

Report on the status of civil registration and vital statistics in Africa

Outcome of the Africa Programme on Accelerated Improvement of Civil Registration
and Vital Statistics Systems Monitoring Framework

Executive Summary

The systematic and coordinated implementation of the Africa Programme on Accelerated Improvement of Civil Registration and Vital Statistics (APAI-CRVS) has helped to build significant momentum towards the improvement of civil registration and vital statistics systems on the continent. The political commitment at the national level coupled with regional technical and capacity-building support for countries has brought a paradigm shift from a fragmented and ad hoc approach to a more holistic and integrated improvement of CRVS systems in member states. More than half of the countries have conducted assessment, some have developed strategic plans and few of them have begun to implement their improvement plans. Despite the remarkable progress achieved in the past few years, there remain a number of major challenges facing the African CRVS systems.

This monitoring report was prepared based on the APAI-CRVS web-based monitoring results conducted in October 2016 to measure the progress achieved by each country in various aspects of civil registration and vital statistics systems. The report presents summary of the findings based on responses obtained from 39 countries out of the 54 member states expected to fill-in the online monitoring form, which makes 72% response rate. The findings provide a broad overview on the status of national CRVS systems and help to identify strengths and weakness of different components of CRVS systems.

The followings are the key findings:

- i. All countries in the region, except South Sudan, have laws and legal provisions for civil registration. However, in many countries the existing laws are outdated and not aligned to the recommended international standards. In more than one-third of the countries, the civil registration law does not distinguish late and delayed registration. Registration of marriage and divorce are not compulsory in many countries. The monitoring result shows that divorce registration is compulsory only in 17 out of the 39 countries completed the monitoring questionnaire. Nearly half of the countries (46%) have no legal provision for transferring of data from civil registration offices to a government agency in charge of compiling national vital statistics and producing annual report.
- ii. Most of the countries responded to the monitoring survey indicated that the national government allocate budget for the maintenance of the civil registration system. Nonetheless, more than two-thirds of the countries reported that the government budget is either inadequate or irregular. For five countries, the government does not make budgetary allocation for the civil registration system.
- iii. The monitoring result shows that only 11 countries (28%) have adequate human resource at all levels of their CR system, yet for 27 countries (67%) their human resource is inadequate at the local registration offices. More than half of the countries have no routine

training schedule for civil registrars and trainings are conducted occasionally in an ad hoc basis.

- iv. Nearly three-quarter (74%) of the countries have constituted high-level coordination body to oversight and provide guidance for national CRVS systems, but the coordination system is not effective in half of these countries. Although many countries have a formal inter-agency committee to facilitate CRVS operations, the collaboration remains to be insufficient.
- v. Some countries charge fees for vital events registrations in legally specified time and for issuing first copy of a certificate. Monitoring result shows that fees are charge for current registrations of birth and deaths in 5 and 9 countries, respectively. More countries charge fees for marriage (21 countries) and divorce (14 countries) registrations. In many countries, customers requiring registration certificate have to pay fees to get first copy of the certificates, for birth and death in 14 countries and for marriage in over 20 countries.
- vi. About half of the countries have fully or partially computerized civil registration system; whereas a large number of countries are still fully depend on paper-based registration system. One-third of the 39 countries capture birth and death records electronically at all local registration offices. Only few countries employ mobile phone technology to notify birth and death occurrences at home or in health facilities.
- vii. The monitoring result reveals that 29 out of the 39 countries have national identification database and 20 countries maintain computerized database on civil registration records. However, the two systems are interoperable only in 13 countries.
- viii. The result indicates that only 13 countries (33%) use the standard international form to certify cause of death and apply the latest version of the ICD-10 for coding of cause of death.
- ix. Only few countries compile annual vital statistics and compute completeness of vital events registered in a given year. According to the monitoring results, the regional average completeness rate of birth registration has increased from around 40% to 56% from 2012 to 2015, while completeness of death registration remained below 40 percent.

In conclusion, countries in the region show wide variation in their civil registration and vital statistics systems. In some of the countries, the existing civil registration laws are outdated and have not been reviewed and aligned to the international standards. Countries have different levels of registration coverage and completeness. Only few countries compile and produce annual vital statistics report from civil registration, while most of the countries do not use registration records to compile vital statistics. There is also lack of effective coordination and collaboration between stakeholders at national level, civil registration systems are underfunded and understaffed.

Registration services are inaccessible to people living in rural areas and the quality of services remain poor, therefore the coverage and completeness of civil registration are very low in most of the countries. The use of modern technology has only progressed piecemeal and databases on citizen records such as civil registries, health information systems and national ID systems are not integrated. Death registration are particularly challenging and many countries perform poorly on completeness of death registration and medical certification of cause of death.

There is a need to pay particular attention on the five poorly functioning components of CRVS systems for most of the countries: budgeting and human resource, coordination and monitoring, use of ICT and digitization, recording of cause-of-death, and producing vital statistics from civil registration.

I. Introduction

1.1 Background

Civil registration and vital statistics is an essential administrative system in modern society. The civil registry provides individuals with essential legal documents required to secure their identity, nationality and civil rights and access to social services. Well-functioning civil registration and vital statistics systems are crucial for creating inclusive societies, ensuring proper delivery of public services and realizing and protecting basic human rights of all individuals. In general, building viable and universal civil registration and vital statistics systems help to make everyone in Africa visible, protect human rights and address inequalities. Compilation and analysis of vital statistics from civil registration are critical for estimating annual changes in population size and structure, and for planning and monitoring social programmes, such as health, education and population intervention. Comprehensive, accurate and timely vital statistics are also essential for monitoring and reporting regularly on the progress in achieving the globally agreed development goals of the 2030 Agenda for Sustainable Development and implementing the regional Agenda 2063: The Africa We Want, which calls for a united, prosperous and peaceful Africa.

Even though these values of civil registration and vital statistics systems are well-recognized, many African countries do not have properly functioning civil registration and vital statistics systems. Only four countries (Egypt, Mauritius, Seychelles and South Africa) have managed to maintain a compulsory and universal registration system that meets international standards, including a satisfactory level of registration coverage and completeness of recording vital events and information on cause of death.¹ During the last few years, in recognizing the poor status civil registration and vital statistics systems in the region, African States have stepped up their efforts to improve their civil registration and vital statistics systems through regional initiatives.

¹ Report of regional assessment study of Civil Registration and Vital Statistics Systems in Africa, UNECA, September 2012. See E/ECA/CMRCR/S/EXP/6.

The first step of regional initiatives began in June 2009 in an expert group workshop held in Dar-as-Salaam. The experts recognized that civil registration and vital statistics is multisectoral and multidisciplinary in nature and can be strengthened only through a holistic and integrated approach, and identified political commitment as the first major step towards this end. Following the First Conferences of Ministers responsible for Civil Registration and Vital Statistics held in August 2010, in Addis Ababa, regional institutions were constituted to coordinate and advance civil registration and vital statistics policies in Africa. The Regional CRVS Core Group was established in early 2011, and, in July 2012, the Ministerial Conference was endorsed as a permanent biennial conference under the auspices of African Union Commission. In 2012, the Second Conference of Ministers launched a regional programmatic framework known as the Africa Programme on Accelerated Improvement of Civil Registration and Vital Statistics (APAI-CRVS) to steer the regional initiative to improve civil registration and vital statistics. The secretariat of Programme was established under the leadership of the Economic Commission for Africa (ECA) to coordinate and provide programmatic guidance to the regional agenda to reform and improve civil registration and vital statistics systems. The Third Conference of Ministers responsible for Civil Registration, held in 2015, passed a number of crucial resolutions and recommendations to strengthen and accelerate the initiative to improve regional civil registration and vital statistics systems in Africa. In June 2016, member States declared 2017-2026 as the “Decade for repositioning of civil registration and vital statistics in Africa”.

The African Programme on Accelerated Improvement of Civil registration and Vital Statistics provides management and programmatic guidance to the efforts aimed at carrying out the regional agenda of reforming and improving civil registration and vital statistics systems on the continent. The Programme, which is guided by policy directives set by the biennial Conference of Ministers and steered by the Regional Core Group, is the regional body for bringing together various civil registration and vital statistics initiatives into a common and consolidated policy and advocacy framework. A five-year strategic plan for the period 2017-2021 has been developed by the Programme to serve as a guiding tool for countries, regional and international organizations in managing interventions and monitoring progress related to the civil registration and vital statistics systems in Africa.

The systematic and coordinated implementation of the Africa Programme on Accelerated Improvement of Civil Registration and Vital Statistics Systems since 2010 has helped to build significant momentum towards the improvement of civil registration and vital statistics systems on the continent. The political commitment at the national level coupled with regional technical and capacity-building support have helped countries make a paradigm shift from a fragmented and ad hoc approach to more holistic and integrated efforts. More than half of the African countries have conducted a comprehensive assessment of their civil registration and vital statistics systems, and some of them have developed action plans to address gaps identified through the assessment and accelerate improvement of national civil registration and vital statistics systems.

Despite the remarkable progress achieved in the past few years, there remain a number of major challenges facing the African civil registration and vital statistics systems. Some countries do not have in place comprehensive civil registration laws that are aligned with international standards and in many of these countries, the laws have not been revised for decades. In many countries, civil registration and vital statistics systems are underfunded and understaffed. Registration services are inaccessible to people living in rural areas and the quality of services remain poor, therefore coverage and completeness of civil registration are very low in almost all countries. There is no efficient coordination and collaboration among the civil registration and vital statistics system stakeholders at the national level. The use of modern technology has only progressed piecemeal in many countries and databases on citizen records, such as civil registrars, national identification systems, population registers and voter registration systems are not linked with each other. Only a few countries compile and produce annual vital statistics report from civil registration. Death registration and cause of death information are particularly challenging for many countries in the region.

The first step to improve civil registration and vital statistics systems is to review the functionality of the current systems. However, most of the countries in the region do not have a system to routinely monitor the development of their civil registration systems and therefore cannot adequately report on improvements and challenges emerging from the interventions. There is an increasing need for a robust system to measure and monitor progress and challenges in the implementation of the African Programme on Accelerated Improvement of Civil Registration and Vital Statistics at the national level. At their second conference the African Conference of Minister responsible for Civil Registration recommended to “develop results-based monitoring and evaluation systems and tools to monitor and report on progress on civil registration and vital statistics” in the region.² Responding to this call, the African Programme on Accelerated Improvement of Civil Registration and Vital Statistics developed a web-based platform to document the status and monitor the progress made by member states on their civil registration and vital statistics systems. This monitoring exercise was launched on the Programme’s website in October 2016; the online form was to be filled by a designated focal point from the country’s civil registration office and submitted through the website.

