

## Quantitative Inequality Assessments of CRVS Systems

**The Meeting of civil registrars in South-East Asia  
Manila, Philippines, 7-9 February 2023**

Present by: Lao PDR

# **Why do Inequality Assessments in Lao PDR**



**Identify population groups at risk of not being included in the CRVS system in Lao PDR to improve completeness and coverage of vital event registration and to allow production of vital statistics**

**Project timeframe: March - December 2022**

# Key stakeholders

## Government

1. Lao Statistics Bureau (LSB)
2. Ministry of Home Affairs (MOHA)
3. Ministry of Foreign Affairs (MOFA)
4. Ministry of Education and Sport (MOES)
5. Ministry of Health (MOH)
6. Ministry of Labor & Social Welfare (MOLSW)
7. Ministry of Public Security (MOPS)
8. Ministry of Justice (MOJ)

## Development Partners

1. UNESCAP
2. UNFPA
3. UNICEF

# Objectives

- To produce the first inequality assessment of CRVS systems in Lao PDR and provide the recommendations for improving CRVS system to make it universal.
- Provide technical support and strengthen the necessary capacities and skills required by government officials to carry out such inequality assessments in the future.

# Key Activities of the Project

Inception Workshop, 11 March 2022

## Aims:

- provide an overview of the project (objectives, activities and results to be achieved)
- Develop relationships among relevant stakeholders (data providers, data users, and policy makers)
- Learn from each stakeholder on possible challenges, such as data access, data sharing and demographic analysis capacities, and how they can be addressed.
- Collaboratively develop a plan for progressing the inequality assessment.



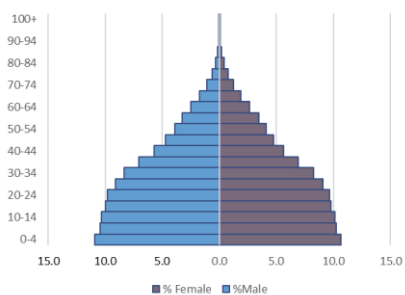
# Key Activities of the Project (Cont.)

1st National Capacity Building Workshop, 17-19 August 2022

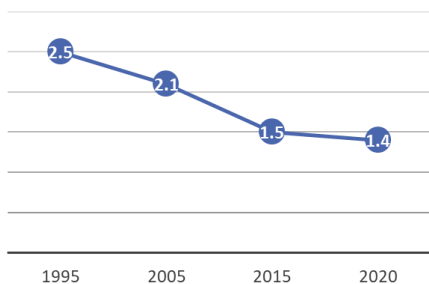
2nd National Capacity Building Workshop, 24-28 October 2022



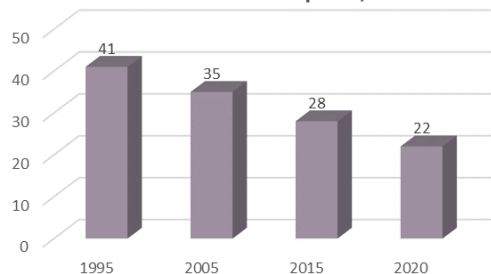
POP Pyramid, Lao PDR (2020)



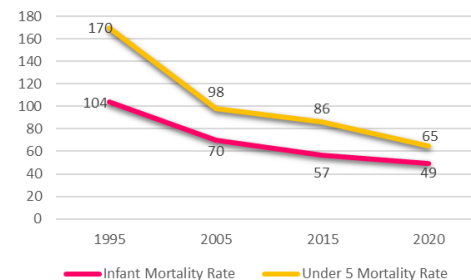
Growth Rates



Crude Birth Rate per 1,000



Under 5 Death Rate



# Key Activities of the Project (Cont.)

National Closing Workshop 27-28/12/2022

- To provide stakeholders an opportunity to discuss the findings on the CRVS inequality assessment report
- To jointly develop an agreed action plan to address identified inequalities and further analyses required



