

**Global Conference On Unpaid Work and the Economy:  
Gender, Poverty and the Millennium Goals**  
**The Economics Institute of Bard College**

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# **Unpaid work and the System of National Accounts**

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## Objective of the presentation

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**To describe the methodology to measure unpaid domestic work in households, within the 1993 System of National Accounts framework, as a SATELLITE ACCOUNT, with results the of Mexican Time Use Survey.**

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- 1. Introduction**
  
- 2. The 1993 SNA and the unpaid work**
  - 1. Satellite account of UPS**
  
  - 2. Methodology to measure UPDS**
  
  - 3. Final comments**

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# Introduction

# Why measure the UPDS?

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## Reasons:

1. **Because Economy has changed**
2. **Because we need to measure the total economy**
  - ✓ **What is done with paid work**
  - ✓ **What is done with unpaid work**
3. **Because it is necessary to identify**
  - ✓ **What private activity is going to public activity**
  - ✓ **What public activity is going inside the household**
4. **Because it is the chance of reconciliation of social and economic sphere**
5. **Because it is important to for policy makers to have relevant information**

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# SYSTEM OF NATIONAL ACCOUNTS AS A FRAMEWORK

- SNA 1993 is a set of concepts, definitions, classifications, register rules and accounts
- It is a framework to value the unpaid work services since the macroeconomic point of view and as a part of a system
- The SNA is the support to economic analysis but also to the social analysis
- A Satellite Account of Unpaid Work is one possibility
- A Satellite Account of Work including Pay and Unpaid Work, is another possibility

# SNA 1993 and the economic analysis

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- **Economic activity**

$$\mathbf{GDP+M=Cp+Cg+FBK+X}$$

**GDP = Gross domestic Product**

**M = Imports**

**Cp = Private consumption**

**Cg = Government consumption**

**FBK = Gross Capital formation**

**X = Exports**

1. **Agriculture, cattle, forestry and fishing**
2. **Mining**
3. **Manufactures**
4. **Construction**
5. **Electricity**
6. **Commerce, restaurants and hotels**
7. **Transport and communications**
8. **Financial and real state**
9. **Community and personal services**

- **Institutional sectors.**

1. **Non financial corporations**
2. **Financial corporations**
3. **General government**
4. **Households**
5. **Non profit institutions for households**

**Rest of the world.**

## 2. 1993 SNA and paid and unpaid work

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- Paid and unpaid is the link between reproductive activity and the economic production
- The total goods and services required by society to satisfy the needs comes from paid, **PW**, and unpaid work **UPW**
- **The UPW services, that** women make mainly, is an extension of the SNA total supply of goods and services