1.2 Objectives of the monitoring survey

The purpose of the monitoring survey is to review the status of civil registration and vital statistics systems in African countries based on data received from them through a web-based online questionnaire filled in by focal points in the country. The monitoring platform is intended to measure the progress achieved by each country on various aspects of civil registration and vital statistics systems in the context of the Programme’s initiatives. This is the first exercise of the web-based monitoring process that will allow countries to correct and update their current status in this area in subsequent years.

The specific objectives included the following:

² See www.apai-crvs.org/sites/default/files/public/Ministerial%20Statement_Eng_0.pdf.

- To assess the current status of civil registration and vital statistics systems in member States;
- To create a regional database on the status of the systems in Africa;
- To provide baseline information for monitoring the progress in the implementation of the Programme's five-year strategic plan for the period 2017-2021;
- To develop a regional dashboard that will present a more detailed status of progress in various aspects of civil registration and vital statistics in Africa.
- To assist countries in taking stock of the status of their civil registration and vital statistics systems and share experiences on best practices and challenges in implementing improvement plans;
- To assist in preparing evidence-based reports for the biennial Ministerial Conference on civil registration and vital statistics improvements and challenges.

1.3 Structure of the monitoring questionnaire

The questionnaire consists of three parts: Part A focused on the civil registration system legal framework, which contained 11 multiple-choice questions assessing the state of the legal framework governing registration of vital events within the country or the production of vital statistics based on civil registration records. Part B deals with the organization and functioning of the civil registration and vital statistics system with 74 multiple-choice questions on topics related to: (i) civil registration infrastructure, coordination and resources; (ii) civil registration and vital statistics processes and services; (iii) use of civil registration documents and vital statistics generated from civil registration (iv) causes of death practices; (v) data quality and plausibility checks; and (vi) data access, dissemination and use. Part C focuses on the completeness of registration of vital events. Filling this part requires collecting data on annual number of registered vital events, population size and basic demographic rates for the four years (2012-2015), preceding the monitoring survey.

1.4 Administration of the monitoring form

The form is a web-based platform to be filled in online, once a year, and submitted through the website by the designated focal point, who has the account on the portal and appropriate access rights to submit the form on behalf of the country. Although only the designated focal point can submit the form, the monitoring exercise is a collaborative effort in which all main national stakeholders are involved. This is emphasized to ensure that the answers best reflect the status of the civil registration and vital statistics improvement process in the country in all aspects. The form is filled out on the website only after consultations with all the national stakeholders.

1.5 Response rate and data quality

Out of the 54 member States expected to fill out the online monitoring form, 39 countries have completed the questionnaire, which constitutes, about a 72-per cent response rate. Fifteen countries have failed to submit the questionnaires, despite follow-up reminders from African Programme on Accelerated Improvement of Civil Registration and Vital Statistics secretariat, In addition to non-responses, there are also some incomplete and inconsistent responses by countries. However, in

most cases the incomplete and inconsistencies have been corrected through follow up communications by the secretariat to the respective countries. The major deficiencies observed on part c of the questionnaire in which countries are requested to provide data on annual number of registered vital events, population size and basic demographic rates inputs to compute completeness of registration. Only less than half of the 39 countries have submitted vital statistics data required for calculating the level of vital events registration completeness. This indicates that more effort is needed by countries and the secretariat to improve the response rate and accuracy of the data.

1.6 Methods of data analysis

Each of the questions with multiple answers has two to four scenarios for countries to choose from that best describes their civil registration and vital statistics (the questionnaire available at: www.apai-crvs.org). In this report, simple frequency distributions of aggregated responses are presented and described. In addition, summary indicators have been computed to measure the level of functionality of the civil registration and vital statistics components, components, such as the legal framework, planning and coordination, resources and infrastructure.

To compute a summary indicator for each major component of civil registration and vital statistics systems, each scenario is assigned a numeric value ranging from 0 to 1. The numeric value of 0 represents a situation that is not compliant with the standards-based practices or status, while 1 stands for a situation or practice that is fully compliant with the standards; for a partially compliant situation, a fraction is assigned. The aggregated values across all question items under each component provides the overall score, which helps to clearly convey the status of a component of the civil registration and vital statistics systems for each country. In terms of percentage score, it ranges from 0 to 100, a score closer to 0 implies a “very weak” system while a high score indicates a “strong” system.

1.7 Structure of the report

This present report comprises four sections divided into subsections. The first section is an introduction section, in which background information, structure and the process of the monitoring exercise is provided. In section two, the results on institutions, resources and registration process under subsections: legal framework; infrastructure and resources; planning, coordination and monitoring; registration process; uses of information and communications technology (ICT); and cause of death, are presented. The third section includes the results on completeness of birth and death registration; vital statistics and data quality checks; and uses of registration documents and vital statistics data. Finally, section four contains the conclusion and way forward.

II. Institutions, resources and registration process

This section highlights major findings on the status of national civil registration and vital statistics systems and their components, including the legal framework, coordination mechanisms, infrastructure, resources, and registration and certification processes. The results are presented in subsections based on the major components of the systems for member States that have completed the monitoring survey.

2.1 Legal framework

The legal framework is a critical primary step to ensure a continuous, permanent, compulsory and universal civil registration system. The establishment, efficient management, operation and maintenance of the registration system cannot be realized without proper legislation and mechanisms designed to enforce it nationwide.³

Most countries have in place some legal provisions for governing their civil registration system. Table 2.1a shows the number of countries that have legal provisions under their law to register vital events. The monitoring result indicates that 38 out of the 39 countries that completed the monitoring form have civil registration laws for recording birth and death. South Sudan is the country lacking legal provision for birth and death registrations. Notably, legal provisions for civil registration do not equally address the four priorities of vital events (birth, marriage, divorce and death). While the law in most countries covers the registration of birth and death, the result indicates that 10 out of the 39 countries do not have legal provisions for registration of divorce.

Table 2.1a: Distribution of countries by legal provisions on civil registrations

Vital event	Have registration law		All segments of population covered		The law is compulsory		Law distinguish late and delayed registration	
	Yes	No	Yes	No	Yes	No	Yes	No
Birth	38	1	37	2	37	2	26	13
Death	38	1	37	2	37	2	24	15
Marriage	37	2	35	4	33	6	11	28
Divorce	29	10	35	4	22	17	8	31
Total	39		39		39		39	

Source:

National legal provisions should call for universal and compulsory registration of vital events to ensure coverage of the entire population in the country, regardless of geographic location and subdivisions of the population. The result indicates that civil registration laws in a majority of the countries (37 out of 39) provide provisions for compulsory registration of birth and death. However, despite having legal provisions for universal and compulsory registration, it does not necessarily mean that countries enforce the law and actually covers the entire population in all geographic locations within their respective territories. Unlike birth and death, registrations of

³ <http://unstats.un.org/unsd/demographic/standmeth/principles/M19Rev3en.pdf>

marriage and divorce are not compulsory in many countries. The provision of compulsory registration of divorce is not particularly common, only 17 out of the 39 countries have in place such legal provisions.

Civil registration law should include the time period within which each vital event should be registered after occurrence. It is important to specify the duration of registration and distinguish between late and delayed registration in order to maintain continuous and timely recording of vital events. Registration of an event within a legally stipulated time period is called *current registration*. If the registration of a vital event occurs after the legally specified time period but within one year after occurrence, it is called *late registration*. Whereas, if the registration takes place later than one year after the occurrence of the event, it is referred as *delayed registration*.

As shown in table 2.1a, civil registration law in many countries does not fully distinguish between late and delayed registration for vital events, particularly for marriage and divorce. Out of the 39 countries, civil registration law that distinguishes late and delayed registration for birth and death is indicated in 26 and 24 countries, respectively, while for registrations of marriage and divorce, the distinction is apparent in only 11 and 8 countries, respectively.

Civil registration law should contain a provision for the transmission of records of vital events from civil registration offices to vital statistics compiling office. The registration law needs also to be accompanied by legislation that defines responsibilities for collection, processing and dissemination of vital statistics from civil registration. Table 2.1b presents the number and percentage of countries that have legal provisions for the transmission of vital records and responsibilities for processing and dissemination of vital statistics. The result indicates that nearly half of the countries (46 per cent) that completed the monitoring form have no legal provision for the transmission of data from civil registration offices to a government agency entrusted with compiling national vital statistics. Out of the 39 countries, 22 countries (56 per cent) have adequate legislation for defining the responsibilities on all vital statistics process, including compiling, processing and the dissemination of vital statistics for civil registration.

Additionally, cause of death is key information that should be collected in a civil registration system. Cause of death, if entered in the death reporting form and certified by trained medical practitioners, is important for legal purposes and planning and monitoring of national health programmes. According to the monitoring results from the 39 countries, almost 50 per cent (20 countries) have reported that they enacted legislation on cause of death certification using the World Health Organizations (WHO) standard form. While for the remaining countries, either their legislation does not adhere to the standard form or indicating cause of death is not required. At all. Among countries that have in place legislation on cause of death certification that conforms with the WHO standard, only a few of them apply the International Classification of Disease codes and certification, as indicated in the following section.

Table 2.1b: Distribution of countries by legal provisions on vital statistics and cause-of-death certification

Compiling vital statistics/ cause-of-death certification	Number of countries	%
Does the law make a provision for the transmission of civil registration data from registration offices to the vital statistics compiling office?		
Yes, include provisions for vital statistics data transmission	21	53.8
No, does not include provisions for vital statistics data transmission	18	46.2
Total	39	100
Does the country have legislation that defines responsibilities for the collection, processing and dissemination of vital statistics from civil registration?		
Yes, has adequate legislation defining responsibilities on all of the vital statistics process	22	56.4
Yes, has legislation but does not mention all stages of the vital statistics process	9	23.1
No legislation defining responsibilities for the vital statistics process	8	20.5
Total	39	100
Does the country have legislation stating that death has to be certified by cause and specify it in the registration form?		
Yes, has legislation on certification of death by cause using the WHO standard form	20	51.3
Yes, cause of death must be indicated on certificate but not using the WHO standard	7	17.9
No, cause of death should be indicated but death certification form not specified	7	17.9
No, it is not necessary to indicate the cause of death at all	5	12.8
Total	39	100

In addition to presenting the results on the 11 individual questions assessing the state of the legal framework governing civil registration and vital statistics, it is also important to examine the summary indicator on legal framework for civil registration and vital statistics systems. The summary indicator provides a score on the level of functionality and helps to clearly communicate the status of countries' legal frameworks for civil registration and vital statistics systems. The score ranges from 0 to 100; countries with a low score implies a "weak" legal framework while a high score indicates that "satisfactory" legal provisions are in place. Based on the scores, the countries are grouped into five categories: less than 35 per cent, 35-49 per cent, 50-64 per cent, 65-79 per cent, and 80 per cent and above. The distribution of countries by categories of overall score is given in table 2.1c. The average score for all the countries that completed the monitoring form is 74 per cent, which is relatively high as compared to the mean score of the other components. As shown in table 2.1c, more than one third of the countries have satisfactory (80 per cent and above) legal provisions for civil registration and vital statistics systems, while about two thirds have a moderate (50-79 per cent) level. Only one country, South Sudan, has a very weak (less than 35 per cent) legal provision for civil registration and vital statistics systems.

