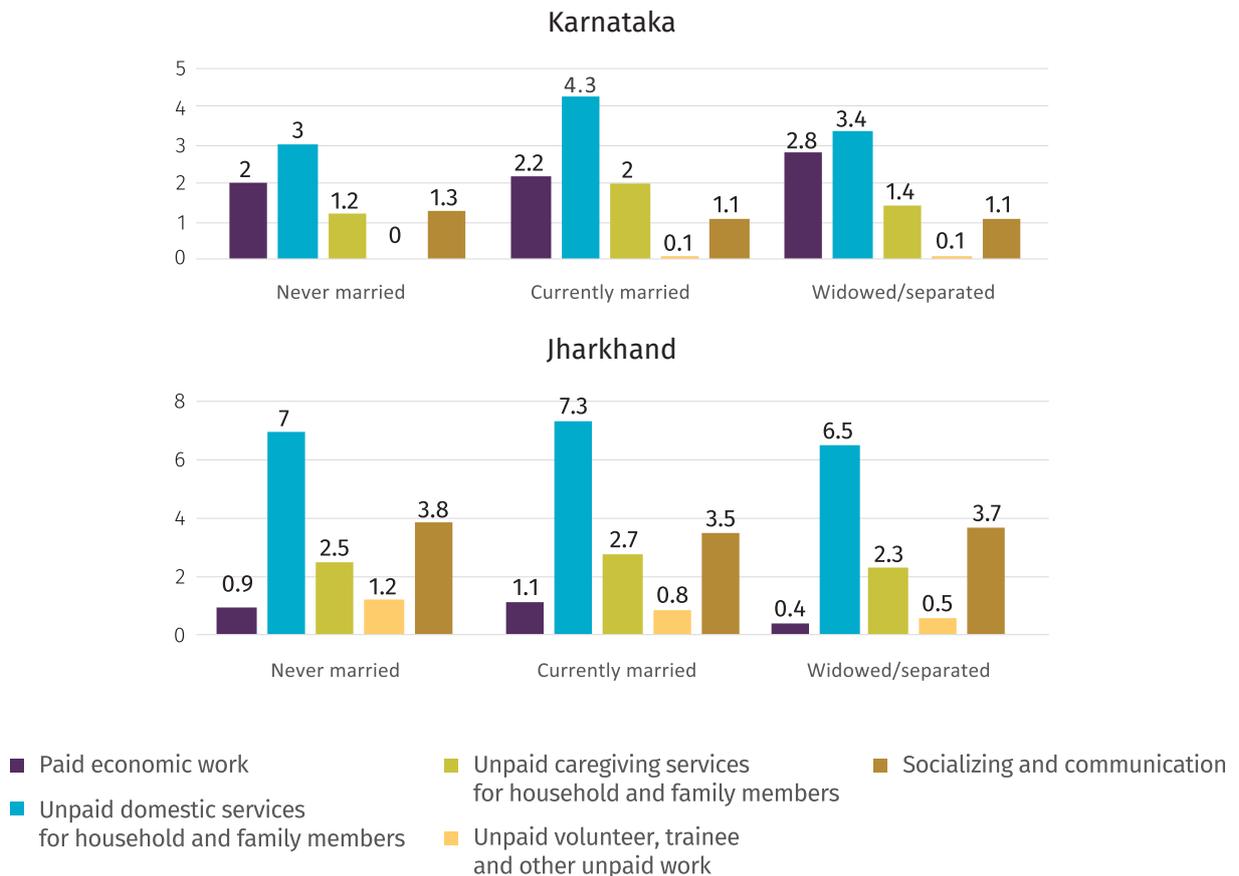
<sup>4</sup> Include own-use production work goods and services for own final use. The intended destination of the output is mainly for final use by the producer in the form of capital formation, or final consumption by household members or by family members living in other households. In the case of agricultural, fishing, hunting or gathering goods intended mainly for own consumption, a part or surplus may nevertheless be sold or bartered.

Figure 14: Women's Average Time-Budget in Activities (in hours)



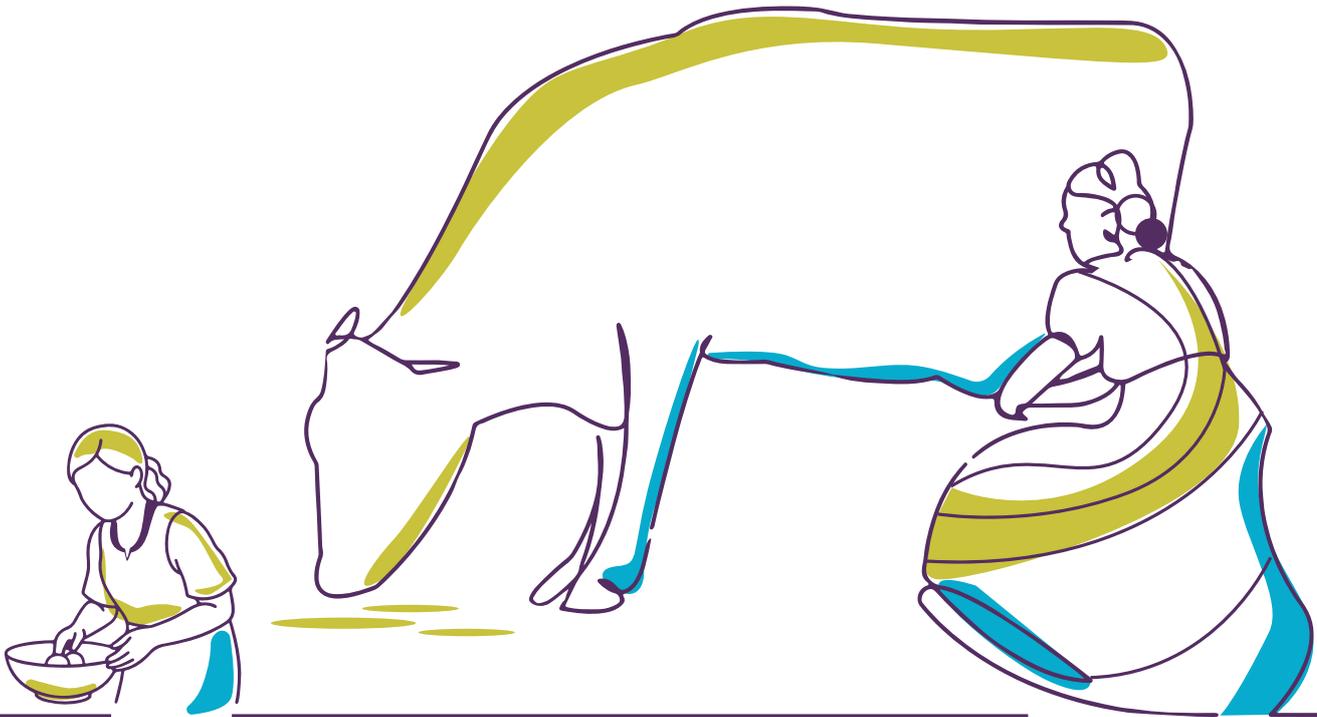
- Married women are observed to spend more time on care and domestic work in both the states across both rural and urban areas, as compared to other women. In urban Karnataka, women's time budget for domestic work increased from 3 hours (among never married women) to 4.3 hours for married women. Similarly, in urban Jharkhand, it increases from 7 hours (among never married women) to 7.3 hours among married women.