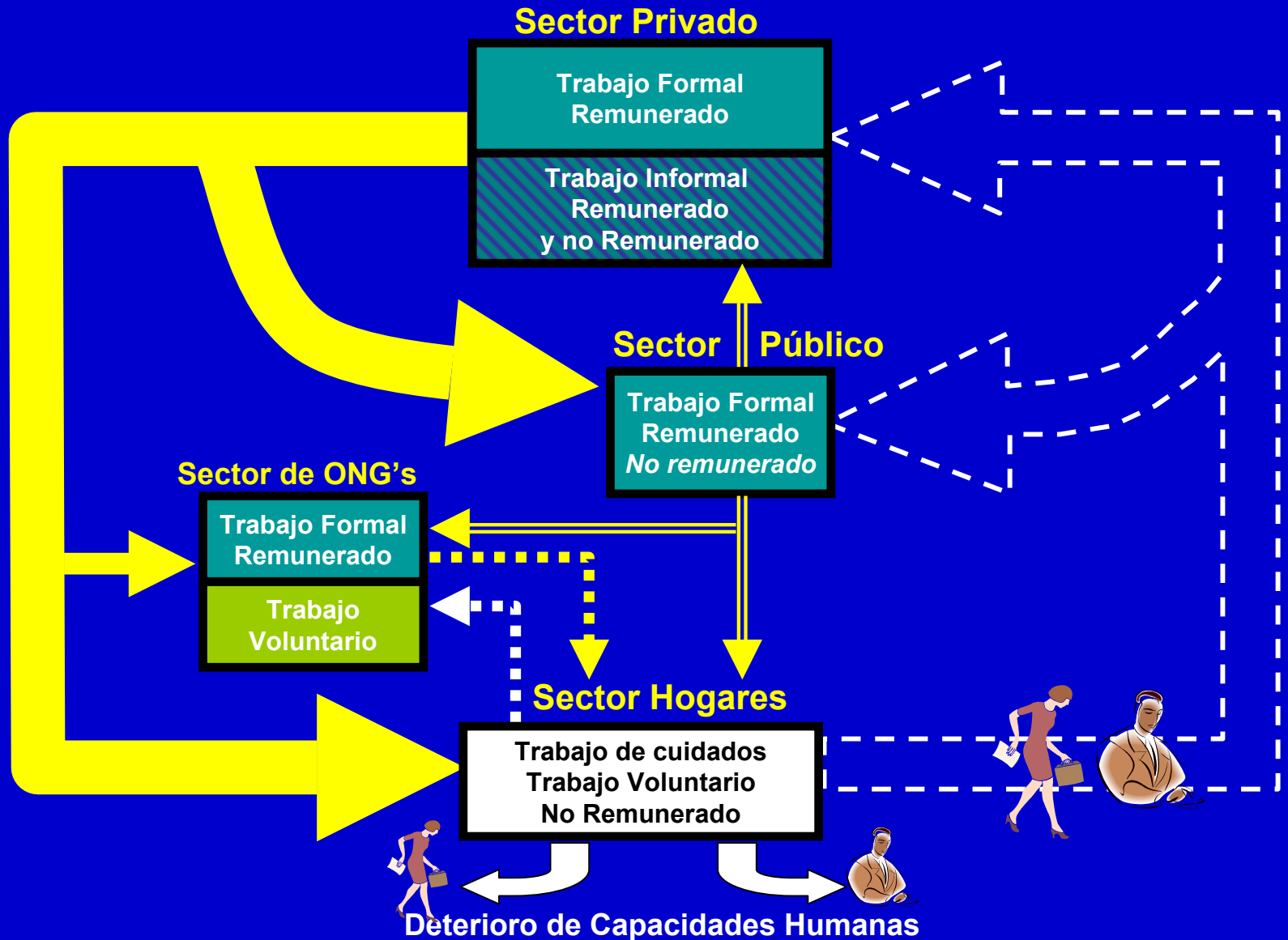


# Unpaid work in SNA

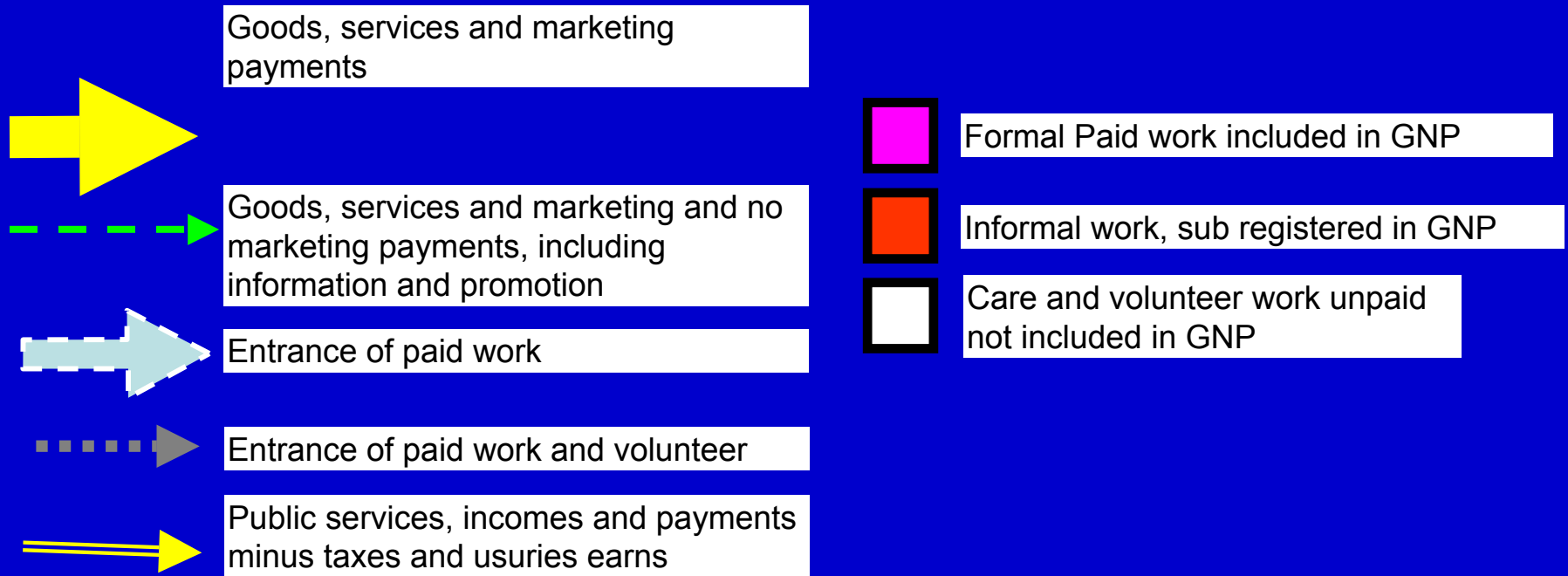
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- The SNA includes values of paid and unpaid output in the boundary of the production
- **But not includes an amount of unpaid work.**