Table 2.1c: Distribution of countries by overall score on legal framework for civil registration and vital statistics systems

Score	Number of countries	%
Less than 35%	1	2.5
35-49%	0	0.0
50-64%	12	30.8
65-79%	11	28.2

80% and above	15	38.5
Total	39	100
Average score	74%	

2.2 Resources and infrastructure for civil registration

For civil registration and vital statistics systems to function properly and run smoothly, it is necessary to have adequate resources, including a regular allocation from the government budget, human resources, infrastructure and supplies of registration forms and materials. The principles of universality and permanency of civil registration system require the government to allocate adequate and regular resources to provide access to registration services within a reasonable distance to all people in a country. A civil registration system should be established as permanent government structures at all levels of the administrative hierarchy, extending from the national level to the smallest possible administrative unit. This requires allocation of a regular and adequate budget as part of government recurrent budget to meet the resource requirement for the day-to-day operation and maintenance of civil registration and vital statistics systems.

Table 2.2a shows the distribution of countries by availability of financial and human resources for civil registration system. The results indicate that in only 8 out of the 39 countries, their respective Government allocates an adequate and regular budget for maintenance of the systems, while 26 countries reported, the budget allocation is either inadequate or irregular. The remaining five countries results indicated that there is no government recurrent budget allocated for the operation of the civil registration system. To assess the recent commitment of Governments for improvement of national civil registration and vital statistics systems, one of the questions on the monitoring survey is whether there had been an increase in the government budget allocation for maintenance of the civil registration system in the last two years. Accordingly, the majority of the countries (64 per cent) indicate that there was no budgetary increase over the past two years, with the rest noting an increased budget for civil registration system within the same period.

Table 2.2a: Distribution of countries by availability of financial and human resources for civil registration system

Adequacy of budget, human resource and training for civil registration operations	Number of countries	%
Is there adequate government funding allocated for the maintenance of the civil registration system?		
Yes, the government allocates an adequate and regular budget	8	20.5
No, the government allocates a budget but it is inadequate or irregular	26	66.7
No, the government makes no budgetary allocation to the civil registration and vital statistics systems	5	12.8
Total	39	100
Has the government increased the budget for the maintenance of civil registration system in the last 2 years? If yes, please indicate the average annual increase.		

Yes, more than 40%	4	10.3
Yes, more than 10% but below 40%	5	12.8
Yes, 10% or less	5	12.8
No, there was no increase	25	64.1
Total	39	100
Does the country have adequate number of human resources dealing with civil registration operations?		
Yes, the existing human resource is adequate	11	28.2
Adequate for the headquarters but not for the local registration offices	15	38.5
Adequate for the local registration offices but not for the headquarters	1	2.5
No, human resource is inadequate at all levels	12	30.8
Total	39	100
Has the government increased the number of human resources engaged in civil registration operations in the last two years?		
Yes	39	100
No	0	0
Is there a routine training schedule for civil registrars and other personnel engaged in civil registration operations?		
Yes, there is a training schedule and training is routinely conducted	6	15.4
Yes, there is a training schedule but not conducted as the schedule	9	23.1
No, there is no training schedule but conducted once in a while	23	59.0
No, there is no training schedule and no training has been conducted	1	2.5
Total	39	100

A civil

registration system requires sufficient and trained personnel at each level of the system. At the national level, personnel are needed to deal with technical support, coordination between government agencies, and for monitoring and evaluation activities, while at the regional or district levels, the personnel act as links between the national and regional office and the local registrar offices. The monitoring survey result shows that 11 countries (28 per cent) have adequate human resource at all levels, while 15 countries (38 per cent) have adequate personnel at headquarters but not at the local registration offices. Nearly one third (31 per cent) of the countries indicated that their human resources are inadequate both at headquarters and the local registration offices. Regarding training and capacity-building programmes, a large number of countries (59 per cent) indicate that no routine training schedule for civil registrars is provided, but trainings are conducted occasionally. The results show that 15 countries have routine training schedules, but in only six of them, training as per the schedule while 9 countries do not comply with the schedule.

Adequate and timely supplies of registration forms and related materials to local registration offices is very important to ensure universal, continuous and timely recoding of vital events. Safekeeping of records is also very important to prevent loss and deterioration of them over time. Registration records must be adequately stored and preserved over an extended period of time to facilitate retrieval of legal documents as requested by individuals or institutions. The monitoring results shown in table 2.2b indicate that nearly half of the countries (49%) have adequate and timely supply of registration forms and related materials from their local registration offices. The

remaining half have implied that local registration offices run out of forms and do not provide enough supply initially to meet the demand.

Regarding availability of adequate storage infrastructure for registration records, only 11 countries (28 per cent) have adequate storage in all their local registration offices. Eighteen countries have reported that only a few of their registration offices have adequate storage infrastructure, while 10 countries have indicated a lack of adequate storage in their local registration offices.

It is also necessary to provide civil registrars with civil registration handbooks and manuals for reference to support their day-to-day activities. The result in table 2.2b shows that in 22 countries (56 per cent), the civil registrars are provided with handbooks and manuals, whereas the results from 11 countries show that only some registrars are provided while six countries have reported that none of civil registrars had been provided with a handbook and manuals.

Table 2.2b Distribution of countries by availability of infrastructure, forms, handbooks and manuals for civil registration system

Infrastructure, registration forms, handbooks and manuals	Number of countries	%
Is the supply of civil registration forms and materials to the local registration offices timely and adequate?		
Yes, forms and related materials is met most of the time	19	48.7
Not always, sometimes local offices run out of forms & materials	19	48.7
No, local offices do not have forms and materials most of the time	1	2.6
Is there adequate storage for civil registration records at the local registration offices?		
Yes, there is an adequate storage in all local civil registration offices	11	28.2
No, adequate storage only in some local civil registration offices	18	46.2
No, storage is inadequate in all local civil registration offices	10	25.6
Are civil registrars provided with handbooks and manuals on civil registration for reference purposes?		
Yes, all registrars provided with handbooks and manuals on civil registration	22	56.4
Yes, only some are provided with handbooks and manuals on civil registration	11	28.2
No, handbooks and manuals on civil registration are not provided	6	15.4

Table 2.2c below shows the distribution of countries overall score on availability of resources and infrastructure for civil registration system. As indicated in the table, 22 countries have scored below 65 per cent, implying low resources allocation and weak infrastructure for the civil registration system. Countries in the first and the second categories (below 50 per cent) are characterized as having extremely low level of resources allocations for the operation and maintenance of their civil registration and vital statistics systems. Only 6 out of the 39 countries had nearly adequate resources for their civil registration system, while 11 countries have partially adequate resources for running their civil registration system (See the annex for the list of countries in each category).

Table 2.2c: Distribution of countries overall score on availability resources and infrastructure for the civil registration system

Score	Number	%
Less than 35%	2	5.1
35-49%	14	35.9
50-64%	6	15.4
65-79%	11	28.2
80% and above	6	15.4
Total	39	100
Average score	59%	

2.3 Coordination, planning and monitoring

As a multisectoral system, civil registration and vital statistics involve participation from different public organizations concerned with the registration of vital events, compiling vital statistics, using registration documents and data for legal and administrative purposes or for planning and monitoring economic and social development programmes. There is need for high-level coordination mechanisms at the national level and inter-agency collaboration to ensure a smooth and efficient operation. Table 3.2a presents the monitoring survey results on availability of coordination and collaboration mechanisms at the national level. The results shows that 29 out of the 39 countries have a high-level coordination mechanism at the national level. However, the coordination mechanism is well-functioning only in 15 countries, and not effective in the remaining 14 countries.

Most countries have separate agencies responsible for civil registration and vital statistics operations. Therefore, it is important to have a structured collaboration and communication mechanism to enable civil registration and vital statistics offices to facilitate smooth and efficient operation of civil registration and vital statistics systems. The monitoring results reveal that 14 out of the 39 countries have a formal inter-agency committee, but the collaboration is efficient in only six countries. Even though there is no formal committee, 19 countries have reported that the two agencies hold regular meetings or have a close relationship that facilitates coordination.

In addition, collaboration between the civil registration office and the ministry of health is important to improve registration coverage on birth and death. The broad health infrastructure and community-based health care services of the ministry of health provide an exceptional advantage to collaborate on birth and death registrations, particularly in rural and remote communities. As the monitoring results in table 2.3a indicate, collaboration with the ministry of health is not effective in many countries. The results indicate that 24 countries (61%) have a formal inter-agency committee, but the collaboration is insufficient. The remaining 15 countries lack a structured collaboration mechanism between the civil registration office and the ministry of health.

Table 2.3a: High-level coordination and inter-agency collaboration in facilitating civil registration and vital statistics operations

Coordination and inter-agency collaboration	Number of countries	%
---	---------------------	---

Is there a high-level coordination body or an inter-agency coordination mechanism at the national level for coordinating the civil registration and vital statistics programme?		
Yes, there is a well-functioning coordination body at the national level	15	38.5
Yes, there is a coordination body at the national level but it is not effective	14	35.9
No, there is no coordination body at the national level	9	23.1
No response	1	2.5
How well does the civil registration office and the vital statistics compiling office collaborate in facilitating civil registration and vital statistics operations?		
Yes, there is a formal committee that collaborates very well	6	15.4
Yes, there is a formal committee, but the collaboration is insufficient.	8	20.5
No formal committee, but they have regular meetings or close work relations	19	48.7
There is minimal or no collaboration between these institutions	4	10.3
No response	2	5.1
How well does the civil registration office and the ministry of health collaborate in facilitating the civil registration and vital statistics operations?		
A. Yes, there is a formal inter-agency committee and the collaboration is effective.	0	0
B. Yes, there is a formal committee, but the collaboration is insufficient.	24	61.5
C. No formal committee, but they have regular meetings or close work relations	7	17.9
D. There is minimal or no collaboration between these institutions	7	17.9
E. No response	1	2.5

The first step towards the improvement of national civil registration and vital statistics systems is to conduct a comprehensive assessment to identify weaknesses and gaps in the systems, and then develop a concrete and time-bound improvement action plan. The monitoring survey reveals that 21 countries (54%) have integrated action plans for improvement of their civil registration system, while six countries have improvement plans, but these plans are not integrated as either vital statistics or cause-of-death are not covered (table 2.3b). The remaining 12 countries have reported to have no action plans at all. Out of the 27 countries that have action plans, only 12 countries have developed the plan based on a comprehensive assessment covering the four vital events and cause of death, while, for eight countries, the plan is an outcome of the comprehensive assessment but does not address the four vital events or cause of death. For the remaining seven countries, the plan is not based on a comprehensive assessment, but is the result of a rapid assessment or not based on any assessment at all.

