National Baseline on Civil Registration and Vital Statistics in Cambodia

Implemented by the General Department of Identification / Ministry of Interior

October 2016-November 2016

Supported by UNICEF

Technical support by Oliver Schell



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Abbreviations

CRVS Civil Registration and Vital Statistics

CCWC Commune Committee for Women and Children

e.g. Example given

ESCAP Economic and Social Commission for Asia and the Pacific

GDI General Department of Identification

ID poor Identification of poor households programme of the Ministry of Planning

MOI Ministry of Interior

MOP Ministry of Planning

NSPI National Strategic Plan for Identification

RAF Regional Action Framework

TBA Traditional Birth Attendants

Statistical fact sheet, figures at a glance

Indicator	Percent (total numbers)	Significance (Chi square)	
Total sample population with registered birth (Regional Action Framework Target 1.C)	89.7% (19983/22274)	Not applicable	
Population registered birth who were covered by mobile registration campaign (2004-2006)	92.0% (16539/17970)		
Population registered birth who were born after the mobile registration campaign 0-9 years = post-mobile campaign sample	80.2% (3414/4259)	P= <0.001	
Children <1 registered birth (RAF Target 1.A)	74.4% (390/524)	Not applicable	
Children <5 registered birth (RAF Target 1.B)	78.0% (1711/2193)	Not applicable	
Children <18 registered birth	84.6% (6444/7613)	Not applicable	
Male of total sample population registered birth	90.0% (9926/11025)	D- 0 122	
Female of total sample population registered birth	89.4% (10057/11249)	P= 0.123	
Birth registration in village with distance to commune within median range 0-2 km	91.7% (11696/12761)	D 0.004	
Birth registration in village with distance to commune above median range <2.1 km	87.1% (8287/9531)	P= <0.001	
Birth registration -in post mobile campaign sample- in village with distance to commune within median range 0-2 km	83.0% (1969/2373)	5 0004	
Birth registration -in post mobile campaign sample- in village with distance to commune above median range <2.1 km	76.6% (1444/1885)	P= <0.001	
Urban population of total sample registered birth	97.7% (6895/7055)	D 40 004	
Rural population of total sample registered birth	86.0% (13088/15219)	P= <0.001	
Khmer of total sample registered birth	93.7% (18073/19298)	P= <0.001	
Non Khmer (indigenous people and ethnic minorities)	64.2% (1910/2976)	P= <0.001	
Population of total sample registered birth with residential documents (family book, registration at location)	92.6% (17180/18544)	P= <0.001	
Population of total sample registered birth without residential documents (family book, registration at location)	75.2% (2776/3692)	P= <0.001	
Children of mother from higher education registered birth * Children of mother from lower education registered birth *	92.5% (1495/1616)	P= <0.001	
, and the second	72.3% (1804/2494)		
Children of father from higher education registered birth * Children of father from lower education registered birth *	91.1% (1825/2003) 68.8% (1328/1929)	P= <0.001	
Children delivered by skilled health staff registered birth*	86.3% (2965/3436)		
Children delivered by TBA registered birth *	54.4% (442/813)	P= <0.001	
Children of non- poor families registered birth*	81.3% (2931/3604)		
Children of ID poor card holders registered birth*	72.6% (431/594)	P= <0.001	
People with no disability registered birth	89.8% (19680/21907)	P= <0.001	
People with disability registered birth	83.5% (298/357)	P= <0.001	
Couples, separated or widows with marriage certificates	29.9% (3325/11124)	Not applicable	
Deceased with death certificates (RAF Target 1.D)	46.9% (60/128)	Not applicable	

^{*}sample: post mobile campaign

Acknowledgements

This national baseline on civil registration —which by sample size is one of the largest baselines of its kind worldwide- is the result of a great team effort of five different departments within the General Department of Identification (GDI). More than 30 staff from the following departments participated in its implementation: The Department of Civil Registration, the Department of Administration, the Department of Population Statistics, the Department of Identification Cards, the Department of Passports and the Department of Information Systems.

As technical adviser to the baseline survey I would like to express my gratitude to His Excellency Mao Chandara, General Director of GDI, His Excellency Yin Malyna, Deputy General Director of GDI and Mr. Eng Chandara, Director of the Department of Civil Registration for their strong support giving priority to the baseline implementation to all departments. I would also like to express my gratitude to the two team leaders Mr. Heng Sophat and Mr. Oeung Kim Unn for their leadership in the field and during data entry, and also to Mr. Yim Sam OI for his senior advice regarding civil registration activities in Cambodia. Especially I would like to personally thank Mr. Kamphorn Sathya for his restless efforts to facilitate the smooth implementation of the survey at all steps and for the translation of the report into Khmer. Finally appreciation goes to UNICEF's Community Development team for their efforts to support the implementation of this baseline survey. Key persons within UNICEF were: Mr. Yi Kosalvathanak, Ms. Alexandra Graf, Mr. Tomas Jensen, Ms. Keo Sovannary, and Ms. Anne Lubell.

Executive Summary

Introduction

In October and November 2016 the General Department of Identification of the Ministry of Interior conducted a baseline survey on civil registration to define absolute levels of Civil Registration and Vital Statistics (CRVS) in line with the National Strategic Plan for Identification and requirements of the Economic and Social Commission for Asia and the Pacific (ESCAP). The implementation of the survey was made possible with financial support from UNICEF.

The survey provides baseline data on key indicators that now enable GDI and stakeholders to objectively monitor CRVS progress, and to plan targeted and specific interventions to improve civil registration. To identify gaps and factors that contribute to inequality in registration rates, the data was disaggregated by relevant indicators such as: gender, geography, ethnicity, residential status, ID poor status, educational status, location of birth and disability. The method of data collection was to gather information on birth, marriage and death from individuals from randomly selected households of the general population. The survey coverd in four provinces and the capital Phnom Penh.

Birth registration

The baseline survey captured data on 22416 individuals from 4681 households. There are significant differences of registration rates of the people who were covered by the Cambodian mobile registration campaign conducted in 2004-2006, when more than 90 per cent of the population were registered¹, and children who were born after the mobile campaign who today are at the age of 0-9.

The overall birth registration rate including those who were covered by the mobile registration campaign is 89.7 per cent (19983/22274; 142 missing data on birth registration). The registration rate for children below the age of 18 is 84.6 per cent (6444/7613). The registration rate of children who were born after the mobile registration campaign (age of 0-9), which represents the current performance of the CRVS system in Cambodia, is 80.2 per cent (3414/4259). For children under the age of five the rate is 78.0 per cent (1711/2193) — which is 4.7 per cent higher than the results of the Cambodian Demographic Health Survey 2014, and the registration rate of children born within the past 12 months is 74.4 per cent (390/524).

There are significant differences in birth registration rates in urban and rural areas and among groups who have certain vulnerability factors. The survey has shown that geographic areas or social groups

¹ Ministry of Interior, 'Report of Birth Registration Results after Mobile Registation Campaign (Khmer)'.

where vulnerability factors accumulate are more likely to show low registration rates. Identifying those areas and groups will help to plan individualized interventions.

Vulnerability factors:

• Living in a rural area

Urban population of total sample registered birth	97.7% (6895/7055)	P=<0.001
Rural population of total sample registered birth	86.0% (13088/15219)	P=<0.001

• Living far from the commune office

Birth registration in village with distance to commune	91.7% (11696/12761)	
within median range 0-2 km		P= <0.001
Birth registration in village with distance to commune	87.1% (8287/9531)	P= <0.001
above median range <2.1 km		

• Belonging to indigenous groups or ethnic minorities

Khmer of total sample registered birth	93.7% (18073/19298)	D_ 40 001
Non Khmer (indigenous people and ethnic minorities)	64.2% (1910/2976)	P=<0.001

• Families who do not have residential status at the location the baby is born

Population with residential documents (family book, registration at location)	92.6% (17180/18544)	P=<0.001
Population without residential documents (family book, registration at location)	75.2% (2776/3692)	P=<0.001

• Children born into families with lower educational level

Father from higher education	91.1% (1825/2003)*	P=<0.001
Father from lower education	68.8% (1328/1929)*	P= <0.001

^{*}sample: post mobile campaign

• Children not delivered by skilled health staff

Children delivered by skilled health staff registered bir	th 86.3% (2965/3436)*	P= <0.001
Children delivered by traditional birth attendant	54.4% (442/813)*	P=<0.001

^{*}sample: post mobile campaign

• Families who are ID poor holders

Children of non- poor families registered birth*	81.3% (2931/3604)*	D- 40 001
Children of ID poor card holders registered birth*	72.6% (431/594)*	P=<0.001

^{*}sample: post mobile campaign

People with disability

People with no disability registered birth	89.8% (19680/21907)	P= <0.001
People with disability registered birth	83.5% (298/357)	1 = \0.001

Marriage certificates

Among 11124 individuals living in relationships, had separated or were widowed only 29.9 per cent (3325/11124) had a marriage certificate. It is widely acknowledged that people still lack understanding of the benefits of a marriage certificate and rather perceives it as an obstacle in case the partnership splits and a divorce has to be filed. The awareness about relevance of marriage certificates seems to increase with people's education which is the most important correlation factor. Among people with no education only 12.5 per cent (236/1889) had a marriage certificate, while the highest rate of marriage certificates of 76.5 per cent was among individuals who had gone to university.

