

WATER STATISTICS

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20-22 March 2017

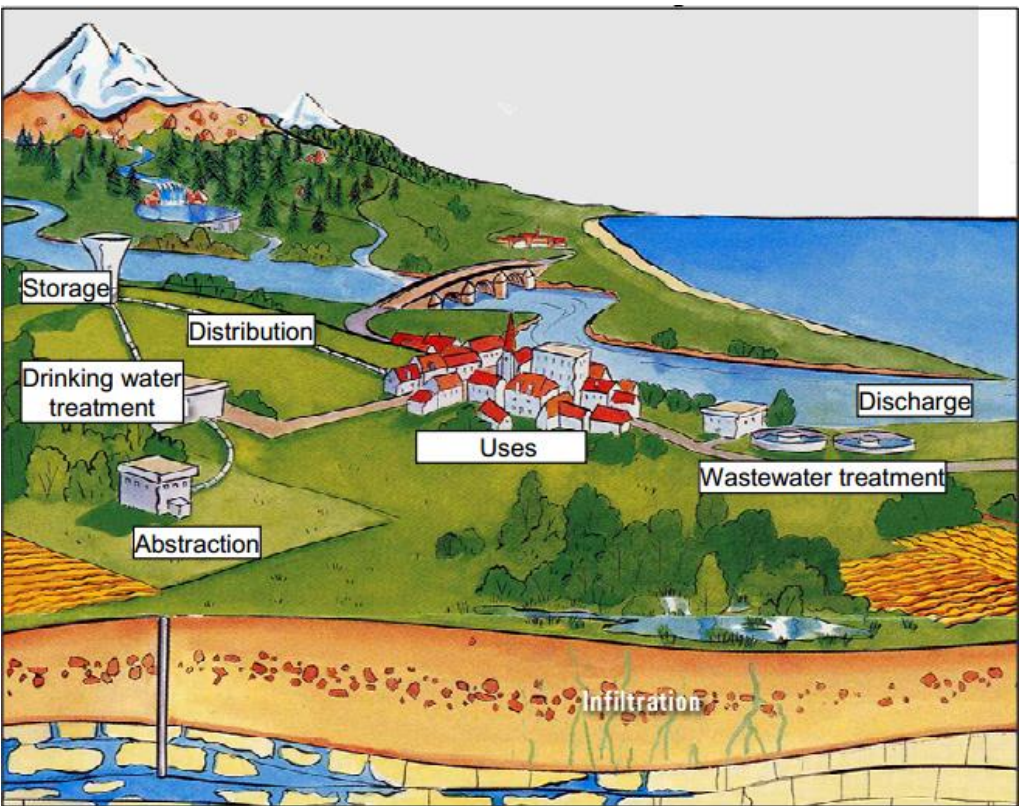
QATAR

Contents

- Concepts, Definitions and Classifications
- Data Collection Process
- Water Statistics Variables
- Data Analysis
- Dissemination
- Challenges

Concepts and Definitions

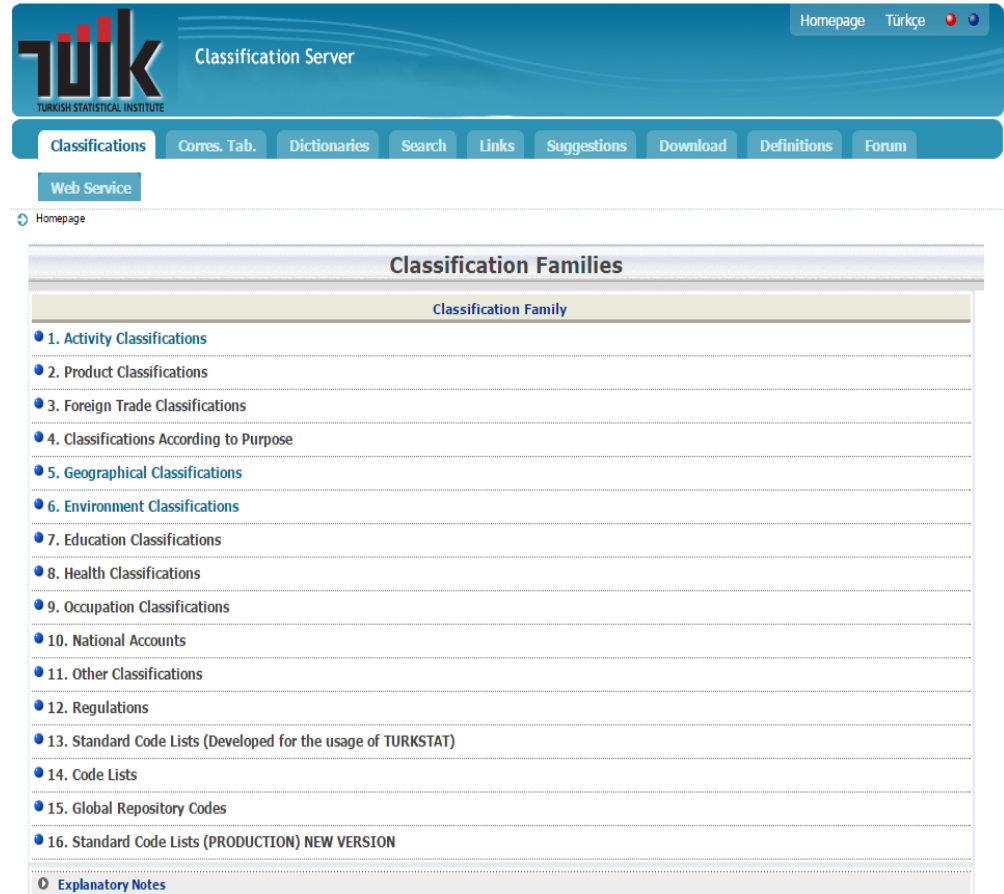
- Fresh Surface Water
- Fresh Ground Water
- Non Freshwater Sources
- Gross Water Abstraction
- Water Returned Without Use
- Reused Water
- Public Water Supply
- Self And Other Supply
- Water Losses
- Water Use



