Timor-Leste

Births and Deaths Statistics Report

2014–2015

Prepared by

the General Directorate of Statistics

with the support of UNFPA and the

UNESCAP Statistics Division

Timor-Leste, 2017

Doct/200517/CCGDS

COUNCIL CONSULTATIVE MEETING GENERAL DIRECTORATE OF STATISTICS (CCMGDS)

BIRTHS AND DEATHS STATISTICS REPORT, 2014-2015

In terms of the Decree Law No. 17/2003, on 1 st October, statistics are defined as a fundamental element of work to know and quantify the reality of the country, allowing the planning of its economic development.

The collection, dissemination and coordination of official statistics should be carried out in a professional manner and in accordance with international standards in order to obtain reliable results that can be used effectively

According to Ministerial Diploma No 38/2014 of 19 November, Organic Statute of the Directorate-General for Statistics, Article 3 (2) The DGE pursues the following tasks:

- Ensure coordination of the National Statistical System (SEN), approving concepts, definitions, nomenclatures, indicators, and other statistical coordination instruments, according to international standards;
- To approve technical instruments of statistical harmonization, of mandatory application in the production of official statistics and promote their respective knowledge, publicity and use.

The **CCMGDS** reconnaises, in the broad lines of National statistical activities, the importance of aligning the statistical metadata system with the best international practices. It further considers that:

The BIRTHS AND DEATHS STATISTICS REPORT, 2014-2015 is a reporting the situation in country about number of Births and deaths when collection from GDS coming from village during one years.

The report will be compare with historical data reports from previous years and current year and confirms with Line Ministry and other agencies.

COUNCIL CONSULTATIVE MEETING
GENERAL DIRECTORATE OF STATISTICS(GDS)

The Consultative Council Directorate-General for Statistics (DGE), at its meeting on May 17, 2017, according to the competence (line 2) on the collection, dissemination and coordination of official statistics should be carried out in a professional manner and in accordance with standards In order to obtain reliable results that can be used effectively. In accordance with the competence of the Statutory Statute of the General Directorate of Statistics, Article 3.0, n. 2 of the DGE, on ensuring that the National Statistical System (SEN) is adopted, approving the concepts, definitions, nomenclatures, indicators and other Statistical coordination, in accordance with international standards, shall deliberate:

- Approve BIRTHS AND DEATHS STATISTICS REPORT, 2014-2015
- Recommend the application of the BIRTHS AND DEATHS STATISTICS REPORT, 2014-2015 by the public administration entities in administrative acts and procedures whenever they can be used for statistical purposes.

Dili, May 17, 2017

Elias dos Santos Ferreira, L. Ec. MM
Director General

Abbreviations and acronyms

CBR	Crude Births Rate
CDR	Crude Deaths Rate
CoD	Cause of Death
CRVS	Civil Registration and Vital Statistics
DHS	Demographic and Health Survey
GDS	General Directorate of Statistics
ICD	International Classification of Diseases
MoE	Ministry of Education
MoJ	Ministry of Justice
MoH	Ministry of Health
MEA	Ministry of Estate and Administration
MoF	Ministry of Finance
MoSA	Ministry of State Administration
MoU	Memorandum of Understanding
NGO	Non-Governmental Organisation
SDGs	Sustainable Development Goals
UNESCAP	United Nations Economics and Social Commission for Asia and the Pacific
UNICEF	United Nations International Children's Emergency Fund
UNTAET	United Nations Transitional Administration in East Timor
WHO	World Health Organization

Acknowledgements

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Chapter 1

INTRODUCTION

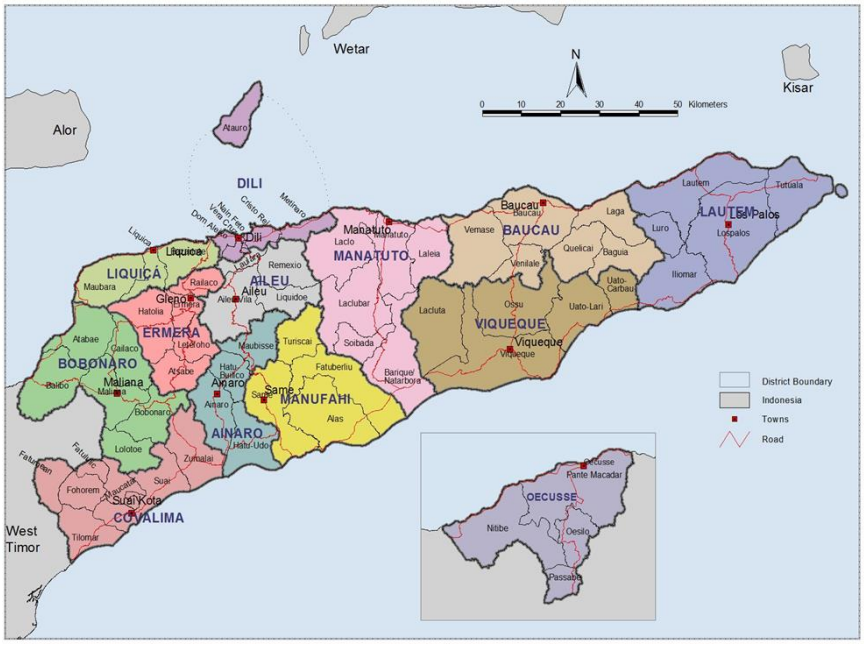
Civil registration is defined as the compulsory, permanent, continuous and universal recording of the occurrence and characteristics of vital events. Registration records are essential for establishing legal identity, nationality, and accessing services based on human rights. Further, vital statistics on births, deaths and causes of death (CoD) are essential for population health assessment and health policy analysis, such as for monitoring progress towards the Sustainable Development Goals (SDGs). National civil registration and vital statistics (CRVS) systems are the best source for such data.

Civil Registration systems are used to record vital events including births, deaths and Marriages and they have the potential to serve as the main source of national vital statistics. However, in many developing countries, Civil Registration and Vital Statistics systems are weak or nonexistent. As a result, key demographic (fertility and mortality statistics) are not available on a continuous basis and in many cases the Civil Registration system does not cover large segments of the population. It is important to underscore that Vital Statistics when complete is the cornerstone of a country's health information system.

If continuous and complete information on the number of births and deaths, and on sex, age and CoD are not available, achieving real progress towards the fundamental goal of health systems of keeping people alive and healthy for longer is out of reach.

Timor-Leste is administratively divided into 12 Municipalities and one Special Administrative Region of Oecusse; the next lower administrative units within municipalities are 65 Administrative Posts (Figure 1). The Administrative Posts are made up of the lowest formal administrative units, the 442 villages or Suco and 2,225 Aldeia.

Figure 1 Administrative Map of Timor-Leste



The 2015 Census population adjusted for population projections was 1,205,466, ranging from 47,205 in Manatuto to 228,642 in Dili, the Capital of Timor-Leste. There were 612,940 males and 592,526 females (Table 1).

The adjusted number of births was 36,202 in the year preceding the 2015 census, including 18,761 boys and 17,441 girls. The highest number of births were in Dili (8,310) and the lowest number in Manatuto (1,447).

In the year preceding the 2015 census, 9,209 deaths were reported to have occurred, 5,026 were of males and 4,183 were of females. Dili had the most deaths and Aileu the least deaths.

Table 1 2015 Census Projections Base Population, and Births and Deaths Reported in the 12 months preceding the Census

	2015 Census Projections Base Population				Births, 2015 Census data (July 2014-June 2015)				Deaths, 2015 Census data (July 2014-June 2015)		
	Male	Female	Total		Male	Female	Total		Male	Female	Total
Aileu	25,589	23,966	49,556		727	680	1,407		165	138	303
Ainaro	32,619	31,243	63,862		1,070	975	2,045		298	283	581
Baucau	62,555	61,831	124,386		1,867	1,722	3,589		550	564	1,114
Bobonaro	49,448	49,298	98,746		1,593	1,459	3,052		388	389	777
Covalima	33,384	32,616	66,000		968	923	1,891		279	217	496
Dili	149,458	139,184	288,642		4,274	4,036	8,310		1,150	838	1,988
Ermera	64,473	62,841	127,314		2,107	1,922	4,029		662	547	1,209
Lautem	32,455	33,446	65,901		979	940	1,919		290	207	497
Liquica	36,977	35,901	72,878		1,200	1,138	2,338		255	194	449
Manatuto	24,081	23,124	47,205		758	689	1,447		201	155	356
Maunfahe	28,167	26,240	54,408		845	775	1,620		208	184	392
Oecusse	35,179	34,629	69,809		1,166	1,068	2,235		267	210	477
Viqueque	38,555	38,205	76,759		1,207	1,114	2,320		313	257	570
Timor-Leste	**612,940**	**592,526**	**1,205,466**		**18,761**	**17,441**	**36,202**		**5,026**	**4,183**	**9,209**

Chapter 2
Development of the Civil Registration System of Timor-Leste

2.1. Timeline of Progress on CRVS in Timor-Leste

Indonesian Rule

- Formal birth registration had negative consequences because of its association with the ruling authority, thus registration through baptism was more widely practiced. Baseline figures from January to May 2003 showed that only 1,540 people were officially registered and just two of them were infants.

2000

- The United Nations Transitional Administration in East Timor (UNTAET) set up Civil Registration administration in December 2000 when the Central Civil Registry was established under the Ministry of Internal Affairs within the East Timor Transitional Authority.

2002 - Independence

- The Division of Civil Registry and Notary of the Ministry of Justice (MoJ) was made responsible for Civil Registration.
- The MOJ and UNICEF signed an agreement identifying birth registration as a priority.
- UNICEF pilot birth registration projects began in two District (Municipalites), Manatuto and Bobonaro.
- A "training of trainers" was conducted by UNICEF. Civil Registration staff and volunteers formed mobile registration teams.
- The mobile birth registration campaign registered approximately 17,000 children - the majority under five years of age.

2008

- The Ministry of Health (MoH) with the support of the World Health Organisation (WHO) established a new pilot project in Manatuto.

2011

- Another national birth registration campaign was undertaken, with the support of UNICEF and the efforts of the MoJ. 60,000 children were registered.
- A Memorandum of Understanding (MoU) was established between MoJ, the Ministry of State Administration (MoSA), and MoH to collaborate on implementation of Civil Registration.

2012

- The WHO carried out a Rapid and Comprehensive Assessment of the Civil Registration and Vital Statistics system.
- The WHO recommendations include revising regitration instruments to meet UN Guidelines, transition to computer-based systems, and creating a single national electronic CRVS system.
- The WHO recommended that the General Directorate of Statistics (GDS) should be involved in CRVS for the generation and dissemination of Vital Statistics for use in policy planning and optimal allocation of resources.
- The WHO recommended that GDS regularly disseminate timely Vital Statistics by place of occurrence and age.
- Representatives from Timor-Leste Government attended a conference on strengthening CRVS in Asia and the Pacific (Brisbane, 2012).

2014

- A committee on CRVS was established involving The Ministry of Finance (MoF) (GDS), MoJ, MoH, Ministry of Education (MoE) and MoSA and the relative responsibilities of these Ministries determined.
- The establishment was enshrined in a document, signed by the five bodies.
- This document required approval by the 5th Constitutional Government, Council of Ministers and the Prime Minister. To date the approval has not been granted.
- Approval is required for sharing of CRVS data between the MoJ and GDS.
- The GDS were tasked with development of twice yearly estimates of population down to the Suco level. Due to lack of access to MoJ CRVS data, GDS designed a proxy system and an instrument for data collection of reported births and deaths (see Appendix 7).
- The GDS trained staff down to Suco level to complete the instrument. Data collection took place from July 2014 onwards. These data are presented in chapters 4 to 6 of this report.
- The MoH commenced collation of registered births and deaths data through the healthcare system at the District (Municipality) level. These data are also analysed in chapters 4 and 5 of this report.
- A delegation attended the Ministerial Conference and pledged Timor-Leste's commitment to the Ministerial Declaration (see Annex 10).

2017

- Civil Registration remains under the authority of the MoJ (National Directorate of Civil Registration and Notary).
- At present, there are 13 Civil Registration offices, one in every Municipality, and the MoJ intends to expand coverage by setting-up offices in all Administrative-Posts, so that people in remote areas have better access.
- Mobile registration currently serves to fill the gap in the interim, increasing the numbers of children registered.
- Five municipality Civil Registry offices have been computerized and connected with the Central Registry office through support from UNICEF.
- The focus thus far has remained on birth registrations, but going forward an equal effort needs to be made to register deaths and capture cause of death data.
- Establishment of an inter-agency committee with members from the MoJ, MoH, MoSA, the Catholic Church and Non-Governmental Organisations (NGOs) is in process to formulate priorities and monitor progress of CRVS on an ongoing basis.
- The recommendation of the WHO in 2014 have not been fully met. The GDS is not yet involved in CRVS through regular data quality assurance or dissemination of timely Vital Statistics by place of occurrence and age. This is because approval for sharing of data between the MoJ and GDS is still in process.

2.2 Meetings between GDS, MoJ and MoH

On 16 February 2017, a meeting took place at the National Directorate of Civil Registration and Notary between the National Director of the National Directorate of Civil Registration and Notary and Ricardo dos Santa Cruz, Acting Director of Methodology at GDS, to discuss sharing of CRVS data by MoJ with GDS. The meeting covered regulations for CRVS, progress by the MoJ in obtaining high-level approving of the Government Resolution on establishment of a committee for CRVS, and drafting of a MoU between GDS and MoJ to share data in future.

On 21 February, Ricardo dos Santa Cruz drafted a letter for the Vice-Minister of the MoF to send to the Minister of Justice seeking approval to share data and derive a MoU.

On 29 March 2017 a second meeting was held between MoF (GDS), MoJ and MoH. The progress on this report was shared by GDS. Progress in signing the MoU concerning sharing of Civil Registration data with GDS to produce a Vital Statistics report was discussed. The MoJ stated that they had held a meeting and the MoU was now with the Director of the Department of Legislation. An internal consultative meeting was also held by the MoJ to discuss sharing of data and the next steps are to raise this issue with the Minister of Justice and then to prepare an internal memorandum for data sharing. Regarding the content of the MoU, a similar data sharing MoU already exists between the MoJ and the MoE, and the MoF (GDS) could be added to this MoU.

Regarding coordination of data sharing and reporting, it was agreed that the MoJ would establish a focal point for the collaboration on data sharing and the focal points of the MoJ, the MoF (GDS) and the MoH will meet quarterly to report progress on data collection and analysis (including completeness and how to improve this). The next meeting will be in the last week of June 2017.

GDS raised the issue of expanding the range of data collected on births and deaths including cause of death in the birth and death registration forms used by the MoJ. Both the MoJ and the MoH were in favour of this idea. The GDS shared forms from other countries in the region so that the scope for broader data collection is understood. The approval of the Minister of Justice will be required to change the content of births and deaths registration forms.

GDS shared a set of table shells (based on Annex 2 and Annex 4) to illustrate to MoJ what can be tabulated with their data. MoJ asked for the shells to be forwarded in electronic form so that they can attempt to add data to the tables.

2.3 Legal issues regarding CRVS in Timor-Leste

The procedures for birth registration established by UNTAET in 2002 remain in effect and guidelines state that births and deaths should be reported to the Civil Registry by a family within 4 weeks. The UNTAET Regulation no: 3/2001 covers the *competency* of the Civil Registration Office to conducted registration for all Timor-Leste citizens. However, the law does not clearly designate and detail the functions and responsibilities of other government ministries, for example, physicians, midwives and health facilities are not required under law to report births and deaths. Additionally, the existing laws do not clearly define a live birth, still birth and fetal death and there is no clear articulation under the law of how and who should certify deaths and causes of death. In effect, families avail of death registration on an optional basis. It is viewed as a “service” rather than a legal requirement.

With regards Vital Statistics, there is *no definition* of a vital statistics system under the law and the law has provisions *only for the possibility* of GDS having access to data from Civil Registration to calculate Vital Statistics.

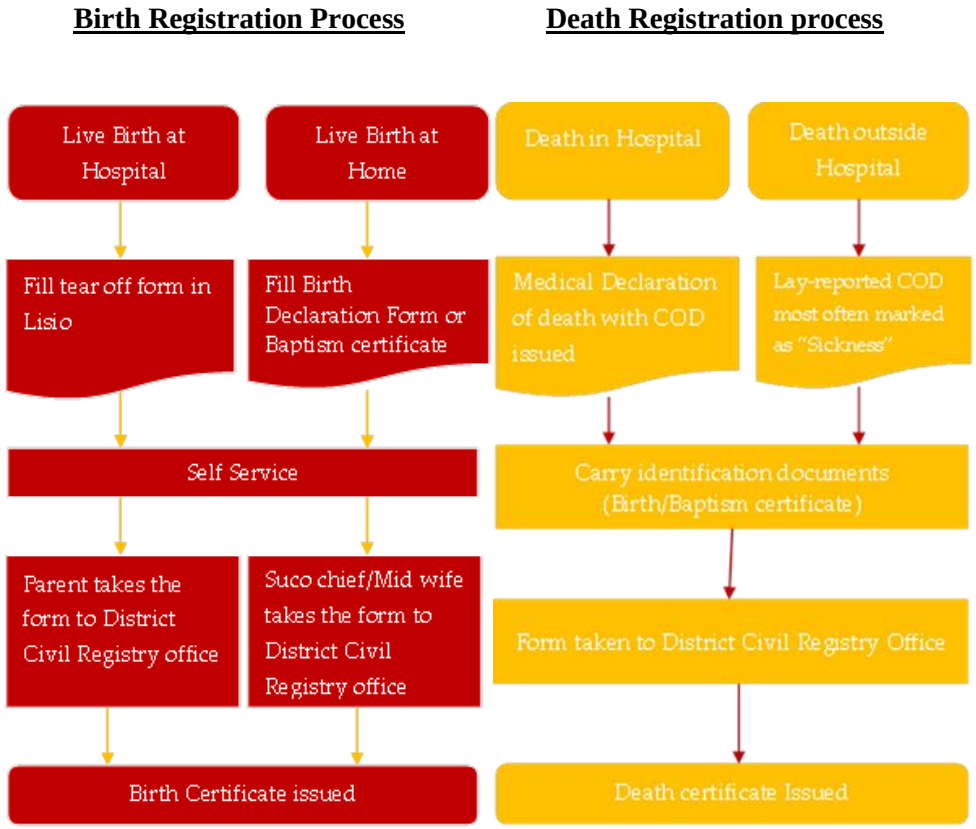
Chapter 3 Status of the CRVS system in Timor-Leste

3.1 Organizational structure

Since 2002, the Division of Civil Registry and Notary under the MoJ have been responsible for birth and death registrations. Currently, 13 civil registries are functional in every Municipality. In addition, there are Notary Offices in Dili, Baucau and Oecusse.