Death certificates

Certification of death is still less than half, 46.9per cent (60/128) of cases, but higher than marriage registration. The rate might be higher because the certificate is to be used to e.g. prove property claims such as land titles, bank accounts etc. or to present it to employers when employees asked for absence from work to attend a funeral. In most cases, 89.4 per cent (371/415) a reason of death was registered. However the reasons registered were in many cases not appropriate to be used for health statistics. In 145 cases the reason of death was simply stated as "disease", in 78 cases as "old age" which sums up to 63.2 per cent of all reasons of death entered. None of the reasons had been accompanied by a medical certificate.

Recommendations

- Set lower individual regional targets for areas like Ratanakiri where there are many factors that have shown a significant effect on reduced birth registration
- Increase early birth registration (within 30 days) e.g. by awareness raising campaigns that also reach populations with lower education: Mass media such as radio or television, peer education or messages to mobile phones and smart devices.

- Strengthening the role of the CCWC and are the cooperation with health care providers are an opportunity to link delivery to timely birth registration.
- Conduct mobile campaigns in certain areas until 2024 to compensate for barriers to birth registration. Targeting should focus on specific groups such as indigenous people, ethnic minorities, areas with many ID poor households, urban poor communities, migrant workers etc.
- Link campaigns or services to the possession of civil registration certificates. Two examples are: school enrolment and issuing an identity card. For both a precondition is to have a birth certificate or a certified birth certificate. This means that people use and need them, it increases their importance because a practical use and benefit are connected.
- Continue to ensure user friendly and equitable access to CRVS documents for all.

1. Background

In September 2015 the United Nation's General Assembly issued the new Agenda for Sustainable Development. Sustainable Development Goal 16.09 covers civil registration: "By 2030, provide legal identity for all, including birth registration".

A regional commitment to foster civil registration was made by the Economic and Social Commission for Asia and the Pacific (ESCAP) at a Ministerial Conference on Civil Registration and Vital Statistics (CRVS) in Asia and the Pacific, which was held in November 2014 in Bangkok. Ministers proclaimed The Asian and Pacific CRVS Decade (2015-2024) and a Ministerial Declaration to "Get Every One in the Picture" was adopted. The Ministers endorsed and committed to the implementation of a Regional Action Framework (RAF) for civil registration.

The conference defined three main goals for the action framework:

- Goal 1: Universal civil registration of births, deaths and other vital events;
- 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
- Goal 3: Accurate, complete and timely vital statistics (including on causes of death), based on registration records, are produced and disseminated

Civil registration in Cambodia started in the 1920th during the French colonial rule, it continued during the reign of Norodom Sihanouk as head of state and the Lon Nol regime until 1975, however during these periods civil registration was widely limited to urban areas. Cambodia's registration records were completely destroyed under the Pol Pot regime and until 2002 there was no standardized legislation on civil registration. The registration process in Cambodia started in 2002, but until 2004, only 300,000 people were registered or less than five per cent of the total population. In October 2004, the Ministry of Interior launched a "Nation-Wide Mobile Civil Registration Campaign". The mobile registration resulted in over 90 per cent nation-wide birth registration rate, representing 11 million people who had their births registered, by the end of the campaign in December 2006.² The MOI subsequently succeeded to maintain a high registration of vital events and to improve their services. Between 2010 and 2014 Cambodian Demographic Health Surveys show a significant increase in the registration of children under five from 62.1 per cent (N=8122) in 2010 to 73.3per cent (N=7805) ³ in 2014 respectively.

² UNICEF,LGCR, 'Concept Note- Working towards Improving Registration of Vital Events in Cambodia'.

³ Statistics/Cambodia, Health/Cambodia, and International, 'Cambodia Demographic and Health Survey 2014'.

However, by 2016 the General Department of Identification (GDI) of the Ministry of Interior responsible for CRVS did not yet possess any reliable baseline data on the general birth registration rate including adults or on marriage or death registration.

The National Strategic Plan for Identification (NSPI) commits that: "based on the existing data and in line with the ESCAP requirements and methodology the General Department of Identification will work on defining a CRVS coverage baseline that will facilitate measuring the progress towards established CRVS coverage goals. During the first phase GDI will define absolute levels of CRVS coverage." 4

Living up to this commitment of the NSPI is the aim of our baseline survey.

2. Overall Objective of the Baseline Survey

The overall objective of the baseline survey is to define absolute levels of CRVS coverage in line with the requirements of the National Strategic Plan for Identification and the ESCAP Regional Action Framework on CRVS. The survey will provide baseline data on key indicators that will enable MOI and stakeholders to objectively monitor progress, and to plan targeted and specific interventions to fill gaps of civil registration.

2.1. Specific Objectives

- To provide quantitative data on registration rates of birth, marriage and death
- To disaggregate registration rates by relevant indicators to analyse potential gaps and necessary fields of interventions.

3. Limitations

The purpose of the survey according to NSPI is to "define absolute levels of CRVS coverage" and is thus designed as quantitative survey. Although the survey has identified gaps and vulnerable groups through disaggregating data by key indicators, and also provides recommendations that result from the interpretation of quantitative data, the author will leave it to GDI and its partners to draw additional conclusions.

The report focussed on the general population and thus followed a strictly random sampling methodology (despite applying some pre-defined criteria as proposed by ESCAP). Therefore the survey did not specifically target vulnerable populations to avoid sampling bias. Groups that were not directly

⁴ MOI, 'National Strategic Plan for Identification 2017-2026'.

covered include: children in institutional care, urban poor communities or mobile communities of fisher-folk on the Tonle Sab etc.

4. Methodology

4.1. Sample Selection

To gather quantitative data on CRVS the survey targeted randomly selected households of the general population. Information was collected from individuals in household interviews. The definition of a household followed that of the Ministry of Planning's Identification of Poor Household Programme as: "All people who eat from the same rice pot or share money for food". A household could thus consist of blood related persons, or non blood related, even friends or other people living together. Persons had to live in the household for at least three months to be counted a household member.

Target provinces were sampled randomly but clustered into four predefined criteria:

- metropolitan area
- rural areas
- remote areas with indigenous population and
- border areas

The survey covered five provinces, accounting for 20 per cent of the 25 provinces/municipalities. Within each province, initially six communes were selected representing 10 per cent of an average of 60 communes per province. In each commune interviewers covered two villages accounting for 20 per cent of an average of ten villages per commune.

The following main five target areas were selected

- Metropolitan City: Phnom Penh as the only metropolitan city in Cambodia
- Border provinces: Two border provinces with main border crossings were nominated for random selection: Svay Rieng and Banteay Meanchey province. Svay Rieng was selected.
- Remote province with high proportion of indigenous population: Four provinces were nominated: Ratanakiri, Mondulkiri, Stoeung Treng, and Preah Vihear. Ratankiri was randomly selected.
- Rural Areas: All remaining provinces were eligible for random selection. Odormeanchey and Preah Sihanouk were selected. The capital city of Sihanouk Ville was excluded from the random sampling for rural areas.

Map of randomly samples provinces



Source: www.mangomap.com, WFP Humanitarian Response Forum

The remaining selection of districts, communes and villages was done with a research randomizer available online (www.randomizer.org) and the Ministry of Planning Identification of Poor Household list of provinces, districts, communes and villages to assign the numbers to target areas. Taking financial and human resource limitation into account the sample size calculation followed a logic based on the number of data collectors that could be employed, how many households they could visit in a day, multiplied by a week of field work in each province. This produced a total of 4500 households targeted. 900 households per province. Because CRVS data was collected on individuals in each household the total sample size was estimated by multiplying with the average number of household members: 4500 households * 4.6 mean size of households * 5 = 20700 individuals. The estimated sample size was exceeded during the survey which achieved a total size of 22416 individuals.

