

Measuring the missed working days

1) In your experience, what is the best methodology/method for costing missed paid and unpaid domestic and care work as a consequence of VAW?

We have different types of work that women might be involved in:

1- *Waged worker by the market definition:* In this case clear questions regarding the number of daily working hours, number of days per week, number of weeks per month should be asked. In addition wage per hour/day/week should be asked and a daily wage should be computed in order to get the opportunity cost of missing a working day / or even a fraction of a working day.

In addition to the questions about the wage we need to collect data about the job characteristics in order to impute any missing data using the multiple regression technique (statistical analysis), which will give a replacement value for the wage using available data for individuals with the same characteristics

2- *Employer /self employed:* Here questions regarding the average earning per day should be asked. Here, we need to have information about the number of missing days due to VAW, or / and the loss in the production due to the VAW with an estimate of the loss compared to a normal day.

3- *Unpaid worker for the family (or not family),* by market definition is considered in the labor force: We need to have information regarding the job characteristics (occupation, sector, economic activity, stability, in /out an establishment).

Using the multiple regression techniques and with the demographic variables in addition to the job characteristics the earning can be imputed again using the estimated wage of a waged worker female with the same characteristics.

4- *Domestic and care work:* this work is not accounted for in the system of national account and is not considered work by labor market definition.

In order to give a monetary value there are several approaches that can be used. A time use survey (questions) is needed in addition to an estimated hourly wage if the generalist replacement approach will be used. (see the notes of measuring unpaid work below).

2) How would you recommend this methodology/method be applied in the other Arab states?

We need to consider the following in the Arab region:

1- The low female labor market participation (around 22% in 2012 in Egypt) and the domination of the governmental work among the female waged workers, in addition to the low wages. The female labor market participation increases with higher education, but revealing any domestic violence decreases with higher education as well.

2- The female labor market participation (FLP) increases if subsistence work¹ is considered (and hence using the extended labor market definition). For example in Egypt 2012 the FLP was around 22% (18%

¹ Such as agricultural activities, raising poultry/livestock, and/or producing ghee/butter/cheese for

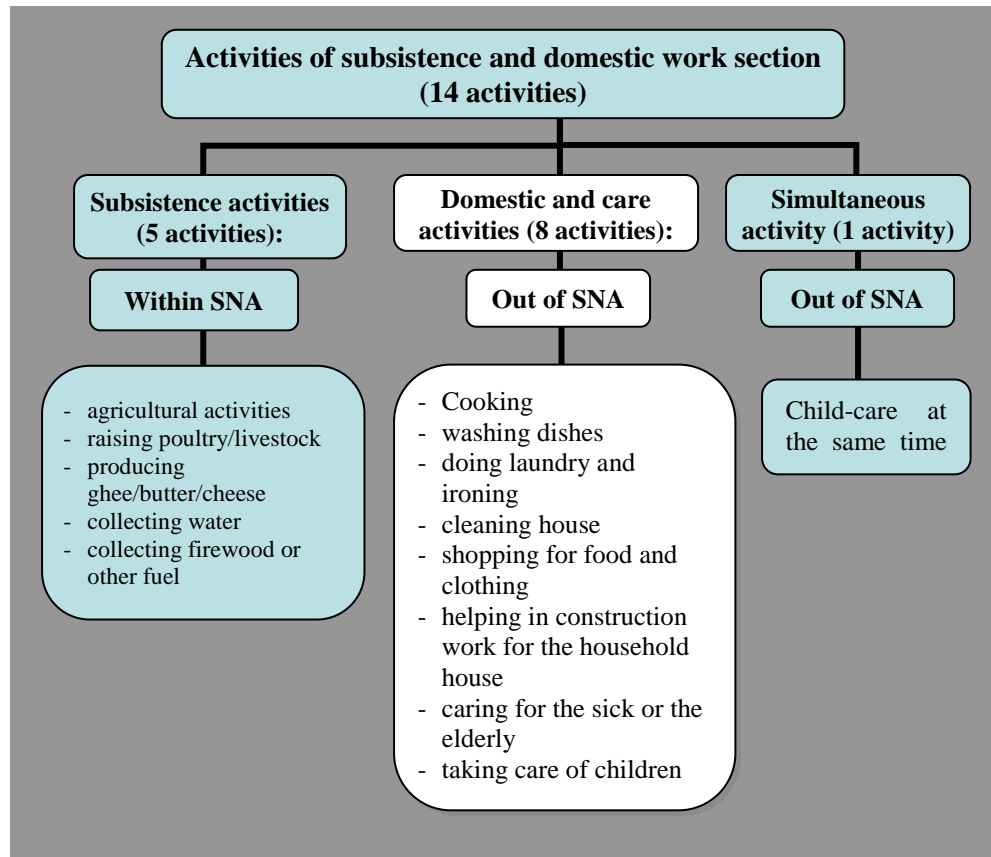
employed and 5 % unemployed) using the market definition and increases to 35% if the extended definition² is used (30% employed 5% unemployed) (Hendy 2015). The subsistence work increases in the rural areas and among the less educated female in almost all Arab countries, therefore adding several investigating questions in the questionnaire is essential for computing the missing working days and imputing the potential loss due to VAW.

