The main challenge for the CRVS system implementation in Thailand is collaboration between stakeholders from various ministries, e.g., the Ministry of Interior (MOI), the Ministry of Public Health (MOPH), and the Ministry of Information and Communication Technology (MICT). The best solutions to CRVS system development would be to establish a formal network of collaboration between stakeholders, to establish training modules/curriculums for health personnel, and to apply appropriate procedures and methods for consistency and plausibility checks on data on fertility and mortality as well as cause of deaths.

## Challenges with the CRVS system of Thailand

- 1. Quality of cause of death (COD) information: According to Thailand's Health Statistics report in 2011, registered deaths that have cause of death as symptoms or signs (R00 R99 of the WHO ICD-10 code) has decrease from 38.23% in 2007 to 34.50% in 2011. However, it should be reduce to less than 10%, according to the WHO guideline.
- 2. There is a high percentage of outside hospital deaths: The accuracy of the cause of death is compromised because 60-70% of the deaths occurred outside hospitals and are often classified as 'natural cause of death' by the head of the village and civil registration officers who do not have a medical background.

## **Policy Recommendations**

- Establish a network of collaboration between stakeholders in CRVS systems to improve the quality of the system and increase long-term utilization of the system not only for government but also for consumers and public.
- 2. Increase the number of staff that can identify cause of death outside hospitals and training modules or curriculums for health personnel and registrars
- 3. Secure maintenance and continuous infrastructure development to increase accessibility and availability of the civil registration system. In addition, the Ministry of Interior has successful of civil registration and they are welcome to suggest and encourage which country are developing civil registration system.
  - 4. Promote other channels to identify cause of death, e.g., Tele-medicine
- 5. Establish routine mechanism to evaluate data quality and feed back for continuous improvement. Establish standard procedure to consistency and plausibility checks on fertility and mortality levels as well as cause of deaths should be carried out before the data are released.