4.2. Set up of Survey Team

A Baseline Survey Team was established according to the instructions of General Director of Identification. It was led by one Deputy General Director and two team leaders of whom one was responsible for data collection and the other one for data entry and analysis. Technical assistance was provided by a part-time consultant. Interviewers were recruited from different departments of the GDI

⁵ 'Cambodia Demographic and Health Survey 2014'.

and trained in data collection. Data entry in the SPSS data bases was done by GDI staff and analysis was done jointly facilitated by the consultant.

4.3. Development of Baseline Survey Tool

The information collection tools cover the key indicators of the ESCAP Regional Action Framework. Despite data on birth, marriage and death registration the tool covered social- and economic indicators taking the Cambodian context into consideration. The design of the questionnaire followed a consultative process with GDI core staff, UNICEF representatives and other stakeholders. Key indicators included in the questionnaire were:

- Age in years for age group disaggregation
- Sex to assess gender discrepancies
- Distance of village to commune office
- Ethnicity to assess differences among ethnic groups
- Local residential status to capture situation of migrants who are not registered at the location of interview
- Educational status to analyse impact of educational level of parents on children's birth registration
- Location of birth to compare birth registration between children born with assistance of skilled health staff to traditional birth attendants
- ID –poor status to assess influence of economic status on registration rates
- Disability

Despite the individual household interview an additional questionnaire for village chiefs was designed to capture general information such as distance and road conditions to commune. A third information collection tool was for the commune level focussing on death registration and the capacity of communes to perform CRVS activities.

4.4. Data Management and Statistical Analysis

Data was entered into a SPSS data base. Frequency analyses including percentages were performed for each variable. Cross tables on dichotome variables performing Pearson chi square tests were done to assess statistical significance of variables on registration rates. We defined that a p-value of below 5 percent (p <0.05) as statistically significant. Linear regression analysis were performed where appropriate.

5. Findings

5.1. Sample Size and Profile

The baseline survey provides data on 22416 individuals from 4681 households, which results in an average household size of 4.8 which is in line with Ministry of Planning (MOP) data from the Inter-Censal Population Survey 2013 with similar figures.⁶ The total sample was evenly distributed among the five main target provinces with Preah Sihanouk having the lowest sample size.

Table 1: Sample distribution among the five target provinces of the baseline survey

Province	Frequency	Percent
Ratanakiri	4391	19.6%
Odormeanchey	5111	22.8%
Preah Sihanouk	3578	16.0%
Svay Rieng	4616	20.6%
Phnom Penh	4720	21.1%
Total	22416	100.0%

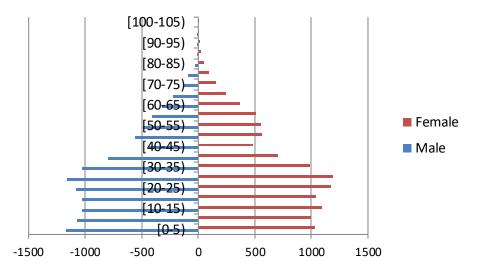
The mean age of individuals registered in the survey is 28.1 years. The median age is 25.0 which complies with the findings of the Inter Censal Population Survey 2013 with a median age of 24.5 years.

The population pyramid shows a drop in population towards the 40-45 year age cluster and a post-conflict baby boom with a sharp growth of the population until the beginning of the 1990s. Then the pyramid shows an expected demographic transition with a decrease in birth rates among the clusters of 15-25 years of age. In our sample there has been a recent increase in births especially during the past five years-however those trends will need to be verified by census surveys in the future.

Figure 1: Population pyramid of the total sample

 $^{^{\}rm 6}$ 'Cambodian Inter-Censal Population Survey 2013'.

⁷ Ihid



N= 22362,54 cases missing

The survey captured 2202 children under five amounting for 9.8 per cent of the total sample and 520 children under one year.

According to GDI estimates, 92 per cent⁸ of the population had been registered as a result of the mobile campaign from 2004-2006. This excellent registration rate during the mobile campaign reflects in the overall birth registration rates of the baseline survey. In order to judge the performance of today's civil registration mechanisms we will especially look at the cluster of children who are today 0-9 years, the "post mobile registration campaign" sample.

The post mobile campaign sample has a size of 4276 individuals or 19.1 per cent of the total sample of the survey. Comparing results of the post campaign cluster with the population that was covered by the mobile campaign is helpful because it shows that many disadvantaged populations significantly benefit from mobile registration activities.

About one third of the population was defined as urban, meaning Phnom Penh municipality and three Sangkat (urban communes) in Svay Rieng town. The other two third were defined as rural.

Table 2: Rural and urban population sample

	Frequency	Valid Percent
Rural	15319	68.3
Urban	7097	31.7
Total	22416	100.0

N=22,416, no missing

-

⁸ Ministry of Interior, 'Report of Birth Registration Results after Mobile Registation Campaign (Khmer)'.

The gender distribution of the sample is almost equal with 50.5 per cent (11314) female and 49.5 percent (11102) male individuals.

To evaluate the economic status of households we asked if they were holders of the Identification of Poor Households Equity Card called the ID poor card issued by the Ministry of Planning. Within our sample population 12.7 percent (2786/21997, 419 missing) were ID poor holders.

Another important variable for disaggregation of data was ethnicity. A pre-defined criterion for the selection of one target province in the survey was to have a high proportion of indigenous people.

The randomly selected province of Ratanakiri has a majority indigenous population and is also home to many ethnic Laotians who traditionally make up a strong ethnic group in the Northeast of Cambodia. Another ethnic minority group that is sufficiently represented in the survey are the Cham. The Cham are descendants of the Champa kingdom. They are the Muslim community in Cambodia.

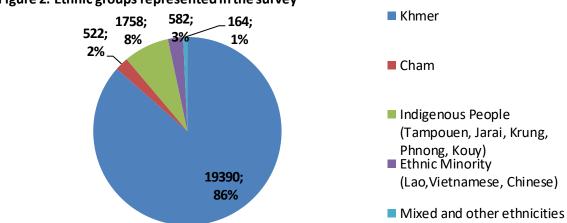


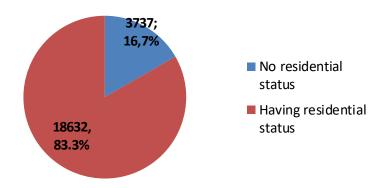
Figure 2: Ethnic groups represented in the survey

N=22,416, no missing

Vietnamese are represented with only 50 individuals, 0.2 percent of the total sample. The random selection of survey sites shows a low proportion of Vietnamese, even thoughtwo provinces —Ratanakiri (9 individuals) and Svay Rieng (1 individual) - directly border Vietnam. Phnom Penh had a sample of 29 Vietnamese.

Migration plays an important role in birth registration. Children have to get their birth certificate from the commune where their parents are registered as residents. If a family moves away from the commune for work, it can be a great burden for them to travel back to their home commune to get their children registered. In order to capture this dilemma we asked households if they were registered at the location of the household interviewed or if they were living here but being registered elsewhere.

Figure 3: Residential status of households

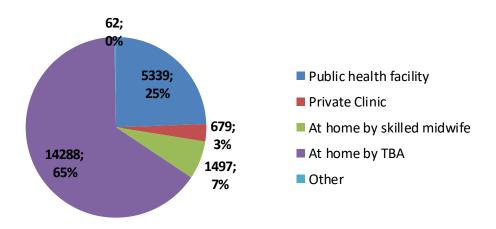


N=22369, 47 missing

The province with the highest proportion of people without residential status was Ratanakiri with 33.8 per cent (1476/4365). The survey team interviewed many families who are migrant workers in the province's agricultural industries. The highest rate of residential registration was in Phnom Penh were 90.6 per cent (4267/4710) were registered.

GDI seeks a strong cooperation with health service providers in order to guide parents to register their children. Therefore it is relevant to know where people were born and if there is a correlation with registration rates. Sub national local governance structures like the Commune Committees for Women and Children (CCWC) build a linkage between health services and local administrations. Reporting on deliveries in Health Centers is an agenda of the CCWC at the commune meeting.

Figure 4: Location of delivery



N=21865, 551 missing

The majority of people in the sample were delivered with the assistance of traditional birth attendants (TBA). Actually the proportion of deliveries by skilled staff surpassed TBA's only 10-15 years ago.