# Reviewing the economy through the women eyes

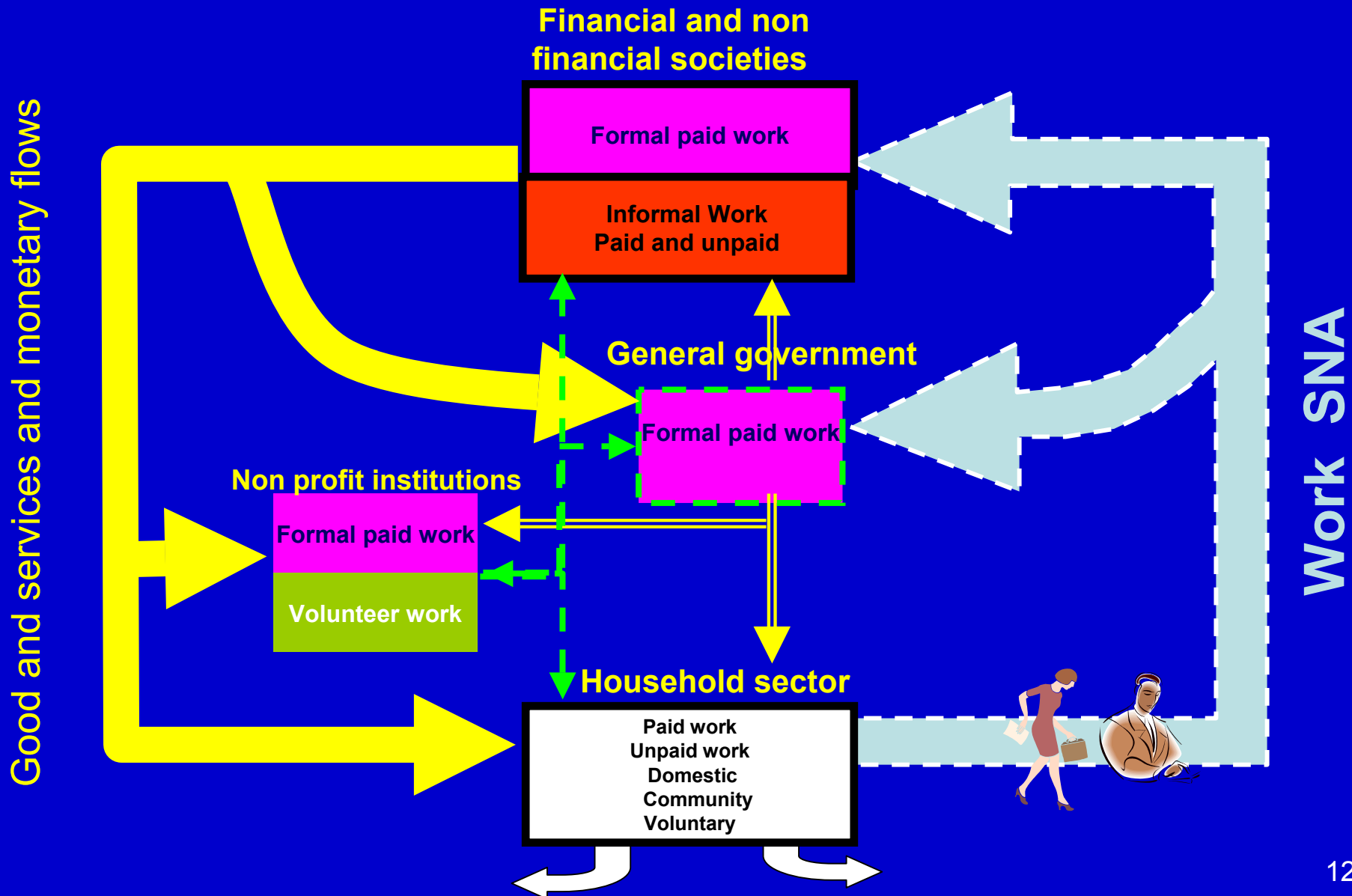


# notes



Source: The progress of the world's women 2000.

# Total economy



# Household sector: paid and unpaid work

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## Household Sector

### Paid work SCN

Financial and non financial societies  
Government  
Non profit institutions  
Households

### Unpaid work

#### Domestic services

to the own members of household  
to the members of other household

#### Community services

#### Volunteer

To non profit institutions

## Paid and unpaid work and the SNA

Institutional sectors	SNA		No SNA	
	Paid work	Unpaid work	Unpaid work	
			Domestic services	Volunteer <sup>1</sup>
Non financial corporations	<b>X</b>			
Financial corporations	<b>X</b>			
General government	<b>X</b>			
Non profit institutions	<b>X</b>			<b>X</b>
Households	<b>X</b>	<b>X</b>	<b>X</b>	<b>X</b>
Rest of the world				

Volunteer: unpaid work to community, unpaid work to non profit institutions

# Domestic and volunteer in SNA 1993

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- The output of services within household was in the 1993SNA research agenda.
- The domestic and volunteer activity household sector is considered as economic activity.

» **THIS IS THE KEY**

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## **3. Satellite account of UPS**



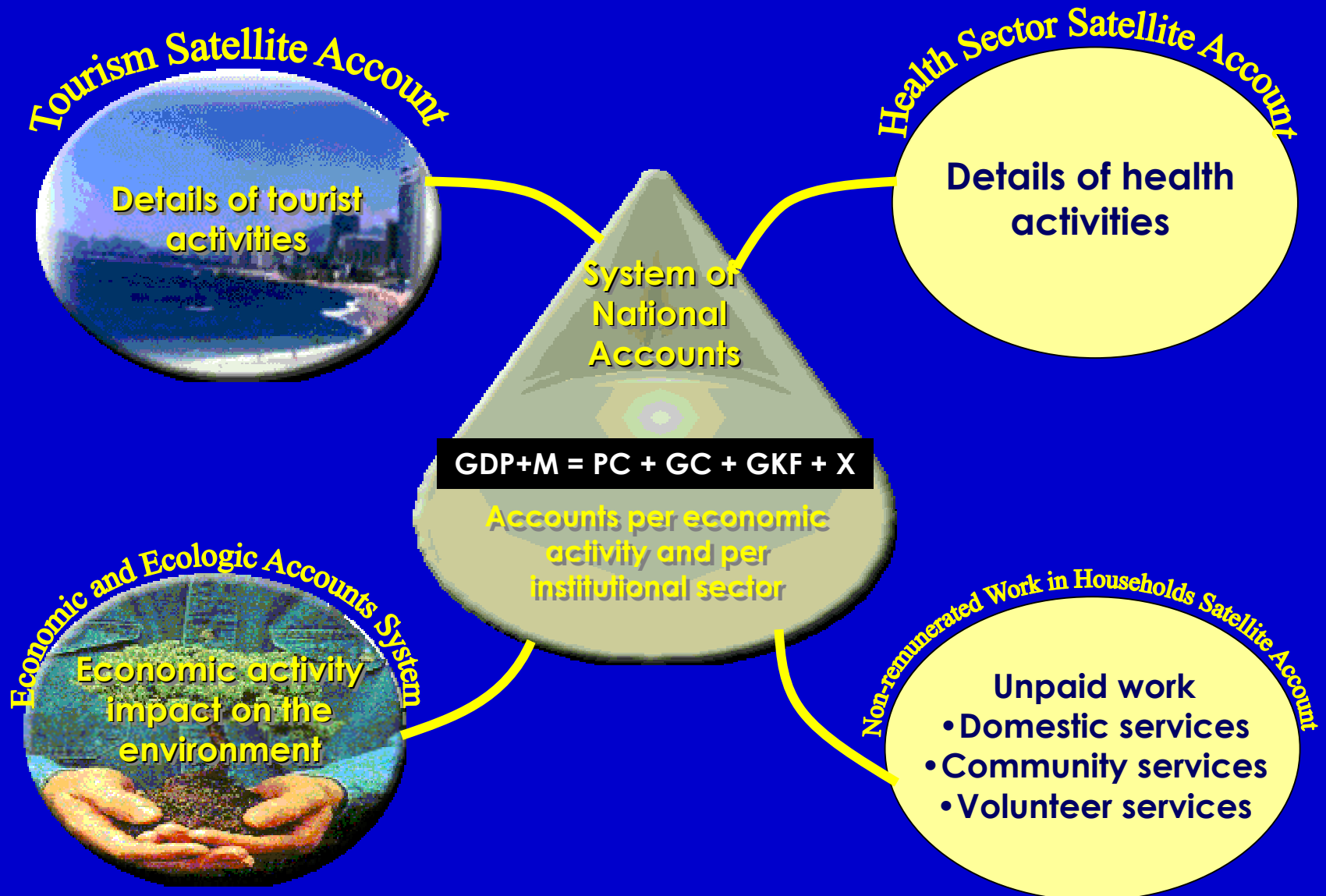
# What is a Satellite Account?

