

Policy Levers	Indicators	Description of Best Practices	Scoring				
			Latent	Emerging	Established	Advanced	
POLICY AREA 1: ENABLING ENVIRONMENT		The system contains crucial components of a comprehensive enabling environment, which addresses related policy elements and enables the functioning of an effective and dynamic system	The system lacks major components of a comprehensive enabling environment	The system contains basic components of a comprehensive enabling environment	The system contains most components of a comprehensive enabling environment	The system contains crucial components of a comprehensive enabling environment	
1.1	Legal Framework	Institutionalization of system: EMIS is institutionalized as an integral part of the education system and the government	There is an existing legal framework to support a fully-functioning EMIS	There is not a legal framework in place	Basic components of a legal framework or informal mechanisms are in place	Most elements of a legal framework are in place	There is an existing legal framework to support a fully-functioning EMIS
		Responsibility: responsibility for collecting, processing, and disseminating education statistics is given to a clearly designated institution or agency					
		Dynamic framework: the legal framework is dynamic and elastic so that it can adapt to advancements in technology					
		Data supply: the legal framework mandates that schools participate in the EMIS by providing education data					
		Comprehensive, quality data: the requirement for comprehensive, quality data is clearly specified in the EMIS legal framework					

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		<p>Data sharing and coordination: the legal framework allows for adequate data sharing and coordination between the Ministry of Education and agencies and/or institutions that require education data</p> <p>Utilization: the legal framework emphasizes data-driven education policy</p> <p>Budget: the education system budget includes a line item for the EMIS</p> <p>Confidentiality: the legal framework guarantees that respondents' data are confidential and used for the sole purpose of statistics</p>					
1.2	Organizational structure and institutionalized processes	Organizational structure and institutionalized processes	The system is institutionalized within the government, has well-defined organizational processes, and has several functionalities beyond statistical reporting	The system is not specified in policies and what exists does not have well-defined organizational processes; EMIS has limited functionalities	The institutional structure of the system is not clearly specified in policies, it has some organizational processes and its functionalities are limited	The institutional structure of the system is defined within the government, it has defined organizational processes, but its functionalities are limited	The system is institutionalized within the government, has well-defined organizational processes, and has several functionalities beyond statistical reporting
1.3	Human resources	Personnel: the core tasks of the EMIS are identified and the EMIS is staffed with qualified people	Qualified staff operate the system and opportunities are available to improve their	Minimum standards of qualification are not met for the majority of staff that operate the system and	Some staff are qualified to operate the system and limited opportunities are available to	The majority of staff are qualified to operate the system and frequent opportunities are available to	All staff are qualified to operate the system and well-established opportunities are constantly available to improve staff

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		Professional development: professional training is available for EMIS staff	performance and retention	opportunities are not available to improve their performance and retention	improve staff performance and retention	improve staff performance and retention	performance and retention
1.4	Infrastructural capacity	Data collection: tools for data collection are available	The system has a well-defined infrastructure to perform data collection, management, and dissemination functions in an integral manner	The system lacks a well-defined infrastructure	The system has a basic or incomplete infrastructure	The system has an infrastructure that allows it to perform some of its functions in an integral manner	The system has a well-defined infrastructure to fully perform its data collection, management, and dissemination functions in an integral manner
		Database(s): databases exist under the umbrella of the data warehouse and have both hardware and software means					
		Data management system: there is a system in place that manages data collection, processing, and reporting					
		Data dissemination: data dissemination tools are available and maintained by the agency producing education statistics					
1.5	Budget	Personnel and professional development: the EMIS budget contains a specific budget for EMIS personnel and their professional development	The system budget is comprehensive, ensuring that the system is sustainable and efficient	The system suffers from serious budgetary issues	The system has a basic or incomplete budget	The system budget contains the majority of required categories to ensure that most parts of the system are sustainable and efficient	The system budget is comprehensive, ensuring that the system is sustainable and efficient
		Maintenance: the EMIS budget contains a specific budget for system maintenance and recurrent costs					
		Reporting: the EMIS budget contains a specific budget for reporting costs					
		Physical infrastructure: the EMIS budget contains a specific budget for physical infrastructure costs					