# Inequality Assessment Report



## INEQUALITY ASSESSMENTS FOR CIVIL REGISTRATION AND VITAL STATISTICS SYSTEMS (CRVS) IN LAO PDR

Final draft report

Prepared: December 23, 2022

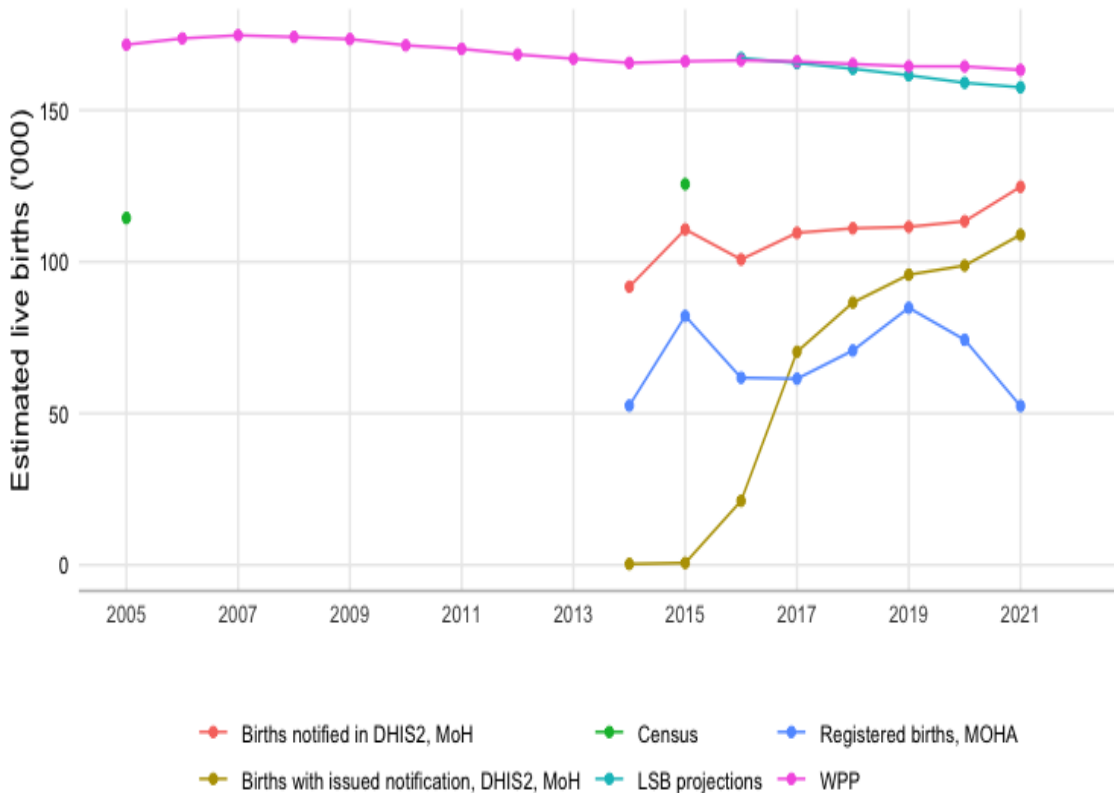
The main report highlights the inequalities which can be measured through available data and the challenges faced by Lao PDR in producing inequality assessments, including limited access to data sources, lack of capacities and skills, and the absence of clear guidance on how to perform assessments



# Available data sources – Births

1. Lao Social Indicator Survey 2012, and 2017
2. Population and Housing Census 2005 & 2015
3. Population Projections 2015-2045
4. Paper-based summaries of registered births by MOHA 2014 to 2021
5. MOH Health facilities data (District Health information System (DHIS2))
6. Estimates from UN's World Population Prospects

# Absolute number of live births by data source, Lao PDR 2005 -2021



- The civil registration system (MOHA) captures fewer live births than DHIS 2 for the 2017-2021 period

Since 2020, birth registration (MOHA) has declined, increasing the difference in completeness between birth notification (DHIS 2) and birth registration (MOHA) – might be effected from COVID-19

Gap in the number of births notified in the DHIS 2 and births issued with a birth notification

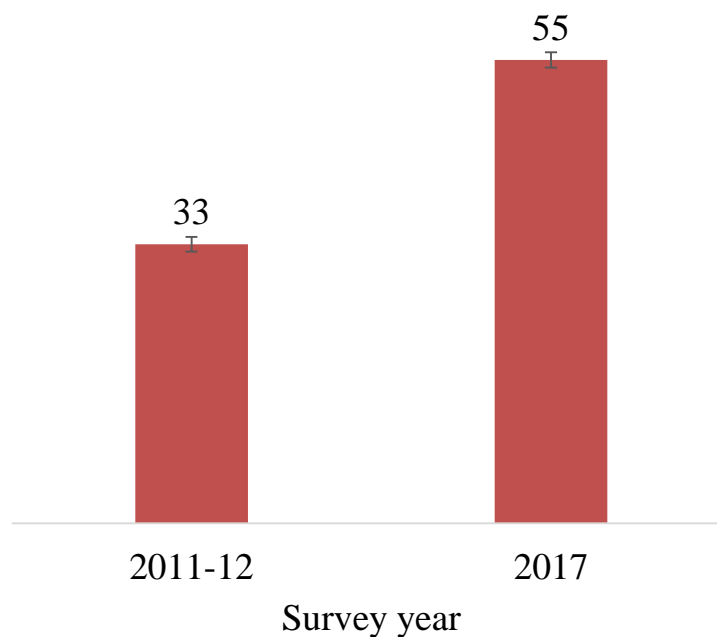
- Number of births captures in the 2015 census significantly lower than the immediate projected number of births.

