# Calculations For Non-Paid Services of The Population In Uzbekistan

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*Abstract.* This article discusses unpaid services of the population, methods of their assessment, international recommendations and approaches, the composition of unpaid services of the population, monitoring of unpaid services of the population, the results of calculations made as a result of observation and analysis made on the basis of their comparison with foreign countries.

*Keywords*: Unpaid services to the population, goods and services consumed for own needs, auxiliary account, household sector, care.

# 1. INTRODUCTION

According to the principles of the System of National Accounts, certain types of goods and services consumed by households for their own needs are included in the production limits of the household sector, and some are not.

The "System of National Accounts (SNA) 2008" methodology is not included in the production line due to problems with accounting for non-payable services of the population.

Nevertheless, as a result of scientific research conducted in some countries of the world, there are approaches to adding relevant value indicators to the sub-account of households in order to form a set of statistical data for assessing inclusive well-being. This implies the study of processes related to the service of a household member not only for their own consumption, but also for other members of the household, taking into account the employment of certain segments of the population, and the consequences of demographic processes.

Research conducted in this area shows that the implementation of auxiliary accounts for households, the recognition of service activities for personal use as a separate type of activity, expands the boundaries of SNA production, and also contributes to a deeper understanding of the traditional elements of national accounts, such as disposable income and the savings rate.

Based on the generalization of data from the accounting of services produced for own consumption and the accounting of the household sector in household auxiliary accounts, it becomes possible to form expanded production indicators and disposable income of households.

## 2. METHODOLOGY

In this case, household final consumption expenditures are divided into three parts: intermediate consumption, acquisition of fixed assets, taking into account their disposal, and final consumption of goods and services.

In approaches to economic growth that describe economic well-being in detail, in addition to the current GDP indicator, it is proposed to take into account the production of unpaid services by households.

As can be seen from the research, the expansion of production boundaries with the inclusion of production activities for own consumption represents the total volume of capital services in the form of conditional mixed income and durable consumer goods.

Households' final consumption expenditures, on the one hand, increase as a result of additional consumption of products produced for their own consumption, and on the other hand, they decrease due to the transfer to intermediate consumption of goods and services used in the process of producing services for their own consumption, and due to the transition of long-term consumer goods to gross accumulation of fixed capital.

Gross saving increases in proportion to changes in voluntary income and final consumption expenditure and corresponds to gross fixed capital saving. Net lending or net debt indicators remain unchanged.

Due to time constraints, household members are required to make decisions about purchasing essential goods by earning money through non-market production or paid services in the household.

Unpaid labor activity in the provision of household services includes cleaning, maintaining housing, cleaning and washing footwear, purchasing, managing the household, and assisting other households.

Unpaid labor activity in the provision of home services manifests itself in the following forms.

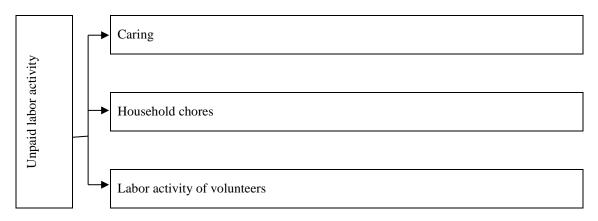


Figure 1. Unpaid labor activity in the provision of home services [3]

In this case, the production of services for own consumption includes activities based on non-market relations, produced and consumed by members of the household living in the household.

Accounting for the production of services for own consumption is described in detail in the UNECE Handbook on the assessment of unpaid labor activity in the provision of home services [3].

This manual provides indicators of unpaid household activities and interrelationships between other areas of the SNA, types of services, and effective assessment methods.

Also, the labor activity of volunteers reflects unpaid labor activity carried out gratuitously in the interests of other persons.

Definitions for assessing this activity, as well as the recommended approaches to assessment, are described in detail in the International Labour Organization's Handbook on Volunteer Work Activity Measurement [4].

