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What Did You Do in the Last 24 Hours?

Some reflections on India's first Time Use Survey in historical perspective

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The first nation-wide survey of the time spent by men and women on various activities during all 24 hours of the day brings out the gender inequalities in the work that each of them do.

"Now tell us some particulars relating to time use for each household member of age 6 years and above from 4:00 AM yesterday to 4:00 AM today": This is how enumerators from the National Sample Survey (NSS) gathered details of what individuals did with their time in 30-minute slots over a 24-hour period for India's first Time Use Survey, the report of which was released recently (National Statistical Office 2020).

Sociologists, economists, demographers and public health researchers are often interested in knowing what our typical day looks like. In particular, they would like to know how much time we allocate to specific activities, broadly defined. They are not peeping toms looking to check our browser histories; neither are they interested in salacious details on how much time we spend whispering/texting sweet nothings to beloveds. Nor are they human CCTVs aiming to monitor every step that we take in our private lives.

Time use research is the analysis of a detailed account of all activities an individual carries out during a 24 to 48-hour period. The activities are categorized into broad buckets to capture (domestic and unpaid) work, (economically remunerative) employment and leisure (divided into broad categories of sleep, grooming, socializing etc.). Researchers usually analyze hundreds of "diaries" that are basically activity logs of respondents, either written by respondents themselves or collected in an interview format by enumerators. These simple and apparently mundane logs have been extensively used by a variety of researchers to understand specifics of individual behaviour that underlie societal patterns in work and public health.

A brief history of time use research

India conducted its first ever national-level Time Use Survey (TUS) in 2019 for the period January-December. While time use research is nascent in India, it has a long history elsewhere.

A quick and brief glance at the history of TUS reveals that time use diaries date back to the 19th century. The first instance of time use diaries were found before 1900 with researchers in Russian *zemstvo* (rural country or regional administrative units), whose main task was to observe peasant households to understand the division of time between different types of peasant work. Subsequently, from the early 20th century there are several instances of time use diaries collected for London women; London factory workers in 1913; Soviet workers in 1925; farm, town and college educated elite women in 1929, after which collection of time use data became fairly routine in Europe and in the US.

> Time use research served the purpose of drawing attention to the multiple demands on women's time.

The Soviet interest in time use was based on the Marxist notions of the worth of an object being determined by the amount of labour time embodied in it. Thus, it was worth investigating how much time people spent on each specific activity. In contrast, the US studies in the late 1920s were investigations into the role of women, as their position started to change from domestic service towards factory or office employment (Bauman et al, 2019). Homes in the US experienced a technological revolution in the mid-20th century with electrification, plumbing, and domestic gadgets to assist domestic chores. This increased domestic productivity and, paradoxically, also led to an increase in time spent on unpaid domestic work. The presence of washing machines implied that clothes started to get washed more often and were regarded as 'dirty' after a single use.

Time use research served the purpose of drawing attention to the multiple demands on women's time. Researchers have been using this data to calculate the economic costs of women's unpaid domestic work. For example, the *New York Times* earlier this year reported an estimate that globally women's unpaid domestic labour was worth $10.9 trillion in 2019.

Present-day TUS research is mainly driven by this objective, i.e., to understand the gender divisions in allocation of time to paid work, unpaid work and leisure. The allocation of time between these three broad buckets has implications for the state of public health as well (with or without a gender focus). For instance, overworked, sleep-deprived sections of the population will be susceptible to poorer health compared to those who have a better balance of time allocation between work and leisure. Therefore, in addition to sociological or economic research into the gendered dimension of time use, TUS data also informs public health research.

> [O]ver the decades, there is convergence between men and women in terms of time spent on paid work, but women spend less time on paid work compared to men.

In the mid-1960s, UNESCO led a harmonized cross-national time use study for 12 countries, which is the model for present-day surveys. An important international hub of time use research is the Centre for Time Use Research in the UK, which houses the Multinational Time Use Study (MTUS), bringing together data from a million and a half diary days from over 90 randomly selected national surveys from over 55 countries over 30 years.

An illustration of a summary of TUS data from 23 countries between 1960 and 2010 can be seen in Figure 1, which plots the proportion of time spent in paid work on the X-axis (horizontal) against the proportion of time spent in non-paid work (which they troublingly describe as "non-work") on the Y-axis (vertical). The arrows show historical change, with the start of the arrow mapped at the start of the study and the end of the arrow mapped at the end of the study. We see that over the decades, there is convergence between men and women in terms of time spent on paid work, but women spend less time on paid work compared to men.