# Methods for estimating birth registration completeness

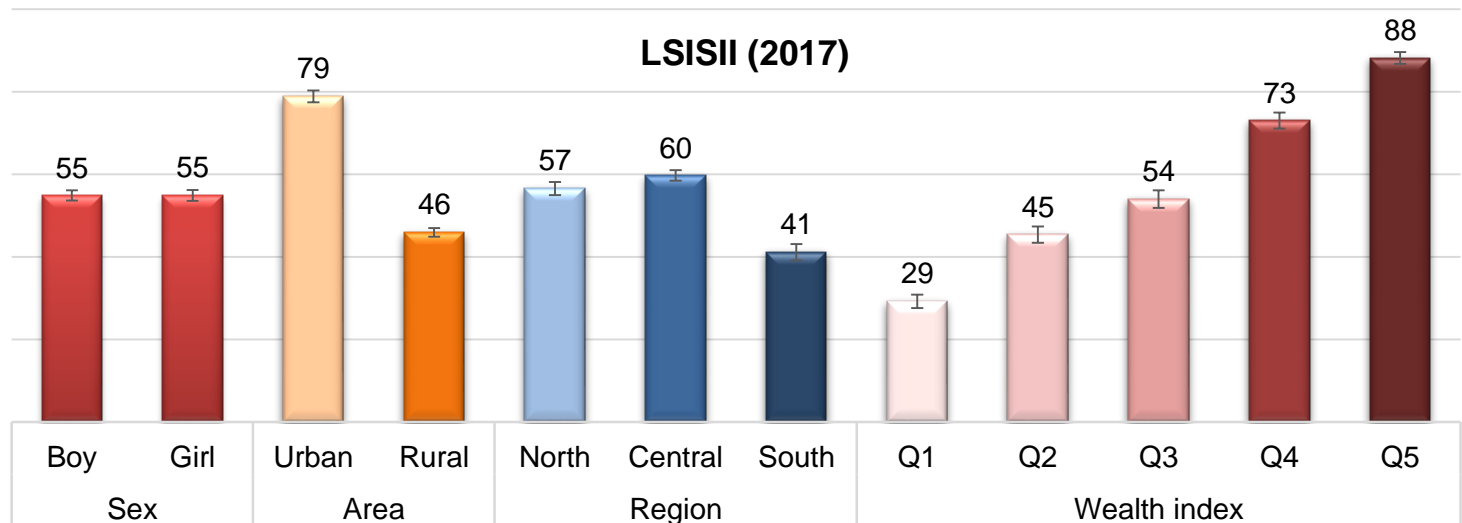
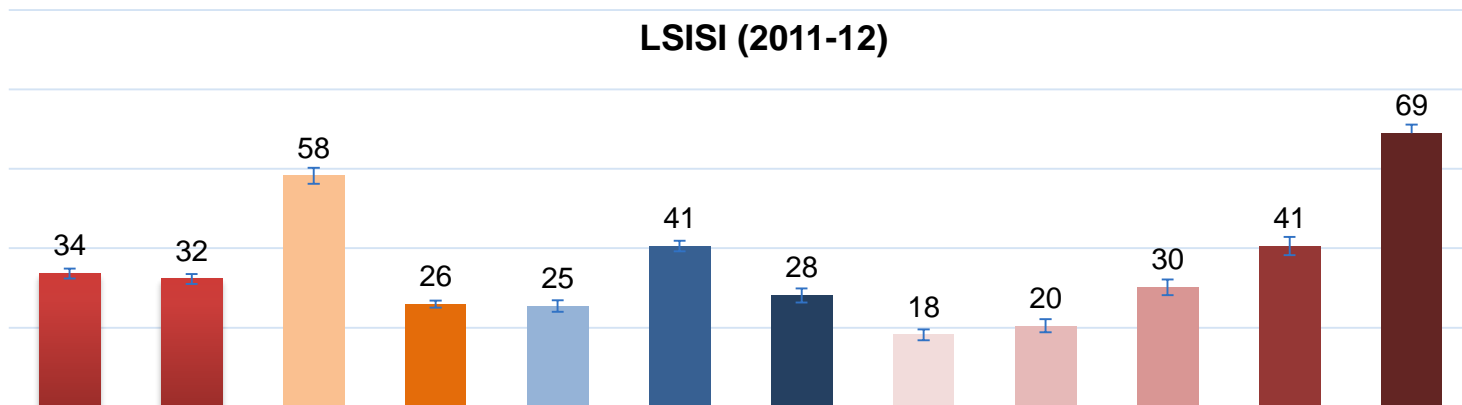
- **Data source:** two most recent Lao Social Indicators Surveys, LSISI and LSISII
- **Variables:**
  - Number of children whose births were registered: Self reported data from the Questionnaire for Children under 5. In the analysis, children whose mothers or caretakers have reported to own a birth certificate, regardless of whether the documentation is physically presented, are considered as *having birth registration*.
  - In both surveys, approximately half of children who reported to be registered have presented their birth certificate to the interviewer.
  - Total number of children in the corresponding age/year
- **Analysis:**
  - Two indicators: (1) the completeness among children under the age of five and (2) the completeness of birth registration within one year of birth
  - All analyses are weighted by sample weights to yield nationally representative estimates.
  - 95% confidence interval also calculated

## % Birth registration completeness among children under 5

$$= \frac{\text{Number of children aged 0–59 months who have birth registration}}{\text{Total number of children aged 0–59 months in the survey}} \times 100$$

