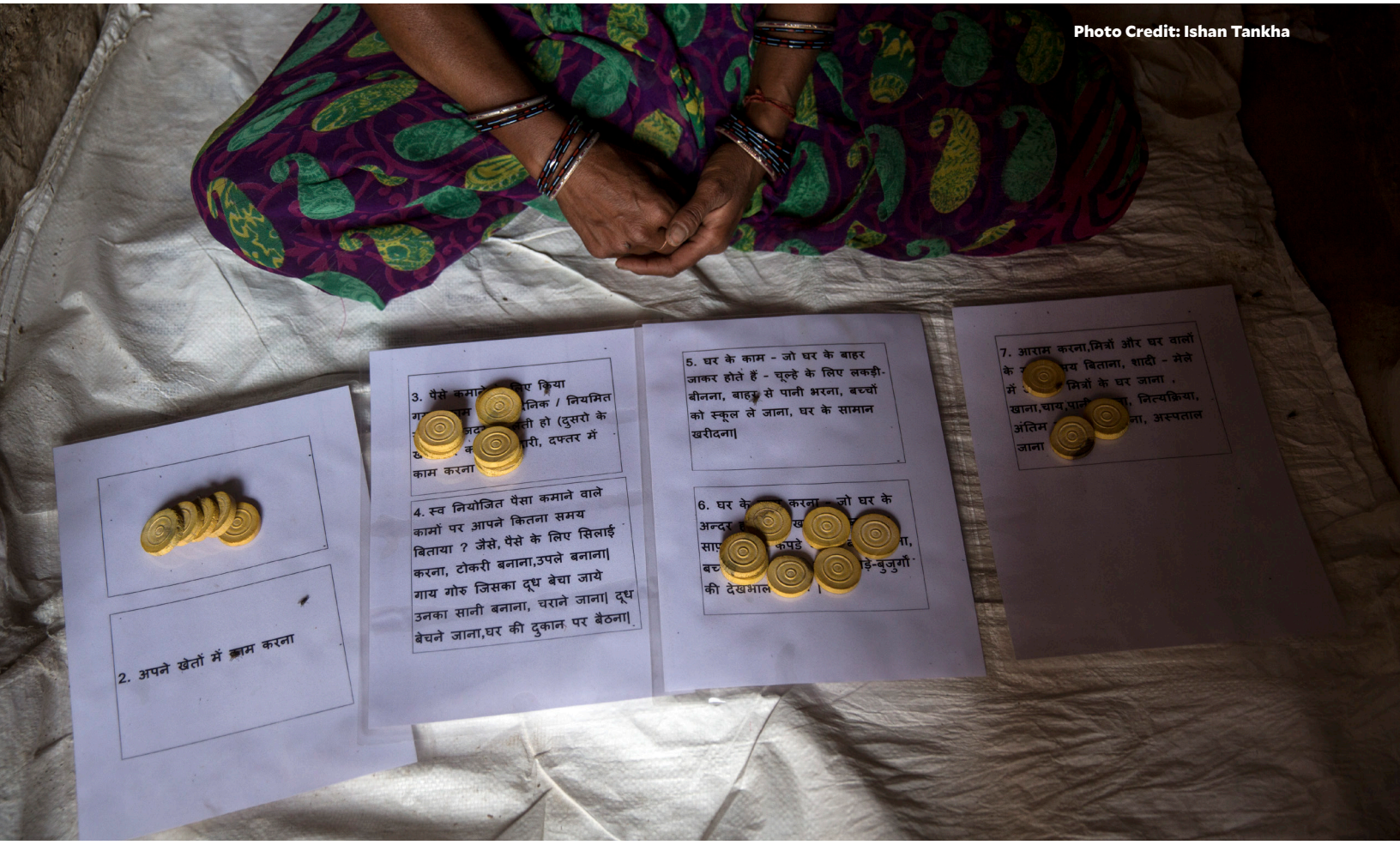

Scaling the Search for Time

Only 21% of Indian women are currently engaged in the labour force, making them one of the least employed populations in the world.[1] However, women's absence from the workforce doesn't reflect low labour effort. Time-use surveys allow researchers to unpack how labour is allocated within the household and across activities, providing deeper insight into the interaction between gender norms and economic marginalisation.

Despite the value of tracking time use, very few statistical agencies in low- and middle-income countries collect these data due to the time-intensive nature of collecting high-quality data. There are two widely accepted methods of collecting time-use data: hourly in-person observations, which is the 'Gold Standard' method; and the more popular 'Traditional' model which depends on one interview per respondent — making it less expensive, but also less accurate, than direct observation. Researchers in the Inclusion Economics network developed and tested a third approach, which has proven to optimise affordability and ease of use while preserving precision. This combination has the potential to produce more widely available time-use data that can be used to inform gender-sensitive labour policy.

1 World Development Indicators Dataset 2021

KEY INSIGHTS

Researchers developed a simplified data collection method – the stylised hybrid diary, or 'Hybrid' module, which uses an interview-based token system to visually represent daily time allocation.

The hybrid module costs less than $6 per survey, compared to the $10 per survey for the widely used method.

