

ACKNOWLEDGEMENTS

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PREFACE

A key challenge facing the SADC Region's ability to report on its human resource development achievements and challenges is information gaps or "data blanks". This is a problem of inadequate data coverage of all education institutions (both public and private) and all sub-sectors in the education system. In other cases, it is the structural arrangements for the management of education in the absence of a policy and norms and standards for the management of education information. Some countries have more than one Ministry responsible for the delivery and management of education and therefore each Ministry collects its own data and information. Issues of duplication, varying definitions and poor coordination of sector wide data arise and thereby affect the quality and availability of education statistics. These issues are compounded when comparisons are made across countries. As a result few Member States are reporting comprehensively on all the required global education indicators. This tends to lead to a number of problems in monitoring and evaluating the performance of an education and training sector in countries and across the region.

Ministers of Education in the SADC Region have placed importance on effective planning; policy making based on sound information and rigorous monitoring and evaluation of the performance of education systems by prioritising Education Management Information System in their regional agenda. To facilitate that all countries in the Region are able to effectively report on all agreed set of statistics and indicators and to ensure cross-country comparison, minimum norms and standards for Education Management Information System are essential. The minimum EMIS norms and standards were intended to guide countries in developing or improving and maintaining national appropriate, comprehensive and sustainable education management information systems. In addition, they are intended to facilitate harmonisation of education management information systems to contribute towards the development of regional and continental EMIS networks.

There are 17 minimum Norms and Standards covering policy and legal frameworks, resource availability and utilization, statistical processes and education information reports. This code of Norms and Standards was adopted by SADC Ministers of Education at their annual meeting in Kinshasa, Democratic Republic of Congo, in March 2010 and by doing so, committed themselves to adhere to these Norms and Standards, thereby improving their education management information systems.

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ACRONYMS

ADEA Association for the Development of Education in Africa

AU African Union

CSO Central Statistics Office

DQAF Diagnostic Quality Assessment Framework

EMIS Education Management Information Systems

ICT Information and Communication Technology

ISCED International Standard Classification system of Education

MDGs United Nations Millennium Development Goals

MIS Management Information Systems

MoE Ministry of Education

NESIS National Education Statistical Information Systems

NFE Non Formal Education
NSO National Statistics Office

OECD Organization for Economic Cooperation and Development

OVCs Orphans and Vulnerable Children
REC Regional Economic Community

SADC Southern African Development Community

Stats SA Statistics South Africa

TVET Technical and Vocational Education and Training

UIS UNESCO Institute for Statistics

UN United Nations

DEFINITION OF TERMS

- 1. Administrative Data- the set of units and data derived from an administrative source.
- 2. **Administrative sources** refers to data and statistics generated internally by government.
- 3. **Aggregated data** The result of transforming unit level data into quantitative measures for a set of characteristics of a population.
- 4. **Benchmark** a recognised standard, or a reference point, that forms the basis for assessment or comparison.
- 5. **Data Dictionary** refers to a reference book on the standardized concepts, definitions and classifications used by the Ministry in the production of its education statistics.
- 6. **Data providers** refers to all bodies and agencies that produce statistics. These include education and training institutions, households, enterprises, administrations and other respondents.
- 7. **Coherence -** The degree to which data can be successfully brought together with other data within a broad analytical framework and over time.
- 8. **Education and training institutions** refers to schools, colleges, universities, centres or any formal and non formal education and training provider that occupies an institution and provides a recognised education programme.
- 9. **EMIS** refers to a System for collection, processing, analysis, publication, dissemination, and rendering of Information services for the Management of Educational resources and services.
- 10. **Guidelines** directions or principles used in the development, maintenance and application of rules. They may or may not be mandatory, but are provided as an aid to interpretation and use of rules.
- 11. **Imputation** refers to the process of identifying missing data from a census survey and taking steps to adjust or modify the data accordingly.
- 12. Individuality a single person or institution.
- 13. **Learner** refers to any pupil or student or person enrolled in an education and training programme.
- 14. **Metadata** is information on the underlying concepts, definitions, and classifications used, the methodology of data collection and processing, and indicators or measures of accuracy of the statistical information.
- 15. **Ministry of Education** the singular term "Ministry of Education" is used synonymously with its plural form "Ministries of Education" to include all those government Ministries responsible for the various levels of education and training in a country.
- 16. Protocols is a set of guidelines or rules.
- 17. Preliminary data results that have not been verified sufficiently to be published.
- 18. **Scope-** coverage or sphere of what is to be observed. It is the total membership or population of a defined set of people objects or events.
- 19. **Statistical authority** shall mean, at national level, the national or central statistical office (CSO, NSDS, or Statistical authority) and other statistical bodies in charge of producing and disseminating African statistics.
- 20. **Statistical Value Chain** refers to the statistical process from the source of data to the final statistical output. For example, it concerns the collection of information in school records, the compilation of an annual census survey, the collection and verification at lower

- levels of governance (circuit, district, regional, provincial), the inputting of the data, the data cleaning and imputation and the generation of statistical tables and reports.
- 21. **Secondary data** refers to data collected by someone other than the user. Examples are data obtained from research, studies and surveys produced outside of the Ministry of Education.
- 22. **Special needs** refers to learners under difficult conditions that are vulnerable, marginalised and/or with disability.
- 23. **Structures** refers to various sub-units of the Ministry responsible for education administration by area of specialisation and geographic distribution.
- 24. **Sub-Sectors -** pre-primary education, primary education, secondary education, Technical and Vocational Education, Teachers' training education, Non-formal education, Higher and tertiary education.
- 25. **Validity -** correctness and reasonableness of data findings truly represent the phenomenon you are claiming to measure.
- 26. Verification the process where data accuracy and inconsistencies are checked.

1. INTRODUCTION

Effective country capacities in Education Management Information Systems (EMIS) is one of the priority areas in SADC's Regional Education and Training Implementation Plan and the African Union's Plan of Action for the Second Decade.

Ministries of Education in the region face a number of challenges with regard to their education statistics. There is a policy and institutional gap in terms of the legal mandate to compel compliance of education and training institutions to supply accurate and comprehensive information. There is an information gap in terms of relevant statistics for planning, budgeting and monitoring purposes. It is also evident that there are quality gap in terms of common standards, including concepts, definitions, and methodologies. A capacity gap in terms of both human resources and infrastructure also exists. In the light of these, SADC Ministers of Education in July 2008 directed the SADC Secretariat to develop and harmonise statistical norms and standards for the region in order to address the challenge of benchmarking capacities and evaluating progress towards effective information management systems.

A set of EMIS Norms and Standards were collaboratively developed by member states, and the 17 principles and their standards produced were adopted by Ministers of Education at their SADC Meeting in Kinshasa, March 2010. Subsequently, SADC with the assistance of ADEA's Working Group on Education Management and Policy Support (WGEMPS) and SADC's EMIS Technical Committee elaborated an assessment framework to benchmark member states' performance against the agreed EMIS Norms and Standards.

The EMIS Norms and Standards code of practice has four areas of focus:

- A. Policy and Legal Frameworks,
- B. Resource Availability and Utilization
- C. Statistical Processes
- D. Education Information Reporting

The first two areas of focus – Policy and Legal frameworks, and Resource Availability and Utilization – are the prerequisites or fundamental conditions that impact on the environment in which EMIS operates. There is the issue of ensuring that the institutional and legal environment, and the availability and use of human, financial and technological resources support a well functioning EMIS. The second two areas of focus look at the methodology and processes that need to be in place to produce quality statistics and information, as well as the appropriateness and timeliness of the products and outputs produced by the process. Each area has a set of Norms that commit Ministries to an expected position or way of producing education statistics. A set of standards of good practice for each of the Norms provides a reference for reviewing the implementation of the code.

2. PURPOSE OF THE NORMS AND STANDARDS

The main purpose of the EMIS Norms and Standards is to have a set of criteria and measures for advocating best practice and benchmarking countries capabilities in being able to produce relevant, accurate, timely and comprehensive education statistics and information. Adopting these Norms and Standards ensures countries will have sustainable, comprehensive and appropriate education management information systems in harmony with international and regional systems and practices.

This Norms and Standards Assessment Framework can be used for:

- Self assessment by producers of education statistics.
- Advocacy tool in debates for ensuring adequate EMIS resourcing and infrastructure for appropriate Ministries of Education.
- Reviews performed by SADC in assessing regional capacity in EMIS and country compliance with the framework.
- SADC accreditation for quality and acceptable statistics.

3. QUALITY OF STATISTICS

Underpinning the Norms and standards is a principle of the Quality of Statistics which is defined as 'fitness for use'. The Quality of Statistics has eight dimensions of quality, namely, relevance, accuracy, timeliness, accessibility, interpretability, coherence, methodological soundness and integrity. Five of these eight quality dimensions are also covered in the Data Quality Assessment Framework of the International Monetary Fund (IMF) and the UNESCO Institute of Statistics.