3.2 Civil Registration Processes

Figure 2 Births and Deaths Registration Processes



Whether a birth or death takes place in a health facility or at home, the registration process is the responsibility of the family and there are a lack of checks and balances to ensure registration has taken place. Civil Registration officers based at the Municipality level have a remit to visit at least one Suco every month to conduct a mobile registration camp but anecdotal evidence suggests that lack of resources for transportation deter visits especially to remote areas. Since most births and deaths take place outside of health facilities, there is a high incidence of unregistered births and deaths.

Where the system is functional, births and deaths forms are stored in the Municipality Civil Registry offices and statistics derived from these forms are passed upwards electronically to the Central Civil Registry office in Dili on an annual basis.

3.3 Incentives and dis-incentives for registration

Incentives	Dis-incentives
Cost	
Children under 5 years have births registered free of charge.	The cost is $5 for registration of those aged over five years. Reforms of Civil Registration processes propose a fine of $3 for delayed registration (after 4 weeks).
Distance	
Mobile birth registration camps. Families can get assistance from Suco Chiefs or health workers in processing birth registrations and obtaining birth certificates.	Mobile birth registration is only conducted on an ad-hoc basis. Rural people must visit the Municipality Government headquarters to register a birth or death.

3.4 Past estimates of completeness of registration

The Demographic and Health Survey (DHS) of 2009-10 estimated that 55% of children under 5 years of age were registered and 40% had a birth certificate. The 2010 census reported that 30% of children aged less than six years had a birth certificate and the 2015 census reported that 31.3% of children aged less than six years had a birth certificate. The total number of deaths registered in 2011 was 2,139 cases (this figure may include deaths occurring in previous years). However, the population projections based on the 2010 census estimated approximately 11,350 deaths in 2010 and 11,470 in 2011. Taking the average of these, completeness of deaths registrations in 2011 was approximately 20%. These data suggest that both birth and death registration are far from complete and death registration is less complete than birth registration.

International Classification of Diseases (ICD-10) coding practice is severely limited and there is no established system to validate the CoD data plausibility, consistency and quality. The majority of the deaths registered still remain attributed to “ill-defined” causes. The MoH Health Management Information System data suggests that CoD is properly coded in fewer than 10% of cases.

3.5 Lack of Inter-Governmental Collaboration on Civil Registration Data

Currently, MoJ unit record data are not shared. These data therefore have not been subjected to standard plausibility and consistency checks such as comparison to the Census (2010, 2015) or DHS (2009-10) data (see Annexes 5 and 6). As a consequence of lack of data sharing and adequate and systematic collection, international standard indicators for fertility and mortality based on Civil Registration are not published.

3.6 Parallel systems and duplicative effort in data collection

The MoJ Civil Registration system is currently paralleled by a GDS system of births and deaths reporting. The MoSA assists MoF (GDS) by collecting and collating data at the Aldeia, Suco, Administrative Post and Municipality (District) levels and passing these compiled lists of births and deaths on a semi-annual (6 monthly) basis to GDS Head Office[1]. The data collected by GDS constitute a duplication of the registration and monitoring efforts at Suco levels (and above). The instruments utilized in the GDS system collect less data than is necessary to meet UN recommendations for Vital Statistics tabulation (see Annex 7). The data collected by GDS are not linked to CRVS and it is not known whether the events are registered.

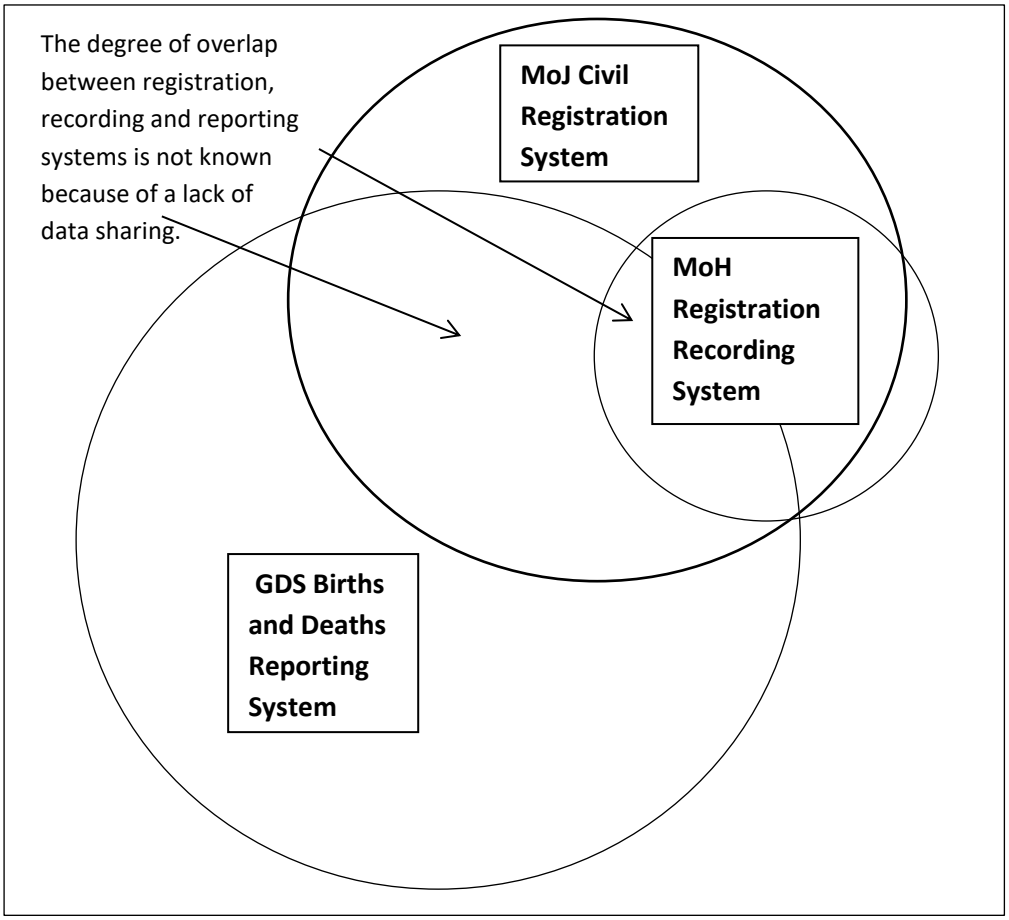
The MoH also collate birth and death registration data through health facilities across the country[2]. The data are collected and entered onto a database in health facilities by staff who implement the Health Management Information System. The majority of cases occur in health facilities, (with a small proportion of recorded cases occurring in the home). The system is incomplete (since only a small proportion of events take place within facilities). The MoH data are published in a monthly 'link' report.

The overlaps of the MoJ Civil Registration System, the MoH Registration Recording System and the GDS Births and Deaths Reporting System are schematically represented in Figure 3. The GDS system of births and deaths reporting probably covers more cases than the number of registrations and has the largest circle. The GDS system will partially overlap with both other systems which both relate to registrations of births and deaths because at least some of the births and deaths reported for the GDS system will also be registered events. Without having access to the unit record data, there is no way of knowing the extent of the overlap of the GDS system with both other systems. The MoH system is mainly contained within the MoJ system because the majority of events recorded in the MoH system are registered events. However, data linkage with the MoJ data would be necessary to determine what proportion of cases in the MoH system are registered events. In Timor-Leste, most births and deaths occur out-with medical facilities, but since the MoH system focusses for the most part on events within facilities, the circle for the MoH Registration Recording system is much smaller than the circle for the MoJ Civil Registration system.

[1] Since 2014, GDS have been collecting data on reported births, deaths and migration to produce estimates of population size and counts of births, deaths and migrants at all geographical levels on a twice-yearly basis (see Annex 7 for instrument). Reports are published and distributed to every Suco Chief in the country. Ideally, best practice would use MoJ births and deaths registrations data as the births and deaths input of population estimation. This is the procedure used by the Australian Bureau of Statistics. Replacing the reported births and deaths data with registrations data would avoid duplication and focus effort into improving the quality and coverage of the registrations data collected.

[2] Births and deaths registrations data are collected from Health Posts, Community Health Centres, Private sector facilities and the Community by a Health Management Information System (HMIS) officer in each municipality. The municipality HMIS officers submit a report to s national HMIS officer responsible for CRVS on monthly basis. An issue with the system is that the mix of sources is not uniform across the country. Secondly, the definition of 'registered' is not clear or uniform, such that it is not clear whether births are registered and a birth certificate was issued or indeed if the cases are recorded prior to a family being instructed to register the case themselves. In order to understand the data better, greater linkages between the MoJ and HMIS datasets would be necessary, and at present there is very limited linkage of data between MoJ and HMIS data. The HMIS department within MoH therefore highlighted the importance of more coordinated work with MoJ in the draft strategic plan 2016-20. The strategic plan highlights the importance of developing and introducing CRVS policy, protocols, procedures and guidelines for staff at every geographical level and the introduction of verbal autopsy for all non-medically certified deaths.

Figure 3 Schematic representation of case overlap between the three systems



Chapter 4 Analysis of Births and Deaths Data

4.1 Analysis of GDS Data on Reported Births

Between 2014 and the present, GDS have been collecting data on reported births down to the lowest geographical level. These data (along with deaths and migration data) are utilized to produce an estimate of population size and counts of births at all geographical levels on a twice yearly basis. Reports are published and distributed to every Suco Chief in the country. As these data have only been published in aggregate form, the full scope that these data have to offer has not been utilized. Recently, the unit record data were entered into Excel spreadsheets to enable a more complete analysis of the births components of the collection to be undertaken for this report.

There is value in analyzing the data on births data (and also deaths data) collected by GDS in the current absence of actual Civil Registration data for the following reasons:

- The exercise of processing, analyzing and producing this report is designed to increase the capacity of staff at GDS and demonstrate to MoJ and other Ministries and stakeholders the value of analyzing these data for their quality assurance and improvement.
- These data represent the best available proxy for registrations data and their analysis illustrates the greater scope that can be achieved in the near future when an agreement is reached with MoJ to share the Civil Registration data with GDS for quality assurance purposes and development of a vital statistics report based on registrations data.
- Analysis of the data collected by GDS will serve for useful comparison with the civil registration data occurring across the same period in a future combined analysis.

Table 2 presents national level reported births data from the period July 2014 to June 2015 by month and sex. Of 12,759 reported births, a total of only 40 did not include information on the month of birth and a total of only 30 did not have information on the sex of the child. These values are low.

Table 2 Reported Births by Month of Occurrence, GDS System, Timor-Leste, July 2014-June 2015

Month of Occurrence	Male	Female	Total [1]
2014 (Period 2)			
July	506	483	989
August	492	443	935
September	481	463	944
October	493	434	927
November	555	473	1,028
December	494	431	925
2015 (Period 1)			
January	701	459	1,160
February	679	463	1,142
March	672	472	1,144
April	669	453	1,122
May	708	446	1,154
June	740	509	1,249
TOTAL [2]	7,190	5,529	12,719
Sex Ratio at Birth			130.0
Crude Birth Rate [3]			10.6
Adjusted Crude Birth Rate [4]			30.1
Completion Rate [5]	38.3	31.7	35.1

[1] Not including 30 births where sex was not stated

2 Not including 40 births where month of occurrence was not stated

[3] 2015 Census projections base population used as the denominator

[4] Number of births adjusted by completion rate. 2015 Census projections base population used as the denominator

[5] Births reported as occurring during the 12 months preceding the 2015 census used as the denominator

Globally, it is generally the case that 1.05 boys are born live compared to every girl born, leading to a sex ratio at birth of 105 boys per 100 girls. As can be seen from these data, this is not the case for Timor-Leste, where the sex ratio for the 12-month period was 130, ranging between 103.9 in September 2014 to 158.7 in May 2015. This illustrates a tendency for the birth of girls to go unreported. Under-reporting of female births should be addressed through advocacy programmes.

The period covered coincides with the year preceding the 2015 Census and enables use of the Census data as a denominator for analysis of the completeness of the data, based on the assumption that the adjusted Census births data represent a complete estimate of the number of births in the period.

The completion rate is a percentage which illustrates the extent to which all births were reported. The completion rate was 38.3% for boys and 31.7% for girls. The difference of 6.6% in completions is further evidence of under-reporting of the birth of girls. A completion rate of just over one-third means that the system failed to report the birth of almost two-thirds of all babies that occurred between July 2014 and June 2015.

The Crude Birth Rate (CBR) uses the Census population as a denominator. A CBR of only 10.6 births per thousand population is low in a country where fertility is currently estimated at 4.7 births per woman, amongst the highest fertility rate in Asia.

Using the completion rate, the CBR has been adjusted and is 30.1 births per thousand population.

Table 3 presents national level reported births data from the year 2015 by month and sex. Of 14,431 reported births, a total of only 59 did not include information on the month of birth and a total on only 24 did not have information on the sex of the child. These values are low.

As for Table 2, the sex ratio at birth is not well balanced, favouring boys. The sex ratio was 145, almost 15 points higher than in Table 2, and ranges between 129.2 in September to 158.7 in May 2015. These sex ratios further emphasize a tendency for the birth of girls to go unreported.

The completion rate has been calculated using birth estimates and the CBR using population estimates from the 2015 release of UN Population Division World Population Prospects.

The completion rate was 37.9% for boys and only 28.2% for girls. As in Table 2, a total completeness rate of precisely one-third demonstrates that the system failed to report the birth of two-thirds of all babies born in 2015.

The CBR was 12.2 births per thousand population in 2015. Using the completion rate, the crude birth rate has been adjusted and is 36.6 births per thousand population.

Table 3 Reported Births by Month of Occurrence, GDS System, Timor-Leste, January-December 2015

Month of Occurrence	Male	Female	Total
January	701	459	1,160
February	679	463	1,142
March	672	472	1,144
April	669	453	1,122
May	708	446	1,154
June	740	509	1,249
July	819	598	1,417
August	756	544	1,300
September	725	561	1,286
October	720	493	1,213
November	693	458	1,151
December	625	409	1,034
TOTAL [2]	8,507	5,865	14,372
Sex Ratio at Birth			145.0
Crude Birth Rate [3]			12.2
Adjusted Crude Birth Rate [4]			36.6
Completion Rate [5]	37.9	28.2	33.2

[1] Not including 24 births where sex was not stated

[2] Not including 59 births where month of occurrence was not stated

[3] 2015 UN projections population used as the denominator

[4] Number of births adjusted by completion rate. 2015 UN projections population used as the denominator

[5] 2015 UN births estimate used as the denominator

Figure 4 graphically illustrates the number of births that were reported by month between July 2014 and December 2015. The bars illustrate that the number of reported births varies from month to month, which could possibly be explained by seasonality in fertility. However the pattern in the second half of 2014 is not consistent with the pattern in the second half of 2015, where the number of births reported declines from a peak in July. It is notable that the number of births reported in in the second half of 2014 is lower than those in the second half of 2015. One explanation for this is that the system was functioning better in in the second half of 2015, one year after its initiation. Another could be lagged births reporting.

Figure 4 Reported births GDS System, Timor-Leste, July 2014-December 2015

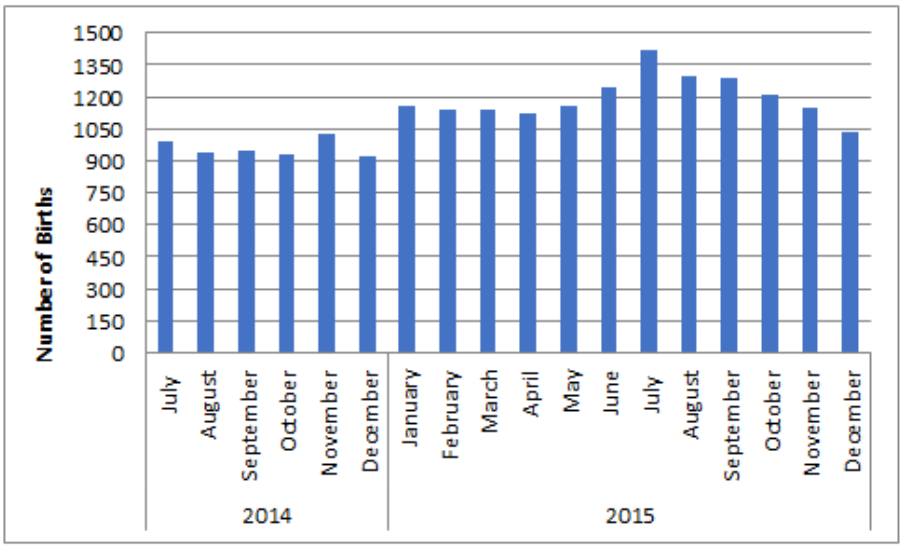


Table 4 provides a means of examining the difference in the number of births reported by month and sex between the second half of 2014 and the second half of 2015. In all cases more males were reported to have been born the second half of 2015 as compared to the second half of 2014. The difference is smaller for females for the months of July to October. In November and December, fewer girls were reported to have been born in 2015 than in 2014. If the system of reporting had improved in 2015 as compared to 2014, this was the case for boys but not the case (to the same extent) for girls. The female data is inconsistent with the total data, once again illustrating a problem with reporting of female births.

