

Evaluation of Household Production using Satellite Accounts for Macroeconomic Policies in Ghana

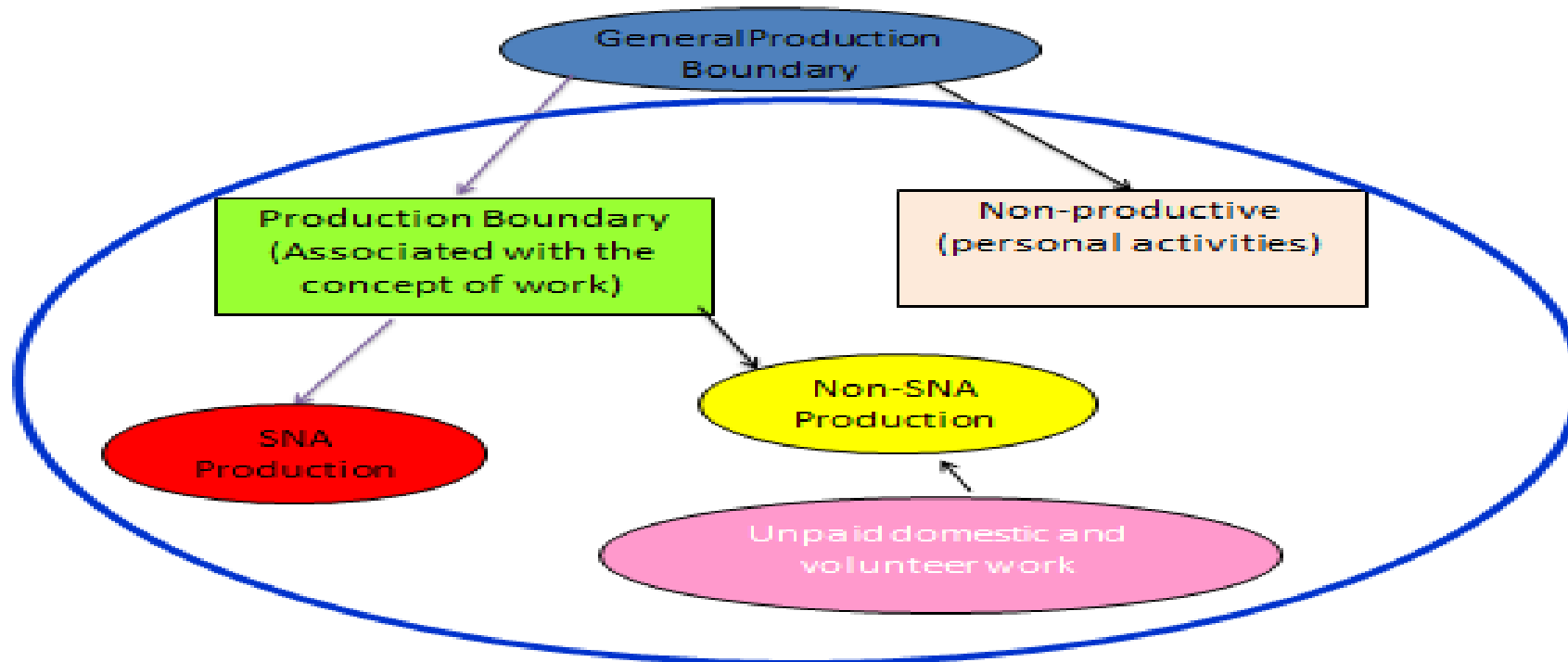
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Introduction

- It is not possible for a society to move towards an economy where all production activity takes place in the market sphere. Therefore, the only way of monitoring the entire economic production is establishing a framework to calculate both the Gross Domestic Product (GDP) and the Gross Household Product (GHP). In this context time use studies are important in order to conduct a complete analysis of the economy (Latigo and Neijwa, 2005).
- The presentation provides the first set of estimates for household satellite accounts for Ghana using the first stand alone Time Use Survey, conducted by Ghana Statistical Service (GSS) in 2009. The availability of the time use data has enables not only estimates of household satellite accounts but will provide the first ever Extended SAM (ESAM) for Ghana.

The production boundary in the System

SNA 1993, 6.17 “The production boundary in the System is more restricted than the general production boundary as production accounts are not compiled for household activities that produce domestic or personal services for own final consumption within the same household, except for services produced by employing paid domestic staff.



Method used to evaluate Household Production

- For the HHSA for Ghana the evaluation of household production, was based on the recommendations of EUROSTAT and SNA 1993.
- The evaluation of HH production is through the sum of costs, the same method as used in the National Accounts (SNA 1993 para 15.66) to assess non-market production carried out by the Public Administration and Non-Profit Institutions Serving Households (NPISH).

Valuation of Household Production

- One of the most important aspects in the valuation of non-market Household Production is to determine which activities carried out in the household are productive. In order to do so, we use what is known as “third party criteria” which was introduced by Margaret Reid. The basic idea is as follows: an activity is considered productive if it may be delegated to someone else.
- According to the words of Margaret Reid «if an activity is of a kind that enables it to be delegated to a paid worker, then such an activity should be considered to be productive...».