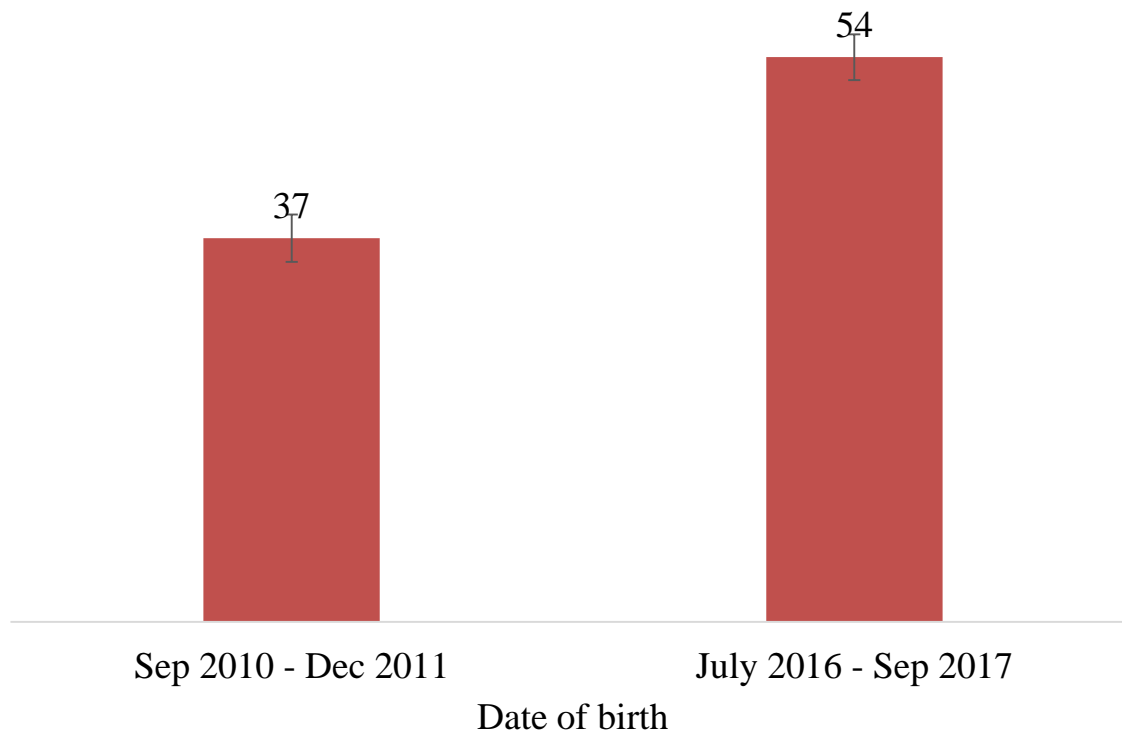


# % Birth registration completeness among children under 5 by selected characteristics



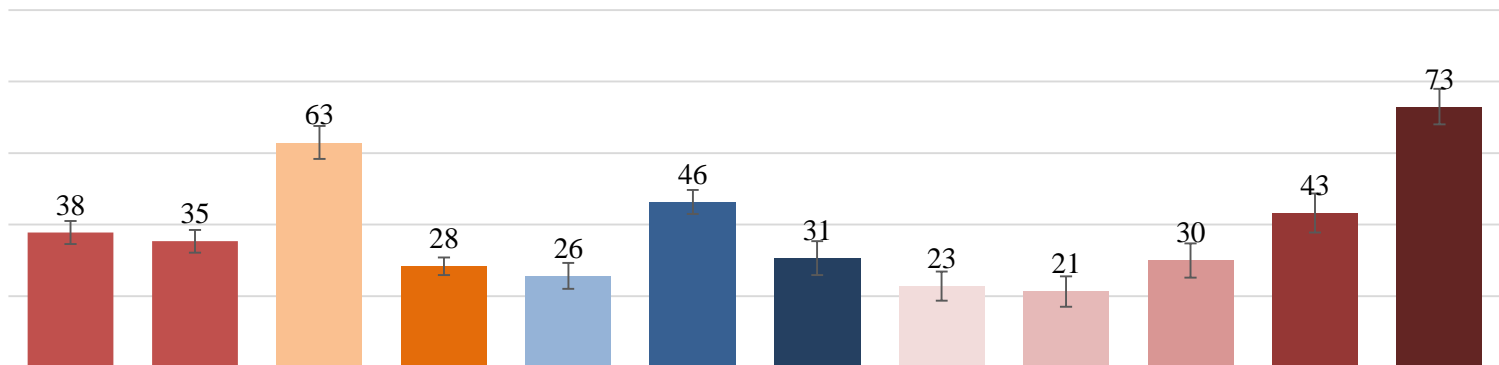
# % Birth registration completeness of children born within 1 year prior to the survey

$$= \frac{\text{Number of children born within 1 year prior to the survey who have birth registration}}{\text{Total number of children born within 1 year prior to the survey}} \times 100$$