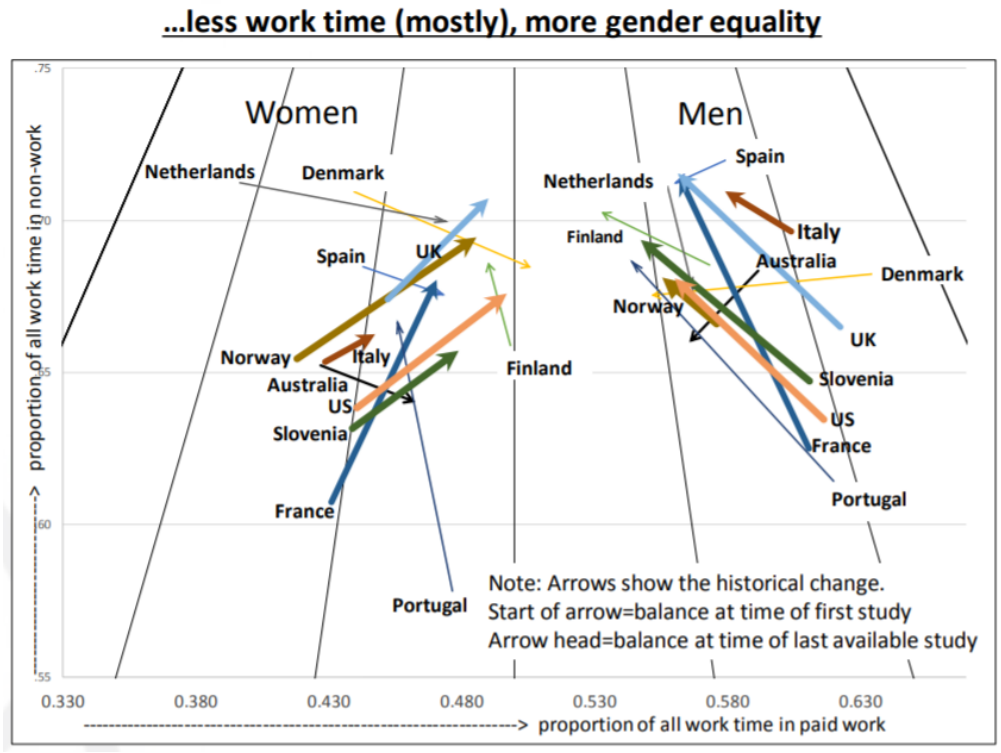


Figure 1: Some Convergence in Advanced Economies Between Men and Women in Time Spent on Paid Work
Source: Multinational Time Use Study

Figure 2 shows the time spent in minutes per day on general housework in selected countries. This shows that over the decades, the time spent by men has broadly speaking increased and among women it has decreased, but the gender gap remains stark. The lowest levels of women's time spent on housework are higher than the highest levels of the time men spent on housework.

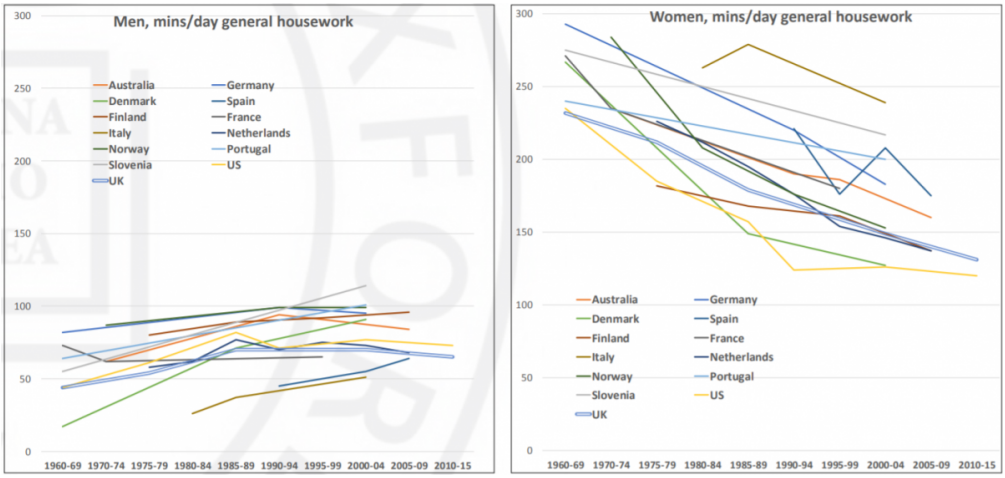


Figure 2: Gender Gap in Time Spent on Housework: Narrowing but Persistent
Source: Multinational Time Use Study