The *relevance* of statistical information reflects the degree to which it meets the real needs of users. It is concerned with whether the available information sheds light on the issues of most importance to users.

The *accuracy* of statistical information is the degree to which the output correctly describes the phenomena it was designed to measure.

The *timeliness* of statistical information refers to the delay between the point to which the information pertains, and the date on which the information becomes available. It considers the frequency and punctuality of release.

The *accessibility* of statistical information refers to the ease with which it can be obtained. The cost of the information may also be an aspect of accessibility for some users.

The *interpretability* of statistical information refers to the ease with which users can understand statistical information through the provision of metadata. This information normally includes the underlying concepts, definitions and classifications used the methodology of data collection and processing, and indicators or measures of the accuracy of the statistical information.

The *coherence* of statistical information reflects the degree to which it can be successfully brought together with other statistical information within a broad analytical framework and over time. The use of standard concepts, classifications and target populations promotes coherence, as does the use of common methodology across surveys.

Methodological soundness refers to the application of international, national or peer-agreed standards, guidelines, and practices to produce statistical outputs. Application of such standards fosters national and international comparability.

The *integrity* of statistical information refers to the values and related practices that maintain users' confidence in the Ministry producing statistics and ultimately in the statistical product.

These dimensions of quality are overlapping and interrelated. Failure to comply with any one dimension will impair the usefulness of the information.

4. USING THE ASSESSMENT FRAMEWORK

A key strategy in modern education management is measurement – and a key feature of measurement is using quantitative indicators as both early warning measures of system dysfunction as well as benchmarks against which progress is assessed.

The assessment framework was created in a manner that makes it possible for country self assessment and peer ranking. Each of the 17 Norms are broken down into a number of components. Components are high level descriptors of a number of Standards. The degree of implementation of a Standard associated with a Norm is measured on a 4 point assessment scale. The ideal Standard is embedded in "Quality Statistics" (Level 4).

Steps to follow in scoring country performance:

- Review the Norm and the associated Standard; and then assess which level (Level 4 to 1) closely approximates the Standard characterized by your EMIS systems.
- In the associated column, score a 4 for a system whose implementation of a standard is characterized by Level 4, similarly score a 3 for Level 3 etc.
- List evidence or provide justification for the scoring. Collect evidence if there is any for later review by the external Norms and Standards Assessment Team.
- The Standards are independent of each other making it possible for an EMIS system to be assessed as Quality Level 1 for one standard and to have Quality Level 3 for the next standard.
- An average score can be calculated for each Norm so as to give an indication of which areas need further improvement. Insert the average score on the Table in Annexure A (see page 31)
- Average the score for each focus area:
 - A. Policy and Legal Framework.
 - B. Resource Availability and Utilization
 - C. Statistical Process
 - D. Education Information Reporting

The overall ranking of an EMIS system will be obtained by averaging all the scores for all the 84 standards. The overall country ranking of the EMIS system will be based on the table below. An overall assessment of greater than 3.3¹ indicates that this country has an EMIS system which produces quality statistics. Similarly,

an overall average score of between 2.6 and 3.3 classifies the country as having acceptable statistics. An average score below 2.6 indicates the country has questionable or poor statistics.

	Range
Quality Statistics	3.4 to 4.0
Acceptable Statistics	2.6 to 3.3
Questionable Statistics	1.8 to 2.5
Poor Statistics	1 to 1.7

The Process of Engagement

The steps of engaging in this process are as follows:

- 1. The Ministry of Education writes a formal application to the SADC Secretariat expressing their wish to have an EMIS Norms and Standards Assessment. The SADC Secretariat will formally respond outlining the steps and conditions for an assessment.
- 2. The SADC Secretariat appoints an EMIS Norms and Standards Assessment Team (ENSAT) made up of 3 members (2 of these from other SADC member states and possibly an external expert). The members of the ENSA Team will be drawn from the pool of countries whose EMIS has an overall score above 2.6. This is a Peer Assessment Team.
- 3. The Ministry of Education undergoes training facilitated by the SADC Secretariat on the Assessment Framework.
- 4. The Ministry of Education creates an internal national Review Team which will undertake the assessments and produce an Assessment Report. This should not take more than two weeks.
- 5. The ENSA Team independently assesses the EMIS system with the evidence provided by the national team. (The external Team will not view the national country assessment at this stage).
- 6. The Ministry of Education Team and the external Team engage in joint discussions and reach a consensus on the scoring of standards. In cases where the country assessment and the peer assessment differ significantly and no consensus on scoring is reached the two scores shall be averaged with the country score constituting 45% and the ENSA Team 60%.
- 7. The Peer Team formulates the final assessment report with scores, findings and recommendations.
- 8. This is shared with the senior officials of the Ministry for their concurrence on measures for improved data quality.
- 9. A date for the next assessment is agreed upon.
- 10. The publication of the assessment findings is subject to confidentiality agreements.
- 11. The statistics for the Ministry of Education can be published with a SADC seal of quality assurance for an EMIS system that has an overall ranking of Quality Level 4 or Quality Level 3.

5. LIMITATIONS OF THE ASSESSMENT FRAMEWORK

A single-valued, aggregate data quality measure is subject to all the deficiencies associated with widely used indexes like the Consumer Price Index. Many of the variables and implicit weightings are likely to be subjective. There is a perspective that some assumptions in the framework bias the scoring against countries with fragile

economies. The framework may not sufficiently take into account the specific country or institutional contexts which may make it difficult for some countries to meet the ideal standards outlined under Quality Level 4. The methodology which largely rests on country self assessments may also limit the usefulness of the framework. There is a tendency for the data producer to rate their data quality highly while the consumers of the statistics will perceive the data to be less credible, timely and free of error. There is not much engagement with the consumers of the statistics in this assessment framework. But if the assumptions and limitations are understood and the index is interpreted accordingly, such a measure can help countries assess data quality status. From the practitioner's viewpoint, such an index helps to succinctly communicate the state of data quality to senior management in Ministries and provide comparative assessments over time. Experience suggests a "one size fits all" set of standards is not a solution. Rather, assessing data quality is an on-going effort that requires awareness of the fundamental principles underlying the production of timely, relevant, accurate statistics.

6. THE EMIS NORMS AND STANDARDS ASSESSMENT FRAMEWORK

In these Norms and Standards, the singular term "Ministry of Education" is used synonymously with its plural form "Ministries of Education" to include all those government Ministries responsible for the various levels of education and training in a country. These Norms apply to all levels of education including Early Childhood Education, Primary, Secondary, Tertiary, Non-Formal and Technical and Vocational Education with the recognition that the Ministry managing the Basic Education level has the primary responsibility for co-ordinating education and training statistics for the sector.

A. Policy and Legal Framework

Policy and legal frameworks governing education statistics have a significant influence on the effectiveness and credibility of a Ministry of Education to produce and disseminate education statistics. The relevant issues are a mandate for data collection from all education institutions and bodies, clarity on roles and responsibilities, registration of pupils and institutions, commitment to quality, reporting accountability, statistical confidentiality, impartiality and objectivity. All education statistical policy frameworks come under the umbrella of national statistical policy.

NORM 1. MANDATE FOR DATA COLLECTION FOR THE EDUCATION SECTOR

The Ministry of Education must have a clear legal mandate to collect information from all education and training institutions and bodies, both public and private, for educational statistical purposes

Components		Standards			Assessme	ent levels		
			Quality	Acceptable	Questionable	Poor Statistics	Score	Comments
			Statistics	Statistics	Statistics			
			Level 4	Level 3	Level 2	Level 1		
Legal mandate	1.1.1	Legal mandate to collect information	There is a law or legal instrument	There is policy to mandate the	There are official documents on the	There are no laws or policies or documents		
		for educational	on collection of	collection of	collection of	on collection,		
		statistical	information for	information for the	information for	production and		
		purposes. ²	production and	production and	production and	dissemination of		
			dissemination of	dissemination of	dissemination of	education and		
			education and	education and	education and	training statistical		
			training statistics.	training statistics.	training statistics.	information.		
	1.1.2	The usage of the	The legal	The legal mandate	The legal mandate	The legal mandate		
		legal mandate.	mandate is	document is	document is rarely	document is not		
			utilized to cover	sometimes utilized.	utilized	utilized.		
			all sub-sectors					
			sector (including					
			training).					
	1.1.3	Legislation on the	Legislation	Legislation grants	Legislation is silent	There is no legislation		
		use of	authorizes the	partial access to	about the use of	in place allowing the		
		administrative	Ministry access to	administrative	administrative	use of administrative		
		records for	use	records for	records for purposes	records for education		
		statistical	administrative	statistical purposes.	of education statistics	statistics. It is		
		purposes.	records for		but statistical	difficult for officials to		
			statistical		authorities may be	gain access to such		
			purposes.		granted access to	records.		
					such records.			