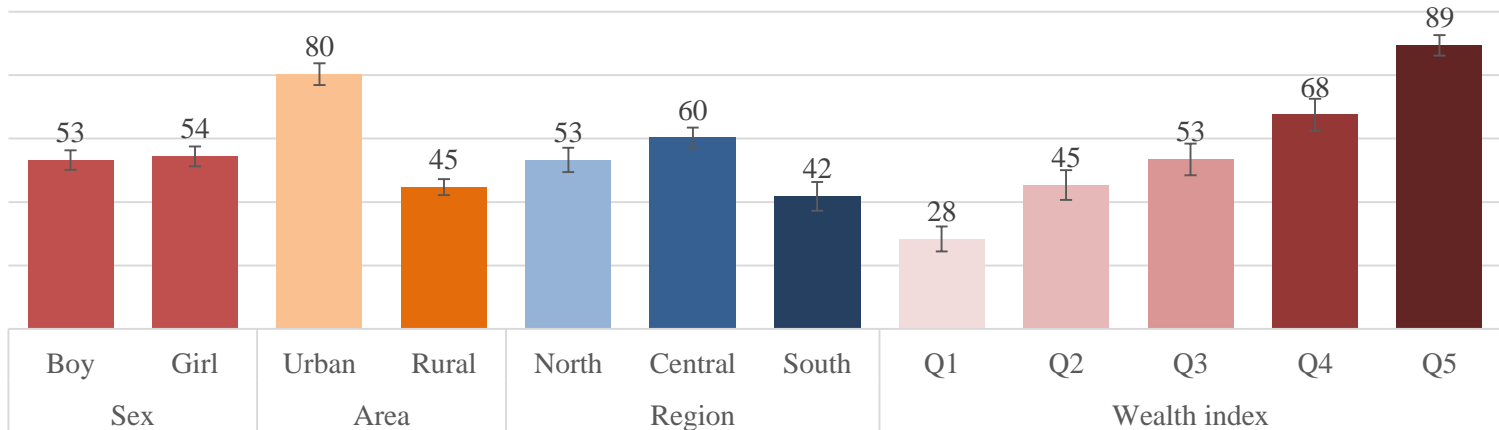


# % completeness among children born within 1 year prior to the survey by selected characteristics

LSISI (2011-12)



LSISII (2017)

