ECONOMIC COMMUNITY OF WEST AFRICAN STATES STATES (ECOWAS)

DRAFT
Regional Capacity Building Strategy for EMIS

2012

Prepared by ADEA Working Group on Education Management and Policy Support for the ECOWAS Commission

ACKNOWLEDGEMENTS

FOREWORD

The Association for the Development of Education in Africa, ADEA, has since the launch of the African Union's Plan of Action for the Second Decade of Education aligned its strategic objectives and work efforts with this continental initiative.

ADEA is a Pan-African network organisation formulated out of the need to create forums for development partners (multi and bi-laterals) to engage in policy dialogue on critical education challenges with senior decision makers in government. We have nine Working Groups focusing on key areas in Education, which include Higher Education, Books and Learning Materials, Early Childhood Development, Non-formal Education, Distance Education, Maths and Science, Teacher Development, Communication for Education and Development and a merged Working Group on Education Management and Policy Support – all of whom work with the AU's Plan of Action in various ways. Governed by the Ministers of the Bureau of the Conference of Ministers of Education of the African Union (COMEDAF) and key development partners, we are proud of our achievements in ensuring that the African Union's Priority Areas in its Plan of Action are increasingly realized.

The ADEA Working Group on Education Management and Policy Support (WGEMPS) is the African Union's lead technical agency in both assisting the AU Observatory to monitor the implementation of the Plan of Action for the Second Decade and in facilitating the achievements proposed under the EMIS priority goals, one of which is to build capacity in this field in the ECOWAS region.

The African Union's roadmap for the continent advocates for harmonized and integrated EMIS nationally and regionally. There is a critical need for timely, accurate and reliable education statistics and information which underpins sound policy formulation, evidence-based planning and budgeting and effective monitoring and evaluation. The goal is to enhance the general performance of the entire education sector and provide an opportunity to the stakeholders to assess and monitor the progress made by the continent's education sector.

All major achievements are as a consequence of the collaboration and commitment of key technical and financial partners. Under the leadership of the AU Observatory, with full support by the ECOWAS Commission's education and statistics divisions, ADEA together with the African Development Bank's Statistics Department have facilitated considerable reflection and agreement on strategies among Member States to building their EMIS capacities.

I am confident that this EMIS Capacity Building Strategy will inform the development process of stakeholders' and development partners' annual work plans at regional and country levels and assist in identifying potential areas of synergy and collaboration to avoid duplication and wastage of resources.

I would therefore like to take this opportunity to encourage all partners supporting EMIS initiatives in Africa to use this publication as a source of information that guides their interventions. In particular, we would like to thank GIZ's BACKUP Initiative project for education in Africa, for funding the consultation process among ECOWAS Member States on the proposed EMIS Capacity Building Strategy so that a consensual proposal can be submitted to ECOWAS Ministers of Education.

Ahlin BYLL-CATARIA

Executive Secretary, ADEA

ACRONYMS

ADEA	Association for the Development of Education in Africa
AfDB	African Development Bank
AIDS	Acquired Immune Deficiency Syndrome
ASC	Annual School Census
AU	African Union
AUC	African Union Commission
CIEFFA	International Centre for Girls' and Women's Education in Africa
CSO/NSO	Central Statistics Office or National Statistical Office
DQAF	Diagnostic Quality Assessment Framework
EAC	East African Community
ECCAS	Central African States Community
ECCE	Early Childhood Care and Education
ECOWAS	Economic Community of West Africa States
EFA	Education for All
EMIS	Education Management Information Systems
FMD	Financial Management Database
GIS	Geographic Information System
HIV	Human Immuno-deficiency Virus
ICT	Information and Communication Technology
IPED	Pan African Institute for Education and Training
ISCED	International Standard Classification system of Education
MIS	Management Information Systems
M&E	Monitoring and Evaluation
MoE	Ministry of Education
NFE	Non Formal Education
PASEC	Analysis Programme of the CONFEMEN Education Systems
PID	Payroll Information Database
PRSPs	Poverty Reduction Strategy Programmes
REC	Regional Economic Community
SACMEQ	Southern and Eastern Consortium for Monitoring Education Quality
TTCs	Teacher Training Colleges
TVET	Technical and Vocational Education and Training
UIS	UNESCO Institute for Statistics
UNESCO	United Nations Educational, Scientific and Cultural Organization
WGEMPS	Working Group on Education Management and Policy Support

Contents

EXECUTIVE SUMMARY

The African Union's Plan of Action for the Second Decade of Education for Africa (2006-2015) takes into consideration the critical challenges and lessons learnt from the implementation of the First Decade of Education for Africa (1997-2006) where it appears that most of the expected outcomes were not achieved for most African Member States. The evaluation of the previous decade's outcomes indicated that there was a crucial lack of evidence-based data and information to assess the value of achievements made in reaching certain education goals. The current Second Decade of Education for Africa's Plan focuses on eight priorities areas of intervention, one of which is Education Management and Information System (EMIS). It is considered an essential element for improving the quality and effectiveness of management of education and training. Ministries of the education and training sector are being asked to reverse the "data blank" phenomena which currently typify African education statistics, by setting in place effective and robust EMIS systems which will provide accurate and reliable data and information for supporting planning processes, monitoring and evaluation and policy formulation within national, regional and international frameworks.

Central to the implementation of the AU's EMIS objectives is the leadership and guidance of its associated observatories, in particular the Pan African Institute for Education and Training (IPED), based in the Democratic Republic of the Congo (DRC) and the International Centre for Girls' and Women's Education in Africa (known by its French acronym as CIEFFA) based in Burkina Faso. The former is responsible for monitoring the implementation of the Plan of Action and reporting on continental and regional performance on all priority goals by producing analytical reports based on statistical indicators. Similarly, CIEFFA monitors the implementation of gender-related goals using national and regional indicators. The building of national EMIS capacities to produce accurate and comprehensive statistics is core to the concerns of these observatories.

Partnership and coordination in supporting the implementation of the AU 's Plan of Action

Under the chair of the AU Observatory, IPED, the AU Restricted EMIS Technical Committee plans the roll-out of EMIS capacity building initiatives on the continent. The Committee, which meets annually, consists of representatives of the AU Department of Economic Affairs, Statistics Division, CIEFFA, Analysis Programme of the CONFEMEN Education Systems (PASEC), UNESCO Institute for Statistics (UIS), United Nations Children's Fund (UNICEF), African Development Bank (AfDB) as well as at least two representatives from each of the regional economic communities of the Common Market for Eastern and Southern Africa (COMESA), the East African Community (EAC), the Economic Community for West African States(ECOWAS), and the Southern African Development Community (SADC). ADEA's Working Group on Education Management and Policy Support (WGEMPS) acts as the secretariat to the committee. This mechanism ensures effective coordination of education sector stakeholders' and development partners' efforts in supporting the AU's EMIS programmes at national and regional levels.

The AU EMIS Initiative

The AU EMIS initiative, under the AU Restricted EMIS Technical Committee, has identified, elaborated and trained countries on 55 indicators for tracking their performance in implementing the Plan of Action. Biennially, a continental report and individual reports for countries and regional economic communities are produced for consideration by the Committee of Ministers of Education of Africa (COMEDAF). These reports, produced by

ADEA on behalf of the AU, are based on a continental education statistics database of all African countries, hosted by the AU's Observatory. [1] In order to address "data blanks", the AU EMIS initiative has adopted a three phase strategy through regional economic community commissions or secretariats, whereby countries' EMIS capacities are assessed through a self- reporting survey which feeds into the development of a strategy for capacity building. Alongside this process, Member States engage in deliberating and customizing a code of practice in terms of EMIS policy, resourcing, statistical processes and information dissemination. This is known as EMIS Norms and Standards. The regional economic communities of SADC, ECOWAS, ECCAS and EAC are at different phases of implementation of the AU EMIS strategy.

ECOWAS education management strategies

ECOWAS has a comprehensive education protocol, adopted in 2002, which maps out regional development goals which include sharing relevant information and data on education and training needs of the region, resource mobilisation, coordinated policy formulation and implementation strategies. Increasingly, EMIS is recognised as critical to a results-based management approach and as a critical tool for financial management, planning, monitoring and evaluation of education programmes and services. Nevertheless, most ECOWAS Member States face several challenges in producing accurate and comprehensive education statistics. These challenges are related to institutional, organisational, human, material and technical deficits at all levels and stages. In addition, data coordination and reporting mechanisms remain very weak in the context of a fragmented education sector involving several ministries.

ECOWAS EMIS capacity building

Based on challenges faced by EMIS Units within the ECOWAS region, this EMIS capacity building strategy has been developed to establish effective mechanisms and strategies to promote EMIS development in the region. This includes creating national and regional south-south cooperation frameworks for addressing EMIS development issues. The proposed regional statistical capacity building strategy has six main components:

1. Policy and legal framework.

2. Statistical processes and methodologies.

3. Sub-sector EMIS development.

4. Data quality improvement and coverage.

5. Resource availability, adequacy and utilization.

6. Education information reporting.

Under the ECOWAS Commission's leadership, the implementation strategy will put emphasis on effective partnership, coordination and reporting mechanisms that will allow joint planning and sharing of information on programmes related to EMIS development with all stakeholders and development partners. The ECOWAS EMIS technical committee, composed of ECOWAS Member States' EMIS experts, will be expected to support the regional EMIS development strategy with respect to the committee's terms of reference agreed to at the 2010 experts meeting in Lomé. A budget summary for implementing the EMIS capacity building strategy is shown below.

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[1] Statistics largely sourced from UIS and the database customized from UNICEF's DevInfo

Priority Area	Budget per year (USD)					Total (USD)
	Yr1	Yr2	Yr3	Yr4	Yr5	
1. Policy and legal infrastructure	101 723	412 590	20 343	20 344		555 000
2. Statistical Processes and Methodologies	10 274	93 836	262 329	167 807	65 754	600 000
3. Sub-sector EMIS development		160 000	160 000	160 000	160 000	640 000
4. Data Quality Improvement		33 333	16 667	25 000	25 000	100 000
5. Resource availability and adequacy		192 686	390 027	292 288	174 999	1 050 000
6. Education Information Reporting			68 054	68 061	38 885	175 000
Yearly totals (USD)	111 997	892 445	917 420	733 500	464 638	3 120 000

The budget figures have been estimated based on the proposed activities matrix under the priority areas listed in the summary for the five-year period 2012 to 2016.

Conclusion

If education interventions and programmes cannot be measured and assessed statistically, it is almost impossible to value their costs and benefits. The African Union, through its Plan of Action for Education in the Second Decade, has put in place a framework that enables such a process to be realized for the continent. The development of EMIS – one of the key priority areas – is crucial to the success of the Plan.

This regional capacity building strategy therefore seeks to strengthen the EMIS capacity and practice in ECOWAS based on adherence to regional norms, expressed in the Norms and Standards Assessment Framework, and international codes of practice in the production and use of quality social statistics. Its successful implementation shall be guided by, among others, strong leadership and effective coordination from the ECOWAS Commission, commitment and support from the region's Member States and external partners as well as the mobilization of adequate resources.