² This could be part of any policy document or separate legal document.

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		T				T		
		1.1.4	Compliance of	Failure to respond	Failure to respond		There are no	
			education	to such requests	to such requests		consequences for non	
			institutions to	has consequences	does not always		compliance.4	
			provide education	for education	have consequences			
			information.	institutions. ³	for education			
					institution.			
Mandate	to	1.2.1	Mandate ⁵ to collect	The Ministry of	The Ministry of	The Ministry of	The Ministry of	
coordinate			and integrate data	Education has the	Education has the	Education has the	Education has no	
EMIS			from the different	mandate to	mandate to collect	mandate to collect	mandate to collect	
processes			sub-sectors and	collect and	and integrate data	and integrate data	and integrate data	
processes			various	integrate data	from some of the	from some of the	from the different	
			government	from the different	sub-sectors of	different sub-sectors	sub-sectors and	
			agencies,	sub-sectors and	education and	of the Ministry of	various government	
			institutions and	various .	training.	Education only.	agencies dealing with	
			structures of	government			education and	
			relevant	ministries and			training.	
			departments,	agencies of				
			ministries and civil	education and				
			society.	training, some				
				institutions and				
				relevant				
				structures of				
				other				
				departments,				
				ministries and				
				civil society.				
		1.2.2	Strategy to collect	The Ministry of	The Ministry of	The Ministry of	The Ministry of	
			and integrate data.	Education has a	Education has a	Education has a	Education has no	
				strategy to	strategy to process	strategy for some	strategy to process	
				process data	data across the sub-	sub-sectors involved	data across other	
				across other sub-	sectors within the	in education and	sub-sectors within	
				sectors within the	Ministry of	training.	the Ministry and with	
				Ministry and with	Education only. 7		other Ministries and	
				other Ministries	=======================================		various government	
				and various			agencies and civil	
				government			societies involved in	
				agencies. 6			education and	
				agonolos.				
							training.	

³ Institution heads are charged, disciplinary action or a school is deregistered.

 $^{^4}$ Institutions view the process as voluntary and response rates are low as there are no consequences for non compliance.

⁵ This could be part of any policy document or separate legal document.

⁶ The EMIS is integrated with administrative records in finance and personnel among others. One Ministry needs to be identified as the responsible party as in some instances more than one Ministry may be involved in education and training.

⁷ Unlike Quality Level 4 there is no clarity on which Ministry has overall mandate but Ministries involved in Education collect data for their sub-sector.

400	1	T .	1	T	T	
1.2.3	Information sharing across the Ministry of Education subsectors and government agencies.	Comprehensive measures are in place to ensure that there is information sharing across sub-sectors and across government agencies. 8	Some measures are in place to ensure that there is information sharing and flow of data among sub-sectors occasionally other government agencies.	Measures are in place but are not clear to ensure that there is information sharing across sub-sectors and government agencies.	There are no measures in place to ensure that there is information sharing across sub-sectors and government agencies.	
1.2.4	Timeliness of information sharing across Ministry sub-sectors and government agencies.	Very timely sharing of information across Ministry sub-sectors and government agencies.	Regular sharing of information (with acceptable delays) across Ministry subsectors and government agencies.	Irregular sharing of information across Ministry sub-sectors and government agencies. Information sharing is often delayed.	No sharing of information across Ministry sub-sectors and government agencies.	
1.2.5	Memorandum of Understanding (MoU) between Ministry of Education and the National Statistics Office.	There is a MoU between the Ministry of Education with the national statistical office (Statistical authority) on all information related to their needs ⁹ .	There is an agreement between statistical authority and Ministry which recognizes the Ministry's representation on its National Statistical Body.	Ministry of Education and statistical authority collaborate on an ad hoc basis.	There is no collaboration and information sharing between the two organizations.	
1.2.6	Defined missions, structures and roles of the Ministry of Education and Educational Institutions on EMIS.	The Ministry has clearly spelt out the roles and responsibilities of education institutions and structures in the collection, compilation, distribution and sharing of educational information with users. These exist as administrative guidelines and	There is a general understanding of the roles and responsibilities of education institutions and structures in the collection, compilation, distribution and sharing of educational information with users. These exist as administrative guidelines and are	The roles of the Ministry and education Institutions are not clearly specified. There are no guidelines in place.	The Ministry has not clearly spelt out the roles of education institutions nor has it set up structures for collection, compilation, distribution and sharing of educational statistical information. There is no clarity in terms of which organization is responsible for which activity which often leads to duplication of	

⁸ Information sharing should be systematic and move across sub-sectors, various directories (HR, Finance), flow right back to the schools as well as information sharing with other Ministries, agencies and departments.

 $^{^{9}}$ The MoU can be with the Central Statistics Office

		are widely used in practice.	usually used in practice.	efforts and/or the neglect of essential steps.	
NORM AVERAGE					

NORM 2: QUALITY COMMITMENT

The Ministry of Education commits itself to work and cooperate according to the norms fixed in the quality declaration of its national statistical systems and in other international statistical frameworks.

Components		Standards	Assessment levels							
			Quality Statistics	Acceptable Statistics	Questionable Statistics	Poor Statistics	Score	Comments		
			Level 4	Level 3	Level 2	Level 1				
Policy and Procedures to ensure quality statistics.	2.1.1	Policy and procedures to ensure quality.	Policy frameworks specify processes Ministry of Education will use to promote and ensure quality in the statistical value chain taking into account national and acceptable international quality standards.	Existence of a framework specifying processes the Ministry uses to promote and ensure quality in statistical value chain. However it is not linked to national and international quality standards.		There is no framework to guide the Ministry on how to promote and ensure quality.				
	2.1.2	Processes to monitor and ensure data quality.	Processes are in place to monitor and ensure the quality of the data collection, processing, and dissemination of statistics. These include processes of information verification and validation. ¹⁰	Processes are in place to monitor and ensure the quality of data. The processes include random information verification and validation. These processes are adhered to most of the time.	There are no processes to monitor and ensure the quality of data at various stages. Though random checks might be made.	There is no outlined process to monitor quality. There is minimal verification and validity.				

¹⁰ Results are compared to those from other surveys and there are checks to ensure statistical data is consistent over time.

NORM 3: STATISTICAL CONFIDENTIALITY

The Ministry of Education guarantees the privacy of data providers' individuality, the confidentiality of the information they provide and its use for statistical purposes only.

Components		Standards	Assessment levels							
			Quality Statistics	Acceptable Statistics	Questionable Statistics	Poor Statistics	Score	Comments		
	211		Level 4	Level 3	Level 2	Level 1				
Confidentiality	3.1.1	Policy outlining measures to safeguard individual data confidentiality and usage.	The individual data confidentiality is well stated in the policy document and implemented once every 12 months. Measures 11 are in place to ensure that individual data are kept confidential and used for statistical purposes only. 12	The individual data confidentiality is well stated in the policy document but seldom implemented. Checks are in place to ensure only aggregated data is publicly available.	There is a statement in the policy document on data confidentiality. There are limited checks established and compliance is ad hoc.	Individual data confidentiality is not mentioned anywhere in the policy document.				
	3.1.2	Protocols for external users accessing data and usage.	Necessary protocols apply all the time to external users accessing statistical data.	Necessary protocols apply to external users accessing statistical data. However, protocols are disregarded in some instances.	No protocols apply to external users accessing statistical data. Though some efforts are made to safeguard individual data confidentiality.	Minimal efforts are made to safeguard the confidentiality of individual data and there are no protocols in place.				

¹² Among these measures should be clear procedures on how to archive records, a policy on how long records are kept and a strategy to safely dispose or destroy the records.

NORM 4: REPORTING ACCOUNTABILITY

The Ministry of Education adheres to a policy of timely and accurate reporting to the statistical information requirements of national, regional, continental and international education frameworks.