Figure 15: Women's Time-Budget and Marital Status - Urban Jharkhand and Urban Karnataka (in hours)



03

# Capturing Respondent/ Informant bias



### 3.1 Deviation in Women's time-use in proxy-reporting in various Paid and Unpaid activities

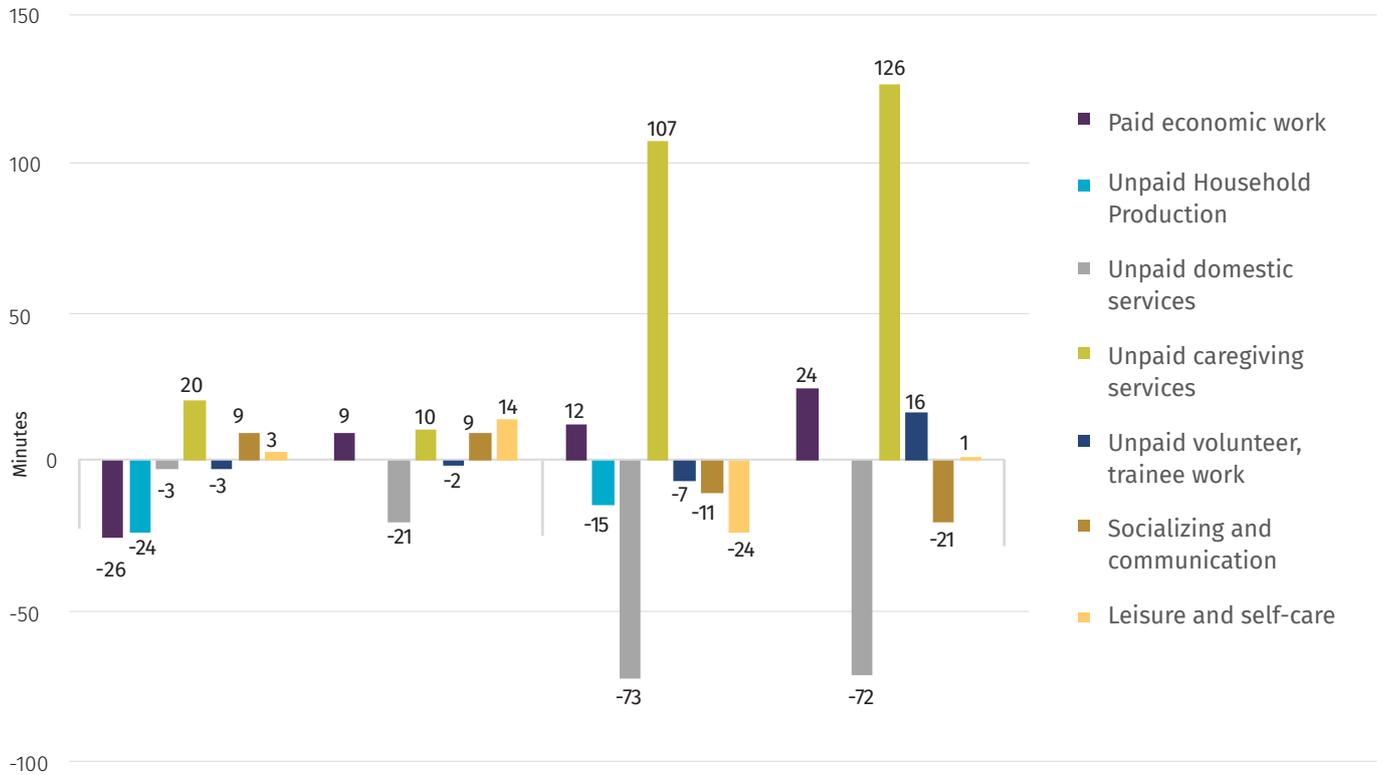
- Men are underestimating women's time use in various activities with major underestimation taking place in case of unpaid household production and unpaid domestic services. Men tend to overestimate women's time use in socialization and leisure.

**Table 1:** Deviation of Women's Time-use in Proxy Reporting in Various Paid and Unpaid activities

Average Time in Hours	Women's Time Use as per Men				Women's Time Use as per Self			
	Karnataka		Jharkhand		Karnataka		Jharkhand	
	Rural	Urban	Rural	Urban	Rural	Urban	Rural	Urban
Paid economic work	4.36	2.39	3.81	1.38	4.79	2.25	3.60	0.98
Unpaid economic work (collection of food, wood, etc.)	0.94	NA	2.5	NA	1.34	NA	2.75	NA
Unpaid domestic services	4.13	3.73	6.52	6.01	4.18	4.07	7.74	7.21
Unpaid caregiving services	2.19	2.03	4.55	4.72	1.85	1.87	2.77	2.63
Unpaid volunteer, trainee work	0.03	0.04	0.81	1.07	0.07	0.08	0.92	0.80
Socializing and communication	1.27	1.26	3.34	3.17	1.12	1.12	3.53	3.53
Leisure and self-care	10.83	11.01	10.6	10.8	10.78	10.78	11.00	10.78
		Underestimation						
		Over/Approximate Estimation						

- The extent of underestimation is higher in Jharkhand than in Karnataka. Whereas men are underestimating women's time use in domestic services in the households by 20 minutes on average in rural and urban areas of Karnataka, the underestimation is higher and stands at 78 and 30 minutes in rural and urban Jharkhand respectively. On the other hand, women's time use in unpaid caregiving is overestimated by men by more than 100 minutes in both rural and urban areas of Jharkhand.