Table 4 Period differences in Reported Births, GDS System, Timor-Leste, July 2014-December 2014 and July 2015-December 2015

Monthly difference (2015 minus 2014)	Male	Female	Total
July	313	115	428
August	264	101	365
September	244	98	342
October	227	59	286
November	138	-15	123
December	131	-22	109
TOTAL	1,317	336	1,653

Table 4 is the sort of analysis that is intended to highlight problems with a system of data collection and could also be applied to Civil Registration data to improve registration practices by Government staff and families alike.

The analysis turns to subnational comparisons. In Table 5, reported births data are presented for the Municipalities for the period July 2014 to June 2015.

Table 5 Reported Births by Municipality of Occurrence, GDS System, Tmor-Leste, July 2014-June 2015

Municipality of Ocurrence	Male	Female	Total[1]
Aileu	256	231	487
Ainaro	281	223	504
Baucau	1,300	485	1,785
Bobonaro	631	562	1,193
Covalima	255	252	507
Dili	1,506	1,037	2,543
Ermera	673	599	1,272
Lautem	450	446	896
Liquica	282	267	549
Manatuto	618	565	1,183
Maunfahe	249	220	469
Oecusse	295	303	598
Viqueque	417	356	773
Timor-Leste	7,213	5,546	12,759
Sex Ratio at Birth			130.1
Crude Birth Rate[2]			10.6
Adjusted Crude Birth Rate[3]			30.1
Completion Rate[4]			35.2

[1] Not including 30 births where sex was not stated

[2] 2015 Census projections base population used as the denominator

[3] Number of births adjusted by completion rate. 2015 Census projections base population used as the denominator

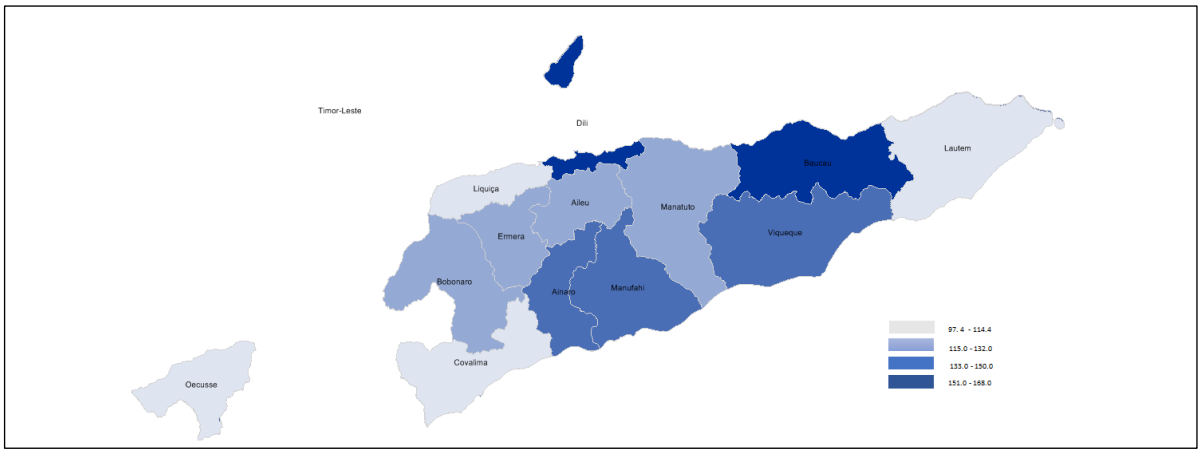
[4] Births reported as occurring during the 12 months preceding the 2015 census used as the denominator

Data are presented in Table 5 for Timor-Leste so that comparison can be made with the same data in Table 2. This is good practice as it is a useful check on the completeness of the dataset. The data are consistent.

The number of reported births varies widely across Timor-Leste, ranging from 469 in Manufahe to 2,543 in Dili. However, the population size also varies by Municipality, so it is necessary to look at the sex ratios at birth, CBRs and completion rates to ascertain whether the variation is due to under-reporting of births to a greater extent in one municipality as compared to others.

In Figure 5 there is no clear pattern for sex ratios across Timor-Leste.

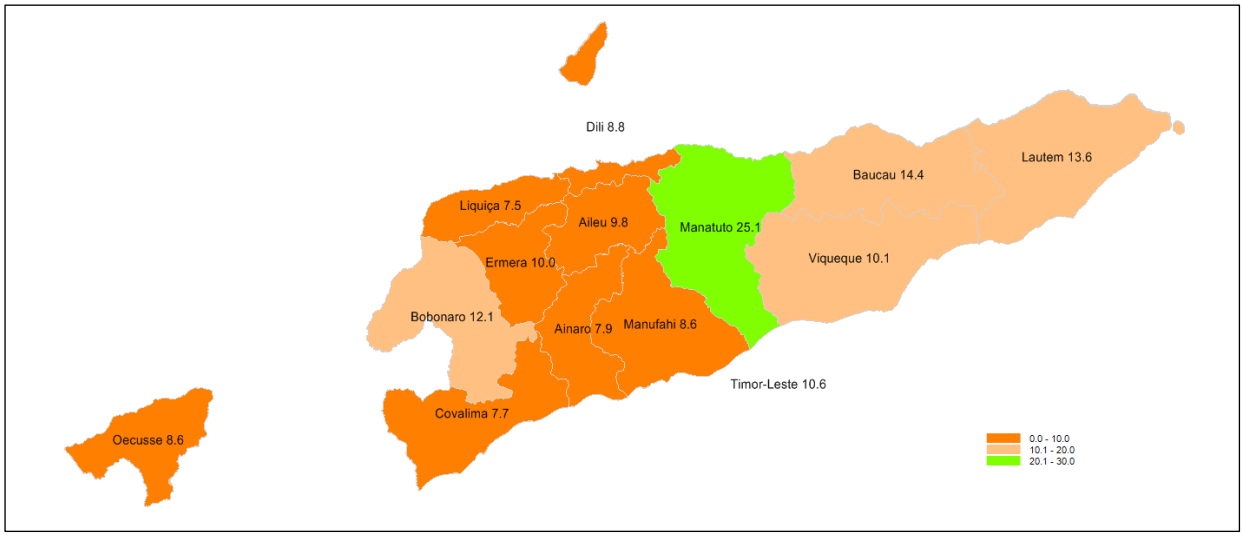
Figure 5 Sex Ratio at Birth, Reported Births, GDS System, Municipalities, Timor-Leste, July 2014-June 2015



For CBR, the range is very large (17.6 births per thousand population), with the highest value in Manatuto (25.1 births per thousand population) and the lowest value in Liquica (7.5 births per thousand population). Manatuto has the smallest population in the country (47,200) and yet is ranked fifth for the number of births reported.

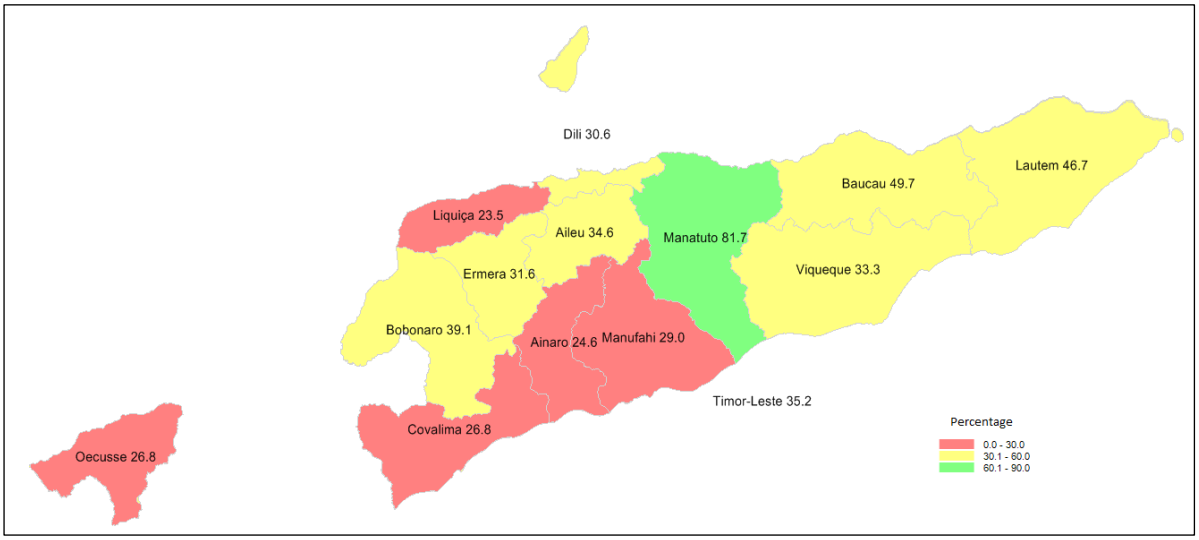
Figure 6 presents the CBR data in a map. There is a clear pattern with lower CBRs found in the West and higher CBRs found in the east. Bobonaro is an inconsistent outlier in the west.

Figure 6 Crude Birth Rate, Reported Births, GDS System, Municipalities, Timor-Leste, July 2014-June 2015



The completion rate also varies widely, from a low of 23.5% in Liquica to a high of 81.7% in Manatuto (Figure 7). The lowest rates are found in the coastal Municipalities of the west and Oecusse. Rates of between 30.1% and 60% are found in the 3 eastern Municipalities and in a band running from Dili through the mountainous Municipalities of Aileu, Ermera and Bobonaro.

Figure 7 Completion Rate, Reported Births, GDS System, Municipalities, Timor-Leste, July 2014-June 2015



Compared to the map for CBRs, the pattern for completion rates is less geographically consistent. However, Figure 8 clearly shows a positive association between the CBR and completion rates across the Municipalities. This is evidence in support of a targeted advocacy campaign to improve reporting of births.

Figure 8 Crude Birth Rate and Completion Rate, Reported Births, GDS System, Municipalities, Timor-Leste, July 2014-June 2015

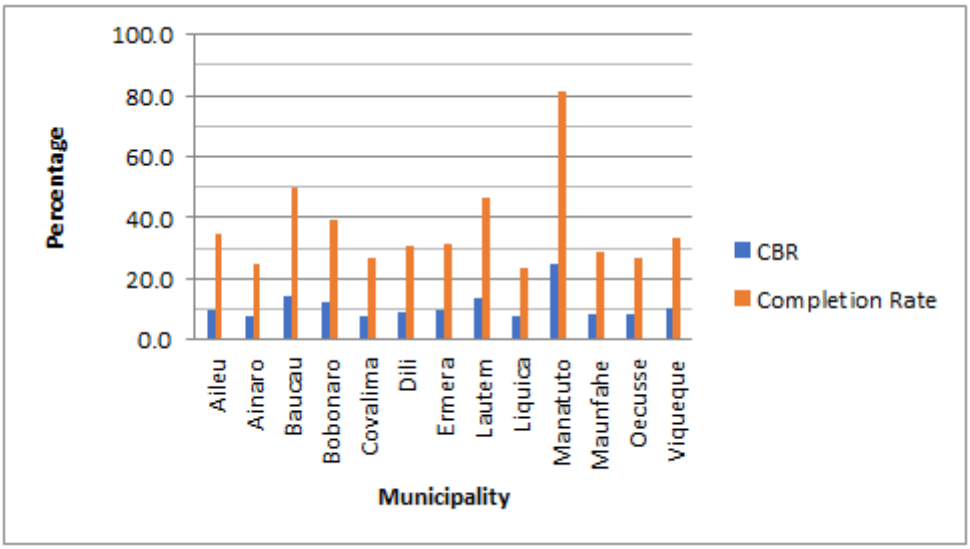


Table 6 presents data for 2015. The national level data is consistent with the national level data in Table 3.

Table 6 Reported Births by Municipality of Occurrence, GDS System, Timor-Leste, 2015

Municipality of Ocurrence	Male	Female	Total[1]
Aileu	435	422	857
Ainaro	475	366	841
Baucau	2,029	466	2,495
Bobonaro	531	468	999
Covalima	280	275	555
Dili	1,689	941	2,630
Ermera	896	869	1,765
Lautem	561	564	1,125
Liquica	258	252	510
Manatuto	215	200	415
Maunfahe	314	302	616
Oecusse	385	351	736
Viqueque	467	420	887
Timor-Leste	8,535	5,896	14,431
Sex Ratio at Birth			144.8
Crude Birth Rate [2]			11.9
Adjusted Crude Birth Rate[3]			36.6
Completion Rate [4]	37.9	28.2	33.2

[1] Not including 24 births where sex was not stated

[2] 2015 UN projections population used as the denominator

[3] Number of births adjusted by completion rate. 2015 UN projections population used as the denominator

[4] 2015 UN births estimate used as the denominator

4.2 Analysis of MoH Data on Registered Births

The MoH collates data on registered births predominately occurring in medical facilities.

Data on registrations collected by the MoH are analysed to shed light on recording of registered births within the healthcare system and as a means of making comparisons on data collected by the MoH and GDS systems.

Table 7 presents national level MoH recorded registration of births in health facilities from the period July 2014 to June 2015 by month and sex.

Table 7 Registered Births, Registration System, Timor-Leste, July 2014 - June 2015

Month of Occurrence	Male	Female	Total
	2014		
July	564	560	1124
August	537	482	1019
September	538	565	1103
October	432	531	963
November	471	440	911
December	431	406	837
	2015		
January	482	427	909
February	437	464	901
March	33	20	53
April	350	334	684
May	434	439	873
June	419	413	832
TOTAL	5,128	5,081	10,209
Sex Ratio at Birth			100.9
Crude Birth Rate [1]			8.5
Adjusted Crude Birth Rate [2]			30.0
Completion Rate [3]	27.3	29.1	28.2

[1] 2015 Census projections base population used as the denominator

[2] Number of births adjusted by completion rate. 2015 Census projections base population used as the denominator

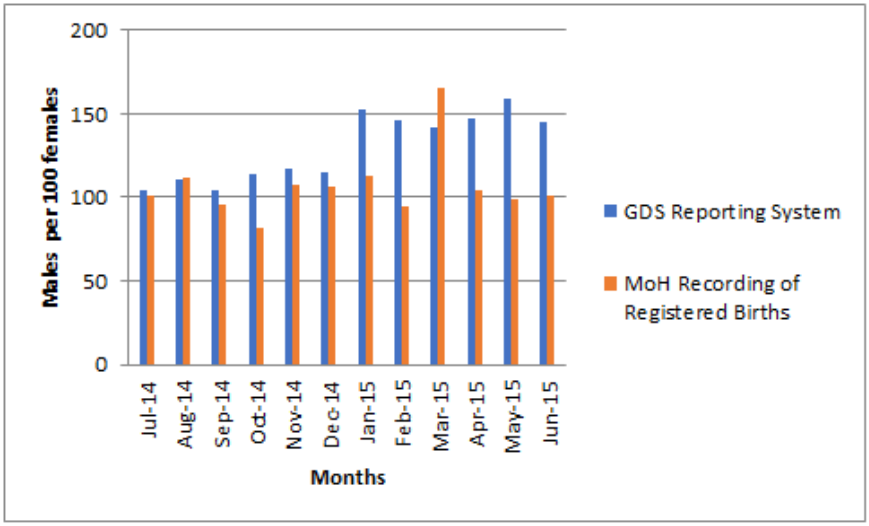
[3] Births reported as occurring during the 12 months preceding the 2015 census used as the denominator

Source: Ministry of Health, Government of Timor-Leste, 2016

Of 10,209 registered births, 5,128 were boys and 5,081 were girls. The sex ratio for the 12-month period was 100.9 (as compared to 130 for the GDS reporting system data). The higher sex ratio for the GDS data demonstrates that the MoH registrations data are of better quality. However, the MoH registrations data sex ratio varies between 81.4 and 165.0, which shows that there are quality issues in these data as well.

Figure 9 compares the sex ratios from the MoH data with the GDS data by month. The sex ratios are generally more similar in 2014 than in the first six month of 2015, when the sex ratios are more skewed towards male reporting in the GDS data set (in all months except March).

Figure 9 Sex Ratios at Birth, GDS and MoH systems, Timor-Leste, July 2014 – June 2015



Source: Ministry of Health, Government of Timor-Leste, 2016

In Table 8, the completion rate for boys was 27.3% and 29.1% for girls (as compared with 38.3% and 31.7% for girls respectively for the GDS system of data reporting). The lower completion rate for the MoH data may be in-part due to the fact that most births occur at home and were not recorded by the MoH. The difference in completion rate for boys and girls is only 1.8%, for the MoH registrations as compared with 6.6% for the GDS dataset. Once again, this demonstrates that the MoH data on registrations is of better quality than the GDS system of births reporting.