A national improvement action plan to improve civil registration and vital statistics is expected to have a monitoring system as an integral part of the system in order to measure progress in achieving targets vis a-vis the action plan. Countries were asked whether they have an institutionalized monitoring and evaluation framework for the improvement plan. The results are shown in table 2.3. Although 19 out of the 27 countries with an improvement plan reported having a monitoring and evaluation framework, only nine of them have put it in practice and it is not consistently applied in 10 countries. The report from the eight countries imply that the improvement plan is being implemented without institutionalized monitoring and evaluation framework.

Table 2.3b: Action plan and monitoring framework for improvement of the civil registration and vital statistics systems

Planning and monitoring	Number of countries	%
Is there a national civil registration and vital statistics improvement plan?		
Yes, there is an integrated civil registration and vital statistics improvement plan	21	53.8
Yes, there is improvement plan but it does not cover vital statistics and/or cause-of-death	6	15.4
No, there is no improvement plan	12	30.8
If there is an improvement plan, was the national civil registration and vital statistics plan developed as an outcome of a comprehensive assessment of the civil registration and vital statistics system?		
Yes, the plan is an outcome of comprehensive assessment on all four vital events and cause of death	12	30.8
Yes, the plan is an outcome of comprehensive assessment but not all four vital events or cause of death were covered	8	20.5
No, it is an outcome of other assessment type, such as a rapid assessment	5	12.8
No, the plan is not based on any assessment	2	5.1
Not applicable	12	30.8
If there is an improvement plan, is there an institutionalized monitoring and evaluation framework for the civil registration and vital statistics plan?		
Yes, there is an institutionalized monitoring and evaluation framework that is in use	9	33.1
Yes, there is an institutionalized monitoring and evaluation framework, but it is not applied on a regular basis	10	25.6
No, there is no institutionalized monitoring and evaluation framework	8	20.5
Not applicable	12	30.8
Does the country compute birth registration completeness on a regular, at least annual basis, based on the system itself?		
Yes, birth registration completeness is computed regularly, at least annually	12	30.8
Yes, birth registration completeness is computed, but not regularly	12	30.8
No, birth registration completeness is not computed	14	35.9
No response	1	2.5
Does the country compute death registration completeness on a regular, at least annual basis based on the system itself?		
Yes, death registration completeness is computed regularly, at least annually	13	33.3
Yes, death registration completeness is computed but not regularly	8	20.5
No, death registration completeness is not computed	17	43.6
No response	1	2.5

In general, the overall score for coordination, planning and monitoring of civil registration and vital statistics systems, which is as an important component of the systems, shows that 20 out of the 39 countries score below 50 per cent, indicating that most countries perform poorly on this component. Only four countries meet the satisfactory level (80 per cent and above) (See the annex for the list of countries in each group). To bring coordinated and sustainable improvement in the system, countries need to have proper planning, a coordination mechanism and a monitoring and evaluation framework.

Table 2.3d: Distribution of countries by overall score

on coordination, planning and monitoring

Score	Number	%
Less than 35%	9	23.1
35-49%	11	28.2
50-64%	4	10.3
65-79%	10	25.6
80% and above	4	10.3
No data	1	2.5
Total	39	100
Average score	51%	

2.4 Registration process and services

Civil registration processes and services cover a number of elements, including, among them, quality of services delivery and attitudes of the public towards services that need to be assessed using qualitative methods. In this subsection, monitoring indicators are provided for a few of them, namely notification, registration and certification processes. In situations in which registration offices are not accessible to the public or there is little incentive for families to report vital events, notifications of occurrence of vital events to local registrars through formal and informal networks play an important role in improving registration coverage. The function of notifiers is to provide information about vital events that occurred in their jurisdiction to the registrar. For the monitoring survey, information was collected on whether countries make use of formal and informal networks to improve access to registration services by the public. Formal networks include government structure, such as health workers and local administrative offices, whereas informal networks involve, for example, community chiefs and religious institutions.

Table 2.4a provides results on uses of formal and informal networks, and arrangements for registering vital events occurring to refugees. According to the results of the survey, the majority of the countries (37) make use of formal and informal networks to improve their birth and death registration coverage. Notification of birth and death events that occur at homes is mainly the responsibility of community chiefs or local administrators, while for events that occur at health facilities, health workers serve as primary notifiers of vital events to local registrars.

The principle of universal civil registration calls for registering all vital events, including events that occur in unconventional residences, such as refugee camps and an internally displaced community. Twenty-nine countries reported that they have arrangements in place for registration of birth and death occurring to refugees, whereas 22 countries have arrangements for marriage and divorce registration for refugees. However, there are no such arrangements for birth and death registration in six countries, and none for registration of marriage and divorce in 10 countries (table 2.4a).

Table 2.4a: Uses of formal and informal networks, and arrangements to improve access to civil registration

	Number of countries	%
Does the country make use of formal and informal networks to improve access to birth registrations services by the public?		
Yes, uses formal and informal networks to deliver birth registration services	27	69.2
The country uses only formal networks to deliver birth registration services	10	25.6
The country uses only informal networks to deliver birth registration services	0	0.0
Doesn't use any formal or informal networks to deliver birth registration services	1	2.6
No data	1	2.6
Does the country make use of formal and informal networks to improve access to death registrations services by the public?		
Yes, uses formal and informal networks to deliver death registration services	20	51.3
The country uses only formal networks to deliver death registration services	17	43.6
The country uses only informal networks to deliver death registration services	0	0
Doesn't use any formal or informal network to deliver death registration services	1	2.5
No data	1	2.5
Are there arrangements made for the registration of birth and death occurring to refugees?		
Yes, there are arrangements to register birth and death occurring to refugees	29	74.4
There are arrangements in place for births but not for deaths	2	5.1
There are arrangements in place for deaths but not for births	0	0.0
No, birth and death occurring to refugee populations are largely not registered	6	15.4
No data	2	5.1
Are there arrangements made for the registration of marriage and divorce occurring to refugees?		
Yes, there are arrangements to register marriage and divorce occurring to refugees	22	56.4
There are arrangements in place for marriage, but not for divorce	4	10.3
There are arrangements in place for divorces but not marriages	0	0.0
No, marriage and divorce occurring to refugees are largely not registered	10	25.6
No data	3	7.7

In addition to lack of access to registration offices and the low incentive for the public to register vital events, registration and certification costs can be a major barrier for families to register vital events. It is generally recommended that no fee should be charged to register vital events within the time period specified by the registration law and for issuing the first copy of certificates. The monitoring survey includes enquiries about the country practices pertaining to registration and certification cost of vital events. Table 2.4b provides information on the number of countries that charge fees for current registration of each vital event and issuing the first copy of certificates. The results show that, fewer countries, five for birth and nine for death charge fees for current registrations, while 21 charge fees for marriage registration and 14 for divorce. Charging fees for issuing the first copy of a certificate is a common practice in more countries than for current registration. As many as 14 countries charge fees for issuing the first copy of birth and death certificates and 22 and 16 charge for marriage and divorce certificate, respectively.

Table 2.4b: Distribution of countries by financial costs for registering vital events and acquiring first copy of certificates

	Registration within legally specified time	To get the first copy of certificate

Vital events	No fee charged	Fee charged	No response	No fee charged	Fee charged	No response
Birth	32	5	2	24	14	1
Death	28	9	2	24	14	1
Marriage	17	21	1	16	22	1
Divorce	24	14	1	22	16	1

The average score on registration process and services for countries that completed the monitoring form is 62 percent, as shown in table 2.4c. which is a “moderate” score, but not adequate. The distribution of countries by grouped scores shows that 20 countries scored below 65 per cent, and only 8 countries fall into the 80-per cent and above category. This implies that many countries need to take proactive measures to extend registration services through formal and informal networks to reach out to less served communities, and reduce the financial cost of registration and certification of vital events.

Table 2.4c: Distribution of countries by overall score on civil registration process

Score	Number	%
Less than 35%	2	5.1
35-49%	7	17.9
50-64%	11	28.2
65-79%	9	23.1
80% and above	8	20.5
No data	2	5.1
Total	39	100
Average score	62%	

2.5 Use of information and communication technology

As civil registration and vital statistics systems are designed to be permanent, continuous, universal and multisectoral undertakings, the use of ICT benefits the systems by improving efficiency and reliability in recording, storing, retrieving of vital records, and for transferring compiling vital statistics data. Many countries are initiating e-governance for streamlining their administrations and improving services to citizens. Civil registration is one sector that can benefit substantially from digitization process. Digitization is also imperative for linkage between the civil registration system and various government functions, such as health care, identification and electoral services.

In this subsection, a summary of the results of the monitoring review on country practices in using ICT for capturing records of vital events, notifying occurrences of vital events, transmitting vital records, and linking the identification database to the civil registration system is presented. As shown in table 2.5a, for births, 13 countries (33 per cent) and for death 11 countries (28 per cent) capture records electronically at the local registration offices. Few countries use an electronic registration system for recording marriage and divorce events. In some countries, electronic

recording is applied only in some registration offices, whereas a larger number of countries fully depend on a paper-based registration system.