When benchmarked against the 'Gold Standard' method, there were no significant differences in findings for women.

The hybrid module is also quicker to administer and reduces enumerator and respondent fatigue compared to both the Traditional and Gold Standard methods.

THE CHALLENGE: NEITHER THE TRADITIONAL NOR GOLD STANDARD METHODS ARE ADEQUATE FOR LARGE-SCALE USE.

How a person spends their time during the day reflects both the opportunities that exist, and their ability to access them. As processes of economic development unfold, gender norms impact the composition of women's time use, and therefore their ability to benefit from economic growth. Collecting gender-disaggregated data on time use is important for formulating and assessing inclusive economic policies. However, collecting accurate time-use data in many low- and middle-income countries has proven difficult. Low literacy rates limit the viability of self-administered time diaries, while traditional enumerator-administered modules require an adaptation to local context, intentionality of capturing multitasking and the blurred divisions between consumption and productive labour, and a rigorous enumerator training that make them infeasible for large studies.

The widely used 'Traditional' module for capturing time-use data requires an enumerator to record a respondent's narration about how they spent time on a previous reference day, making this method relatively inexpensive but reliant on respondent's memory and an enumerator's ability to categorise the activity accurately. The research team benchmarked this against the 'Gold Standard' Method, which requires the enumerator to observe a respondent's actions every hour throughout a given day. This method produces precise data, but is expensive, and time-intensive for both the observer and the observed. Given these limitations, the team set out to develop a new method with the intention of improving efficiencies while maintaining accuracy.

THE EXPERIMENT: DEVELOP AND TEST A HYBRID METHOD OF DATA-COLLECTION THAT IS BOTH MORE AFFORDABLE AND MORE ACCURATE THAN CURRENT METHODS.

The researchers developed a stylised hybrid diary module, where an enumerator sits down with a respondent and asks them to chronologically narrate their previous day. After the respondent finishes, the enumerator takes 24 tokens, each representing one hour of time, and places them on pictures that each represent one of eight major activities.[2] Enumerators then ask specific targeted questions about other areas of research interest, like childcare. The enumerator and respondent then work together to assemble the most accurate characterisation of the reference day. This hybrid method proved substantially simpler than the process of categorising the previous day's activities at 15-minute increments into 1 of 152 categories, and was completed in only two thirds the time of the traditional method.

2 These activity categories can be found in at https://egc.yale.edu/ie/projects/measuring-time-use

THE TIME CATEGORIES MUST BE BOTH CULTURALLY RELEVANT TO THE STUDY POPULATION AND ACCURATELY REFLECT THE RESEARCH QUESTION.

Before testing the new method, the team conducted substantial formative work to ensure that the categories of time use were contextually relevant. They conducted open-ended, semi-structured, conversations with respondents in northern India to determine major categories of time use that were relevant to both men and women and could serve to disentangle women's consumptive and productive labour. These interviews resulted in separate categories for home production, home-based work that generated income, self-employed income-generating activity, household chores, and unpaid work outside the house, among others. Significantly, these interviews also illuminated the importance of accounting for **passive childcare**, or time spent caring for children alongside other activities.

RESEARCHERS TESTED THE ACCURACY OF THE HYBRID MODULE AGAINST THE TRADITIONAL AND GOLD STANDARD MODULES IN A RANDOMIZED CONTROLLED TRIAL (RCT).

Enumerators working with Inclusion Economics India Centre visited 515 respondents across 197 village clusters in Madhya Pradesh, and administered the Gold Standard approach. On the following day, respondents were randomly assigned to either the Traditional Method or the Hybrid Method, and were asked to narrate chronologically their previous day's activities. One week later, enumerators visited respondents a third time, and again administered one of the three methods to allow for a second point of comparison — one with less chance of bias due to potential priming from the first 'Gold Standard' visit.

THE HYBRID MODULE PERFORMED EQUALLY WELL IN TERMS OF ACCURACY AS THE GOLD STANDARD METHOD FOR ALL WOMEN, REGARDLESS OF AGE AND MARITAL STATUS.

The team found that the Hybrid module captured more accurate average time-use for all subgroups of women than the Traditional method, when benchmarked against the 'Gold Standard' approach. The Hybrid method also performed well in accounting for passive care and the time-use of married men. While underreporting for high-intensity activities is rare, underreporting low- and medium-duration activities – a trend reflective of the failure of such activities to add up to the hour-representative token — is somewhat more common.

THE HYBRID MODULE OUTPERFORMED THE TRADITIONAL MODULE IN TOTAL COST PER SURVEY.

The researchers calculated the cost of each survey, inclusive of training and materials. The Hybrid approach cost less than $6 dollars to administer, while the Traditional method cost $10 — representing an opportunity to save 40% of data collection funds.

INSIGHTS FOR POLICY

Statistical agencies the world over are tasked with collecting data that informs policy design. In developing a hybrid module for capturing time-use data, researchers were able to identify a method that can be fitted within existing surveys and strengthens the toolkit available to policy makers when evaluating women's well-being and the impact of policies that seek to improve it.