Method based on sum of costs

Compensation of employees (Value of work)
(No of hours x salary/hour)

+

Other taxes on production less subsidies

+

Consumption of Fixed Capital

+

Intermediate Consumption

=

Total production or output

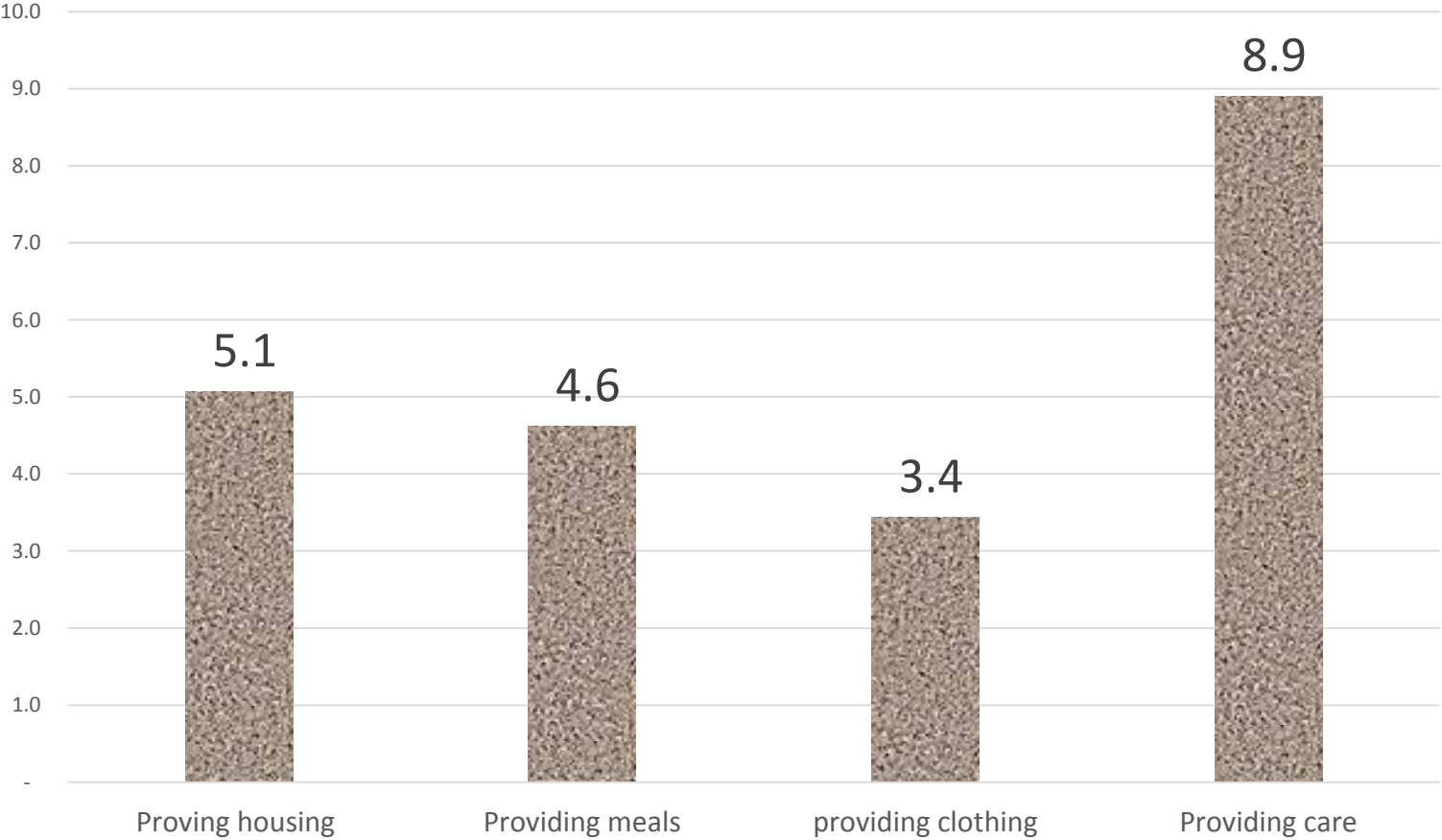
Final Consumption, Intermediate Consumption, and Gross Formation of Fixed Capital (Household durables)

- Household final consumption expenditure is categorized by purpose (COICOP classification). Household final consumption expenditure in the household satellite account was allocated based on UK's Household Satellite Accounts (Holloway et al. 2002) into final, intermediate, and durables.
- HH final consumption consists of goods and services used by individual households or the community to satisfy their individual or collective needs or wants without effecting any changes to the products acquired before their consumption. Intermediate consumption consists of inputs into processes of production that are used up or transformed within the accounting period (SNA 1993, para 1.49).
- Principal output and activities

Household production by Principal output/activities

Daily Time Spent on Principal output by Sex, GTUS 2009								
	male				Female			
<i>Activities</i>	<i>Proving housing</i>	<i>Providing meals</i>	<i>providing clothing</i>	<i>Providing care</i>	<i>Proving housing</i>	<i>Providing meals</i>	<i>providing clothing</i>	<i>Providing care</i>
Food management		X				X		
Cleaning and upkeep of dwellings and surroundings	X				X			
Care of textiles and footwear			X				X	
Shopping	X	X	X	X	X	X	X	X
Travel related to provision of unpaid domestic services	X	X			X	X		
Unpaid domestic services n.e.c.	X				X			
Childcare				X				X
Adult care				X				X
Travel related to unpaid caregiving services to household members				X				X
Providing unpaid caregiving services to household members n.				X				X
	X	X	X	X	X	X	X	X