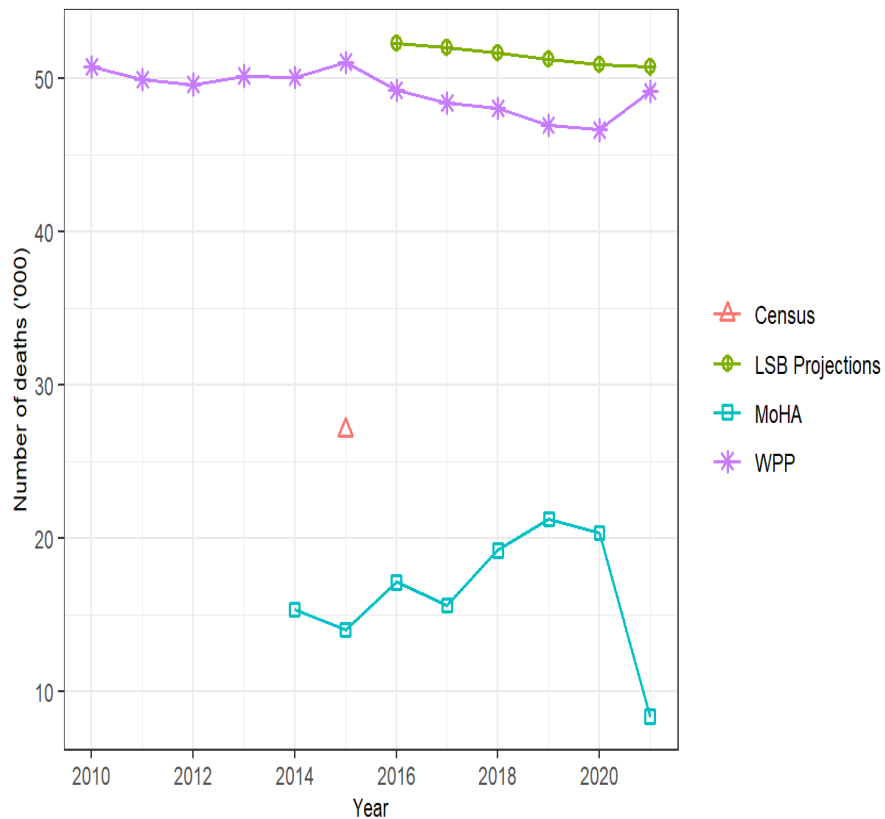


# Available data sources - Deaths

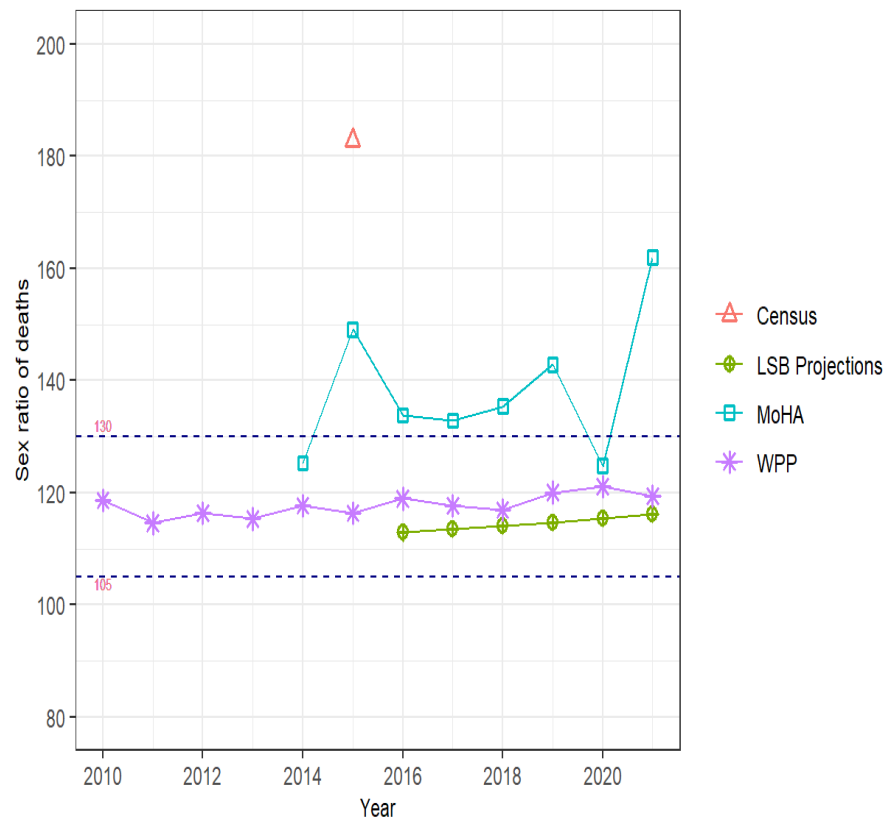
1. Lao Social Indicator Survey 2012, and 2017
2. Population and Housing Census 2015
3. Population Projections 2015-2045
4. Paper-based summaries of registered deaths by MOHA 2014 to 2021
5. MOH's DHIS 2
6. Estimates from UN's WPP



# The absolute number and sex ratio of deaths by data source



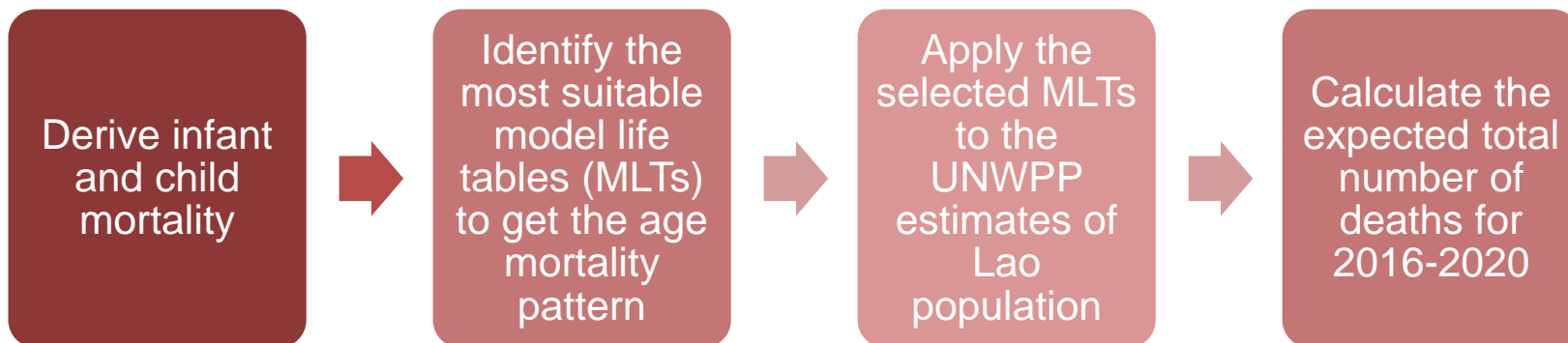
The absolute number of deaths by data source



Sex ratio of deaths by data source

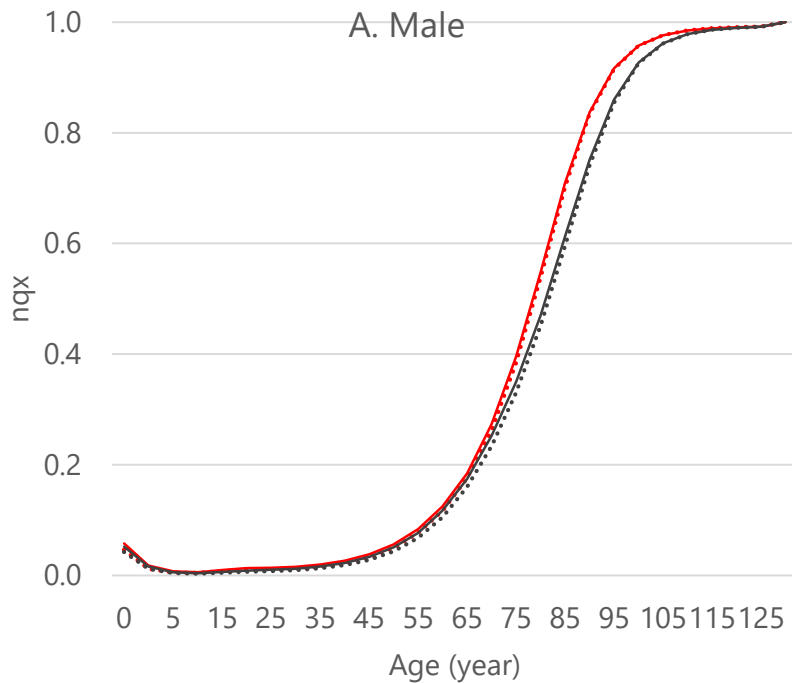
# Methods for estimating death registration completeness

