Education Statistics: The case of Mozambique

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**Introduction**

Like variables such as sex and age, education is one of the major variables used for data analysis. Thus, in all statistical operations information related to these variables is collected. This makes it possible to monitor progress through different indicators with a gender perspective and by educational status of the head of the household.

The current paper focuses in the main topics related to education statistics. First, it will present the structure of the education system and then the concepts and definitions regarding education statistics, sources of data, demand for data versus collected data, challenges and emerging issues in education statistics.

The current education system was introduced in 1983 and has the following structure:

**General Education**

- **Primary Education** (Grade 1 to 7)
- **Secondary Education** (Grade 8 to 12)
- **Higher Education/University** (4 to 7 years)

**Technical Education**

- **Elementary Level** (3 years) After 1st level Primary
- **Basic Level** (3 years)
- **Medium Level** (3 years)

Within the system of education, there are subsystems:

- Teachers training
- Literacy and Adult Education

The primary school education starts at age 6 but it is legally allowed to admit children at age 5 in the urban areas (only in the cities).

The major language of learning is Portuguese since it is the official language. However a bilingual education is taking place in some rural areas as trial testing of new curricula for primary school. Education is provided in both, public and private schools.
Education statistics within the National Statistics System

The National Statistics System is understood to be the series of institutions and entities tasked with the exercise of official statistical activity.

The bodies of the National Statistics System are:

- The Higher Statistics Council (CSE);
- The National Institute of Statistics (INE);
- The Bank of Mozambique (BM);
- The General Population Census Coordinating Council (CCRGP).

The Prime Minister chairs the Higher Statistics Council or delegates this duty to a member of the government. The Higher Statistics Council consists of the following members:

a) President of the National Institute of Statistics;
b) A representative of the BM;
c) A representative of each central body of the State Apparatus;
d) Two representatives of Mozambican universities, appointed by the National Higher Education Council;
e) A maximum of three representatives of business associations, one from the industrial area, one from agriculture and one from trade.

In c) is included the representative of the Ministry of Education, which usually is the respective Minister. Thus, the Minister of Education is a member of Statistics High Council.

On the other hand, a department of statistics within the Ministry of Education is a Delegated Organ of the National Institute of Statistics (INE). It means that it was given a mandate by the INE for producing education statistics, using its own administrative records which are collected annually through the schools and local and provincial offices.

Main concepts and definitions

**Education** – in narrow terms, it means schooling and refers to a progressively structured education given in particular institutions. It is generally known as *formal education*, a process of training and developing people in knowledge, skills, mind and character in a structured and certified program.

**Adult education** – extension of educational opportunities to those adults beyond the age of general public education who feel a need for further training of any sort. Adult education is also known as continuing education.

**Literacy** – is considered as the ability to read and write in any language.

**Illiteracy rate** – represents the proportion of people aged 15 and older without ability to read and write; it means one who can’t read and write. Since more than half of the adult people can’t read and write, we use the illiteracy rate rather than literacy rate.
Admission rate – the proportion of children aged 6 who are starting primary level. It is calculated by dividing the number of students aged 6 starting the primary level by the population aged 6. Note that the age of 6 years is the official age to start primary school.

Gross enrolment rate – the number of total pupils enrolled in a given level of education, expressed as a percentage of the total population in the theoretical age for the same level. For example, the gross enrolment rate for the first level of primary education is expressed as the number of students enrolled in the first level of primary school (regardless of their age) divided by the population of 6 to 10 years old.

Net enrolment rate – is the number of pupils of the theoretical school-age group for a given level of education who are enrolled in that level, expressed as a percentage of the total population in that age group. For example, the net enrolment rate for the first level of primary education is expressed as the number of students aged 6 to 10 who are in first level primary school divided by the population of 6 to 10 year olds.

Age specific enrolment rate – is expressed as the proportion of students of a given age related to the population of the same age.

