

Sampling Design of 2012 Global Adult Tobacco Use Survey (GATS 2012) in Turkey (Comparison with GATS 2008)

(Comparison with GATS 2008)
Yılmaz ERSAHIN
TURKSTAT

(Methodology Department)

SESRIC August 2017 - Ankara



Presentation Plan

- > Introduction
- > Survey Coverage
- > Estimation Level and Sample Size
- ➤ Address Frame
- Stratification Criterion
- Sampling Method
- Sampling Distribution
- Weighting



Introduction

The purpose of this study is to provide general information on the subject of the sampling design of 2012 Global Adult Tobacco Use Survey (GATS).

Turkish Statistical Institute (TurkStat) applied GATS to 11200 sample households (individual) *for the first time in* 2008.

Give information about similarities and differences.



Introduction (Continue)

In order to measure the tobacco use change between years, *the second application* was started in 2012 with the sample size of 12.580 individual.

In 2012 GATS "Sample Design Manuel(Version 2.0 November 2010)" was used as a basic reference source for sampling methodology.



Survey Coverage

Geographical Coverage:

All settlements in the territory of Republic of Turkey were covered in sample selection.



Survey Coverage (Continue)



Covered Population:

All 15+ aged population in private households who are living in the territory of Republic of Turkey.





The population defined as the institutional population (residents of dormitories, hotels, schools, kinder-gardens, rest homes for elderly persons, special hospitals, military barracks and recreation quarters for officers)



Estimation Level and Sample Size

Sample size of the survey was calculated to produce estimations on the base of *total of Türkiye*.

The calculated sample size is *11.536 individual*. (The calculated sample size is *11.200 individual for 2008*)



Address Frame

The frame used in sampling studies of survey is the *National Address Database* (updated 2008 and 2012).



Stratification Criteria

Urban/Rural:

"Urban": Settlements with population 20.001 and over

"Rural": Settlements with population 20.000 and below



Sampling Method

3 stage stratified clustured sampling



Primary Sampling Unit (PSU): Cluster

[Clustering was done, so that cluster size is approximately 300 addresses] Clusters were selected in each design domain separately by using probability proportional to size (**PPS**)



Secondary Sampling Unit (SSU): Address (Household)

Totally 28 households were selected systematically within each selected cluster. The calculated sample size is 11.536 individual.



Final Stage Sampling unit ((FSU): Individual

Selecting one eligible 15+ aged individual from household. (2008 Man and Women for household)!!



Sampling Distribution

Number of Sample Cluster and Household 2012

	Urban	Rural	Total
Number of Sample Cluster	206	206	412
Number of Sample Household	5768	5768	11.536

Number of Sample Cluster and Household 2008

	Urban	Rural	Total
Number of Sample Cluster	200	200	400
Number of Sample Household	5600	5600	11200

Within each household one eligible 15+ aged individual



Weighting

A three-step weighting procedure was used in accordance with the GATS Sample Weights Manual.

First stage: Base weights were calculated

Second stage: Non-response adjustments

Household PSU level,

Individual PSU level (2008 Urban/Rural

male/fmale smoking status)

In the final stage of weighting, calibration adjustments were carried out on weighted data to adjust weights to known projected population totals



Thank you...