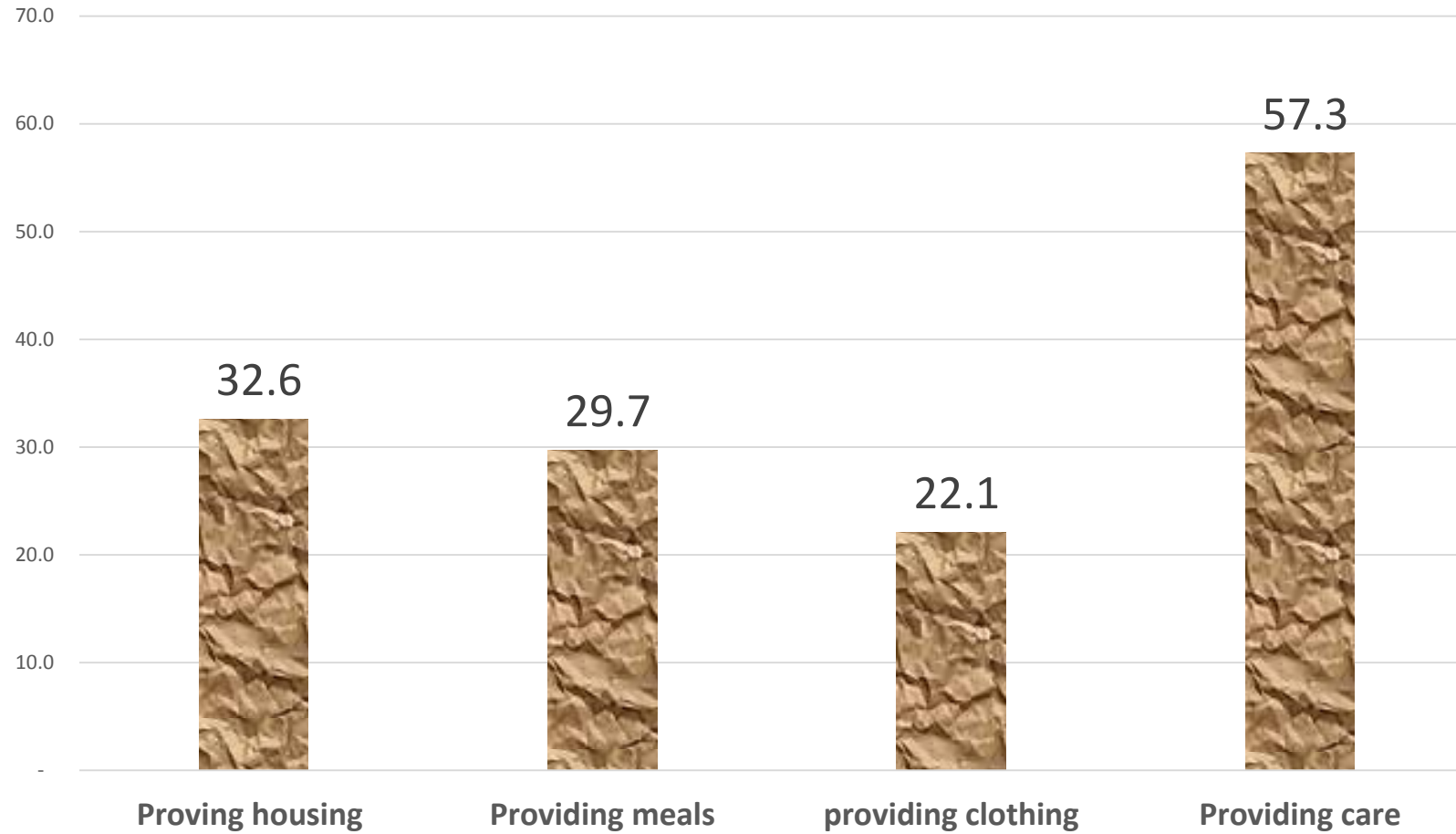
Time spent by principal function, hours



Value of work

- The generalist cost method is employed to value household unpaid labour for the compilation of HHSA. The value of household daily mean time spent on unpaid labour in minutes was evaluated using the generalist cost method based on a domestic worker wage (minimum wage).
- Why????
 - Domestic workers are not exempted from the minimum wage, but are entitled to the national minimum wage according to the Labour Act, 2003 of Ghana

Valuation of unpaid work using generalist cost by Principal Function in 2009, %GDP