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		Efficient use of resources: processes and procedures are in place to ensure that resources are used efficiently					
	Data-driven Culture	Data-driven Culture	A data-driven culture prioritizes data as a fundamental element of operations and decision making, both inside and outside of the education system.	The system suffers because there is not a data-driven culture that prioritizes data management and data utilization in decision making.	The system has a data-driven culture that demonstrates a basic appreciation of data and interest in developing better data utilization practices.	A data-driven culture exists that prioritizes data management and utilization within and beyond the education system.	A data-driven culture exists that prioritizes data management and utilization within and beyond the education system and evidence of that culture is present in daily interaction and decision-making at all levels.
POLICY AREA 2: SYSTEM SOUNDNESS			The processes and structure of the EMIS are sound and support the components of an integrated system	The system lacks processes and structure	The system has basic processes and a structure that do not support the components of an integrated system	The system has some processes and a structure, but they do not fully support the components of an integrated system	The processes and structure of the system are sound and support the components of an integrated system
2.1	Data architecture	Data architecture	The data architecture is well-defined to ensure full system functionality	The system's data structure does not have a well-defined data architecture	The system's data architecture includes some components, however, it is incomplete	The system's data structure has most elements of the data architecture, however, it has some deficiencies that affect the system's functionality	The data architecture is well-defined to ensure full system functionality
2.2	Data coverage	Administrative data: the EMIS contains administrative data	The data in the system is comprehensive	The data in the system is far from being	The data in the system includes	The data in the system includes	The data in the system is comprehensive and

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		Financial data: the EMIS contains financial data Human resources data: the EMIS contains human resources data Learning outcomes data: the EMIS contains learning outcomes data	and covers administrative, financial, human resources, and learning outcomes data	comprehensive and coverage is limited	some of the data areas	most but not all of the data areas	covers all data areas
2.3	Data analytics	Data analytics	Tools and processes are available to perform data analytics at different levels on a regular basis	There are tools and processes to perform limited tabulations	Basic tools and processes are available, but the system is not capable of conducting advanced analytical steps (e.g., predictive models, projections, etc.)	Tools and processes are available; however, data analytics are not performed regularly	Tools and processes are available to perform data analytics at different levels on a regular basis
2.4	Dynamic system	Quality assurance measures: the system is dynamic and maintains quality assurance measures Data requirements and considerations: there are mechanisms for addressing new and emerging data requirements System adaptability: the EMIS is elastic and easily adaptable to allow for changes and/or advancements in data needs	The system in place is elastic and easily adaptable to allow for changes/advancements in data needs	The system in place is not easily adaptable to changes/advancements in data needs, as no quality assurance standards are used	The system in place is not easily adaptable and requires significant time and resources to accommodate changes and/or advancements	The system in place is easily adaptable, but it remains reasonably complex	The system in place is elastic and easily adaptable to allow for changes / advancements in data needs
2.5	Serviceability	Validity across data sources: information brought together from different data and/or statistical frameworks in the EMIS is placed within the data warehouse using structural and consistency measures	Services provided by the system are valid across data sources, integrate non-education databases into the EMIS, and archive	There are serious issues related to data validity and consistency	There are inconsistencies related to data validity and consistency	The data is consistent and valid; however, some concerns still exist	Services provided by the system are valid across data sources, integrate non-education databases into the EMIS, and archive

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		Integration of non-education databases into EMIS: data from sources collected by agencies outside of the EMIS are integrated into the EMIS data warehouse Archiving data: multiple years of data are archived, including source data, metadata, and statistical results Services to EMIS clients: Services provided by the system to EMIS clients include ensuring the relevance, consistency, usefulness, and timeliness of its statistics	data at the service of EMIS clients by ensuring the relevance, consistency, usefulness, and timeliness of its statistics				data at the service of EMIS clients by ensuring the relevance, consistency, usefulness, and timeliness of its statistics
POLICY AREA 3: QUALITY DATA			The system has the mechanisms required to collect, save, produce, and utilize information, which ensures accuracy, security, and timely, high-quality information for use in decision making	The system lacks mechanisms to collect, save, or produce timely, high-quality information for decision making	The system has basic mechanisms to collect, save, and produce timely, quality information; however, its accuracy might be questionable	The system has most mechanisms in place needed to collect, save and produce timely, high-quality information for use in decision making; however, some additional measures are needed to ensure accuracy, security, and/ or timely information that can be used for decision making	The system has the required mechanisms in place to collect, save, produce, and utilize information, which ensures accuracy, security, and timely, high-quality information for use in decision making
3.1	Methodological soundness	Concepts and definitions: data fields, records, concepts, indicators and metadata are defined and documented in official operations manuals along with other national datasets, and endorsed by the government	The methodological basis for producing educational statistics from raw data follows	The methodological basis for producing educational statistics does not follow internationally	The methodological basis for producing educational statistics follows the basics of	The methodological basis for producing educational statistics follows most required	The methodological basis for producing educational statistics from raw data follows internationally accepted standards,