Figure 17: Extent of over-estimation and under-estimation of women's work by men (in minutes)



- The extent of underestimation is also varying across women's employment status. Men are less likely to underestimate women's time use on domestic and care work if women are employed as compared to non-working women.

Figure 18: Over-estimation and under-estimation of women's work by men in Rural Karnataka

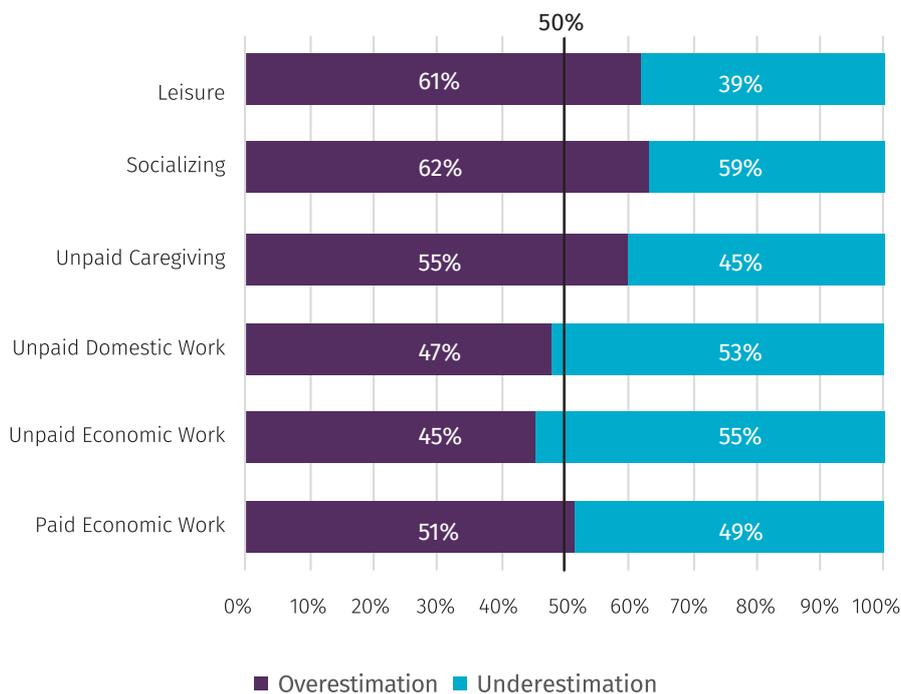


Figure 19: Over-estimation and under-estimation of women's work by men in Urban Karnataka

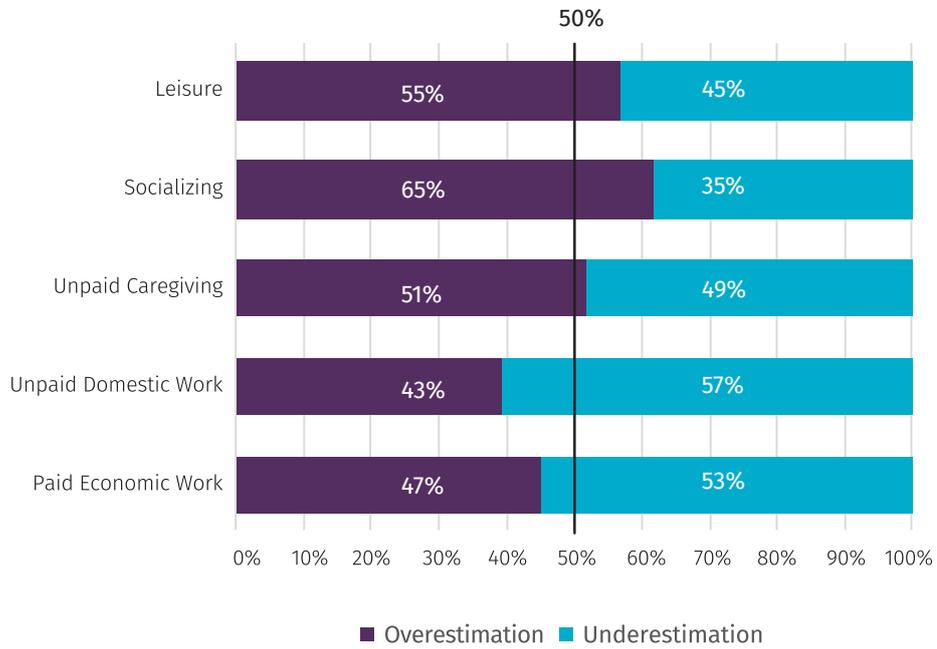


Figure 20: Over-estimation and under-estimation of women's work by men in Rural Jharkhand

