

Who is to be Included and How

The role of the census in future official statistics

Olivia Blum, Israel Central Bureau of Statistics

UNECE Group of Experts
on Population and Housing Censuses
Geneva, Switzerland, 18–20 September 2019



Main Points

- The relevance of usual residence does not always serve the main goal of the census.
- Area is the entity to refer to, when usual residence does not coincide with people consuming or needing services.
- In a realm of indirect data collection for official statistics (administrative individual data, big data...), and where regional statistics is the mean to leave no one behind, the role of the census is to be questioned.

Between people and space

- The **main goal** of the census and of statistics at large is to serve the social and economic welfare of the population via efficient and effective decision making.
- The **statistical means**: Detailed data referring to **people**, their characteristics, their affiliations, their location and their environment.
- People are the main **census information carriers**. However, in a dynamic reality, where people are very mobile in short time intervals, space is the entity to refer to as the relevant information carrier for decision making.
- The **derived inconsistencies** are of the people to be counted and of the **place(s)** to count people in.

Questions to be asked

- a. Who are the people in the area of interest?
 - b. What services are consumed in this area?
 - c. What services are needed in this area (based on the above)?
 - d. Who is to provide (or support the provision of) these services?
-
- What is the role of the census in the process?

Usual vs. Actual



Annual “surprise” presented by the first rain.

The reasoning supplied: The drainage system is not built for a once in a blue moon event.

People of interest

People who are out of their usual residence on an ongoing basis: Work immigrants, commuters, nomads, and students under 18 in institutions.

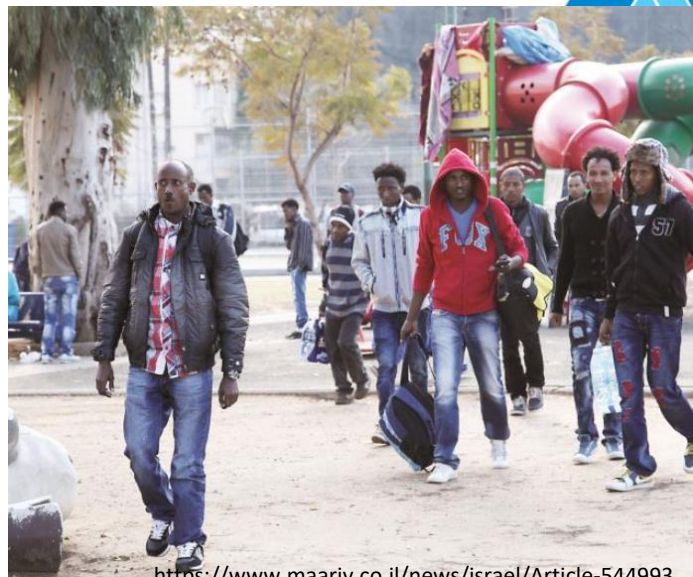
Areas of interest

Any area, from the whole country to a specific neighbourhood, that experiences movement of people (in and out) who are consuming services (and goods) on an ongoing basis.

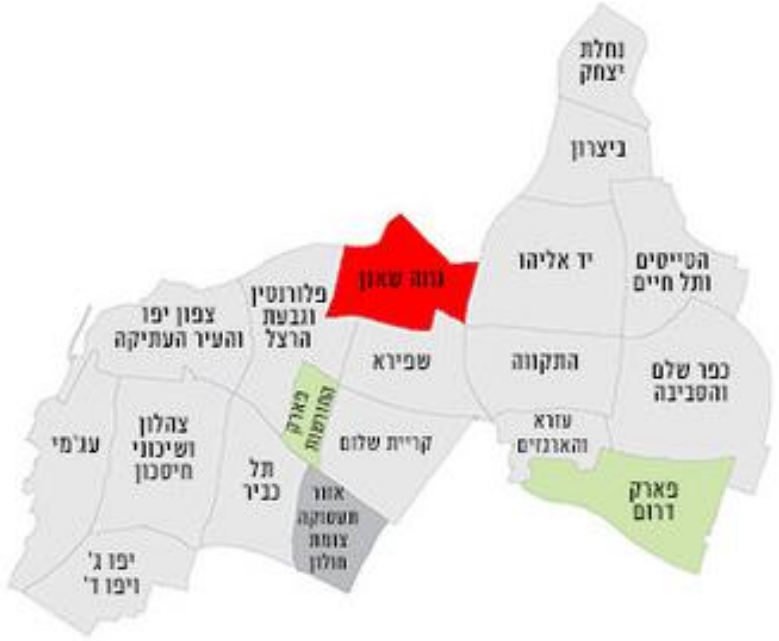
Global and Local Work-migration: Foreigners in Israel

- Foreigners coming to work in Israel have a stable substitution rate.
- Their total number is only slightly changed from one year to another, but about 20% of them are non census population (less than one year in the country).
- Foreigners tend to live in communities.

Therefore, the non-census foreign population should be referred to globally (country) and locally (locality, neighborhood).