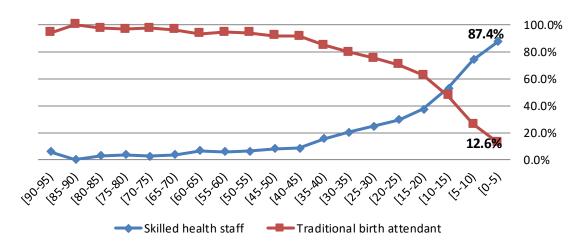


Figure 5: Deliveries by skilled health staff compared to TBAs

N=21823, 593 missing

Even today in the 0-5 age cluster still a significant proportion of 12.6 per cent are delivered by TBA despite this practice has officially been abandoned. This figure however is due to the high proportion of 40.6 per cent of the 0-5 year olds (214/527) who were still delivered by TBAs in Ratanakiri. In the other provinces these rates were much less: 3.4 per cent in Odormeanchey, 7.7 per cent in Preah Sihanouk, 3.4 per cent in Svay Rieng and 1.8 per cent in Phnom Penh.

The rate of disabled people in the survey sample was 1.6 per cent (361/22416). This rate is lower than the prevalence of disability assessed in the last Cambodian Demographic and Health Survey.

Table 3: Disability including combination of different impairments

Type of disability	Frequency	Valid Percent
Seeing	109	30.2
Hearing	36	10.0
Walking	113	31.3
Memory, concentration	21	5.8
Self-care	18	5.0
Contact/communication	34	9.4
Using arm/hand	4	1.1
Hearing and seeing	11	3.0
Hearing and walking	2	0.6
Seeing and walking	5	1.4
Seeing and memory concentration	1	0.3
Walking, self-care	2	0.6
More than two impairments combined	5	1.5
Total	361	100.0

The CDHS gives a prevalence of disability of any kind with 9.5 per cent. This includes also disabilities that result only in having only some difficulties. The CDHS category for serious disability defined as "a lot of difficulty or cannot do" has a prevalence of 2.1 per cent. During the baseline survey we asked for level of disability that inhibits the performance of daily tasks which will more likely represent the latter CDHS category of serious disability.

5.2. Quality of Maintaining CRVS Records in Communes

At 21 commune offices an inspection of quality of registration activities was done by checking the registration twin books. More than half of the communes scored good or very good. All six communes in Svay Rieng scored good (5) or very good (1). The three weak scores come from Ratanakiri (1 very weak) and Oddar Meanchey (2 weak).

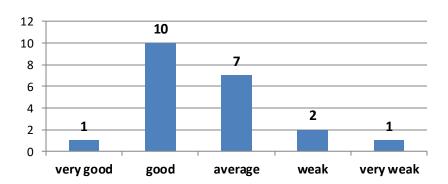
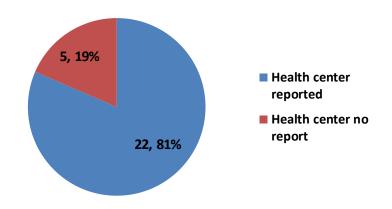


Figure 6: Quality of maintaining civil registry twin books

More than 80 per cent of communes receive reports on deliveries in health centers from the public health services. The common occasion of reporting is the monthly meeting at the commune level when health centre representatives attend commune meetings. Many topics are discussed in this general monthly meeting and the number of children delivered in health facilities is one agenda point reported by Commune Committee for Women and Children member. In the 5 communes who did not receive a report, it was because there is no health centre in the commune.

⁹ 'Cambodia Demographic and Health Survey 2014'.

Figure 7: Reporting of health centres to communes



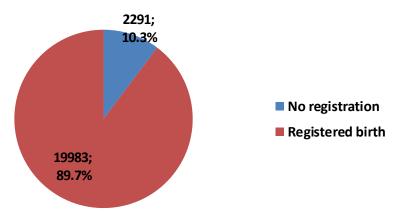
N=27 communes

5.3. Birth Registration

5.3.1. Overall Results

The overall birth registration rate among the total sample population in the baseline survey was 89.7 per cent. This figure however includes all ages and thus also those who were registered during the mobile registration campaign 2004-2006.

Figure 8: Overall birth registration rate including birth certificates and certified birth



N=22,274, 142 missing

The table below disaggregates between the sample covered during the mobile registration campaign and the post mobile campaign sample which reflects on the current performance of CRVS systems. We see that the registration rate among those aged 0-9 years is 80.2 per cent. Compared to the 92.0 per cent that had been registered during the mobile campaign, the drop of about 12 per cent to the current performance is statistically significant with a Pearson Chi-square p-value of <0.001.

Table 4: Comparing birth registration among age groups post mobile registration campaign and within mobile registration campaign.

Sample	No birth registration	Registered birth	Total
Post mobile registration	845	3414	4259
0-9 years	19.8%	80.2%	100.0%
Within mobile registration	1431	16539	17970
10 years and above	8.0%	92.0%	100.0%
Total	2276	19953	22229
Total per cent	10.2%	89.8%	100.0%

N=22229, 187 missing = 54 missing ages and 133 unknown status of birth registration. Pearson Chi-square test on statistical significant difference p<0.001

Even though statistically significance is shown, the programmatic reality of maintaining an 80.2 per cent birth registration among the total population is very good.

The registration rate for children below the age of 18 is 84.6 per cent (6444/7613). Results for the younger children however show lower registration rates with 78.0 per cent for children under five and 74.4 per cent for children that were born within the past year. A reason for this might be that many parents still register their children when the birth certificate is demanded for school enrolment at the age of six.

Table 5: Birth registration rates for children under five and children under one year.

Children < 5 years registered birth	78.0% (1711/2193)
Children < 1 year registered birth	74.4% (390/524)

In Cambodia there is a difference between certified birth certificates and birth certificates which are only issued within the first thirty days of life. There were only three new-borns in the survey sample below one month. Of those one already had a birth certificate. However there were 99 babies of the age of one month. Among those 67 had a birth certificate, 5 had a certified birth certificate and 27 did not yet have their birth registered amounting for an overall registration rate of 72.7 per cent at the age of one month to two months.

5.3.2. Regional Differences

Disaggregating the birth registration data by province shows regional differences between the five sample provinces. In the chart below the blue bars represent the sample cluster that was covered by the mobile registration campaign, the red charts children between 0-9 who were born after the mobile registration.

95.<u>7%</u> 86.8% 97.7% 96.5% 98.4% 95.5% 92.1% 100.0% 78.7% 73.0% 80.0% 52.0% 60.0% 40.0% 20.0% 0.0% Phnom Penh Svay Rieng Preah Sihanouk Odormeanchey Ratanakiri ■ Post mobile registration Within mobile registration

Figure 9: Birth registration rates by region comparing cluster of people covered by the mobile registration campaign with children born after registration campaign

N=22229, 187 missing

The municipal sample of Phnom Penh reaches close to 100% birth registration. It has managed to maintain a high registration rate even after the mobile registration campaign with a drop of only 1.2 per cent (97.7 per cent to 96.5 per cent). Svay Rieng achieved similar good results with 98.4 per cent during the mobile registration and maintains 95.5 per cent in the post mobile registration sample. A drop of only 2.9 per cent. Svay Rieng is a small province with high population density and thus a dense net of administrative centers. Impressive results also in Odormeanchey, selected as a rural area and a remote north-western province of Cambodia. Odormeanchey achieved 95.7 per cent during the mobile registration campaign and maintains 86.8 per cent, a drop of less than 10 per cent (8.9 per cent). Preah Sihanouk was sampled as rural province and achieved 92.1 per cent during the mobile registration and maintains 78.7 per cent which is a drop of 13.4 per cent.

The worst result of the baseline survey has Ratanakiri where only 73.0 per cent were achieved in the mobile campaign and within the post mobile campaign sample only 52.0 per cent are maintained. In general the data shows that there is a statistically significant lower birth registration in rural areas compared to urban. Defined as urban were Phnom Penh and three Sangkats in Svay Rieng provincial capital town.

Table 6: Differences in birth registration between rural and urban areas

	No registration	Registered birth	Total
Rural	2131	13088	15219
Kurai	14.0%	86.0%	100.0%
Lluban	160	6895	7055
Urban	2.3%	97.7%	100.0%
Tatal	2291	19983	22274
Total	10.3%	89.7%	100.0%

Pearson Chi-square < 0.001

The baseline survey has looked at a number of vulnerability factors to analyse if they contribute to lower civil registration rates. The report reflects on the relations of: gender, distance, ethnicity residential status, education, health services, economic situation, disability and ID card issuing on civil registration activities. The results show that a combination of multiple factors exacerbates low registration rates. The clearest example is Ratanakiri Province.