Source: Data Collection Manual for the OECD/Eurostat
Joint Questionnaire on Inland Waters
Version 3.0 – September 2014

Classifications

- **NACE Rev.2:** Statistical Classification of Economic Activities in the European Community (**N**omenclature statistique des **A**ctivités économiques dans la **C**ommunauté **E**uropéenne) (EU)
- **ISIC Rev.4** International Standard Industrial Classification of All Economic Activities (ISIC Rev. 4) is the last version of ISIC Rev. 3 developed by United Nations. (UN)
- **NUTS:** Nomenclature of Territorial Units for Statistics (Statistical Regions-SRE) (EU)



The screenshot shows the 'Classification Server' homepage of the Turkish Statistical Institute (TUIK). The header includes the TUIK logo and navigation links for 'Homepage' and 'Türkçe'. Below the header is a menu bar with links: 'Classifications', 'Corres. Tab.', 'Dictionaries', 'Search', 'Links', 'Suggestions', 'Download', 'Definitions', and 'Forum'. A 'Web Service' button is also present. The main content area is titled 'Classification Families' and lists 16 categories, each with a blue circular icon:

1. Activity Classifications
2. Product Classifications
3. Foreign Trade Classifications
4. Classifications According to Purpose
5. Geographical Classifications
6. Environment Classifications
7. Education Classifications
8. Health Classifications
9. Occupation Classifications
10. National Accounts
11. Other Classifications
12. Regulations
13. Standard Code Lists (Developed for the usage of TURKSTAT)
14. Code Lists
15. Global Repository Codes
16. Standard Code Lists (PRODUCTION) NEW VERSION

At the bottom, there is a link for 'Explanatory Notes'.

Data collection process

Summary

- Variables collected by surveys (questionnaires)
 - Determining the variables
 - Preparation of standard code lists
- Determination of all address framework
 - Determining of scope
- Methods of data collection
 - Surveys
 - Administrative data

For surveys:

- Preparation of questionnaires
- Preparation of web base application
 - DDI and edit rules of programme (database and edits)
- Data sources (Address framework process)

Administrative:

- Data transfer

Water Statistics Questionnaire (web vs paper base)

Before 2014 (paper base)

After 2014 (web base)

TÜİK T.C. BAŞKANLIK
TÜRKİYE İSTATİSTİK KURUMU

**TERMİK SANTRAL
SU, ATIKSU VE ATIK İSTATİSTİKLERİ
SORU KAGIDI
2008**

İş Kayıt No: Santral No:

1. Bu bilgiler 10.11.2005 tarih ve 5429 sayılı Türkiye İstatistik Kanunu uyarınca derlenmektedir. Bilgiler yalnız istatistik amaçla toplanmaktadır.
2. Soru kağıdına istenilen sürede cevap veremeyenler, eksik ya da yanlış cevap verenler hakkında 5429 sayılı Kanunun ilgili maddeleri uyarınca işlem yapılmaktadır.
3. Anketi, işletme müdürü, çevre birimi sorumlusu veya genel müdür tarafından görevlendirilecek kişi tarafından doldurulacaktır.
4. Ankette kullanılacak tanım ve kavramlar için Bölüm IV'e bakınız.