<https://www.maariv.co.il/news/israel/Article-544993>



Commuters

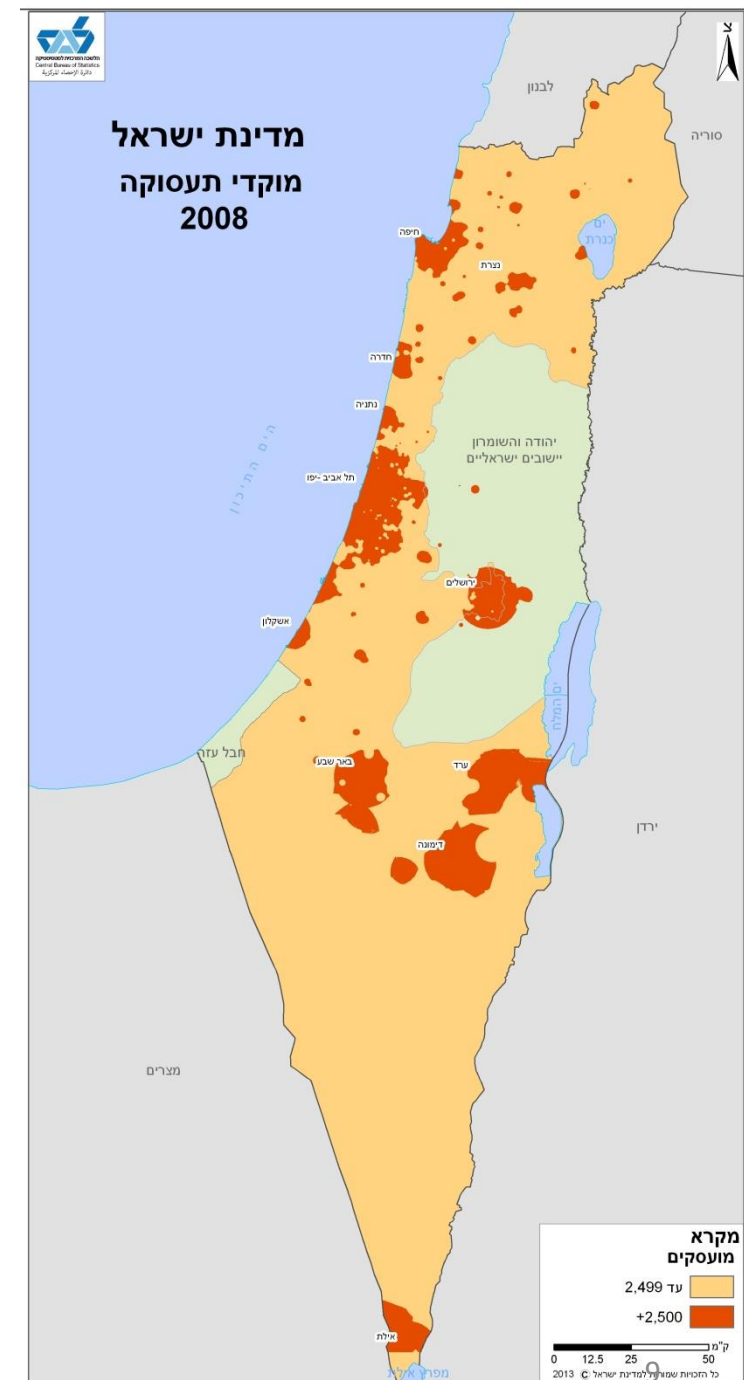
Functional Urban Areas

FUA	Usual Residents	Day Population	Work Commuters	Ratio
Tel-Aviv	402,781	3,475,400	3,072,619	8.63
Haifa	264,407	864,500	600,093	3.27
Jerusalem	760,420	1,028,000	267,580	1.35
Be'er Sheva	193,580	351,300	157,720	1.81
Nazareth	71,694	223,100	151,406	3.11
Karmi'el	44,270	65,800	21,530	1.49
Hadera	79,444	100,400	20,956	1.26
Ashqelon	110,593	123,100	12,507	1.11

2008 Census

Based on paper by Yael Klejman, ICBS, 2017.