3- Due to the previous notes regarding the low FLP, the unpaid domestic work is the most important work that will be missed due to VAW at the national level. Therefore, as previously said a good/accurate time use questions are needed in the questionnaire.

One last thing that has to be considered in the Arab Region context, that is NOT related to work but rather shelters. It is a common phenomenon in the Arab Region that the victim leaves the house and stays at her parents (friends) rather than public/ private shelters. This phenomena needs to be considered in the questionnaire and in imputing its cost.

² Under the market definition of economic activity, only market work counts as work, so that subsistence workers can be considered unemployed if the rest of the definition applies to them. Under the extended definition, any subsistence work counts as work and subsistence workers are not considered unemployed even if they are searching for market work, which thus reduces the numerator of the unemployment rate. Moreover, the denominator now includes subsistence workers, most of whom are counted as out of the labor force in the market definition. As a result, the unemployment rate estimates under the extended definition are much lower than those counted within the scope of the market definition (Assaad 2009)

Measuring Unpaid Domestic Work



Unpaid work may be understood to include all productive activities outside the official labor market done by individuals for their own households or for others; such as: housework, care for children and for sick and old people, voluntary community work, subsistence agriculture, helping in family businesses, building the family house, maintenance work, transport services etc. All of these activities have one thing in common — they could, at least in theory, be replaced by market goods and paid services.

There are different approaches for measuring unpaid work but the primary ones are:

The Output Method which takes all outputs into account based on the value of all goods and services produced by the household (quantity x price) at market equivalent prices (ESCAP and UNDP, 2003).

The Input Methods which are based on the value of labor that is determined by the wage that would be given to a worker to replace the unpaid worker doing the same work. It includes the opportunity cost approach and the market replacement cost approaches; (a) the specialist market replacement; and (b) the generalist market replacement.

Data Used in Measuring Domestic Unpaid Work

Time-use surveys are considered very useful tools in this context since they provide detailed information on how individuals spend their time on a daily or weekly basis with a

combination of specificity and comprehensiveness not achieved in any other type of surveys (Hirway, 1999a) Well designed standardized time use surveys can provide a basis for international comparisons of time use.

Generally, imputing a monetary value for unpaid work activities depends on the valuation of the unit of work and the wage rates for this unit. The general formula for computing that value of *an individual* is:

$$\text{Value of unpaid work} = \text{volume of work done} \times \text{wage rate} \quad (\text{Equation 1})$$

At the aggregated level, the formula is:

$$\text{Value of unpaid work} = \text{average volume of work done} \times \text{average wage rate} \times \text{number of persons involved} \quad (\text{Equation 2})$$

The volume of unpaid work could be in terms of the output units or time units spent in producing the output. Similarly, the wage rate (price for a unit of work) could be in terms of the wage paid by output units or by time spent. The measurement would depend upon the prevailing practices in the economy of a country. The common approaches used in the valuation are the output approach and the input approach (ESCAP and UNDP, 2003).