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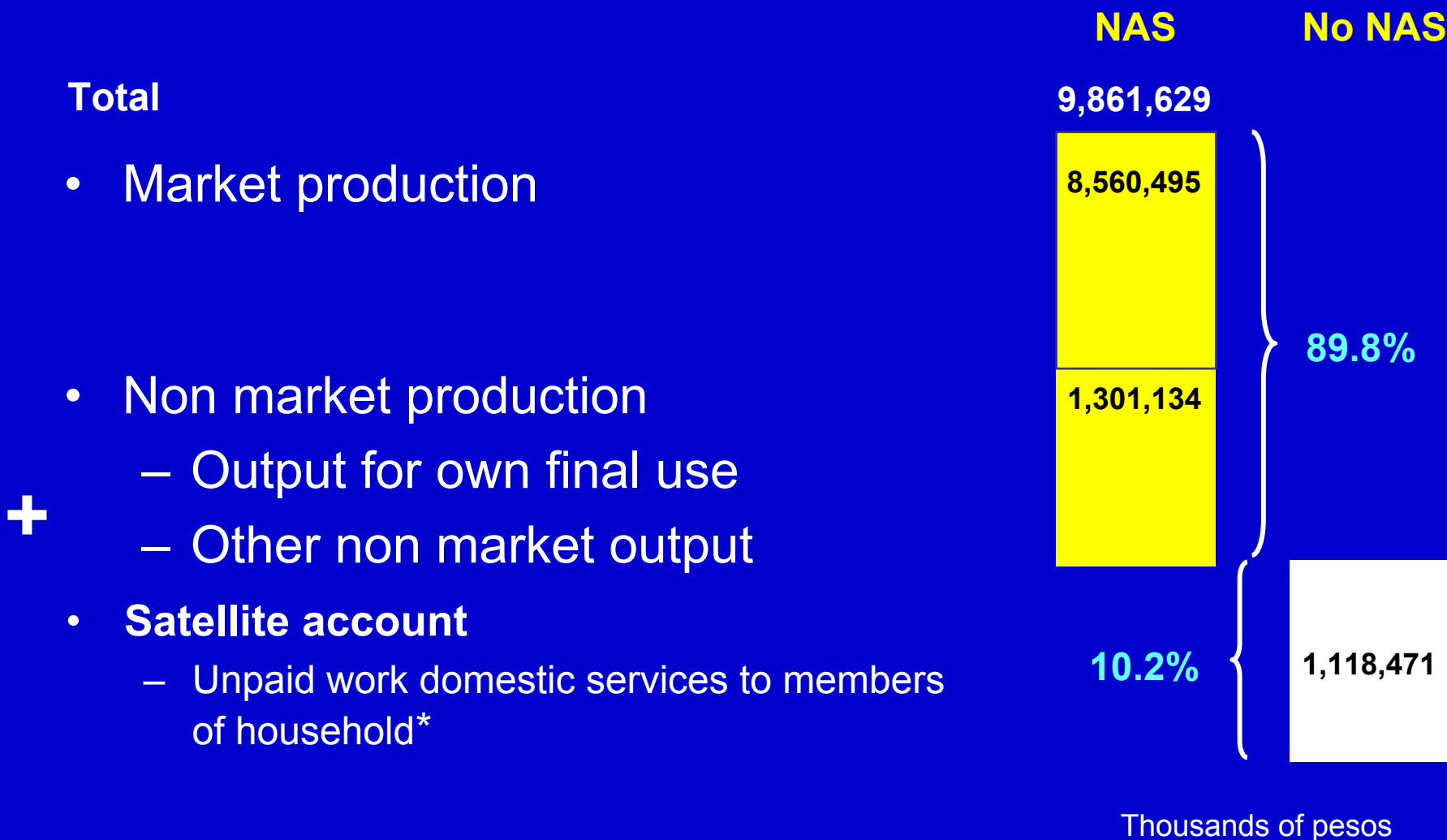
- It is a data set that expands the analytic capacity of national accounts on specific economic or social topics or selected areas without distorting the central nucleus.
- Main characteristics
  - a) Present specific functional information, reordering the information
  - b) They use complementary or alternative concepts (production, classifications and accounting frameworks) when it is necessary to include additional dimensions
  - c) Combination of a) and b)
  - d) They link the sources and the demographic and physical data analysis with the money accounting system.

# SNA: Central and Satellite Systems

Ecology and Tourism systems available; others, in process



# Satellite account of unpaid work is an extension of the bounder of SNA production



\*VOLUNTEER IS NOT INCLUDED

# 1993 SNA and the UPWS

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## How to incorporate UPW to the macroeconomic analysis?

- By Satellite Account.
- Extension of the boundary of SNA production
- The output of unpaid work that we need measure is a SERVICE
- Category: Unpaid work services
  - Household Sector**
    - to the household members
    - to the members of other household
    - to the community
  - Non Profit Institutions Sector**
    - To household**
    - (Volunteer work as a complement of paid work)

# Concept and methodology bases

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- ***1993 System of National Accounts***
- ***Hand book on household sector***
- **Hand book on non profit institutions**
- ***UNSD – Trial classification of time use activities***
- ***Activity list in Eurostat's time use survey and production boundary***
- **Several papers and experiences of other organizations and countries**

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## **4. Methodology to measure UPDS**

### **Preliminary exercises**

# General methodology: main activities

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- 1. Analysis of Mexican SNA (SCNM)**
- 2. Identification and analysis of data sources**
- 3. Criteria for the selection and classification of activities**
- 4. UPDS measure**
- 5. Estimates and results**

# 1.SCNM. Production boundary in households sector

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Mexican National Accounts System (SCNM) is based on 1993 SNA.

Households production includes:

- Production of goods and services for the market
- Goods for own consumption: agricultural and manufactured
- Paid domestic services
- Hire of houses occupied by their owners
- Construction for own consumption



## 2.Information sources

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- **1996 Time Use Survey**
- **2002 Time Use Survey**
- **Mexican National Accounts System (SCNM)**
- **National Survey on Household Income and Expenditure (ENIGH)**

# NTUS 2002. Hours per week that people spend in unpaid services

## Activities



### 3. Identify activities to be considered in the boundary of UPS

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- The principle of the “Third Person”.
  - Someone can do it
  - It is possible to be buy in the market.
  