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		Classification: there are defined education system classifications based on technical guidelines and manuals	internationally accepted standards, guidelines, and good practices	accepted standards, guidelines, or good practices	internationally accepted standards, guidelines, and good practices	internationally accepted standards, guidelines, and good practices	guidelines, and good practices
		Scope: the scope of education statistics is broader than and not limited to a small number of indicators (e.g., measurements of enrollment, class size, and completion)					
		Basis for recording: data recording systems follow internationally accepted standards, guidelines, and good practices					
3.2	Accuracy and reliability	Source data: available source data provide an adequate basis for compiling statistics	Source data and statistical techniques are sound and reliable, and statistical outputs sufficiently portray reality	Source data and statistical techniques lack soundness and reliability	Source data and statistical techniques have basic soundness and reliability, but statistical outputs do not portray reality	Source data and statistical techniques follow most required elements to be sound and reliable, but statistical outputs do not portray reality	Source data and statistical techniques are sound and reliable, and statistical outputs sufficiently portray reality
		Validation of source data: source data are consistent with the definition, scope, classification, as well as time of recording, reference periods, and valuation of education statistics					
		Statistical techniques: statistical techniques are used to calculate accurate rates and derived indicators					
3.3	Integrity	Professionalism: EMIS staff exercise their profession with technical independence and without outside interference that could result in the violation of the public trust in EMIS statistics and the EMIS itself	Education statistics contained within the system are guided by principles of integrity	Education statistics contained within system are not guided by principles of integrity	Education statistics contained within the system are guided by limited principles of integrity (1 of the 3 principles of professionalism,	Education statistics contained within the system are mostly guided by principles of integrity (2 of the 3 principles of professionalism,	Education statistics contained within the system are guided by all 3 principles of integrity: professionalism, transparency, and ethical standards
		Transparency: statistical policies and practices are transparent					

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		Ethical standards: policies and practices in education statistics are guided by ethical standards			transparency, and ethical standards)	transparency, and ethical standards)	
3.4	Periodicity and timeliness	Periodicity: the production of reports and other outputs from the data warehouse occur in accordance with cycles in the education system	The system produces data and statistics periodically in a timely manner	The system produces data and statistics neither periodically nor in a timely manner	The system produces some data and statistics periodically and in a timely manner	The system produces most data and statistics periodically and in a timely manner	The system produces all data and statistics periodically and in a timely manner
		Timeliness: final statistics and financial statistics are both disseminated in a timely manner					
POLICY AREA 4: UTILIZATION FOR DECISION MAKING			The system is wholly utilized by different users for decision making at different levels of the education system	There are no signs that the EMIS is utilized in decision making by the majority of education stakeholders	The system is used by some education stakeholders, but not for major policy decision making	The system is used by most education stakeholders, but is not fully operational in governmental decision making	The system is wholly utilized by different users for decision making at different levels of the education system
4.1	Openness	EMIS stakeholders: EMIS primary stakeholders are identified and use the system in accordance with the legal framework	The system is open to education stakeholders in terms of their awareness and capacity to utilize the system	The system lacks openness to education stakeholders in terms of their awareness and capacity to utilize the system	The system is open to some education stakeholders in terms of their awareness and capacity to utilize the system	The system is open to the majority of education stakeholders in terms of their awareness and capacity to utilize the system	The system is open to all education stakeholders in terms of their awareness and capacity to utilize the system
		User awareness: current and potential EMIS users are aware of the EMIS and its outputs					
		User capacity: EMIS users have the skills to interpret, manipulate, and utilize the data produced by the system in order to ultimately disseminate findings					
4.2	Operational use	Utilization in evaluation: Data produced by the EMIS is used to assess the education system	Data produced by the system is used in practice by the main education stakeholders	Data produced by the system is not used in practice by education stakeholders	Data produced by the system is used in practice by some education stakeholders	Data produced by the system is used in practice by the majority of education stakeholders	Data produced by the system is used in practice by the main education stakeholders
		Utilization in governance: Data produced by the EMIS is used for governance purposes					

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		Utilization by schools: Data produced by the EMIS is used by schools					
		Utilization by clients: data produced by the EMIS is used by clients (including parents, communities, and other actors)					
		Utilization by government: the system is able to produce summative indicators (derived variables) to monitor education system					
4.3	Accessibility	Understandable data: data are presented in a manner that is easily digestible	Education statistics are presented in an understandable manner, are widely disseminated using clear platforms for utilization, complemented by user support	The system suffers from serious accessibility issues	The system has major accessibility issues	The system has minor accessibility issues	Education statistics are presented in an understandable manner, are widely disseminated using a clear platform for utilization, complemented by user support
		Widely disseminated data: education statistics are disseminated beyond the Ministry of Education and/or the education statistics-producing agency to other EMIS stakeholders					
		Platforms for utilization: platforms are standardized across the EMIS and are customizable to user needs					
		User support: assistance is provided to EMIS users upon request to help them access the data					
4.4	Effectiveness in disseminating findings	Dissemination strategy: national governments have an information dissemination strategy in place	Dissemination of education statistics via an	Dissemination is neither strategic nor effective	Dissemination is reasonably	A dissemination plan has been implemented;	The dissemination of education statistics via an

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		Dissemination effectiveness: dissemination of EMIS statistics is effective	EMIS is strategic and effective		strategic, but ineffective	however, there is room for improvement (for full effectiveness in relation to strategic engagement)	EMIS is strategic and effective