	Standards	Assessment levels						
		Quality Statistics	Acceptable Statistics	Questionable Statistics	Poor Statistics	Score	Comments	
		Level 4	Level 3	Level 2	Level 1			
4.1.1	Production of statistical reports.	Annual reports on statistics on education and training institutions are produced and disseminated widely within 12 months of data collection.	Annual statistical reports are produced regularly and published. However, the reports are delayed in dissemination beyond 12 months of data collection.	Annual statistical reports are produced but not published.	Some reports are not produced.			
4.1.2	Obligation to report education performance annually.	The Ministry has an obligation to report on all information related to	The obligation to report is indicated in the statistical code of practice.	The obligation to report is indicated in the plan or administrative document.	. The Ministry does not have an obligation to produce analytical reports on education performance.			
4.2.1	Responsiveness of a country to international reporting requirements.	The country supplies complete education statistics to SADC, the African Union, and other international agencies as per required.	Reports to international organizations include most of the required information.	Country reports are characterized by large data gaps and delays; sometimes reports are not submitted. ¹³	The country does not supply the required information to international organisations.			
	4.1.2	4.1.1 Production of statistical reports. 4.1.2 Obligation to report education performance annually. 4.2.1 Responsiveness of a country to international reporting	4.1.1 Production of statistical reports. Production of statistical reports. Annual reports on statistics on education and training institutions are produced and disseminated widely within 12 months of data collection. Cobligation to report education performance annually. Annual reports on statistics on education and training institutions are produced and disseminated widely within 12 months of data collection. The Ministry has an obligation to report on all information related to education by law. Responsiveness of a country to international reporting requirements. Annual reports on statistics on education and training institutions are produced and disseminated widely within 12 months of data collection. The Country has an obligation to report on all information related to education by law. The country supplies complete education statistics to SADC, the African Union, and other international agencies as per	4.1.1 Production of statistical reports. Production of statistical reports. Annual reports on statistical reports on education and training institutions are produced and disseminated widely within 12 months of data collection. Obligation to report education performance annually. A.1.2 Obligation to report education performance annually. Responsiveness of a country to international reporting requirements. Annual reports on statistical reports are produced regularly and published. However, the reports are delayed in dissemination beyond 12 months of data collection. The Ministry has an obligation to report is indicated in the statistical code of practice. The country and published. However, the reports are delayed in dissemination beyond 12 months of data collection. The Ministry has an obligation to report is indicated in the statistical code of practice. The country and published. However, the reports are delayed in dissemination beyond 12 months of data collection. The obligation to report is indicated in the statistical code of practice. SADC, the African Union, and other international agencies as per	4.1.1 Production of statistical reports. Annual reports on statistical reports. Annual reports on statistical reports. Annual statistical reports are produced and disseminated widely within 12 months of data collection. 4.1.2 Obligation to report education performance annually. Acceptable Statistics Level 3 Annual statistical reports are produced regularly and published. However, the reports are delayed in dissemination beyond 12 months of data collection. The obligation to report is indicated in the statistical report is indicated in the statistical code of practice. The obligation to report is indicated in the statistical code of practice. The obligation to report is indicated in the statistical code of practice. Acceptable Statistics Level 2 Annual statistical reports are produced regularly and published. However, the reports are delayed in dissemination beyond 12 months of data collection. The obligation to report is indicated in the statistical code of practice. The obligation to report is indicated in the plan or administrative document. Acceptable Statistics Annual statistical reports are delayed in dissemination beyond 12 months of data collection. The obligation to report is indicated in the statistical code of practice. The obligation to report is indicated in the plan or administrative document. Aliant provided regularly and published. However, the reports are delayed in dissemination beyond 12 months of data collection. The obligation to report is indicated in the plan or administrative document. Acceptable provided regularly and published. The obligation to report is indicated in the plan or administrative document. Acceptable provided regularly and published. However, the reports are delayed in dissemination beyond 12 months of data collection. The obligation to report is indicated in the statistical code of practice. Acceptable provided regularly and published. Annual statistical reports are reports are or side provided in the statistical code of practice. Acceptable	Annual reports on statistical reports. Annual reports are produced and disseminated widely within 12 months of data collection. Annually. Obligation to report annually. Annually. Responsiveness of a country to international reporting requirements. Annual reports are produced regularly and published. However, the reports are delayed in dissemination beyond 12 months of data collection. Annual statistical reports are produced but not published. However, the reports are delayed in dissemination beyond 12 months of data collection. A1.2	Acceptable Statistics Level 4 Level 3 Level 2 Level 1	

 $^{^{13}}$ As evidenced by the huge data gaps in publications such as Global Education Digest, AU Reports and SADC Report

NORM 5: IMPARTIALITY AND OBJECTIVITY

The Ministry of Education must produce and disseminate education statistics respecting scientific independence and in an objective, professional and transparent manner in which all users are treated equitably.

Components		Standards	Assessment levels						
-			Quality Statistics	Acceptable Statistics	Questionable Poor Statistics Statistics		Score	Comments	
			Level 4	Level 3	Level 2	Level 1			
Impartiality and objectivity.	5.1.1	The compilation of education statistics is based on scientific and statistical considerations only.	Statistics are compiled on a scientific basis determined by statistical considerations only.	The compilation of statistics is largely based on statistical consideration but there is a minimal degree of external interference.	The compilation of statistics is largely based on statistical consideration but there is considerable degree of external interference.	The compilation of statistics is largely influenced by other external forces and disregards statistical and scientific considerations. Results are either suppressed or/and manipulated.			
	5.1.2	Corrections of errors are published.	in published statistics are corrected at the earliest possible	In most instances errors discovered in published statistics are corrected within a reasonable timeframe and publicized.	Errors discovered in published statistics are corrected but the corrections are rarely publicized.	Errors in statistics are not corrected.			
	5.1.3	Data revisions and/or updates are publicized 14.	Revisions of data and/or updates of information are always publicized.	Revisions of data	The revision of data and/or the update of information is publicized in some instances.	The revision of data and/or the update of information is not publicized.			
	5.1.4	Information on the methods and procedures for statistical production used by the Ministry is publicly available.	Information on the methods and procedures used by the Ministry is publicized and routinely disseminated.	Information on the methods and procedures used by the Ministry is sometimes disseminated.	Information on the methods and	Information on methods and procedures used by the Ministry is not available to the public.			
	5.1.5	The release of statistics is made in an impartial and objective manner.	All statistical releases and statements made in the media are objective and non-partisan.			Statistical releases and statements made in the media tend to be biased and partisan.			

¹⁴ Publicize means to bring to the public's attention – make something known – this can be done using various forms of media such an advert in the newspaper or use of bulletin boards.

5.1.6	Staff is aware of professional and ethical conduct.	There are guidelines in place to ensure professional independence and ethical behavior by staff. A clear strategy 15 to ensure staff is conscious of acceptable conduct is in place.	Professional and ethical guidelines exist but lack clarity or/and are not adequately imparted to all staff.	There are no systems in place to guide staff on acceptable ethical and professional conduct. Personnel, however, are not implied in irregular practices.	There are no systems in place to guide staff on acceptable ethical and professional conduct. Staff is involved in irregular practices.	
NORM AVERAGE	Conditions under which policy makers can access data before its release are outlined in the dissemination policy.	Conditions under which policy-makers, specifically government, may have access to data before its release are published and is available for public scrutiny.	Policy makers have access to the data. The conditions, along with the reasons for their access, are published and not adhered to.	Policy makers have uncontrolled access to data, the conditions along with their reasons for their access, are not published.	There are no policy measures preventing policy makers' access to data before its release and publication.	

NORM 6: REGISTRATION OF INSTITUTIONS

All education and training institutions must be compelled to register with appropriate education Ministries if they are to operate as an education and training institution.

Components	Standards		Assessment levels							
		Quality Statistics	Acceptable Statistics	Questionable Statistics	Poor Statistics	Score	Comments			
		Level 4	Level 3	Level 2	Level 1					
Registration 6 of Institutions.	All public and private education institutions are registered with Ministries of Education or relevant government authority.	More than 90% of education institutions are registered with a unique number by the Ministries of education.	more than 80% of education institutions are	Less than 80% and more than 50% of education institutions are registered with a unique number.	Less than 50% of public and private education institutions are registered by Ministries of Education and have a unique number.					

¹⁵ Such a strategy may include induction and orientation of new staff, circulating professional guidelines and codes or constantly training staff on managing professional and ethical questions that may arise.

NORM AVERAGE

NORM 7: REGISTRATION OF LEARNERS

All learners are required to present their birth certificate/records in any given year at any education and training institution.

of learner i data by age	All education institutions report	Quality Statistics Level 4 The Ministry	Acceptable Statistics Level 3 The Ministry	Questionable Statistics Level 2	Poor Statistics Level 1	Score	Comments
of learner i data by age	All education institutions report	The Ministry		Level 2	Level 1		
of learner i data by age	institutions report	•	The Ministry				
r	learners according to valid birth registration documentation	reports accurate and comprehensive age by grade education statistics for all	reports partially on the age of learners for some education institutions.		The Ministry does not report age by grade education statistics for any education institutions.		
t r r k	The Ministry has appropriate consultation with the Ministry responsible for universal	All learners are able to present their birth certificates/record s on entry to education institutions.			Very few learners are able to present their birth certificates/records to education institutions.		

 $^{^{\}rm 16}$ Enrolment by age is collected and published.

B. Resources Availability and Utilization

Adequate resources and their effective use in managing an education management information system has a major impact on the quality of education statistics.

NORM 8: ADEQUATE RESOURCES

The Ministry of Education ensures that resources are commensurate with the statistical programmes, personnel, facilities, equipment, technology, training and financing of their education management information systems.