- **Data sources:** Civil registration and LSISII
- **Variables:**
  - Annual registered deaths from 2015 to 2020 are from MOHA. We assumed that the occurrence of a death and the registration take place within the same year.
  - Infant and child mortality are derived from Historical data of births in the LSISII's Women's Questionnaire. Infant mortality (1q0) is defined as the probability of dying between 0-1 years old. Child mortality (4q1) is defined as the probability of dying between 1-4 years old.
- **Analysis:**

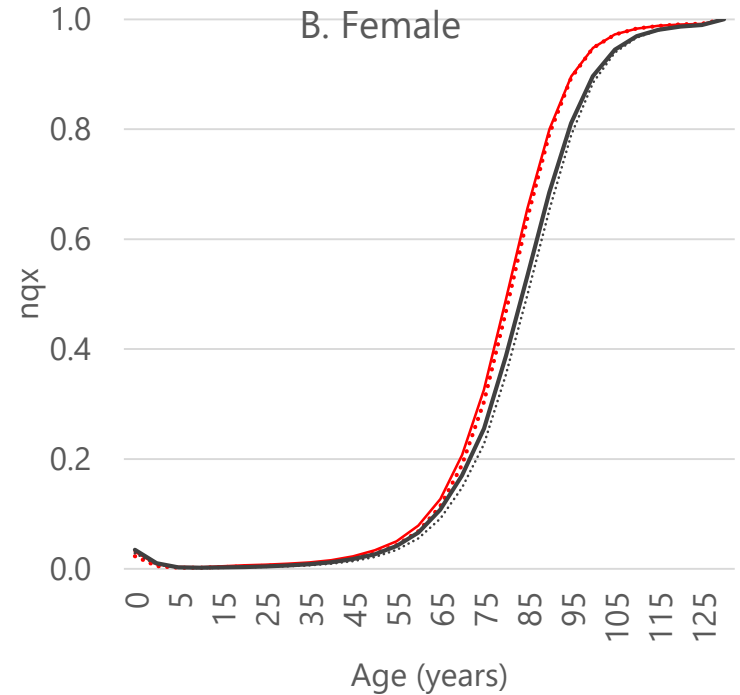


# Age specific mortality patterns for Lao PDR

Selected mortality pattern from Coale-Demeny's and UN's model life tables for Lao PDR



— CD West - 62.5    ..... CD West - 65  
 — UN General - 65    ..... UN General - 67.5



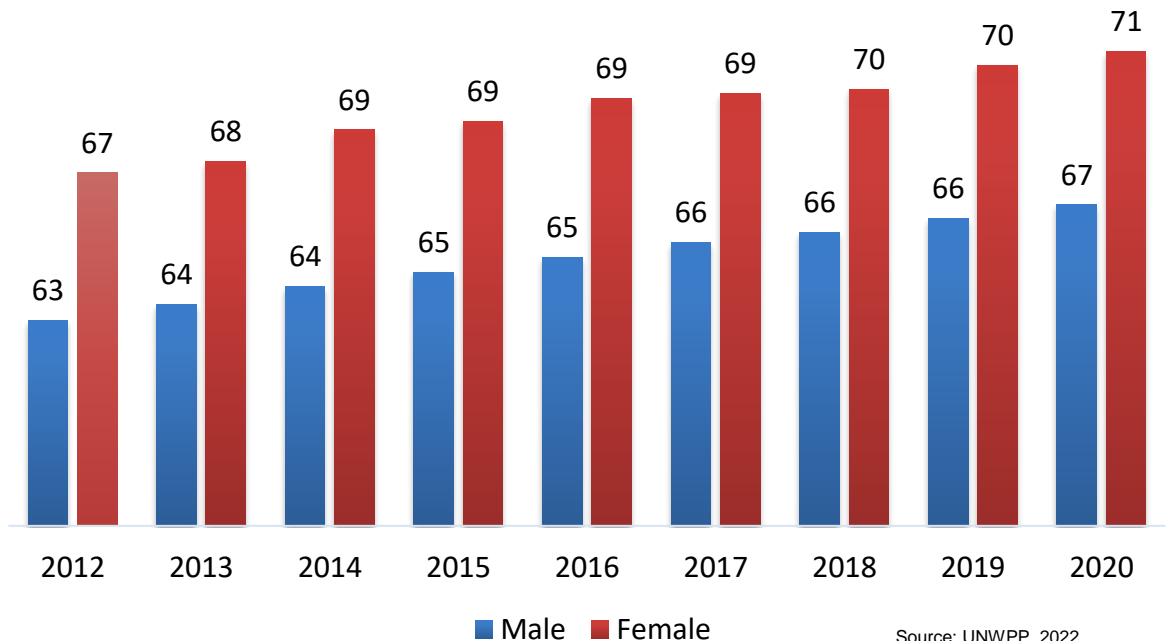
— CD West - 70    ..... CD West - 72.5  
 — UN General - 72.5    ..... UN General - 75