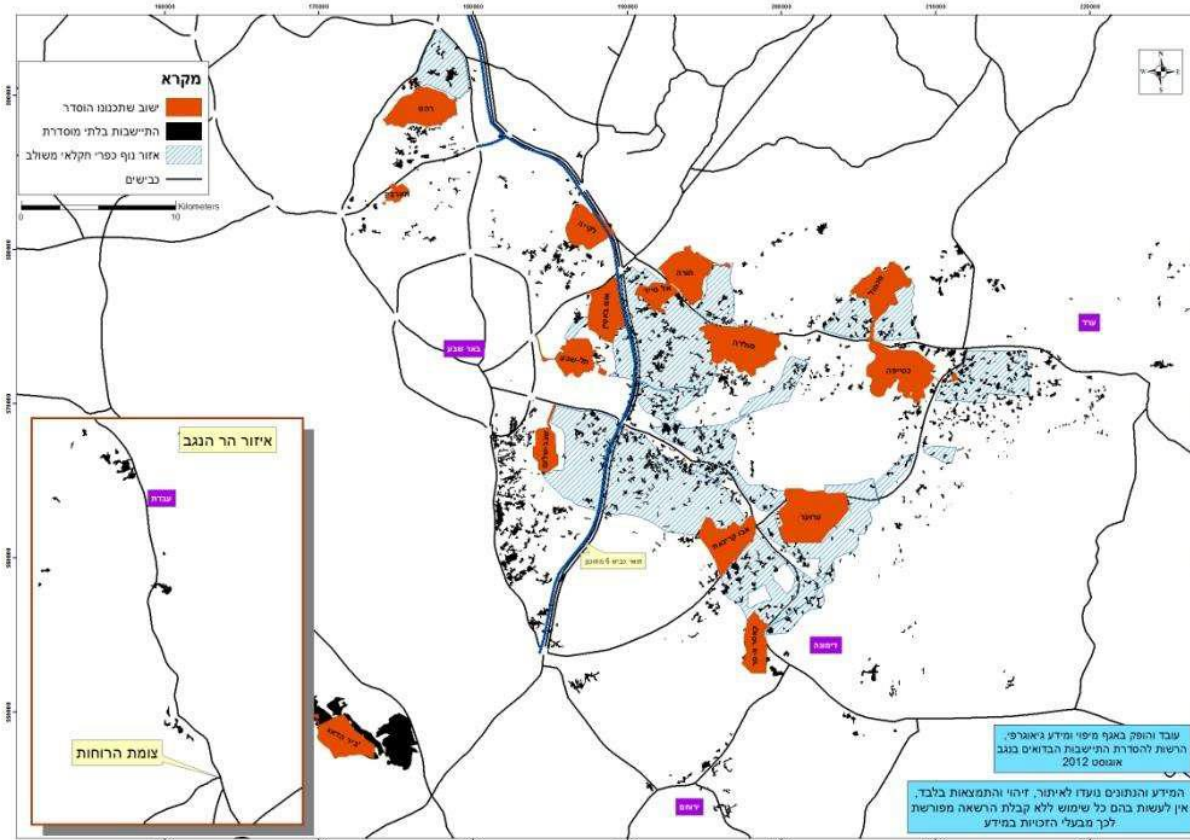
A functional urban area consists of a city and its commuting zone. Functional urban areas consist of a *densely inhabited city and a less densely populated commuting zone whose labor market is highly integrated with the city* (OECD, 2012).



Out-of-locality Population: The Bedouins in the Negev

- Nomadic Arab tribes who have historically inhabited desert regions. The Bedouins in Israel are semi-nomad. They live in the Negev desert, in 7 recognized localities, in unrecognized villages and outside localities (scattered).
- Government resolution 2397 (2017) following government resolution 1999 (2007) aim to improve the socio-economic status of the population, to recognize the unrecognized villages and to bring all the tribes to permanent dwellings in the localities.
- Census information is critical to the planning authorities.

Bedouins in the Negev



- Bedouins living close to recognized localities enjoy services provided by the locality and they should be taken into account as a part of it.
- Yet, the information about their place of usual residence is needed for the planning authorities.

People vs. Area canvassing in 2020 Census

In the 2020 census in Israel, the sampled unit for the survey is a person. The sampling frame is the administrative geo-demographic census file.

The challenges presented in the Negev (among others) are:

- Finding the sampled Bedouins who live outside localities, and
- Recording their place of residence.

Test 2019

Methodology: The location of the tribe and the location of the family was predicted by using data from 1995 and 2008 censuses (Ahmad Hleihel, ICBS 2019).

The interview was conducted face to face in order to be able to assign the x-y coordinates of the place of residence.

Results

- 85% were found in the predicted area and additional 5% were reported to live with the tribe of their spouse (married recently).
- Spatial information was recorded in or close to the dwelling unit.
- Getting the right spatial information about place of residence requires physical presence of the enumerator, since people may not be able to provide this information at all or they may provide the name of the close-by locality.

Students under 18 in Institutions

- In Israel, there are institutional localities. These are institutions outside the area of other localities with a minimum number of residents.
- Adhering to the recommendation to bring the students back to their households, means changing the status of the locality and preventing services needed.
- It does not serve census purposes.

The role of the census

- Censuses should aim to provide the wide range data, in order to enable the governance of a modern society.
- Getting very small spatial entities to carry census and non-census information, that enables the analysis of very small population groups, require the augmenting of many individual data collected in the statistics office.
- The data needed should be expanded and use information like consumption of services.
- The challenges reside in the identification of the relevant population and the areas of interest. The linking between their representing entities is to be addressed as well.

Is census statistics different from other official statistics?

The short answer is **Not Really**.

The long answer refers to the process:

The advancement toward administrative census is an important catalyst to reach this point, where one data lake (actually an ocean) harmonized and linked on the individual level, serve for different statistics themes in small areas and for small population groups.



הלשכה המרכזית לסטטיסטיקה
Central Bureau of Statistics
دائرة الإحصاء المركزية