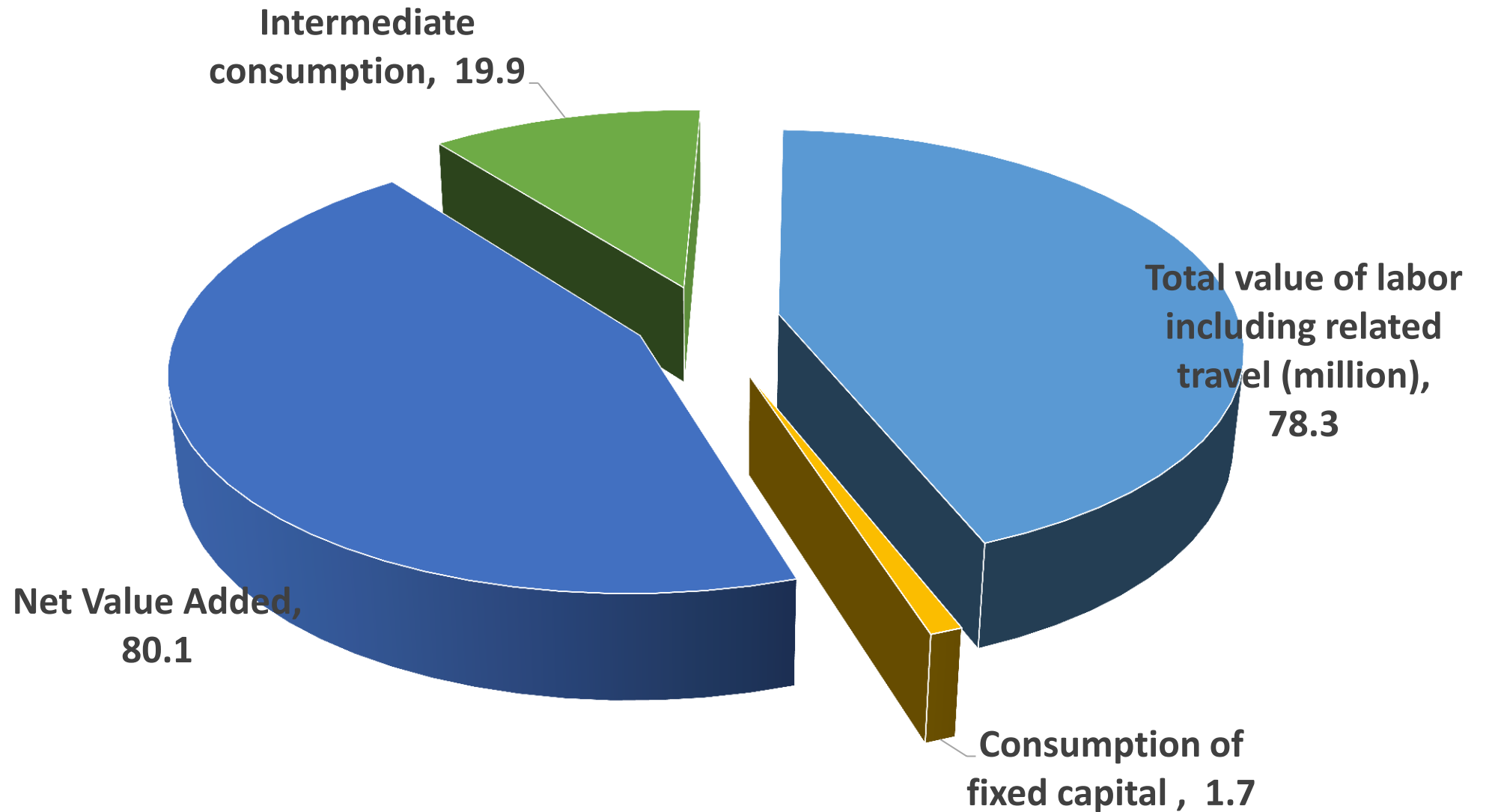
Taxes and subsidies

- According to SNA 1993 para. 7.49, includes taxes on the personal use of vehicles by households.
- Among the production-related subsidies that could be received by the households from the government could be allowances for the support of children or the elderly. However, this kind of support from the government to the households in Ghana does not exist. For that matter, production-related subsidies to households were excluded from the Household Satellite Account as these transfers could be insignificant.

Consumption of Fixed Capital

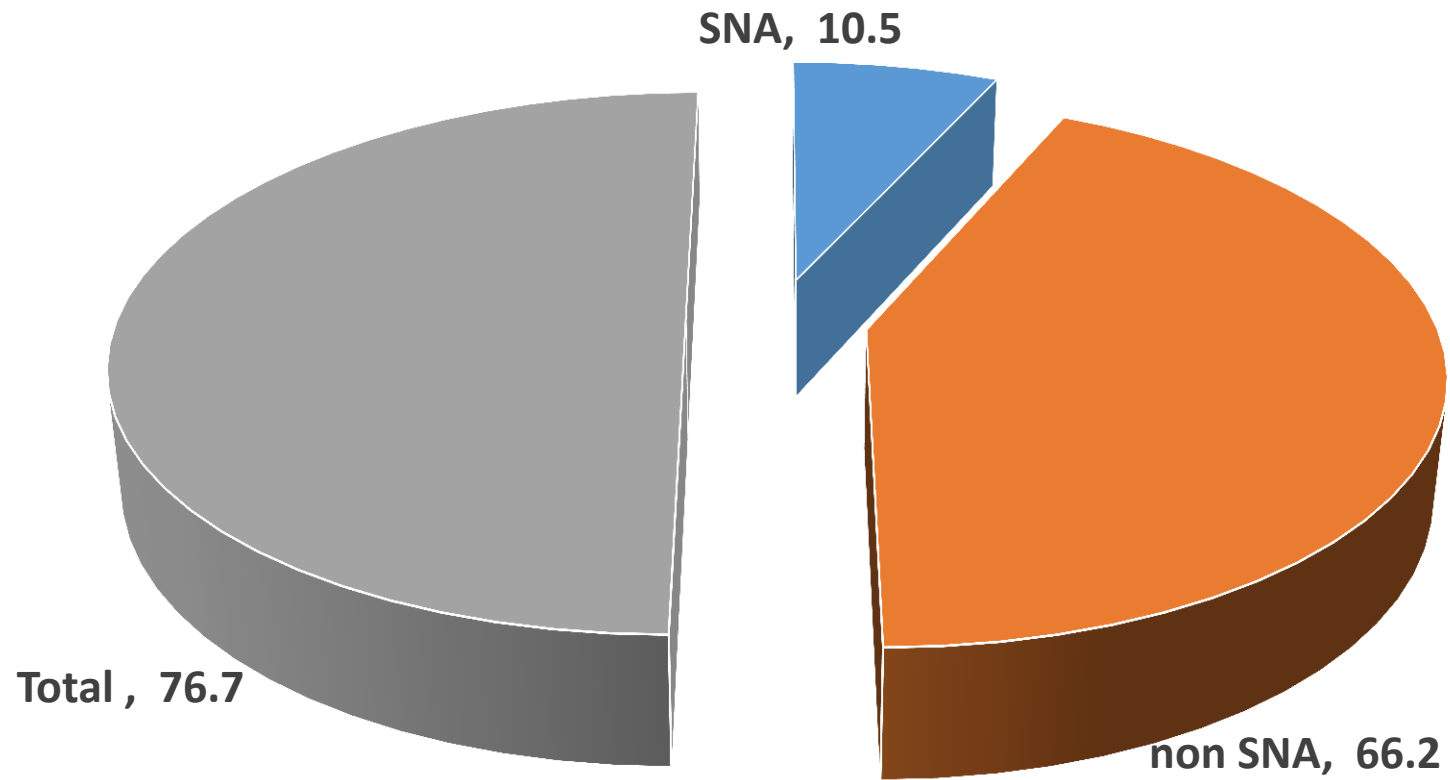
- There is a cost incurred by the consumption of capital goods in the productive process. Households, in so far as they use durable or semi-durable goods in their activities that wear and tear in the process, this cost must be considered in the total value of Household Production.
- The Perpetual Inventory Method or PIM was used as recommended by Eurostat 2003, p. 36