According to the definitions given in this manual, both of the above-mentioned forms of labor activity include very similar service groups. Therefore, to distinguish them, it is necessary to pay attention to the criterion of recipients of the relevant services.[6]

In particular, preparing food for an elderly relative living in one household is considered as labor activity for the production of services for one's own consumption, while the performance of a similar service by a person living in another household who is not a family member is considered as labor activity of volunteers. The provision of services for own consumption includes:

- childcare;

- care for the elderly;
- cooking, preparing pastries;
- transport services;
- disposal of the household;
- laundry and clothing repair;
- procurement;
- repair of home appliances;
- current repairs of one's home;
- other types of services.

Unpaid labor activity of households in the provision of services for own consumption is assessed in two ways: cost method;

production method.

In the cost method, wages, capital expenditures, and intermediate consumption are estimated by the sum of the costs necessary to produce these services using the following formula [3]:

CE + T - S + CFC + RC = GVA + IC = 0, (1)

here:

*CE* - conditional accrued wages;

T - other taxes on production;

S - other subsidies for production;

CFC - consumption of fixed capital;

*RC* - income from capital;

GVA - gross value added;

*IC* - intermediate consumption;

 ${\it O}$  - production volume

To carry out these calculations, it is advisable to conduct sample statistical observations once every 5 years.

When determining the value of the conditional payment for hours worked, information on wages paid for the production of equivalent market services is used.

In order to compare with market production, it is recommended to make conditional adjustments on taxes and subsidies, as well as on gross mixed income.

In the production method, each related service is multiplied by the price of similar services exchanged on the market using the following formula:

$$O - IC = GVA - CFC - T + S - RC = CE, \qquad (2)$$

here:

*O* - production volume;

IC - intermediate consumption;

GVA - gross value added;

CFC - consumption of fixed capital;

T - other taxes on production;

S - other subsidies for production;

*RC* - income from capital;

CE - conditional accrued wages

In this case, data from household expenditure surveys can be used to assess intermediate consumption expenditures, that is, the consumption of goods and services used in labor activity and purchased from the market.

In the aforementioned international manual, it is recommended to use the cost method. Also, the results of the production method are used in comparative analysis.

Within the framework of the study, based on international recommendations and the studied foreign experience, work was carried out to assess unpaid labor activity in the provision of home services in Uzbekistan. In this case, first of all, an inventory of existing data sources was carried out for use in calculations.

## 3. ANALYSIS AND RESULTS

As a result of the inventory of available data sources, it turned out that there is insufficient data for assessing unpaid labor activity in the provision of home services. Within the framework of the study, based on the recommendations of international organizations and the experience of foreign countries, a sample survey was developed to assess unpaid labor activity in the provision of home services.

Based on this survey questionnaire, the survey is conducted selectively in order to obtain accurate and reliable information on the Republic of Uzbekistan. The observation was organized based on the principle of voluntary participation. The survey was conducted in the form of an electronic questionnaire with household members. The sample surveyed population constituted part of the population of households (550 people or 0.00002%). At the same time, in order to ensure the quality of observation and obtain correct results, the main attention was paid to the selection of the rural and urban population, as well as men and women in equal proportions.[7]

During this sample survey, organized to assess unpaid labor activity in the provision of household services, households are surveyed according to the 1st time (one-time) "Questionnaire for the Study of Unpaid Labor Activity."

The survey program included questions containing the following information:

Your age, gender, and marital status;

What kind of work activity are you currently engaged in and how much time do you spend on average on this work;[9]

How much time on average do you spend doing the following household chores: cooking food and other meals, cleaning the house, washing and ironing clothes, repairing household appliances, caring for children and elderly in the family, buying essential family items, working in the yard, garden or household, caring for pets, caring for other people