Ratanakiri outruns the other provinces in possessing a number of risk factors that could contribute to its low birth registration. It has a majority of non-Khmer population consisting of indigenous people and ethnic Lao and the lowest educational status. Because many migrants from low-land Cambodia work on Rubber plantations and other agricultural industries, Ratanakiri also has the highest rate of people without having residential status. And finally it has the highest rate of deliveries still performed by Traditional Birth Attendants.

Ratanakiri

Odormeanchey

Preah Sihanouk

Svay Rieng

Phnom Penh

Odormeanchey

TBA delivery

Figure 10: Multiple risk factor analysis per province from post mobile registration campaign sample cluster

N varies within each sub category

The following paragraphs will assess the influence of those and other indicators on birth registration in more detail.

5.3.3. **Gender**

Gender inequality is an issue in many countries, however Cambodia shows gender equality with regards to birth registration. There is statistically no significant difference in the registration results with 90.0 per cent of male and 89.4 per cent of females registered. The gender equality was also maintained after the mobile registration campaign with a female registration rate of 79.6 per cent (1614/2028) and male registration rate of 80.7 per cent (1800/2231). We can conclude that Cambodia

is a good role model for other countries to ensure that there is no discrimination between the sexes with regards to CRVS.

Table 7: Overall birth registration disaggregated by gender

Gender	No registration	Registered birth	Total
Male	1099	9926	11025
iviale	10.0%	90.0%	100.0%
Famala	1192	10057	11249
Female	10.6%	89.4%	100.0%
Total	2291	19983	22274
Total	10.3%	89.7%	100.0%

Chi square p=0.125 confirming no statistically significant difference.

5.3.4. Distance to Commune Offices

A general assumption is that remoteness and distance to commune offices has an impact on birth registration. In our sample the average distance from village to commune was 3.36 km, the median distance was 2 km. The mean was increased by extremely remote villages in Ratanakiri and Odormeanchey. In Ratanakiri the median was double the national average and Odormeanchey had the farthest average distance.

Table 8: Mean and median distance to commune

	Distance from village to commune			
	Mean km Median km			
Ratanakiri	4.29	4		
Odormeanchey	4.92	3		
Preah Sihanouk	1.77	1		
Svay Rieng	3.49	1		
Phnom Penh	1.89			
Total	3.36			

To analyse the influence of distance on birth registration the sample was disaggregated into two groups. We looked at the birth registration rate of "close" villages within the median range of zero to two kilometres and villages farther than the median distance.

Table 9: Cluster size of close and far villages

	Number of	
	individuals	Percent
"Close" (0-2] km within median	12761	57.3%
"Far" (>2.1 to highest] km	9513	42.7%
Total	22274	

The bar chart below shows birth registration rates disaggregated by "close" village and "far" villages within different sample clusters: the overall sample (red bars), the sample of people who have been covered by the mobile registration campaign (green bars) and the children born after the mobile registration campaign (blue bars).

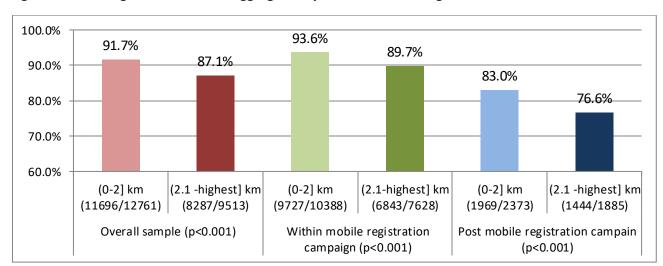


Figure 11: Birth registration rates disaggregated by distance from village to commune office

In all three clusters the difference in birth registration rates between close villages within median range and farther villages is statistically significant. However the rate among populations in remote villages that were covered by the mobile campaign is with 89.7 per cent 13.1 per cent better that the 76.6 per cent registration rate in remote villages after the mobile campaign. So a mobile campaign is a good compensator for distance barriers, but in general we can conclude that people living in remote villages are less likely to be registered than people living closer to a commune office.

However there is Odormeanchey province with many remote villages which perform very good. The village of Sleng Por for a example has aan overall registration rate of 96.1 per cent (393/409) and maintains 96.2 per cent in the post mobile campaign cluster (76/79) is 18 km from the commune office and is the farthest of all villages in the whole baseline survey. So distance and remoteness seem not to have a stand-alone effect on registration rates but the regional differences in birth registration are created by a combination of different social factors.

5.3.5. Ethnicity

There are 24 indigenous groups recognized by the Ministry of Planning in Cambodia who make up 1.3 per cent of the total population. In the northeast of Cambodia however, including the province of Ratanakiri represented in the survey, indigenous people make up the majority of the population. Besides indigenous people significant numbers of ethnic minorities like the Cham, the Lao and Vietnamese have lived in Cambodia for many generations/centuries. Looking at birth registration rates

among the ethnic Khmer and the Cham population in comparison to other ethnic groups we see significant differences.

92.9% 93.7% 100.0% 80.0% 59.0% 57.0% 60.0% 40.0% 20.0% 0.0% Khmer N=19298 **Cham N=522** Indigenous **Ethnic Minorities** People N=1730 N=563

Figure 12: Birth registration rates of different ethnic groups in comparison

The cross table below shows differences between Khmer and non-Khmer populations. Non Khmer include the Cham, indigenous people, ethnic minorities and also children from mixed marriages.

Table 10: Comparison of birth registration between Khmer and non-Khmer ethnic groups

	No registration	Registered birth	Total
Khmer	1225	18073	19298
	6.3%	93.7%	100.0%
Non Khmer	1066	1910	2976
or mixed	35.8%	64.2%	100.0%
Total	2291	19983	22274
Total	10.3%	89.7%	100.0%

Pears on Chi-square < 0.001

5.3.6. Residential Status

In order to register their children at a commune or sangkat office, parents need to be registered residents there. It means they have to possess a residential card or a family book that is issued in the respective area of administration. Thus migrants who do not have changed their residential status have no opportunity to register their children. This poses a significant burden to families who cannot afford the money and time to travel back to their home communes to register their children.

The result of the survey shows that residential status of a family has a significant influence on birth registration. Among people who did not possess residential documents the registration rate was 75.2 per cent, whereas the registration among the people with residential documents was 92.6 per cent. Svay Rieng was selected as a border province with a lot of migration, however problems of civil

registration seem not to arise in the provinces that people leave, but in those areas to where people move to.

Table 11: Influence of residential status on birth registration

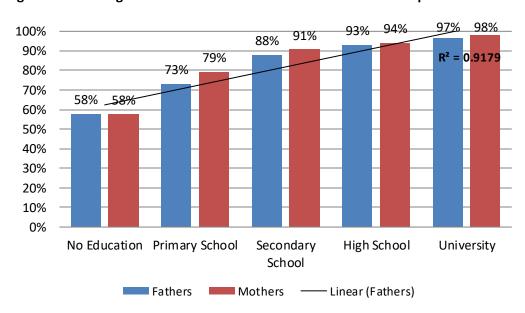
	No registration	Registered birth	Total
No residential	916	2776	3692
status	24.8%	75.2%	100.0%
Having residential	1364	17180	18544
status	7.4%	92.6%	100.0%
Total	2280	19956	22236
าบเลเ	10.3%	89.7%	100.0%

Pearson Chi square p=<0.001

5.3.7. Parent's Education

A common assumption is that awareness about importance of civil registration and the motivation to register their children is related to the educational level of parents. Thus the survey asked for educational level of fathers and mothers and indeed there is a strong correlation of increased birth registration with the increase of educational level of parents.

Figure 13: Birth registration rates in relation to educational level of parents



N varies in each category, sample from post mobile registration campaign, pre-school not displayed because small sample linear increase R^2 =0.92

To test statistical significance we created two clusters. One cluster are children from parents with low educational level which includes: no education, pre-school, primary school and skill training and a second cluster of higher education which includes: secondary school, high school and university. The result shows a statistically higher birth registration among families with higher education.

Table 12: Comparison of birth registration rates between higher and lower educational levels.