Non-SNA cost production structure, % of total output

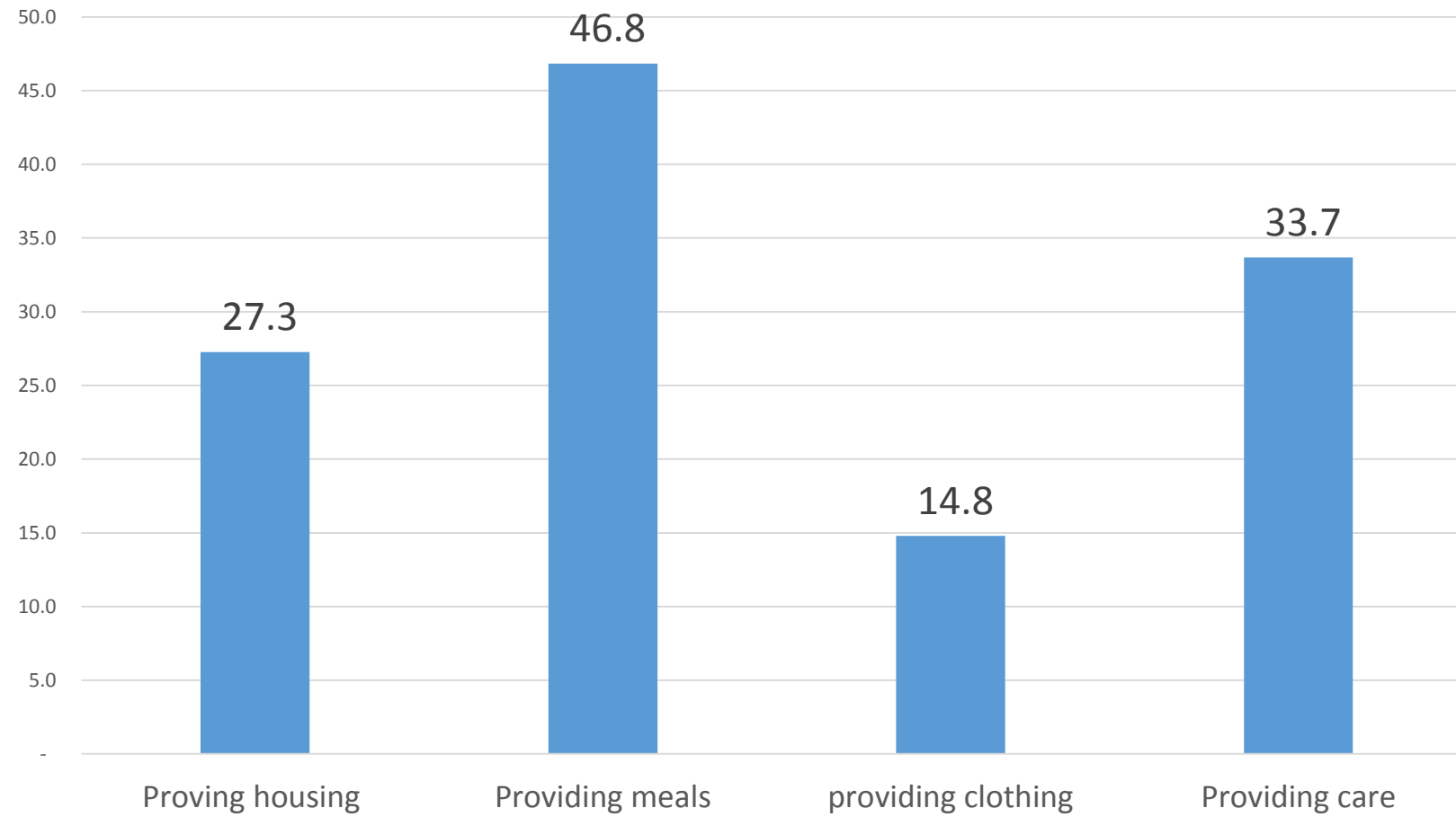


Extended Household Production account

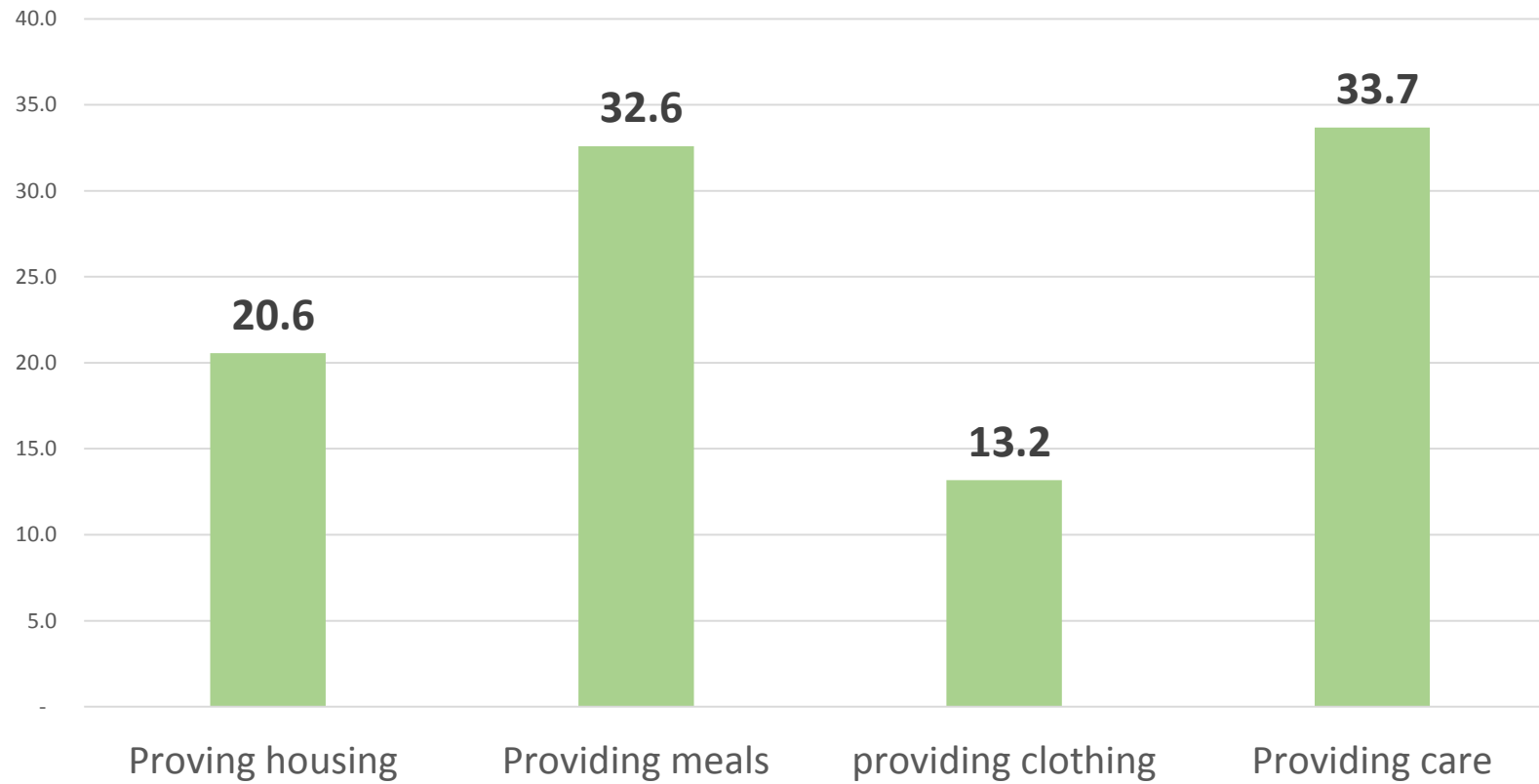
Total output of household production: SNA and Non-SNA in 2009, GHS Billion