BÖLÜM I- SANTRALİN KİMLİĞİ

1. Santralin Adı :
2. Adresi :
a) İl :
b) İlçe :
c) Bucak :
d) Belediye :
e) Köy :
f) Mahalle/Semt/Mevkii :
g) Caddesi/Sokak :
h) Dış kapı no :
i) Telefon no :
j) Faks no :
k) Elektronik Posta : @ (MWh) Gön

3. 2008 yılında ne kadar enerji ürettiniz? (Biri olarak)
4. 2008 yılında santralinizin yıllık çalışma süresini belirtiniz. Gön

Güvenli | <https://harzemli.tuik.gov.tr/BelediyeSuIstatistikleri2016/?scode=DpCwmkh3ifWKfiiOD5vjeVbA.6C>

Uygulamalar TÜİK Rehber TÜİK Intranet Servisi Türkiye İstatistik Kurumu Outlook Web App TÜİK Uygulamalar Google

Belediye Su İstatistikleri Soru Formu, 2016

Kalan oturum süresi (saniye): 879 YAĞAR TOLGA SARI ÇEVRE, ENERJİ VE ULAŞTIRMA İSTATİSTİKLERİ DAİRE BAŞKANLIĞI

İSTATİSTİK BİRİM NO YIL Anket Durumu Cevaplık Bölge Kodu Kendi Formlarım

20004472711 2016 KADIKÖY BELEDİYESİ

BELEDİYE_ADRES

BELEDİYESİNİN ADRESİ

İSTATİSTİK BİRİM NO 20004472711
YIL 2016
BELEDİYESİNİN ADI KADIKÖY BELEDİYESİ
BİRİM NUMARASI 77002

Araştırmanın Amacı: Ulusal ve uluslararası veri ihtiyacının doğrultusunda belediyelerin su hizmetlerine ilişkin verileri derlemek ve kullanıcılarına sunmaktır. Kapsam: Tüm belediyeler kapsamaktadır. Yöntem: İnternet üzerinden veri girişi ile soru formu doldurulur. Gizlilik: Bu bilgiler, sadece istatistiksel çalışmalarda kullanılmak amacıyla toplanmaktadır. Elde edilen bilgilerin gizliliği 5429 Sayılı Kanunun 13. ve 14. maddeleri gereği teminat altına alınmıştır. Vereceğiniz bilgiler, idari, adli ve askeri hiçbir organ, makam, merci veya kişiye verilmeyecektir. İstatistik amaçları dışında kullanılmayacağı ve lepat amacı olamaz. Bu bilgiler 10.11.2005 tarih ve 5429 sayılı Türkiye İstatistik Kanunu'nun "7. 8. 9. ve 10. maddeleri" uyarınca toplanmaktadır. Soru formunun istenilen zamanda doldurulmaması, eksik veya yanlış cevaplanması durumunda ilgili Kanunun 53.ve 54. maddelerine göre 2752 (Kibin yediyüz elliiki Türk Lirası) TL idari para cezası uygulanır. İdari para cezası ve diğer cezaların uygulanması, İstatistik biriminin bilgi verme yükümlülüğünü ortadan kaldırmaz.

Soru Kağıdına Cevap Veren

| CEVAP VEREN KAÇINCI KİŞİ | ADI SOYADI | GÖREVİ | TELEFON NUMARASI | E-POSTA ADRESİ | SORU FORMUNA CEVAP VERİLEN TARİH |
|--------------------------|----------------------|----------------------|----------------------|----------------------|----------------------------------|
| 1. Kişi | <input type="text"/> | <input type="text"/> | <input type="text"/> | <input type="text"/> | <input type="text"/> |
| 2. Kişi | <input type="text"/> | <input type="text"/> | <input type="text"/> | <input type="text"/> | <input type="text"/> |

Harzemli Web Sürüm 3.10.9

TURKSTAT Environmental Surveys (biennially)

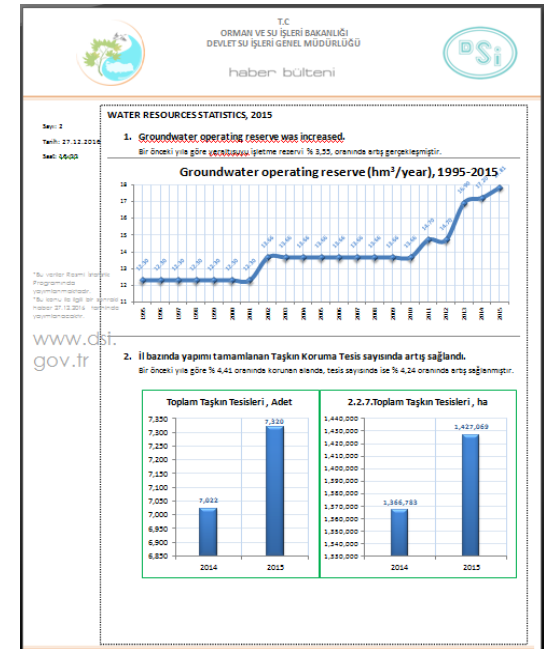
| Name of survey | Scope (data source) | Number of respondents (2017) |
|---|--|------------------------------|
| Municipal Water Statistics | All municipalities | 1 397 |
| Manufacturing Industry Water, Wastewater and Waste Statistics | All manufacturing industry establishments with 50 or more employees | 12 000 |
| Thermal Power Plants Water, Wastewater and Waste Statistics | All thermal power plants with 100 MW or more installed capacity | 73 |
| Mining Establishments Water and Wastewater Statistics | All operating mining ores | 6 000 |
| Organized Industrial Regions Environmental Statistics | All organized industrial regions having completed their infrastructure | 293 |