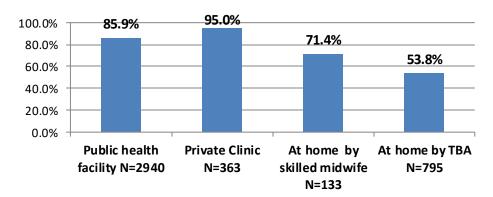
	Mothers education			Fathers education		
	No registration	Registered birth	Total	No registration	Registered birth	Total
No or low	690	1804	2494	601	1328	1929
education	27.7%	72.3%	100.0%	31.2%	68.8%	100.0%
Higher	121	1495	1616	178	1825	2003
education	7.5%	92.5%	100.0%	8.9%	91.1%	100.0%
	811	3299	4110	779	3153	3932
Total	19.7%	80.3%	100.0%	19.8%	80.2%	100.0%

Pearson Chisquare for both tables p<0.001

5.3.8. Health Service Provision

A backbone of increasing birth registration rates is the education and guidance to parents to register their new born babies given by health service providers (midwifes and nurses) that are involved in the mother and child care. The result of the survey shows that delivery by a skilled health staff yields higher birth registration rates compared to deliveries by TBAs.

Figure 14: Different birth registration rates according to location of delivery



Clustering the sample into deliveries by skilled health staff which combines: public health facilities, private clinics and home deliveries by skilled midwifes compared to TBAs, we see a difference of more than 30 per cent.

Table 13: Comparison of birth registration of children delivery by skilled health staff and TBAs.

Delivery attended by	No registration	Registered birth	Total
Delivery by skilled health staff	471	2965	3436
	13.7%	86.3%	100.0%
Delivery by TBAs and "other"	371	442	813
	45.6%	54.4%	100.0%
Tatal	842	3407	4249
Total	19.8%	80.2%	100.0%

Pearson Chi Square p<0.001

5.3.9. Economic Status

12.7 per cent of individuals in the survey came from families that are ID poor card holders. The poor are more likely not to have a birth certificate than children from better off families. The difference in our sample of 8.7 per cent was also statistically significant.

Table 14: Birth registration compared between ID poor and non poor families.

ID poor status	No registration	Registered birth	Total
No ID poor	673	2931	3604
	18.7%	81.3%	100.0%
ID poor card holders	163	431	594
	27.4%	72.6%	100.0%
Total	836	3362	4198
	19.9%	80.1%	100.0%

Pears on Chi Square p<0.001

5.3.10. Disability

Among the 357 people with disability the birth registration rate was 83.5 per cent in comparison to 89.8 percent registration among people without disability. However this sample includes people who were covered by the mobile registration campaign. The survey captured only 11 children between 0-9 who were born after the mobile campaign. Of those only 6 were registered so just over 50 per cent.

Table 15: Birth registration among people with disability compared to people without disability

Status of disability	No registration	Registered birth	Total
No Disability	2227	19680	21907
	10.2%	89.8%	100.0%
Disabled	59	298	357
	16.5%	83.5%	100.0%
Total	2286	19978	22264
	10.3%	89.7%	100.0%

Pears on Chi Square p<0.001

5.3.11. Identification Card Issuing Campaigns

The GDI has implemented a nationwide campaign to issue identification cards to all citizens from the age of 15. The results are impressive. A proportion of 87.5 per cent of the baseline sample were possessing a new ID. A precondition of GDI for issuing an ID card is that applicants need to have a birth- or a certified birth certificate however this was handled in different ways.

	NewID	Old ID	Don't Know type of ID	Lost ID	No ID	Total
Ratanakiri	2151	240	14	29	459	2893
Nataliakili	74.4%	8.3%	0.5%	1.0%	15.9%	100.0%
Odormoonshov	3094	109	2	35	264	3504
Odormeanchey	88.3%	3.1%	0.1%	1.0%	7.5%	100.0%
Preah Sihanouk	2353	103	7	22	185	2670
Prean Smanouk	88.1%	3.9%	0.3%	0.8%	6.9%	100.0%
Sugu Biona	3187	115	6	32	129	3469
Svay Rieng	91.9%	3.3%	0.2%	0.9%	3.7%	100.0%
Dharana Damh	3394	71	17	25	155	3662
Phnom Penh	92.7%	1.9%	0.5%	0.7%	4.2%	100.0%
Total	14179	638	46	143	1192	16198
Total	87.5%	3.9%	0.3%	0.9%	7.4%	100.0%

6218 missing

One reason for the good birth registration result of Odarmeanchey seems to be their approach to consequently link the issuing of ID cards with the possession of birth certificates. This practice was followed through during the ID card campaign of GDI in 2016/2017. In Odarmeanchey 97.1 percent (2999/3087) of new ID card holders had registered their birth. At the same time in Ratanakiri only 76.7 percent (1623/2117) of new ID card holders also had a birth- or a certified birth certificate. This means in return that 23.3 per cent of new ID card holders in Ratanakiri were issued an ID without possessing a birth or certified birth certificate. But it also shows the good example of Odarmeanchey where the ID card campaign at the commune level that was linked to birth certification had a very positive impact on registration rates.

5.4. Marriage Certificate

Information about possession of marriage certificates was registered from 11332 individuals. Eligible were people who were living in relationships ("living together like husband and wife"), or who had separated or were widowed. 208 individuals were officially divorced by the court which implies that they must have had a marriage certificate. Singles were excluded. The table below shows that only about 30 per cent of eligible people counted in the baseline had a marriage certificate.

Table 16: Marriage certificates

	No marriage certificate			marriage ificate	То	tal
Couple	6905	68,0%	3246	32,0%	10151	100,0%
Seperated	208	87,8%	29	12,2%	237	100,0%
Widowed	686	93,2%	50	6,8%	736	100,0%
Total	7799	70,1%	3325	29,9%	11124	100,0%

N=11332 missing 208 divorced not counted in this table

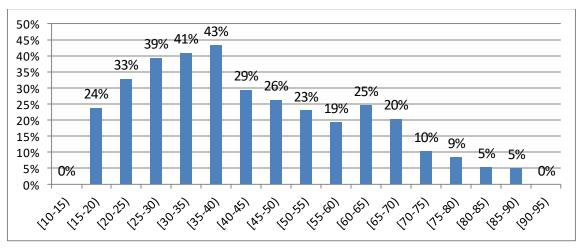
There were 39 partnerships under the age of 18, 35 were living as a couple "like husband and wife" three were divorced and one was already widowed. The rate of under-age relationships is thus 0.3 per cent (39/11332). More than half of the under-age relationships are in Ratanakiri (22/39). Of the total under-age partnerships 28% (11/39) had a marriage certificate.

Table 17: Count of under-age partnerships

	Age	Living as couple	Divorced	Widowed	Total
	14	1	0	0	0
	15	0	0	0	0
Ratanakiri	16	7	0	0	0
	17	13	1	0	0
	Sub total	21	1	0	22
	15	1	0	1	0
Odowanosanobou	16	1	0	0	0
Odormeanchey	17	1	0	0	0
	Sub total	3	0	1	4
Preah	17	5	1	0	0
Sihanouk	Sub total	5	1	0	6
	16	2	0	0	0
Svay Rieng	17	3	1	0	0
	Sub total	5	1	0	6
Dha ana Damh	15	1	0	0	0
Phnom Penh	Sub total	1	0	0	1
Total		35	3	1	39

Looking at different age groups the group with the highest rate of having marriage certificates are those from 35-40 years of age.

Figure 15: Percentage of people in a partnership having marriage certificates per age groups



N=3521 including divorces

The awareness about relevance of marriage certificates increases with people's education.

Among people with no education only 12.5 per cent (236/1889) had a marriage certificate. Of those who had attended primary school it were 23.3 per cent (1006/4311), 37.1 per cent (957/2582) among those who went to secondary school and 50.7 per cent (773/1526) among those who went to high school. The highest rate of marriage certificates of 76.5 per cent was among individuals who went to university. The table below compares the possession of marriage certificates of people with no education and primary school, with people who went to secondary school, high school or university. Differences are statistically significant with a p<0.001.

Table 18: Marriage certificates and level of education

	No marriage certificate	Have marriage certificate	Total
No or low education	4992	1270	6262
	79.7%	20.3%	100.0%
Medium or higher	2505	2143	4648
education	53.9%	46.1%	100.0%
Tatal	7497	3413	10910
Total	68.7%	31.3%	100.0%

Pears on Chi Square p<0.001

5.5. Death Certificate

Among the overall sample only 128 family members were recorded as deceased during the past three years. The death registration rate is less than 50 per cent.

Table 19: Possession of death certificates

	Frequency	Valid Percent
No	68	53.1
Yes	60	46.9
Total	128	100.0
Not Applicable	22288	

At the commune level the survey team checked on the commune registry books to follow up on the registration of reasons of death. The team reviewed all entries since January 1st 2016. In most cases, 89.4 per cent (371/415) a reason of death was entered. There are four communes where no data was reported: two in Ratanakiri, one in Svay Rieng and one in Phnom Penh.