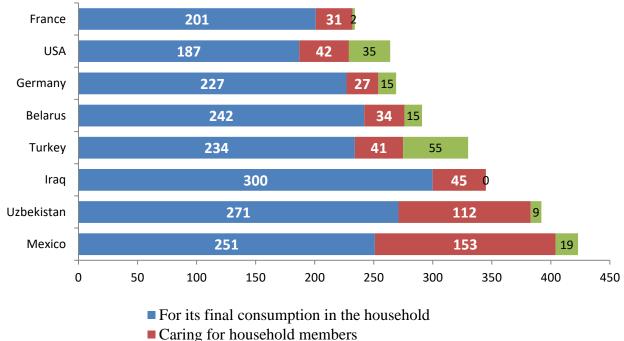
(neighbors, friends or relatives);

What do you think is the share of women in unpaid domestic work in Uzbekistan;

What is the distribution of unpaid domestic work in your family?

How much time do you spend each day on the following activities?

Distribution of the results of the sample survey to the general population was carried out using the software product. Within the framework of the study, the results of the observations were summarized and compared with the data of foreign countries.



Community work and other household help

Figure 2. Time spent by women on various categories of unpaid labor activity, minutes per day [5]

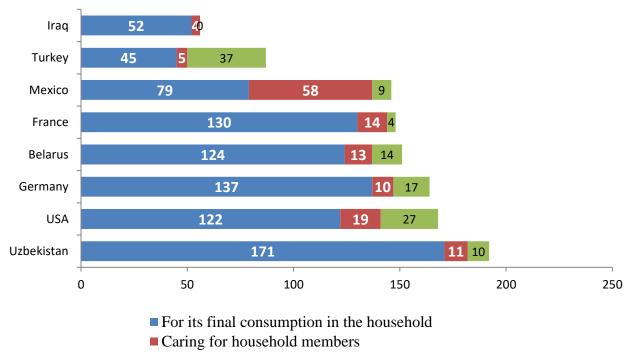
Within the framework of our research, the results of calculations carried out on the basis of sample observation data were compared with the data of a number of countries of the world, presented in Jakuis Charmes' book "Non-paid Activities and the Labor Market." The figure above shows data on the time spent by women in various categories of unpaid labor activity in different countries of the world. From these data, it can be seen that Uzbekistan ranks high in the world in terms of time spent by women on unpaid work. In Uzbekistan, women spend an average of 392 minutes a day on unpaid work, in Mexico - 423 minutes, in Iraq - 345 minutes, in Turkey - 330 minutes, in Belarus - 291 minutes, in Germany - 269 minutes, in the USA - 264 minutes, in France - 234 minutes. These indicators are directly explained by the unemployment rate in the country, national traditions, religious views, and attitudes towards the family.

It is noteworthy that the main part of unpaid labor activity in all countries is spent by women on the final consumption of the household. Such services include cooking food and other dishes, cleaning the house, washing and ironing clothes, buying essential household items, working in the yard, garden or household, and caring for pets. Women spend an average of 300 minutes a day on such services in Iraq, 271 minutes in Uzbekistan, 251 minutes in Mexico, 242 minutes in Belarus, 234 minutes in Turkey, 227 minutes in Germany, 201 minutes in France, and 187 minutes in the USA.

At the same time, caring for household members constitutes another significant part of unpaid labor activity. Such services include family care for children and the elderly. Women spend an average of 112 minutes a day on such services in Uzbekistan, 153 minutes in Mexico, 45 minutes in Iraq, 42 minutes in the USA, 41 minutes in Turkey, 34 minutes in Belarus, 31 minutes in France, and 27 minutes in Germany. These indicators are explained by the existing traditions in the country, the love of children by the peoples, and respect for the elderly. The Uzbek people are

distinguished by their love for children and a high level of respect for the elderly and parents.[8]

Another part of unpaid labor activity consists of community service and assistance to other households. Women spend an average of 9 minutes a day on such services in Uzbekistan, 55 minutes in Turkey, 35 in the USA, 19 minutes in Mexico, 15 minutes in Germany and Belarus, 2 minutes in France, and 0 minutes in Iraq. From these figures, it can be seen that the time spent by women on unpaid work is a social indicator and is not directly related to the level of development of the country's economy. In some cases, these indicators are high in developed countries, and in others, on the contrary.