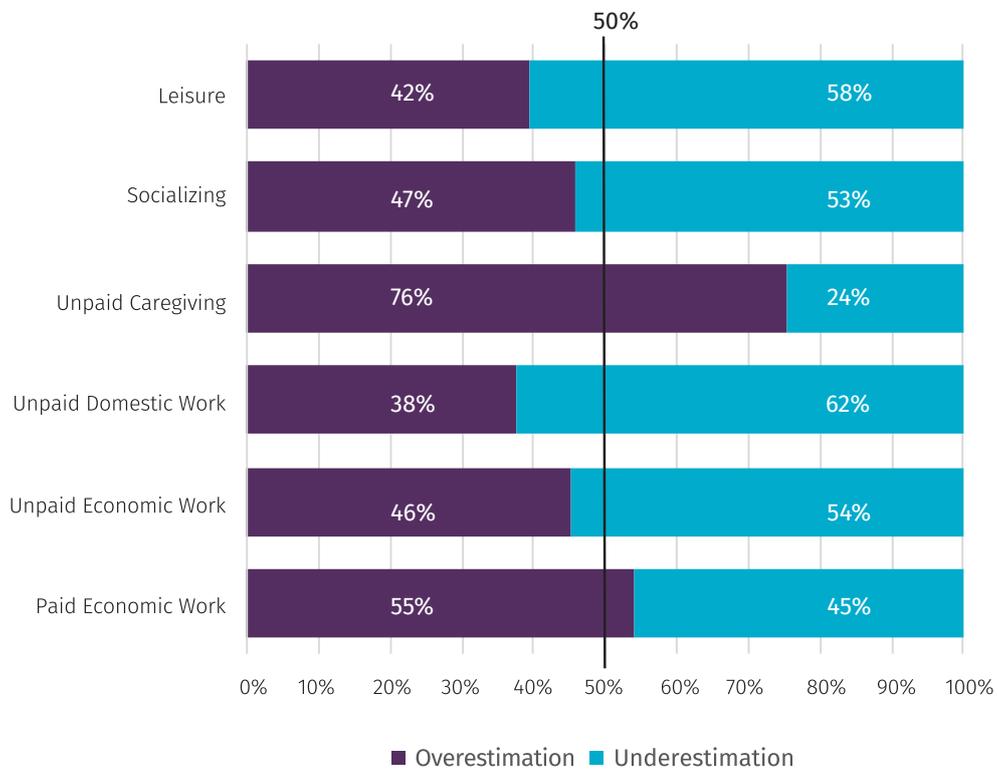
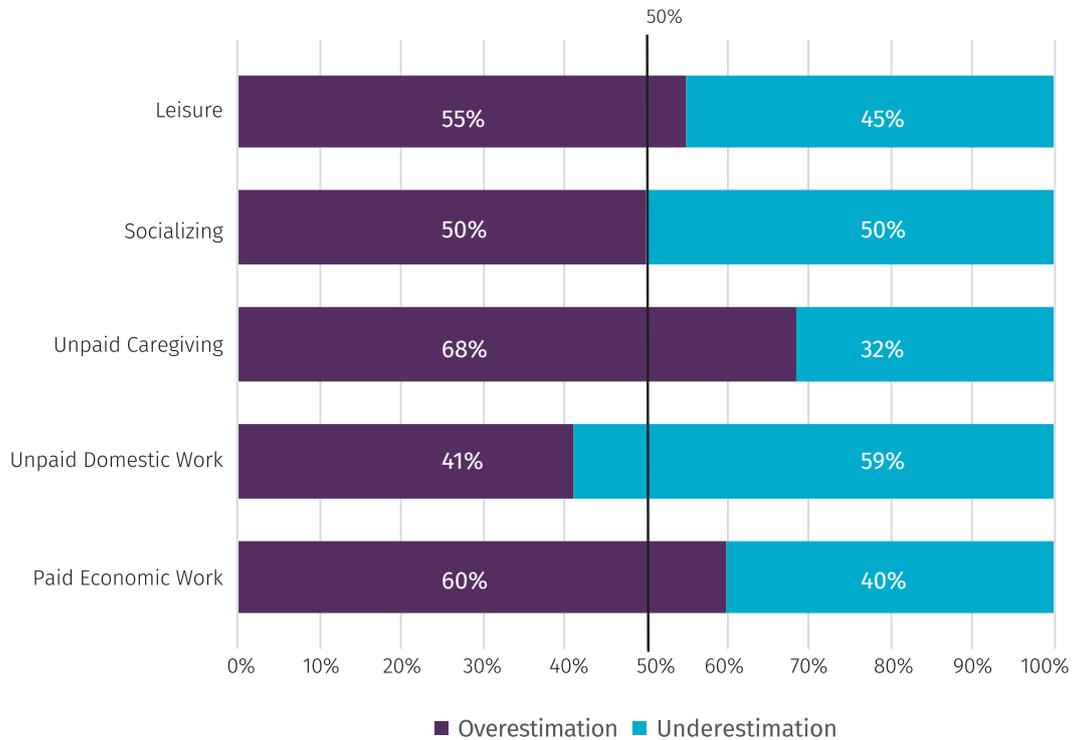


Figure 21: Over-estimation and under-estimation of women's work by men in Urban Jharkhand



- Men are less likely to underestimate women's time use in care work if they themselves engage in care work. In case of unpaid domestic services where mens participation is insignificant, underestimation of women's time use is high.