Table 20: Registered deaths and reasons for deaths per province

	Number of death registered	Number of causes of death registered	% registered death with reason of death
Ratanakiri	6	5	83.3%
Odormeanchey	59	54	91.5%
Preah Sihanouk	101	93	92.1%
Svay Rieng	129	118	91.5%
Phnom Penh	120	101	84,2%
Total	415	371	89,4%

Data counted from commune office registry books

However the reasons that were registered were in many cases not appropriate to be used for health statistics. In 145 cases the reason of death was simply stated as "disease", in 78 cases as "old age" which sums up to 63.2 per cent of all reasons of death entered.

Table 21: Reasons of death registered

	Frequency	Per cent
Disease	145	41.1%
Old age	78	22.1%
Trafficaccidents	25	7.1%
Hypertension	20	5.7%
Otheraccidents	16	4.5%
Liver cancer/cirrhosis	11	3.1%
Suicide	5	1.4%
Diabetes	5	1.4%
Lung cancer	5	1.4%
Pneumonia	5	1.4%
Heart attack	4	1.1%
Typhoid	4	1.1%
Tuberculosis	4	1.1%
Gastrointestinal disease	3	0.8%
During delivery	3	0.8%
Stroke	3	0.8%
Dengue	2	0.6%
Fainting	2	0.6%
Stomach cancer	2	0.6%
Meningitis	2	0.6%
Malaria	2	0.6%
Blood symptoms	1	0.3%
Fever	1	0.3%
Bleeding	1	0.3%
Lung edema	1	0.3%
Cervical cancer	1	0.3%
Tetanus	1	0.3%
Kidney failure	1	0.3%
Total	353	

None of the reasons had been accompanied by a medical certificate. Entering the reasons of death remains one of the main challenges for civil registration officers. Also its usefulness for health statistics is not clear because it is very difficult to determine the real cause of death of a person even for a medical doctor. Registering the underlying disease, which is done by health statistics in hospitals and health centers will be a much better option to collect health statistics for the Ministry of Health.

6. Conclusions

Birth Registration

The current birth registration mechanisms that are put in place by the Cambodian government are achieving excellent results in many regions. Provinces like Svay Rieng or the capital Phnom Penh are already reaching more than 95 per cent birth registration among children 0-9 years that were bom after the mobile registration campaign. It seems though that many children are only registered when a birth certificate is needed, e.g. for school enrolment, because early birth registration is still about 20 per cent lower with only 78.0 per cent of children under five and 74.4 per cent of children under one registered. The survey has further identified several factors that contribute to inequality of birth registration rates among certain groups and in regions with a high prevalence of these factors.

Statistically significant vulnerability factors identified in our survey are:

- Living in remote areas
- Belonging to indigenous groups or ethnic minorities, except the Cham who have similar birth registration rates as the Khmer
- Families who have no residential status at the location the baby is born
- Children born into families with lower educational level
- Children not delivered by skilled health staff
- Families who are ID poor holders
- Disabled persons

Marriage certificates

The majority of couples of about 70 per cent still decide to live together without acquiring a marriage certificate. It is widely acknowledged that people lack understanding of the benefits and perceive the marriage certificate as an obstacle in case the partnership splits and a divorce has to be filed.

Death certificates

Certification of death is less than 50 per cent but higher than marriage registration. This might be because the death certificate is to be used to e.g. prove property claims such as land titles, bank accounts etc., or to present it to employers when employees asked for absence from work to attend a funeral.

The certification of the reasons of death continues to be difficult for commune staff. Currently more than 60 per cent of reasons of death are defined as "old age" or "disease/illness" so the information is not useful for health statistics. It is doubtful in general if civil registration records are to provide those kind of official health statistics.

7. Recommendations

For regions where birth registration is already very high the current activities in place seem to work effectively and only need the continuation of existing support from national level and international partners in order to maintain their high performance.

The mobile registration campaign cluster has shown that many of the vulnerability factors we identified can be compensated by mobile registration. Two examples: Whereas birth registration among children delivered by TBAs in the post mobile campaign is only 54.4 per cent, people delivered by TBAs and covered by the mobile registration campaign have a registration rate of 90.6 per cent. Children from the post mobile campaign sample born to mothers with low education only have a registration rate of 72.3 per cent, the people covered by the mobile campaign with low educated mothers have a registration rate of 91.6 per cent

Special attention however should be paid to:

- Set lower individual regional targets for areas like Ratanakiri where there are many factors that have shown a significant effect on reduced birth registration
- Increase early birth registration (within 30 days) e.g. by awareness raising campaigns that also reach populations with lower education: Mass media such as radio or television, peer education or messages to mobile phones and smart devices.
- Strengthening the role of the CCWC and are the cooperation with health care providers are an opportunity to link delivery to timely birth registration.
- Conduct mobile campaigns in certain areas until 2024 to compensate for barriers to birth registration.
- To plan mobile registration campaigns the government should select target areas with:
 - o High proportion of indigenous- or ethnic minority groups
 - High level of ID poor households using the Ministry of Planning ID poor maps

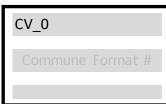
- Migrants in their new settlement areas such as: workers in agricultural industries, urban poor communities etc.
- Link campaigns or services to the possession of civil registration certificates. Two examples are: school enrolment and issuing an identity card. For both a precondition is to have a birth certificate or a certified birth certificate. This means that people use and need them, it increases their importance because a practical use and benefit are connected.
- Continue to ensure user friendly and equitable access to CRVS documents for all.

Attachments

List of villages with distance and birth registration rates

		Diatas		Birth regis	stration	
		Distance from Village	No regis	Ĭ	Register	ed hirth
		to Commune	Count	Row N %	Count	Row N %
Ratanakiri	Pa Yang	4,00	6	9,1%	60	90,9%
	Leu Touch	1,50	25	46,3%	29	53,7%
	Srae Pok Thom	4,00	29	42,0%	40	58,0%
	Yeun	2,00	119	64,7%	65	35,3%
	Serng	8,00	110	87,3%	16	12,7%
	Neang Dei	3,00	7	58,3%	5	41,7%
	Pa Or	6,50	32	41,0%	46	59,0%
	Bey Ophnorng	1,00	19	17,1%	92	82,9%
	Lung Khung	,20	6	46,2%	7	53,8%
	Srae Pok Thoch	4,00	32	53,3%	28	46,7%
	Sala	1,30	0	0,0%	1	100,0%
	Chhmorn	10,00	2	50,0%	2	50,0%
	Chaet	4,00	70	58,3%	50	41,7%
	Phum 3, Kon Mom	,15	17	29,8%	40	70,2%
	Phum 5, Kon Mom	15,00	34	48,6%	36	51,4%
	Phum 2, TC, Kon Mom	,30	7	14,6%	41	85,4%
	Phum 2, TK, Kon Mom	,70	0	0,0%	1	100,0%
Odormeanchey	Srah Chhouk	6,00	10	7,1%	131	92,9%
•	Kandal Leu	3,00	2	2,5%	78	97,5%
	Kandal Krom	3,50	5	6,6%	71	93,4%
	Thnorl Keng	,90	2	6,7%	28	93,3%
	Ou Sromorh	10,00	11	13,9%	68	86,1%
	Ou Ang Re	16,00	1	6,3%	15	93,8%
	Sleng Por	18,00	3	3,8%	76	96,2%
	Toul Svay	6,00	0	0,0%	2	100,0%
	Aphivath	1,50	4	21,1%	15	78,9%
	Ta Sam	,80	12	10,7%	100	89,3%
	Ou Chikh	2,00	26	31,3%	57	68,7%
	Thnol Keng	10,00	18	30,0%	42	70,0%
	Ou Svay	1,00	36	31,0%	80	69,0%
	Boeung	3,50	1	1,9%	52	98,1%
	Kleang kandal	2,00	4	23,5%	13	76,5%
	Santi Pheap	4,00	0	0,0%	3	100,0%
	Preah Brolay	2,00	0	0,0%	30	100,0%
	Ou Romdol	3,60	2	7,4%	25	92,6%
	Tram Jann	,80	12	11,5%	92	88,5%
Preah	Rithy 1	4,00	27	32,1%	57	67,9%
Sihanouk	Rithy 2	2,00	30	49,2%	31	50,8%
	Andong Thmor	1,00	6	9,4%	58	90,6%
	Ou Trav	1,00	8	10,5%	68	89,5%

