



**Palestinian National Authority
Palestinian Central Bureau of Statistics**

**Environmental Survey for
Education Sector, 2008**

User's Guide

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Introduction

Environmental statistics in the educational establishments are very interested and these statistics are an important instrument to make decisions, planning, and draw the outlines for environment. And relating to infrequency of data about this subject in the Palestinian Territory, the Palestinian Central Bureau of Statistics (PCBS) builds up and develop a database about the environment in the educational establishments.

For all of this PCBS implemented a specialist survey on the environmental of education sector through administrative records during the period 01/04/2008 to 01/07/2008, the survey covered all educational establishments in Palestinian Territory of which overseen by (governmental sector, UNRWA and private sector Non-governmental organizations). The main objective of this survey is to provide statistical data about the educational establishments on the following indicators:

- Outside Environmental Effects (Noise, Smell, Dust, Smoke)
- Properties of the Educational Building
- Water Consumption and Water Sources.
- Wastewater
- Solid Waste Management
- Environment of the Cafeteria.

Concepts and Definitions

Solid Waste Disposal:

Ultimate deposition or placement of refuse that is not salvaged or recycled.

Wastewater:

Used water, typically discharged into the sewage system. It contains matter and bacteria in solution or suspension.

Dumping Site:

Site used to dispose of solid wastes without environmental control.

Solid Waste:

Useless and sometimes hazardous material with low liquid content, solid wastes include municipal garbage, industrial and commercial waste, sewage sludge, wastes resulting from agricultural and animal husbandry operations and other connected activities, demolition wastes and mining residues

Pharmaceutical Waste:

This includes pharmaceutical products, drugs and chemicals, which have been returned from wards, have been spilled or soiled, are out of date or contaminated, or are to be discarded for any reason.

Waste Collection:

Collection or transport of waste to the place of treatment or discharge by municipal services or similar institutions, or by public or governmental and non-governmental corporations, specialized enterprises or general government. Collection of municipal waste may be

selective, that's to say carried out for a specific type of product, or undifferentiated, in other words, covering all kinds of waste at the same time.

Open Burning:

Out door burning of wastes such as lumber, scrapped cars, textiles, sawdust and so forth.

Cesspit:

A well or a pit in which night soil and other refuse is stored, constructed with either tight or porous walls.

Sewage Network:

System of collectors, pipelines, conduits and pumps to evacuate wastewater (rainwater, domestic and other wastewater) from any of the location paces generation either to municipal sewage treatment plant or to a location place where wastewater is discharged.

Smoke:

Particles suspended in air after incomplete combustion of materials.

Noise:

Audible sound from traffic, construction, and so on that may generate unpleasant and harmful effects (hearing loss). It is measured in decibels.

Dust:

Particles light enough to be suspended in the air.

Water quality:

The water without color, taste, smell or precipitates is considered as good water, the water with some color or taste or smell or precipitates but still acceptable from the respondent's point of view is considered to be fairly good water, and the water with some color or taste or smell or precipitates to an extent that is not acceptable from the respondent's point of view is considered to be bad water.

Materials of External Walls:

The main material used in the construction of external sides of walls could be one of the following elements:

1– Cleaned Stone, 2– Stone and Concrete, 3– Concrete, 4– Cement Blocks, 5– Adobe Clay, 6– Old Stone, 7– Other. **Old stones:** are used in the construction of old buildings in ancient parts of urban and rural areas. Construction materials could be comprised of more than one element. Nevertheless and for the purposes of the Survey, “the construction material” refers to the main material used in the construction of external walls. Item no. **(Others)** could refer to wood, straw, fabric, hyrax, hair, zinc, tin, ...etc. The main material used in the construction of external sides of walls and it could comprise cleaned stone, stone and concrete, concrete, cement blocks, adobe clay, old stone or other.

Public Network (Electricity):

A net of pipes for the purpose of providing electricity to localities. It normally belongs to a municipality, the council or to a private company.

Survey Questionnaire

The environmental questionnaire was designed in accordance with similar country experiments and according to international standards and recommendations for the most important indicators, taking into account the special situation of the Palestinian Territory.

Target Population

The target population of this survey is all educational establishments, as follows:

1. Educational establishments belonging to Ministry of Education and Higher Education.
2. Educational establishments belonging to UNRWA.
3. Educational establishments belonging to Non-governmental organizations.
4. Educational establishments belonging to the Private sector.

Sample and Frame

The frame for all establishments in the education sector is updated annually by administrative records of the Ministry of Education and Higher Education.

Weight and Variance Calculation

It is necessary to calculate weight and variance to any survey implemented by sample method as statistical tools to evaluate their output data, but in our survey we used census method to collect data about educational establishments, for this it was not necessary to calculate weight and variance.

Reference Date

The reference period was 2008.

Data Collection

Dedicated fieldwork is the only way to obtain the needed data from the primary source. Field operations started 01/04/2008 and had lasted until 01/07/2008. All data collected through the questionnaire was provided to PCBS for further operations such as data processing and data entry.

Fieldwork directorate follow-up process to collect all questionnaires of higher education establishments and schools, where it was within two mechanisms:

1. Higher education: the questionnaires were sent directly to establishments to fill them and sent the questionnaires to PCBS.
2. Schools: heads of planning division and school health division in all education departments were trained, and provided with a number of questionnaires, where they follow up fieldwork in there area, after filled the questionnaires by schools the questionnaires were sent to the PCBS.

Data Processing

The data processing stage consisted of the following operations:

Editing before data entry

All questionnaires were edited again in the office using the same instructions adopted for editing in the field

Data entry

Then data was entered into the computer, using Microsoft Access. The data entry program was prepared to satisfy a number of requirements such as:

- Duplication of the questionnaire on the computer screen.
- Logical and consistency check of data entered.
- Possibility for internal editing of questions answered.
- Maintaining a minimum of digital data entry and fieldwork errors.
- User-friendly handling.
- Possibility of transferring data into another format to be used and analyzed using other analytical statistical systems such as SAS and SPSS.

Data Quality

Accuracy of the Data

Two types of errors affected the quality of the report's data, sampling and non sampling errors. Sampling errors are measurable and very limited in this report, because the study covered all educational establishments in the Palestinian Territory. The non-sampling errors could not be determined easily, due to the diversity of sources (e.g. the interviewers, respondents, editors, coders, data entry operators...etc). To minimize such errors data was edited before and after the entry process.

Comprehensiveness

One of the most important goals to publish annual reports to the statistics of the environment for the education sector is to create a time series tables for the most important indicators relating to environmental conditions and circumstances of this important sector in the Palestinian Territory.

Notes that the report does not contain data on previous years since it implemented for the first time. This report covers as the most important environment-related indicators for the educational sector in 2008.

As for the geographic database, notes that schools are covered in full for all provinces, but data for higher education establishments were lacking in some governorates of establishments of higher education, noting that the data contained on higher education has been deployed in the region (the West Bank, Gaza Strip).

Comparison of the Data

Survey carried out for the first time, so there is no previous data to be compared, but the results were compared with data for the World Health Organization.

Special Technical Notes

Can be summarized as sources of some non-statistical errors that have emerged during the implementation of the survey with the following:

1. Differentiation on understanding the questionnaires.
2. Variation in individual measurements of some different issues such as the amount of water consumed and the amount of solid waste generated has been appreciated, in addition to questions relating to estimates of sizes, distances and time periods.