Components		Standards	Assessment lev	/els				
			Quality Statistics Level 4	Acceptable Statistics Level 3	Questionable Statistics Level 2	Poor Statistics Level 1	Score	Comments
Finance	8.1.1	Allocation of an appropriate budget for EMIS.	The Ministry of Education allocates a ring-fenced 17 adequate percentage of its national education budget for the production of accurate, relevant and timely statistics.	The Ministry of Education allocation of its national education budget for the production of education statistics is sufficient to cover most of the EMIS census and is received within a reasonable timeframe.		There is no specific amount allocated for EMIS purposes. The funding for various activities is on an adhoc basis or sustained by external funding.		
Personnel	8.1.2	There are sufficient qualified personnel in key EMIS positions.	There are sufficient qualified personnel in all key EMIS positions; with the minimum number comprising of an EMIS specialist, education statisticians, system analyst, programmers and education planners	Over 80% of the key EMIS positions are staffed with qualified personnel. At a minimum there is a statistician and programmer and EMIS specialist.	More than 60% of EMIS posts are staffed by qualified personnel with at least on of whom is a statistician.	Less than 60% of EMIS posts are occupied by qualified staff and certain functions are outsourced to external partners		

 $^{^{\}rm 17}\,{\rm secured}$ funding that cannot be moved to other budget lines

		and data capturers at the national level.					
8.1.3	The existence and implementation of professional development strategy ¹⁸ in place for EMIS staff.	The Ministry promotes and implements regular professional development and upgrading through training programs and on-site technical assistance to ensure progress and continuity of EMIS work. District Officers sufficiently trained to manipulate and analyze their local databases. 19	There is a plan and strategy in place and there is training taking place but seldom reaches beyond the national level.	There is a plan in place but there is no training taking place.	There are neither training programs nor strategy in place.		
8.1.4	There is a strategy in place to retain scarce specialist skills.	There is a strategy in place to attract and retain specialist staff in areas of scarce skills by either offering additional incentives and / or performance contracts outside the normal salary post levels.	There is a limited strategy in place to retain scarce specialist skills. Staffs are on the normal salary postings	There is a strategy in place to retain scarce specialist skills but no implementation is occurring.	There is no strategy in place to attract and retain specialist skills.		

¹⁸ Internal and external training programs which include computer programming updates, database management skills, survey administration, planning and budgeting skills, analytical report writing, etc.

 $^{^{\}rm 19}$ Professional development initiatives are across all sub-sectors.

	8.1.5	Participation and	EMIS personnel	EMIS personnel	EMIS staff seldom	1	
		interaction with	annually	occationally	attend conferences on		
		international	participate in	participate each	EMIS related topics. ²⁰		
		networks of EMIS	regional/internatio	year in EMIS	ļ		
		experts.	nal networks and	conferences.			
			conferences of				
			EMIS experts in				
			order to learn and				
			share best				
			practices. The				
			Ministry EMIS				
			experts are				
			recognized as				
			regional resources				
			in EMIS expertise				
			and to improve				
			their expertise.				
Equipment	8.1.6	Adequate	EMIS unit has	Only a few key	EMIS unit has		
-		information	access to quality	EMIS staff has	inadequate access to		
		technology (IT)	IT equipment, with	access to	quality IT equipment		
		equipment and	modern	information	and tools.		
		communication	communication	technology and			
		tools and other	tools ²¹ of	communication			
		necessities.	adequate	equipment that has			
			processing and	sufficient			
				processing and			
			all administrative tiers ²² .	storage capacity.			

²⁰ Tendency for participation to be assigned to inappropriate person.

²¹ Internet, Wide Area Network and Local Area Network. Access to such ICT facilities should not only be at Head Offices but even at Provincial and District Offices

²² Head Office, Region, Provinces and Districts.

NORM 9: COST EFFECTIVENESS

Resources must be effectively used.

Components		Standards	Assessment levels							
			Quality Statistics	Acceptable Statistics	Questionable Statistics	Poor Statistics	Score	Comments		
			Level 4	Level 3	Level 2	Level 1				
Utilization of Resources.	9.1.1	Monitoring of resource utilization	There are internal and external mechanisms in place to monitor the use of EMIS resources ²³ .	Mechanisms are in place to monitor some areas of resource utilization.	Control mechanisms are weak and poorly adhered to.	No mechanisms are used.				
Technology	9.2.1	Utilization of technology.	Information and Communications Technologies (ICTs) are optimized for essential operations in implementing the statistical value chain. 24	ICTs used in most essential operations in the statistical value chain. Their usage enhances productivity.	Use of ICTs is - only limited to data capturing and data processing.	ICTs are not used productively.				
Human Resources Management	9.3.1	Management of human resources	EMIS staff used 90% on their core business in line with their job descriptions.	EMIS staff work on many other activities outside of EMIS, particularly in the areas of IT support troubleshooting and exams.		There are no dedicated EMIS personnel.				
Finance	9.4.1	Utilization of EMIS Funds	EMIS finances are used specifically for EMIS activities and functions. Resources received are effectively used.	EMIS finances are		EMIS funds are diverted to other programmes.				

²³ (e.g. Performance Assessments Frameworks, Audits)

²⁴ Some processes are automated. The productivity potential of ICT is being optimized for data collection, processing and dissemination. Active use of website, CD's, E-mails etc.

C. Statistical Processes

SADC's Protocol on Education and other international standards, guidelines and good practices must be fully observed in the process used by Ministries to organise, collect, process and disseminate official statistics. The credibility of the statistics is enhanced by a reputation for good management and efficiency on statistical production processes. The relevant aspects are sound methodology, appropriate statistical procedures, definitions and classifications of internationally acceptable practices and non-excessive burden on respondents.

NORM 10: SOUND METHODOLOGY AND APPROPRIATE STATISTICAL PROCEDURES

Sound methodology must underpin quality statistics. This requires appropriate statistical procedures throughout the entire statistical value chain.

Components		Standards			Assessme	ent levels	Assessment levels							
			Quality Statistics	Acceptable Statistics	Questionable Statistics	Poor Statistics	Score	Comments						
			Level 4	Level 3	Level 2	Level 1								
Data collection, processing, publication and dissemination methodology	10.1.1	Methodology follows international /national standards or peer agreed standards.	Standardized methodology used which includes a data collection and processing methodology; monitoring of the statistical chain; Definitions of terms and concepts are documented; a standard system for data processing; and necessary user and technical manuals are available.	Standard methodology to most areas of the statistical value chain are in place but not documented.	Standard methodology to some areas of the statistical value chain are in place but not documented.	Methodologies do not follow accepted standards.								
	10.1.2	Piloting and testing	Data collection instruments are piloted prior to administering them. Data entry and database structures are piloted and tested.	Data collection instruments, data entry and database structures are, most of the time (but not always), piloted before their administration.	Piloting may occur but changes are seldom incorporated.	Piloting and testing is not practiced.								

	10.1.3	\\'C' · ·	Data	Data del u	Data vasificati	The same to the state of the	
	10.1.3	Verification processes	Data verification	Data verification	Data verification	There is no data	
			processes in place	processes are built	processes is done	verification.	
			include the	into the statistical	occasionally.		
			following: internal	value chain but			
			control tables in	there are certain			
			the survey	key steps missing.			
			questionnaire;				
			physical checks of				
			the questionnaires				
			by receiving				
			officers;				
			missing data				
			identified and				
			estimated; current				
			enrolment figures				
			and indicators are				
			checked against				
			previous year's				
	10.01		results.				
	10.2.1	Survey designs	Survey designs,	Survey designs and	Survey designs,	No survey designs or	
			sample selections	sample selections	sample selections are	sample selections	
Specialised			and weights follow	are used but there	occasionally used but	used.	
survey			standard	is no proper	there is no		
methodology			methodology and	documentation.	documentation.		
			are properly				
	10.2.2	D (1111 C	documented.				
	10.2.2	Definition of	Procedures are in	Standard concepts,	Standard concepts,	No documented	
		standard concepts	place to ensure	classifications and	classifications and	concepts and	
		and terms are	that standard	definitions are	definitions are	definitions exist.	
		available'	concepts,	mostly documented	documented but do		
		documented and	definitions and	and used.	not satisfy accepted		
		used.	classifications are		standards.		
			consistently applied				
			in the statistical				
	10.2.3	Avoilability of	value chain	Thorogo a standand	Thorogo a standard	Only od hos data	
	. 3.2.0	Availability of	There is a standard	There is a standard	There is a standard	Only ad-hoc data	
		questionnaires for	data collection	data collection	data collection	collection	
		sub-sectors	instrument for each	instrument for	instrument only for	instruments are used.	
			subsector (formal	most subsectors	some subsectors		
			and non-formal	(at least 4).	(less then 4 sub-		
			education).		sectors)		

Record Systems		Compatibility of institutional records	Standardized ²⁵ institutional records ²⁶ compatible with the information needs of the Education Census.	School records are standardized but often not compatible with the information needs of the annual education census instrument.	School record keeping covers a few areas of school management. It is not compatible with the annual education census.	Institutional records not standardized and not compatible with the Annual Education Census.	
10.3	3.2	Imputation of missing data	Appropriate automated editing and scientific imputation systems are used and regularly reviewed, revised or updated as required.	Scientific manual methods are used to calculate some of the missing data.	Non scientific methods are used to calculate the missing data.	There is little effort to calculate the missing data.	
10.3	3.3	Data Revisions	Revisions follow standards and well established and transparent procedures.			Revision methods used do not follow accepted standards, sets of guidelines or transparent practices.	
10.3		Source of population statistics ²⁷	The latest survey or census population estimates and projections obtained from the Statistical authority (CSO/NSO) are used to calculate education indicators.		The latest population figures and institution age breakdown, sometimes obtained from Statistical authority (CSO/NSO) and other times from international sources outside of Statistical authority.	Population estimates are obtained from unauthorized sources.	