India's first foray into time use research

The focus in the western literature, illustrated by the charts above, has been on women's unpaid non-market work-domestic chores, care and reproductive work. The sexual division of such work, which disproportionately falls on women everywhere, is a key feature of gender inequality globally.

However, in developing countries including India, there is another crucial dimension to women's unpaid work: unpaid *economic* work, the kind of work that would get counted as "work" if it were done by a man. This includes work on farms and in fisheries, on livestock and orchards, in family enterprises engaged in artisanal production (handlooms, handicrafts), family-run stores in retail, family-owned workshops (woodwork, metal work) and so forth. Thus, women in developing countries are engaged in unpaid work that would conventionally fall within the boundaries of the System of National Accounts (SNA), i.e., activities that get counted in the measurement of a country's national income or GDP.

> [O]ften men and women do very similar work, but men get counted as "workers" and women are not.

Pioneering Indian feminist scholars were concerned that labour force statistics that formed the basis of GDP estimation by measuring "workers", such as those collected in India by the NSS or the Census, were unable to capture women's *economic* contributions. This was because a large part of women's economic work (distinct from domestic chores) was unpaid and unvalued.

What happens if women's work is *not* counted adequately?

As Devaki Jain noted more than two decades ago, a failure to measure women's economic contribution reduces them to "virtual non-entities in economic transactions." (Jain 1996, p WS 47). This concern is just as valid today. Women become invisible as workers, and are seen primarily as engaged in domestic work, even when their economic contribution is critical to the success of their family enterprises. In other words, often men and women do very similar work, but men get counted as "workers" and women are not.

Jain reminds us that "if women's unpaid work were properly valued, it is quite possible that women would emerge in most societies as the main breadwinners - or at least equal breadwinners - since they put in more hours of work than men..." (ibid)

In 1982, along with fellow researcher Malini Chand Sheth, Jain conducted a time use survey in selected villages in two states of India, Rajasthan and West Bengal, which was India's first mini-TUS. The authors called it a "time allocation survey (TAS)". The survey demonstrated the invisibility of women's work and showed how time disposition in hours could be incorporated into large-scale household surveys and rectify the inaccuracies of national data (Jain, 1996).

Jain and Sheth's TAS revealed that the female work participation rate (WPR) is significantly higher than what NSS labour force surveys or the census figures were able to capture, whereas male WPRs were similar. This showed that labour force statistics were accurately

able to capture men's work, but systematically underestimated women's work.

Focusing on time allocation or time use revealed that women were spending a considerable time on unpaid economic activities, in their role as workers on family enterprises, but this work, and consequently their true status as workers, was rendered invisible by conventional measurement of work and workers. Thus, the gap between male and female WPRs was far narrower than what conventional measures suggested.

Not only that, in fact, Jain's TAS found that the female WPR was *higher* than the male WPR among landless households. This revelation, which came from analysing time allocation, highlighted the critical role played by class stratification that the conventional labour force surveys had been unable to reveal.

The first official TUS: 1998 pilot

Advocacy by leading scholars to count women's work adequately led to the Ministry of Statistics and Programme Implementation (MoSPI) conducting a pilot TUS in 1998-99 across six states in India: Haryana, Madhya Pradesh, Gujarat, Odisha, Tamil Nadu, and Meghalaya. This was based on a survey of 18,591 households. The main objectives of this pilot were to quantify the contribution of women in the "national economy" and to assess "gender discrimination in household activities".

The report found that out of 168 hours (24*7) in a week, men spent 42 hours in SNA activities, whereas women spent 19 hours. However, in what the report described as "Extended SNA", which included unpaid economic activities, men spent 3.6 hours compared to women who spent 34.6 hours.

> The major headline finding from the pilot was that the share of women's work in total work (male + female) was 55%, far higher than what figures from official statistics would reveal.

