

Public Infrastructure, time allocation to unpaid work and poverty alleviation

Men and women spend some time in non marketed, unpaid household activities and caregiving but these household chores consume disproportionate amount of time in the event of inadequate provision of public infrastructure, particularly in rural areas of developing countries. Time allocation to market and non market activities is influenced by gender, geographic location, income status and education level. However, provision of public infrastructure or its inadequacy; transportation, efficient energy sources, water and sanitation facilities configure as a highly significant determinant in how men and women allocate their time between productive Market activities and non market, non productive but nevertheless essential tasks. Intrahousehold inequalities in terms of household division of labour and the role played by lack of basic services in aggravating them is evident with the availability of this first ever Time Use Survey of Pakistan.

Country studies have shown that women bear the brunt of carrying out the chores of collecting water and firewood and hence shift away from agricultural production or from school attendance in case of girl children being involved. This can have implications for the health of women as they have to travel long distances and carrying loads of firewood and water containers they can injure their backs. Hygiene factor appears important as the pathogens' content increases when water gets polluted causing diseases affecting health of poor families already striving to make both ends meet.

The linkage between public infrastructure investment and its consequent effect on reducing poverty by freeing the time locked in some unproductive tasks and its resultant substitution by income generating market activities is established by empirical studies and increasingly recognized as significant. Saito (1994) has shown that in Burkina Faso, due to shortage of fuelwood, women have to spend almost 35 hours per week in collecting firewood. By provision of efficient energy sources, this

time can be released and utilized by women in activities enhancing income and reducing poverty of their households.

As revealed from TUS report of Pakistan, a substantial amount of time is consumed in collecting water and fuel and gender differential is noticeable. More women are involved in collecting water as compared to men while fuel collection is mostly done by men. Distribution of households by main source of drinking water shows that 84.2 percent households have drinking water source within house premises while this is lesser for rural areas where only 79.4 % have water source as compared to 92.4% for urban areas. Piped (tap) drinking water is available in only 30.2% of households, 17.7% for rural areas and 52.8% urban areas. Remaining households have either borehole on site or well on site for provision of drinking water. Remaining 15.8% households have to get drinking water from outside house premises, either from communal borehole, flowing water/ stream or river. Here again rural urban divide is sharp with higher proportion of rural households, 20.3% as compared to 7.6% urban households getting water from outside house premises.

Women spend more than 1.5 hours per day in collecting water overall and in rural areas whereas the time spent by women in collecting water per day is less than an hour in urban areas. Female allocate more time towards collection of water as compared to men, irrespective of the geographical location and age. Time allocation to fetching of fuel and water differentiated by age demonstrates that female in the age bracket 10-19 spend considerable amount of time to fuel and water collection and this age category includes school going girl children who may have been shifting away from school attendance to carry out these household chores. There are variations in the allocation of time to collection of water and fuel by urban/rural and male/female while provincial differentials are also substantial.

There is a clear link between access to water, efficient source of fuel/energy and time allocation of women implying that implementing changes in these two areas by improving water and energy infrastructure can result in better participation of women

in market/productive activities. Better provisioning of public infrastructure can result in substitution effects in time allocation between remunerative market work and non market unpaid work having implications for poverty reduction. They can earn income for the households in this newly available time and school enrollment rates may rise in case of girl children engaged in these tasks.

In the proposed study, the linkage between market related SNA activities, investment in public infrastructure of all kinds and allocation of time to collecting water and fuel may be investigated. In order to work out the effect of infrastructure on contribution to market work with gender and geographical differentials (rural/urban and provincial), dummy variables may be included. The study can lead to policies enhancing investment in public infrastructure in general and water infrastructure in particular that could save much time of the poor households.

Rural areas need to be more emphasized because of greater dearth of water sources within house premises keeping in view the fact that 70% of the population lives in rural areas and higher proportion of total poor live in villages. Surveys and projects can be initiated in rural areas to supply water within easy access along with complementary schemes to provide market and income activities to women of the areas where such schemes are implemented, on the lines of the Asian Development Bank Project in Bangladesh 1998-2005 with the objective to promote economic growth through infrastructure improvement in rural Bangladesh. The project successes showed the increase in income of the rural households, greater availability/affordability of three meals a day, improvement in housing and sanitation, and increase in enrollment of school children.

Reference:

Saito, K., Mekonnen and D. Spurling, 1994, ' Raising the productivity of women farmers in Sub-Saharan Africa, World Bank, Discussion Paper.