

Brazil on how geospatial information can strengthen gender statistics



04 de Dezembro de 2024



Daléa Antunes

Coordinator of the IBGE gender social relations commission

Inter-Agency and Expert Group on Gender Statistics (IAEG-GS) 18th Meeting

Commission on Social Relations of Gender and Sexuality

Transversalize the topic across ALL areas of IBGE:

- **Time Use Working Group**
- **Identity and Sexual Orientation Working Group**
- **Territory and Environment Working Group**
- **Emerging Themes: Agriculture (Agro)**
- **Organization and Systematization of Documents**
- **Training and Capacity Building: For both new and experienced staff**

How geospatial information can strengthen gender statistics ?

The spatial dimension can enhance gender statistics by providing detailed insights into gender disparities across different Geographic contexts, allowing for more precise identification of inequalities and barriers.

At IBGE, I believe we are contributing in the following ways:

- **Regional Disparities**
- **Access to Infrastructure and Services**
- **Mobility and Transportation**
- **Environmental and Territorial Impacts**

How geospatial information can strengthen gender statistics ?

1- Identifying Regional Disparities: Survey: Census Demographic 2022

Geospatially sensitive statistical production allows us to analyze geographic scales based on specific
phenomen.

At IBGE, the Geosciences has contributed to new data collection methodologies by creating special collection areas, enabling data collection on Traditional Peoples and Communities.

From a **gender perspective**, these communities often hold traditional knowledge and production closely tied to gender roles, such as the women coconut breakers (Quebradeiras de coco).

This methodology's progress will be tested in the new Agricultural Census.

How do women redistribute themselves in the territory?

How geospatial information can strengthen gender statistics ?

2. Access to Infrastructure and Services:

Survey: Households' surroundings (Census)

Geosciences adds value to the Census by identifying territorial attributes around homes.

From a gender perspective, we can identify: how many women live on streets with lighting or near wheelchair ramps:

We can also determine how many people with disabilities live in neighborhoods with low accessibility and on streets inaccessible to cars or buses.

This information is particularly relevant for women, who often carry family caregiving responsibilities and frequently work in caregiving professions.

which infrastructure is most important for the daily lives of women in the territory?

How geospatial information can strengthen gender statistics ?

2. Access to Infrastructure and Services: Survey: Establishments (Census)

The last Demographic Census released data on millions of establishment addresses, categorized by type: health, religions, education etc

By combining spatial information on household surroundings with data on establishments, it becomes possible to analyze, for example:

How many routes between homes and healthcare facilities are fully equipped with wheelchair ramps?

How many mothers of wheelchair user can leave home and reach schools with ramps along the entire route.

This integration of spatial and gender-sensitive data enables other analyses, fostering more inclusive policies and solutions.

What is the frequency and spatial distribution of the establishments most used by women?

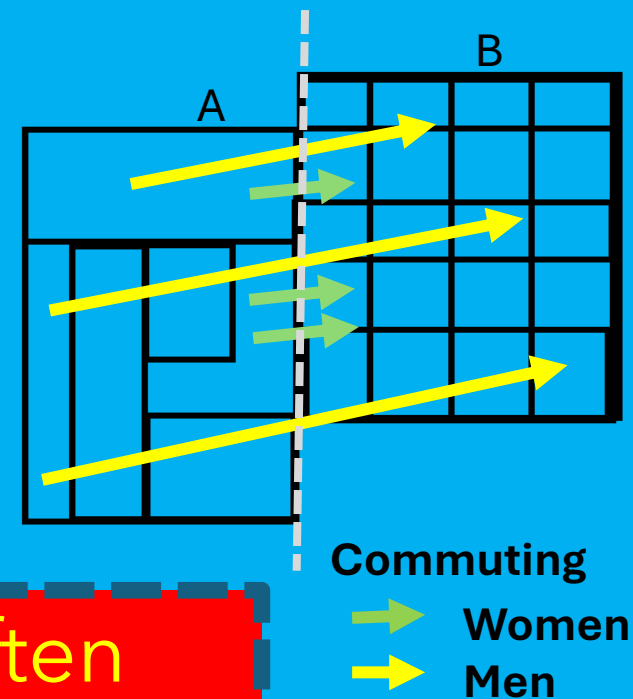
How geospatial information can strengthen gender statistics ?

3. Mobility and Transportation: Survey: Population arrangements.

Geosciences is also responsible for products such as Population Arrangements, which are groups of municipalities highly integrated by frequent population movements for work or study

This research can enhance gender studies by identifying **women's mobility** patterns and reflecting the scope, depth, and diversity of integration between municipalities or even review the urban hierarchy.

A geographic perspective can also clarify whether women tend to move between neighboring municipalities while men travel farther or if women's mobility occurs from neighborhoods closer to these Municipalities.



Do women go to other municipalities more often when they already live in border areas?

How geospatial information can strengthen gender statistics ?

4- Environmental and Territorial Impacts: Survey: population in risk areas

The spatial perspective has enabled IBGE's collaboration with government agencies like CEMADEN. Through this partnership, risk area mapping and a new geographic boundary (BATER) were developed.

This spatial polygon, intersecting Census Tracts and risk areas, allows analysis of the number of women in at-risk areas. For example, it calculates the percentage of **women** in a census tract compared to the percentage in environmental risk areas within that tract.

Considering an especific neighborhood ,
women are overrepresented in risk areas ?

How geospatial information can strengthen gender statistics ?

Policy Planning and Implementation:

The spatial dimension has much to contribute to statistical research: before, during, and after the survey phases. It enhances methodologies and broadens the thematic scope.

Geospatial information contributes to a better understanding of women's material and everyday lives in a world where territory has largely been conceptualized, built, and managed by men, shaped by their needs and perspectives.

Since most urban planners and city managers are men, the male influence on socio-territorial organization is disproportionate.

It is urgent to challenge this norm and explore new possibilities for building a society and spaces that are more inclusive and friendly to women. For this, the heuristic and technical tools of geospatial information are indispensable.

Thank you!



Daléa Antunes

dalea.antunes@ibge.gov.br