- THIS APPROACH DOES NOT INCLUDE VOLUNTAREE UNPAID WORK BECAUSE IT WAS NOT CONSIDERED IN THE TUS QUESTIONER

# Classification of the activities considered in the estimation

1. Domestic activities	2. Care activities	3. Other services
<ul style="list-style-type: none"><li>• Cleaning dwelling</li><li>• Dish washing</li><li>• Laundry</li><li>• Ironing clothes</li><li>• Sewing clothes</li><li>• Cooking or preparing food</li><li>• Waste disposal</li><li>• Carrying water</li><li>• Collecting firewood</li></ul>	<ul style="list-style-type: none"><li>• Childcare and household members</li><li>• Health care</li><li>• Transporting households members</li></ul>	<ul style="list-style-type: none"><li>• Keeping domestic animals or land</li><li>• Shopping for household</li><li>• Paying and requesting facilities</li><li>• Making repairs</li></ul>

# Assessment: alternatives of the measure and the impact

Canada

Importance of the selection of the “price” for the assessment of the UPDS and its dimensions, regarding the GDP.

Years	Potential income		Replacement cost	
	Before taxes	After taxes	Specialists	General
1961	63.6	52.4	55.6	34.2
1971	57.5	40.5	50.1	30.5
1981	47.6	31.3	39.5	25.6
1986	44.6	28.0	37.5	26.1
1992	54.2	32.0	43.0	34.0

# A method to measure production

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$$Q \cdot P = GPV$$

quantity x price = Gross Output Value

**For the UPWS**

**Estimate per activity**

**time, number of hours x price per hour of an equivalent activity ( number of weeks ) = Gross Output Value**

**GOV = Added Value or Gross Domestic Product, GDP**

Time considered: 50 weeks

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**First exploration with ENUT 2002  
based on preliminary data**

# Methodology of the estimation

ACTIVITY	Hours a week per person ENUT 2002	Income per hour, pesos/* ENIGH 2002	UPDS value, thousand pesos Considering 50 weeks
Laundry and ironing	3.3	13.8	138,909
Paying and banks ...	1.5	23.2	19,063
...	...	...	...
Health care	3.5	37.3	19,687
Making repairs	3.5	10.3	6,486
...	...	...	...
<b>TOTAL</b>	<b>79.7</b>	<b>439.2</b>	<b>1,118,471</b>

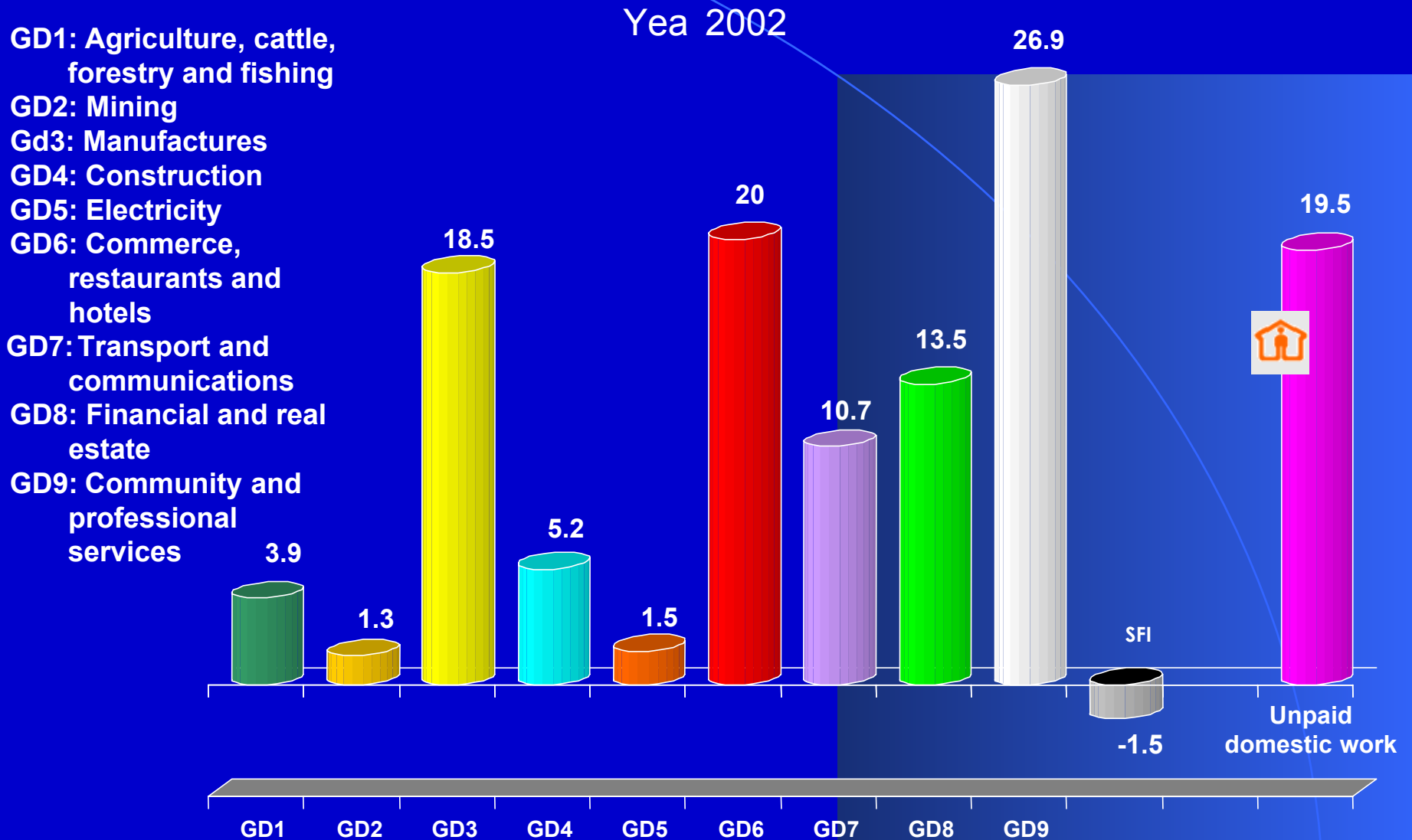
2002

/\*Equivalent activities are considered.