TurkStat Environmental Administrative Data

| Name of survey | Scope (data source) | Number of villages (2017) |
|---|--|---------------------------------|
| Water and Wastewater Statistics of Villages | Ministry of Interior (for all villages) | 18 000 |

Administrative Data Disseminated by Other Institutions

- Water resources statistics
([State Hydraulic Works \(DSİ\)](#))



Data collection process

Before the field applications

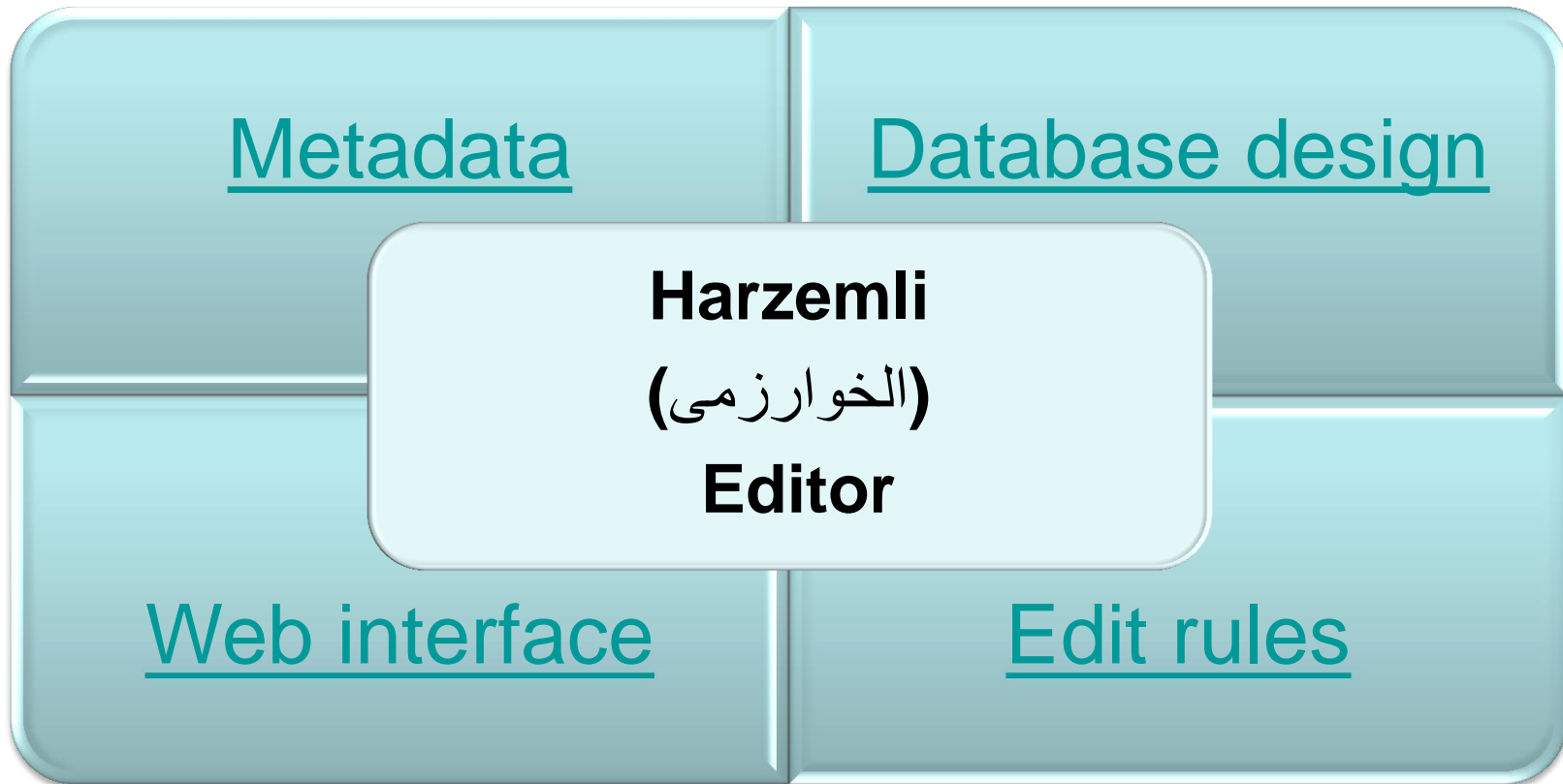
- Reviewing/updating questionnaires
- Determination/preparation of the address framework
- Preparation of the web base application
 - DDI and editing rules (by Harzemli editor)
 - Preparation of analysis programme (SAS)
 - Test of the web base application (regional and central)
- Sending the official letter, brochure and password

Preparation of the web base application

Harzemli Editor

- The Harzemli Editor application provides a user-friendly interface for defining the questionnaire for web base.
- Produces DDI and rule files as XML format :
 - the reference and structural metadata information of the questionnaire
 - the rule file of the flow and data integrity.
- Takes XML files as inputs and generates the desired data entry application.
- Search fields, page structures, question types and restrictions are defined
- The questions in the questionnaire are designed by a drag-and-drop method and the designed questionnaire displayed instantaneously.
- The properties of variables and variable groups are in the form of "What You See Is What You Get".