Table 8 Registered Births, Registration System, Municipalities, Timor-Leste,

July 2014-June 2015

Municipality of Ocurrence	Male	Female	Total
Aileu	252	282	534
Ainaro	109	91	200
Baucau	224	357	581
Bobonaro	857	783	1,640
Covalima	313	378	691
Dili	1,258	1,267	2,525
Ermera	229	201	430
Lautem	266	286	552
Liquica	372	333	705
Manatuto	311	274	585
Maunfahe	314	258	572
Oecusse	128	93	221
Viqueque	495	478	973
Timor-Leste	5,128	5,081	10,209
Sex Ratio at Birth			100.9
Crude Birth Rate [1]			8.5
Adjusted Crude Birth Rate [2]			30.0
Completion Rate [3]	27.3	29.1	28.2

[1] 2015 Census projections base population used as the denominator

[2] Number of births adjusted by completion rate. 2015 Census projections base population used as the denominator

[3] Births reported as occurring during the 12 months preceding the 2015 census used as the denominator

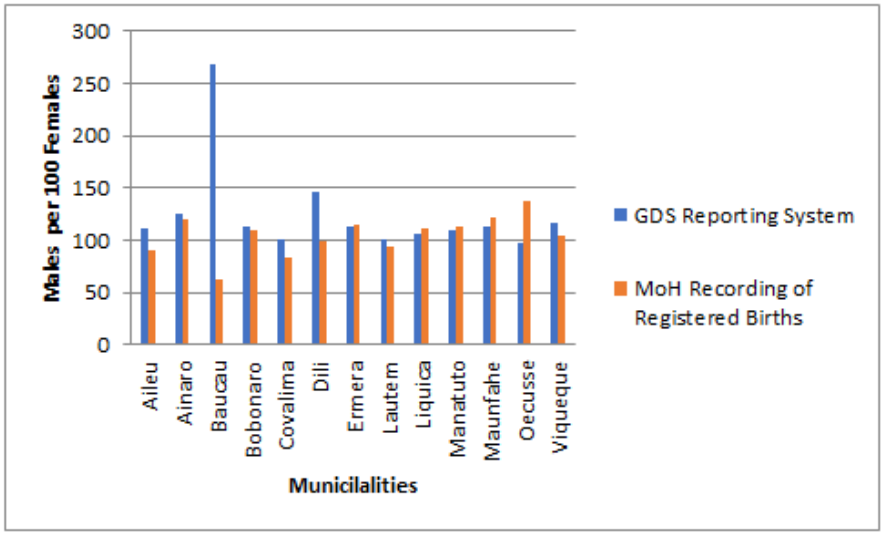
Source: Ministry of Health, Government of Timor-Leste, 2016

A CBR of 8.5 is low in the context of a population with a fertility rate currently estimated at 4.7 births per woman, amongst the highest in Asia. The adjusted crude birth rate of 30.0 births per thousand population is consistent with the national data in Table 7.

In Table 8, the number of recorded registered births varies widely across Timor-Leste, ranging from 200 in Ainaro to 2,525 in Dili. However, the population size also varies by Municipality, so it is necessary to look at the sex ratios at birth and CBRs to ascertain whether the variation is due to under-reporting of births in one municipality as compared to others.

Firstly, examining the sex ratio at birth, the data ranges from 62.7 registered male births per 100 female births in Baucau to 137.3 registered male births per 100 female births in Oecusse. This range (74.6 registered male births per 100 female births) is smaller than the range in the GDS dataset for the same period (170.6 registered male births per 100 female births). However, Figure 10 shows that the sex ratios are fairly similar between the MoH and GDS datasets by Municipality except for Dili, Oecusse and especially Baucau.

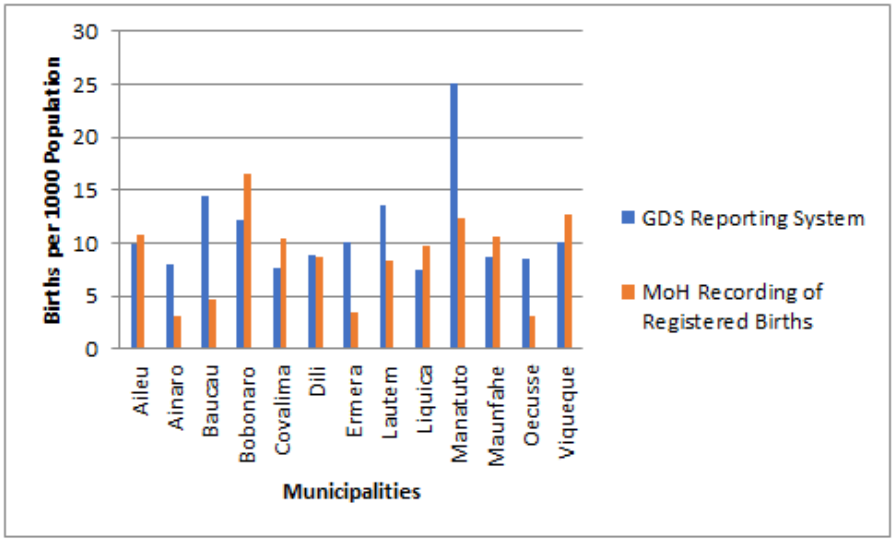
Figure 10 Sex Ratios at Birth, GDS and MoH systems, Municipalities, Timor-Leste, July 2014 – June 2015



Source: Ministry of Health, Government of Timor-Leste, 2016

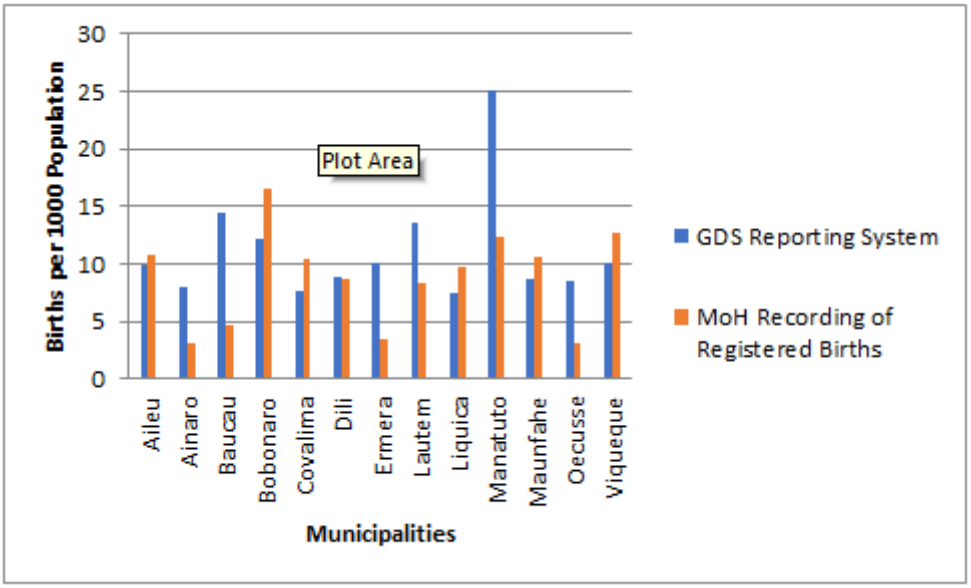
There is no consistency by Municipality between the MoH and GDS datasets for CBRs (Figure 11) or birth completion rates (Figure 12).

Figure 11 CBRs, GDS and MoH systems, Municipalities, Timor-Leste, July 2014 – June 2015



Source: Ministry of Health, Government of Timor-Leste, 2016

Figure 12 Completion Rates, GDS and MoH systems, Municipalities, Timor-Leste, July 2014 – June 2015



Source: Ministry of Health, Government of Timor-Leste, 2016

Chapter 5 Analysis of Deaths Data

5.1 Analysis of GDS Data on Reported Deaths

Between 2014 and the present, GDS have also been collecting data on reported deaths down to the lowest geographical level.

Table 9 presents national level reported deaths data from the period July 2014 to June 2015 by month and sex. Of 4,756 reported deaths, a total of only 65 did not include information on the month of death and only 29 cases did not have information on the sex of the deceased. These values are low.

Table 9 Reported Deaths by Month of Occurrence, GDS System, Timor-Leste, July 2014-June 2015

Month of Occurrence	Male	Female	Total [1]
2014 (Period 2)			
July	192	161	353
August	182	182	364
September	170	159	329
October	174	174	348
November	200	181	381
December	173	139	312
2015 (Period 1)			
January	242	228	471
February	239	231	470
March	213	237	451
April	181	194	375
May	221	188	409
June	238	190	428
TOTAL [2]	2,427	2,264	4,691
Sex Ratio at Death			107.2
Crude Death Rate [3]			3.9
Adjusted Crude Death Rate [4]			7.2
Completion Rate [5]	52.5	55.9	54.1

[1] Not including 29 deaths where sex was not stated

[2] Not including 65 deaths where month of occurrence was not stated

[3] 2015 Census projections base population used as the denominator

[4] Number of deaths adjusted by completion rate. 2015 Census projections base population used as the denominator

[5] Estimated deaths during one year based on 2011-15 life table

The period covered coincides with the year preceding the 2015 Census and enables use of the Census life tables data as a denominator for analysis of the completeness of the data.

The completion rate is a percentage which illustrates the extent to which all deaths were reported. The completion rate was 52.5% for males and 55.9% for females. A total completion rate of 54.1% demonstrates that the system failed to report the death in almost half of all cases that occurred between July 2014 and June 2015. However, the rate of reporting of deaths is better than for reporting of births.

The Crude Death Rate (CDR) uses the 2015 Census population as a denominator. A CDR of only 3.9 deaths per thousand population is low. This can be partly explained by the fact that close to half of all deaths were not reported and partly by the young population age structure in Timor-Leste. Applying an adjustment based on the completion rate yields a more realistic CDR of 7.2 deaths per thousand population.

Table 10 presents national level reported deaths data from the year 2015 by month and sex. Of 5,291 reported deaths, a total of only 126 did not include information on the month of death and a total of only 20 did not have information on the sex of the deceased. These values are low.

Table 10 Reported Deaths by Month of Occurrence, GDS System, Timor-Leste, January-December 2015

Month of Occurrence	Male	Female	Total[1]
January	242	228	471
February	239	231	470
March	213	237	451
April	181	194	375
May	221	188	409
June	238	190	428
July	235	184	419
August	191	209	400
September	210	189	399
October	201	226	427
November	221	229	450
December	230	236	466
TOTAL [2]	2,623	2,542	5,165
Sex Ratio at Death			103.2
Crude Death Rate [3]			4.4
Adjusted Crude Death Rate[4]			6.6
Completion Rate [5]	61.0	71.0	65.6

[1] Not including 20 deaths where sex was not stated

[2] Not including 126 deaths where month of occurrence was not stated

[3] 2015 UN projections population used as the denominator

[4] Number of deaths adjusted by completion rate. 2015 UN projections population used as the denominator

[5] 2015 UN deaths estimate used as the denominator

The completion rate has been calculated using deaths estimates and the CDR using population estimates from the 2015 release of the UN Population Division World Population Prospects.

The completion rate was 61% for males and 71% for females. A total completion rate of just under two-thirds is better than the same value for births in 2015 (Table 3). This is further evidence that death reporting is better than birth reporting in the GDS dataset. This finding is inconsistent with Civil Registration data in Timor-Leste, where births registration is generally perceived to have better coverage than deaths registration.

A total completion rate of just under two-thirds is also better than the same value obtained using a Census life table denominator for deaths during the period July 2014 to June 2015. It is possible that the UN estimate for deaths is an underestimate. Indeed, the UN estimated approximately 7,800 deaths whereas the Census recorded approximately 8,700 deaths. This demonstrates that it is important to carefully choose a denominator, as it can have a large impact on the completion rate.

The CDR was 4.4 deaths per thousand population in 2015, which is also higher than the value obtained using a Census based denominator for deaths during the period July 2014 to June 2015. The adjusted CDR was 6.6, which because of the higher completion rate in 2015 is lower than the adjusted CDR in 2014-15.

Figure 13 graphically illustrates the number of deaths that were reported by month between July 2014 and December 2015. The number of reported deaths varies from month to month, which could possibly be explained by seasonality. However, the pattern in the second half of 2014 is not consistent with the pattern in the second half of 2015. It is notable that the number of deaths reported in the second half of 2014 are lower than those in the second half of 2015. One explanation for this is that the system was functioning better in in the second half of 2015, one year after its initiation. Another could be lagged deaths reporting. Indeed, the number of deaths reported in January of 2015 are 50% higher than those reported in December of 2014.

Figure 13 Reported Deaths GDS System, Timor-Leste, July 2014-December 2015

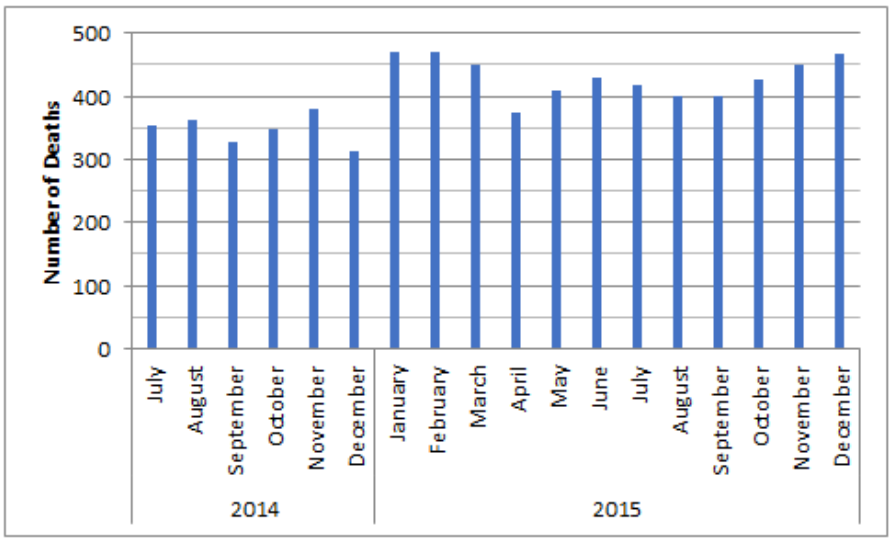


Table 11 provides a means of examining the difference in the number of deaths reported by month and sex between the second half of 2014 and the second half of 2015. In all cases more deaths were reported in the second half of 2015 as compared to the second half of 2014. As compared to Table 4, there does not appear to be any systematic bias against reporting of female deaths (as there appears to be for female births).

Table 11 Period differences in Reported Deaths by Month of Occurrence, GDS System, Timor-Leste, July 2014-December 2014 and July 2015-December 2015

Monthly difference (2015 minus 2014)	Male	Female	Total
July	43	23	66
August	9	27	36
September	40	30	70
October	27	52	79
November	21	48	69
December	57	97	154
TOTAL	196	278	474

The GDS system collects information on age at death. These data are presented in Table 12 for July 2014-June 2015. A significant number of cases (449, or 9%) had no age at death reported. This illustrates that lack of awareness of age is still as significant problem in Timor-Leste.

Table 12 Reported Deaths by age and sex, GDS System, Timor-Leste, July 2014-June 2015

Age	Male	Female	Total	Age Specific Death Rate
0	239	241	480	14.0
1-4	186	133	319	2.2
5-9	69	53	122	0.8
10-14	60	65	125	0.8
15-19	59	77	136	1.0
20-24	70	61	131	1.2
25-29	73	56	129	1.4
30-34	98	98	196	2.7
35-39	79	68	147	3.0
40-44	70	75	145	2.6
45-49	100	110	210	4.4
50-54	74	107	181	5.1
55-59	104	67	171	5.4
60-64	169	178	347	12.2
65-69	205	173	378	17.0
70-74	175	174	349	19.2
75-79	128	126	254	25.5
80+	262	225	487	51.8
Age not stated	247	202	449	
TOTAL	2,467	2,289	4,756	
Sex Ratio at Death				107.8
Crude Death Rate				3.9
Adjusted Crude Death Rate[2]				7.6
Completion Rate[1]	53.4	56.5	54.9	

[1] Number of deaths adjusted by completion rate. 2015 Census projections base population used as the denominator

[2] Estimated deaths during one year based on 2011-15 life table

The adjusted estimate for births occurring in the year preceding the 2015 Census was 36,202, and with only 480 deaths of children aged less than one year reported in the GDS system, this yields an implausibly low infant mortality rate of only 13.2 deaths per thousand births (which contrasts with a rate in the high 50s derived using indirect estimates on 2015 Census data). Similarly, with only 319 reported deaths of children aged between 1 and 4 years of age and a base population of 142,186, the child mortality rate is estimated at only 2.2 deaths per thousand population, also implausibly low for Timor-Leste. This leads to the conclusion that deaths of children less than five years of age are severely under-reported in the GDS system. This is evidence that an advocacy campaign on reporting of child deaths and age of death more generally is required.

The age specific death rate has been calculated for males and females using the 2015 Census population as a denominator. These data are graphed in Figure 14. Higher rates in early childhood and at ages older than 60 years are clearly visible. There are inconsistencies in rates for males and females, but no significant differences between the sexes.