INTRODUCTION

The African Union's vision of integration, peace and prosperity in the global economy is predicated on the development of Africa's human resource capital. Education is therefore key in achieving this vision and is supported by a number of international policy frameworks such as Education for All (EFA), Millennium Development Goals (MDGs) and the African Union's own Plan of Action for Education in the Second Decade.

Education Management Information Systems (EMIS) is one of the eight priority areas of the AU Plan of Action. The Plan specifies that the goal of this strategic area is to "reverse the current phenomenon of 'data blanks' and facilitate planning based on sound information; enhance rigorous monitoring and evaluation of the performance of education systems".[2] At the heart of it is to establish a well-functioning and sustainable EMIS at continental, regional and national levels.

In 2003, the Economic Community of West African States (ECOWAS) raised the profile of the education sector regionally with the adoption by its Member States of their Regional Protocol on Education and an ECOWAS Convention on the recognition and the equivalence of degrees, diplomas and other qualifications. The protocol sets out priority objectives in education and the means to achieve them within the framework of Member States' cooperation. In 2010, the ECOWAS Education, Culture, Science & Technology Department through its education desk committed itself to the AU Plan of Action's initiative on EMIS, among others, and called Member States to a meeting in Lomé, Togo and later Monrovia, Liberia to explore strategies to empower this management function. Taking cue from their Commission, Member States called for enhanced regional networking and sharing of experiences on EMIS, timely and regular publication of statistical yearbooks, the adoption of regional norms and standards on EMIS and the establishment of an ECOWAS EMIS Technical Committee.

Under the African Union EMIS initiative and with technical support of ADEA and AfDB Statistics Department's Statistical Capacity Building programme, ECOWAS embarked on a series of steps to improve their Member States' information management systems in 2010. The first initiative was to conduct an EMIS Capacity Assessment Survey and Report which reviewed Member States' policies, structures, information coverage and areas of capacity development need. This report forms the basis of the ECOWAS Regional Capacity Building Strategy presented here. Parallel to this process, ECOWAS Member States have engaged in a process of developing and refining an EMIS Norms and Standards Assessment Framework to ensure regional codes of conduct in implementing EMIS. An assessment framework was developed by technical specialists from five Member States and then submitted to all ECOWAS EMIS experts for their modification and validation. In September 2012, these norms and standards and the assessment framework will be submitted to ECOWAS Ministers of Education for their validation.

METHODOLOGY

The ECOWAS EMIS Assessment Report produced in 2010 on Member States' policy framework, resourcing and statistical practices provides the basis for informing the statistics capacity building strategy report.

The strategy has integrated elements and issues emanating from the outcomes of initiatives and country consultations that sought to determine the status of EMIS in the ECOWAS region through a survey assessment

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[2] AUC (2006) The 2nd Decade of Education for Africa (2006-2015), p.6

carried out in 2010 involving 12 Member States, developing EMIS norms and standards code of practice for benchmarking regional progress in EMIS and formulating a framework of indicators for monitoring the implementation of the ECOWAS Plan on Education and Training. Three regional technical meetings were held between December 2009 and January 2011 in Lomé, Monrovia and Ouagadougou respectively. ECOWAS EMIS experts met to discuss and develop an ECOWAS EMIS development roadmap and identify capacity gaps and areas of promising practices. This has led to the development and finalization of this EMIS capacity building strategy.

The report comprises seven chapters grouped into two main parts:

Part I: Strategic Framework which covers:
- Chapter 1 on background information on ECOWAS vision, mission statement and its Education and Training Protocol,

- Chapter 2 on the conceptual framework of capacity building,

- Chapter 3 on trends in EMIS development in Africa in general as well the status of EMIS in the ECOWAS region and finally the current initiative in EMIS in the ECOWAS region,

- Chapter 4 on ECOWAS EMIS assessment of Member States and the development of a capacity development response, management, resourcing and monitoring

Part II: Plan of Action 2011-2015 which includes the goals, objectives, expected outcomes, strategies for implementation and a matrix of activities for 2012-2016.

PART 1: STRATEGIC FRAMEWORK

CHAPTER 1: The ECOWAS COMMISSION

About ECOWAS

The Economic Community of West African States (ECOWAS) was established on the 28th of May 1975 in Lagos, Nigeria with the adoption of the ECOWAS Treaty which was revised in 1993 to accelerate the process of regional integration. It is composed of 15 West African countries:

- Eight Francophone countries: Benin, Burkina Faso, Côte d'Ivoire, Guinea, Mali, Niger, Senegal and Togo

- Five Anglophone countries: The Gambia, Ghana, Liberia, Nigeria and Sierra-Leone

- Two Lusophone countries: Cape Verde, Guinea-Bissau

The region had an estimated population of 304 million in 2010 and is projected to be 345 million by 2015. [3] ECOWAS accounts for 29.7 per cent of sub-Saharan Africa's population, making it one of the most populated regional economic communities in Africa. The land area, 5,110,914 km², stretches from the Cape Verde archipelago in the West to Nigeria in the East.

Vision and principles

The vision of ECOWAS is to achieve "a region without borders in which the populations can access and are able to harness its abundant resources by creating opportunities for the population and sustainable environment."[4] The region's overarching objective is to promote cooperation and integration, leading to the establishment of an Economic and Monetary Union in West Africa that drives the region's economic growth and contributes to the continent's progress and development.

Equality and interdependence of Member States, accountability, economic and social justice as well as the promotion and consolidation of democracy and good governance are among the key fundamental principles guiding the region.

Mission statement

Its mission is to promote economic integration in "all fields of economic activity" including social and cultural matters. Through the development of a comprehensive, integrated, compatible and functional EMIS, ECOWAS seeks to "improve the utilisation of current and relevant education data for planning, decision making and monitoring at national and regional levels."

ECOWAS Education and Training Protocol

The ECOWAS Education and Training Protocol was endorsed during the ECOWAS Ministers of Education's first conference held in Dakar, Senegal from 24 to 26 September 2002. The Protocol seeks to derive optimum benefits from education in the region through resource mobilization and the harmonization of policies,

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[3] UN Population Council, http://www.un.org/esa/population/
[4] Source : ECOWAS Regional report on Education, October 2009
http://www.africa-union.org/root/AR/index/ECOWAS REPORT TO COMEDAF EDUCATION.doc

programmes and strategies that promote the provision of equal educational opportunities for all citizens through a regionally integrated education system in terms of access, equity, relevance and quality of education – which invariably relies on the development of an effective EMIS network in ECOWAS.

The protocol addresses a wide range of areas of education, covering education and training policies in basic and secondary education, including adult education; intermediate level of education and training and higher education. In addition, the ECOWAS protocol puts emphasis on the Convention on Equivalence of Certificates to promote regional cooperation in the assessment and recognition of degrees, certificates and other qualifications. It seeks to widen cooperation among the countries and strengthen collaboration in manpower and the exchange of skills and pursuit of studies.

Introduction to the Focus of the Strategy

ECOWAS has developed this EMIS capacity building strategy, through ADEA's Working Group on Education Management Policy Support (WGEMPS), in response to a commitment by the ECOWAS Ministers of Education and Training to "provide adequate resources and establish funding benchmarks for EMIS as a measure of their political will".[5]

CHAPTER 2: CONCEPTUAL FRAMEWORK

Key national sector plans and international policy agendas on development in education shape and enhance the drive for our governments to address statistical capacity and supply in their ministries. The eight Millennium Development Goals – which range from halving extreme poverty to halting the spread of HIV/AIDS and providing universal primary education, all by the target date of 2015 – form a blueprint agreed to by all the world's countries and the entire world's leading development institutions.

Similarly, the Education For All goals dictate key statistical indicators that ministries of education need to monitor and assess progress on these targets.

> Education For All Goals
>
> - Expand early childhood care and education.
> - Free and compulsory education of good quality by 2015.
> - Promote the acquisition of life-skills by adolescents and youth.
> - Expand adult literacy by 50 per cent by 2015.
> - Eliminate gender disparities by 2005 and achieve gender equality in education by 2015.
> - Enhance educational quality.

More recently, African countries have agreed to the African Union's Second Decade of Education which prioritizes seven areas of country action – one of which is developing capacity in Education Management Information Systems and establishing an observatory on education in Africa.

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5 Outcome of Ministerial policy decisions in Lusaka, 2008

African Union's Second Decade of Education Plan of Action Priorities

- Culture and Gender
- Education Management Information Systems
- Teacher Development
- Higher Education
- Technical and Vocational Education
- Curriculum and Learning Materials
- Quality Management
- Early Childhood Development

There are also ECOWAS' own regional policy frameworks such as the education and training protocol which has incorporated key priorities of the AU Plan of Action and guides and informs the implementation of EMIS activities in the region. It lists the following nine priority areas of focus during this period:

ECOWAS priorities for regional implementation of education and training

- Education Management Information Systems
- Quality Improvement and Management
- Higher Education
- Technical and Vocational Education and Training
- Teacher Education
- Quality Assurance and Qualification Frameworks
- Curriculum Development, Teaching and Learning Materials
- Open and Distance Learning
- Gender, Culture, HIV and Aids and ICT (cross cutting areas)

Countries' development agendas are also driven by their national frameworks that outline the plans for the different sectors.

ECOWAS ministries of education, as do all regions' and continents' ministries of education, need measures and statistical indicators to monitor and evaluate their progress in implementing these various policy agendas to which they have committed themselves. This calls for the analysis of the existing capacity and the capacity building needs of ECOWAS in EMIS and statistics.

The Role of EMIS

African governments, among other developing regions, and development partners have committed themselves to management for development results. This "results-based management" involves focusing on performance and outcomes. The results-based management approach is data intensive and predicated on the notion that there is both the capacity to demand and effectively use statistics for policy analysis and design (statistical capacity) and the national capacity to produce better statistics on a sustained basis, on a scale and time frame relevant to policy makers (statistical supply). To conclude on this point, Education Management Information

Systems (EMIS) is an essential tool for processing information for the management of education resources and services.[6]

> "Whether we wish to…pursue macroeconomic convergence in the region, or assess progress in achieving the Millennium Development Goals, accurate, timely, useful data lie at the heart of all these efforts… Achieving the right policies requires the management of trade-offs informed by good statistics." Trevor Manuel, Minister of Finance (South Africa), 2007.

Hua and Herstein (2003) define EMIS as an institutional service unit producing, managing and disseminating educational data and information, usually within a national Ministry or Department of Education. [7] The management functions of EMIS include collecting, storing, integrating, processing, organising, outputting and marketing educational data and statistics in a timely and reliable fashion.

Standards in EMIS development

EMIS design, development and maintenance is a complex, challenging, labour intensive and expensive undertaking that requires a balanced emphasis on policy, processes, resources and reporting issues that also integrate the aspect of quality.

Policy and legal infrastructure

- Existence of policy and legal framework on EMIS: Policy and legal frameworks governing EMIS significantly influence the Ministry of Education's effectiveness and credibility to produce and disseminate education statistics. The Ministry therefore needs a clear mandate to collect information from all education and training institutions and bodies for education statistical purposes.

- Institutional anchoring and accountability: Organisational or institutional structures influence the environment in which EMIS develops and institutions with unclear lines of accountability, redundant responsibility assignments and poor coordination and leadership hinder EMIS development. It is therefore important that the location of the EMIS unit is close to the Ministry's senior decision-makers due to its central role in underpinning policy making, educational planning, budgeting and resource allocation, monitoring, evaluation and policy research and analysis.