Table 2.5a: Electronic recording of vital events at the local registration office

	Number	%
Are birth records captured electronically at the local civil registration office?		
Yes, for all registration offices	13	33.3
Yes, only for some registration offices	11	28.2
No, the records are not captured electronically at any local civil registration office	14	35.9
No response	1	2.5
Are death records captured electronically at the local civil registration office?		
Yes, for all registration offices	11	28.2
Yes, only for some registration offices	11	28.2
No, the records are not captured electronically at any local civil registration office	15	38.5
No response	2	5.1
Are marriage records captured electronically at the local civil registration office?		
Yes, for all registration offices	10	25.6
Yes, only for some registration offices	9	23.1
No, the records are not captured electronically at any local civil registration office	19	48.7
No response	1	2.5
Are divorce records captured electronically at the local civil registration office?		
Yes, for all registration offices	7	17.9
Yes, only for some registration offices	7	17.9
No, the records are not captured electronically at any local civil registration office	23	59.0
No response	2	5.1

Mobile technology is applied to improve registration coverage in remote and hard to reach communities by recording and reporting vital events over a short time period. Community health workers can use mobile technology to notify local registration offices on the occurrence of birth and death at the community level. However, the monitoring results indicate that only few countries use mobile technology for notifying vital events and transmitting records. As many as 34 countries (87 per cent) have reported that mobile technology is not applicable to notify occurrence of birth and death at the community level. Similarly, health facilities in a majority of the countries (32 out of them) do not use an electronic system to notify local registration offices about the occurrence of birth and death in their facilities.

Table 2.5b: Electronic notification of vital events occurrence and transmission of records

	Number	%
Is mobile technology used to notify about the occurrence of birth and death at the community level?		
Yes, for both birth and death	2	5.1
Yes, but only for birth	2	5.1
Yes, but only for death	0	0.0

No, mobile technology is not used to notify for both birth and death	34	87.2
No response	1	2.5
Are civil registration records transmitted electronically from the civil registration offices at the local level to the district or national office?		
Yes, data are transmitted electronically at all levels	11	28.2
Yes, but data transmitted electronically only from the district to the national office	4	10.3
No, only paper records are transmitted at all levels	9	23.1
No, no records are transmitted from the local civil registration office	14	35.9
No response	1	2.5
Do health facilities notify electronically local registration offices about the occurrence of birth and death?		
Yes, all health facilities	3	7.7
Yes, but only some health facilities	3	7.7
No, no health facilities notify electronically local registration offices	32	82.1
No response	1	2.5

Several countries in the region have national identity systems that provide identity documents to their citizens. Some of the countries have a national identification database in which a unique identity number is assigned to the individual, and details, such as biometric data, that identifies each person. A civil registration records database, particularly, birth and death registration database, needs to be organically linked to the national identity database to ensure that it operates properly and the identification system is maintained well for the lifespan of an individual, that is, from birth to death. The monitoring results reveal that 29 countries (74 per cent) have a national identification database and 20 countries (51 per cent) maintain a computerized database on civil registration records. However, the national identification database is linked to the civil registration system only in 13 countries (table 2.5c).

Table 2.5c: Linkage between the national identification database and the civil registration system

	Number	%
Is there computerized national database where civil registration records are maintained?		
Yes	20	51.3
No	18	46.1
No response	1	2.5
Does the country have a national identification database?		
Yes	29	74.4
No	9	23.1
No response	1	2.5
If yes to the question above, is the national identification database linked to the civil registration system?		
Yes	13	33.3
No	16	41.0
Not applicable	9	23.1
No response	1	2.5

Table 2.5d provides the distribution of countries by average score on digitization of civil registration system. As indicated in the table, most of the countries (54 percent) that completed the monitoring assessment score less than 35 per cent with regard to the digitization of the civil

registration system. Only 12 countries have a moderate to satisfactory level of digitization, with scores of 65 per cent and above (see the annex for the list of countries in each category). The average score for digitization of the civil registration system is estimated to be 40 per cent, which is very low; substantial improvement in this component is required to ensure that the civil registration and vital statistics systems in region are efficient and reliable.

Table 2.5d: Distribution of countries by overall score on digitization of civil registration system

Score	Number	%
Less than 35%	21	53.8
35-49%	3	7.7
50-64%	2	5.1
65-79%	7	17.9
80% and above	5	12.8
No response	1	2.5
Total	39	100
Average score	40%	

2.6 Verifying and recording cause of death

Cause of death is one of the key information that is required to be collected when registration on the event of death takes place. It is also recommended to use the standard international form of medical certificate for recording cause of death to ensure comparisons across countries. In most cases, it is required that cause of death should be certified by a medical practitioner, mainly for deaths occurring in health institutions. In many African countries, most of the deaths occur at home and outside health facilities, therefore, it is challenging to get medical certificates for the causes of deaths. Some countries use verbal autopsy techniques to come up with a probable cause of death in cases in which deaths occur outside health facilities. Table 2.6a presents the distribution of countries by practices of collecting and publishing cause of death statistics. According to the monitoring results, 29 countries have reported that cause of death records are included in their death registration process. Only few countries apply verbal autopsy methods to record cause of death information and publish cause of death statistics based on the civil registration system.

In the monitoring survey countries are also asked whether they use the standard international form and international classification of diseases codes for verifying and recording cause of death. The result reveals that only 13 countries regularly use the standard international form to certify cause of death, while 11 countries have reported that the standard form is used when deaths occur in health facilities. Regarding application of the international classification of diseases codes, 15 countries indicate that they are using the latest version of the International Statistical Classification of Diseases and Related Health Problem 10th revision, while two countries are using the older version

Table 2.6a: Practices of cause-of-death recording and publishing statistics

	Number	%
Is cause-of-death information collected during the death registration operation?		
Yes	29	74.4
No	9	23.1
No response	1	2.5
Are verbal autopsy tools or methods used for collecting cause-of-death information for non-institutional deaths?		
Yes, verbal autopsy tools are used for collecting cause of death information	9	23.1
Verbal autopsy tools are used, but only in some areas	8	20.5
No, verbal autopsy tools are never used in collecting cause of death	21	53.8
No response	1	2.5
Are there reports published on causes of death statistics based on the civil registration system?		
Yes, there is an annual publication on cause of death statistics	8	20.5
Yes, there is a publication released but on an ad hoc basis	8	20.5
No, there is currently no publication released on cause of death statistics	23	59.0

The results also show that only 10 countries offer training in the International Classification of Diseases code to physicians for certifying cause of death either in medical school curriculum or in their in-service training (table 2.6b). Most of the countries that completed the monitoring form reported that they provided training for doctors on cause of death certification in their medical schools or on in-service training. Nevertheless, sixteen countries did not provide training for doctors on the International Classification of Diseases codes.

Table 2.6b: Practices on using standard forms and International Classification of Diseases codes, and training for doctors

	Number	%
Does the country use the standard international form of medical certificate of cause of death for recording deaths?		
Yes, the form is always used by doctors to certify cause of death	13	33.3
The form is always used when deaths occur in health facilities	11	28.2
The form is used to certify death only in a few hospitals	4	10.3
No, the form is not used for certifying causes of death	10	25.6
No response	1	2.5
In your country, is cause of death coded according to the International Classification of Diseases format?		
Yes, International Classification of Diseases coding is done using the full version of the ICD-10 (the latest revision)	15	38.5
Yes, International Classification of Diseases coding is done using the full version of the ICD, but the older revision	2	5.1
International Classification of Diseases coding is done, using a shortlist, which is a national adaptation of the International Classification of Diseases.	5	12.8
No, the International Classification of Diseases is not used	15	38.5

No response	2	5.1
Is there a training on death certification provided to doctors for certifying the cause of death?		
Yes, the training is included in the medical curriculum and available in service	15	38.5
Yes, the training is included in the medical curriculum but not available in service	4	10.3
Yes, the training is available to doctors in service but it is not in the medical curriculum	9	23.1
No, no training on death certification is given to doctors	9	23.1
No response	2	5.1
Is there a training on International Classification of Diseases provided to doctors for certifying the cause of death?		
Yes, the training is included in the medical curriculum and available in service	7	17.9
Yes, the training is included in the medical curriculum but not available in service	3	7.7
Yes, the training is available to doctors in service but it is not in the medical curriculum	11	28.2
No, no training on the International Classification of Diseases is given to doctors	16	41.0
No response	2	5.1

In general cause of death recording and certification practices are not common in many African countries. Even for countries which have reported the collection of information on cause of death, the coding and certification practices are not reliable as certifiers and coders are not properly trained on the standard international forms and the International Classification of Diseases coding practices. This accounts for the low average score of 46 per cent on cause of death certification and recording practices in the region. Distribution of countries by categories of scores reveals that 24 countries score below 50 per cent and only four have a satisfactory level, with a score of at least 80 per cent (table 2.6c).

Table 2.6c: Distribution of countries by overall score on cause of death recording practices

Score	Number	%
Less than 35%	12	30.8
35-49%	12	30.8
50-64%	2	5.1
65-79%	8	20.5
80% and above	4	10.3
No response	1	2.5
Total	39	100
Average score	46%	

III. Registration completeness, vital statistics and uses of data

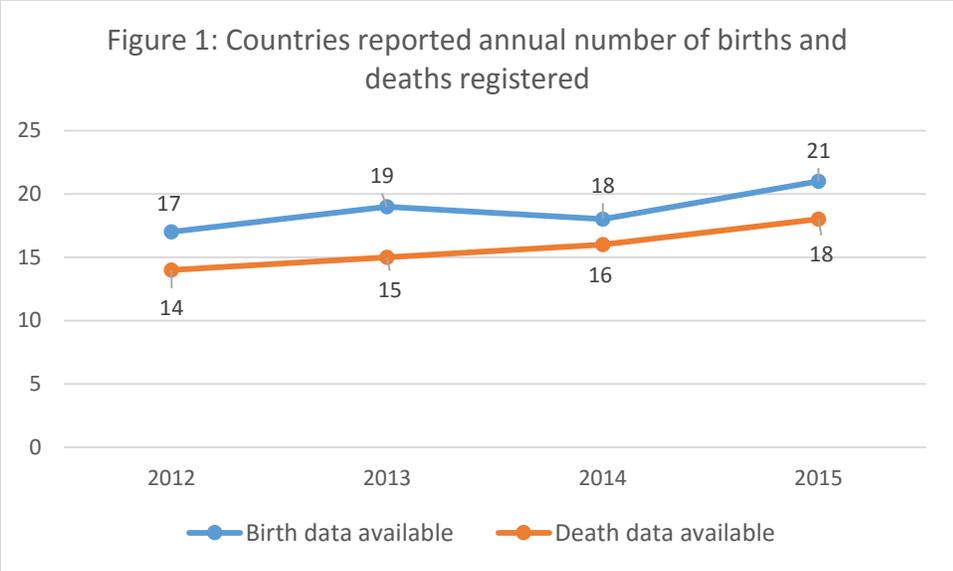
3.1 Completeness of birth and death registrations

Complete registration of a vital event refers to registration of every event that occurs to all population groups in a country within a specified time period.⁴ It not only indicates that each vital event occurring within the country is registered, but it also shows that the registration has taken place within a legally specified time. In other words, it means that the system has attained 100 per cent registration within the legally stipulated time allowance. A deviation from this, therefore, implies “completeness error” in the registration system.