Combining time spent on SNA with that on extended SNA, the report found that rural men were spending 46.05 hours on "work", compared to rural women who were spending 56.48 hours. The corresponding figures for urban men and urban women were 44.5 and 45.6 hours, respectively.

The major headline finding from the pilot was that the share of women's work in total work (male + female) was 55%, far higher than what figures from official statistics would reveal. Not only that, including extended SNA activities, women's participation in economic work was *higher* than of men. If these activities had been counted correctly, there would still have been a gap in labour force participation between men and women, except in the opposite direction.

The first national TUS, 2019

The pilot highlighted the need for an all-India survey, but it took two decades before it saw the light of day. This national level survey interviewed 1,38,799 households and covered the entire country except Andaman & Nicobar Islands. In contrast to the international surveys, the Indian TUS relies on the interview method, where information on all members of the household 6 years and older was collected from a single respondent.

Unlike in international TUS, the reporting of time spent on various activities was not done separately by each person in the household, but often by a central respondent for all members of the household. When the respondent was giving details about their own time use, it would be "self-reporting". In the 2019 TUS, 56% of rural males self-reported (49.5% urban), and 65.8% rural women self-reported (62.5% urban). This is an important disclaimer to be noted when we analyse figures from TUS. It is entirely possible that male respondents overstated their own contributions to domestic chores and understated their wives' contribution to economically productive work.

The broad buckets were participation and time spent on paid activities, unpaid caregiving activities, unpaid volunteer work, unpaid domestic service producing activities, learning, socializing, leisure and self-care activities. The presentation of data in the report of the 2019 TUS is in a format different from the 1998 pilot. It uses three categories to refer to SNA, non-SNA, and Other activities (instead of clearly identifying extended SNA, as the pilot did). Non-SNA production activities are unpaid and they include unpaid domestic services for household members, unpaid caregiving services for household members, unpaid volunteering for household and community.

"Other activities" are leisure, recreation, personal care and sleep. (For a more detailed discussion of these concepts, see Appendix 1)

The TUS 2019 finds that rural men spent 434 minutes per day in employment-related activities, which amounts to 50.63 hours per week. Rural women spent 317 min/day or 36.98 hours per week. The corresponding figures for urban men and urban women were 514 min/day (59.96 hours/week)and 375 min/day (43.75 hours/week), respectively.

Thus, focusing only on SNA activities (paid economic activities), the 2019 TUS confirms the findings from employment or labour force statistics. The report shows that the share of time spent in SNA activities is greater among men than women, and the gaps are larger in urban compared to rural areas. This is in accordance with the gaps in labour force participation rates. (For a discussion of the suitability of the TUS data to assess levels of work status see Appendix 2)

However, if we examine the percentage share of total time in a typical day by age group, gender and rural-urban residence, we find that women spend a far greater proportion of their time in non-SNA production compared to men, regardless of the age group and rural/urban residence.

Male-female difference: "Unpaid domestic service"

TUS 2019 reports numbers from the self-reported distribution of total time in a day across broad categories separately for men and women. We have noted the male-female difference in SNA work . A major difference between men and women is in terms of time spent on "unpaid domestic service". What does this category include? It includes "Food and meal management and preparation", "Cleaning and maintenance of own dwelling and surrounding", "DIY maintenance, repair, decoration", "Care and maintenance of textiles and footwear", "Household management for own final use (e.g., paying bills)", "Pet care", and "Other unpaid domestic services".

These are fancy labels to describe routine and humdrum cooking and cleaning chores. In 2019, the time spent by Indian women on these activities was 10 ten times more than men.

This highlights the structural issue of sexual division of domestic work, which is among the most unequal in South Asia, especially in India and Pakistan, compared to the global average. The results of the TUS 2019 show that there is no evidence of a movement towards the more equal sharing norms that are seen internationally.

In addition to the fact that an equal division of domestic work is desirable for its own sake as it reflects gender equality within the household, my work with Naila Kabeer shows that being primarily responsible for domestic chores is a big constraint on women's ability to participate in paid work, when such work is available. For working women, this social norm results in a double burden of housework and paid work.