Figure 14 Pyramid for Reported Deaths by age and sex, DGS System, Timor-Leste, July 2014-June 2015

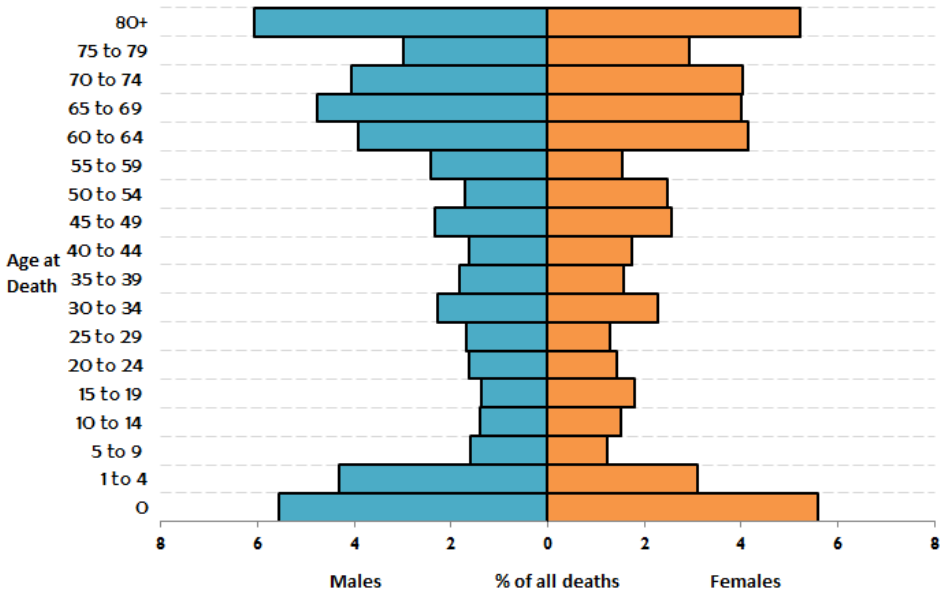
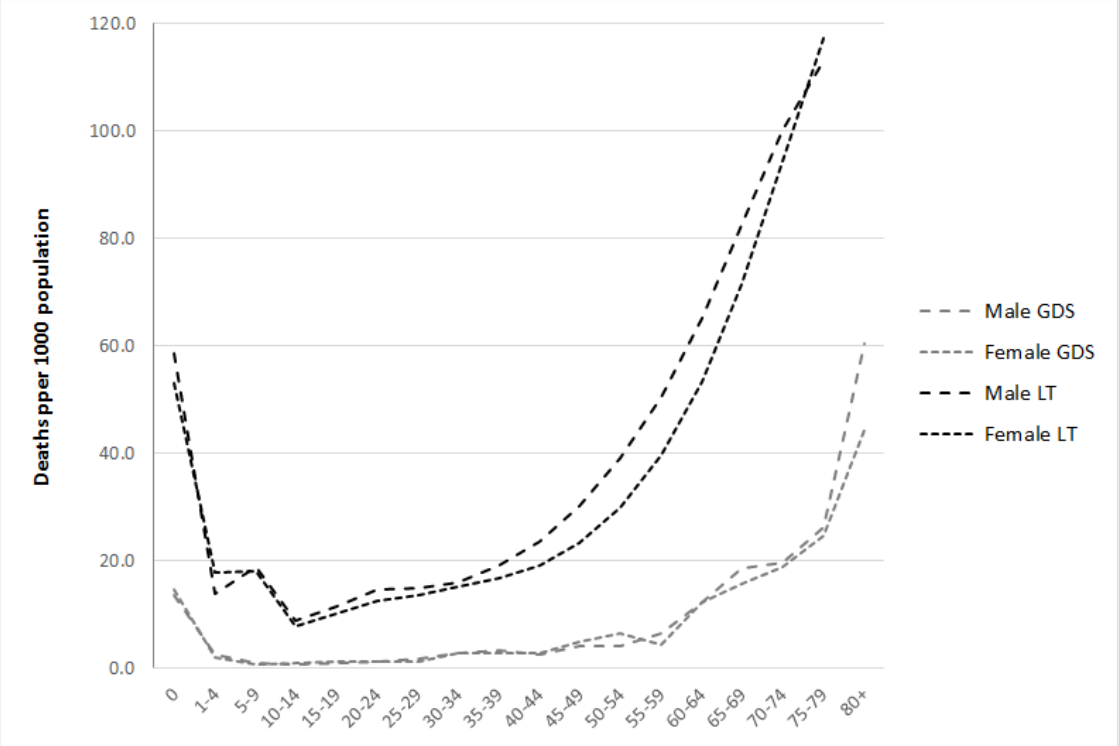


Figure 15 compares male and female age specific death rates in the GDS data with male and female age specific deaths rates based on the 2015 Census life tables (LT).

It is noticeable from Figure 15 that age specific death rates are higher across all ages for both sexes using life table data as compared with the GDS system data, which is a graphic demonstration of under-reporting in the GDS data. Nevertheless, despite the under-reporting in the GDS data, it is encouraging that the general shape of the GDS curves conform to the life table curves.

Figure 15 Reported Age-Specific Death Rates by sex, GDS System and 2015 Census Life Tables, Timor-Leste, July 2014-June 2015



In Table 13, reported deaths data are presented for the Municipalities for the period July 2014 to June 2015. The number of deaths reported varies between only 98 in Aileu and 885 in Dili.

Table 13 Reported Deaths, GDS System, Municipalities, Timor-Leste, July 2014-June 2015

Municipality of Ocurrence	Male	Female	Total[1]
Aileu	60	38	98
Ainaro	233	191	424
Baucau	269	239	508
Bobonaro	249	217	466
Covalima	83	70	153
Dili	476	409	885
Ermera	292	291	583
Lautem	178	162	340
Liquica	112	126	238
Manatuto	99	103	202
Maunfahe	100	83	183
Oecusse	162	179	341
Viqueque	154	181	335
Timor-Leste	2,467	2,289	4,756
Sex Ratio at Death			107.8
Crude Death Rate			3.9
Adjusted Crude Death Rate[2]			7.6
Completion Rate[3]	53.4	56.5	54.9

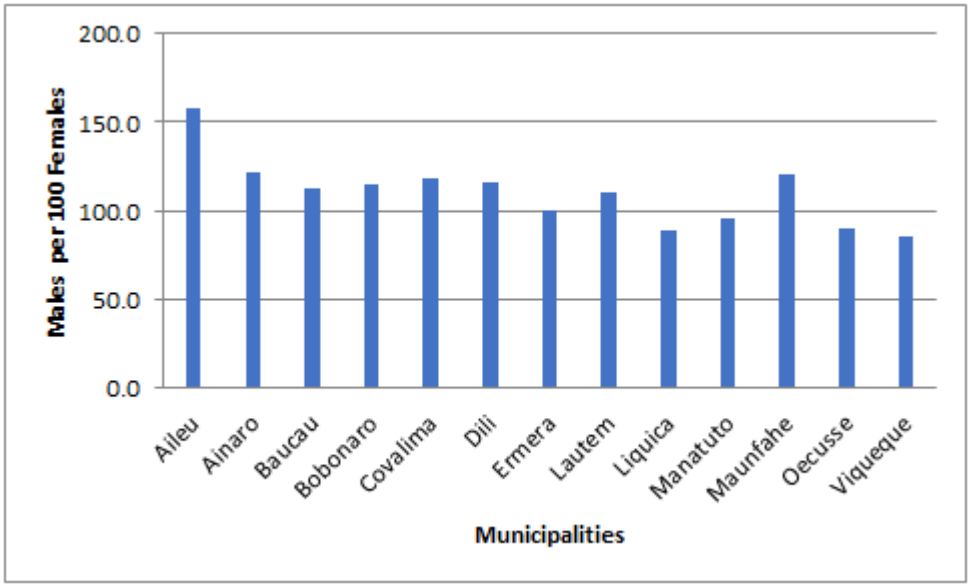
[1] Not including 29 deaths where sex was not stated

[2] Number of deaths adjusted by completion rate. 2015 Census projections base population used as the denominator

[3] Estimated deaths during one year based on 2011-15 life table

Figure 16 graphically illustrates that the reported sex ratio of deaths varies widely around Timor-Leste. Reported deaths are only balanced between the sexes in one Municipality (Ermera). Reporting of male deaths exceeds reporting of female deaths in eight Municipalities and reporting of female deaths exceeds reporting of male deaths in only four Municipalities.

Figure 16 Sex Ratio of Deaths, Reported Deaths, GDS System, Municipalities, Timor-Leste, July 2014-June 2015



Geographically, there is no clear pattern, but are generally there are more male than female deaths reported in the west than in the east (Figure 17).

Figure 17 Sex Ratio of Deaths, Reported Deaths, GDS System, Municipalities, Timor-Leste, July 2014-June 2015

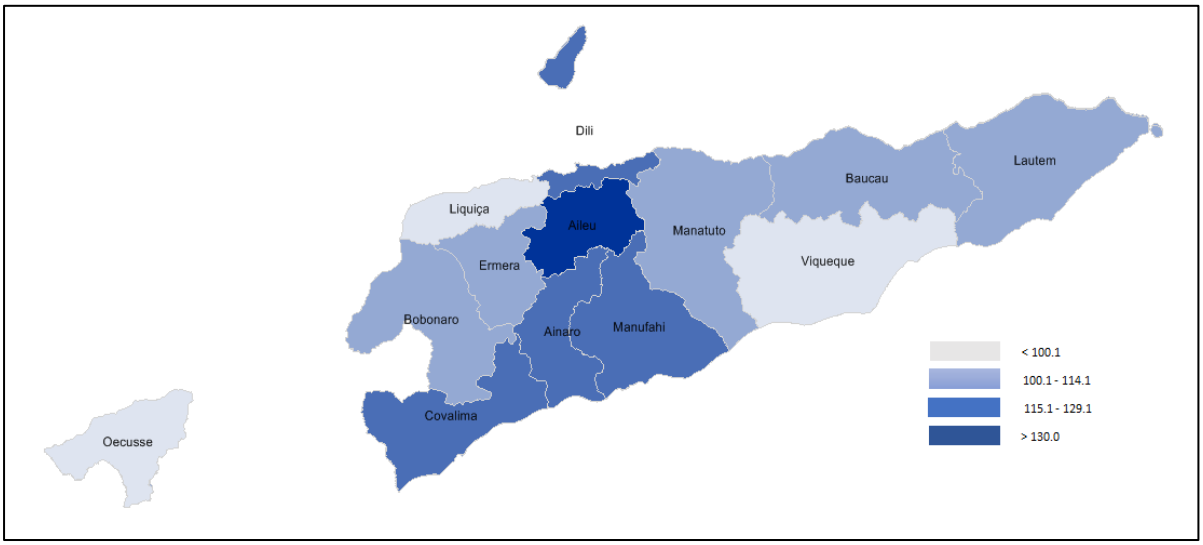


Figure 18 illustrates that the CDR derived using reported deaths also varies widely around Timor-Leste. The CDR ranges from only 2.0 deaths per thousand population in Aileu to 6.6 deaths per thousand population in Ainaro. Such a large range is implausible.

Figure 18 Crude Death Rate, Reported Deaths, GDS System, Municipalities, Timor-Leste, July 2014-June 2015

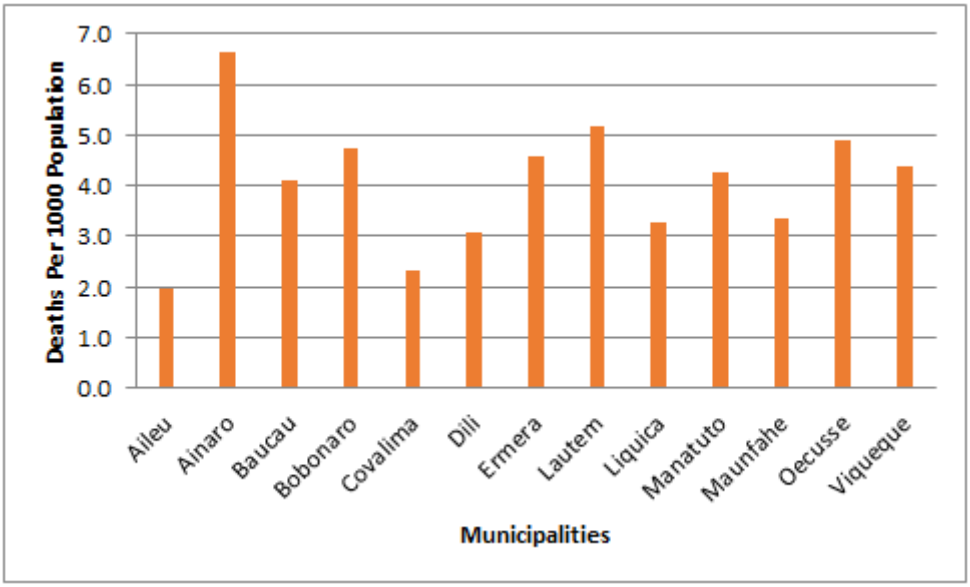


Figure 19 shows that the CDR data in the east of Timor-Leste is consistently higher as compared with the data in the west of Timor-Leste.

Figure 19 Crude Death Rate, Reported Deaths, GDS System, Municipalities, Timor-Leste, July 2014-June 2015

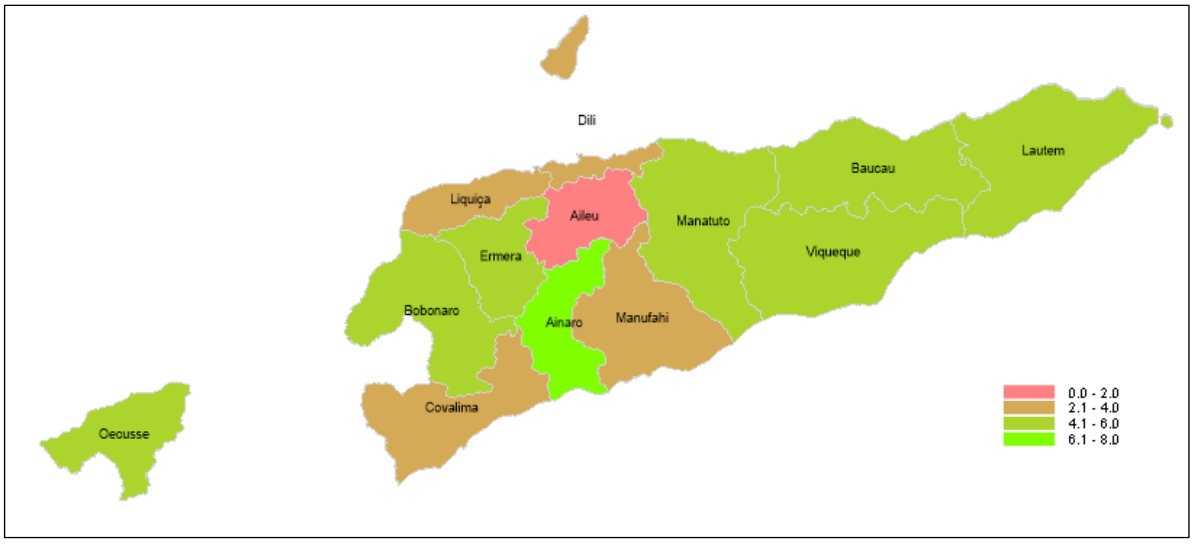
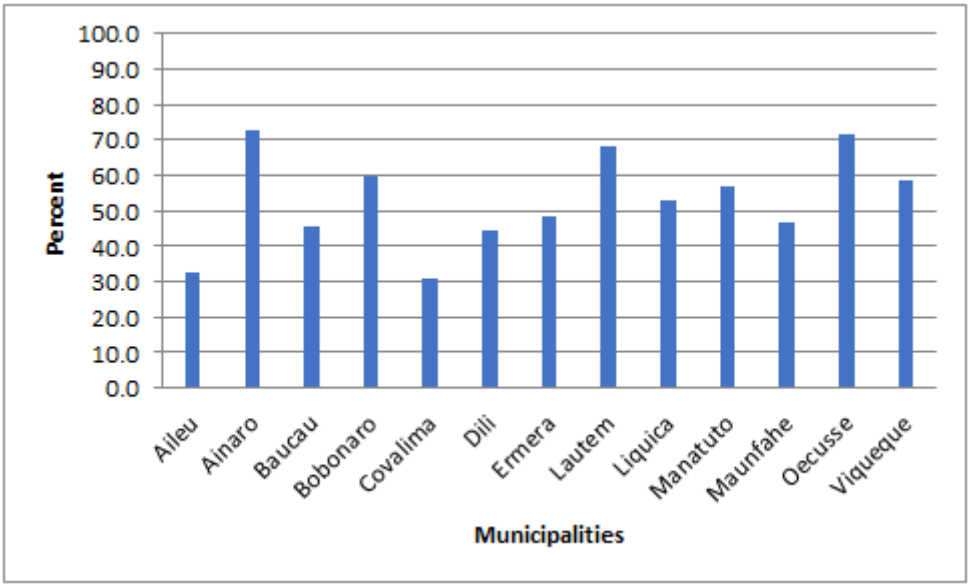


Figure 20 illustrates that the completion rate derived using reported deaths also varies widely around Timor-Leste. The completion rate ranges from only 30.8% in Covalima to 73.0% in Ainaro.

Figure 20 Completion Rate, Reported Deaths, GDS System, Municipalities, Timor-Leste, July 2014-June 2015



There is no clear geographical pattern in the completion rates (Figure 21).

Figure 21 Completion Rate, Reported Deaths, GDS System, Municipalities, Timor-Leste, July 2014-June 2015

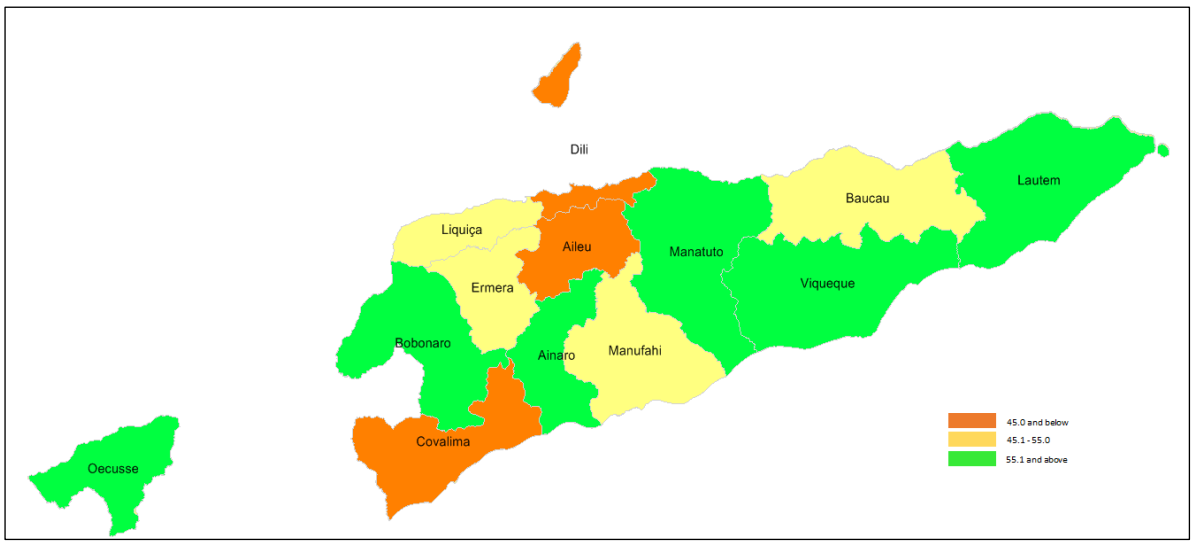


Table 14 presents reported deaths data for 2015. The reported sex ratio of deaths varies widely around Timor-Leste. Reported deaths are close to being in balance between the sexes in only one Municipality (Baucau). However, reporting of male deaths exceeds reporting of female deaths in eight Municipalities and reporting of female deaths exceeds reporting of male deaths in only five Municipalities.

