



## **Palestinian Central Bureau of Statistics**

**Workshop on Environment Statistics in the Countries of the Region of the  
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### **Environment Statistics in Palestine**

**Achievement, Procedure and Obstacles**

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# Environment Statistics in Palestine

## **Introduction:**

Environment statistics is an important issue especially in Palestine due to the limited natural resources and the damage of the environment caused by occupation. Providing and updating environmental statistics is highly essential for the purpose of environment protection.

The Environment Statistics program has the responsibility of creating and updating data on the statistical indicators of the pressure on the environment and mainly in the following subjects:

- Meteorology
- Emissions to Air and Air quality
- Water and Wastewater
- Noise
- Solid Waste
- Fresh water (consumption, supply, quantity)
- Biodiversity

## **Uses of Environmental Statistics:**

The environmental statistics are used by many establishments and data users (ministries, research centers, universities, students and others). The Palestinian Central Bureau of Statistics (PCBS) had organized a number of user-producer dialogues (UPD) to have an idea about needed data by the users.

Using environmental data face many problems:

- Ignorance of these statistics by the planners and policy makers.
- The acceptance of public for specific environmental issues such as wastewater, solid waste and energy.

## **Framework for the Development of Environment Statistics (FDES):**

DPSR-model (recommended by environment statistics units' in UN, OECD, Eurostat and several countries) has been used to develop the Palestinian indicators in this field.

The basic principle is a cause-effect chain: the **D**riving forces (D in the model), which are all human activities, put **P**ressure (P) on the environment and the natural resources. The pressure leads to changes in **S**tate (S) of the environment in terms of changes in quantity and quality, deterioration and contamination. If changes are harmful to man and nature, they cause a social **R**esponse (R) with the aim of either changing the driving forces, or directly alleviating the environmental pressure. Sometimes responses also aim at repairing disturbances in the state of the environment itself.

Concerning the development of indicators, PCBS had organized a number of workshops and UPDs to discuss and improve the indicators in Palestine, also to uniform the concepts and definitions and the methods of measurements.

One of the achievements in this field is the establishing of a steering committee to develop the environmental and natural resources statistics. The aim of establishing such a committee is to uniform and coordinate the work on the environmental statistics among the environmental national agencies. The SC join in its membership most of the agencies that involved in the environmental work.

## The Methodology

The environmental data collection mainly depends on the following methods:

- A. The Population, Housing, and Establishment Census – 1997.
- B. The surveys conducted by the PCBS (mentioned in the above outputs).
- C. Collecting data from the administrative records of the Palestinian ministries and institutions:
  1. Environment Quality Authority: Solid waste data, biodiversity data, land use.
  2. Palestinian Water Authority: Water and Wastewater data.
  3. Ministry of the Local Government: Solid waste data.
  4. Ministry of Transport and Communication: Meteorology data.
  5. NGO's: various data

## The Quality of Available Data:

1. The data collected by surveys are accurate and reliable.
2. The data collected from administrative records have problems such as:
  - Different methodologies, concepts and definitions used by the different data producers, which makes the data unable to be comparable.
  - Lack of national recommendations for Environment Statistics, which makes the data unable to be comparable with other countries.
  - Lack of historical data due to the absence of documented methodologies and concepts for the data during the occupation period of the Palestinian Territory.
  - The available data are not covering all environmental indicators for all localities and governorates in the Palestinian Territory.

The lack of well coordination and cooperation between different institutions, either in the planning or implementing.

## Achievements:

The Environment Statistics program in the Palestinian Central Bureau of Statistics (PCBS) has accomplished the following activities (outputs):

### PCBS Outputs:

Activity (output)	Year	Type	Description
The Steering Committee of Environmental Statistics	2003	Steering Committee (SC)	The aim of establishing such a committee is to uniform and coordinate the work on the environmental statistics among the environmental national agencies. The SC join in its membership most of the agencies that involved in the environmental work.
Sub-master plan for Environment and Natural Resource Statistics	1997	Sub-master plan	This plan gives an overview of the scope and content of environment and natural resource statistics and provides guidelines for the development and direction of this multidisciplinary field until the year 2000.
User/Producer dialogue	1997, 2000	Workshop	Most stakeholders have contributed to these discussions on the national set of environmental statistical indicators and source of needed data.