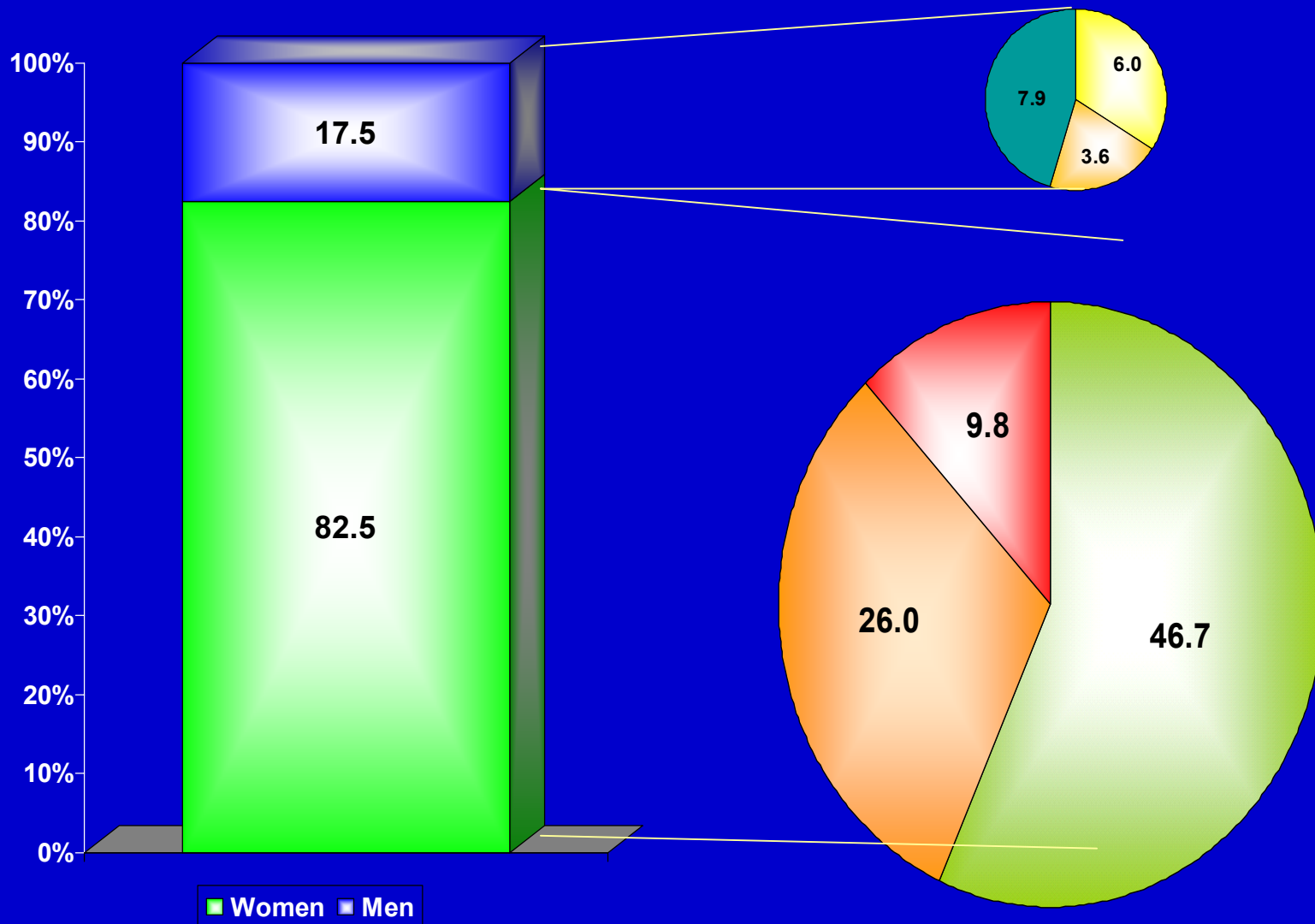
Annual GDP at basic prices, thousand pesos	5,727,942
UPDS GDP, thousand pesos	1,118,471
<b>Proportion of the upws value with respect to GDP</b>	<b>19.5%</b>