Preparation of the web base application



Data collection process

Official Letter

- Title of the survey
- Aim of the survey
- Information about how to access to web programme
- Reply period
- Statistical law
 - Confidentially
 - Response obligation and penalty

T.C.
TÜRKİYE İSTATİSTİK KURUMU BAŞKANLIĞI
..... **G KOLONU** Bölge Müdürlüğü

Başlangıç Tarihi: 20 Mart 2017
Konu: Atık Bertaraf ve Geri Kazanım Tesisleri İstatistikleri 07/03/2017

.... **C KOLONU**

Türkiye İstatistik Kurumu Başkanlığı (TÜİK), 5429 sayılı Türkiye İstatistik Kanunu uyarınca çeşitli konularda sayım ve anket düzenlemekte ve sonuçlarını kullanıcılara sunmaktadır. Bu çalışmalardan biri olan "Atık Bertaraf ve Geri Kazanım Tesisleri İstatistikleri, 2016" soru formu ile elde edilecek olan istatistikler; kalkınma planları ve yıllık programların hazırlanması, ülkemizde çevre konusunda meydana gelen değişimlerin izlenmesi, ulusal ve uluslararası bilgi sistemine ve karşılaştırmalara olanak sağlanması ile çeşitli araştırmalara kaynak teşkil etmesi amacıyla kullanılacaktır.

İki yılda bir kez uygulanan bu araştırmaya ilişkin formun, "tuik.gov.tr" adresinde yer alan "ankete giriş" butonu aracılığıyla, tarafınıza teslim edilen/edilecek "kullanıcı adı" ve "şifre" kullanılarak, şifrenin teslimini müteakip (şifre daha önce teslim edildi ise bu yazının tarafınıza teslimini müteakip) 15 gün içerisinde, eksiksiz ve doğru bir biçimde doldurulması gerekmektedir. Sizlerden alınan bilgiler yalnızca istatistikî çalışmalarda kullanılmak amacıyla derlenmektedir. Bu bilgilerin gizliliği, 5429 sayılı Türkiye İstatistik Kanunu ile teminat altına alınmıştır. Kanun uyarınca, bu bilgiler idari, adli ve askeri hiçbir organ, makam, merci veya kişiye verilemez, istatistik amacı dışında kullanılamaz.

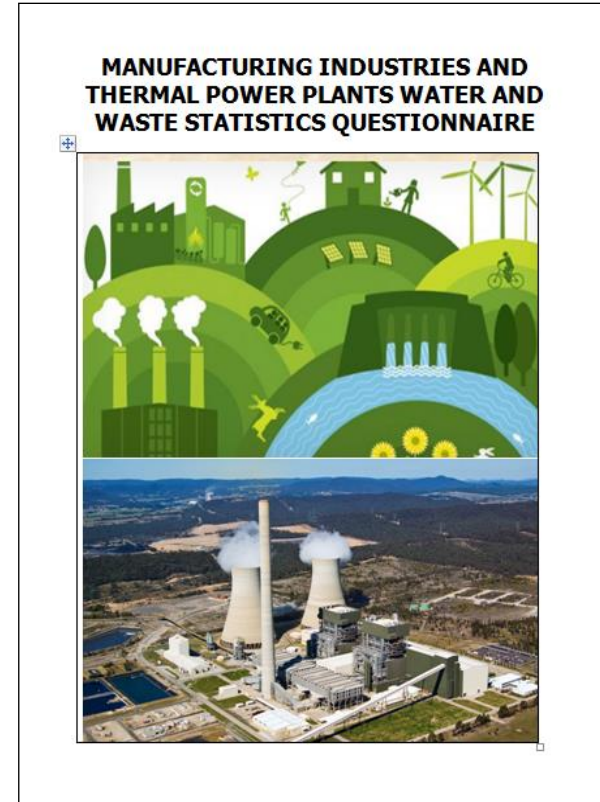
5429 sayılı Türkiye İstatistik Kanununun 54. maddesi uyarınca, istenilen bilgilerin belirlenen şekilde, zamanında, eksiksiz ve doğru bir biçimde verilmesi durumunda; 2.752 (iki bin yediyüze iki) TL idari para cezası uygulanmaktadır. Çalışma ile ilgili ayrıntılı bilgi almak için aşağıda iletişim bilgileri yer alan Bölge Müdürlüğümüz yetkililerine ulaşabilirsiniz. Çalışma kapsamında vereceğiniz bilgiler ve ilginiz için teşekkür eder, saygılar sunarız.