Table 14 Reported Deaths, GDS System, Municipalities, Timor-Leste, 2015

Municipality	Male	Female	Total[1]
Aileu	104	60	165
Ainaro	227	381	608
Baucau	244	248	491
Bobonaro	247	231	478
Covalima	114	86	200
Dili	494	407	901
Ermera	377	324	700
Lautem	217	193	410
Liquica	123	144	267
Manatuto	83	106	190
Maunfahe	114	82	196
Oecusse	191	173	364
Viqueque	152	169	321
Timor-Leste	2,687	2,604	5,291
Sex Ratio at Death			103.2

[1] Not including 20 deaths where sex was not stated

5.2 Analysis of MoH Data on Registered Deaths

The MoH collates data on registered deaths predominately occurring in medical facilities.

Data on registrations collected by the MoH are analysed to shed light on recording of registered deaths within the healthcare system and as a means of making comparisons on data collected by the MoH and GDS systems.

Table 15 presents national level data on MoH recorded registration of deaths in health facilities from the period July 2014 to June 2015 by month and sex.

Table 15 Registered Deaths, Registration System, Timor-Leste, July 2014 - June 2015

Month of Occurrence	Male	Female	Total
	2014		
July	66	44	110
August	61	55	116
September	74	82	156
October	64	40	104
November	43	41	84
December	48	51	99
	2015		
January	59	60	119
February	82	94	176
March	7	1	8
April	13	15	28
May	31	13	44
June	53	35	88
TOTAL	601	531	1,132
Sex Ratio at Death			113.2
Crude Death Rate			0.9
Completion Rate[3]	13.0	13.1	13.1

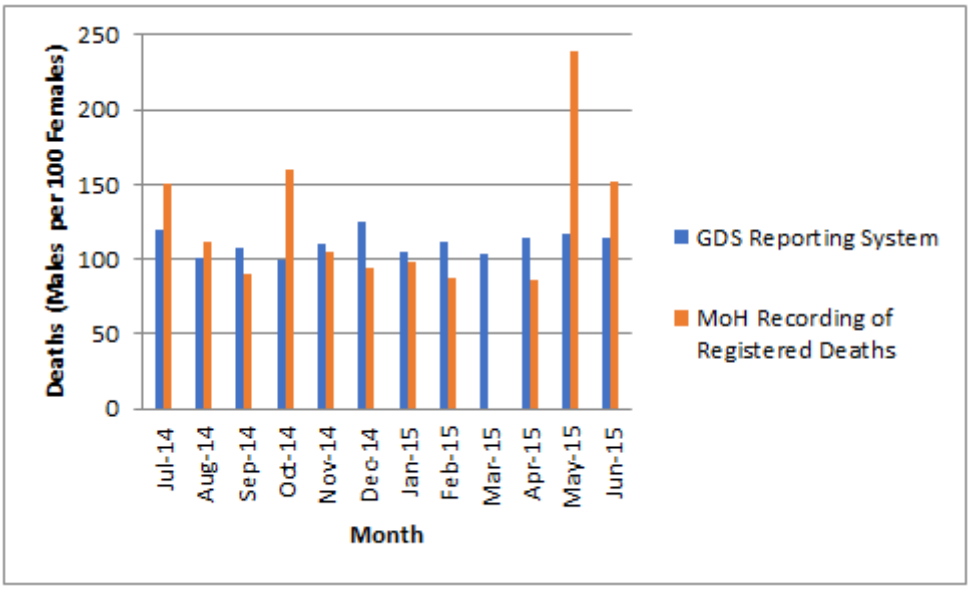
[1] Estimated deaths during one year based on 2011-15 life table

Source: Ministry of Health, Government of Timor-Leste, 2016

Of 1,132 registered deaths, 601 were males and 531 were females. The sex ratio for the 12-month period was 113.2 (as compared to 107.2 for the GDS reporting system data). The MoH registrations sex ratio varies between 86.7 and 238.5.

Figure 22 compares the sex ratios from the MoH data with the GDS data. The sex ratios fabvour female death registration in 5ive months in the MoH dataset, but only in one month are more female deaths reported in the GDS dataset than male deaths. The sex ratio is higher for MoH in five months and GDS data is higher in the other months (seven). Where male registration exceeds female registration in the MoH, the gaps are usually large, but this may be attributable to the small number of registrations.

Figure 22 Sex Ratio of Deaths, GDS and MoH systems, Timor-Leste, July 2014 – June 2015



Source: Ministry of Health, Government of Timor-Leste, 2016

In Table 16, the number of registered deaths is low, but varies across Timor-Leste, ranging from only 16 in Ermera to 174 in Baucau. In Dili, it is notable that only 44 deaths were registered.

Table 16 Registered Deaths, Registration System, Municipalities, Timor-Leste, July 2014-June 2015

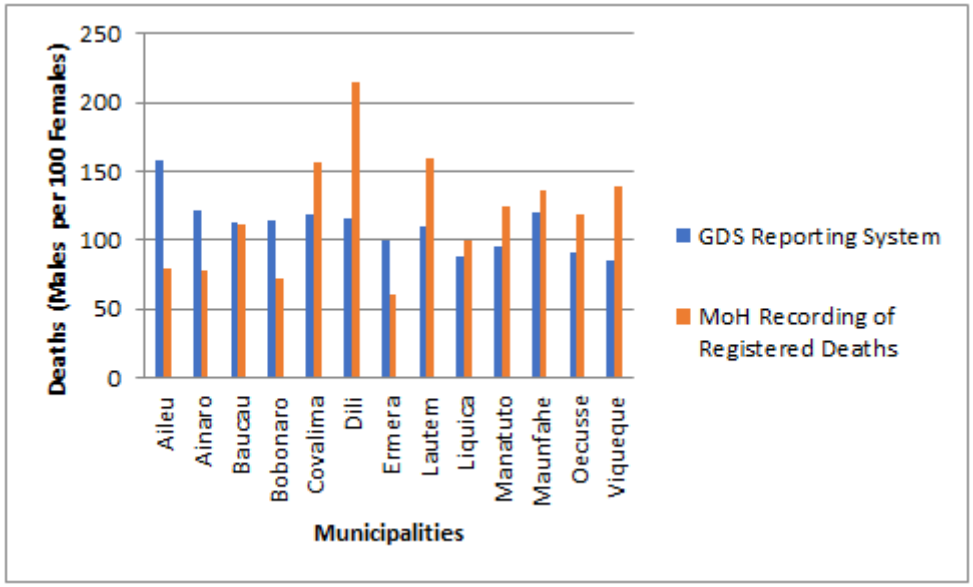
Municipality of Occurrence	Male	Female	Total
Aileu	32	40	72
Ainaro	25	32	57
Baucau	92	82	174
Bobonaro	41	57	98
Covalima	44	28	72
Dili	30	14	44
Ermera	6	10	16
Lautem	32	20	52
Liquica	63	63	126
Manatuto	89	71	160
Maunfahe	30	22	52
Oecusse	64	54	118
Viqueque	53	38	91
TOTAL	601	531	1,132
Sex Ratio at Death			80.0
Crude Death Rate			0.9
Completion Rate[1]	13.0	13.1	13.1

[1] Estimated deaths during one year based on 2011-15 life table

Source: Ministry of Health, Government of Timor-Leste, 2016

Turning to the sex ratio at death, the data ranges from 60 registered male deaths per 100 female deaths in Ermera to 214 registered male deaths per 100 female deaths in Dili. Figure 23 shows that the sex ratio is generally not consistent between the MoH and GDS datasets.

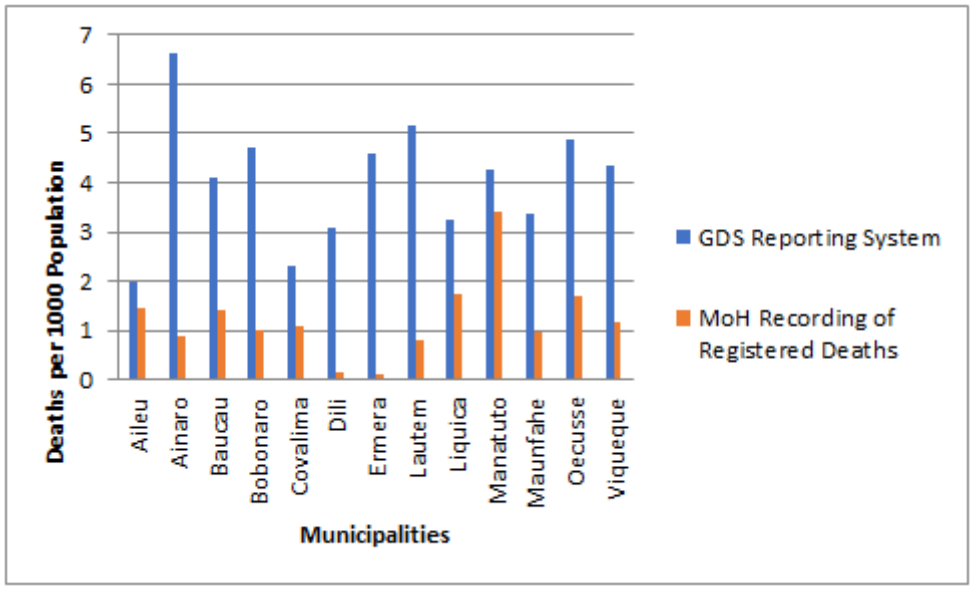
Figure 23 Sex Ratio of Deaths, GDS and MoH systems, Municipalities, Timor-Leste, July 2014 – June 2015



Source: Ministry of Health, Government of Timor-Leste, 2016

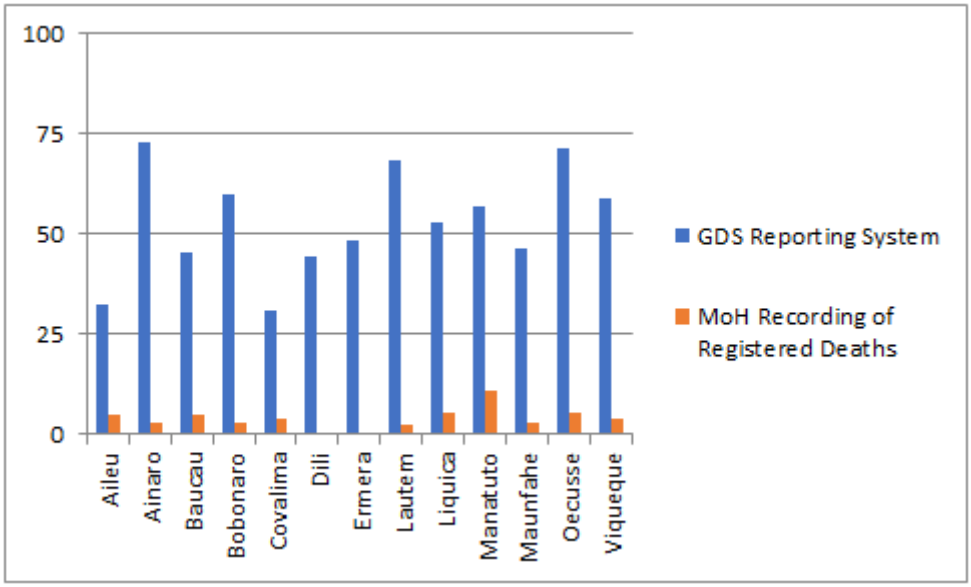
There is no consistency by Municipality between the MoH and GDS datasets for CDRs (Figure 24) or completion rates (Figure 25).

Figure 24 CDRs, GDS and MoH systems, Municipalities, Timor-Leste, July 2014 – June 2015



Source: Ministry of Health, Government of Timor-Leste, 2016

Figure 25 Completion Rates, GDS and MoH systems, Municipalities, Timor-Leste, July 2014 – June 2015



Source: Ministry of Health, Government of Timor-Leste, 2016

Figure 26 illustrates monthly births and deaths reporting as a percentage of the annual totals. If reporting is uniform (and there is no seasonality), then it would be expected that each month would yield 8.33% of annual births and deaths. However, it can been seen that births and deaths reporting varies across the 18 month time period and in generally, month–by–month reporting varies markedly, such that a particular month is seldom consistent with the same month in the following year for either births or deaths, or with the preceding or following month in the same year. There is also little consistency between the two data sets, such that births reporting is proportionately higher than death reporting in July to September 2015 and deaths reporting is proportionately higher than births reporting in January to March 2015 and November and December 2015.

Figure 26 Proportional Monthly Reporting of Births and Deaths, GDS System, Timor-Leste, July 2014 – December 2015

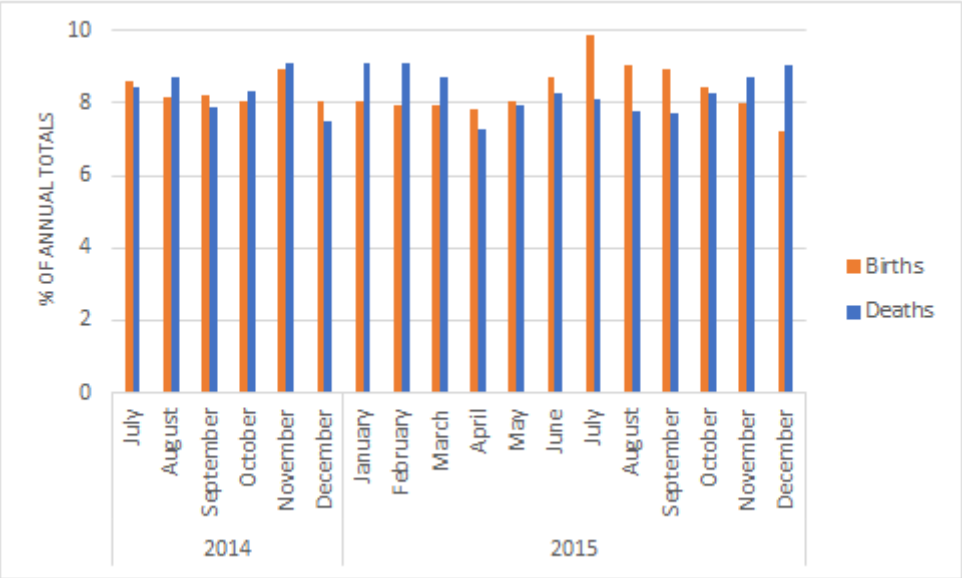


Table 17 is an assessment of data gaps at the lowest geographical level, the Suco, for births and deaths in 2014, Period 2. Of 442 Sucos, 107 (or 24.2%) had provided no births and deaths data to GDS. The percentage of Suco's with no data reporting varied very widely around the country. In Bobonaro Municipality, no data whatsoever was collected and provided to GDS. Over two thirds of Sucos in Lautem provided no data and over 40% of Sucos in Dili and Ermera provided no data. The highest reporting by Sucos were for Ainaro (90%) and Oecusse (94%).

Table 17 Sucos with no reported data on births or deaths, GDS System, Timor-Leste, 2014, Period 2

Municipality	Total Number of Sucos	Sucos without data	% of Sucos without data
Aileu	31	8	25.8
Ainaro	21	2	9.5
Baucau	59	8	13.6
Bobonaro	50	50	100.0
Covalima	30	5	16.7
Dili	31	13	41.9
Ermera	52	22	42.3
Lautem	34	23	67.6
Liquica	23	7	30.4
Manatuto	29	8	27.6
Maunfahe	29	4	13.8
Oecusse	18	1	5.6
Viqueque	35	6	17.1
TOTAL	442	107	24.2

Table 18 is an assessment of data gaps at the lowest geographical level, the Suco, for births and deaths in 2015, Period 1. Of 442 Sucos, 124 (or 28.1%) had provided on data on births and deaths to GDS, a decrease in reporting as compared to Period 2 of 2014. In contrast to Period 2 of 2014, when Bobonaro Municipality provided no data whatsoever, coverage was complete in 2015 (Period 1). However, there was no data for Ainaro Suco's whatsoever in 2015, Period 1. A sharp contrast to 2014, Period 2, when Ainaro had provided data for over 90% of Sucos. Elsewhere, data provision varied widely. Large gaps in reporting by Sucos was found in Aileu, Oecusse and Viqueque (where between 77.4% and 68.6% of Sucos provided no data) and around 40% of Sucos in Baucau and Dili provided no data. The highest rates of reporting were in Ermera (94%) and Manatuto (97%).

Table 18 Sucos with no reported data on births or deaths, GDS System, Timor-Leste, 2015, Period 1

Municipality	Total Number of Sucos	Sucos without data	% of Sucos without data
Aileu	31	24	77.4
Ainaro	21	21	100.0
Baucau	59	23	39.0
Bobonaro	50		-
Covalima	30	4	13.3
Dili	32	13	40.6
Ermera	52	3	5.8
Lautem	34	11	32.4
Liquica	23	5	21.7
Manatuto	29	1	3.4
Maunfahe	29	3	10.3
Oecusse	18	13	72.2
Viqueque	35	24	68.6
TOTAL	443	124	28.0

Table 19 is an assessment of data gaps at the lowest geographical level, the Suco, for births and deaths in 2015, Period 2. Of 442 Sucos, 133 (or 30.1%) had provided on data on births and deaths to GDS, a decrease in reporting as compared to Period 2 of 2014 and Period 1 of 2015. However, in contrast to previous Periods, every municipality provided data and three Municipalities (Dili, Liquicia and Manufahe) provided data for every Suco. Elsewhere, provision of data by Sucos varied, with very large gaps in of 79.4% of all Sucos in Lautem, 78% in Bobonaro and 71.4% in Viqueque to higher data provision found in 96% in Ermera, 93% in Manatuto and 90% in Covalima.