- Cross-sectoral mandate to coordinate the collection of statistics: The Ministry of Education requires data from administrations, enterprises and households, and the public at large, for education statistical purposes. In order to strengthen the coordination of EMIS activities, the mandate to request for and obtain such data should be executed by a central coordinating EMIS unit that articulates across other sub-sectors within the Ministry and liaises with other ministries to integrate the data.

- Involvement in monitoring plans and frameworks: EMIS plays a critical role in monitoring and evaluating a country's progress in meeting its educational obligations as outlined in the national development plans and policy frameworks and the regional, continental and international frameworks on education.

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[6] Tung, K. C. (1999). The Role of Statistics in Policy Review: Mid-production workshop on Education for All 2000 Assessment and Sub-regional meeting on NESIS. Nyanga, Zimbabwe.
7 Hua. H and Herstein, J. (2003). Education Management Information System (EMIS): Integrated Data and Information Systems and Their Implications In Educational Management. A paper presented at the Annual Conference of Comparative and International Education Society, New Orleans, LA, USA.

For this purpose, the EMIS unit should regularly provide the requisite statistical data for all the sub-sectors of education.

- Commitment to quality: The Ministry of Education must commit 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.

- Statistical confidentiality: Through appropriate protocols and provisions ensuring the security and integrity of statistical data, ministries of education must guarantee the privacy of data providers, the confidentiality of the information they provide and its use for statistical purposes only.

- 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.

- Registration of institutions: All education institutions must register with appropriate education Ministries. An accurate and regularly updated list of all public and private institutions should be kept and be publicly available. This will facilitate the monitoring of the registration process and tracking of non-responses from the institutions.

Resource availability and utilisation

- Financing EMIS: Adequate resources and their effective use in EMIS management have a major impact on the quality of education statistics. The Ministry of Education should therefore allocate a ring-fenced percentage of its national education budget for EMIS.

- Staffing: The Ministry of Education should ensure that there are sufficiently qualified personnel in key EMIS positions with access to quality IT equipment and tools; it should promote regular staff upgrading through training programmes to ensure progress and continuity of EMIS work. There has to be a strategy in place to attract and retain specialist staff in areas of scarce skills and staff should be encouraged to attend relevant international training courses.

- Infrastructure and equipment: These relate to the type of infrastructure – availability of electricity, telephones and other communication systems – as well as equipment in place. Measures must be put in place to secure equipment (and hence the data and information) and identify the type of computers and related hardware required; how they will be used, the type of software, database and application development tools needed to use in EMIS development; and the network architecture to use and how it will be supported and maintained, etc.

Statistical processes

- Methodology and procedures as pre-requisites of quality: Sound methodology must underpin quality statistics for effective utilization of data on education. This requires appropriate statistical procedures throughout the entire statistical value chain, including consistent use of standard concepts and definitions, standardization and piloting of questionnaires, standardizing data collection procedures and using the latest survey or census population estimate to calculate education indicators.

- Improving data operations: Linking or merging data from multiple sources (finance, payroll, examinations and school census), multiple years and multiple levels (learners, teacher or school level) is an important EMIS development strategy that adds value to the management of information. Standardized data dictionaries – comprising unique identifiers, definitions, database structures and coding schema – is one way of facilitating this process.

- Decentralization and automation: Timely production of data and information is guaranteed through an efficient EMIS cycle which can be achieved by decentralizing EMIS operations to sub-national levels, automating most of the processes in the data value chain and working closely with other national statistical units.

- Reducing respondents' burden: By constantly analyzing the usage trends of education information and the user needs, it is possible to reduce the burden of reporting for respondents. Ministries of education should therefore monitor this burden and set targets for its reduction over time.

Education information reporting

- Relevance to user needs: Ministries of education should ensure that the statistics they produce are in line with the needs of the users. This entails putting in place processes to regularly consult users, monitor how they use statistics, periodically conducting user satisfaction surveys and incorporating their changing needs in education statistical publications.

- Accurate and reliable information: Education statistics must accurately and reliably portray reality. Achieving this requires the source data, intermediate results and statistical outputs to be assessed, validated and verified; sampling errors and non-sampling errors measured and systematically documented; and studies and analyzes of revisions routinely conducted and the outcomes used internally to inform statistical processes.

- Timely and punctual dissemination: For education statistics from all education and training institutions to be disseminated timely and punctually, they should be published in annual reports within a year of their collection, with the variation of this timeframe taking into account user requirements as much as possible.

- Coherent, comparable and integrated statistics: Education statistics should be consistent internally, over time, and comparable between regions and countries; it should be possible to combine and make joint use of related data from different sources. This calls for compatible databases and meta-data policies that include data dictionaries and information on how the statistics are collected and stored, among other strategies.

- 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. Among the strategies to facilitate this is promoting the use of educational information, establishing information desks and collecting feedback from users and producers of the information.

- Comprehensiveness of information: Education statistics and information should report on all sectors of education and training. This includes integrating information on learners with specials needs into all national surveys and censuses and reporting the same in annual statistical publications.

Monitoring and evaluation

Monitoring and evaluation systems exist to assess what works and what does not work. Effective evaluation is based on good feedback. In an education system, a routine system evaluation must be put in place and evaluators must design sufficient indicators for this process as well-developed indicators assist in adjusting or re-adjusting the course of educational development and reform. For this reason, EMIS is a prerequisite for monitoring and evaluating activities of the sector.

Conclusion

An EMIS system is only as good as its component parts. To develop an effective EMIS system that provides all-round information-based support and decision-making necessitates having effective tools. Technology, database tools and technical skills are necessary ingredients in achieving this. An EMIS unit needs a clear vision and must nurture a new management culture that goes beyond establishing a data and information system. The culture of data sharing, information use and organisational management must also be embraced by all. Ultimately, a national master plan on EMIS will ensure its sustainability.

Capacity building/development

Capacity building or capacity development refers to strengthening human capital with desired skills, competencies and abilities to perform a specific task, function or activities in meeting quality product delivery. The process of building human capital should also be viewed holistically at individual and institutional levels for enabling environment and conditions that enhance proper skills and competencies development.

ECOWAS EMIS assessment findings – problems, issues and challenges within countries' education statistics production cycle – are the main inputs for developing the current Capacity Building Strategy document. The countries facing the same challenges are grouped under the same category with a specific set of activities and actions for addressing the issues underscored, with appropriate funding and with support of in-country development partners.

ECOWAS Secretariat will use this Strategy to develop a reliable fundraising proposal and mobilize technical expertise to address the defined and agreed needs. Partnerships and joint planning mechanisms are key to the implementation of the Strategy –all partners supporting EMIS development in the ECOWAS region should work hand in hand in building a critical mass of persons skilled and competent in EMIS, jointly with the ECOWAS Ministries of Education to produce quality education statistics.

GOOD PRACTICES IN EMIS

1. Focus on management and institutional issues (not IT)

'Most EMIS interventions – assessment, design, and implementation - tend to focus on technical solutions created by technical teams, and tend to overlook the organizational processes and institutional incentives that drive information use.' Crouch, Mircea & Supanc, 1999

2. Focus on information usage (not production)

*'Effective EMIS have specific users who demand specific data to inform decisions for which they are held accountable. . .Incentives in developing countries to use objective information tend to be weak. Other criteria (e.g. securing funding, rewarding supporters) may be more important in determining a manager or policymaker's success. Frequently, the absence of reliable data can be to the advantage of the potential user. In most cases, more information is collected than actually analyzed and applied toward decision making. EMIS reform should focus first only on information that directly informs priority decisions..*Crouch, Mircea & Supanc, 1999

3. Nurture a culture of data sharing, information use and organisational management

'The development of EMIS involves nurturing a new management culture more than establishing a data and information system. The process of data collection, integration, analysis, and dissemination is important, but even more critically, it is the culture of data sharing, information use, and organizational management that leads to the effectiveness of the EMIS development. It is important to remember that EMIS development is not IT development.' Hua and Herstein 2003

4. Focus on speed (not comprehensiveness)

'EMIS systems tend to be over-designed. Systems with the highest use and down- stream adaptation tend to be simple and modest in scope. Similarly, EMIS design tends to be burdened by unrealistic expectations about the degree of precision "required" without taking into account precision's high costs.'. Crouch, Mircea & Supanc, 1999

5. Evolution (not revolution)

'Effective systems tend to build-off of existing databases, taking advantage of current data collection routines. Maintaining familiarity while enhancing efficiency builds early wins for a more ambitious, long term effort.' Crouch, Mircea & Supanc, 1999

6. Follow sector priorities

'In summary, EMIS design and implementation needs to be informed by and responsive to Government ambitions for sector reform and planning processes and the status of policy and strategy development. . . Early EMIS implementation with a view to ongoing refinement, driven by sector priorities, allows for faster EMIS integration and trust building, rather than pre-implementation system perfection and delayed rollout.' Perry and Ratcliffe, 2003

Source: R.Ellison A Practical Guide to Working with EMIS, 2002.

CHAPTER 3: TRENDS in EMIS DEVELOPMENT

EMIS development in Africa

The general trend in EMIS development in Africa revealed that despite efforts made for reversing "data bank" phenomena underscored during the Africa Union decade, many countries are still in the **basic stage** in terms of EMIS System Capacity which features are characterised by poor statistical infrastructure, little government commitment to and/or use of data, significant gaps in national statistics and a less immediate need for internationally comparable data for national policy purposes. A positive trend has been observed for a group of countries moving toward an **intermediate EMIS system status** which are characterised by having basic data channels in place, some commitment to data use but data are fragmented across ministries; there is also a lack of efficient collaboration among data producers, problems with data coverage and relevance persist, but there is interest in cross-national benchmarks and comparisons. Finally, only few countries can be stated as self-**sustaining EMIS systems** which features are characterized by stable information systems, good links between users and producers of data, responsiveness to relevant policy issues, more complex data demands and international comparisons are widely used (cf. appendix 1).

Assessing EMIS capacity in the ECOWAS region

The majority of the ECOWAS countries are facing challenges within the education statistics production cycle linked to institutional, organisational, human, material and technical deficits at all levels and stages in the education information management process. Some countries have progressively moved toward a decentralized EMIS although this is only possible and effective when there are sufficient resources and person power in place. Most ECOWAS countries lack adequate equipment and ICT infrastructure to effectively decentralize to lower levels. Many ECOWAS countries have effective EMIS in the primary and secondary sectors, less so in pre-primary and relatively weak in the sub-sectors of tertiary, technical vocational education and non-formal education. Substantial work remains to expand and build EMIS systems to ensure countries, and the region, monitor and evaluate regional and international educational goals.

Coordination is an issue that stems from the context of fragmentation of the education and training sector into several sub-sector ministries of education, which does not enhance effectiveness of EMIS for delivering quality education statistics in the region.