.... **T KOLONU**
Bölge Müdürü

Data collection process


Brochure

- Why do we come to you?
- Why do we apply municipal water statistics questionnaire?
- How do we choose you?
- What is the method of research?
- What are the latest figures?
- How do you enter your data via internet?
- User name and password
- Response obligation
- Data confidentiality
- Contact information of regional and central offices



Field application

- User names and passwords are delivered to the respondents
- 2 months



The screenshot shows the login interface for the TurkStat Online Statistics System (Harzemli). At the top left is the TurkStat logo. To its right, the text "TurkStat Online Statistics System (Harzemli)" is displayed. Below this, a paragraph of text reads: "Enter your credentials to go directly to in Harzemli System, which serves data entry, analysis and reports services of Turkish Statistical Institute(Turkstat). To use these services you must get id and password from TurkStat." Underneath this text is the heading "User registration". The registration form consists of three rows: "User Name :" with a text input field, "Password :" with a text input field, and "Please type characters :" with a text input field. To the right of the third input field is a blue graphic with the word "ONEK" and a blue arrow pointing right. Below the input fields is a "Login" button with a hand cursor icon. At the bottom left of the form area is a link that says "Password Forgot?".

Water Statistics Variables

Municipal Water Statistics

- drinking water networks presence,
- rate of population served by drinking water networks,
- water treatment plant presence,
- rate of population served by water treatment plants,
- amount of water abstracted to drinking water networks by type of resources,
- number of subscribers and amount of water distributed (paid and cost free),
- Network losses and illegal uses,
- number, type and capacity of water treatment plants,
- amount of water treated

Water Statistics Variables (cont'd)

Industrial Water Statistics

Data collected from manufacturing industry establishments, thermal power plants, mining establishments and organized industrial zones are:

- amount of water abstracted by type of resources,
- source of cooling water,
- water consumption by type of use,
- Reused water amount

Water Statistics Variables (cont'd)

Water Statistics of Villages (Compiled by Ministry of Interior)

- Drinking water networks presence,
- Population served by drinking water networks in villages,
- Amount of water abstracted by type of resources

Data Analysis

SAS analysis (Regional Offices)

- Data coherency in the question and between the questions
- Data analysis by population, sector, per capita or employee, etc.
- Data control of the respondent with the previous years
- Data control in terms of totals and subjects (ex: total water abstraction and water abstraction from sea, lake, etc.)

SAS analysis (Central Office)

- In depth analysis of explanations of the respondents (are they logical or enough)
- Data control with the available administrative records (ex: treatment plant capacity)
- Data control with the previous years despite the correction via SAS analysis

Dissemination

<http://www.turkstat.gov.tr>

Statistics is the key of comprehending the past,
managing the present & planning the future

Login | Contact | Türkçe

Home About Us Publications Information Request FAQ Site Map Mail to President

Statistics by Theme »

National Accounts Employment, Unemployment and Wages Inflation & Price

Foreign Trade Construction and Housing Industry

Trade and Services Agriculture Environment and Energy

Population and Demography Income, Consumption and Poverty Education, Culture, Sport and Tourism

Health and Social Protection Science, Technology and Information Society Justice and Election

Transportation and Communication

Press Room

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Social Media

Statistics by Theme » Environment Statistics »

Environment Statistics

Press Releases

Statistical Tables and Dynamic Search

Dynamic Search

- Municipal Waste Statistics
- Municipal Wastewater Statistics
- Municipal Water Statistics
- Public sector environmental expenditure statistics
- Air quality statistics

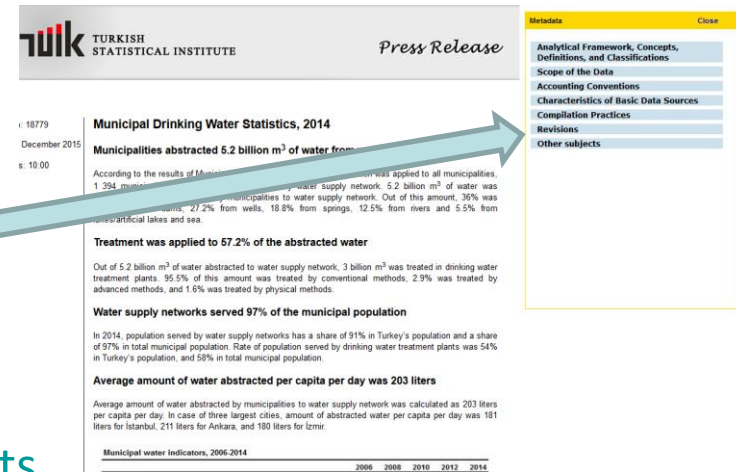
Statistical Tables

- Air statistics
- Water statistics
- Wastewater statistics
- Waste statistics
- Environmental expenditure statistics

Metadata

Dissemination

- Preparation of press bulletins (standart),
- Special press bulletins (press room),
- Special occasion press bulletins
- Updating metadata
- Updating databases,
- Preparation of Institutional Quality Reports,
- Preparation of tables for other publications (yearbook, web-page, statistics in figures, etc.),
- Transfer of data to Eurostat, OECD, etc.