	Beong Reang	4,00	7	14,0%	43	86,0%
	Ta Aong Thom	2,00	10	17,9%	46	82,1%
	Thul Therng 3	,15	29	33,7%	57	66,3%
	Phum 1, Steung Haw	,50	0	0,0%	35	100,0%
	Phum 1, SH, Tomnum Roluk	2,00	5	13,9%	31	86,1%
	Phum 2, Steung Hav	1,00	0	0,0%	24	100,0%
Svay Rieng	Thnorl Keng	,45	2	2,8%	69	97,2%
	Ta Dev	1,00	3	5,6%	51	94,4%
	Chek	12,00	11	11,8%	82	88,2%
	Koh Kban Khangchoeng	6,00	5	8,2%	56	91,8%
	Po	1,00	0	0,0%	66	100,0%
	Prey Korki	1,00	0	0,0%	49	100,0%
	Chamka Leav	2,00	0	0,0%	49	100,0%
	Thmey	1,00	3	5,7%	50	94,3%
	Preah Tonle	4,00	1	1,5%	67	98,5%
	Chong Preak	7,00	3	4,2%	68	95,8%
	Veal Yon	1,00	5	8,8%	52	91,2%
	Po Ta Hor	,05	0	0,0%	46	100,0%
Phnom Penh	Thul Tachan	1,00	0	0,0%	58	100,0%
	kbal Chroy	,50	5	5,6%	85	94,4%
	Toul Roka	1,00	2	3,6%	53	96,4%
	Prek Taloung 2	2,50	2	5,1%	37	94,9%
	Koh Dach	1,00	2	1,8%	111	98,2%
	Chong Koh	7,50	4	5,4%	70	94,6%
	Khtor	2,50	2	3,3%	59	96,7%
	Bak Kheng	3,00	4	6,3%	59	93,7%
	Kean Khleang	2,00	0	0,0%	1	100,0%
	Bak Kheng Kroum	2,00	0	0,0%	5	100,0%
	Prek Tanou 2	,90	0	0,0%	50	100,0%
	Prek Ta Kong 3	,50	1	1,7%	58	98,3%
	Phum 3, Chamka Morn	1,00	1	7,7%	12	92,3%
	Phum 2, Chamka Morn, BTB	,50	0	0,0%	2	100,0%
	Phum 6, Chamka Morn BTB	,20	1	2,8%	35	97,2%
	Phum 7, Chamka Morn, BTB	1,00	0	0,0%	17	100,0%
	Phum 4, Chamka Morn, BTB	1,00	2	18,2%	9	81,8%



	Commune Format #
CV_1 Commune /Sangkat:	
CV_2 Municipality / District / Khan:	CV_4 Interviewer:
CV_3 Capital/Province:	CV_5 Data entry by:
Review the death registry book	
CV_6 Number of deaths registered in commune death registry 01.01.2016	
CV_7 Number of reasons of death registered	
(please note down the reasons of death)	
CV_8 Number of registered reasons of death that were based on medical certificate (HC/ Hospital)	
CV_8.1 Based on certificate of police in case of accident	
Assess collaboration with Health service	
CV_9 Distance to nearest Health Center/ Hospital	km
CV_10 Does Health Center/Hospital report on births	○yes ○no
CV_10.1 When does Health Facility report	1= when mother and child are still in facility 2= when mother and child left facility 3= in monthly meetings with commune (CCWC)
Preparedness for internet based civil registration syst	ems
CV_11 Does Commune have internet connection	○ yes ○ no
CV_11.1 If yes what type	1= 3 G 2=
CV_12 Does anyone of commune staff know how to use a "smart" device (tablet/smartphone)	○yes ○no
CV_12.1 If yes, who? (multiple answers possible)	1= Commune Chief 2= Commune Clerk 3= Deputy Commune Chief 4= Commune Council Members
CV_13 Does the Commune/Sangkat have a computer	○ yes ○ no
CV_13.1 Who can use the computer	1= Commune Chief 2= Commune Clerk

	4= Commune Council Members
Use of Village Record Book	
CV_14 Do you cross check the village record book with the	○yes ○no
commune registry	
CV 14.1 How?	1= During monthly meeting
_	2= Village chiefindividually with person
	responsible for registraion
	3 = Other

3= Deputy Commune Chief

After looking at the registration books please rate on the quality of recording

1=very good 2=good 3=average 4=weak 5=very weak

English village format:

V_1 Village:
V_2 Commune /Sangkat:
V_3 Municipality / District / Khan:
V_4 Capital / Province:
V_5 Number of households:
V_6 ID poor 1: %
V_7 ID poor 2: %
V_8 CDB MDG score for village:

- Write the codes in the table fields as written under the Variable (V) numbers
- or 1=Yes; 0=No
- X = Don't know
- Y = Not Applicable (e.g. living persons cannot have a death certificate)

V_9	Distance to commune office in km	km
V_9.1	Conditions to travel to commune office	1=easy access 2= difficult access 3= very difficult
V_9.1.1	Distance to nearest Health Center/Hospital	km
V_10	Is the village record book used in this village? (Only for Ratankiri and Phnom Penh)	1=Yes 0=No
		Y= NA

V_11	Did village experience any catastrophic event during the past 12 months?	0= no 1= flooding 2= drought
		3=storm
		4= others – specify

V_1 Village:	V_14 Interviewer:
V_2 Commune /Sangkat:	V_15 Checked by:
V_3 Municipality /District/ Khan:	V_16 Data entry by:
V_4 Capital/ Province:	V_17 ID Poor: 1=Level one; 2=Level two; 0=No ID poor

V_0	
Questionair ID	

- Write the codes in the table fields as written under the Variable (V) numbers
- or 1=Yes; 0=No
- X = Don't know

• Y = Not Applicable (e.g. living persons cannot have a death certificate)

V V V V 22 Education

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0.1	18.	19	20	21		0=no so			Born at	25	ID	Family	28	29	30					
	Household (HH)	Sex	Age	Ethnic group		1= prin	nary sch	ool	1=Public health	Birth	0= no	situation								
	Members	1=Male	Year	1= Khmer		2= seco	ndary so	chool	facility (PHF)	registration	1=new	1=single								
	1= HH head	2=Female		2= Cham		3= high	school		2= Private clinic	0= no	2=old	2=partnership								
	2= Spouse of HH		If<12	3= Tampuen		4= univ	ersitv		(PC)	1=birth	3= ID	3=separated								
	head		Month	4= Krung												but	4=divorced			
	3= Child		write	5= Jarai				,	midwife	2=certif birth	don't	5=widowed			4)					
	4= Child in "law"		month	6= Lao					4=Home TB		know				age					
	5= Parent of HH			7= Vietnam	Registered resident				5= other		type		ي و	je je	Disability (Checklist page					
	head			8= other	er nt				0 011101 1111111111	type	-5 P-		Marriage certificate	Death certificate	lit dis					
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	.1 18.	19	20	21		0=no s			Born at	25	ID	Family	28	29	30
	Household (HH)	Sex	Age	Ethnic group		1= prin	nary sch	ool	1=Public health	Birth	0= no	situation			
	Members	1=Male	Year	1= Khmer			ondary so	chool	facility (PHF)	registration	1=new	1=single			
	1= HH head	2=Female		2= Cham			ı school		2= Private clinic	0= no	2=old	2=partnership			
	2= Spouse of HH		If<12	3= Tampuen		4= univ	-		(PC)	1=birth	3= ID	3=separated			
-	head		Month write	4= Krung		5= skil	l training	5	3=Home Skilled		but	4=divorced			
	3= Child		month	5= Jarai					midwife	2=certif birth	don't	5=widowed			page
	4= Child in "law"			6= Lao	b				4=Home TB	8	know		- 0	43	t pa
	5= Parent of HH head			7= Vietnam 8= other	ere at				5= other		type		age	Sate	lity His
	6- Crandchild				jist de	V_23.	V_23.	V_23.2.		type 4= registered			rri	if th	abi eck
	o. 7=other			•••••	Registered resident	1	2.1	2		lost			Marriage certificate	Death certificate	Disability (Checklist p
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Disability checklist. For V_30 ask if anyone has any of these conditions

Difficulty seeing, even if wearing glasses?	= 1
Difficulty hearing, even if using a hearing aid?	= 2
Difficulty walking or climbing steps?	= 3
Difficulty remembering or concentrating?	= 4
Difficulty (with self-care such as) washing all over or dressing?	= 5
Have difficulty communicating, (for example understanding others or others understanding {him/her}, because of a physical, mental of emotional health condition?	= 6