Although countries were requested to provide data on annual vital events registered by their national civil registration system, less than half of the 39 countries that completed the monitoring form submitted the data required for calculating the level of registration completeness. Figure 1 shows the number of countries that provided adequate data on annual births and deaths registered over a four-year time span. The graph shows that for each year more countries reported annual records on birth than records on death. However, the trend indicates a moderate increase over time in the number of countries that provided birth and death records. Low responses from the countries suggest that many countries do not compile annual data vital records, and hence, are not able to measure regularly the level of registration completeness in their registration system. As indicated in table 2.3b, only a few countries compute birth and death registration completeness on a regular basis.

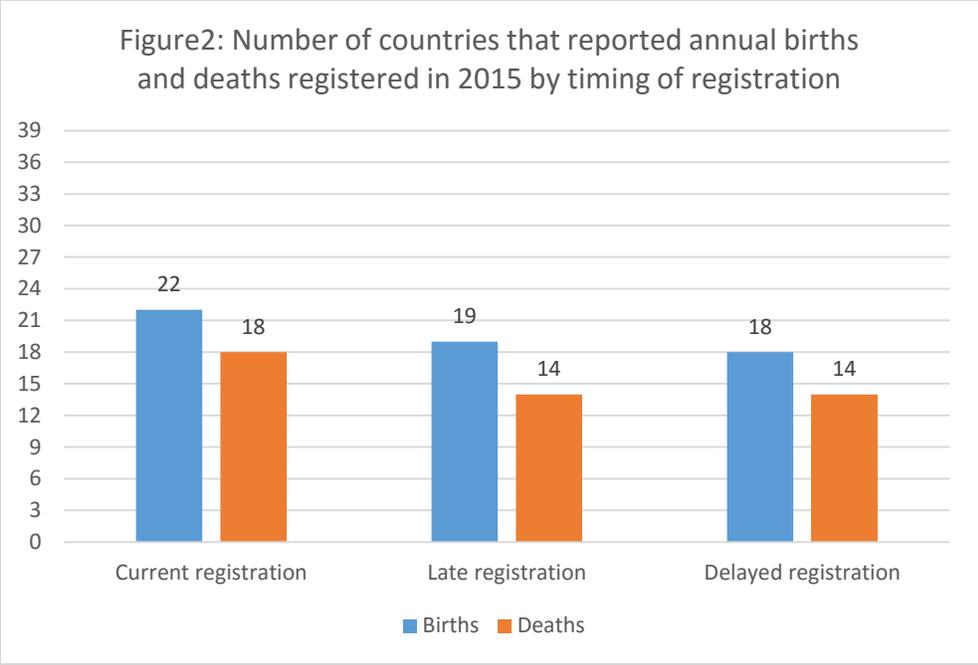
IN FIGURE 1, Need to change spelling of available

⁴ <http://unstats.un.org/unsd/demographic/standmeth/principles/M19Rev3en.pdf>



Comparison of trends on total number of vital events reported by the countries that submitted annual vital statistics data, show great discrepancies over the subsequent years. In a normal condition where there is no major natural disaster or epidemic, the total number of vital events in successive years will not differ greatly from each other. Generally, inconsistencies in reported figures for subsequent years imply that the data quality is questionable. In addition, some countries reported only current or total annual registration without indicating late and delayed registrations. In most cases, it is highly probable that reported current or total registration in fact includes delayed registration that is backlog clearance or campaign registrations of older children. The level of registration completeness should normally be computed based on current registration plus late registration, but not delayed registration (registered after the grace period, which is usually one year after the occurrence of the event).

Although the countries were expected to report current, late, delayed and total registration, few countries reported these four figures, which are needed to complete a proper estimation of the level of registration completeness. As indicated in figure 2, in 2015, only 22 out of the 39 countries reported current birth registration, while 19 and 18 countries provided data on late and delayed registration, respectively. These figures are much lower for death registration, and very few countries reported numbers of annual registrations for marriages and divorces.



Despite the low response rate and the poor quality of the reported data on the annual number of vital events, birth and death registration completeness rates were estimated based on available data from the countries that reported adequate information. The estimation of the level of registration completeness is calculated as a percentage of the expected number of vital events in a given year that are actually registered or captured by the civil registration system in the same year. The number of births or deaths expected for a given year is estimated as a product of the crude birth rate or the crude death rate and the estimated midyear total population size for the given year. It is important to note that the numbers on vital events reported in the monitoring survey and the numbers of expected vital events estimated from population census data are often error-prone. However, estimates on completeness rates for different events provide rough indicators on the levels and changes of registration completeness in the region over the past few years.

Figure 3 shows the trends of estimated levels on births and deaths registration completeness based on available data from countries that reported adequate information for calculating the rate of completeness. It indicates that the levels of birth and death registrations completeness are very low in the region. According to the results, about fifty per cent of the expected number of births and only 33 per cent of expected number of deaths are captured by the civil registration systems. The figure also shows that the level of completeness on birth registration increased between 2013 and 2015 while for death registration, it did not change. In general, because of the very low levels of registration of births and deaths — the two top priority events, countries need to establish a regular monitor mechanism for measuring completeness of civil registration system at local and national levels and take appropriate measures to improve registration completeness.

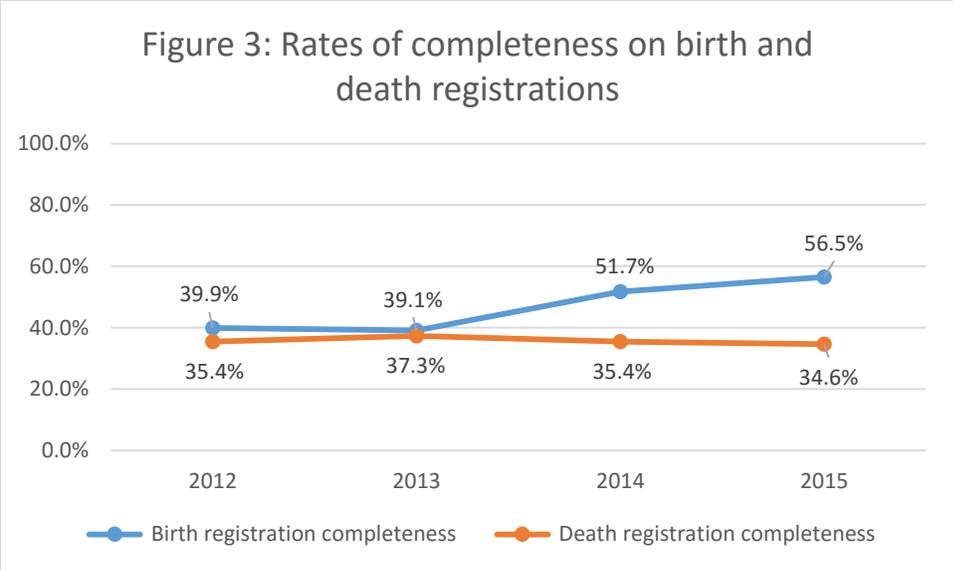


Table 3.1 provides distribution of countries classified by levels of completeness on birth and death registrations in 2015. As shown in the table, for birth registration, in 11 out of the 21 countries and for death registration, in 12 out of the 18 countries, less than 50 per cent of the events were registered in the civil registration system. For both vital events, only five countries reached a registration completeness rate of 80 per cent, which is considered a satisfactory level. According to the monitoring results, the average completeness rates for birth and death are estimated to be about 56 per cent and 35 per cent, respectively. The countries that reported adequate data on their annual birth and death registrations are also likely to have higher rates of birth and death registration completeness. Therefore, the completeness rates estimated in this monitoring survey could be on the higher end and may not be representative of all the member States in the region.

Table 3.1 Number of countries by birth and death completeness rates, 2015

Rate	Birth	Death
<35%	6	10
35-49%	5	2
50-64%	1	0
65-79%	4	1
>80%	5	5
Countries reported	21	18
Average rate	56.5%	34.6%

3.2 Vital statistics, data quality checks and dissemination

A well-functioning civil registration system provides reliable and timely vital statistics data that can be used to determine population size on a continuous basis. Vital statistics data are important to plan, implement and monitor development programme at the national level and at local administrative subdivisions. The vital statistics data from the civil registration system are also critical for monitoring and enhancing the registration system. Data compiled from registration system help in evaluating coverage, completeness and quality of registration records at local offices and at regional and national levels.

The vital statistics data collected through the civil registration system are expected to be compiled, published and disseminated to users on a regular basis. Table 2.7a shows the number of countries that compile vital statistics based on civil registration. Out of the 39 countries that have responded to this question, 25 reported that they have compiled birth and death statistics. However, only 10 countries reported compiling data from marriage and divorce records. As can be seen from the table, only 15 countries publish annual vital statistics reports compiled from civil registration system, while 11 countries publish a vital statistics report on an ad hoc basis. In general, there is a wide variation between countries, some countries compile vital statistics from civil registration and few publish annual report on vital statistics, while other have not started compiling vital statistics from their civil registration system.

Table 2.7a: Practices on compiling and publishing vital statistics from the civil registration

	Number	%
Are vital statistics on birth and death compiled from civil registration system?		
Yes, vital statistics on both birth and death are compiled from civil registration system	25	64.1
Vital statistics on births are compiled from civil registration system but not on deaths	0	0.0
Vital statistics on deaths are compiled from civil registration system but not on births	1	2.5
No, vital statistics on births and deaths are not compiled from civil registration system	12	30.8
No response	1	2.5
Are vital statistics on marriage and divorce compiled from civil registration system?		
Yes, vital statistics on both marriage and divorce are compiled from civil registration system	10	25.6
Vital statistics on marriage are compiled from the civil registration system but not on divorce	8	20.5
Vital statistics on divorce are compiled from the civil registration system but not on marriage	0	0.0
No, vital statistics on marriage and divorce are not compiled from the civil registration system	20	51.3
No response	1	2.5
Does the country publish annual vital statistics reports compiled from civil registration data?		
Yes, a vital statistics report compiled from civil registration data is published every year	15	38.5
No, a vital statistics report compiled from civil registration data is published on an ad hoc basis	11	28.2
No, vital statistics report compiled from civil registration data has ever been published	12	30.8
No response	1	2.5

It is important to verify that vital statistics compiled from civil registration are accurate and complete by using techniques of data quality checks. Complete, accurate and timely vital statistics

provide reliable data for identifying health and social problems and for planning and monitoring progress of development programmes. However, many countries in the region do not have in place a data quality checks procedure to ensure consistency and plausibility of their vital statistics reports. Results from the monitoring survey, shown in table 2.7b, indicates that only a few of the countries that publish annual vital statistics reports carry out regular data quality and plausibility checks before they release their data. As evident in the table below, two thirds of the countries that completed the monitoring form do not have a routine data quality and plausibility checks mechanism.