Examples of data dissaminated

Municipal Water Statistics Data, 2014

| Number of municipalities | Total municipal population | Number of municipalities served by water supply network | Rate of population served by water supply network in total municipal population (%) | Number of municipalities served by drinking water treatment plants | Rate of population served by drinking water treatment plants in total municipal population (%) |
|--------------------------|----------------------------|---|---|--|--|
| 1 396 | 72 505 107 | 1 394 | 97 | 436 | 58 |

Amount of water abstracted from resources, (thousand m3/year)

| Year | Total amount of water abstracted | Municipalities | Villages | Manufacturing industry establishments | Thermal power plants | Organized industrial zones | Mining establishments |
|------|----------------------------------|----------------|-----------|---------------------------------------|----------------------|----------------------------|-----------------------|
| 2012 | 14 262 629 | 4 930 733 | 1 036 740 | 1 668 756 | 6 396 057 | 120 296 | 110 047 |
| 2014 | 14 744 979 | 5 232 039 | 428 882 | 2 203 935 | 6 526 322 | 144 886 | 208 915 |

Press bulletins

| Metadata | Close |
|--|-------|
| Analytical Framework, Concepts, Definitions, and Classifications | |
| Scope of the Data | |
| Accounting Conventions | |
| Characteristics of Basic Data Sources | |
| Compilation Practices | |
| Revisions | |
| Other subjects | |

No: 18779
22
December
2015
Hrs: 10:00

Municipal Drinking Water Statistics, 2014

Municipalities abstracted 5.2 billion m³ of water from water resources

According to the results of Municipal Water Statistics Survey 2014, which was applied to all municipalities, 1 394 municipalities out of 1 396 were served by water supply network. 5.2 billion m³ of water was abstracted from water sources by municipalities to water supply network. Out of this amount, 36% was abstracted from dams, 27.2% from wells, 18.8% from springs, 12.5% from rivers and 5.5% from lakes/artificial lakes and sea.

Treatment was applied to 57.2% of the abstracted water

Out of 5.2 billion m³ of water abstracted to water supply network, 3 billion m³ was treated in drinking water treatment plants. 55.5% of this amount was treated by conventional methods, 2.9% was treated by advanced methods, and 1.6% was treated by physical methods.

Water supply networks served 97% of the municipal population

In 2014, population served by water supply networks has a share of 91% in Turkey's population and a share of 97% in total municipal population. Rate of population served by drinking water treatment plants was 54% in Turkey's population, and 58% in total municipal population.

Average amount of water abstracted per capita per day was 203 liters

Average amount of water abstracted by municipalities to water supply network was calculated as 203 liters per capita per day. In case of three largest cities, amount of abstracted water per capita per day was 181 liters for İstanbul, 211 liters for Ankara, and 180 liters for İzmir.


Municipal water indicators, 2006-2014

| | 2006 | 2008 | 2010 | 2012 | 2014 |
|---|-------|-------|-------|-------|-------|
| Total number of municipalities | 3 225 | 3 225 | 2 950 | 2 950 | 1 396 |
| Number of municipalities served by water supply network | 3 167 | 3 190 | 2 925 | 2 928 | 1 394 |
| Rate of population served by water supply network in total municipal population (%) | 98 | 99 | 99 | 98 | 97 |
| Total amount of water abstracted to water supply networks by resources (million m ³ /year) | 5 164 | 4 647 | 4 785 | 4 806 | 5 237 |
| Dam | 1 844 | 1 810 | 2 252 | 2 416 | 1 887 |
| Well | 1 402 | 1 276 | 1 274 | 1 396 | 1 424 |
| Spring | 1 380 | 1 061 | 1 016 | 948 | 985 |
| River | 305 | 174 | 159 | 78 | 652 |
| Lake - Artificial lake/Sea | 233 | 226 | 83 | 98 | 290 |
| Amount of water distributed via water supply network (million m ³ /year) | 2 375 | 2 401 | 2 580 | 2 802 | 3 395 |
| Amount of water treated in water treatment plants (million m ³ /year) | 2 427 | 2 121 | 2 520 | 2 729 | 2 995 |
| Average amount of water abstracted per capita per day (liter/capita-day) | 245 | 215 | 216 | 216 | 203 |


EXPLANATIONS

Municipal Water Statistics Survey has been applied to all municipalities in Turkey, whereas villages have been out of the scope of this survey.