The AU/ECOWAS EMIS initiative

The first workshop for EMIS experts in ECOWAS Member States and partners was held in Lomé, Togo in June 2010. Its main purpose was to provide countries with the opportunity to share experiences on EMIS programmes and define a road map for EMIS development for the ECOWAS region, in line with the implementation of the African Union's Plan of Action for the Second Decade of Education for Africa (2006-2015) – whose success depends, to a large extent, on having strong, harmonized and sustaining EMIS. Thus, one of the key workshop decisions was for the ECOWAS Secretariat, with support from ADEA Working Group on Education Management and Policy Support, to undertake an assessment survey to establish the current status of EMIS in the region. In addition, participants made a strong call for the setting up of an ECOWAS EMIS Technical Committee, whose terms of reference were also developed, to act as a technical advisory body on EMIS matters in the ECOWAS region.

The second workshop, which took place in Monrovia, Liberia in November 2010, validated the findings of the EMIS Assessment survey and developed a regional strategy and Action Plan for capacity development of EMIS in

ECOWAS Member States. The meeting also selected five Member States (Burkina Faso, Gambia, Ghana, Mali and Senegal) with comparatively advanced levels of EMIS development to form a restricted technical committee. The team later met in Ouagadougou, Burkina Faso in March 2011, and, with the participation of the ECOWAS Commission and Education Statistics Experts from ADEA Working Group on Education Management and Policy Support (WGEMPS), the African Development Bank Statistics Department, AU/CIEFFA, ADEA Working Group on Non Formal Education and the Burkina Faso National Institute of Statistics and Demography, developed the minimum EMIS Norms and Standards (ENS) and Assessment Framework for the ECOWAS region, based on the one developed by the SADC region.[8]

The fourth meeting of ECOWAS EMIS experts reviewed and validated the developed Norms and Standards Assessment Framework and deliberated on the findings of its piloting in the five countries of Burkina Faso, Gambia, Ghana, Mali and Senegal. It is hoped that the Framework will subsequently be presented to the ECOWAS sector ministers and statutory bodies for endorsement and adoption.

CHAPTER 4: ECOWAS EMIS ASSESSMENT FINDINGS

ECOWAS EMIS Assessment findings clearly revealed that most Member States are facing issues and challenges which vary from country to country. The following is a synopsis of the existing situation.

Policy and legal frameworks

A well-functioning EMIS system that delivers quality education statistics requires an appropriate legal framework which is set up on the basis of promoting transparency and where roles and obligations of all actors guarantee independence, integrity and accountability of statistical authorities. It appears that a positive relationship or correlation is associated with the quality of statistics and appropriate legal environment ensuring compliance of data producers. Looking at the legal framework enabling compliance with EMIS, 10 of the 12 surveyed ECOWAS Ministries are legally able to compel education institutions to periodically report statistics - Sierra Leone and Benin have yet to develop such a policy. Eight ECOWAS Member States indicated having legal frameworks – statistical laws – ensuring the compliance of all registered education institutions and sub-sectors to report their statistics upon the request of the government. Despite this, sanctions against non-reporting institutions are seldom implemented. Eight ministries report that they are legally obliged to publish current educational information and statistics for general public use. In addition, all countries have an Information and Communication Technology (ICT) policy which shows good will of these countries to integrate ICT within their institutional and data collection and processing frameworks.

Monitoring development frameworks

Most African leaders have committed themselves to meeting national, regional and international agenda such as EFA goals, MDGs and the AU Plan of Action. EMIS units in all ECOWAS countries are playing key roles in the provision of relevant and accurate statistics for monitoring and evaluating the progress toward the realization of the above frameworks and goals. It is noteworthy that Benin's EMIS reports a lack of involvement in reporting statistics for the African Union's Plan of Action for the Second Decade. It is the one country that consistently reports a lack of involvement in curriculum planning, monitoring the education needs of disadvantaged groups and that of the impact of HIV and AIDS on education.

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[8] The main purpose of the EMIS Norms and Standards is to have a set of criteria and measurements for advocating best practice and benchmarking countries capabilities in being able to produce relevant, accurate, timely and comprehensive education statistics and information.

In most cases, EMIS activities are focused in the primary sub-sector (50 per cent) with secondary (25 per cent) and other sub-sectors of TVET, Higher Education and Non Formal Education consuming just a quarter of their time on EMIS.

EMIS structures and relationships

An appropriate and strong institutional framework of the education and training sector in a well-coordinated environment with clear roles and responsibilities for all actors enables the EMIS unit to operate in an effective manner, even in a context of fragmented education sectors into several ministries. Within a coordinated institutional framework, an effective reporting mechanism will definitely serve the purpose, ensuring quality assurance in producing quality education statistics. Ideally, having a single ministry covering all sub-sectors will have a greater advantage in ensuring the functionality of a central coordinating EMIS structure. In Africa, the education and training sector generally falls under several ministries with fragmented reporting structures and hence EMIS is not sector-wide, which reduces the effectiveness of sector-wide planning. Indeed, most ECOWAS countries have a single Ministry of Education managing pre-primary, primary and secondary education. Some have a separate ministry responsible for tertiary education. Others have a separate ministry managing technical vocational education and training (TVET).

The majority of countries, with the exception of Côte d'Ivoire, Liberia and Sierra Leone who possibly lack the resources or have yet to implement this strategy, report having decentralized EMIS structures. In the organizational hierarchy, most EMIS units are located in Planning Directorates or Commissions close to the senior decision-makers of the Ministry. All country EMIS units, except that of Togo, report a close working relationship with their national statistical offices (NSOs) who tend to provide them with demographic data, capacity building and quality assurance.

EMIS systems development

On the degree of automation of EMIS operations, several potential scenarios leading to improved data quality and simplification of processes could be explored more in depth, taking the benefit of using ICT to enhance education statistical production, publication and dissemination processes. Improving and automating most of the EMIS processes and steps within education data collection and processing in the ECOWAS region should realize significant improvements in data quality and accuracy. However, most ECOWAS Member States are far from the ideal situation. In 11 countries, distribution and completion of the data collection instruments are done manually, except for Gambia which has modernized these aspects of its EMIS process with the use of Optical Character Recognition for data capture and web-based questionnaire distribution and completion.

Data entry and analysis are on the whole, both manual (largely at the lower levels) and automated (at both provincial and head office). All countries reported using word processors and other office automation software for writing their reports. Nine ECOWAS countries reported that publication and dissemination of annual education statistical reports are increasingly moving towards automation, with web uploads and the distribution of electronic media.

Census survey coverage of sub-sectors

Sector-wide planning and monitoring of progress made in achieving national, regional and international goals and objectives requires a sector-wide EMIS, covering all education sub-sectors, starting from sound information requirements identification, through to well-designed and user-friendly data collection questionnaires regularly reviewed to meet new requirements and proper mechanisms for their distribution and collection within the entire education statistical value chain.

EMIS – Value Chain
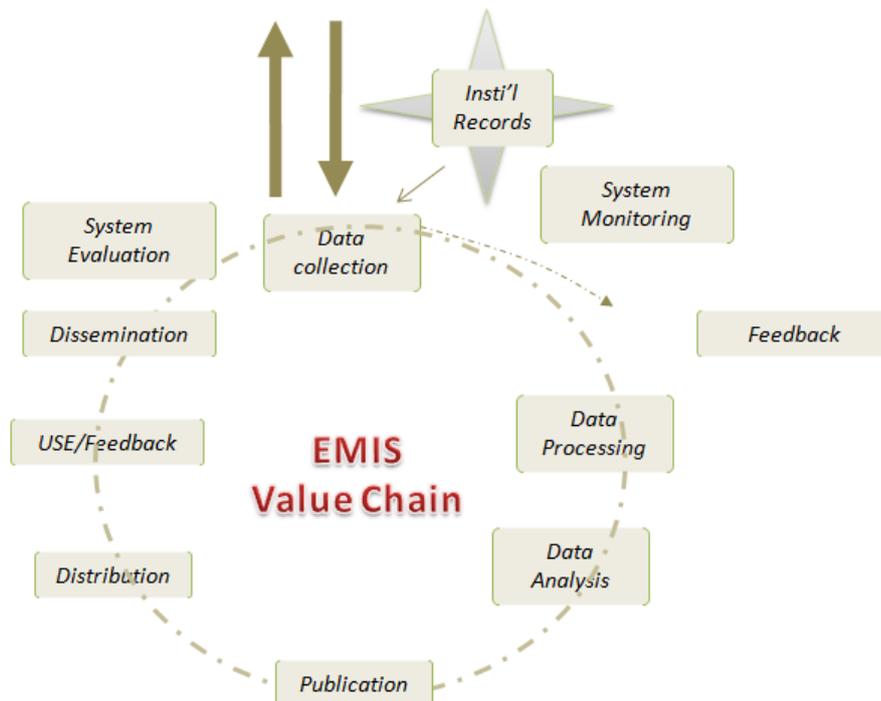
All the surveyed ECOWAS countries report having annual census surveys for pre-primary, primary and secondary education; nine countries monitor non-formal education (NFE); eight monitor for TVET; and seven cover tertiary education statistics. The Gambia and Nigeria indicated that they have incomplete and inadequate EMIS in the areas of tertiary, technical and vocational and non-formal education. Liberia, Sierra Leone and Côte d'Ivoire have no EMIS in these sub-sectors. Similarly, Togo reports having no EMIS in these areas but does cover non-formal education programmes. These gaps are a huge challenge for monitoring developments in these areas and consequently countries with these "data gaps" are not able to respond to regional and continental education action plans, such as that of the African Union, among others.

Census survey content

Data collection instruments, in most of the ECOWAS region, cover almost the same topics such as institutional profile, facilities and materials and learner/pupil and teacher/educator profiles with little variation in the level of disaggregation. In particular, some countries did not distinguish rural/urban, public / private dimensions in their questionnaires— Benin, Mali and Sierra Leone are less concerned with tracking rural/urban characteristics at the secondary level.

The majority of questionnaires do collect information on institutional facilities and teaching and learning materials. However, variations across ECOWAS Member States on this topic are based on specific items and not on the necessity to have them –Benin, Niger and Togo census questionnaires ignore laboratories and libraries in the pre-primary and primary sub-sectors. Liberian census does not request information on toilets (normally associated as a proxy for gender access) and Sierra Leone does not count furniture. Sierra Leone does not capture information on teacher guides or other teaching materials for the pre-primary and primary sub-sectors.

Teacher or educator profile data are covered by most census questionnaires for the different levels of education with some variation on the details. Some countries, such as Sierra Leone and Benin, however, exclude teacher professional qualification; while others - Benin and Mali - exclude teaching experience; both of which are vital indicators for effective teacher utilization and planning. Most countries do not collect information on teacher attendance or hours of instruction – two variables closely associated with quality learning outcomes.

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Enrolments of orphans and vulnerable children (OVC) and learners with special needs, in pre-primary and primary schools, are tracked in six countries – Burkina Faso, Côte d'Ivoire, Gambia, Ghana Liberia and Senegal. With the exception of Liberia, they are also tracked at the secondary level in these countries.

Statistics on national languages, as a subject or as a medium of instruction, African and national history and mother tongue instruction – key African Union education indicators – are seldom collected by ECOWAS EMIS systems.

The tertiary and TVET census questionnaires tend to be far more patchy and incomplete, with large information gaps on facilities and equipment. This finding may be as a result of unawareness of available information as most respondents answering the survey were located in ministries associated with basic education.