<b>Activity (output)</b>	<b>Year</b>	<b>Type</b>	<b>Description</b>
Household Environmental Survey	1998, 1999, 2003	Surveys and statistical reports	The main objective of this survey was to provide reliable and comprehensive data on the environment of the households in the Palestinian Territory.
Environmental Economic Survey	1998, 2001, 2003	Surveys and statistical reports	The main objective of this survey was to provide reliable and comprehensive data on the environment of the economical establishments in the Palestinian Territory.
Local Community Survey	1998, 2003	Surveys and statistical reports	the main objective of this survey was to provide reliable and comprehensive data on the situation of the local communities in the Palestinian Territory
Health Care Environmental Survey	2000, 2001, 2003	Surveys and statistical reports	The main objective of this survey was to provide reliable and comprehensive data on the environment of the health care centers in private, governmental and non-governmental sectors in the Palestinian Territory.
Dumping Sites Survey	2001	Surveys and statistical reports	The main objective of this survey was to provide reliable and comprehensive data on the dumping sites and its impact on the on the Palestinian environment.
Household Energy Survey	1999, 2001, 2003	Surveys and statistical reports	The main objective of this survey was to provide reliable and comprehensive data on the energy in the households in the Palestinian Territory.
Institutions Capability in Land Use and Geographic Information System Survey	1999	Survey	The main objective of this survey is to provide basic information on the human and equipment available in the institutions dealing with land use data and GIS.
Meteorological conditions in the Palestinian Territory	1998, 1997-2001	Statistical reports	The report includes data about the main meteorological conditions indicators in Palestine.
Wastewater Statistics in the Palestinian Territory	2001	Statistical reports	The report includes data about the main wastewater indicators in Palestine.
Wastewater Treatment in the Palestinian Territory	2001	Statistical reports	The report includes data about the main wastewater Treatment indicators in Palestine.
National Report of Solid Waste in the Palestinian Territory	2000	Statistical reports	The report includes data about the main solid waste indicators in Palestine.
Water Statistics in the Palestinian Territory	1998-2003	Statistical reports	The report includes data about the main water indicators in Palestine.

<b>Activity (output)</b>	<b>Year</b>	<b>Type</b>	<b>Description</b>
Energy Consumption in the Palestinian Territory	1996-2002	Statistical reports	The report includes data about the main energy indicators in Palestine.
land Use statistics in the Palestinian Territory	1998-2001	Statistical reports	The report includes data about the main land use indicators in Palestine.
Environmental Statistics in Palestine	2000	Statistical reports	The report includes data about the main environmental indicators in Palestine.

#### **Environment Quality Authority (EQA) Outputs:**

<b>Activity (output)</b>	<b>Year</b>	<b>Type</b>	<b>Description</b>
Palestinian Environment Strategy (PES)	2000	Plan	In this plan the environmental statistics and information as well as indicators had been emphasized and given some priority to be dealt with.
Solid Waste Database	1998	Database	The Database contains statistical records and information about the solid waste situation in the West Bank; collection, transport, dumping, as well as many other information about the municipalities, local councils, and the management system of the solid waste. Recently the process of updating the database started.
Losses Indicators		List if indicators	Draft indicators about the environmental losses during the second Intifada.
Framework for Palestinian Environmental Indicators		List if indicators	Draft indicators about the environment in Palestine

#### **Current Status**

The Environment Statistics program in the Palestinian Central Bureau of Statistics (PCBS) is currently involved in the following activities:

<b>Activity (output)</b>	<b>Year</b>	<b>Type</b>	<b>Progress</b>
Household Environmental Survey	2004	Surveys and statistical reports	In the implementation stage
Environmental Economic Survey	2004	Surveys and statistical reports	In the implementation stage
Health Care Environmental Survey	2004	Surveys and statistical reports	In the implementation stage
Household Energy Survey	2004	Surveys and statistical reports	In the implementation stage
Energy Balance	2004	Methodological report	In the preparation stage

Emissions to Air Statistics	2004	Methodological report	In the preparation stage
Statistical tables about environmental subjects such as water and energy.	2004	Statistical tables	In the preparation stage

**The Environmental Data Collection Difficulties:**

1. Most of the available environmental data represent the period after the year 1993, this situation didn't allow to build a time-series for comparison purposes.
2. The data derived from administrative sources represented various years, didn't cover all the Palestinian Territory, and have a lot of geographical and periodical gaps.
3. Lack of data because of the Israeli occupation of the Palestinian Territory. Israel had confiscated the data and did not allow to the Palestinian Authority to access it.
4. Inability to collect data about Israeli closed military areas and the Israeli settlements located in the Palestinian Territory (more than 45% of the Palestinian Territory), and even from some areas located in the (C) and (B) zone. (Oslo agreement classification of the Palestinian Territory).
5. Many of the Palestinian Institutions and Ministries are still in the establishing stage.
6. Lack of coordination among data providers..
7. Most of the environmental data are not produced periodically.

**Environmental Data Dissemination:**

Environmental Statistics Department use many methods and ways in the dissemination of environmental data, such methods are: regular dissemination, electronical dissemination, public used file, user services, and exchange publications.

**• Regular Dissemination:**

Environmental Statistics Department regularly disseminate its collected data as a statistical reports, executive summaries, posters, and other printed publications.

The publications are prepared according to a standard publication rules to be uniform and easy to understand. The Environmental Statistics Department publish around 51 environmental reports and publications.

**• Electronical Dissemination:**

The Environmental Statistics Department has the experience in dissemination through internet. The department has an electronic page within the Palestinian Central Bureau of Statistics (PCBS) web site (<http://www.pcbs.org/inside/selcts.htm>), the department publications could be browsed or downloaded.

Beside internet dissemination, the department disseminate the data through CD's, all the department outputs from publications were loaded on CD's on the form of PDF documents. In addition, powerpoint and PDF are used in workshops, sessions, and conferences.

**• Documentation and Public Used File:**

The Department follow the system used in the PCBS in the documentation of the environmental data in order to preserve these data from loss and to be easily returnable in the future. Also, the department publish a copy of the raw data for each project to be used by the public, this copy should be modified and treated to fulfill the secret conditions.