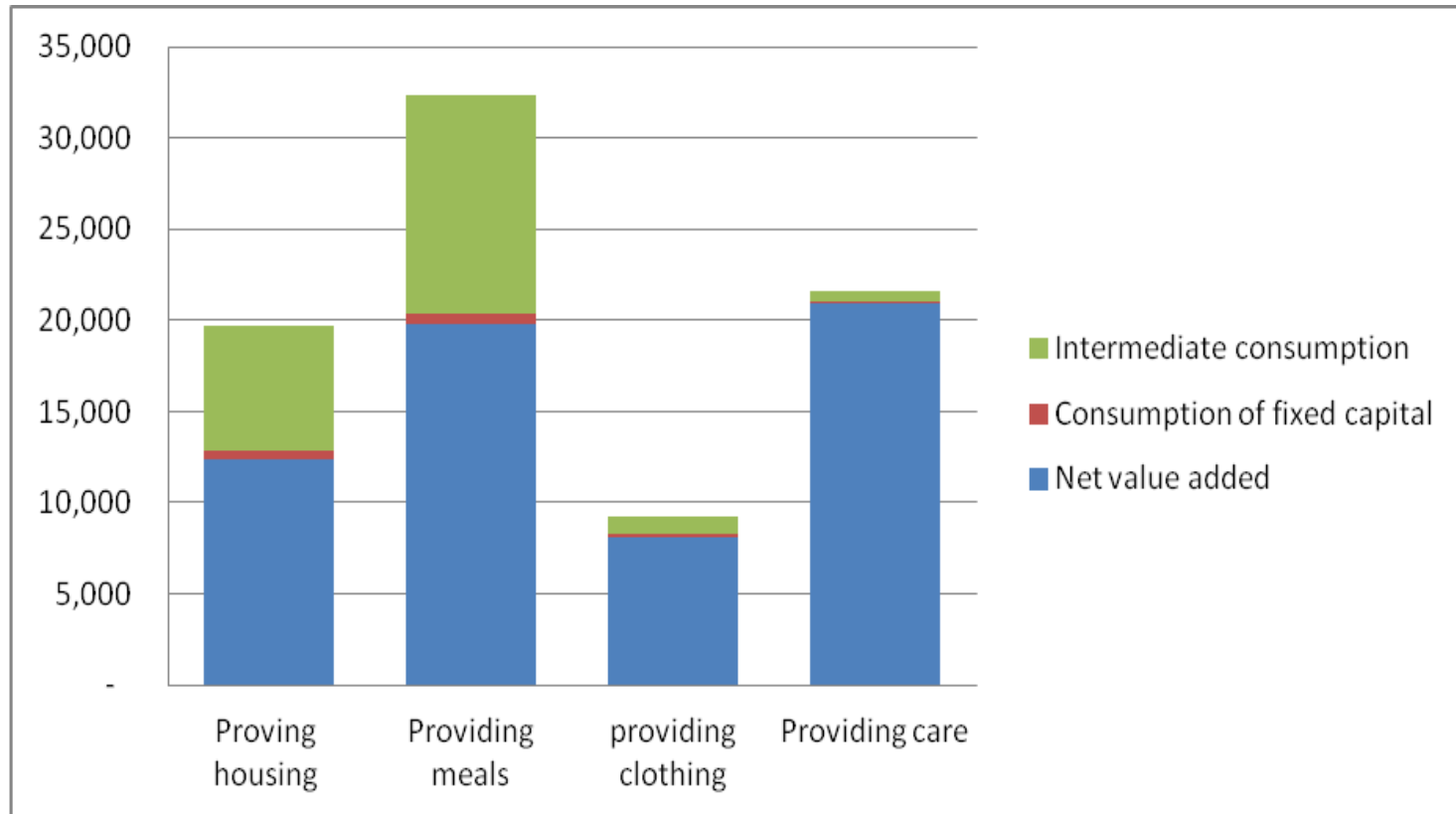
Output by function, % Total GVA



Gross Value Added by functions (% Total GVA)



Household production Account by principal function, Million cedis



Providing care

- Providing Care is the biggest principal function of the households in 2009. Care for children and adults accounts for a relatively modest part of total household production
- Care provided by households is highly labor-intensive. The only capital goods allocated to care are for instance, baby carriages, car seats, etc. resulting in only a per cent share of consumption of fixed capital of output.
- Children's toys and books, nappies and various baby care supplies and accessories are allocated to intermediate consumption.
- Beds and other furniture needed in the provision of care and for living in general are allocated in their entirety to housing. Likewise, food consumed by the care recipient is allocated to meals and snacks.

Providing meals

- It includes the amount of time spent in groceries shopping and the corresponding proportion of the running costs of cars and other vehicles. The activity, groceries shopping and related travel is included under nonSNA production, even though part also serves SNA production - Fishing, hunting, harvesting food crops usually require a car.