Output Approach

This approach would be applicable in economies where household and domestic productions are paid based on the units of output. The valuation of unpaid work in this approach needs data on the output of the unpaid work such as the number of meals prepared, items of clothing washed and ironed, area of house cleaned, children taught, number of elderly given care etc. This approach also needs data on the wage rate per unit of output, such as the labor charge for each meal prepared, charge per item of clothing washed and ironed number of children tutored, payment for each elderly person given care (ESCAP and UNDP, 2003).

The output method is theoretically superior, but unfortunately, it is difficult to be applied if the goods and services produced are not sold on the market (Swiebel, 1999).

Input Approach

This approach is applicable for household and personal services for which individuals are paid by the time spent, depending upon the country practice of payment for those activities such as: taking care of children and the elderly, transporting household members, teaching children, cleaning and other similar activities. This approach is also applicable to volunteer work in non-profit institutions.

The input approaches value household production as the sum of all values of its inputs which include labor inputs (time-use) and the use of physical capital (the land, dwellings and equipment owned by households). However, time-use surveys only provide information on

time-use; so that, the valuation methods in practice do not take into account the value of the physical capital used by households in non-market production (Budlender, 2002).

The output method measures the values of the goods produced while the input method measures the burden (which is the major concern in unpaid work). Thus, input measures are commonly used in the valuation of unpaid work for household production of domestic and personal services for own consumption.

There are two broad approaches in applying the input methods to evaluate the wages: the opportunity cost and the market replacement cost:

The Opportunity Cost Approach (OCA). The opportunity cost approach is based on the potential wage that the person would earn in the market. The most common wage used in this method is the potential wage of the person based on sex, educational level and age, i.e. the valuation will change depending upon who is engaged in the unpaid work (ESCAP and UNDP, 2003).

The Opportunity Cost Approach assumes that the worker has a job opportunity in the paid labor market and that compensation is based on the worker's qualification or possible paid employment instead of the type of work done. This means that it uses different wages for the same activity when the work is performed by different people. For example, the time spent cooking a meal by a university graduate has more value than the same time spent by someone without formal schooling doing the same activity, even if that person is a better cook (ESCAP and UNDP, 2003).

The Market Replacement Cost Approach (MR). Two types of wage rates – Specialist and Generalist – have been commonly used in the valuation of unpaid work of domestic and personal services, using the market replacement cost approach.

- **Market Replacement - Specialist (MR-S).** The value of unpaid work for a specific activity is equal to the compensation or wage rate of a specialist engaged in this activity multiplied by the time spent on the activity.
- **Market Replacement - Generalist (MR-G).** This approach is based on the wage of the domestic paid worker under the country classification (for example, the wage rate of a housekeeper, or housework or food service worker). This approach assumes that there are available workers in the market and their work is similar to that of a domestic worker.

A general formula that may be used to estimate the aggregate value of the unpaid work using the input approach is:

$$\text{Value of unpaid work} = \sum T*W*P \quad \longrightarrow \quad (\text{Equation 3})$$

where **T** = average time spent for the type of work, activity or job

W = average wage rate per unit of time for work, activity or job

P = estimated population engaged in the work, activity or job

The differences between the values from the different approaches become particularly big where there are large inequalities in wages and salaries in the economy. This is the situation in many countries (ESCAP and UNDP, 2003).

Reference: Imputing Monetary Value to Egyptian Females' Unpaid Domestic and Care Work. Abd Eallatif D.,and Gadallah M. Journal of Development and Economic Policies. Vol 13. No.1 31-56, January 2011.