Community work and other household help

Figure 3.Men's time spent on various categories of unpaid labor activity, minutes per day [5]

The figure above shows data on the time spent by men in various categories of unpaid labor activity in different countries around the world. From these data, it can be seen that Uzbekistan ranks high in the world in terms of the time spent by farmers on unpaid labor activity. In Uzbekistan, men spend an average of 192 minutes a day on unpaid work, while in the USA - 168 minutes, Germany - 164 minutes, Belarus - 151 minutes, France - 148 minutes, Mexico - 146 minutes, Turkey - 87 minutes, Iraq - 56 minutes. These indicators, on the one hand, are related to the unemployment rate in the country, and on the other hand, are explained by the level of well-being.

It is noteworthy that in all countries, men spend the main part of unpaid labor activity on the final consumption of the household. Such services include purchasing necessary products for the family, working in the yard, garden or household, caring for pets, cooking food and other dishes, cleaning the house, washing clothes, and ironing clothes. In Uzbekistan, men spend an average of 171 minutes a day on such services, while in Germany - 137 minutes, in France - 130 minutes, in Belarus - 124 minutes, in the USA - 122 minutes, in Mexico - 77 minutes, in Iraq - 52 minutes, in Turkey - 45 minutes. These indicators are explained by the existing unemployment rate in the country, traditions, gender equality, and the worldview of peoples. When the unemployment rate in the country is high, most men try to earn income by working in a yard, garden, or household, as well as caring for pets.

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gender equality, and the worldview of peoples. When the unemployment rate in the country is high, most men try to earn income by working in a yard, garden, or household, as well as caring for pets.

Another part of unpaid labor activity consists of community service and assistance to other households. Men spend an average of 10 minutes a day on such services in Uzbekistan, 37 minutes in Turkey, 27 in the USA, 17 minutes in Germany, 14 minutes in Belarus, 9 minutes in Mexico, 4 minutes in France, and 0 minutes in Iraq. From these figures, it can be seen that the time spent by men on unpaid work is a social indicator and is not directly related to the level of development of the country's economy.

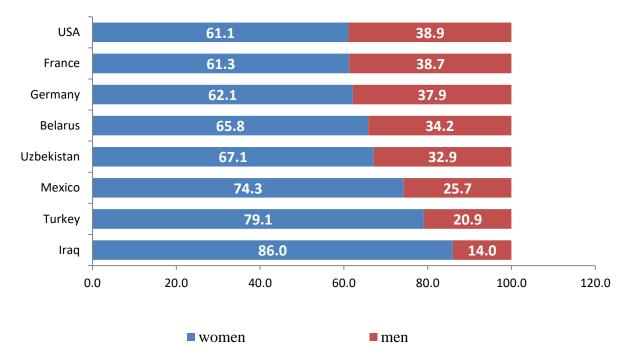


Fig. 4. Share of time spent by women and men on unpaid labor activity, as a percentage of the total [5]

The figure above shows data on the proportion of time spent by women and men on unpaid work in different countries of the world. From these data, it can be seen that in all countries of the world, women spend more time on unpaid work. Uzbekistan is among the countries with a high proportion of women in the world in terms of time spent on unpaid work. In Uzbekistan, the share of women in terms of time spent on unpaid work is 67.1%, in Iraq - 86%, in Turkey - 79.1%, in Mexico - 74.3%, in Belarus - 65.8%, in Germany - 62.1%, in France - 61.3%, in the USA - 61.1%. These indicators are explained by the existing unemployment rate in the country, traditions, gender equality, and the worldview of peoples. In countries with a high level of gender equality, the ratio approaches. A striking example of this is the situation in the USA, France, and Germany.