Dissemination Data Base








CENTRAL DISSEMINATION SYSTEM



By Indicator
By Time
By Region
Report
Help

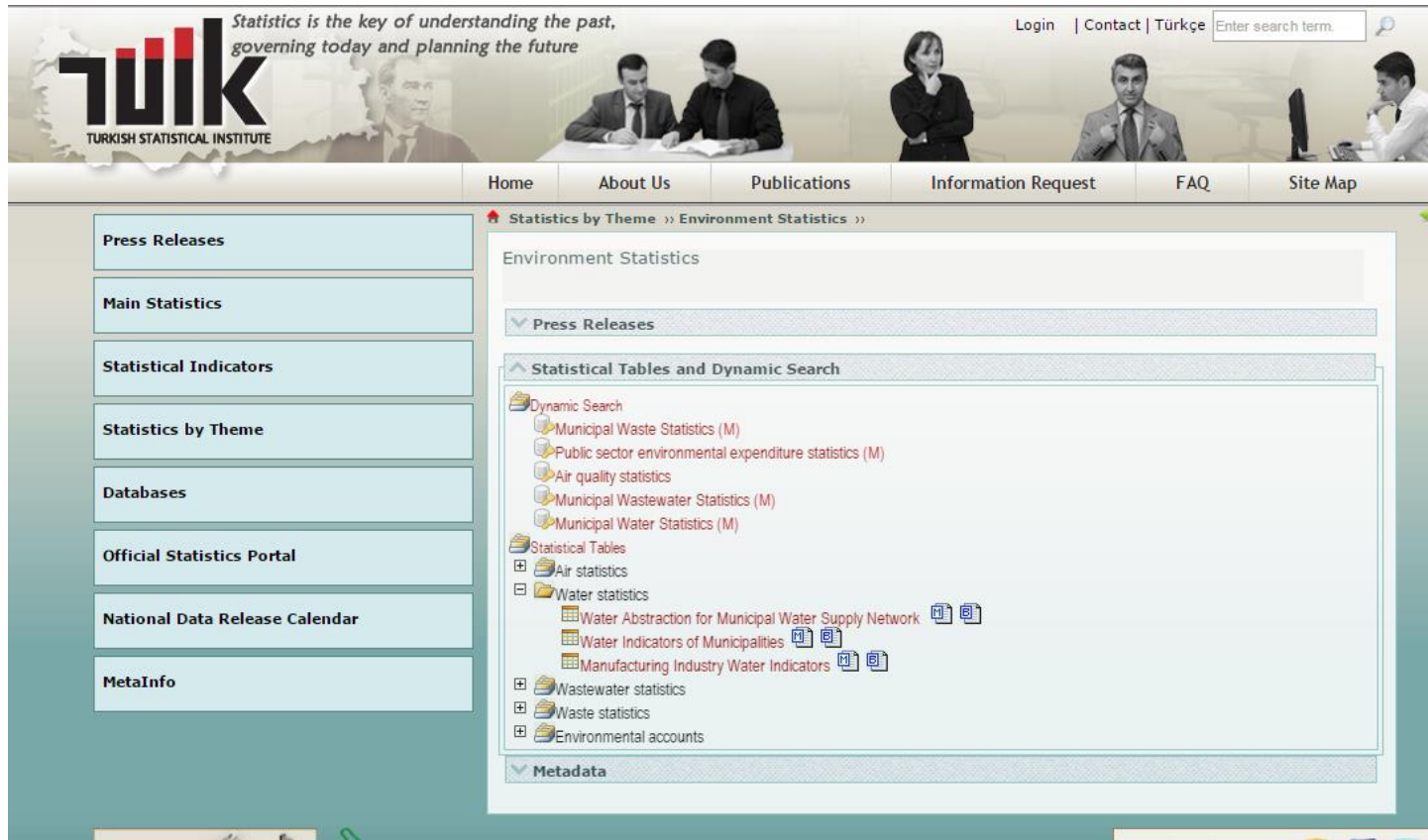
Subject
Municipal Waste Statistics

Measurement

| Choose a Measurement | |
|---|---|
|  | Total number of municipalities |
|  | Number of municipalities served by municipal waste services |
|  | Population of municipalities served by municipal waste services |
|  | Rate of population served by municipal waste services in total population (%) |
|  | Rate of population served by municipal waste services in total municipal population (%) |

Number of chosen Indicators: 0 X Number of chosen Regions: 0 X Number of chosen Time: 0 the result of multiplication cannot be greater than 50000!

Statistical Tables



The screenshot displays the TUIK website interface. At the top, the TUIK logo is accompanied by the tagline "Statistics is the key of understanding the past, governing today and planning the future". Navigation links include Home, About Us, Publications, Information Request, FAQ, and Site Map. A search bar is located in the top right corner.

The main content area is titled "Statistics by Theme » Environment Statistics »". On the left, a sidebar contains links to Press Releases, Main Statistics, Statistical Indicators, Statistics by Theme, Databases, Official Statistics Portal, National Data Release Calendar, and MetaInfo.

The central content area, "Environment Statistics", features a "Statistical Tables and Dynamic Search" section. This section includes a "Dynamic Search" list with items like Municipal Waste Statistics (M), Public sector environmental expenditure statistics (M), Air quality statistics, Municipal Wastewater Statistics (M), and Municipal Water Statistics (M). Below this, a "Statistical Tables" section lists various data sets such as Water Abstraction for Municipal Water Supply Network, Water Indicators of Municipalities, Manufacturing Industry Water Indicators, Wastewater statistics, Waste statistics, and Environmental accounts. A "Metadata" section is also visible at the bottom of the list.

International Questionnaires

- [Eurostat / OECD Inland water joint questionnaire](#)

Challenges

- Non-registered data
- Address framework
- Technical terms
- Non-technique respondents
- Unintended faults

Thank you for your attention