Table 2.7b: Data quality and plausibility checks on vital rates derived from civil registration data

	Number	%
What consistency and plausibility checks are carried out on fertility levels derived from the civil registration data before the data are released?		
Checks on overall levels of fertility derived from the vital statistics data are made routinely by calculating rates and comparing these over time; rates are also compared to data derived from other sources, such as censuses and surveys	7	18.0
Checks on overall levels of fertility derived from vital statistics data are undertaken by calculating rates and comparing these to earlier time series	5	12.8
Checks are limited to computer programmes that simply look for compilation errors before the data are published	1	2.5
No specific checks are routinely carried out, or there is no data released on fertility	24	61.5
No response	2	5.1
What consistency and plausibility checks are carried out on mortality levels derived from the civil registration data before the data are released?		
Checks on overall levels of mortality derived from the vital statistics data are made routinely by calculating rates and comparing these over time; rates are also compared to data derived from other sources, such as censuses and surveys	5	12.8
Checks on overall levels of mortality derived from vital statistics data are undertaken by calculating rates and comparing these to earlier time series	6	15.4
Checks are limited to computer programmes that simply look for compilation errors before the data are published	3	7.7
No specific checks are routinely carried out, or no data are released on mortality	23	59.0
No response	2	5.1
What consistency and plausibility checks on marriage levels are carried out before the data are released?		
Checks on overall levels of marriage derived from the vital statistics data are made routinely by calculating rates and comparing these over time; rates are also compared to data derived from other sources, such as censuses and surveys	6	15.4
Checks on overall levels of marriage derived from vital statistics data are undertaken by calculating rates and comparing these to earlier time series	3	7.7
Checks are limited to computer programmes that simply look for compilation errors	3	7.7
No specific checks are routinely carried out or no data are released on marriage	25	64.1
No response	2	5.1
What consistency and plausibility checks on divorce levels are carried out before the data are released?		
Checks on overall levels of divorce derived from the vital statistics data are made routinely by calculating rates and comparing these over time; rates are also compared to data derived from other sources, such as censuses and surveys	5	12.8
Checks on overall levels of divorce derived from vital statistics data are undertaken by calculating rates and comparing these to earlier time series	2	5.1

Checks are limited to computer programmes that simply look for compilation errors before the data are published	2	5.1
No specific checks are routinely carried out or there is no data released on divorce	27	69.2
No response	3	7.7

In table 2.7c, presents the distribution of countries by average score on practices of compilation and dissemination of vital statistics from civil registration. More than half of the countries (22) have scored below 50 per cent, which implies that in most of the countries, the vital statistics system is very weak. Only eight countries have score of at least 65 per cent have a satisfactory vital statistics system. The average score (39 per cent) for the vital statistics subsystem is the lowest of the components of civil registration and vital statistics systems presented above. This indicates that most countries do not regularly compile and disseminate a vital statistics report from the civil registration system. As stated in the subsections above, in most countries, civil registration offices do not regularly transfer vital event records to institutions responsible for compiling vital statistics, such as the national statistics offices. In addition, levels of completeness of civil registrations are very low and the quality of vital records are inadequate.

Table 2.7c: Distribution of countries by overall score on producing and disseminating vital statistics

Score	Number	%
Less than 35%	17	45.6
35-49%	5	12.8
50-64%	6	15.4
65-79%	5	12.8
80% and above	3	7.7
No response	3	7.7
Total	39	100
Average score	39%	

3.3 Uses of registration documents and vital statistics data

The civil registry provides individuals with documentary evidence of their legal identity so that they can obtain a national identity card or passport. These two documents help to protect individuals' human and civil rights, enable them to access basic social services, such as health care and primary education, and are used for collecting inheritance. A birth certificate is required for school enrolment and, in certain cases, courts use death and cause of death records or certificates as legal evidence in settling criminal matters. Courts use death certificates or records as primary evidence in ruling on inheritance or other related claims. Marriage and divorce certificates are used as the primary legal documents for the formation and dissolution of a marriage between couples. Community health workers or health facilities require birth records or certificates to identify recent births or mothers who gave birth in the recent past, while providing postnatal services, including

vaccinations. Community health workers also require death records or certificates to identify individuals affected by communicable diseases.

Despite the low level of registration in most countries, vital event records and certificates are used as legal documents. The results in table 2.8a indicate that in 35 out of the 39 countries, the courts use vital records or certificates as legal evidence in settling civil or criminal matters, and in ruling inheritance claims. In almost all of the countries (95 per cent), marriage certificates or records are used by courts as primary evidence in settling the existence of a marriage between parties. A majority of the countries use birth certificates as a primary source document in issuing national identification cards and passports.

In many countries civil registration records and certificates are also used to provide different administrative and social services. For instance, 27 countries (69 per cent) reported that a birth certificate is required for school entry among children. However, community health workers and health facilities do not commonly use birth and death certificates: for identifying recent births; to identify individuals affected by communicable diseases; and while providing postnatal services and vaccination. Even though maternal and child health services can be used as an entry point to boost birth registration in developing countries, only in eight countries (20 per cent) reported that their health facilities request mothers to show birth certificates while providing vaccination and postnatal services. Lack of synergy between national effort on universal access to maternal and childcare services and civil registration system is a missed opportunity to improve birth registration coverage. . Similarly, health programme planners and managers also benefit from civil registration to get information on the current or projected number of births that should be targeted for prenatal, delivery and postnatal services.

Table 2.8a: Use of civil registration documents for legal and administrative purposes

	Number	%
Is birth certificate required for school enrolment?		
Yes	27	69.2
No	11	28.2
No data	1	2.5
Do courts use birth, death, marriage or divorce records or certificates as legal evidences in settling civil or criminal matters?		
Yes	35	89.7
No	3	7.7
No data	1	2.5
Do courts use death certificates or records as primary evidences in ruling inheritance or other related claims?		
Yes	35	89.7
No	3	7.7
No data	1	2.5
Do courts use marriage certificates or records as primary evidences in settling the existence of marriage between parties?		
Yes	37	94.9
No	1	2.5

No data	1	2.5
Do community health workers or health facilities require birth records or certificates in identifying recent births or mothers who gave birth in the recent past?		
Yes	18	46.1
No	18	46.1
No data	3	7.7
Do community health workers or facilities require death records or certificates to identify individuals affected by communicable diseases		
Yes	14	35.9
No	24	61.5
No data	1	2.5
Do health facilities request families to show birth certificates while providing postnatal services, including vaccination		
Yes	8	20.5
No	30	76.9
No data	1	2.5
Is information from the birth certificate used as primary source documents in issuing national identification documents?		
Yes	33	84.6
No	5	12.8
No data	1	2.5
Is information from the birth certificate used as primary source documents in issuing national passports?		
Yes	35	89.7
No	3	7.7
No data	1	2.5

In addition to providing legal identity to individuals, civil registration records are also sources of regular and permanent vital statistics needed for preparing demographic estimates. Birth rates and death rates produced by the civil registration system are used for official population estimates and projections. Death rates generated using civil registration data are used for preparing life tables in official statistics. Analyses of vital statistics produced by the civil registration system are used to evaluate completeness or quality of population census. However, the results in table 2.8b show that in only 10 countries, birth rates and death rates produced from civil registration system are used for official population estimates for preparing life tables in official statistics and to evaluate completeness or quality of population census results.

Table 2.8b: Use of data from civil registration records for population estimates and statistical purposes

	Number	%
Does the country use birth rates and death rates produced by the civil registration system for official population estimates or projections?		
Yes, official population estimates or projections are produced based on civil registration data	10	25.6
No, official population estimates or projections are produced but not based on civil registration data	26	66.7

No, there are no official population estimates or projections	2	5.1
No data	1	2.5
Are death rates generated using civil registration data used for preparing life tables in official statistics?		
Yes	10	25.6
No	28	71.8
No data	1	2.5
Are vital statistics produced by the civil registration system used to evaluate completeness or quality of population census results?		
Yes	10	25.6
No	28	71.8
No data	1	2.5

In general, compared to other components of civil registration and vital statistics systems, the overall average score (62 per cent) for utilization of civil registration records or certificates and utilization of vital statistics data is high. Only eight countries fall under the score of 50 per cent, while 16 countries scored 65 per cent or higher. However, it should be noted that the legal and administrative uses of civil registration records or certificates and statistical uses of aggregated vital statistics depend on the level of completeness of registration and quality of vital records. As already noted, coverage and completeness of civil registration remain very low in most countries in Africa, and the large part of the population may not use a civil registration as a source of legal identity for the protection of their human and civil rights.

Table 2.8c: Distribution of countries by overall score on uses of civil registration documents and data

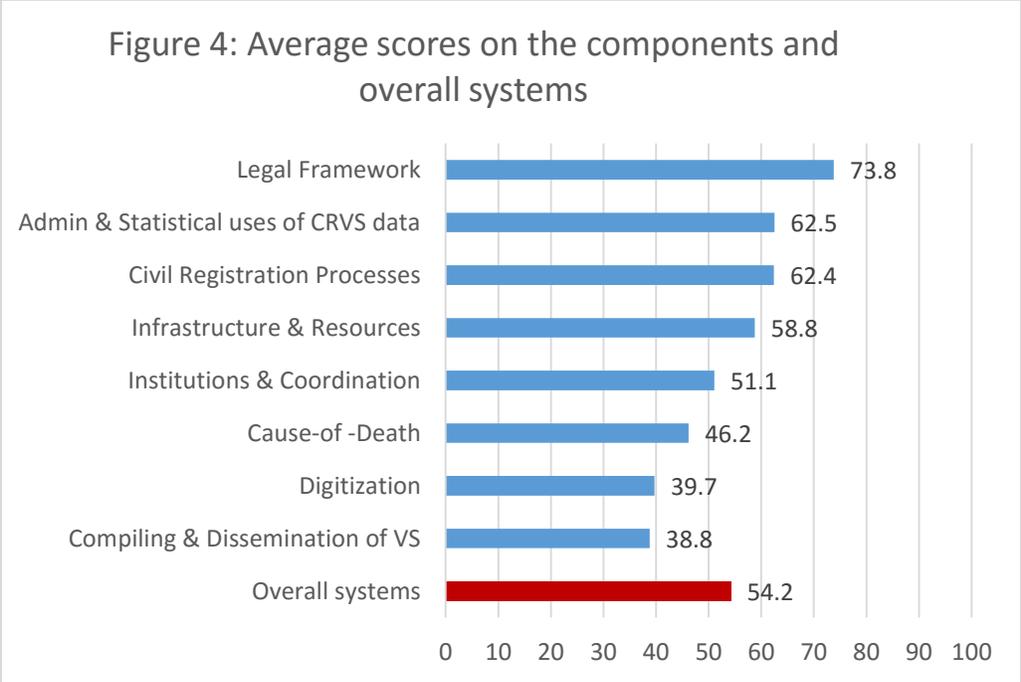
Score	Number	%
Less than 35%	3	7.7
35-49%	5	12.8
50-64%	13	33.3
65-79%	10	25.6
80% and above	6	15.4
No data	2	5.1
Total	62%	