# Unpaid work contribution to GDP

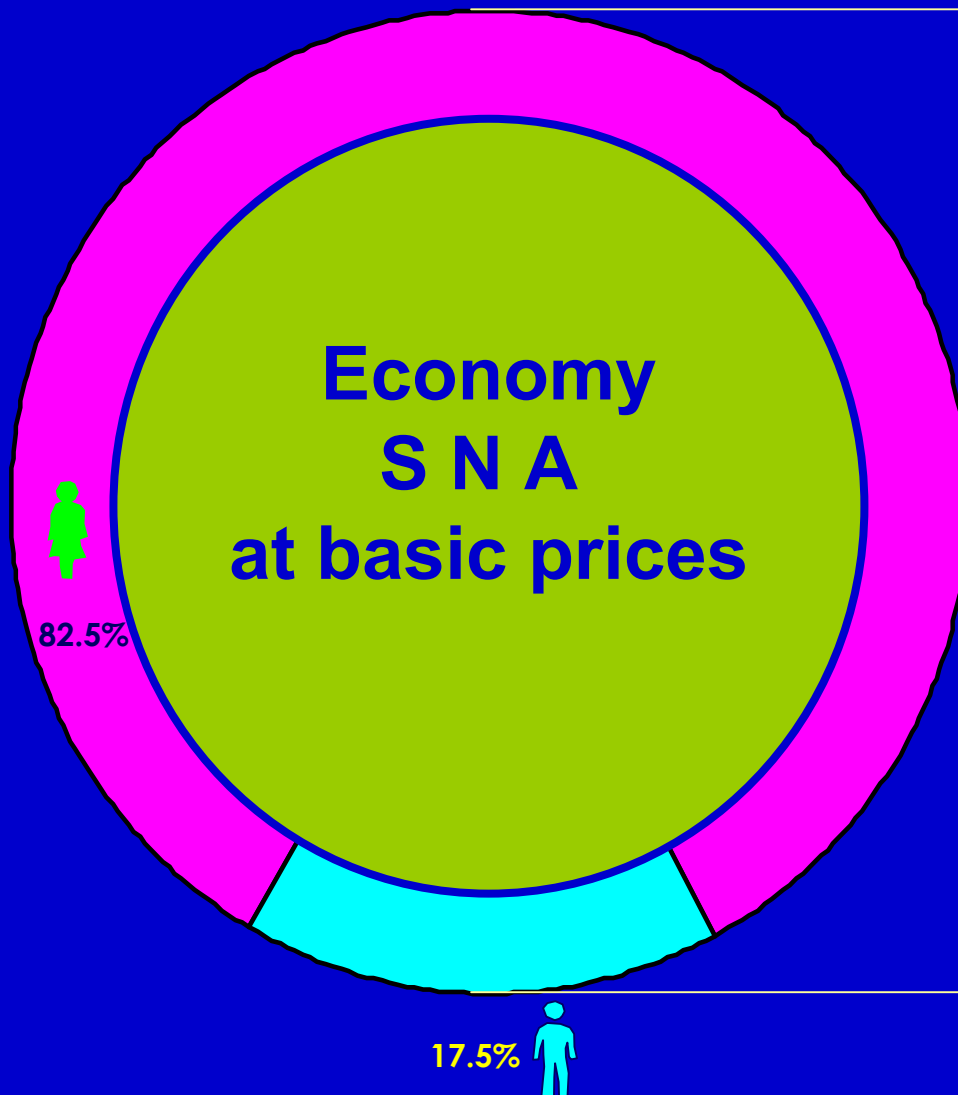


# Contribution of women and men to unpaid work services



# New situations require new solutions

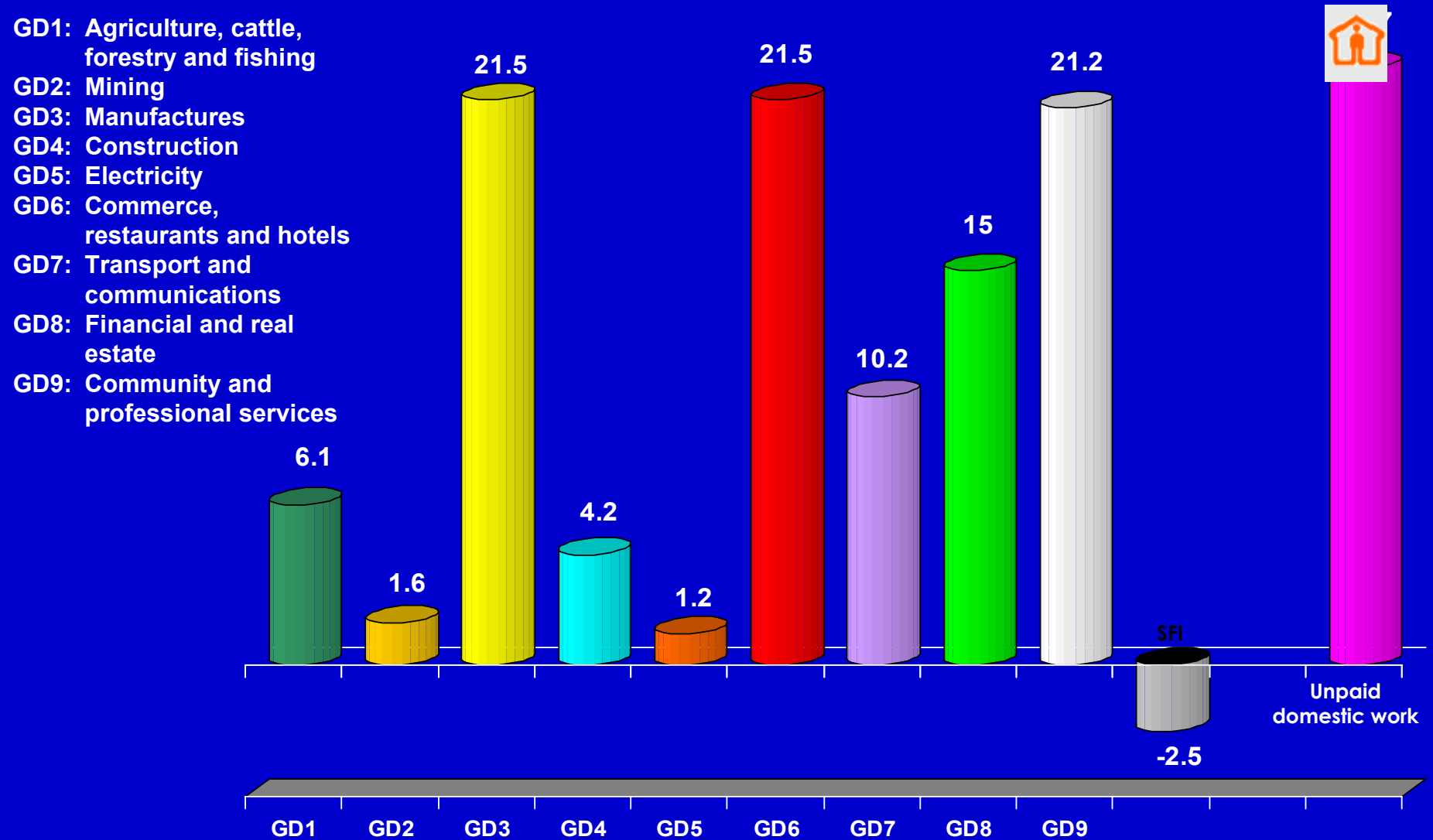
Activities of the UPDS\* (not SNA)  
equivalent to 19.5 % of GDP (SNA)



- Analytic frameworks
- Up-to-date statistical and geographical information
- Design of a comprehensive economic and social policy
- Design of public policies

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- 1996 ESTIMATION

# Under the ENUT 1996, the UPDS represented 22.7% of GDP<sub>bp</sub>, a similar proportion to those of economic GD; 3, 6, and 9