Figure 22: Time-Use on Domestic Services

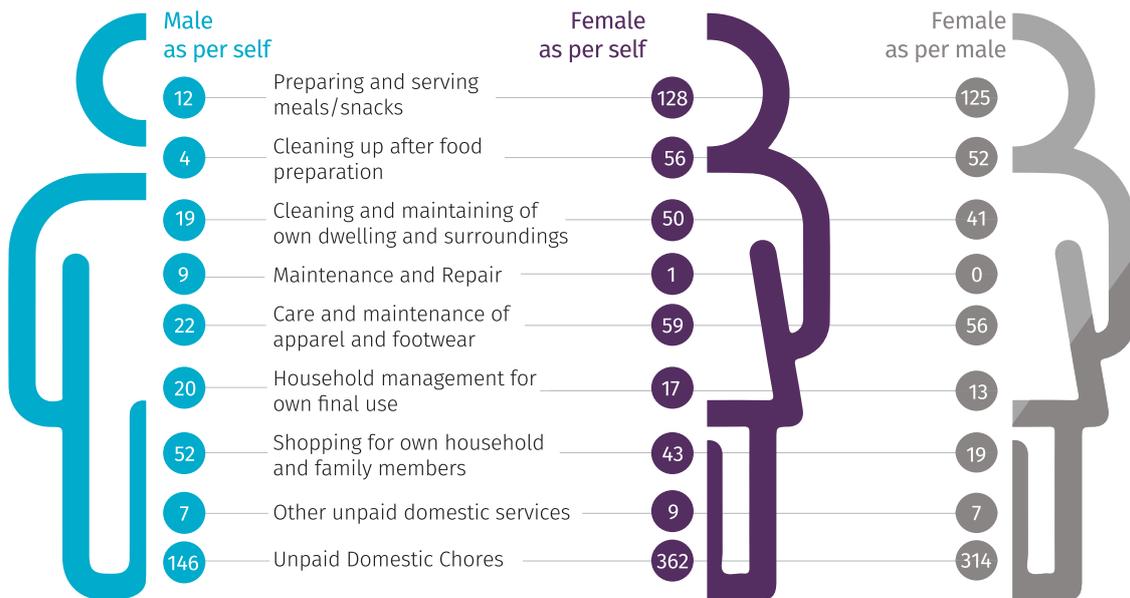
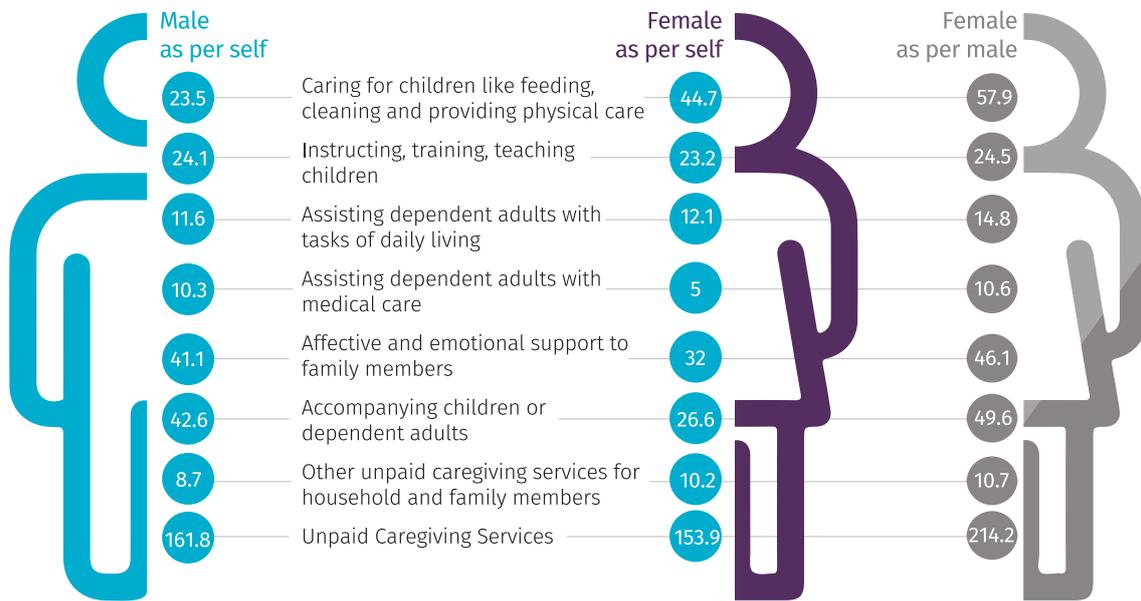


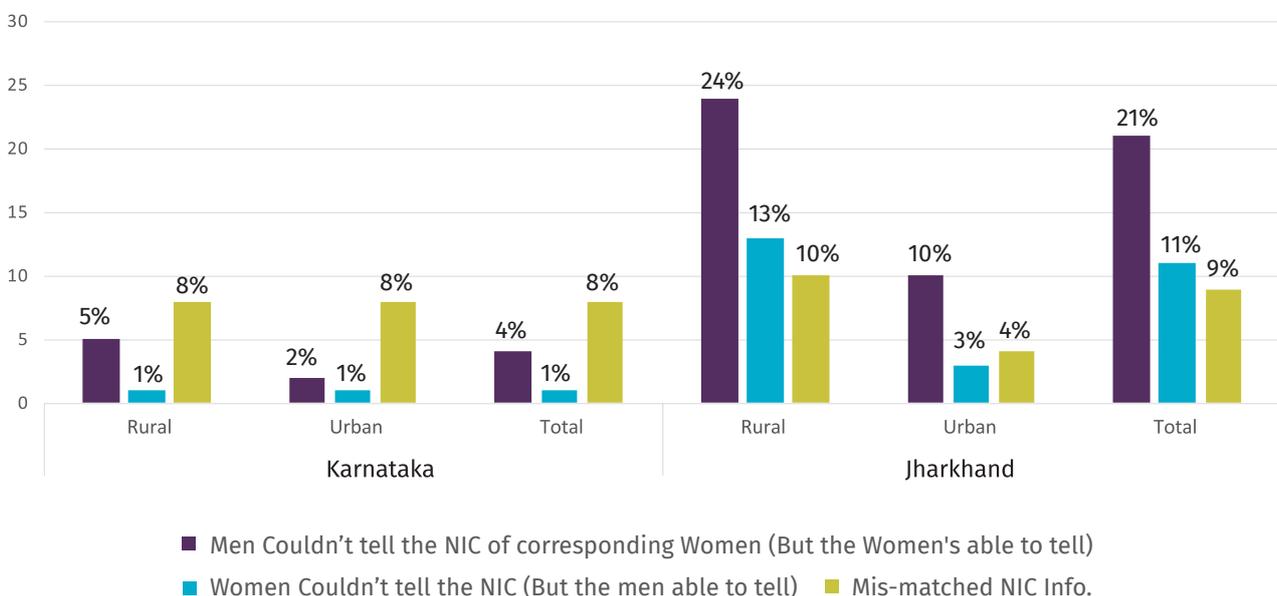
Figure 23: Time-Use on Caregiving Services



### 3.2 Anomalies in men's responses on National Industry Code and National Code for Occupations of women's employment

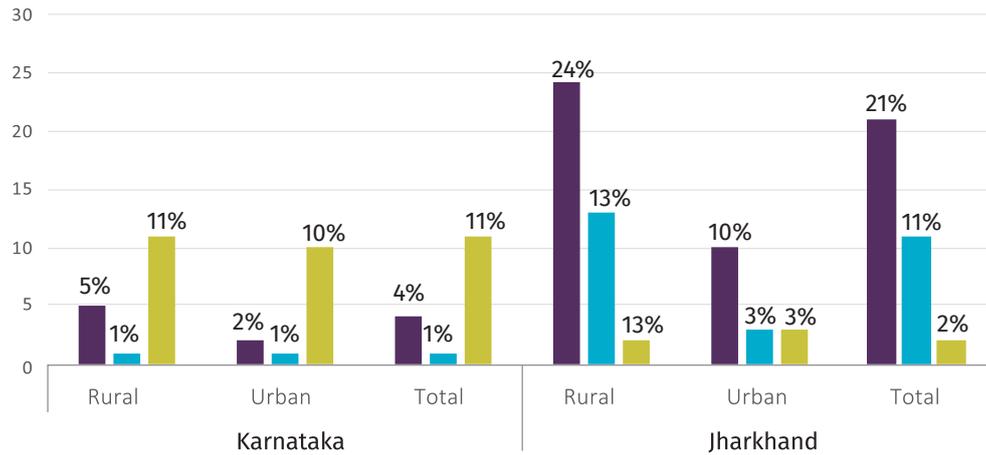
- 14 per cent and 10 per cent men have misreported on the industry of employment for the corresponding women in rural and urban Karnataka respectively. 47 per cent and 16 per cent men have misreported on women's industry of employment in rural and urban Jharkhand respectively.