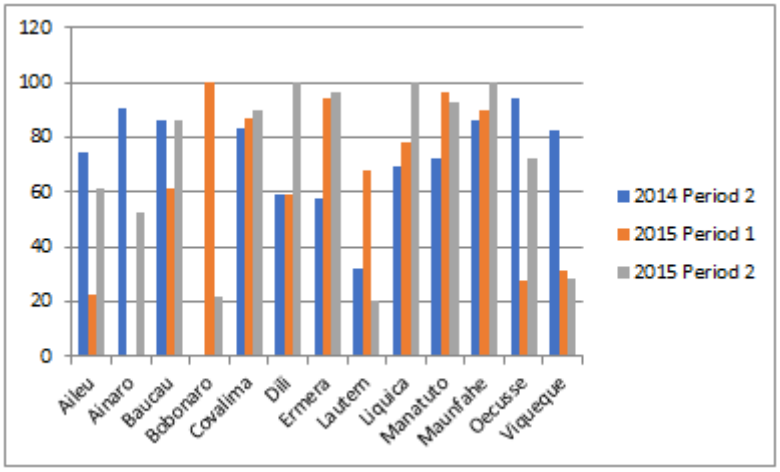
Table 19 Sucos with no reported data on births or deaths, GDS System, Timor-Leste, 2015, Period 2

Municipality	Total Number of Sucos	Sucos without data	% of Sucos without data
Aileu	31	12	38.7
Ainaro	21	10	47.6
Baucau	59	8	13.6
Bobonaro	50	39	78.0
Covalima	30	3	10.0
Dili	32		-
Ermera	52	2	3.8
Lautem	34	27	79.4
Liquica	23		-
Manatuto	29	2	6.9
Maunfahe	29		-
Oecusse	18	5	27.8
Viqueque	35	25	71.4
TOTAL	442	133	30.1

Gaps in data provision by Sucos increased from 25 per cent of Suco's providing no data in 2014 Period 2, to 30 percent Suco's providing no data in 2015 Period 2. Figure 27 illustrates that for most Municipalities, there was little consistency between the three reporting periods. Reductions in gaps in reporting were observed in only five Municipalities (Covalima, Dili, Ermera, Liquicia and Manufahe). Lautem and Bobonaro were the worst performing Municipalities across the period, and Aileu, Ainaro and Viqueque all had increased gaps in reporting across the period 2014, Period 2 to 2015, Period 2.

This analysis illustrates widespread issues with gaps in reporting at the lowest geographical level, which in the case of some Municipalities are persistent, and in others more inconsistent over time. Monitoring of coverage by GDS and the MoSA using data such as that presented in this chapter in conjunction with follow up with Municipality, Administrative Post and Suco level administration is required. Awareness building strategies are necessary to ensure that coverage increases over time.

Figure 26 Percentage of Sucos covered in GDS System, Timor-Leste, 2014-2015 reporting periods.



Chapter 7 Proposed ways to improve the CRVS system

- During 2017, MoJ and GDS should collaborate to facilitate analysis of the Civil Registration data held in a database by the Division of Civil Registry and Notary. These data span 2013 to 2016.
- An assessment of the instruments for birth and death registration (see English translation of forms in Annexes 1 and 3) has proven that a large number of analytical tables and demographic indicators could be produced for assessment of coverage and for planning purposes (See Annex 2 and 4 for list of tables).
- In the longer term, better instruments could be designed by learning from other countries that are collecting much more information on their forms e.g. Maldives.
- The parallel system of births and deaths reporting operated by GDS should be phased-out and combined effort applied to improving the quality of the Civil Registration system operated by the MoJ.
- By sharing the Civil Registration data with GDS, statistical expertise would facilitate completeness and coverage issues to be exposed and addressed.
- MoH registration data collection can be made more meaningful and useful through information sharing both on the ground, at the Suco level and at the national level.
- Improved coordination across line ministries is necessary to follow up on completeness and coverage issues across the country.
- MoJ plans to extend registration to the Administrative Post level should be expedited as a means of improving access to registration facilities by rural people.
- Suco Chiefs and health workers should be given the opportunity to support registration at the Administrative Post level rather than only at Municipality (District) levels.
- Administrative Post level staff should be an integral part of follow up checks on completeness.
- Mobile registration camps should be organized from the Administrative Post level including through provision of adequate transport resources.
- Additional data sources are available and can be used to improve data quality. The 2015 Census recorded information on birth registration and certification of children aged under six years. If unit record data (including personal identifiers) are shared by MoJ coverage rates can be assessed for the period 2013 to 2015 through comparison with the Census data.
- UNICEF support for computerisation within five Municipalities could be rolled out. Best practice examples of computerised registrations, such as those operated in Mongolia should be replicated across Timor-Leste.

Annex 1 Ministry of Justice Birth Registration Form

DEMOCRATIC REPUBLIC OF TIMOR-LESTE

MINISTRY OF JUSTICE

DIRECTORATE OF CIVIL REGISTER AND NOTARY

CIVIL REGISTRY CORSERVATORY

BIRTH Form No …….

Complete Name: ……**Sex**.....

Place, time, and date of birth: ...……..

Natural from: Suco……Post-Municipality…….……

Municipality…….

Usual/Habitual residence……...

Father: ……...

Date of birth ……Status……

Natural from: Suco……..Post-Municipality……..Municipality……...

Usual/Habitual residence……

Nationality……..

Mother: ……

Date of birth ……..Status…….……

Natural from: Suco……..Post-Municipality……..Municipality……

Usual/Habitual residence……

Nationality……..

Paternal Grandparents from: …… and…….

Maternal Grandparents from: ……...…… and…….

Declarant: ……..

Special mentions: ……..

Witnesses:

a) **Name:** ……..age ……year/s old, Status …….....

Usual/Habitual residence: ……
Signature: ……

b) **Name:** ……..age ……year/s old, Status ……..……
Usual/Habitual residence……
Signature: ……

Date of the endorsement: ……..…….

Document No……. Pack No ……Diary/Daily No ……..

Declarant – Signature …… Date …….

Reservations: …….

The Conservator of Civil Registry / Central

Name …….. Signature ..…….

Policy Privacy

……

……

……

Full name of adopting parents.

Father: ……..……..……..… **Natural from: Suco** ……...……..

Post – Municipality ……...… **Municipality** ……..……

Nationality: ……..…….

Mather: …… **Natural from: Suco** …..……..

Post – Municipality ……..……. **Municipality** ……..……

Nationality: ……..…….

Decision of the Court of ……... and ……..….

Date of sentence ……

Annex 2 List of Births Registration Tables that can be produced using the MoJ Birth Registration Dataset

National Level Tables

1. Month of occurrence of Birth Registration by sex, Timor-Leste, 2013 , Sex ratio, Completeness Rate and Crude Birth Rate (UN Denominators)

2. Month of occurrence of Birth Registration by sex, Timor-Leste, 2014, Sex ratio, Completeness Rate and Crude Birth Rate (UN Denominators)

3. Month of occurrence of Birth Registration by sex, Timor-Leste, July 2014-June 2015, Sex ratio, Completeness Rate and Crude Birth Rate (2015 Census Denominators)

4. Month of occurrence of Birth Registration by sex, Timor-Leste, 2015, Sex ratio, Completeness Rate and Crude Birth Rate (UN Denominators)

5. Month of occurrence of Birth Registration by sex, Timor-Leste, 2016, Sex ratio, Completeness Rate and Crude Birth Rate (UN Denominators)

6. Occurrence of registered birth by age of mother, Timor-Leste, 2013, TFR and Age Specific Fertility Rate (UN Denominator)

7. Occurrence of registered birth by age of mother, Timor-Leste, 2014, TFR and Age Specific Fertility Rate (UN Denominator)

8. Occurrence of registered birth by age of mother, Timor-Leste, July 2014-June 2015, Completeness Rate, TFR, Age Specific Fertility Rate and Crude Birth Rate (2015 Census Denominator)

9. Occurrence of registered birth by age of mother, Timor-Leste, 2015, TFR and Age Specific Fertility Rate (UN Denominator)

10. Occurrence of registered birth by age of mother, Timor-Leste, 2016, TFR and Age Specific Fertility Rate (UN Denominator)

11. Occurrence of registered birth by marital status of mother, Timor-Leste, 2013 to 2016

12. Occurrence of registered birth by paternal adoptive status, Timor-Leste, 2013 to 2016

13. Occurrence of registered birth by maternal adoptive status, Timor-Leste, 2013 to 2016

14. Occurrence of registered birth by maternal and paternal adoptive status, Timor-Leste, 2013 to 2016

Municipality level tables

1. Occurrence of Birth Registration by sex, Municipalities, 2013 , Sex ratio

2. Occurrence of Birth Registration by sex, Municipalities, 2014, Sex ratio

3. Occurrence of Birth Registration by sex, Municipalities, July 2014-June 2015, Sex ratio, Completeness Rate and Crude Birth Rate (2015 Census Denominators)

4. Occurrence of Birth Registration by sex, Municipalities, 2015, Sex ratio

5. Occurrence of Birth Registration by sex, Municipalities, 2016, Sex ratio

6. Occurrence of registered birth by age of mother, Municipalities, 2013

7. Occurrence of registered birth by age of mother, Municipalities, 2014

8. Occurrence of registered birth by age of mother, Municipalities, July 2014-June 2015, Completeness Rate, TFR, Age Specific Fertility Rate and Crude Birth Rate (2015 Census Denominator)

9. Occurrence of registered birth by age of mother, Municipalities, 2015

10. Occurrence of registered birth by age of mother, Municipalities, 2016

11. Occurrence of registered birth by marital status of mother, Municipalities, 2013 to 2016

Administrative-Post level tables

1. Occurrence of Birth Registration by sex, Administrative-Post, 2013, Sex ratio

2. Occurrence of Birth Registration by sex, Administrative-Post, 2014, Sex ratio

3. Occurrence of Birth Registration by sex, Administrative-Post, July 2014-June 2015, Sex ratio, Completeness Rate and Crude Birth Rate (2015 Census Denominators)

4. Occurrence of Birth Registration by sex, Administrative-Post, 2015, Sex ratio

5. Occurrence of Birth Registration by sex, Administrative-Post, 2016, Sex ratio

Suco Level Tables

1. Occurrence of Birth Registration by sex, Suco, 2013, Sex ratio

2. Occurrence of Birth Registration by sex, Suco, 2014, Sex ratio

3. Occurrence of Birth Registration by sex, Suco, 2015, Sex ratio

4. Occurrence of Birth Registration by sex, Suco, 2016, Sex ratio

Annex 3 Ministry of Justice Deaths Registration Form

DEMOCRATIC REPUBLIC OF TIMOR-LESTE

MINISTRY OF JUSTICE

DIRECTORATE OF CIVIL REGISTER AND NOTARY

CIVIL REGISTRY CORSERVATORY

DEATH Form No ……..

Complete Name: ……...

Sex……..Age……Marital Status……in the year……..

Date of Birth……...… Natural from: Suco …..……..

From Post-Municipality……from Municipality……Nationality……..

Son of……..……

and …….

Time/Hour and date of death ……

Place of Death……Habitual/usual residence…….……

From Suco ……. Post-Municipality …….……. Municipality…….

Buried in the cemetery ……..…….

Cause of Death ...……

Declarant ……...……..

Habitual Residence ……..……..

The deceased left heirs, subject to mandatory inventory…….…..

Name of Last Spouse……..

Left goods……. And last child (Minor children) …….

Date of the endorsement ……..

The Director / Conservative ……..……

Document No ……. Pack No …….. Diary / Daily No ……

Birth Form No ……in the year Conservatory of ……

Marriage Form No ……. in the year Conservatory of ……...

Death Form No ……. ……...in the year Conservatory of ……..

Recorded No ……. ……....in the year Conservatory of ……..

Annex 4 List of Deaths Registration Tables that can be produced using the MoJ Death Registration Dataset

National Level Tables

1. Month of occurrence of Death Registration by sex, Timor-Leste, 2013 , Sex ratio, Completeness Rate and Crude Death Rate (UN Denominators)

2. Month of occurrence of Death Registration by sex, Timor-Leste, 2014, Sex ratio, Completeness Rate and Crude Death Rate (UN Denominators)

3. Month of occurrence of Death Registration by sex, Timor-Leste, July 2014-June 2015, Sex ratio, Completeness Rate and Crude Death Rate (2015 Census Denominators)

4. Month of occurrence of Death Registration by sex, Timor-Leste, 2015, Sex ratio, Completeness Rate and Crude Death Rate (UN Denominators)

5. Month of occurrence of Death Registration by sex, Timor-Leste, 2016, Sex ratio, Completeness Rate and Crude Death Rate (UN Denominators)

6. Occurrence of registered Death by age at death, Timor-Leste, 2013, sex ratio

7. Occurrence of registered Death by age at death, Timor-Leste, 2014, sex ratio

8. Occurrence of registered Death by age at death, Timor-Leste, July 2014-June 2015, sex ratio, Completeness Rate, Age Specific Death Rate and Crude Death Rate (2015 Census Denominator)

9. Occurrence of registered Death by age at death, Timor-Leste, 2015, sex ratio

10. Occurrence of registered Death by age at death, Timor-Leste, 2016, sex ratio

11. Occurrence of registered Death by marital status, Timor-Leste, 2013 to 2016

12. Occurrence of registered Death by place of death, Timor-Leste, 2013 to 2016

13. Occurrence of registered Death by sex and cause of death, Timor-Leste, 2013 to 2016

14. Occurrence of registered Death by age, sex and cause of death, Timor-Leste, 2013

15. Occurrence of registered Death by age, sex and cause of death, Timor-Leste, 2014

16. Occurrence of registered Death by age, sex and cause of death, Timor-Leste, 2015

17. Occurrence of registered Death by age, sex and cause of death, Timor-Leste, 2016

Municipality level tables

1. Occurrence of Death Registration by sex, Municipalities, 2013 , Sex ratio

2. Occurrence of Death Registration by sex, Municipalities, 2014, Sex ratio

3. Occurrence of Death Registration by sex, Municipalities, July 2014-June 2015, sex ratio, Completeness Rate and Crude Death Rate (2015 Census Denominator)

4. Occurrence of Death Registration by sex, Municipalities, 2015, Sex ratio

5. Occurrence of Death Registration by sex, Municipalities, 2016, Sex ratio

6. Occurrence of registered Death by age at death, Municipalities, 2013

7. Occurrence of registered Death by age at death, Municipalities, 2014

8. Occurrence of registered Death by age at death, Municipalities, July 2014-June 2015, Sex ratio, Completeness Rate, Age Specific Death Rate and Crude Death Rate (2015 Census Denominators)

9. Occurrence of registered Death by marital status, Municipalities, 2013 to 2016

10. Occurrence of registered Death by place of death, Municipalities, 2013 to 2016

11. Occurrence of registered Death by sex and cause of death, Municipalities, 2013 to 2016

Administrative-Post level tables

1. Occurrence of Death Registration by sex, Administrative-Post, 2013, Sex ratio

2. Occurrence of Death Registration by sex, Administrative-Post, 2014, Sex ratio

3. Occurrence of Death Registration by sex, Administrative-Post, July 2014-June 2015, Sex ratio, Completeness Rate and Crude Death Rate (2015 Census Denominators)

4. Occurrence of Death Registration by sex, Administrative-Post, 2015, Sex ratio

5. Occurrence of Death Registration by sex, Administrative-Post, 2016, Sex ratio

Suco Level Tables

1. Occurrence of Death Registration by sex, Suco, 2013, Sex ratio

2. Occurrence of Death Registration by sex, Suco, 2014, Sex ratio

3. Occurrence of Death Registration by sex, Suco, 2015, Sex ratio

4. Occurrence of Death Registration by sex, Suco, 2016, Sex ratio

Annex 5 2015 Census questions relating to Births, Birth Registration, and Deaths

Part 4: **For All women aged 15 years and over (private household only)**

Particulars of all live births (If no children write "00")									Particulars of last live birth (if no children write "00")						
Write woman's Line No. from **Part 3**.	Total children ever born		Children usually live in this household		Children usually live elsewhere		Children who have died		Date of last birth Month / Year	Sex of last birth	Is the last child alive?	Facility of delivery ***if code 5 skip to P54***	Time taken to reach health facility (one way)	Mode of travel	Assistance during delivery
	Male	Female	Male	Female	Male	Female	Male	Female		1. Male 2. Female	Codes are below	Codes are below	Codes are below	Codes are below	Codes are below
P39	**P40**	**P41**	**P42**	**P43**	**P44**	**P45**	**P46**	**P47**	**P48**	**P49**	**P50**	**P51**	**P52**	**P53**	**P54**

P50: Survival status of last birth
1. Yes
2. No
3. At least one of multiples

P51: Facility of delivery
1. Hospital
2. Government community health centre
3. Government health post
4. Private clinic
5. Own/Family house
6. Traditional birth attendant house
7. Other

P52: Time to reach health Facility
1. <1 hour
2. 1 - 2 hours
3. > 2 hours

P53: Mode of Travel
1. Car/Bus/Taxi
2. Ambulance
3. Motorcycle
4. Horse
5. By Foot
6. Any other (please specify...)

P54: Assistance during delivery
1. None
2. Doctor
3. Nurse
4. Midwife / Skilled birth attendant
5. Traditional birth attendant
6. Relatives
7. Other (specify...)

If Age 0-5 years
Birth Registration
Does (Name) have a birth certificate If NO, PROBE has (Name's) birth ever been registered with the civil authority?

P24: Birth Registration
1. Has RDTL birth certificate / any valid certificate
2. Registered by civil registration office
3. Registered in hospital
4. Registered in suco
5. Registered in church
6. Registered in other places
7. Not registered
8. Don't Know

Part 6:

Recent deaths information

How many members of this household died in the last 12 months (**11 July 2014- to date**)?
(in this household and not a relative who lived in another household).

If nobody died, write **"00"** and skip, if somebody died fill D2-D8 accordingly.

