Education Data Quality Assessment Framework (DQAF)
Fact finding mission
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Preliminary findings and recommendations

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• Context:

Education Management Information Systems (EMIS) aims at providing quality education statistical data that is complete, relevant, accurate, timely and accessible, as well as managed efficiently. This, in turn, makes effective decision making possible. Improvement of EMIS is one of the priorities of the African Union’s action plan for the Second Decade of Education for Africa, as well as the education programme of the South African Development Community (SADC).

In this context, and upon recommendation of the meeting of the SADC Ministers of Education (Maputo, September 2009), the UNESCO Institute for Statistics (UIS) is in the process of conducting diagnostic assessments of national education statistics systems.

These diagnostics are guided by the Data Quality Assessment Framework (DQAF). This methodology was originally developed by the International Monetary Fund (IMF), and developed further by UIS and the World Bank for an education context.

The diagnostics is conducted through a fact finding mission aiming at the production of DQAF report including recommendations that can then be turned into an action plan towards improvement of data quality.

This minute summarises the main preliminary findings / recommendations raised from the two week mission conducted by the experts.

• Strengths:
The EMIS Unit is well recognised and accepted in its function by all directorates.

+ Duplication of data collection is avoided (only one data collection exercise and monthly staff returns)
+ Response burden is controlled

The importance of using data for piloting the system is demonstrated by the creation of an M&E Unit. Although to be strengthened.

+ The first ever produced data analysis is under finalisation although would need some further improvement
+ SWAP education sector WG monitors progress out of agreed list of indicators populated with EMIS data

Although there are some doubts about the quality of data, this recognition is probably due because at least data is regularly produced every year.

The EMIS Unit is implementing some good practices that many other countries should follow:

+ DCI dissemination using school labelling – trying to identify unique list of schools

The EMIS Unit is benefiting from NSO seconded staff dedicated to statistical work and guaranteeing certain professionalism.

+ NSO is considering reinforcing its support to MoE.

- **Data quality issues:**

  + Legal and institutional environment is poorly defined (no access to education act; statistical act, code of ethics)
    - The statistical act is outdated (1967) and although NSO is preparing a new version, the share of responsibility, the final decision before publishing, etc. have not been addressed (from the meeting with Deputy commissioner)
    - There is no arrangements with MoGCD concerning the publication of data – In fact there is no statistical data collection per se for ECD
    - Rec: dev dialogue between 2 Ministries
    - Assistance seems to be given to Head teachers in filling the questionnaires in order to raise awareness. However, the cause of non reliable data probably remains at school level. Not really because the why data are collected is not understood but rather more because of the socio-economic conditions and the overall teaching conditions that are not improving (pupil classroom ratio is more than 100% and we have seen classroom of 200 pupils).
    - there are no penalties for misreporting

  Resources:
  + staffing is commensurate although more professionalism should be developed
  + IT equipment is adequate
  - The software is not guaranteeing quality data (problem of historical series, non professional design) but above lack of independence on the maintenance and reporting facilities
- Financial resources is an issue: EMIS is not a program in ESEP. It is only part of the SWAP basket. This year because it was not funded by a project, data collection quality has suffered (delay in dissemination, no labelling of DCIs...)

Quality awareness:
- Poor documentation exists throughout the EMIS life cycle. This is a lack of transparency which impacts on the trust which built on data and on the sustainability of what has been developed.
- However the process is well implemented and it seems like staff is dedicated to the task. The PEA coordinators at district levels is a very good way for controlling data quality

Accuracy and reliability
- Good practices (seen above) that lead to good response rate although it is not published and missing data are not imputed.
- There are issues in school registration – some non authorised private schools have been closed and then re-opened without authorisation - This probably impacted on the obvious discrepancy in enrolment trends.
- No compulsory birth certificate for registration
- Finance data are also discussable. In particular there is no publication of actual expenditures and we have noticed some discrepancies in accounting identities between aggregates.
- There is no comparison of school data with previous year (neither manually at district level or automatically – because the system doesn’t allow it)
- School registers seem to be used effectively for filling the questionnaires although we are not convinced that instructions are clear and they are applied in a uniform manner
- The gap between attendance and enrolment (-33.7 for primary) is not investigated
- Population data used to calculate enrolment rates were not updated since 1998. This has changed and series will have to be revised. But it shows also a lack of coordination between NSO and EMIS

Timeliness: data are published within school year
- This is quite good compared to many countries
- Although, a first intermediate publication could be produced out of the first monthly reports to provide information on the beginning of the school year. This wouldn’t cost much effort.

Publication / dissemination:
- The statistical bulletin is a rather well presented document although it doesn’t contain any analysis.
- This has started this year with the “2010 KEY EMIS INDICATOR ANALYSIS” but it is only a description of the graphs produced, not an explanation of the phenomenon.
- Publications are not released on a pre-announced schedule and no MoE website is available. Although it can be downloaded from the NSO web site, it is not mentioned on the publication itself
- Accessibility to the DB could be improved (for public as well as internal use)
- Meta data are not very well developed
• Preliminary recommendations

❑ Many recommendations can be easily formulated out of the list of issues presented. The following are the one we consider as priorities:

❑ Develop guide lines for filling the questionnaires in a standard manner all over the country using the register at a specific date
❑ Conduct a head count based on a sample schools and advertise results recalling the disciplinary actions foreseen by the law (still need to verify this is in the statistical act!)
❑ Reinforce the control at district level through systematic comparison with staff return
❑ Work together with NSO on digging into the different sources of data (using the coming released census data) to look difference in concepts and definitions and for evidence of discrepancies (district disparities). Prepare a document for explanation of differences.
❑ Improve or rebuild the current software before any further attempts for decentralisation. Such decentralisation needs to be integrated in a global strategy with secure funding and sound action plans