²⁵ Standardised in terms of uniformity and quality; there has to be a glossary of standard concepts.

²⁶ Includes all institutions – schools, colleges, universities, etc.

²⁷ This is to make sure that there is one source of population statistics –Central Statistics Office.

NORM 11: NON-EXCESSIVE BURDEN ON RESPONDENTS

The reporting burden should be proportionate to the needs of the users and should not be excessive for respondents. The Ministry of Education monitors the response burden and set targets for its reduction over time.

Components		Standards			Assessm	ent levels		
·			Quality Statistics	Acceptable Statistics	Questionable Statistics	Poor Statistics	Score	Comments
			Level 4	Level 3	Level 2	Level 1		
Essential minimum	11.1.1	Core information needs.	The range and detail of education statistics demands is limited to what is essential.	The range and detail of education statistics collected exceeds their demand by users.		Education statistical surveys are overloaded with detail or do not address the minimum needs of		
	11.1.2	The burden of response.	The burden of responding to questionnaires is spread as widely as possible over survey populations through appropriate sampling techniques in instances where a census of education institutions is not being undertaken.			No sampling is done other than census.		
	11.1.3	Sources of data.	Administrative sources ²⁸ and secondary data are used whenever possible to avoid duplicating requests for information.	Secondary data and administrative records are sometimes used.		No secondary or administrative records are used.		
	11.1.4	Collaboration on education surveys.	The Ministry's EMIS unit is the coordinating and registering body of internal education surveys in collaboration with the national statistical office. This ensures that	Most of the time, EMIS monitors all internal educational surveys. The EMIS unit collaborates with all producers of education surveys.	Sometimes EMIS monitors educational surveys.	EMIS does not monitor other education surveys except education surveys by the Ministry.		

²⁸ Includes EMIS data

	they arbitrate the	
	quantity, quality	
	and standards of	
	surveys undertaken	
	in education and	
	training	
	institutions.	
NORM AVERAGE		

D. Education Information Reporting

Published and disseminated education statistics must meet users' needs. Education statistics need to comply with international quality standards and serve the need of African institutions, governments, research institutions, business concerns and the public generally. The important issues concern the extent to which the statistics are relevant, accurate and reliable, timely, coherent, comprehensive, comparable, over time, across regions and countries and readily accessible by users.

NORM 12: RELEVANCE

Education statistics must meet the needs of users.

Components		Standards			Assessm	ent levels		
			Quality Statistics		Questionable	Poor Statistics	Score	Comments
				Statistics	Statistics			
			Level 4	Level 3	Level 2	Level 1		
User needs	12.1.1	Identification of	Key users ²⁹ of	Key users have	Attempts have been	No attempt has been		
		user needs.	data have been	been identified	made to create a	made to create a user		
			identified with	with some of the	user list. Some user	list.		
			their most recent	contact details but	data and their			
			contact details.	it is not up to	contacts are known,			
				date. The list is	but no proper list			
				more than two	exists. The list is not			
				years old. It is not	complete or			
				current.	regularly updated.			
	12.1.2		Processes ³⁰ are in	Processes are in	Processes are in	No consultations or		
			place to regularly	place but users are	place but	processes on user		
			consult users on	sometimes not	consultations are on	needs in place.		
			their needs,	consulted. There	an ad hoc basis.			
			monitor the	are institutional	There are no			
			relevance and	processes in place	institutional			
			practical utility of	but consultation	processes in place.			
			existing statistics	happens in 80% of				
			in meeting their	the time.				
			needs, and advise					

²⁹ Key users are civil society, development partners, researchers; senior policy makers, government and teachers.

³⁰ Includes a responding to priorities in a register of user requests, a memorandum of understanding between users and producers, annual user satisfaction surveys on publications; annual engagement with key stakeholders in the refining census questionnaires – at least two should be in place to score quality statistics.

		_	<u>, </u>				_
			on their emerging				
			needs and				
			priorities. ³¹				
User and	12.2.1	Feedback	Institutional data			There is no feedback	
producer		reports.	reports are sent	Institutional data	Institutional data	provided to the	
feedback		'	back to all	reports are sent	reports are sent to	institutions and/or	
			institutions and	back to all	some institutions	administrative levels.	
			different	institutions and	and some		
			administrative	different	administrative		
			levels for feedback	administrative	levels. There is little		
			and to allow	levels for	or no follow-up.		
			schools to make	feedback. There is	or no ronow up.		
			comparisons.	some follow-up.			
			Follow-ups are	Some follow up.			
			made.				
Feedback	12.3.1	A User	There is a user	There is no user		There are no user	
collection		Satisfaction	satisfaction survey	satisfaction survey		satisfaction surveys	
00110011011		Survey is	or other formal	but there are other		and no arrangements	
		conducted among	arrangements are	informal		in place.	
		users.	conducted	arrangements in		p	
		400.0.	annually to collect	place to collect			
			feedback from	feedback.			
			users and	Toodbaok.			
			producers of the				
			information ³² , in				
			particular those				
			institutions who				
			are involved in the				
			collection,				
			compilation and				
			reporting of				
			educational				
			information.				
Appropriate	12.4.1	EMIS Strategic		The EMIS strategic	There are annual	No plans in place.	
ness of EMIS		Plan		plan exists but		The plane in place.	
strategies					include EMIS but no		
3			all subsectors and	_	separate Strategic		
			addresses the		Plan for EMIS. It		
			Ministry's nolicy		only deals with some		
			objectives. 33		sub levels of the		
					education system.		
	1			į	1 Saucation System.	j	

 $^{^{\}rm 31}$ Availability of dissemination, briefing, distribution of outputs etc.

 $^{^{\}rm 32}$ Refers to institutions, different administrative levels and other line Ministries.

³³ Exisistence of a documented strategy.

12.4.2 Indicators in	Key indicators are	Analysis of		Analysis and tracking	
Annual	analysed and	indicators in	There is use of	of statistical	
Statistical	tracked to	annual statistical	indicators to	indicators are	
publications	measure	publications	measure the	infrequent. No effort	
	performance of the	largely measures	performance of	is made to make	
	entire education	certain levels of	education. The	comparisons with	
	system.	the education	indicators are limited	internationally	
	International and	system.	to national goals	comparable	
	regional	Occasionally	with little	indicators.	
	•	international and	international		
		regional indicators	comparisons.		
	widely used.	are compared.			
Data 12.5.1	Annual training	Few training	Ad-hoc arrangement		
utilization Key data users	programmes take	programmes are	for participation in	No training is held.	
are trained to u	<u>'</u>	undertaken.	other training		
data effectively			programmes.		
NORM AVERAGE					

NORM 13: ACCURACY AND RELIABILITY

Education statistics must accurately and reliably portray reality. The accuracy of the statistical information is the degree to which the output correctly describes the phenomenon it was designed to measure.

Components	Standards		Assessment levels						
		Quality Statistics	Acceptable Statistics	Questionable Statistics	Poor Statistics	Score	Comments		
		Level 4	Level 3	Level 2	Level 1				
Assessment of coverage of data collection in comparison to the target population	Coverage of the school ³⁴ census.	There is a complete and updated schools master-list which is used to determine the size of the target population. All private and public schools are listed and updated annually.	There is a complete list of public schools which has been updated within the year. The list of private schools is less reliable as updating is more difficult.	There is an incomplete national list of public and private schools which was last updated over a year ago. Comparisons are made with the population size of the previous year.	There is an incomplete national list of schools which is updated irregularly on an ad hoc basis.				

³⁴ Includes preprimary, primary and secondary (junior and senior) schools and technical vocational schools at the secondary level.

