Data Quality Assessment Framework (DQAF) Report

Analysis of qualitative aspects of the education statistical system in Mozambique

Executive Summary

Background

1. The DQAF evaluation for Mozambique has been carried out by the UNESCO Institute for Statistics (UIS) from June 27 to July 4th 2009 and was part of a sub-regional activity which was conducted by the South African Development Community (SADC). Mozambique is one of the seven pilot countries that have been selected for the purposes of applying a methodology to evaluate the quality of data produced by education sub-sector.

2. The methodology has been adapted from initial evaluations undertaken by the International Monetary Fund (IMF) and the World Bank, and further adapted by the UIS to ensure a comprehensive evaluation of the quality of education statistics.

3. The DQAF evaluation has two different types of approaches: one which focuses on the analysis of all the elements contributing to the quality of the statistical system, and a second one that looks at the entire statistical business process model through user-needs and practices employed by data producers.

4. The DQAF evaluation has assessed the strengths and weaknesses of the available structures using the six DQAF dimensions: (i) pre-requisites of quality; (ii) integrity; (iii) methodological soundness; (iv) accuracy and reliability; (v) serviceability and; (vi) accessibility.

5. The report is organized around these six dimensions and their sub-components. For each one of them, a score has been assigned, as an indication only, whose sole purpose is to give the position of Mozambique in relation to an ideal international standard.

Pre-requisites of quality

6. With a global score of 60% for this dimension, improvements should be particularly made on human resources and communication. At the Ministry of Education and Culture (MoEC), there is a lack of human resources mainly in the field of statistics. There should be a balance in the recruitment process between statisticians and education planners and it is important
to establish parity for each education sub-sector. The recruitment of additional staff at the national level is also crucial since staff is overburdened and does not undertake more in-depth research on planning and education sector performance analysis. In addition, as for many other African countries which face this challenge, there is a high staff turnover. On the communication issue, there should be a better collaboration between the MoEC and other education data producing agencies. More particularly, the MoEC and the National Statistics Institute (NSI) would benefit from strengthening their relationship. Another aspect which could be improved is the production of technical documentation and statistical procedures manuals. If no information is recorded to ensure internal traceability, it does not facilitate statistical activities on a long term basis especially when there is high staff turnover.

Integrity

7. With a global score of 30% for this dimension, some efforts should be made to make sure that the principal of objectivity in the collection, processing, analysis and dissemination of data is firmly adhered to. The MoEC should cultivate the assessment and regular use of secondary sources of data (i.e. education data extracted from household surveys). In addition, important progress could be made regarding transparency. The MoEC must implement its own documentation about the terms and conditions under which official statistics are compiled and disseminated. Major changes in methodology, source data and statistical techniques should also be made available to data users. The development of an educational communication policy towards the public is a key component in order to improve transparency.

Methodological soundness

8. The global score for this dimension is 68%, which is the highest percentage obtained from all the DQAF dimensions. Generally, the production of statistics in Mozambique is based on internationally compliant methodological practices and principles. In regard to the production of education statistics, one of the major issues is the lack of quality data on finances, especially on human and financial resources invested in education. Data coverage is also not complete since data for pre-primary education are collected by the Ministry of Women and Social Affairs and these are not reported to the UNESCO Institute for Statistics (UIS) to allow international comparisons. In addition, there is a lack of information regarding the number of hours spent teaching per year. Therefore, calculation of full-time equivalence of part-time teachers is impossible. The MoEC should develop a long term plan for decentralization since there is a strong demand for it. Furthermore, there should be the implementation of an EMIS capacity development plan and a Monitoring and Evaluation (M&E) framework. There is actually no capacity development plan with a list of activities, time frame, budget and M&E framework for EMIS improvement in the country. Nevertheless, there is an umbrella document that has been produced by the MoEC (ref.: Plano Estratégico do Sector de Estatística (2008-2012)) in which are identified some visions / proposals in terms of what should be done in the future.

Accuracy and reliability

9. The global score for this dimension is 26%, which is the lowest percentage obtained from all the DQAF dimensions. Concerning soundness of data procedures, improvement should be made especially regarding measures on coverage and procedures on how to manage missing data. For instance, there is no register of all Mozambican schools in the country making impossible the identification of non-responding schools. Some registers exist at the
provincial level (in order for the schools to receive financial contributions) but it seems that the information at the provincial level is not always reported properly at the national level. In addition, the MoEC would benefit from comparing the data they collect with data from different sources which also measure the same or closely related phenomena. This data validation would ensure a better quality of the data by detecting inconsistencies that may arise from this process. Finally, the fact that revision studies are not undertaken on a regular basis contributes to the low score obtained for this DQAF dimension.

Serviceability

10. With a global score of 32% for this dimension, the sub-component on periodicity and timeliness has obtained the highest score amongst the three sub-components. The main issues that should be addressed are the lack of missing data treatment and preliminary data published at the central and provincial levels. However, the global score attributed to serviceability would have been higher if the sub-components on consistency as well as revision policy and practice would have obtained better scores. While some efforts are made regarding consistency over time and consistency obtained through other data sources and/or statistical frameworks, greater efforts should be made regarding internal consistency. No checks are done to verify if statistics are consistent within the dataset. The MoEC should put in place automated procedures to control/check the coherence of data at the central, provincial and district levels.

Accessibility

11. This dimension has obtained a global score of 29%. In general, statistics are presented in a clear and understandable manner, forms of dissemination are adequate, and statistics are made available on an impartial basis. However, the dissemination means are not commensurate with users’ needs and there is no schedule for data release which is announced in advance. In terms of metadata accessibility, major improvements should be done to make available up-to-date and pertinent metadata. Even if metadata is disseminated in a manner that facilitates its access, it should provide more detailed information such as biases in the data, information about response rates to the main surveys used, etc., as well as levels of details that are adapted to the needs of the intended audience. Regarding assistance with the users, improvements should be made to provide a prompt and knowledgeable support service to data users.