- Consumption of fixed capital accounts for a less proportion of nonSNA food than SNA food, not more than two per cent. Although households use a wide range of household appliances such as cookware and serving dishes, these are classified as household durables.
- The preparation of food requires a some amount of intermediate consumption goods including household energy consumption and the consumption of water, food products such as meat, fish, vegetables, etc

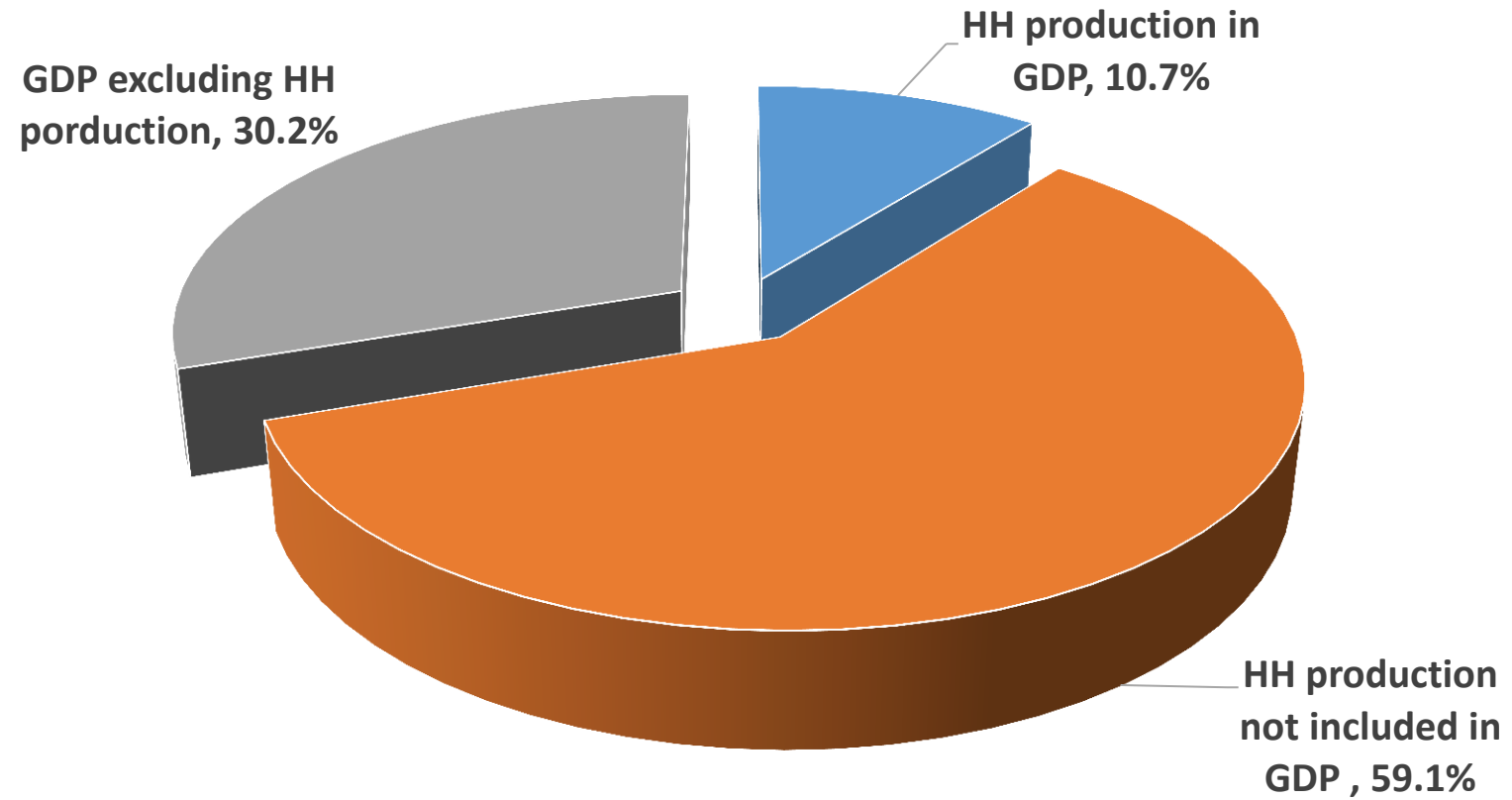
Providing housing

- The total output of housing services is pushed up by: the consumption of fixed capital (depreciation of housing as well as home furnishings and equipment).
- Intermediate consumption of housing consist of rents paid, repairs and maintenance.
- Housing services excluded from the core national accounts composes of “Do-it-yourself” activities (SNA 1993, 9.59) which are often of a routine nature that would normally be seen as the responsibility of a tenant such as decoration, household textiles and undertaking minor maintenance and repair of the dwelling, sanitary and sewage services and other services.
- Is more labour-intensive