13.1.2	Coverage of post secondary (non tertiary) institutions census	There is a complete and updated institutions master-list which is used to determine the size of the target population. All private and public institutions are listed and updated annually.	There is a complete list of public institutions which has been updated within the year. The list of private institutions is less reliable as updating is more difficult.	There is an incomplete national list of public and private institutions which was last updated over a year ago. Comparisons are made with the population size of the previous year.	There is an incomplete national list of institutions which is updated irregularly on an ad hoc basis.	
13.1.3	Coverage of higher and tertiary institutions census	There is a complete and updated institutions master-list which is used to determine the size of the target population. All private and public institutions are listed and updated annually.	There is a complete list of public institutions which has been updated within the year. The list of private institutions is less reliable as updating is more difficult.	There is an incomplete national list of public and private institutions which was last updated over a year ago. Comparisons are made with the population size of the previous year.	There is an incomplete national list of institutions which is updated irregularly on an ad hoc basis.	
Assessment of response rates to the census.	Response rate to the school census.	There is over 95% response rate from both private and public institutions in returning their census questionnaires. Response rates and the assumptions on missing institutions are clearly indicated in statistical reports.	There is 80-94% response rate from public and private institutions in returning their questionnaires. Response rates are sometimes reported.	There is between 50 - 79 % of institutions responding to the census questionnaire. Response rates are not published with the reported statistics.	There are less than 50% of institutions responding to the census questionnaire. Response rates are not reported annually.	
13.2.2	Response rate to the post secondary (non tertiary) census.	There is 80% or above response rate from both private and public institutions in returning their census questionnaires. Response rates	There is 60% - 79% response rate from public and private institutions in returning their questionnaires. Response rates are sometimes reported.	There is between 40 -59 % of institutions responding to the census questionnaire. Response rates are not published with the reported	There are less than 39% of institutions responding to the census questionnaire. Response rates are not reported annually.	

					-1-P-P		
			and the		statistics.		
			assumptions on				
			missing institutions				
			are clearly				
			indicated in				
			statistical reports.				
	13.2.3	Response rate to	There is over 95%	There is 80-94%	There is between	There are less than	
		the higher and	response rate from	response rate from	50 - 79 % of	50% of institutions	
		tertiary census.	both private and	public and private	institutions	responding to the	
		,	public institutions	institutions in	responding to the	census questionnaire.	
			in returning their	returning their	census	Response rates are not	
			census	questionnaires.	questionnaire.	reported annually.	
			questionnaires.	Response rates are	Response rates are	reported armdany.	
			Response rates	reported.	•		
			and the	reported.	not published with		
					the reported		
			assumptions on		statistics.		
			missing institutions				
			are clearly				
			indicated in				
			statistical reports.				
Improving	13.3.1	All non sampling	There are no non -	There are minimal	There are	Data unusable.	
sample		errors are	sampling errors	non-sampling	numerous non-		
surveys		calculated ³⁵ .	(put technique	errors.	sampling errors.		
			here).				
	13.3.2	Measures of	Measures of	Measures of	Measures of	Measures of sampling	
		sampling errors	sampling errors	sampling errors	sampling errors	errors are not	
		for key variables	must be calculated	are published for	are available on	calculated.	
		are calculated	for the main	the main variables.	request for the		
		e.g. Standard	variables. They	Measures of other	main variables		
		error, coefficient	must be available	variables are not	only.		
		of variation.	for the other	available even on	orny.		
		or variation.	variables on	request.			
			request.	request.			
Triangulation	13.4.1	Data consistency.	Annual School	This occasionally	This seldom	This never happens.	
_		Data Consistency.		1		This never happens.	•
of Data			Education Census	happens when you	happens.		
			data is regularly	identify a possible			
			compared with	error.			
			other sources of				
			data - Household				
			Survey data and				
			other data				
			sources.				
NORM AVERAGE	•						

³⁵Poor responses to survey questionnaires either deliberately or due to lack of comprehension or poor conceptualisation by the surveyors.

NORM 14: TIMELINESS AND PUNCTUALITY

Education statistics must be disseminated in a timely and punctual manner.

Components		Standards			A	ssessment levels		
			Quality Statistics	Acceptable Statistics	Questionable Statistics	Poor Statistics	Score	Comments
			Level 4	Level 3	Level 2	Level 1		
Statistics publication	14.1.1	An Annual Statistical report is published.	Annual statistical report is published within the academic year of collection.	Annual statistical report is published within 2 years.	Annual statistical report is published in more than 2 years.	Annual statistical report is not published at all.		
A calendar of publication of data	14.2.1	Guidelines on frequency and release dates for data in place.	Clear guidelines are in place stating the frequency of releasing statistics, and setting out a time frame for their release.	Guidelines on frequency exists but are only adhered to in some instances, with some release dates missed.	Though guidelines on frequency and release dates are in place, they are often disregarded.	No guidelines exist for the frequency of release and release dates. Most of these decisions are left at the discretion of the relevant directorate/departmen t head.		
Punctuality of release	14.3.1	Guidelines on frequency and release dates for data in place.	in place stating the frequency of releasing statistics, and setting out a time frame for the release of statistics.	adhered to in some instances, with some release dates missed.	Though guidelines on frequency and release dates are in place, they are incomprehensive and often disregarded.	No standards or guidelines exist for the frequency of release and release dates. Most of these decisions are left at the discretion of the relevant directorate/departmen t head.		
	14.3.2	Deviation from the dissemination schedule publicised.	dissemination schedule is	Delays in the dissemination of statistics are occasionally published in advance.	Notifications of delays are scarce.	There is no clarity on release dates of data and no justification for delay in data publication is given.		

14.3.3	Preliminary data	Guidelines	Guidelines exist	There are no	No preliminary
	disseminated in	exist making it	making it	guidelines in place	statistics are made
	accordance to	possible to	possible to	ensuring the	available to users.
	set timeframes.	release	release	release of	
		preliminary	preliminary	preliminary data.	
		data. High	data. Preliminary	Preliminary data	
		quality	data is	can be made	
		preliminary	disseminated	available upon	
		data is	but often fails to	request on an ad-	
		disseminated	be within the set	hoc basis.	
		according to	timeframes.		
		the			
		recommended			
		timeframes.			
NORM AVERAGE					

NORM 15: COHERENCE, CONSISTENCY, COMPARABILITY AND INTEGRATION

Education statistics should be coherent and consistent, over time, and comparable between regions and countries; it should be possible to combine and make joint use of related data from different sources

Components		Standards				Assessment levels		
			Quality Statistics	Acceptable Statistics	Questionable Statistics	Poor Statistics	Score	Comments
			Level 4	Level 3	Level 2	Level 1		
Coherence ³⁶ and	15.1.1	Statistics are	Statistics are	Statistics are	Statistics are	No consideration is		
consistency ³⁷ of		compiled on the	always	compiled, most	compiled,	given to the		
data		basis of	compiled on	of the time, on	occasionally, on	compilation of		
		established	the basis of	the basis of	the basis of	statistics on the basis		
		common	common	common	common	of common standards.		
		standards.	standards –	standards.	standards.			
			information on					
			statistical					
			procedures and					
			data dictionary					
			is available ³⁸					
	15.1.2	Statistics are	Statistics use	Statistical	Sometimes	Statistical consistency		
		consistent over	the same	consistency is	statistical	is hardly checked and		
		time.	principles and	mostly checked	consistency is	reported.		
			procedures	and comparison	checked. Errors			
			over time ³⁹).	of datasets	are found in			

³⁶ It reflects the degree to which data sets are logically connected and complete. The degree to which statistics can be brought together with other information

 $^{^{\}rm 37}$ The same definitions and procedures are used over time.

³⁸ with respect to scope (same parameters such as institutional profile, facilities, teacher and learner information, etc), definitions, units of measure and official classifications in the different surveys and sources.