This is a good point to remind ourselves that unpaid domestic/reproductive work allows others (men mainly) to go out and do productive work. As a recent report suggests "unpaid work has been the social safety net for the world…" (BBC, November 27, 2020,). Globally, there are concerns that the massive gains the world has seen in terms of gender equality in the home is now under threat of derailment in the post-Covid-19 world, where we face the "risk of reverting to 1950s gender stereotypes…" (BBC, 2020).

My recent work with CMIE data shows a mild increase in men's time on domestic work between April-August 2020 in India. Are these the green shoots of gender equality within the household? It is too early to tell.

Summing up

Time use diaries, even if written by members themselves, are riddled with well-known problems, e.g., their inability to correctly account for overlapping activities. This is especially important for women who typically multi-task much more compared to men. Women cook, clean, mind the children, keep an eye on the elderly, and in rural India feed animals all at once and simultaneously. Several of the unpaid domestic activities tend to get under-recorded for women as they see it as too routine as to forget, while for men, time spent on unpaid work is often exaggerated as they view their own participation as extraordinary and noteworthy. Thus, on unpaid domestic work, TUS data are likely to underestimate the male-female gaps.

> [D]ata from TUS 2019, with all the caveats and disclaimers, is a stark reminder of the deep-rooted gender divisions at work and at home.

The push by Indian feminists in the late 1970s and 1980s towards capturing time allocation of women was with a view to recognize their crucial role in unpaid *economic* activities. A recognition of women's unpaid economic work would contribute towards their recognition as workers, even when they are not employed for "pay or profit" (which is the ILO definition). This recognition would be the foundation on the basis of which a more equitable distribution of family income could be achieved, which would pave the way for women to be socially recognized as workers.

TUS 2019 is an initial step towards recognizing that time allocation matters. However, for TUS to contribute to an accurate measurement of women's economic work, it needs to internalize the framework outlined in the pilot TUS of 1998-99. In the meanwhile, data from TUS 2019, with all the caveats and disclaimers, is a stark reminder of the deep-rooted gender divisions at work and at home.

I will conclude with a story. A little boy heard his father tell someone "my wife doesn't work". He drew the drawing reproduced at the beginning of this article. It was his visual and starkly expressive "time use diary" of his mother's (non)-work, which is hidden in plain sight. As a society, we just need to open our eyes to "see", recognize and value women's work.

This piece is based on my presentation made at the webinar on "India's First National Time Use Survey' organized by the Laws of Social Reproduction Project at King's College, London on November 27, 2020 (TUS webinar 2020, hereafter, which can be accessed here: https://www.youtube.com/watch?v=Es6lJnUmh8E&feature=youtu.be

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Appendix 1

SNA, non-SNA and Other Activities

Conventional labour force and national income statistics provide information on productive time use by people in economic activities, where work for "pay or profit" is counted. Since unremunerated work is not included in national income, the person performing it is not counted as a member of the labour force. The System of National Accounts contains the list of activities to be counted in the national income, based on internationally agreed concepts and definitions. These are SNA activities. In developing countries, workers in household non-market activities such as raising livestock, working on kitchen gardens or on textiles are meant to be counted as being part of the labour force. The 1998 pilot report clearly categorises some non-SNA activities as extended SNA, and all other activities related to personal care, leisure etc are non-SNA or Other activities.

Appendix 2

Can TUS data be used to gauge work status?

P. C. Mohanan, formerly with the National Statistical Commission, highlights several problems underlying comparability of the 1998 pilot and TUS, 2019 data (Mohanan, TUS webinar, 2020). A large set of issues is related to the methodology of collection, not summarized here, but available from his talk. Fieldwork 101 teaches us that the quality of data is extremely sensitive to the method of collection. He highlights the problems inherent in using contract investigators as well as points out that the TUS report does not outline the field methodology they used.

On the all-important question of using TUS data to gauge work participation, Mohanan points out that works status in standard employment surveys is mutually exclusive, i.e. an individual can only belong to one work category at a time. In TUS, participation in activities is not mutually exclusive, thus, most individuals participate in various kinds of activities, often simultaneously. Also, since the TUS asks about activities in the past 24 hours, the work participation rate (based on participation in SNA activities) ought to be

compared with the NSS daily status WPR, and not usual or principal status. To compare the two surveys accurately, he makes a very important suggestion: instead of aggregating the statuses of seven days of the week as NSS does to compute daily status WPR, one should compare the daily status recorded on the day before the NSS survey with TUS, which has the same reference duration.