Providing clothing

- Clothing care includes cleaning (washing, ironing, etc), and repairs and hire of clothing. The production of clothes at the household level is on a small scale like the “batiking”.
- Providing clothing are mostly purchases of already made clothes. Shopping and related travel services should have accounted for a large proportion of production but this does not reflected in the information obtained from GTUS 2009

Extended GDP in the Household production accounts, 2009



Integrating household production into the national accounts

- GDP increased by 144.5 per cent.
- This result implies that GDP coverage is not exhaustive and therefore the compilation of GDP requires improving the exhaustiveness of the GDP coverage to include the production of agricultural goods by household enterprises for own final consumption; the production of other goods for own final use by households such as the construction of dwellings, the production of foodstuffs and clothing, etc.; the production of housing services for own final consumption by owner occupiers; and domestic services produced by employing paid staff such as servants, cooks, gardeners, etc. to produce services for their own consumption as recommended by SNA 1993 para 1.21 with the aim of reducing the gap between SNA production and nonSNA household production.

Integrating household production into the national accounts (2)

- final consumption expenditure of the households increased by 153.5 per cent due to the integration of household production in the national accounts.
 - The momentous change calls for improved coverage of household consumption of goods and services to include the changing consumption pattern of the households. Consumption patterns of the households over time changes, and are influenced by factors other than price changes, and more importantly, are the changes in the level and distribution of household income causing a shift in demand for goods and services towards goods and services with higher income elasticity.

Conclusion

- Understanding the contribution of unpaid work to GDP is a very vital input into formulating policies and programmes such as the Ghana Shared Growth Development Agenda and currently, the Sustainable Development Goals (SDGs) adopted by the UN in 2015. Not only that, but integrating household production (unpaid work) into the household sector accounts in the system of national accounts enables us to know the existing potential capacity of households and its production and significance to the economy as a whole.
- From the analysis, the total value of unpaid household labour obtained for Ghana's first valuation of household production by using the generalist cost method is 51.8 billion cedis and representing an average of 35.0 per cent of GDP in 2009.

Recommendations

- It is very important that unpaid work should be reflected in national accounts of Ghana to show a complete picture of the country's economic performance to assist the Government and its agencies to develop responsive policies and programmes for better development outcomes to achieve sustainable development.
 - HHSA gives a good information about household production
 - The size of household production from the HHSA compilation could be of much help in any policies aimed at widen the tax net to capture most unpaid activities which, form part of the informal sector.
 - The momentous change in the final consumption of households calls for the use of price elasticity to determine the tax incidence or tax burden of a good on the demand of a good.
 - To alleviate poverty without mainstreaming gender in to macroeconomic and social policies and programmes of poverty reduction strategies to achieve sustainable development.
 - Create national machinery for advocating the advancement of women based on its commitment to the Beijing Declaration and the Platform for Action

limitations

- lack of wage data
- It would be useful to classify nonSNA household production by principal function in the ICATUS
- The scope of the time use survey needs to be broadened to include miscellaneous current taxes that are payable, usually annually, such as payments by households to obtain certain licenses to own or use vehicles, boats or aircraft and for licenses to hunt, shoot or fish. Other payments for all other kinds of licenses (e.g., driving or pilot's licenses, television or radio licences, firearm licenses, etc.) are to be part of the survey design because the calculation of current taxes payable by the households from the government accounts was really too low.
- Output in physical quantities or volumes for example, the number of meals prepared, transportation distance, the volume of the laundry, and the time a service is provided (e.g. hours of childcare) should be included in the scope of the time use survey

Best practices

- The evaluation of HH production should be through costs, the same method as used in the National Accounts to assess non-market production carried out by the Public Administration and Non-Profit Institutions Serving Households (NPISH), or
- The time use survey should be expanded to measure the value and quantity of outputs independently from the value and quantity of inputs, such as meals cooked, number of children cared for, loads of laundry, lawns mowed, number of shopping trips taken.
 - The United Kingdom recently produced experimental output-based household production accounts, thus, the possibilities as well as the challenges in producing such accounts.

Best practices (2)

For the exhaustiveness of GDP

- Production of goods for own final use
 - Agriculture, forestry, fishing and mining for own final use
 - Growing crops and trees, kitchen gardening, for own final use
 - Gathering wild products, for own final use
 - Farming of animals, production of animal products, for own final use
 - Forestry and logging, for own final use
 - Fishing and aquaculture, for own final use
 - Hunting , trapping and production of animal skins, for own final use

Further study and research

- To integrate the HHSA into standard Social Accounting Matrix (SAM) to make this framework not only gender responsive but to incorporate half of the total economy (household economy), which traditionally have been omitted in macroeconomic analysis to compile the - extended gender-aware SAM as done by Turkey and Spain;
- SAM based multipliers as done by Kenya;
- Construct a gender aware Computable General Equilibrium (CGE) model for income distribution and poverty analysis of macroeconomic policies as done for South Africa.

Thank you for your kind attention