³⁹ Refer to Accounting consistency which is reconciliation across years (missing data is taken into account) and arithmetic consistency is where subtotals add up to totals

	15.1.3	Statistics are coherent over time.	Statistics are coherent or reconcilable over a minimum of five years.	reflects missing data. There are minimal errors and they are reported Current year statistics are comparable to the previous year statistics in most cases.	comparing data across years and within the data set. Current year statistics are sometimes compared to the previous year statistics for	Current year statistics are hardly compared to the previous year statistics for coherence.	
Compatibility	15.2.1	Statistics from different ministries can easily be compared based on . Regional codes, . Schools codes, . location coordinates etc	Statistics are compatible with other government databases (such as central statistical office and other government ministries) through unique identifiers.	Statistics from different sources can and are, in some cases, compared.	coherence. Statistics from different sources can be compared, but with great difficulty as it is seldom done.	Only statistics on administrative locations can be compared. Databases stand alone and have little or no links.	
Comparison with other systems	15.3.1	Statistics are compared with other statistical systems.	Comparisons are made with household surveys and the like when they are appropriate. Cross national comparability of the data is ensured through frequent comparisons with other international statistics (UIS, AU Outlook Database) and regional assessments of country statistics.	National statistics are occasionally reconciled with other national surveys and sometimes involved in international and regional comparisons.		compared with other statistical systems at	

Interpretability	15.4.1	Time series	Five years of	Two years of			
		data to allow for	data is	data is available	Available data makes it		
		effective	available for	for effective	difficult for effective		
		interpretation	effective	interpretation.	interpretation.		
			interpretation.				
NORM AVERAGE							

NORM 16: ACCESSIBILITY AND CLARITY

Education statistics should be presented in a clear and understandable form, disseminated in a suitable and convenient manner, available and accessible on an impartial basis with supporting metadata and guidance

Components		Standards			P	ssessment levels		
			Quality Statistics	Acceptable Statistics	Questionable Statistics	Poor Statistics	Score	Comments
			Level 4	Level 3	Level 2	Level 1		
Clarity of education statistics	16.1.1	The statistics are presented in a clear and understandable manner.	Statistics are analyzed and presented in a form that facilitates proper interpretation and meaningful comparisons.	Statistics are clearly presented but some limited analysis.	Statistics are clearly presented but without analysis	Statistics lack clarity and there is no analysis.		
Dissemination	16.2.1	Annual Statistical reports disseminated utilizing various methods.	Dissemination services use modern information and communication technology tools ⁴⁰ and traditional hard copy.	Statistics are distributed using modern technology mainly with hardcopy reports in limited numbers.	Limited distribution using modern information and communication technology and hardcopy reports.	Statistical reports not disseminated.		
	16.2.2	Regular dissemination strategy in place.	Ministry establishes an information desk to cater for users and customizes its dissemination of annual publications to meet needs of diverse target groups.	Most of the time there is an arrangement to provide information to users but the dissemination is seldom customized to their needs.	There is no established arrangement to provide information to users. However, it is common to cooperate and provide information.	There is no arrangement to provide information other than distribution of annual statistical reports.		

 $^{^{\}rm 40}$ Web sites, internal shared drives, online storage sites, CDs and email.

Metadata	16.4.1	Documentation on metadata exists.	Meta-data documentation exists on the database and documentation includes a data dictionary and information on how the statistics are	Some level of documentation on metadata is available but not complete.	There is no formal documentation on the statistical processes and database but it can be explained verbally by EMIS personnel.	No metadata is documented and no explanation is available.	
	16.2.5	Regular training given for EMIS personnel on analytical reporting.	Annual training on analytical reporting is provided to all levels of EMIS personnel	Annual training on analytical reporting is provided to EMIS personnel at headquarters and the next lower level of the Ministry only.	Ad hoc training on analytical reporting is provided to some levels.	No training on analytical reporting is provided.	
	16.2.4	Analytical reports provided to lower structures.	Lower levels ⁴¹ of government structures receive official or published annual summary statistics (both actual and indicator statistics) appropriate to their area.	Lower levels of government structures receive annual summary statistics most of the time.	Lower levels of government structures receive annual summary statistics sometimes.	Lower levels of government structures do not receive annual summary statistics	
	16.2.3	Users are informed about the statistical processes and outputs.	Users are kept informed through provision of metadata on the methodology of statistical processes and the quality of statistical outputs.			Users are not informed about the statistical processes and statistical outputs.	

⁴¹ Regions, provinces, districts and schools

	collected, produced and stored.		
NORM AVERAGE			

NORM 17: COMPREHENSIVENESS

Education statistics and information are reported on for all sectors of education and training.

Components		Standards			A	ssessment levels		
			Quality Statistics	Acceptable Statistics	Questionable Statistics	Poor Statistics	Score	Comments
			Level 4	Level 3	Level 2	Level 1		
Comprehensive statistics	17.1.1	Education statistics collected on all education sub- sectors are reported on.	Statistics are reported on all sub-sectors of education and training.	Statistics are obtained for sub- sectors under the Ministry of Education but not sub-sectors from other ministries who provide education and training.	Statistics are collected on most sub-sectors of education but tends not to cover private institutions.	Statistics are obtained only on one or two sub-sectors.		
	17.1.2	There are statistics on quality indicators ⁴² in the annual statistical reports.	Statistics within education and training institutions that impact on the quality of education are reported annually.	The annual statistics report(s) include some statistics on quality.	The annual statistical reports include very few statistics on quality.	The annual statistical reports include hardly any statistics on quality.		
	17.1.3	Statistics are disaggregated by gender.	Gender is disaggregated across all levels of education	Distinctions are made by gender in most levels of education but not all.	Gender disaggregation occurs only in basic education and not in the other levels.	No gender disaggregation is found		

⁴² Quality indicators are debatable but at the minimum should include graduation rates and at least three other indicators of efficiency - completion rate, promotion rate, drop out rates, pass rate, educator/learner ratio, textbook pupil ratio disaggregated by gender.

Statistics on	17.2.1	Statistics on	Statistics on				
learners with		learners with	learners with	Statistics on	Statistics on	Statistics on special	
special needs		special needs	special needs	special	special education	education are hardly	
education ⁴³		education is	to be collected	education is	is collected for	collected and reported.	
Gudation		integrated with	at all sub-	collected for the	some sub-sectors	concetted and reported.	
		other education	sectors of	primary and	but not reported		
		statistics.	education.	secondary sub-	in annual		
		Statistics.	These are	sectors and	statistical reports.		
			reported in	reported in	statistical reports.		
			annual	annual statistical			
			statistical	reports.			
			publications.	Toports.			
	17.3.1		Distinctions are	Distinctions are	Separate statistics	Distinct statistics on	
		Statistics are	made between		on urban and rural		
		disaggregated					
		by rural and	characteristics	However, this is	•		
		urban.	(as defined by	not in	,		
			national	accordance with			
			statistical	national			
			offices) of	statistical office.			
Statistics on			learners and				
rural/urban			institutions				
characteristics			where possible.				
NORM AVERAGE							

 $^{^{\}rm 43}$ Learners who are either gifted or have physical or mental challenges to learning.

ANNEXURE A: SCORING MATRIX

Country Date of Assessment	
Please Tick were appropriate	
External Peer Team Assessment Country Assessment Other	
Focus Area A. Policy And Legal Framework	Norm Average Score
Norm 1. Mandate For Data Collection	
Norm 2: Quality Commitment	
Norm 3: Statistical Confidentiality	
Norm 4: Reporting Accountability	
Norm 5: Impartiality And Objectivity	
Norm 6: Registration Of Institutions	
Norm 7: Registration Of Learners	
Focus Area Average	
Focus Area B. Resources Availability And Utilization	Norm Average Score
Norm 8: Adequate Resources	
Norm 9: Cost Effectiveness	
Focus Areas Average	
	1
Focus Area C. Statistical Processes	Norm Average Score
Norm 10: Sound Methodology And Appropriate Statistical Procedures	
Norm 11: Non-Excessive Burden On Respondents	
Focus Area Average	
Focus Area D. Education Information Reporting	Norm Average Score
Norm 12: Relevance	
Norm 13: Accuracy And Reliability	
Norm 14: Timeliness And Punctuality	
Norm 15: Coherence, Comparability And Integration	
Norm 16: Accessibility And Clarity	
Norm 17: Comprehensiveness	
Focus Area Average	
Overall Average of all Standards	
Add each score per standard and divide by 84 (total number of standards)	

ANNEXURE B: EXTERNAL PEER RATING TEAM AND COUNTRY SCORING MATRIX

The Ministry of Education and Peer Review Team engage in joint discussions and reach a consensus on ranking. In cases where the country assessment and the peer assessment differ significantly and no consensus on scoring is reached the two scores shall be averaged with the country score constituting 45% and the Peer Review Team 60%.

Focus Area A. Policy And Legal Framework	Country Score	Peer Review Team Score	Average Score
Norm 1. Mandate For Data Collection			
Norm 2: Quality Commitment			
Norm 3: Statistical Confidentiality			
Norm 4: Reporting Accountability			
Norm 5: Impartiality And Objectivity			
Norm 6: Registration Of Institutions			
Norm 7: Registration Of Learners			
Focus Area Average			

Focus Area B. Resources Availability And Utilization	Country Score	Peer Review Team Score	Average Score
Norm 8: Adequate Resources			
Norm 9: Cost Effectiveness			
Focus Areas Average			

Focus Area C. Statistical Processes	Country Score	Peer Review Team Score	Average Score
Norm 10: Sound Methodology And Appropriate Statistical Procedures			
Norm 11: Non-Excessive Burden On Respondents			
Focus Area Average			

Focus Area D. Education Information Reporting	Country Score	Peer Review Team Score	Average Score
Norm 12: Relevance			
Norm 13: Accuracy And Reliability			
Norm 14: Timeliness And Punctuality			
Norm 15: Coherence, Comparability And Integration			
Norm 16: Accessibility And Clarity			
Norm 17: Comprehensiveness			
Focus Area Average			

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