# Mortality indices for Lao PDR

**Infant mortality (1q0) and child mortality (4q1) by sex for one-year period preceding the survey**

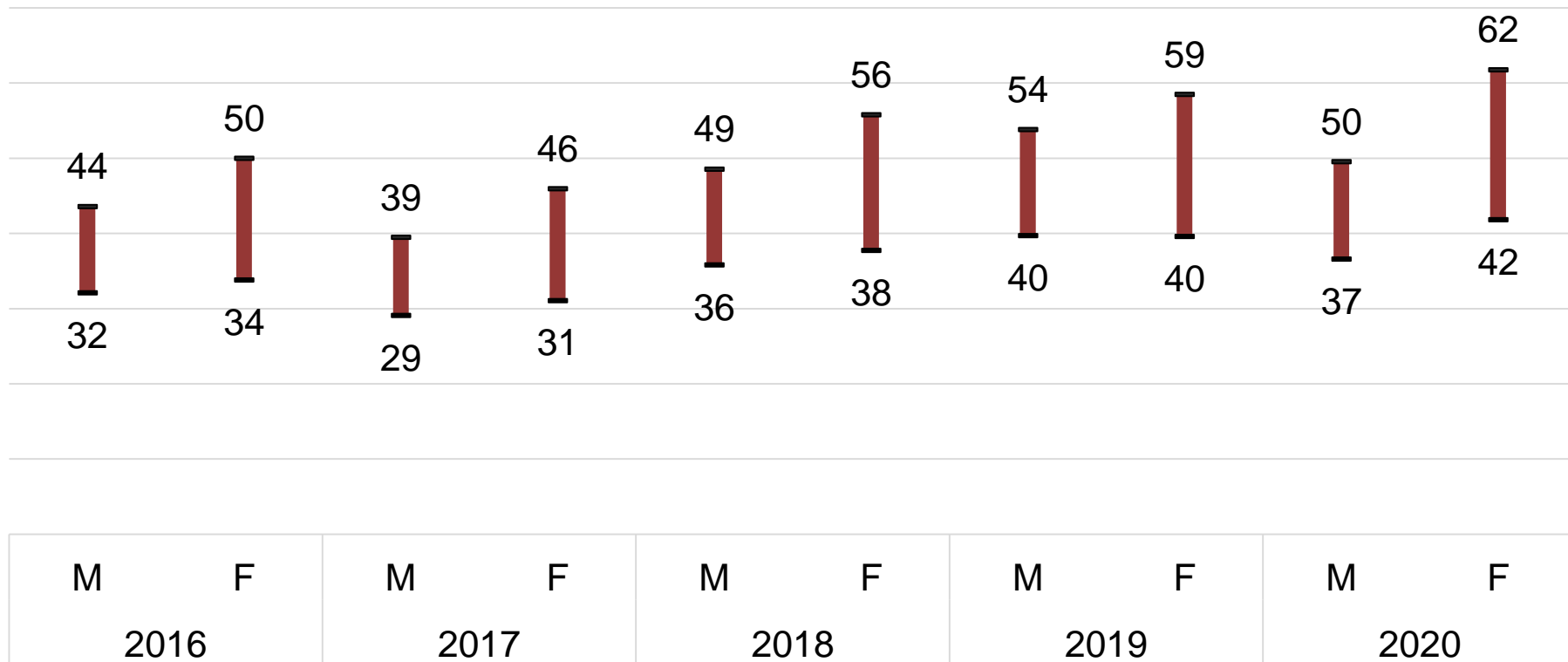
	Males	Female
1q0	0.04976	0.02452
4q1	0.01312	0.01727

**Life expectancy by sex for Lao PDR, 2012-2017**



# % death registration completeness for males and females

$$= \frac{\text{The number of deaths registered with civil authorities in a given year}}{\text{Total number of deaths in the same year}} \times 100$$



# Lessons learnt from the inequality assessment

- The CRVS system in Lao PDR should be continuously developed to cover the entire population.
- The Citizen Management Inter-ministerial Coordinating Committee should intensify its efforts to establish and secure a sustainable data-sharing system and culture (such as data sharing, quarterly the consultation meeting of steering committee, workshop and so on).
- A dataset containing essential information on key vital events should be made available to enable further analyses and use for policy-making as well as for monitoring the progress of achieving the SDGs.
- Lao PDR should continue implementing the inequality assessment for the CRVS system and ensure the sustainability of the initiative until the targeted coverage of civil registration can be achieved.

# Way forward 2023-2025

2023

- MOHA is developing the Civil Management Information System (CMIS) and CMIS set up at all provinces;
- Case study to explore why people decided not to register.
- Establish a mobile registration unit to provide services to people in the remote areas and outreach.
- Pilot data sharing with MOHA and relevant organizations
- Capacity Building on data analysis using the data from CRVS system
- Conduct Social Indicator Survey 2023 (LSIS).

2024

- Data sharing with MOHA and relevant organizations;
- Annual report of vital statistics from CRVS systems;
- Conduct inequality assessment of the CRVS system

2025

- Conduct Population and Housing Census 2025;
- Annually report of vital statistics

**Thank you**