Financial data is largely under-reported in most census surveys. Some exceptions are Ghana, Nigeria, Burkina Faso and Côte d'Ivoire who reported that their censuses cover financial data for all sub-sectors. Inadequate collection of financial data is a major challenge for budgeting and estimating the costs of education.

Census production processes

An effectively functioning EMIS requires sound methodologies, approaches, compliance to administrative rules and efficient statistical processes to deliver credible quality statistical products. One of the key challenges that ECOWAS countries need to address is to develop an appropriate strategy for ensuring an updated and accurate master list of registered public and private education institutions. An accurate master list is critical in judging the level of questionnaire return rate which shows the efficiency of processes in place at all levels of the entire statistical value chain with regards to questionnaire distribution and collection from schools to District Education Offices. Nearly all the ECOWAS countries reported that they have a current and accurate master list of registered public and private schools. Some state that this list was last updated in 2008 (Sierra Leone and Nigeria), in 2009 (Mali, Liberia, Ghana and Benin) and in 2010 (Gambia, Burkina Faso, Côte d'Ivoire, Niger, Senegal and Togo). The return rate of census questionnaires is relatively high for pre-primary, primary and secondary level – scoring over 80 per cent. Nevertheless, some sub-sectors – Higher and Tertiary education, TVET and NFE – are facing low return rates which impact on data quality and coverage and consequently on budgeting, planning and resource allocation.

Most countries report an average six month turnaround time from the census survey distribution to the release of the statistical publications –such as an annual yearbook. This is exceptionally fast compared to other African countries. In terms of data processing, missing data estimation techniques are used in nine of the reporting countries which ensures that more effective budgeting and planning takes place as it is based on total estimated school populations.

Half of the participating countries reported that they have Financial Management databases (FMD), Payroll Information databases (PID) and other databases outside EMIS. In most cases, they are not linked to the EMIS database – the exception includes Gambia whose PID is linked to the EMIS database allowing it detailed value-added analysis of school performance against its costs.

Resource availability and adequacy

Adequate resources and their effective use in managing an education management information system have a major impact on the quality and timely delivery of education statistics for supporting effective education planning process. Most ECOWAS countries indicated that their EMIS units do not have sufficient EMIS personnel and they were under-supported with essential EMIS equipment, particularly at district levels, to effectively

perform EMIS functions. Five countries highlighted that they have no functioning intranet for EMIS. Ten ECOWAS countries indicated that the Ministry of Education has a functional website, with Benin, Burkina Faso, Gambia, Ghana, Mali, Niger, Senegal and Togo publishing data on the Ministry website. Exceptions for the latter include Côte d'Ivoire, Liberia, Nigeria and Sierra Leone. The majority of countries indicated that their governments provide financial support for the annual census operations but the tendency is a heavy reliance on external financial support for purchasing EMIS equipment, statistics processing operations and software as well as for capacity building initiatives.

Publication, distribution and utilisation

Publication and distribution of relevant education statistics needed by the main internal and external data users should be the focus of EMIS unit for delivering quality statistics meeting users' needs. This requires the EMIS unit to comply with regional and international quality standards, such as ECOWAS EMIS Norms and Standards, which underscore important dimensions related to quality statistics. These standards include relevance, accuracy, reliability, timeliness, coherence and comparability.

Most ECOWAS Member States, despite the availability of internal capacity to handle the production of statistical outputs such as the Annual Education Statistical Yearbook, reported having difficulties in producing and releasing education statistics on time, some countries having a two year backlog. Timely release of education statistics seems to be weak in some ECOWAS countries. In fact, only four ministries indicated that they had produced these publications for 2009/2010. Failure to deliver education statistics is affecting the ability of ministries of education to have effective evidence-based planning processes. Niger and Burkina Faso were the only countries that reported that they also produce other analytical reports such as case studies or statistical newsletters. A limited number of countries use user requests and feedback on the supplied statistics to customize their publications and data collection instruments to users' needs.

Identified areas of EMIS capacity in the region

The assessment survey focussed on specific capacity building areas and the ECOWAS countries indicated areas in which they are strong and can share promising practices and experiences, as well as the areas that need improvement through appropriate capacity building strategies and interventions.

In line with south-south cooperation, common and specific EMIS thematic areas of strength have been identified within ECOWAS Member States for mapping advanced countries which can provide technical expertise to support others (see table below for more details).

Strengths and expertise in EMIS	Country
Management Information System (MIS)	
Strong statistical management information system (MIS) for primary	**Burkina Faso, Gambia, Ghana, Guinea, Mali, Niger, Nigeria, Senegal, Sierra Leone, Togo**
Strong statistical management information system (MIS) for secondary	**Burkina Faso, Gambia, Ghana, Guinea Mali, Niger,**

	Nigeria, Senegal, Sierra Leone, Togo
Strong statistical management information system (MIS) for TVET	**Burkina Faso, Ghana, Guinea, Mali, Nigeria, Senegal, Sierra Leone, Togo**
Strong statistical management information system (MIS) for NFE	**Benin, Burkina Faso, Ghana, Guinea, Mali, Niger, Nigeria, Senegal**
Functional statistical management information system (MIS) covering examination	**Benin, Burkina Faso, Ghana, Guinea, Niger, Nigeria, Senegal, Sierra Leone, Togo**
Functional statistical management information system (MIS) covering data on teacher attendance	**Burkina Faso, Ghana, Nigeria, Togo**
Functional statistical management information system (MIS) covering payroll information system	**Burkina Faso, Gambia, Ghana, Mali, Liberia and Sierra Leone**
Functional statistical management information system (MIS) covering school-mapping and geographic information system	**Gambia, Mali, Nigeria, Senegal**
Sound statistical approaches, methodologies and promising practices	
National classification of education services and programmes that are aligned to international standards such as ISCED	**Burkina Faso, Ghana, Guinea, Mali, Niger, Nigeria, Senegal, Togo**
Regular user consultation on information needs and persistent tracking of non-response of statistical provision from schools	**Ghana, Niger**
Models for projection and estimation of missing school data Decentralization of the national school EMIS system	**Benin, Burkina Faso, Ghana, Mali, Senegal, Togo**
Collaboration between EMIS unit and National Central Statistics Offices	**All ECOWAS countries, except Togo**
The development of new indicators	**Burkina Faso, Ghana, Guinea, Nigeria**
Use of IT to support EMIS	
Existence of Information and Communication Technology policy	**All ECOWAS countries**

The effective use of ICT resources to support the Ministries' EMIS activities : eg : Web-based data collection framework – e-Survey : online questionnaire, online date entry	**Gambia**

Identified EMIS capacity needs

Countries reported that the key areas they would assess themselves as needing capacity building were as follows:

EMIS Capacity Building Areas		Country
I-	**Institutional and legal infrastructures framework deficits and weak coordination mechanism**	
	Weak application of legal frameworks and policies related to EMIS –including the national Statistics Act.	**Benin, Côte d'Ivoire, Guinea, Sierra Leone, Togo**
	Limited coverage of EMIS policy to all education sub-sectors with regards to education statistics production	**Benin, Sierra Leone**
	Lack of clarity on the data collection mandates among ministries in the sector	**Côte d'Ivoire**
	Absent or weak sector planning mechanisms	**Benin, Guinea**
	Weak coordination within education and training sector data producers	**Togo, Guinea**
	Absence of a "dialogue or consultation" framework on the sector's information needs	**All Ecowas Member States**
II-	**Weak organisational culture for evidence-based planning**	
	Weak advocacy for the production of education statistics.	**All Ecowas Member States**
	Financial Management Information Systems not integrated with the Ministry's EMIS database	**All Ecowas Member States**
	Weak infrastructure linking the Ministry's head office and lower levels of governance	**Côte d'Ivoire, Guinea, Senegal**
	Limited EMIS coverage of key education sub-sectors such as Non Formal Education, Higher Education and TVET	**Côte d'Ivoire, Liberia, Sierra Leone**
	Absent or weak monitoring of indicators on school environment, infrastructure, nutrition, teachers personal information, institutional expenditure and HIV and AIDS.	**Benin, Mali, Sierra Leone**
	Quality of available statistics is questionable	**Benin, Burkina Faso, Côte d'Ivoire, Mali**
	School and tertiary records management systems are not standardized or aligned to national planning needs	**Benin, Mali, Niger, Nigeria, Gambia, Ghana, Guinea, Senegal, Togo**
	Master lists of private and public schools are not regularly updated, calling into question issues of coverage and validity	**Benin, Côte d'Ivoire, Ghana, Liberia, Mali**
III-	**Inadequate human and financial resources for implementing EMIS activities**	

	Personnel	
	Lack of statistical skills in assessing quality management issues in education delivery among staff	**All Ecowas Member States**
	Lack of analytical data skills to process statistics into strategic information	**All Ecowas Member States**
	Absence of competencies for collecting and processing education finance statistics and education expenditure statistics	**All Ecowas Member States**
	Inadequate human resources – missing statisticians, programmers and planners from the EMIS unit	**All Ecowas Member States**
	Poor retention of skilled staff as inadequate career development strategies for EMIS	**All Ecowas Member States**
	Specialized staff not available at the lower levels of government (eg. provinces, districts)	**Benin, Guinea**
	Lack of capacities in web design, web publication and data dissemination	**Benin, Mali, Niger, Ghana, Guinea, Senegal, Sierra Leone, Togo**
	Equipment and infrastructure	
	Inadequate or outdated ICT equipment to perform EMIS functions	**All Ecowas Member States except Gambia**
	Inadequate use or integration of ICT to support EMIS	**All Ecowas Member States except Gambia**
	Finances	
	Weak coordination mechanisms of development partners' support for EMIS	**Alll Ecowas Member states**
	Strong dependency on external funding to implement EMIS activities	**Burkina Faso, Côte d'Ivoire, Gambia, Ghana, Guinea, Liberia, Mali, Niger, Nigeria**
	Lack of resource mobilization strategy for EMIS units	**Alll Ecowas Member States**
	Lack of ring-fenced funding for EMIS – absence of a budget line	**Alll Ecowas Member States**
	IV- **Inadequate use of statistical methodologies and processes**	
	Weak practices of data reconciliation across a number of data sources, little use of secondary data to supplement data analysis, poor methods of estimating missing data, weakness in using projection models for planning and tracking non-response to census from schools, weak harmonization processes for data processing, lack of regular updates to school master lists	**Guinea, Mali, Niger, Nigeria, Senegal, Sierra Leone, Togo**
	Inadequate mechanism for monitoring the timeliness in producing statistical reports and yearbooks	**Benin, Guinea, Nigeria, Senegal, Sierra Leone**

	Statistical publications are seldom released or delayed up to two years and there is poor feedback and dissemination of statistics	**Côte d'Ivoire**
	Users are seldom consulted on their information needs	**Benin, Guinea, Mali, Niger, Sierra Leone, Togo**
	Little development of new indicators for monitoring and evaluation	**Benin, Guinea, Mali, Niger, Senegal, Togo**
	No data revision policy	**Benin, Guinea, Mali, Niger, Senegal, Togo**
V- **Ineffective use of relevant statistics for policy formulation**		
	Underutilization of available educational information / statistics for planning purposes	**All Ecowas Member States**
	Weakness in data disaggregation by rural and urban or private and public schools	**Sierra Leone**
	Difficulties in reporting, publishing and disseminating education statistics	**Guinea, Nigeria, Sierra Leone, Togo**
	Little existence of the culture of using statistics – the practice of basing decisions on the analysis of education statistical data is low	**All Ecowas Member States**

Typology of EMIS needs for capacity building by country

There is wide variation in the needs of ministries of education for capacity building. These range from long-term technical fundamental capacities and creating enabling environments to specific methodological techniques. The table below shows the countries that selected the EMIS capacity building areas that they shortlisted as their first and second priorities.