Pupil-teacher ratio – is expressed as the number of pupils by teacher. It is calculated by dividing the total number of students of a given level of education by the total number of teachers in the respective level.

Repetition rate – is the proportion of students repeating a grade or level. It is calculated by dividing the number of repeaters in a given grade or level by the total number of students in the respective grade or level.

Transition rate – is the number of students admitted to the first grade of a higher level of education in a given year expressed as a percentage of students enrolled in the last grade of the lower level of education in the previous year.

Education attainment – refers to the highest level of schooling a person has attained in terms of grades of primary or secondary education completed. It also refers to post secondary institutions attended and certificates, degrees or diplomas granted.

School attendance – is the attendance at any regular accredited educational institution or program, public or private, for organized learning at any level of education at the time the data is being collected.

Dropout rate – refers to the proportion of students enrolled at the beginning of a given school year who leave before the end of the same school year. It is calculated as the difference between the number of students at the beginning and the end of school year divided by the number of students enrolled at the beginning of the school year.

Out of school children - represents the proportion of children of school age who aren’t attending school.

Sources of data in education statistics

The main data sources for education statistics are:
- Census – the last one was conducted in 2007
- Surveys – the Mozambique National Institute of Statistics (INE) has established an integrated system of surveys which include the following surveys:
  - CWIQ (Core Welfare Indicators Questionnaire)
  - Household Budget Survey (last carried out in 2002/3)
  - Demographic and Health Survey (last carried out in 2003)
  - Labour Force Survey (last carried out in 2004/5)
- Annual administrative records (from the Ministry of Education)

Some indicators can be produced by both the National Institute of Statistics and the Ministry of Education. For example, both calculate the gross and net enrolment rates for first level primary school. However, the Ministry of Education has to request the INE for information on school age population. While the Ministry of Education calculates the primary enrolment rates only, the INE in addition also calculates rates for secondary and higher education. There are indicators produced exclusively by the Ministry of Education. For example, admission rate, pupil-teacher ratio, repetition rate and dropout rate. Also, some indicators are produced only by the INE, such as illiteracy rate, out of school children, school attendance, and education attainment.

Demands for data versus collected data

The National Institute of Statistics is the central executive body of the National Statistics System whose task is the notation, ascertaining, coordination and publicizing of the country’s official statistical information. To respond to the demands for data, the INE has a Five Years Strategy in which is highlighted the level of priority for each activity. The plan is elaborated by the INE and approved by the Higher Statistics Council. One of the major principles defined in the INE Five Years Strategy as well as in the INE Letter of Quality is that “data collected may reflect the users need”. And the Government is one of the major users of information, including for monitoring policies and plans/program. Objectives of PRSP and the MDGs are taken into account in the definition of the strategic plans.

To guarantee that the needs of data users are satisfied, all the field operations, including during the planning phase, are presented to and discussed with the main users so that they could know the objectives and the kind of information to be collected. To satisfy specific needs, the INE is open to give technical support to some institutions/organizations, including for conducting specific surveys.

Dissemination of education statistics

Education statistics are being disseminated through printed publications and website. When asked formally, specific information is given in CDs and flash drives, but in a way that guarantees confidentiality.

Challenges

The census is a unique source from which we can find information for the lower administrative units. But censuses are conducted in five to ten years. The information from surveys is representative only for national, national urban, national rural and provincial levels. To carry out a survey representative at the district level could mean a very big increase in costs. Note that
actually, the costs for conducting surveys are considered very high: between 1.2 to 1.5 million dollars.

Thus, the main challenge now is to provide data for the lower administrative units, particularly for district levels. The district is taken as the main planning unit by the Mozambique authorities. There is a need for information at that level to monitor plans and programs.

Another challenge is to increase the quality of existing data. The harmonization of concepts and a better coordination among producers and users of data is very important to ensure the quality of information.

**Emerging issues**

For further analysis in education statistics it will be important to apply the gender parity index (GPI) to assess how far females are behind males in access to education, and how the situation differs with respect to the various educational indicators.