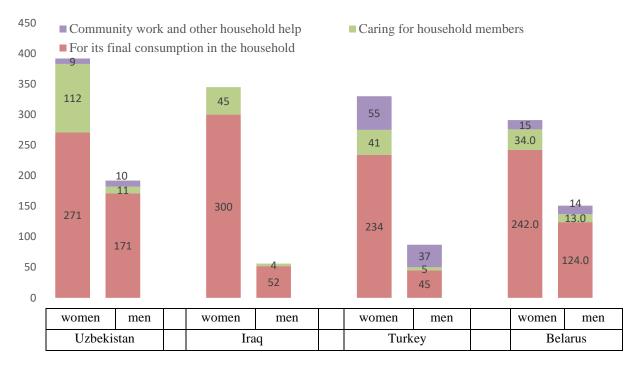


Fig. 5. Time spent by women and men on unpaid labor activity, minutes per day [5]

Within the framework of the study, we divided the countries into 2 groups according to the time spent on various categories of unpaid labor activity. In the first group, we presented comparative data on the time spent by women and men on various categories of unpaid work in Turkey, Belarus, Uzbekistan, and Iraq (Fig. 6).

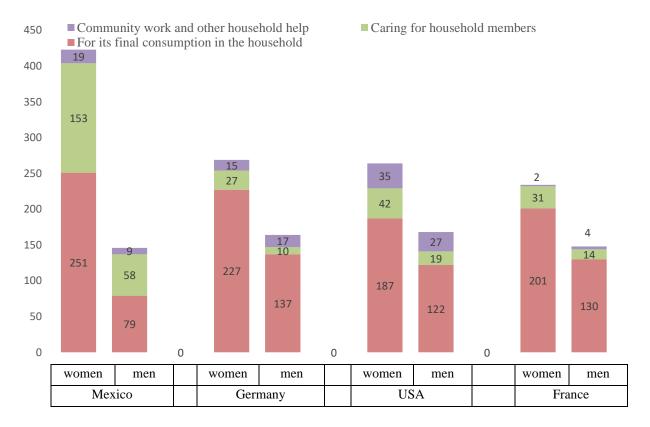


Fig. 6. Time spent by women and men on unpaid labor activity, minutes per day [10] In the second group, we presented comparative data on the time spent by women and men on various categories of unpaid work in Mexico, Germany, the USA, and France (Fig. n). In the countries of this group, the time spent by the population on unpaid labor activity for public works and other household services is higher than in the first group.

In terms of coverage, time expenditure data can be as follows:

- full-scale, that is, all types of activities that a person can engage in for a certain period of time (for example, 12 hours, one day a week or 7 days);
- sampling, recording the time spent on sampling activities or several types of activities within a specific time interval.

Time expenditure statistics can cover primary or main activities, secondary or one-time activities. Characteristic features of any activity include:

- place (place of activity);
- participation of other persons in carrying out this activity ("with whom");
- an interested person or organization, in whose interests this activity is carried out;
- incentive (whether a reward was received for the work performed, in other words, whether this work was paid for or not).

#### 4. CONCLUSIONS

The concept of time spent on any activity has two aspects, such as the duration of the activity and the number of events in the activity.

The duration of activity for a certain period is called the total time spent on this activity.

An event is understood as the implementation of any activity without any change (accumulated data), and the number and frequency of events are understood as the duration of any activity event.

For example, an individual can participate in three events of eating differently throughout the day (a short breakfast lasting 10 minutes, a business lunch lasting 55 minutes, and a family dinner lasting 25 minutes).

For some types of time expenditure data analysis, characteristics such as time flow and sequence are important.

The passage of time represents the time (day, week, or year) during which this activity is carried out, and the sequence of time represents the relationship between previous and subsequent activities.

The time expenditure statistical database is usually presented as the time spent on all types of activities for "average day" or "average week." To select such an average or "standard" day and week, it is necessary not only to have complete data covering all possible types of activities, but also to take into account the difference between weekends and regular days of the week, special holiday, the influence of changes in activities depending on the seasons, district, or region.

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