EMIS Capacity Building Areas	Country's Priority 1	Country's Priority 2
Building sufficient general national capacity in EMIS	**Côte d'Ivoire, Guinea, Niger, Liberia**	**Nigeria, Sierra Leone**
Having a strong strategy for mobilizing resources for statistical services	**Ghana, Guinea, Nigeria**	**Mali**
Developing appropriate policy and standards for EMIS	**Guinea, Sierra Leone , Togo**	**Liberia**
Putting in place a new indicator development and data revision policy	**Burkina Faso, Guinea**	**Benin, Gambia, Senegal**
Developing an effective model for web design, web publication and data dissemination	**Guinea, Senegal**	**Côte d'Ivoire, Ghana**
Instituting an effective monitoring mechanism for the production of Annual Education Statistical reports / abstracts	**Benin, Gambia**	
Developing a strategy for integrating databases (EMIS, Payroll and Finance)	**Senegal**	**Mali**
Developing a reliable methodology and model for projection and simulation		**Niger**

Putting in place a reliable methodology for imputing missing data		**Côte d'Ivoire**
Putting in place an effective strategy for collecting financial data from private institutions to ascertain the actual cost of education		**Burkina Faso**
Having a reliable methodology for data reconciliation using secondary sources such as household, demographic and poverty sample surveys	**Mali, Senegal**	

Part 2: EMIS PLAN OF ACTION (2012 – 2016)

GOAL, OBJECTIVES , EXPECTED OUTCOMES AND IMPLEMENTATION

Overall goal

To develop sustainable education management information systems that support effective evidence-based planning, monitoring and evaluation of education and training delivery to meet national and regional human resource development needs.

Objective

The Plan of Action establishes a general framework that is at promoting a sustainable EMIS development within the ECOWAS region to address the current challenges, problems and key findings identified by the EMIS capacity assessment exercise. At national levels, it will provide a reference for strategies and actions aimed at the capacity development of EMIS.

The specific objective is to improve the utilization of current and relevant education data for planning, decision making and monitoring at the national and regional levels through the development of comprehensive, integrated, compatible and functional EMIS networks for all levels of education and notably also Non Formal Education in the framework of holistic, inclusive and integrated vision of education.

Expected outcome

By ensuring that Member States build their EMIS capabilities in terms of statistical methodologies, information dissemination, resource allocation and policy and legal frameworks on EMIS, the ECOWAS region will be in a position to deliver systematic and sector-wide planning, monitoring and management of the education and training sector in the region.

The principal result is that together the 15 ECOWAS member states achieve at least two additional levels compared to their actual levels in the development of their EMIS following the ECOWAS Norms and Standards Assessment Framework, namely in terms of their statistical methodologies, the dissemination of information, the allocation of resources and the implementation of policy and legal framework on EMIS.

Implementation of the Plan of Action

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The implementation of the strategy will be effected across regional and national structures under the leadership of the ECOWAS Commission and additionally, will take account of national initiatives and seek the best coordination of current national processes with that of regional processes.

The Plan has been scheduled for a five year period with an activity and performance management framework to regularly assess progress on its implementation. In addition, this framework provides the means of verification, partners involved and a budget breakdown.

Management and coordination mechanisms

All ECOWAS stakeholders involved in supporting the implementation of this EMIS Capacity Building Strategy are expected to bring their contribution within a coherent framework for effective and efficient management and coordination, with key actors' roles and responsibilities clearly identified and agreed upon in terms of technical and financial support.

ECOWAS Commission

The ECOWAS EMIS Capacity Building Strategy will be articulated at both regional and country levels. At the regional level, the ECOWAS Commission, with the technical and financial support of development partners, will act as central body in the coordination of all activities focused on policy and strategy development, as well as play an advocacy role.

The ECOWAS Commission will oversee the overall implementation of the EMIS strategy on behalf of ECOWAS Ministers of Education and Training and other stakeholders supporting the initiative. The Commission shall seek advice and technical guidance from the EMIS technical committee and on a regular basis inform the council of Ministers and obtain political guidance and policy direction on key issues related to its implementation.

ECOWAS Member States

EMIS units in charge of education statistics production in collaboration with national bodies working within the National Statistics Development Strategy framework are expected to effectively contribute towards managing, monitoring and reporting on the implementation of the strategy at the national level.

At the country level, within the existing EMIS development initiatives for each Member State and based on the findings from the assessment survey jointly undertaken by ECOWAS and the ADEA WGEMPS , the strategy proposes that all ECOWAS countries assess themselves in terms of the criteria defined by the EMIS Norms and Standards Assessment Framework – a process that should be incorporated in the country EMIS development roadmap aimed at improving the national education indicator production framework. The ECOWAS Commission is charged with mobilizing the necessary technical and financial resources to peer review the country assessments.

Composition and role of the ECOWAS EMIS technical committee

The ECOWAS EMIS Technical Committee was created in November 2010 in Monrovia, Liberia. It is composed of Member State country experts, one per country and some technical and financial partners – AU, ADEA, AFDB, UNESCA, and GIZ. the Committee meets once a year for an ordinary year, however, will meet for extra-ordinary meetings when there is need and on the demand of the majority of member States. The Committee is an orientation structure charged with monitoring and evaluation:

:

- Advocate for adherence to the EMIS Norms and Standards
- Seek to harmonize EMIS across the ECOWAS region
- Identify capacity gapps and develop intercountries support and trainee opportunities Encourage sharing of good practices among Member States
- Comply with the provisions of regional, continental and international framework such as second decade of Education in Africa , UFA, MDG, etc
-
- Ensure education data standardization
- Supply ECOWAS Commission with quality education data
- Report to ECOWAS Commission and the African Union Education Observatory
- Formulate recommendations to the regional decision making body
- Coordinate various programmes in the education sector
- Ensure coordination at country and regional levels

Partnerships The ECOWAS key partners, namely ADEA Working Group on Education Management and Policy Support (WGEMPS), UNESCO Institute for Statistics (UIS), Pan African Institute for Education and Development (IPED), African Union International Centre for Girls' and Women's education in Africa (AU/CIEFFA), Africa Development Bank (AfDB) Statistics Department, GIZ and others shall set up a collaboration and partnership framework at institutional, technical and political level in order avoid duplication and conflict.

Resource mobilization and sustainability

An effective fundraising strategy needs to address both the regional and country level funding gaps. At the ECOWAS Commission, ECOWAS Statistics Division and Education Division should work hand in hand to mobilize resources and look at the feasibility of establishing an Education Statistics Trust Fund to support the implementation cost for the five year period of the strategy.

Monitoring and evaluation

The proposed strategy includes benchmark indicators which will monitor the implementation progress in terms of expected outputs or achievements within the agreed timeframe.

A mid-term review should be undertaken with the aim of evaluating the implementation level with regards to the expected goals and objectives in order to give an opportunity for policy makers to provide policy orientations to hand the challenges and key issues faced during the first half time-period.

In addition, periodical financial and activity reports should be produced with ECOWAS EMIS technical committee support in order to inform the ECOWAS Secretariat on the challenges faced by Member States within the implementation of Action Plan of Capacity Building Strategy Framework. Moreover, a critical outlook of regional and international framework reports on education such as the AU Plan of Action for Education in the Second Decade, Education for All (EFA), Global Monitoring Report (GMR) and UIS Global Education Digest with a focus on ECOWAS Member States in terms of provision of quality data and statistics at regional and international bodies will inform the progress made in terms the implementation of the strategy.

Schedule of activities (2012 – 2016)

Overall Goal: To improve the availability and utilization of current and relevant education data for planning, decision making and monitoring at the national and regional levels of ECOWAS through the development of comprehensive, integrated, compatible and functional EMIS networks.

Strategic Priority Area	Identified thematic areas	Identified activities	Country	Time					Performance indicator	Verification	Partners	Budget (USD)
				Y1	Y2	Y3	Y4	Y5				
1- Policy and legal framework	**Objective: To have effective EMIS policies and legal frameworks which significantly influence the effectiveness and credibility of ministries of education to produce and disseminate education statistics.**											
	1.1 Advocacy for political endorsement and effective use of ECOWAS EMIS Norms and Standards Assessment Framework	1.1.1 Political endorsement by the ECOWAS Ministers of Education meeting	All ECOWAS Member States						• Official adoption of EMIS Norms and Standards Assessment Framework by ECOWAS Ministers of Education on behalf of Member States • Availability of a framework to support advocacy and Policy dialogue around legal mandate of Ministries of Education and Training within Education Statistics production.	• Report on formal meeting of ECOWAS Ministers of Education indicating official adoption - Advocacy document available	ECOWAS Ministers of Education, ADEA, AfDB,	40,000
		1.1.2 Publication and dissemination of ECOWAS Norms and Standards Assessment Framework	All ECOWAS Member States						• 100 copies of ECOWAS EMIS Norms and Standards Assessment framework printed • ECOWAS EMIS Norms and Standards Assessment framework disseminated	• Reports showing availability, accessibility and tracking of effective use of ECOWAS EMIS Norms and Standards Assessment Framework within the Ministry of Education's Statistics production process		10,000

Strategic Priority Area	Identified thematic areas	Identified activities	Country	Time					Performance indicator	Verification	Partners	Budget (USD)
				Y1	Y2	Y3	Y4	Y5				
		1.1.3 Higher level advocacy for national adoption and effective use of regional Norms and Standards	All ECOWAS Member States		▓				• 80 Percentage of ECOWAS Member States have adopted regional Norms and Standards - The percentage of Member States that have integrated of EMIS Norms and Standards in national plans.	• Quantify the ???Elements of the regional Norms and Standards integrated in the annual work plan for EMIS		
		1.1.4 Advocacy for strengthening EMIS policy and legal frameworks to decision -makers - Facilitate the development of sector-wide coverage to include all sectors in the EMIS policy including TVET, NFE and Higher Education	All ECOWAS Member States		▓	▓	▓	▓	• Percentage of ECOWAS Members States effectively using EMIS policy and legal frameworks • Census questionnaire return rate for all sectors improved (including NFE and TVET) •Questionnaire return rate for private institutions improved • Proportion of ECOWAS Member States having a coherent EMIS policy meeting covering all the sub-sectors	• Annual School Census (ASC) reports showing increments in the number of reporting schools , especially private ones, accurate and updated master lists, timely publication and release of ASC report	ECOWAS Commissio n ADEA AfDB	150,000

