**Resource needs for a Sample Registration System**

*The generic list below is suggested as the most essential resources that a country might need to develop and implement successfully an SRS. The list may vary depending on the country context, existing capacity and equipment, and data collection and system strategy adopted.*

**Resource needs can be categorized into four components**

1. Initial data comprises of mortality data sources, sampling frame of clusters and possible maps
2. Human resources at all levels
3. Logistics and equipment
4. IT needs
5. **Data needs**

* Baseline mortality data (from DHS/MICS, Population Censuses, HDSS)
* Complete sampling frame with population distribution: Obtained from recent population census
* Maps of clusters

1. **Human resources at all levels**
   1. **Community level (cluster level)**
      1. Community-based workers
         1. Part-time worker trained and paid to conduct the surveillance
         2. Ideally resident in the cluster or nearby
         3. Selected by the community
         4. Must be literate (complete primary school) with ability to read, write and use a smartphone
         5. Need to review existing community worker cadre in the country to decide on the appropriate worker for the SRS
      2. Volunteer community members and officials (Chiefs, religious leaders, Birth attendants)
         1. Unpaid
         2. Support dissemination of the study to generate buy-in and cooperation from the population
         3. Assist with identification of events (pregnancies, births and deaths)
         4. Access to community registers if they exist
   2. **Provincial and regional level**
      1. Study Coordinator and manager
      2. Trained Verbal and Social Autopsy (VASA) data collectors (1 per 10-15 clusters)
         1. High school or few years in college
      3. Data collection supervisors (1 per 2-3 data collectors)
         1. High school or few years of college
      4. Drivers
      5. Engage provincial/regional health directors and officials
         1. Discuss any in-kind resources they can provide (e.g. vehicles, offices)
   3. **Central level** 
      1. **Management and administration team**
         1. Project manager for overall administration
         2. Financial management team (financial manager and assistant)
         3. HR team
         4. Administrative Coordinator
         5. Logistic and procurement manager
         6. Drivers
      2. **Technical team**
         1. Project PI (Demographer or Epidemiologist, or equivalent)
         2. Provincial/regional focal points responsible for province/region supervision
         3. IT engineers
         4. Data managers
         5. Data analysts
         6. Technical experts - VASA data (MD)
         7. Technical experts - mortality data (Demographers)
         8. Communication and data visualization experts
         9. Engage relevant government technical officials (M&E, Planning, Community Health, etc.)
2. **Logistical need** 
   1. **Community Level**
      1. Smart phones with GPS capability + cover
      2. Phone solar chargers
      3. T-shirts, hats, boots
      4. Backpacks (or plastic folders)
      5. Bicycles
      6. Notepads
      7. Pens and pencils
      8. Printed list of community households with identifiers
      9. Paper forms (for reporting in areas with no or defective network coverage
      10. Household identifier stickers (or cards)
   2. **Provincial/regional level**
      1. 4x4 vehicles and accessories (tracking devices, insurance, fuel and maintenance budget) – 1-2 vehicles per province/region
      2. Tablets + covers for VASA data collection and supervision
      3. Power banks
      4. Smart mobile phones
      5. Computers (Laptops) with Microsoft software installed
      6. Printers, toner, rimes of papers
      7. Backpacks
      8. T-shirts with project logo, raincoats, boots
      9. Pens and pencils
      10. Modem and internet package
      11. Air-time credit for communication
      12. Office desks and chairs
      13. Office rentals
      14. First Aid equipment
   3. **Central level**
      1. 4x4 vehicles and accessories (tracking devices, insurance, fuel and maintenance budget) – 1-2 vehicles
      2. Computers (Laptops and Desktops)
      3. Printers, Toners, Rimes of papers
      4. Tablets
      5. Smart phones
      6. Software: Statistical (STATA, R, OpenVA), Data collection (ODK), Microsoft, mapping software
      7. Audio recorders for formative research
      8. Modem and internet package
      9. Airtime credits for communication
      10. Publication costs
3. **IT needs**
   1. **Servers**
      1. Data Collection Server (Key functionality)
         1. Data repository for raw data
         2. Operational Management: Provides tools to manage data collection operations (user accounts, assignments, activity monitoring, report generation, maps)
         3. Serves blank forms to Community and Provincial data collectors, receives and stores form data
      2. Data Analysis Server (Key functionality)
         1. Platform for cleaning, merging, and analyzing data
         2. Data repository for identifiable and deidentified analytic data sets
         3. Tools for statistical calculations and visualizations
      3. Data Sharing Server: Platform for publicly sharing data
      4. Server Software
         1. Operating Systems: Either Linux or Windows systems can be used. Make the choice based on the exiting IT team’s knowledge with consideration for licensing cost.
         2. Data Collection platform: Choose a mature and proven system with an accessible database. Key consideration: *Is offline data collection needed?*
   2. **Hardware**
      1. Central: Servers (see above), Laptops, printers for staff. Tablets and phones to test and monitor data collection
      2. Provincial: Laptops, printers for staff. Tablets and phones for data collection. Estimate replacement of 1/3 of field devices every year.
      3. Community: Tablets and phones for data collection. Estimate replacement of 1/3 of field devices every year.
4. **Other in-contributions**
   1. Local institutions leading implementation may offer in-kind contribution
      1. Vehicles
      2. Offices
      3. Printers
      4. Internet
      5. Servers
   2. Some personnel may already be government employees and work only part-time on the system with small incentives.