Figure 24: Reporting on Industry Status



- 18 per cent and 13 per cent men have misreported on the corresponding women's occupation of employment in rural and urban Karnataka respectively. 38 per cent and 15 per cent men have misreported on the corresponding women's occupation of employment in rural and urban Jharkhand respectively.

Figure 25: Reporting on Occupation Status



- Men Couldn't tell the NIC of corresponding Women (But the Women's able to tell)
- Women Couldn't tell the NIC (But the men able to tell)
- Mis-matched NIC Info.





04

## Key Insights from the data analysis

The following additional insights on the factors and barriers influencing the FLFPRs from the study help to understand the multifaceted nature of women's labour force participation.



## 4.1 Education/ Training and FLFPR

- As indicated by descriptive statistics, the returns to the labour market skills are higher in Karnataka as compared to Jharkhand. Vocational training appears to be an enabler of FLFP in Karnataka but not so much in Jharkhand; FLFPR is higher for women without children as compared to women with children. The existence of a flat U-shaped association between FLFP and education level in Karnataka indicates a rise in FLFP for those women with graduation, post-graduation and above, and the all-throughout inverse relation between education level and labourforce participation in Jharkhand hints towards the lack of suitable opportunities for the highly educated women.

Figure 26: Vocational training and FLFPR



Figure 27: Childcare responsibilities and FLFPR

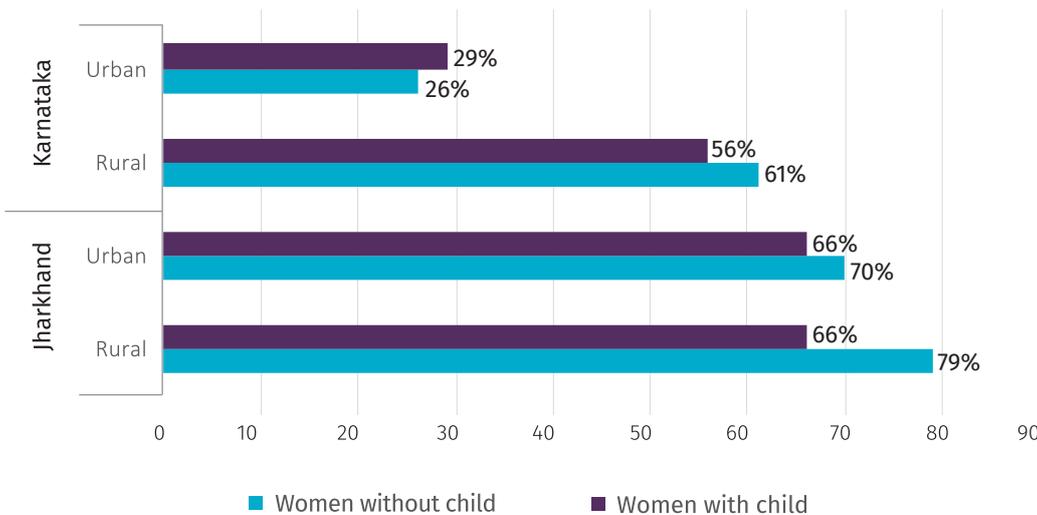
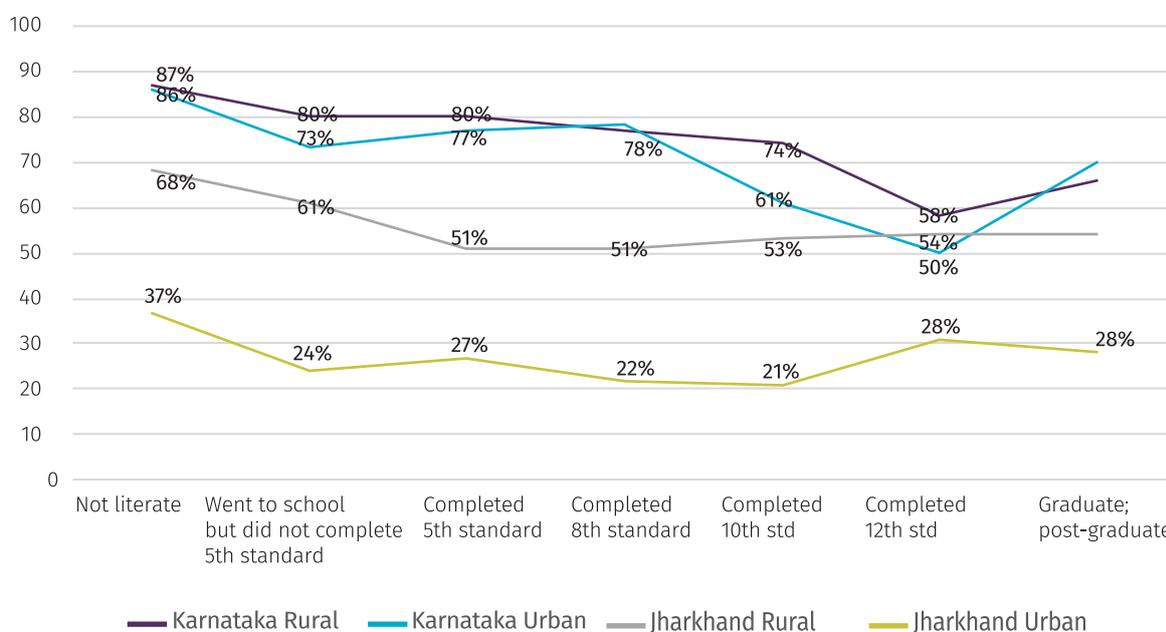