Strategic Priority Area	Identified thematic areas	Identified activities	Country	Time					Performance indicator	Verification	Partners	Budget (USD)
				Y1	Y2	Y3	Y4	Y5				
	1.2 Periodic assessment of ECOWAS EMIS policy development level or status	1.2.1 Regular assessment of ECOWAS Member States EMIS policy to track conformity to regional and international standards – Norms and Standards Assessment Framework	All ECOWAS Member States						• Percentage of countries assessed by the ECOWAS Norms and Standards Periodic national team assessment reports produced	• Assessment reports disseminated and recommendations discussed and incorporated in national EMIS work plan EMIS policy briefs produced • Availability of ECOWAS Member State EMIS Policy briefs to the ministries of education and EMIS experts	ECOWAS Member States	40,000
		1.2.2 Peer Review exercise : Specific technical assistance provided by ECOWAS Peer EMIS Experts to assess country EMIS policy development 1.2.3 ECOWAS countries under take data quality assessment based on UIS DQAF analysis	All ECOWAS Member States						• ECOWAS EMIS Norms and Standards assessments for all ECOWAS Member States are undertaken. • ECOWAS Commission issues quality assurance standards of country and peer reviews of the assessments - ECOWAS Commission reports progress to Ministers.	• Peer Review Assessment report produced - - ECOWAS Ministers of Education are updated on EMIS rankings of member states.	ECOWAS EMIS experts, ECOWAS Secretariat, ADEA, UIS, AfDB	125,000

Strategic Priority Area	Identified thematic areas	Identified activities	Country	Time					Performance indicator	Verification	Partners	Budget (USD)
				Y1	Y2	Y3	Y4	Y5				
	1.3 Hierarchical position of EMIS unit within the Ministry of Education	1.3.1 Advocacy for placing the EMIS unit higher in the Ministry's structure	Guinea Conakry,		■				• EMIS representation is found at the top level management	• Organizational charts of ministries in charge of education and training		
Mandate to Coordinate EMIS processes	1.4 Effective mechanism for monitoring timeliness in the production of the statistical abstract/ yearbook	1.4.1 Develop an EMIS work plan with an agreed calendar of activities and timelines - Develop effective M&E mechanisms for timely delivery of statistical outputs- - Develop an efficient model of providing immediate statistical feedback to education data providers	Benin, Togo, Gambia, Guinea, Burkina Faso, Côte d'Ivoire, Niger, Nigeria, Sierra Leone			■	■	■	• Improved production and delivery of annual statistical abstract or reports for all levels of education. • Produce various profile reports for feedback to lower levels – regions, districts and schools e.g. school report card.	• Monitoring reports showing adherence to set schedule. • Users' feedback revealing timely delivery of reports. • Statistical reports are produced for TVET, NFE and Higher Education from the majority of ECOWAS countries.		90,000
	1.5 Coordination and collaboration mechanism that ensure comprehensive integration of sector wide education statistics	1.5.1 Establish inter-ministerial coordination mechanisms to manage the fragmentation within the education sector Enhance collaboration between ministries of education and central and national statistical offices) within sub-sectoral EMIS units	All ECOWAS Member States, exclude Cote d'Ivoire and Senegal			■	■	■	Technical coordination mechanism established and functional at ministerial and sub-sector levels • Inter sectoral collaboration mechanism established– e.g. through an MOU / agreement between EMIS and National Strategy for the Development of	• High level meeting of key statistical producer institutions in the education and training sector - Submission by all ECOWAS member states of all the UIS questionnaires on a timely basis. • Reports indicating areas of increased collaboration and cooperation within the education statistics	CSO/NSO; AfDB, Afristat	100,000

Strategic Priority Area	Identified thematic areas	Identified activities	Country	Time					Performance indicator	Verification	Partners	Budget (USD)
				Y1	Y2	Y3	Y4	Y5				
									Statistics (NSDS) framework • Reduced number of inconsistencies (less than 5% variation) between the MoE and CSO/NSO databases • Improved quality of annual EMIS report. • Increased level of usage of EMIS reports (proxy for improved confidence in the quality of statistics from EMIS)	production process		
Sub total 1												**555,000**
	Objective: To improve the credibility of education statistics through well-managed and efficient statistical processes that fully observe ECOWAS's Protocol on Education, other international standards, guidelines and good practices in the EMIS cycle											
2- Sound Methodology and Appropriate Statistical Procedures	2.1 Methodological approaches for a sound education statistics production cycle:	2.1.1 Training on methodological approaches and procedures for EMIS processes (including projection and simulation models, revision policies for data that is already published, imputing missing data, verification processes for the annual school census and error tracking mechanisms at	All ECOWAS Member States						• Number of trained EMIS Experts on best practice for improving EMIS processes • All ECOWAS member State have harmonized and standardized data collection instruments for primary, secondary, TVET, NFE and higher education • Improved cycle and quality of reporting as exhibited in the annual statistical reports.	• Dissemination of best practices and strategies for improving EMIS . - Data collections tools exist. - • Reports showing effective usage of projection and simulation methodologies in the statistics production process	ADEA, AfDB, UIS, GIZ BACKUP	350,000

Strategic Priority Area	Identified thematic areas	Identified activities	Country	Time					Performance indicator	Verification	Partners	Budget (USD)
				Y1	Y2	Y3	Y4	Y5				
		various levels and data reconciliation using secondary data sources) Develop skills in developing new indicators and data analysis.

Put in place an effective strategy for linking EMIS with external/complementary databases such as finance, examination and personnel | Benin, Togo, Burkina Faso, Gambia, Guinea, Mali, Niger, Côte d'Ivoire, Niger, Senegal | | | | | | • Number of EMIS best practices produced or used within ECOWAS region

• At least 80% of target countries have an effective data revision policy

• At least 60 % of target countries having a documented imputed missing data model

• Methodologies for data collection and error tracking used

• Sound and reliable methodology for data reconciliation used

• Effective mechanism for recording user requests and/or feedbacks in place

. Annual EMIS reports are comprehensive in | • Methodologies clearly defined or reflected in EMIS / statistical reports

• Availability of coherent and reliable statistics meeting norms and standards

• Statistic reports or outputs showing effective estimation of missing data

. Regular committee reports on prioritized user needs

• ASC reports show constant revision in response to the changing | | |

Strategic Priority Area	Identified thematic areas	Identified activities	Country	Time					Performance indicator	Verification	Partners	Budget (USD)
				Y1	Y2	Y3	Y4	Y5				
									data coverage	user needs. Evaluation reports		
Record Systems	2.2 Strong school records management system	2.2.1 Build capacity to develop a strong school and tertiary records management systems. 2.2.2. Advocate for the use of ICT equipment at school level.	All ECOWAS member states						• At least 80% of target countries have a standardized School and Tertiary Records Management System contributing to improved data quality at the national level • Proportion of schools with aligned information definitions across school/education institution, district and levels. •Availability of functional ICT equipment and records databases at institutional level • Improving return rate of school census questionnaires	- Percentage of country with propotion of school management system in place. - Proportion of schools with functional ICT equipment. - At least 80% ECOWAS have return rates between 50% ???? - EMIS Reports	ADEA, BACKUP	250,000

Strategic Priority Area	Identified thematic areas	Identified activities	Country	Time					Performance indicator	Verification	Partners	Budget (USD)
				Y1	Y2	Y3	Y4	Y5				
Sub total 2												**600,000**
Objective: To improve EMIS in the under-developed sub-sectors and areas TTVETs – TVET												
3- Sub-sector EMIS developments	3.1 Reinforce EMIS in the sub-sectors	3.1.1 Strengthen the capacity of staff involved in EMIS in the various subsectors, in particular those in sub-sectors outside formal schooling.	All ECOWAS Member States						• Data available for all education sub-sectors. • Number of EMIS staff trained • Increased role of EMIS in the various national plans and international frameworks	• Training reports • Monitoring reports for national plans and international frameworks use EMIS data ECOWAS Members submit UIS A, B and C questionnaires	ADEA UIS and BACKUP	60,000
		3.1.2 Enhance the integration of EMIS in the areas or sub-sectors of HIV/AIDS impact on Education and on education needs of disadvantage groups, school environment, infrastructure and nutrition, NFE, ECD, TVET and Teacher Development.	All ECOWAS Member States						• Increased coverage of EMIS with sub-sector statistics available and used in reporting in at least 90% of the countries.	• Data coverage include information on the areas/subsectors covered • Data collection instruments developed or revised for the sub-sectors concerned. • Data collection instrument revised for secondary -- integration of information on teachers experience, professional qualification	Common wealth of Learning, UIS, UNESCO, ADEA, GIZ, AAU, RECs, AfDB, WGECD, UNICEF,	340,000

Strategic Priority Area	Identified thematic areas	Identified activities	Country	Time Y1	Y2	Y3	Y4	Y5	Performance indicator	Verification	Partners	Budget (USD)
	3.2 Functional school-mapping and Geographic Information System	3.2.1 Support the implementation of school mapping and GIS (geo referencing of schools, software acquisition, training, map development, link to EMIS, etc.) through training in, and advocacy for the use of, GIS	Benin, Burkina Faso, Togo, Côte d'Ivoire, Niger, Senegal, Nigeria, Ghana, Guinea, Mali						• At least 80% of target countries have staff trained in GIS system • At least 60% of target countries have received GIS software and hardware	• Successful integration of the GIS function into the education planning process - Availability of GIS mapping integrated into some country EMIS Statistical reports	ADEA, AfDB, UNESCO, Development Partners	100,000
	3.3 Strong statistical management information systems (MIS) on learner performance	3.3.1 Strengthen the national team's capacity to use standards and methodologies from SACMEQ and PASEC - Sharing best practices on monitoring and evaluation of learner performance (e.g. SA's LURITS)	Benin, Guinea, Togo. Mali, Burkina Faso						• The two target countries staff strengthened to use standards and methodologies from SACMEQ and PASEC	• Data coverage include information on learner performance	PASEC, SAQMEQ	40,000
	3.4 Integrated Financial Management Information System on Education	3.4.1 Strengthen MIS on Education Finance Statistics	ECOWAS Member States						Increased availability and use of education finance statistics for planning	• Data coverage includes information on education finance statistics	IIEP, UIS, AFDB, AU Statistics, UNECA, Afristat	80,000
		3.4.2 Put in place an effective collaboration and data sharing mechanism between the EMIS divisions and the finance department							• Data sharing mechanism put in place			5,000

Strategic Priority Area	Identified thematic areas	Identified activities	Country	Time					Performance indicator	Verification	Partners	Budget (USD)
				Y1	Y2	Y3	Y4	Y5				
		3.4.3 Improve the financial reporting mechanism or framework for estimating the costs of education			■	■	■	■	• At least 80% of target countries showing an improved financial data reporting	• Improved data coverage with education finance and expenditure data		15,000
Sub total 3												**640,000**
4 Data quality improvement and covers Statistical Confidentiality	**Objective: To produce, publish and disseminate education statistics according to quality standards – in terms of the pre-requisites (legal and institutional environment, resources and quality awareness) and the eight dimensions of quality (relevance, accuracy, timeliness, accessibility, coherence, methodical soundness, and integrity).**											
	4.1 Procedures in place to ensure confidentiality	4.1.1 Share experiences and adapt best practices from countries with sound confidentiality standards	Benin, Guinea, Togo		■				• The two countries have improved mechanisms for data confidentiality	• Reports showing reduced cases of unauthorized access to confidential data		20,000
Quality Commitment	4.2 Data quality control processs	4.2.1 Develop an effective data quality control processes : - verification processes in the entire statistical value chain / tracking errors and inconsistencies	All ECOWAS Member States			■	■	■	• At least 80% of all ECOWAS Member States have effective data quality control processes	• Improved quality of data for all education sub-sectors		80,000
Sub total 4												**100,000**