	Name	**Sex**	**Age at Death**		**If the deceased was female 15 years and above, did (Name) die .....?**		
Line No.	Name of deceased	Sex of the deceased **1. Male** **2. Female**	Write age in completed years at the time of death	Was the death related to either accident or violence 1. Yes 2. No	During pregnancy **1. Yes** **2. No** **3. Don't Know**	Giving birth **1. Yes** **2. No** **3. Don't Know**	Within six weeks after delivery **1. Yes** **2. No** **3. Don't Know**
	D2	**D3**	**D4**	**D5**	**D6**	**D7**	**D8**

Annex 6 2016 DHS question relating to Birth Registration and Certification

IF AGE 0-4 YEARS
BIRTH REGISTRATION
20
Does (NAME) have a birth certificate? IF NO, PROBE: Has (NAME)'s birth ever been registered with the civil authority? 1 = HAS CERTIFICATE 2 = REGISTERED 3 = NEITHER 8 = DON'T KNOW

Annex 7 GDS Births and Deaths Reporting Instrument

DEMOCRATIC REPÚBLIC OF TIMOR-LESTE
Ministry of Finance
GENERAL DIRECTORATE OF STATISTICS

Module 1

Municipality : .....

Post - Administrative : ..... Period: ..... till .....

Semester Report on Births and Deaths

No.	Name	Date of Births					Date of Deaths					Age	Diagnosed	Medical Diagnosed Yes = 1 ; No = 2
		Date	Month	Year	Sex		Date	Month	Year	Sex				
					Male	Female				Male	Female			
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)

Annex 8 Vital Statistics definitions and specifications

Live birth: Complete expulsion or extraction from its mother of a product of conception, irrespective of the duration of pregnancy, which, after such expulsion or extraction, breathes or shows any other evidence of life, and each product of such birth is considered live-born.

Death: Permanent disappearance of all evidence of the life at any time after live birth has taken place.

Crude birth rate (CBR) = $\frac{Number\ of\ live\ births\ during\ the\ year}{Mid-year\ population} x\ 1000$

Age-specific fertility rate (ASFR) = $\frac{Number\ of\ live\ births\ in\ a\ specific\ age-group}{Mid-year\ female\ population\ of\ the\ same\ age-group} x\ 1000$

General fertility rate (GFR) = $\frac{Number\ of\ live\ births\ in\ a\ year}{Mid-year\ married\ female\ population\ in\ the\ age-group\ (15-49)years} x\ 1000$

Crude Deaths rate (CDR) = $\frac{Number\ of\ live\ deaths\ during\ the\ year}{Mid-year\ population} x\ 1000$

Infant Mortality rate (IMR) = $\frac{Number\ of\ live\ deaths\ during\ the\ year}{Mid-year\ population} x\ 1000$

Completeness rate (CR) = $\frac{Total\ Population\ Civil\ Registration\ Records}{Total\ Population\ from\ Census\ 2015} x\ 1000$

Sex ratio at births (SRB) = $\frac{Number\ of\ female\ births\ recorded\ during\ the\ year}{Number\ of\ male\ births\ recorded\ during\ the\ year} x\ 100$

Mid-year population: July 2014-June 2015 Population from census 2015

Annex 9

Ministerial Declaration

to "Get every one in the picture" in Asia and the Pacific*

We, the ministers and representatives of members and associate members of the United Nations Economic and Social Commission for Asia and the Pacific assembled at the Ministerial Conference on Civil Registration and Vital Statistics in Asia and the Pacific, held in Bangkok, from 24 to 28 November 2014,

Reaffirming the human right of everyone to be recognized everywhere as a person before the law, which is enshrined in the Universal Declaration of Human Rights,[1]

Recalling the International Covenant on Civil and Political Rights,[2] the Convention on the Rights of the Child,[3] the International Convention on the Protection of the Rights of All Migrant Workers and Members of Their Families,[4] and the Convention on the Rights of Persons with Disabilities,[5] which stipulate that States Parties should register all children immediately after birth without discrimination, as invoked by resolutions adopted by the General Assembly and the Human Rights Council, the most recent being General Assembly resolution 66/141 of 19 December 2011, and Human Rights Council resolution 22/7 of 21 March 2013,

Also recalling the Convention on Consent to Marriage, Minimum Age for Marriage and Registration of Marriages,[6] which stipulates that States Parties should ensure that all marriages are registered in an appropriate official register by the competent authority,

Further recalling General Assembly resolution 68/261 of 29 January 2014, which endorsed the Fundamental Principles of Official Statistics, and General Assembly resolution 64/267 of 3 June 2010, which acknowledged that reliable and timely statistics and indicators measuring a country's progress are an indispensable basis for informed policy decision-making and for monitoring the Millennium Development Goals at the national, regional and international levels, on the understanding that this extends to other internationally agreed development goals and to monitoring at the subnational level,

Recalling World Health Assembly resolution WHA67.14 of 24 May 2014, in which member States were urged, in the context of the development agenda beyond 2015, to recognize the importance of accountability by strengthening of civil registration and vital statistics and health information systems, which can be used for monitoring health equity by providing disaggregated data that do not reveal information about individuals,

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* Adopted by the Ministerial Conference on Civil Registration and Vital Statistics in Asia and Pacific on 28 November 2014 in Bangkok, Thailand.

[1] General Assembly resolution 217 A (III).

[2] See General Assembly resolution 2200 A (XXI), annex.

[3] United Nations, *Treaty Series*, vol. 1577, No. 27531.

[4] United Nations, *Treaty Series*, vol. 2220, No. 39481.

[5] United Nations, *Treaty Series*, vol. 2515, No. 44910.

[6] United Nations, *Treaty Series*, vol. 521, No. 7525.

Also recalling Commission resolutions 67/12 of 25 May 2011 and 69/15 of 1 May 2013, which recognize the importance of civil registration and vital statistics for measuring aid effectiveness and raising the visibility of and improving policy focus on the most vulnerable groups,

Welcoming World Health Assembly resolution WHA67.10 of 24 May 2014, endorsing "Every newborn: an action plan to end preventable deaths", particularly the strategic objective that every newborn needs to be registered, and newborn and maternal deaths and stillbirths need to be counted,

Also welcoming the conclusion on civil registration of the Executive Committee of the Programme of the United Nations High Commissioner for Refugees of 17 October 2013,[7] which noted the importance of civil registration and documentation for the protection of refugees and that the lack of civil registration and related documentation makes persons vulnerable to statelessness and associated protection risks,

Recognizing that civil registration is the continuous, permanent, compulsory, and universal recording of the occurrence and characteristics of vital events in people's lives in accordance with the national law, including births, deaths, foetal deaths, marriages, divorces, adoptions, legitimations and recognitions,

Also recognizing that civil registration and vital statistics systems are, depending on national laws and administrative arrangements, typically the shared responsibility of multiple ministries and government agencies, such as the ministries of the interior, justice, home affairs and health, national statistics offices, and local and provincial governments,

Affirming that universal and responsive civil registration and vital statistics systems have a critical role in achieving inclusive, equitable and people-centred development, including the following:

- Providing documents and a permanent record for individuals to establish their legal identity, civil status and family relationships, and subsequently promoting social protection and inclusion by facilitating access to essential services, such as education and health care, among others;

- Enabling good governance and strengthened public administration through greater political participation and accountability, and facilitating public service delivery by providing a basis for national population databases, national identity programmes and e-governance;

- Providing vital statistics on the demographics and health of the population and other information that offer an evidence base for policymaking at local, provincial and national levels, including preventative and targeted interventions for addressing social, economic and health inequities, especially among hard-to-reach and marginalized populations;

- Assisting the implementation of universal health coverage and providing the most reliable data to monitor and address the causes of mortality, including providing an evidence base for measures to improve newborn, infant and maternal health;

- Promoting gender equality and the empowerment of women and girls through the provision of documents to prove family relations and civil status, and the production of age-, sex- and geographically disaggregated statistics;

- Preventing and reducing the risk of statelessness, human trafficking, child and early marriage, child labour etc., as well as promoting durable solutions for refugees, including by documenting links to the country of origin;

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[7] United Nations High Commissioner for Refugees, *Conclusion on civil registration*, No. 111 (LXIV) – 2013, EXCOM Conclusions, 17 October 2013.

- Offering information for humanitarian planning, disaster risk reduction and management, and aiding the response to disasters,

Deeply concerned that an estimated 135 million children under 5 years of age in the region have not had their birth registered and that millions of other vital events are not registered,[8]

Alarmed that the majority of countries in the region do not possess universal and responsive civil registration and vital statistics systems that meet relevant international standards and recommendations,[9]

Convinced that a comprehensive and integrated approach to improving civil registration and vital statistics, involving all relevant stakeholders and incorporating civil registration and vital statistics into relevant national development plans, is the most effective and sustainable way to develop and improve civil registration and vital statistics systems,

Recognizing the need to address disparities in the civil registration coverage of hard-to-reach and marginalized populations, including people living in rural, remote, isolated or border areas, minorities, indigenous people, migrants, non-citizens, asylum seekers, refugees, stateless people, and people without documentation,

Also recognizing the need for special attention to build national capacities related to death registration and determining causes of death, including medical certification of death and coding causes of death according to the International Classification of Diseases, verbal autopsy and training of health workers,

Underscoring that the functioning of civil registration and vital statistics systems should be guided by the United Nations' Principles and Recommendations for a Vital Statistics System[10] and production of vital statistics undertaken in accordance with the Fundamental Principles of Official Statistics,

Emphasizing that, when universal, civil registration is the best source of vital statistics, and that, while household surveys have considerable value, they cannot replicate the strengths of civil registration as a data source, namely universality in coverage, permanence, continuity, archiving of records and cost-effectiveness over time, and are thus not a long-term substitute for civil registration and vital statistics systems,

Recognizing the important role and added value of international, regional and subregional organizations and initiatives to support the development and improvement of civil registration and vital statistics in countries through advocacy, technical assistance, capacity-building, dissemination of information, research, innovation, and facilitation of the exchange of knowledge and best practices,[11]

Also recognizing that non-governmental organizations, civil society, professional associations, media and the private sector, including those involved in public-private partnerships, can also play a significant role in supporting the improvement of civil registration and vital statistics, in accordance with national priorities and strategies,

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[8] This figure is an estimate provided by the United Nations Children's Fund, *Every Child's Birth Right: Inequities and Trends in Birth Registration* (New York, 2013).

[9] According to self-assessments conducted by 47 (out of a total of 62) ESCAP members and associate members during the period between 2010 and 2013 using a rapid assessment tool developed by the University of Queensland and the World Health Organization, 36 possessed civil registration and vital statistics systems that were categorized as "dysfunctional", "weak" or "functional but inadequate".

[10] *Principles and Recommendations for a Vital Statistics System: Revision 3* (United Nations publication, Sales No. E.13.XVII.10). Available from http://unstats.un.org/unsd/Demographic/standmeth/principles/M19Rev3en.pdf.

[11] Such as the first International Identity Management Conference, held from 23 to 25 September 2014 in Seoul, which recognized that civil registration is a basis for civil identification of individuals and that an organic link between civil registration and identity management is critical.

Believing that monitoring and accountability, including the setting of national targets for elements of civil registration and vital statistics, can expedite the improvement of civil registration and vital statistics systems,

Appreciating the efforts already made by members and associate members to improve their civil registration and vital statistics systems,

Also appreciating the ongoing support provided by development partners as part of the regional initiative to improve civil registration and vital statistics in Asia and the Pacific, including recent efforts to strengthen financing for civil registration and vital statistics improvement activities at national, regional and global levels,

Recognizing the valuable role of subregional programmes to improve civil registration and vital statistics and in the implementation of the present Declaration, particularly for addressing unique subregional challenges,

Acknowledging that the establishment of a regional network of civil registrars would facilitate information sharing and peer-to-peer technical support to realize universal civil registration,

Welcoming the growing momentum around civil registration and vital statistics, including the progress achieved through initiatives in developing countries in Asia and the Pacific and other regions, including Africa, Latin America and the Eastern Mediterranean,

Applauding the Regional Steering Group for Civil Registration and Vital Statistics in Asia and the Pacific for its efforts in overseeing the preparations for the Ministerial Conference and the development of the Regional Action Framework on Civil Registration and Vital Statistics in Asia and the Pacific,

Expressing appreciation to the co-organizers of the Ministerial Conference and to Thailand as the host Government,

1. *Proclaim* our shared vision that, by 2024, all people in Asia and the Pacific will benefit from universal and responsive civil registration and vital statistics systems that facilitate the realization of their rights and support good governance, health and development;

2. *Affirm* that that the realization of our shared vision depends on achieving the following goals:

   (a) **Goal 1:** Universal civil registration of births, deaths and other vital events;

   (b) **Goal 2:** All individuals are provided with legal documentation of civil registration of births, death and other vital events, as necessary, in order to claim identity, civil status and ensuing rights;

   (c) **Goal 3:** Accurate, complete and timely vital statistics (including on causes of death), based on registration records, are produced and disseminated;

3. *Declare* the years 2015 to 2024 to be the Civil Registration and Vital Statistics Decade for Asia and the Pacific to achieve our shared vision;

4. *Endorse* the Regional Action Framework on Civil Registration and Vital Statistics in Asia and the Pacific, so as to accelerate and focus the efforts of Governments and development partners and, thereby, to achieve our shared vision;

5. *Commit* to the implementation of the Regional Action Framework so that the shared vision, goals and national targets can be achieved through comprehensive, integrated and concerted efforts by all relevant stakeholders in the following action areas:

   (a) Political commitment;

(b) Public engagement, participation and generating demand;

(c) Coordination;

(d) Policies, legislation and implementation of regulations;

(e) Infrastructure and resources;

(f) Operational procedures, practices and innovations;

(g) Production, dissemination and use of vital statistics;

6. *Also commit*, by the end of 2015, to establish an effective and sustainable national civil registration and vital statistics coordination mechanism, develop a national improvement strategy, including monitoring and evaluation, set national targets for 2024 and initiate the other implementation steps of the Regional Action Framework;

7. *Resolve* to give particular attention and take measures to reduce all barriers to civil registration and to ensure the registration of vital events among hard-to-reach and marginalized populations and to build national capacities related to death registration and ascertaining causes of death;

8. *Call upon* development partners to provide technical and financial assistance to countries in a coordinated manner that is conducive to a comprehensive and integrated approach to improving civil registration and vital statistics;

9. *Invite* all concerned development partners, including the following, to join and contribute to the regional partnership supporting the implementation of the Regional Action Framework:

(a) Subregional organizations, including the Association of Southeast Asian Nations, the South Asian Association for Regional Cooperation and the Economic Cooperation Organization, and initiatives, such as the Pacific Vital Statistics Action Plan (2011-2014) under the auspices of the Brisbane Accord Group, to promote subregional cooperation for the improvement of civil registration and vital statistics;

(b) Development cooperation agencies, to strengthen the effectiveness of their plans and programmes on civil registration and vital statistics and related areas of development assistance in line with national policies and priorities;

(c) Bilateral and multilateral development agencies, banks and other financial institutions, such as the World Bank Group and the Asian Development Bank, to harness their technical and financial resources for supporting the improvement of civil registration and vital statistics;

(d) The United Nations system, including programmes, funds and specialized agencies, to jointly deliver support for improving civil registration and vital statistics, including through effective use of existing mechanisms at the national, regional and international levels, such as the United Nations Development Group, country teams, and disaster and emergency planning and response teams;

(e) Non-governmental and civil society organizations, to support Governments and foster continuous responsiveness to the aspirations and needs of all people, including hard-to-reach and marginalized populations;

(f) The private sector, to promote innovation and strengthen efforts to form public-private partnerships;

(g) Academic and research institutions and professional societies, to collect, develop and disseminate best practices, innovation and technical resources;

10. *Designate* oversight for the Regional Action Framework and custodianship of the Decade to the Regional Steering Group for Civil Registration and Vital Statistics in Asia and the Pacific reporting through the Commission;

11. *Call upon* members, associate members and development partners to support the further development of an Asian and Pacific regional network of civil registrars, and, in particular, its contribution to the implementation of the Regional Action Framework;

12. *Encourage* members and associate members to advocate for the inclusion of civil registration and vital statistics in the development agenda beyond 2015;

13. *Recommend* that the improvement of civil registration and vital statistics systems be included in United Nations Development Assistance Frameworks;

14. *Request* the Executive Secretary:

(a) To accord priority to supporting members and associate members in the full, effective and sustainable implementation of the present Declaration and Regional Action Framework, in cooperation with other concerned entities;

(b) To provide secretariat support for the implementation of the Regional Action Framework;

(c) To oversee regional reviews of progress in implementing the Regional Action Framework in 2020 and 2025;

(d) To mainstream the improvement of civil registration and vital statistics systems into the work of the secretariat;

(e) To continue engagement with development partners to ensure the ongoing, coordinated and effective operation of the regional partnership;

(f) To submit the outcome of this Ministerial Conference to the Commission at its seventy-first session.

Annex 10 Timor-Leste Statement at the Ministerial Conference

Republic Democratic of Timor – Leste

"Intervention on Regional action Framework on Civil Registry and Vital Statistics in Asia and the Pacific "

Chairman

Excellency delegation

First of all, I would like to express my sincere thanks to UN-ESCAP and other organization committee for inviting the Timor-Leste be participate in this international event and for the warm hospitality given to Timor-Leste delegation.

Timor-Leste is a small country and very young nation, in the crossroad of Asia and the Pacific. The Portuguese came to my country 500 years ago. As a result, today we are a predominantly Catholic country with strong cultural ties to Portugal. Indeed the Timor-Leste welcoming the regional action framework on CRVS in Asia and the Pacific.

Ladies and Gentlemen:
CRVS in Timor-Leste are universal coverage. The Ministry of Justice trough National Directorate of Civil Registration has responsibility for registration of birth, death, marriage and divorce.

The Strategies of implementation CRVS and for achievement and targets for required action framework on CRVS, the Government of Timor-Leste will approach as follow:

1. Council of Minister trough of Ministry of Justice will issues resolution for establish National steering committee, technical committee and Municipality committee for improvement and strengthen working on CRVS.

2. Development of strategy plan for implementation CRVS to achieving targets by 2024 on gradually

3. Continue investment on program capacity and capability of human resources and improvement of infrastructure of ITC on CRVS team work;

4. Dissemination and civic education such as result of implementation CRVS that standardized in country and regional Asia and the Pacific

5. Routine assessment of targets and monitoring of achieving for evaluation work of CRVS every year.

I thank you for all you attention.

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