CRVS digitalization in Nepal
Introduction

• Data processing, storage, and transmission all rely on digitization.
• It enables information to be shared and accessed without loss, as well as to migrate to new formats as needed.
• Digitization is critical for ensuring accuracy, correctness, increased sales and process automation in CRVS system operation
CRVS digitalization in Nepal

• Vital Event Registration and Social Protection Management Information System (VERSP-MIS) is used as a digital tool for managing civil registration system since 2017 in Nepal
• Roles and functional and non-functional requirements defined.
• Online event registration is in operation in 6619 out of 6743 local registrar’s offices.
• More than 19 millions paper-based records of 697 local levels have been digitized and 56 remaining are in progress.
• Civil Registration System has been integrated with other systems/organizations
  • Social Security,
  • Consular service,
  • Citizenship,
  • NID,
  • Health Facility,
  • Department of Immigration,
  • National Statistics Office
  • Integration with Election Commission, Education is in progress.
Integration Status of Civil Registration

Sources of Notification
- BRMS
- DRMS
- Public Portal
- Nagarik APP

Sources of Verification
- CIMS
- NIDMIS

API Container

VER SYSTEM

API Gateway

NSO
PIS
TIA
SSA
DoCS

Service Users
- Student Registration
- Voter List Update
- HMIS
Key features of CRVS digitalization

• Web based centralized system is being used in local registrars' offices,
• Major features of VERSP-MIS include registering vital events and generating reports accordingly.
  • Registration Forms
  • Data Entry and Validation
  • Document Imaging and Scanning
  • Record Management
  • Workflow Management
  • Reporting and Analytics
  • Security and Access Control
  • Integration with External Systems
  • Data Exchange and Interoperability
Functions of CRVS digitalization

- Notification
- Verification
- Registration
- Certification
- Copy, amendment, void certificate
- User management
- Reporting
- Sub-Systems (Grievance, archiving system, digitization, progress tracking)
Process of Civil Registration
User Interface

- Multiple Language Support: English and Nepali
- Auto date conversion: BS to AD
- Responsive design, bootstrap framework is used
- Single user and password may be used for multiple product of Department like: SSA, VER, Grievance
- NSO Standard (National Standard) Coding has been used in the options in the form.
1. Remote access VPN tools for establishing secure connection to access VER System
2. AD is used to authenticate VPN user
3. ISE is used to VPN user authorization
4. Two step authentication is mandatory for user login (User name password, OTP send to mobile number)
5. Hierarchical role based user management
6. Geo-location control (can not access domain and IP outside the country)
7. WAF is used for application filtering, monitoring and blocking malicious HTTP/S traffic between VER application and Internet
8. Next gen. firewall to detect and prevent cyber threat
Grievance Management Mechanism

• Grievances are being addressed through various medias: Grievance Registration Form, Telephone, IVR, Toll Free Number, Hot Line, Social Media, Email, Hello Sarkar etc.

• A web application (GMIS: Grievance Management Information System, https://gms.donidcr.gov.np) has been developed which can be accessed by public, local registrar offices, local level offices and DoNIDCR.
Next Plan

• Expansion of notification system
  • Nation wide rollout of BRMS, DRMS (Integration of Health System),
  • API Integration for health facilities using different system
  • Public portal
  • SMS Notification, Mobile notification from Female Community Health Volunteers (FCHV)

Data Verification

• Integration of National ID for the identity verification during certificate issuing
• Digitized data de-duplicate and migration to the live system for the purpose of issuing copy certificate
Next Plan..

- **Vital statistics Report**
  - Development of Integrated interoperable CRVS System including CR, HMIS, NSO
  - Use of Business Intelligence tools for automated CRVS reporting through knowledge portal

- **Technology Intervention for e-CRVS System**
  - Big data implementation for CRVS data variety, volume and velocity analysis
  - Use of block chain technology for integrity verification of CRVS registries
  - Development of interactive information dashboard
  - Integrating with social security for targeting and reducing inclusion-exclusion error

- **Capacity Building**
  - Self certification system implementation
  - Capacity building of local registrar and IT personnel
  - Infrastructure development
Thank you!