

## TECHNOLOGIES AND INFRASTRUCTURE TO REDUCE THE WORK BURDEN OF WOMEN

### Insights from time-use studies in Ethiopia, Ghana and Uganda

Gender and social norms in African countries result in a greater share of overall work on women than men. Notably, women and girls across the globe undertake a greater share of unpaid domestic and care work than men. This disparity has several implications. First, despite consuming women's time and effort this work remains unremunerated. Second, by constraining women's time, it limits their capacity to participate fully in paid work which has implications for women's income, wealth, resource access and voice and bargaining power within households and the society at large. Moreover, when women and girls undertake both paid and unpaid work, they sacrifice rest and leisure. For young girls and girl children, work impacts their schooling and skills development.

The distribution of unpaid work between men and women, however, can change over time with changes in gender norms. Moreover, unpaid work can be reduced through technologies, access to markets and infrastructure. Drawing on PARI research on time use (box 1), this policy brief first presents the distribution of men's and women's time use between paid work, unpaid work and leisure and highlights the gendered patterns of its distribution in the rural households of Ethiopia, Ghana and Uganda. It further presents these patterns for children and their time in schooling and learning activities. Moreover, we show agricultural and domestic technologies along with access to infrastructure that can reduce unpaid work.

#### Patterns of time use

**Women spend more time on work in total (up to two hours) and considerably more time on unpaid work (up to 6.5 hours) compared to men.** Overall, women undertake both paid and unpaid work while men do little or no unpaid work. For instance, in Uganda, women spent around four more hours doing domestic and care work than men, but only 2.5 fewer hours doing paid work. Men's participation in unpaid work was low at less than one hour. In Ethiopia, only 18 percent of men undertook any unpaid domestic or care work compared to almost 100 percent of women. On the other hand, 98 percent of men and 68 percent of women reported doing paid work. Men are also more likely to participate in and spend more time on leisure

activities such as sports or hobbies than women. In Ethiopia, 55 percent of men reported having leisure time compared to 38 percent of women.

**Children's time use similarly shows gendered patterns. Girls spent up to one and a half more hours than boys working.** Girls are also more likely to participate in unpaid work. In Ethiopia, 71 percent of girl children undertook unpaid work compared to only 44 percent of boys.

#### Differences between households

**Individual and household characteristics such as income, occupation, education and single- vs dual-adult households, affect how women and girls allocate their time.** Women in lower-income households spend more hours working, particularly domestic and care work. Women from wealthier households tend to spend more time in paid activities. Women's involvement in paid work activities also increases with higher education levels. Girls in single-adult households allocate more time to work and unpaid activities than in dual or multi-adult households. Women and girls in households with more than six members allocate more time to unpaid work than those in smaller households. Women's time allocation in paid and unpaid work affects their children, particularly their girls' time. In Ethiopia, boys spend more time on school work, and less on total work when women participate in paid work. Girls spend more time on paid and school work and have less leisure time when women spend time on paid work.

#### DATA

Household survey data was collected from 1420 rural households in Ethiopia, Ghana and Uganda between July and September 2022. The time-use module of the survey instrument recorded data on the time spent by an individual in the pre-defined list of categories during the previous day. This section recorded the data of the primary adult man, primary adult woman and the eldest child above age 10 in the household.



## Technology and infrastructure

**Household technologies can reduce domestic work, but access remains low in African countries.** Historically, the proliferation of appliances in the US and UK increased women's participation in paid work by reducing the time spent on domestic chores. However, rural households in Ethiopia, Ghana and Uganda did not have access to these appliances. Less than a fourth of the households had cooking stoves and domestic water pumps. Still, these simpler technologies appeared to affect time use patterns. Women in households with agricultural water pumps spend more time in paid work, perhaps because access to water reduces the time needed in unpaid work.

**Infrastructure, including all-weather roads, electricity and clean water, and market access can ease the demands of domestic and paid work.** In Uganda, women in low-income households with shorter distances to the water source spend less time in unpaid work and more in paid work. Boys in households with short distances to a water source also spent fewer hours in unpaid work. Children in households near an all-weather road spend less time commuting and have more time for leisure. Similarly, in Ethiopian households with access to electricity, women spend fewer hours in unpaid work and have more rest hours. Infrastructure access too, however, remains woefully low in the rural areas of the three countries. In Uganda, only three households in the sample had a connection to piped water and the electricity grid. Having a market nearby allows women to undertake more paid work and less unpaid work.

### POLICY RECOMMENDATIONS

- **Improve access to education, training and vocational skills development for girls and women.**
- **Invest in rural infrastructure development and improvement** to enhance rural peoples' access to transport, water and electricity, with a focus on investments that can reduce the time burden of women.
- **Improve access to domestic technologies** such as cooking stoves by leveraging taxes and subsidies to reduce the prices of consumer durables and make them more widely available.
- **Expand access to improved and simpler agricultural technologies** such as agricultural water pumps and hand insecticide pumps to reduce overall time burdens on farm as well as off-farm.
- **Foster more equal sharing of domestic and care work between men and women** through campaigns encouraging shared parental responsibilities, and engaging men in household tasks through community programs.

The policy brief is based on the studies:

Getahun, TD and Lulie J. (2024) Time Use among Rural Household in Ethiopia: Implications for Household Welfare and Productivity. ZEF Working Paper No. 229.

Isoto R., Nakamatte I., Bashaasha B. and Saleemi S. (2024) Gendered Patterns of Adults' and Children's Time and Access to Technology and Infrastructure in Rural Uganda. ZEF Working Paper No. 230

Asante F., Awo M., Bonzo B., Sam R. and Saleemi S. (2024) Innovations, Technology and Time Allocation: Implications for Labour Productivity and Welfare in Ghana. ZEF Working Paper No. 231.

The studies are available at [www.r4ai.org](http://www.r4ai.org).

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### IMPRINT

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