Figure 28: General education level and FLFPR

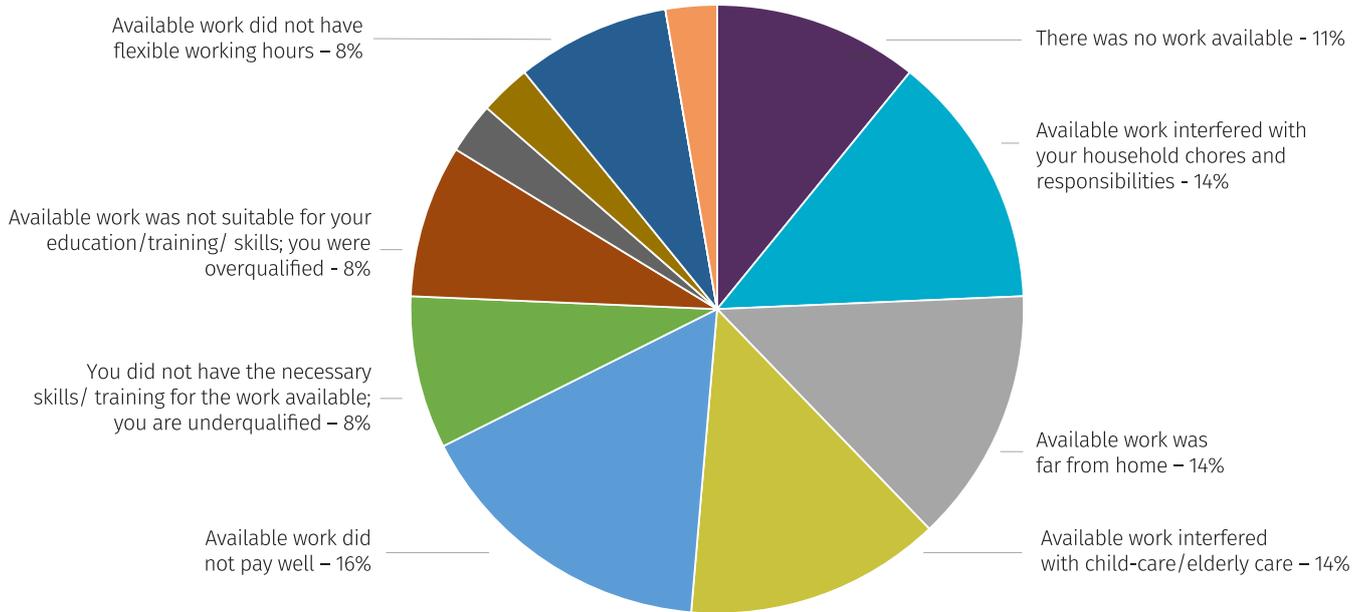


## 4.2 Barriers to Women's Labour Force Participation

- Domestic chores and child-care responsibilities remain a major constraint for women's job search, their workforce participation, and their willingness to work. In Karnataka, the shares of women citing domestic chores as the major barrier for job search stand at 14 per cent and 9 per cent in rural and urban areas respectively, whereas the shares of women citing care responsibilities as the major barrier stands at 14 per cent and 17 per cent in rural and urban areas respectively. In Jharkhand, 13 per cent and 17 per cent of respondents reported household chores to be the major challenge for job search in rural and urban areas respectively, while the shares of women citing care responsibilities as the major challenge are 11 per cent and 10 per cent in rural and urban areas respectively. The demand-side challenges are higher in the job search process in Jharkhand as compared to Karnataka in both rural and urban areas. The higher demand-side challenges in Jharkhand also get reflected in a higher share of women not looking for work in spite of being willing to work, in Jharkhand as compared to Karnataka.