Strategic Priority Area	Identified thematic areas	Identified activities	Country	Time					Performance indicator	Verification	Partners	Budget (USD)
				Y1	Y2	Y3	Y4	Y5				
	Objective: To put in place strategies that ensure availability of adequate resources and their effective use in managing EMIS.											
5. Resource availability, adequacy and utilization	5.1 Strong strategy for mobilizing resources for statistical services	5.1.1 Advocate for national ring-fenced funding allocation (e.g. line budget) for EMIS, including infrastructure and equipment.	All ECOWAS Member States in particular for Côte d'Ivoire, Liberia, Senegal, Gambia, Ghana, Guinea, Togo						• At least 70 % of ECOWAS member States have a ring-fenced funding allocation for EMIS • Improved resourcing for EMIS • Increased role of EMIS in planning and monitoring	• Education finance reports		270,000
	5.2 Adequate resources in equipment for EMIS	5.2.1 Develop advocacy and resource mobilization strategies for the procurement of equipment and put in place adequate infrastructure for EMIS	All ECOWAS Member States except Gambia						• At least 80 per cent of ECOWAS Member States have developed resource mobilization strategies			200,000
	5.3 Cost-efficient model of training for main data sources providers	5.3.1 Develop and advocate for the inclusion of statistical modules and records keeping in Teacher Training Colleges (TTCs)	Benin, Burkina Faso, Côte d'Ivoire, Niger, Gambia, Guinea, Senegal, Togo,						. • Statistics training modules produced and available in TTC curriculum • At least 70 % of target countries have introduced Statistics and Records Keeping into Teacher Training Colleges	• TTC curriculum evaluation reports		100,000
		5.3.2 Advocate for timely release of	Côte d'Ivoire, Guinea, Senegal,						• Timely release of funding to ensure a	• Report on financial disbursements for, and		80,000

Strategic Priority Area	Identified thematic areas	Identified activities	Country	Time					Performance indicator	Verification	Partners	Budget (USD)
				Y1	Y2	Y3	Y4	Y5				
		financial and human resources for statistics production and the commissioning of research on the best practices on financing and resourcing EMIS	Mali			▓	▓	▓	smooth implementation of the national education census cycle.	staff involved in, statistics production		
		5.3.3 Training on use of education indicators, data analysis and reporting -- for Policy formulation, M&E of Curriculum development policy framework	Benin, Burkina Faso, Côte d'Ivoire, Guinea, Liberia, Mali, Niger, Senegal			▓	▓		• Number staff trained on use of education indicators, data analysis and reporting	• Statistics outputs with improved analytical coverage		60,000
		5.3.4 Capacity building on reporting financial data	Burkina Faso, Gambia, Guinea, Liberia			▓			• Number of staff trained on financial data reporting	• Improved data coverage with regards to education finance data		40,000
		5.3.5 Data utilization training/workshop	Côte d'Ivoire, Guinea, Liberia, Niger, Senegal				▓		• Number of staff trained on data utilization - Available software for data processing and reporting financial data	• Statistics outputs with effective utilization of data an relevant analysis • Increase in the number, and improved quality, of analytical policy briefs produced for planning and decision making		40,000

Strategic Priority Area	Identified thematic areas	Identified activities	Country	Time					Performance indicator	Verification	Partners	Budget (USD)
				Y1	Y2	Y3	Y4	Y5				
		5.3.6 Build capacity in software applications development – (particularly in Non Formal and Higher Education) Engage IT consultants for EMIS software maintenance according to new requirements (new indicator) and strengthening of IT skills through training. Develop norms and standards for the use for appropriate data processing and analysis	Liberia, Ghana Niger, Guinea, Senegal, Burkina Faso Liberia, Gambia, Burkina Faso Liberia, Côte d'Ivoire, Niger, Senegal, Benin, Ghana, Nigeria, Sierra Leone, Togo						• Number of staff trained on application development -- data capture and report generation • Number of staff trained on EMIS Skills • Number of staff trained on web design, web publication, data dissemination and maintenance -	• Internal capacities within Ministry of Education to maintain and add new requirements on EMIS application software -- data entry and reporting module • Improved processes in rolling up EMIS functions • Efficient integration of ICT in supporting EMIS functions and processes	AFDB, GIZ BACKUP, ADEA and UIS	160,000
	5.4 Include adequate career development strategy for EMIS staff in EMIS policy	5.4.1 Review and modify existing MoE policy	Benin, Togo						• At least 50 % of target countries have developed policy addressing the career development for EMIS staff	• Improved EMIS staff retention and motivation policy		20,000

Strategic Priority Area	Identified thematic areas	Identified activities	Country	Y1	Y2	Y3	Y4	Y5	Performance indicator	Verification	Partners	Budget (USD)
	5.5 Models of best practice in decentralization of information systems.	5.5.1 Develop a strategy for EMIS staff to putting in place effective decentralized EMIS at the lower levels of governance	All ECOWAS member states		■	■			• Other sectors integrating best practices on decentralization • Synchronized data collection system across levels • Improved EMIS work in other sectors and at the lower administration levels • Revised/improved structure and coordination within the decentralization process	• Improved information systems at decentralized levels • Comprehensive ASC reports • Reports on resource allocation • Reports showing enhanced sectoral and lower level inputs. • Decentralization status reports		80,000
Sub total 5												**1,050,000**
6-Education information reporting	**Objective: To publish and disseminate education statistics that comply with national, regional and international quality standards as well as serving the needs of African institutions, governments, research institutions, business concerns and the public in general.**											
	6.1 Effective publication release and dissemination strategy	6.1.1 Review or develop a policy and strategy on publication release and dissemination	Benin, Guinea, Nigeria, Sierra Leone, Togo, Mali			■	■		• Reduction of publication time • Timely release and diverse modes of dissemination including online publishing			15,000

Strategic Priority Area	Identified thematic areas	Identified activities	Country	Time					Performance indicator	Verification	Partners	Budget (USD)
				Y1	Y2	Y3	Y4	Y5				
	6.2 Appropriateness of EMIS strategies	6.2.1 Develop National Master Plan for EMIS development for all sectors	All ECOWAS Member States		■	■	■	■	• At least 70 % of ECOWAS member states have a current EMIS Master Plan for all sectors of education	• Copies of Master Plan are disseminated and available in the Ministry • EMIS development initiatives show elements of being guided by the Master Plan	ADEA, AfDB, ECOWAS Commission	100,000
	6.3 Effective publication and data dissemination model	6.3.1 Improve the accessibility and clarity of education statistical information	Benin, Côte d'Ivoire, Guinea, Niger, Togo			■	■	■	• Regular availability of quality EMIS information, including electronically and online •Tracking of the use of recent data from EMIS by various stakeholders	• Functional web portal • Reports on dissemination and utilization of EMIS information through diversified modes: hard copy and other electronic modes (e-newsletter, e-reports, CDs/ DVDs, etc.		20,000
	6.4 Effective strategy for user consultation	6.4.1 Undertake regular user satisfaction surveys and other methods	Benin, Guinea, Niger, Nigeria, Togo			■	■	■	Visible regular improvements on questionnaires based on the outcomes of the user satisfaction surveys or consultations	• User satisfaction survey reports or meeting reports		40,000
Sub total 6												**175,000**
Total budget												**3,120,000**

Budget

Priority Area	Budget per year (USD)					Total (USD)
	Yr1	Yr2	Yr3	Yr4	Yr5	
1. Policy and legal infrastructure	101 723	412 590	20 343	20 344		555 000
2. Statistical Processes and Methodologies	10 274	93 836	262 329	167 807	65 754	600 000
3. Sub-sector EMIS development		160 000	160 000	160 000	160 000	640 000
4. Data Quality Improvement		33 333	16 667	25 000	25 000	100 000
5. Resource availability and adequacy		192 686	390 027	292 288	174 999	1 050 000
6. Education Information Reporting			68 054	68 061	38 885	175 000
Yearly totals (USD)	111 997	892 445	917 420	733 500	464 638	3 120 000

The budget figures have been estimated based on the proposed activities matrix under the priority areas listed in the summary for the five year period between 2012 and 2016. Quantification of the financial requirements has considered the following:

- Number of participating Member States and the likely number of staff
- Likely location and type of activity
- Training and learning material – preparation, production and translation
- Resource personnel

Conclusion

The success of the implementation of the proposed EMIS Capacity Building Strategy will depend on not only effective coordination of the key stakeholders, in particular the role played by the ECOWAS Commission in managing this, but that of mobilizing adequate resources to allow implementation. There is a role for not only external development partners but also Member States to provide the necessary support and commitment to the process of enhancing the quality and scope of education statistics in the region. If education interventions and programmes cannot be measured and assessed statistically, it is almost impossible to value their costs and benefits.

This regional capacity building strategy is looking to strengthen country EMIS capacity and practice based on adherence to regional and international codes of practice and standards with regards to social statistics production in general and EMIS in particular.

Appendices

Appendix 1: Typology of EMIS capacity

BASIC EMIS SYSTEMS	INTERMEDIATE SYSTEMS	SELF-SUSTAINING SYSTEMS
Poor statistical infrastructure	Highly centralized statistical infrastructure with some decentralization to lower levels (e.g. provinces, regions, districts) with basic data channels in place	Extensive and stable statistical infrastructure at head office and lower levels that functions relatively effectively.
Little government commitment to and/or use of data	Some government commitment to and/or use of data	High government commitment to and/or use of data
Significant gaps in national statistics, even at Basic Education levels (primary, secondary, pre-primary)	Annual statistics on Basic Education are regularly collected (primary and secondary levels) with some significant gaps in other sub-sectors (pre-primary, tertiary, technical and vocational education, non-formal)	Reasonable statistical coverage of most education sub-sectors.
Data is fragmented across ministries and there is a lack of efficient collaboration among data producers. Data needs of users are sometimes considered	Data fragmented across ministries and lack of efficient collaboration among data producers. Within subsectors data needs of users are reviewed and taken into consideration by EMIS	Good links between users and producers of data. Data needs of users are regularly reviewed.
Problems with obtaining annual statistics on all Basic Education schools (public and private)	Problems with the coverage of all schools persist.	There is good census coverage of all education institutions (public and private)
The relevance of the data collected to policy, planning and budgeting is not clear. Data is often not timely or accurate enough. Census turn-around times can cover more than one year.	Data relevance and responsiveness problems persist. The EMIS cycle can take more than one year turn-around time from questionnaire dissemination to publishing an annual statistical report.	EMIS data is critical to policy, planning and budgeting processes at all levels of the Ministry. Complex data demands are made. Problems with timeliness and relevance persist.
A less immediate need for internationally comparable data for national policy.	There is interest in cross-national benchmarks and comparisons.	International comparison is widely used.