IV. Conclusion

The monitoring survey was conducted based on an Africa Programme on Accelerated Improvement of Civil Registration and Vital Statistics web-based monitoring form to measure the progress achieved by each country in various aspects of civil registration and vital statistics systems. This report contains a summary of the findings based on responses obtained from 39 countries out of the 54 member States of ECA requested to fill-in the online monitoring form, which equated to a 72 per cent response rate. The findings provide a broad overview on the status of national civil registration and vital statistic systems and help to identify strengths and weakness of different components of the systems. The summary indicators from the monitoring results can serve as a

baseline data for the five-year (2017-2021) strategic plan of the Africa Programme on Accelerated Improvement of Civil Registration and Vital Statistics for monitoring progress at the national level.

Although each country may have a unique setting and faces different challenges, many gaps and challenges are common to most countries in the region. Figure 4 provides summary indicators on eight major components and the overall civil registration and vital statistic systems at the regional level. The annex shows the distribution of countries by five broad categories of scores for each component and the overall civil registration and vital statistics systems, classified as: <35 per cent (very weak), 35-49 per cent (weak), 50-64 per cent (moderate), 65-79 per cent (satisfactory), and 80 per cent and above (strong). The results indicated in figure 4 show that the average scores for compiling vital statistics, digitization process, and cause-of-death recording are very low (<50 per cent), meaning a “weak” performance in the region regarding the three components of the civil registration and vital statistics systems. Most of the countries that have completed the monitoring form fall under “very weak” or “weak” category and function poorly with regard to the three components (See the annex for the list of countries). Only, with regard to the legal framework component is the satisfactory level reached, with the average score being about 74 per cent, in which 26 countries scored at least 65 per cent. The average scores for the remaining four components ranges from 51 to 62 per cent, at “moderate” level. The average score for the overall civil registration and vital statistics system is about 54 per cent, which indicates that substantial improvements are required for most of the components.



Even though, most countries in the region have in place laws and legal provisions for civil registration, in many of them, the existing laws are not up-to-date nor are they aligned with the recommended international standards. Furthermore, some countries lack effective mechanisms for properly enforcing their civil registration laws. The results also show that most countries lack proper mechanisms for coordination and inter-agency collaboration and communication to establish and maintain well-functioning civil registration and vital statistics systems. Inadequate budgetary allocations and a shortage of full-time professional staff are major challenges faced by civil registration and vital statistics systems in many countries. Lack of registration offices in a reasonable distance, particularly in rural areas, low level of awareness about benefits of civil registration for individuals and the public at large and financial costs of registration could be factors behind the poor status of civil registration and vital statistics systems in many African countries

According to the monitoring results, the average completeness rate of birth registration has progressed slowly, while completeness of death registration has not changed over the past few years. Death registration are particularly challenging and many countries perform poorly on completeness of death registration and medical certification of cause of death. The monitoring results also show that only a few countries compile and produce annual vital statistics reports from their civil registration systems.

Use of modern information technology for registration, storage, linkage and transferring of records is very low in the region. In most countries, there is no linkage between civil registration records, health information system and national identification, and the related databases are maintained independently.

In general, there is need to focus on the five poorly functioning components in most of the countries: infrastructure and resources; coordination and monitoring; use of ICT and digitization; recording of cause-of-death; and producing vital statistics from civil registration.

Annex: Distribution of countries by summary scores (%) on major components of civil registration and vital statistics systems

Components of CRVS Systems		Composite Scores (%), Number and List of Countries ¹				
		<35%	35-49%	50-64%	65-79%	80-100%
1	Legal framework	1	0	12	11	15
		South Sudan		Lesotho, Rwanda, Uganda, Zimbabwe, Burundi, Ghana, Ivory Coast, Madagascar, Botswana, United Republic of Tanzania, Benin, Swaziland	Mali, Ethiopia, Burkina Faso, Niger, Liberia, Zambia, Equatorial Guinea, Angola, Djibouti, Cameroon, Democratic Republic of the Congo	Comoros, Egypt, Mauritius, Nigeria, Namibia, Cabo Verde, Senegal, Malawi Mozambique, Congo, Chad, Sierra Leone, Tunisia, South Africa, Sao Tome and Principe
2	Infrastructure and resources	2	14	6	11	6
		Lesotho South Sudan	Liberia, Comoros, Mozambique, Ghana, Senegal, Congo, United Republic of Tanzania, Rwanda, Burkina Faso, Botswana, Côte d'Ivoire, Democratic Republic of Congo, Benin, Chad	Namibia, Mali, Swaziland, Sao Tome and Principe, Uganda, Madagascar	Cabo e Verde, Malawi, Nigeria, Angola, Equatorial Guinea Cameroon, Burundi, Zambia, Sierra Leone, Djibouti, Tunisia	Mauritius, Ethiopia, Niger, Zimbabwe, South Africa, Egypt
3	Planning, Coordination & Monitoring ²	9	11	4	10	4
		South Sudan, Equatorial Guinea Comoros, Madagascar United Republic of Tanzania, Chad, Senegal, Lesotho, Ethiopia	Benin, South Africa, Cameroun, Rwanda, Botswana, Congo Burkina Faso, Democratic Republic of Congo, Uganda, Mauritius, Liberia	Côte d'Ivoire, Djibouti, Mozambique, Tunisia	Namibia, Mali, Sierra Leone, Niger, Nigeria, Angola, Cabo Verde, Malawi, Swaziland, Ghana	Sao Tome and Principe, Zimbabwe, Zambia Egypt
4	Civil registration process ³	2	7	11	9	8
		Comoros, United Republic of Tanzania,	Liberia, Ethiopia, South Sudan, Burkina Faso, Uganda, Sao Tome and Principe, Equatorial Guinea	Malawi, Rwanda, Democratic Republic of Congo., Swaziland, Tunisia, Djibouti Cameroun, Côte d'Ivoire, Benin, Angola, Madagascar	Mozambique, Egypt, Mali, Zambia, Botswana, Lesotho, Ghana, Niger, Congo	Chad, Senegal, South Africa, Caboe Verde, Zimbabwe, Namibia, Nigeria, Mauritius
5	Dissemination	21	3	2	7	5

		Angola, Burkina Faso, Benin, Cameroun, Chad, Comoros, Congo, Democratic Republic of the Congo, Ethiopia, South Sudan, Equatorial Guinea, Ghana, Liberia, Madagascar Mali, Niger, Mozambique, Tanzania, Nigeria, Sao Tome and Principe, Sierra Leone,	Côte d'Ivoire , Senegal, Zambia	Mauritius, Zimbabwe	South Africa, Namibia, Swaziland, Botswana, Malawi, Djibouti, Cabo Verde	Rwanda, Lesotho Tunisia, Uganda, Egypt
6	Cause-of-death recording and certification ²	12	12	2	8	4
		South Sudan, Nigeria, Equatorial Guinea, Ethiopia, Burkina Faso, Senegal, Benin, Djibouti, Malawi, Democratic Republic of the Congo, Lesotho, Cameroon	Rwanda, Uganda, Swaziland, Tanzania, Liberia, Mali, Namibia, Tunisia, Madagascar, Mozambique, Comoros Côte d'Ivoire	Angola, Congo	South Africa, Zambia, Botswana, Ghana, Sierra Leone, Zimbabwe, Mauritius, Sao Tome and Principe	Chad, Niger, Cabo Verde, Egypt
7	Vital statistics, & quality checks & dissemination ⁴	17	5	6	5	3
		Comoros, Zambia, Chad, Benin Mozambique, Tanzania, Namibia, Liberia, South Sudan Ethiopia, Cameroon, Nigeria, Equatorial Guinea, Malawi, Senegal, Madagascar, Ghana	Swaziland, Uganda, Rwanda, Congo, Côte d'Ivoire	Zimbabwe, Angola, Niger Lesotho, Mali, Cabo Verde	Sierra Leone, South Africa Mauritius, Djibouti, Botswana	Egypt, Tunisia, Sao Tome and Principe
8	Uses of civil registration documents vs. dData	3	5	13	10	6
		Rwanda, Democratic Republic of the Congo, South Sudan	Senegal, United Republic of Tanzania, Ethiopia, Ghana, Liberia	Lesotho, Chad, Niger, Burkina Faso, Côte d'Ivoire , Zambia, Benin, Sierra Leone, Cameroon, Mozambique, South Africa Swaziland, Madagascar	Uganda, Equatorial Guinea, Cabo Verde Botswana, Mali Djibouti, Malawi, Angola, Namibia, Zimbabwe	Congo, Mauritius, Tunisia, Egypt, Sao Tome and Principe
9	Overall civil registration and vital statistics systems ²	2	15	13	7	1
		South Sudan, United Republic of Tanzania	Equatorial Guinea, Benin, Chad Ethiopia, Senegal, Madagascar, Liberia, Comoros, Nigeria, Cameroon, Lesotho, Rwanda, Burkina Faso, Mozambique, Demorcratic Republic of the Congo	Ghana, Djibouti, Malawi, Congo, Mali, Angola, Niger, Botswana, Namibia, Zambia, Uganda, Swaziland, Côte d'Ivoire ,	Sao Tome and Principe, Tunisia, Cape Verde, Zimbabwe, Mauritius, Sierra Leone, South Africa	Egypt

¹ Fifteen countries have not filled-in monitoring form: Algeria; Central African Republic; Eritrea; Gabon; Gambia; Guinea; Guinea-Bissau; Kenya; Libya; Mauritania; Morocco; Seychelles; Somalia; Sudan and Togo.

² Burundi lacks data on this indicator.

³Burundi and Sierra Leone lack data on this indicator

⁴Burundi, Burkina Faso and the Democratic Republic of the Congo lack data on this indicator