Figure 29: Barriers that hinder willingness to work-Karnataka

Karnataka Rural



Karnataka Urban

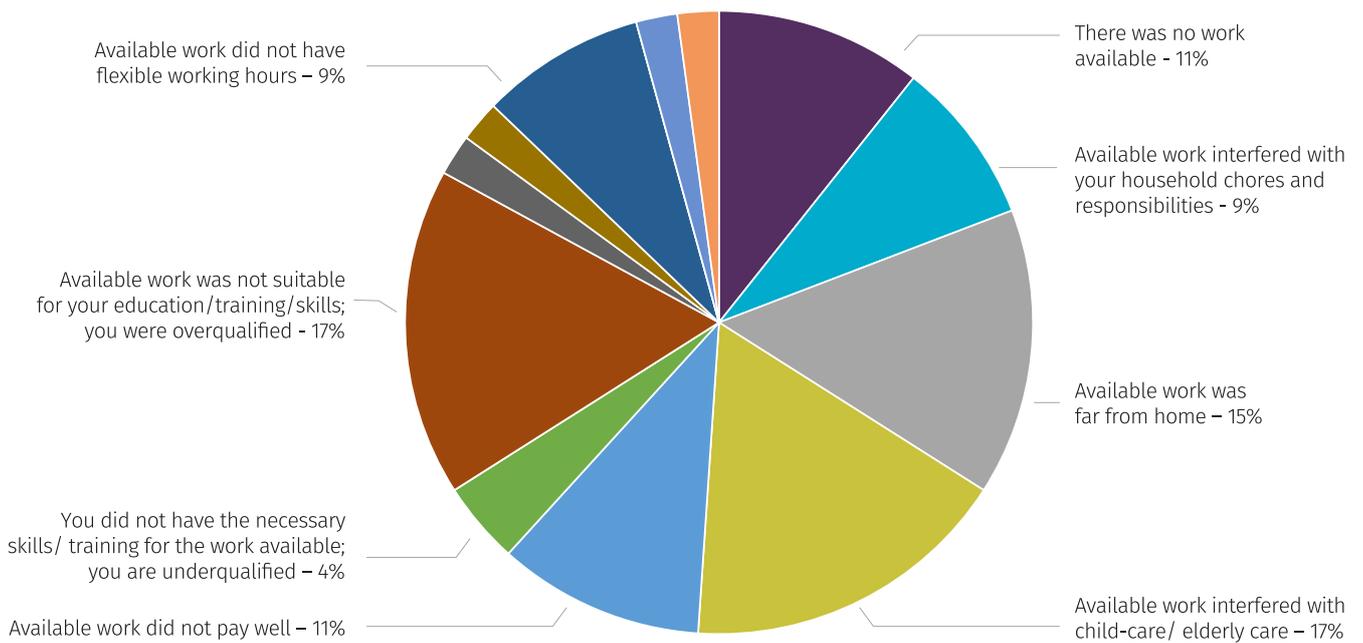
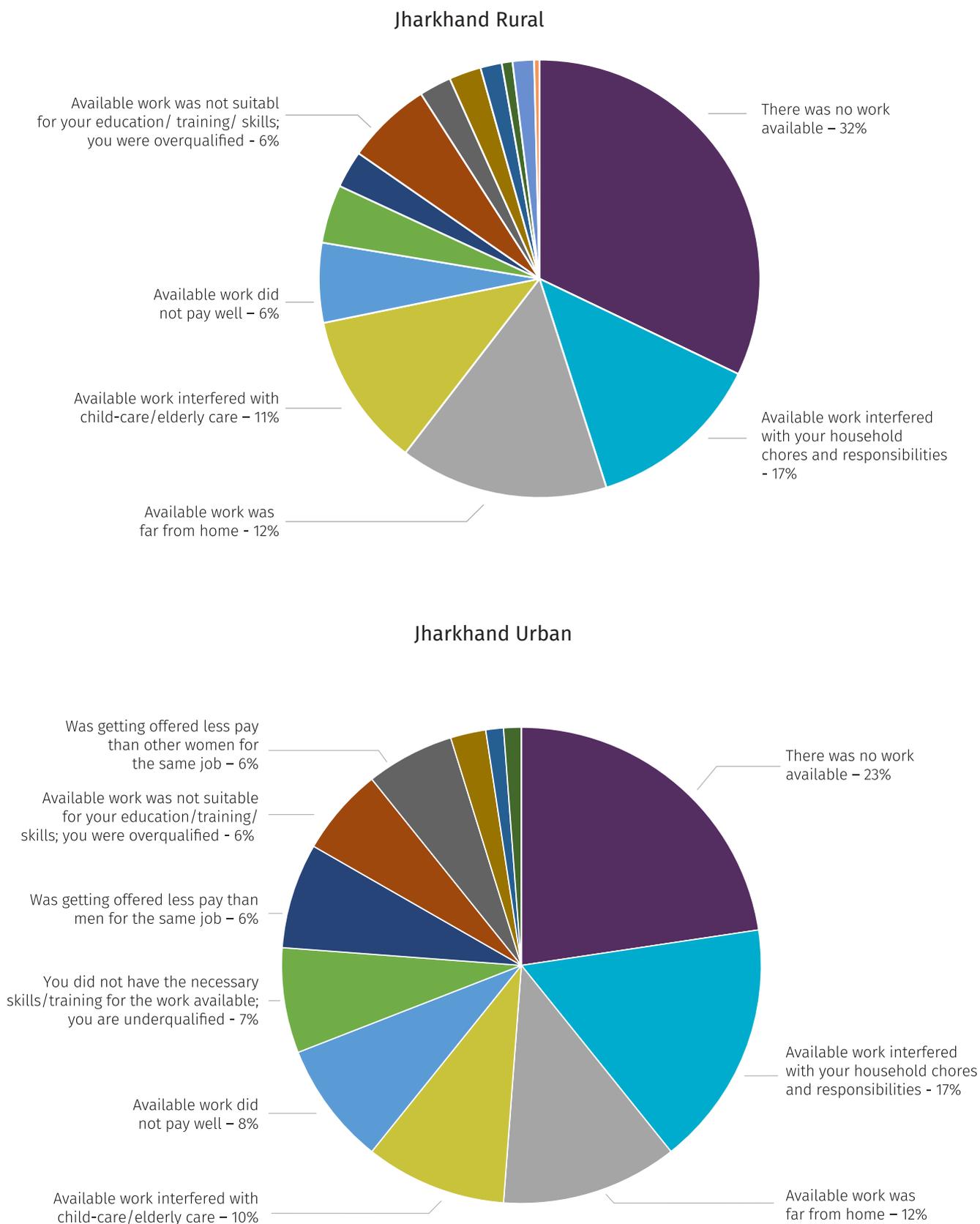


Figure 30: Barriers that hinder willingness to work – Jharkhand



## 4.3 Results from logit and ordered logit modelling

- Women's likelihood to participate in the workforce increases with receiving vocational training and continuously declines with increase in education level until the graduation and post-graduation level where it slightly rises, resembling a flat U-shape. The flat U-shape indicates towards dearth of suitable opportunities for women with secondary and tertiary level of education.
- The presence of other adult women in a household increases women's likelihood of participating in both the principal and subsidiary engagements by getting the burden of household duties distributed among the adult women. Childcare responsibilities act as a constraint for female workforce participation.
- Women engaged in regular/casual work as their principal employment, are more likely to engage in subsidiary activities as compared to the self-employed women.
- The underestimation in proxy reporting by men on women's time spent on domestic and care work, is less for employed women, as compared to non-working women. Also, men are less likely to underestimate women's time on care work if men themselves also engage in care work for the household, in comparison to when they don't engage in care work.

The IWWAGE study uses modifications in tools and probing techniques targeted to elicit information from individual women aimed to capture the complexity of women's work. The motivation to deepen understanding on why despite working throughout the day on activities that contribute to economic outputs, women remain excluded from the numbers. The survey tools, applied specifically on women, thus attempts to capture higher number of subsidiary engagements of women; probes women's 'willingness to work' to capture labour underutilization more inclusively; calls out the activities for measuring the weekly status participation of women more accurately; and conducts a separate male survey intended at revealing the difference between proxy-reporting and self-reporting and highlighting the perception among male members about women's work.

The results show higher FLFPR and FWPR as compared to PLFS estimates in capturing women's employment activities using the conventional LFS; reveals women's engagement in more than one subsidiary activity showing the need of capturing more than one subsidiary activity using different time criterion; a higher share of women not looking for work in spite of being willing to work focusing on the significance of capturing the willingness aspect under the LFS for an extensive measure of labour underutilization; higher estimates of women's weekly status workforce participation than PLFS estimates because of calling out the activities loud to the respondents. The survey also significantly highlights the presence of informant/respondent bias on women's work and daily activities in both paid and unpaid realms thus emphasizing on the shortcomings of proxy-reporting.







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