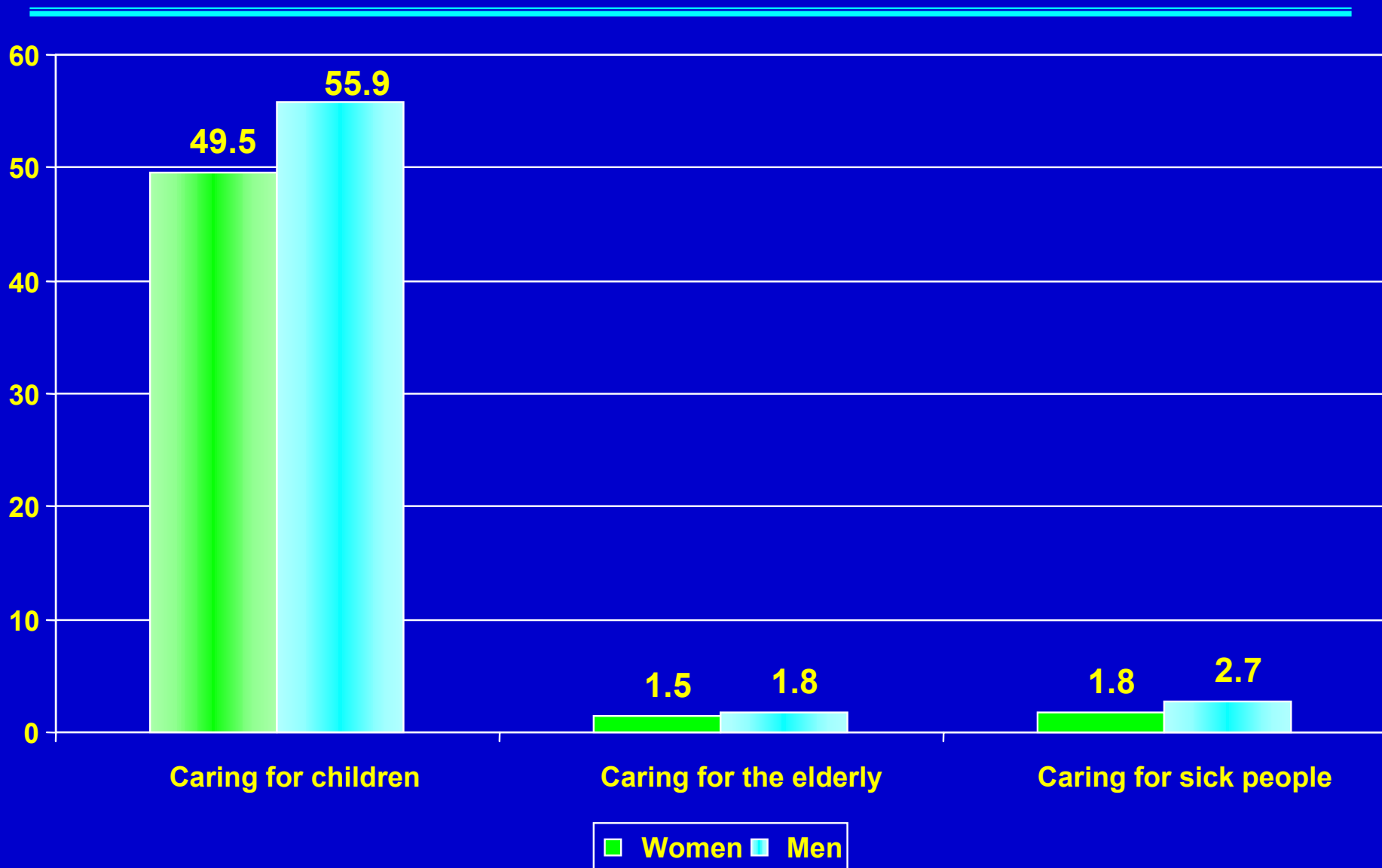
## Estimation of the UPDS value, with a big desegregation, increased the value

	Million pesos	%
<b>Total UPDS</b>	<b>520.9</b>	<b>100.0</b>
<b>Domestic services</b>		
<b>Household tasks</b>	198.4	38.1
<b>Caring Services</b>	281.2	54.0
Child care	263.2	50.5
Caring for elderly	8.2	1.6
Health care people	9.9	1.9
<b>Family Activities</b>	11.4	2.2
<b>Other Services</b>	28.0	5.3
<b>Services to the community</b>	2.0	0.4

**Disaggregating allows to better know the differences by gender and activities; however, it is necessary to analyze the measurement of the time assigned.**

	Women	Women	Men	Men
	Million pesos	%	Million pesos	%
<b>Total</b>	<b>439 504</b>	<b>100.0</b>	<b>81 453</b>	<b>100.0</b>
Household tasks	180 054	39.2	18 299	22.5
Caring services	231 969	52.8	49 281	60.5
<b>Childcare</b>	217 571	49.5	45 597	55.9
<b>Caring for the elderly</b>	6 778	1.5	1 439	1.8
<b>Health care</b>	7 620	1.8	2 245	2.7
Family activities	9 790	2.2	1 598	2.0
Other services	17 155	3.9	10 520	13.3
Services to the community	536	0.1	1 455	1.7

# Caring Services. It is convenient to analyze “caring for the elderly” and “caring for the sick”, because an overlapping may result.





# Total Economy

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## SNA economy

$$\text{GDP} + \text{M} = \text{PC} + \text{GC} + \text{GKF} + \text{X}$$

GDP. Gross Domestic Product

M. Imports

PC. Private Consumption

GC. Government Consumption

GKF. Gross Capital Formation

X. Exports

- Production and consumption widen, when including the UPDS:  $\text{GDP}_{\text{not-sna}}$  and  $\text{PC}_{\text{not-sna}}$

## Total Economy

$$\text{GDP}_{\text{sna}} + \text{GDP}_{\text{not-sna}} + \text{M} = \text{Total PC}(\text{Pc}_{\text{sna}} * \text{Pc}_{\text{not-sna}}) + \text{GC} + \text{GKF} + \text{X}$$

**Towards a better understanding of the national and welfare economies**

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## 5. Some comments

# Final comments (1)

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- The measures of the UPS is necessary to understand the link between economic and social issues, between public and private affairs, in order to analyze **total economy**.
- SNA is a milestone to define and construct a conceptual framework and the statistical standards to analyze the paid and unpaid work and put this indicators within the set of the main strategy indicators for the policy makers is an urgent task.
- A Satellite Account of Unpaid Work is a good point to start, as we can relate with the public sector activity
- Harmonization of different classifications: time use activities with the Purposes Classifications of Government, of the Non Profit Institutions and of Household Sector

# Final comments (2)

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- **The activity classification of time use is a main tool for surveys in all their stages: conceptual framework, questionnaire design, information raising and treatment, statistics presentation and indicators elaboration. In Mexico the experiences had been very useful but we have a lot of work to do.**
- **The ENUT and the macroeconomic measures of the UPWS offer an enormous potential for analyzing and designing economic and social policies, with a comprehensive vision.**
- **The national budgets are incomplete if they do not considering indicators linked to unpaid work, with a comprehensive and total vision of the efforts that a society carries out in seeking its welfare.**

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# Thank you

**Any comments will be wellcome  
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