INTEGRATED STATISTICAL SYSYTEM: Data Collection, Processing and Dissemination



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Goal:-

Timely, accurate and adequate response to data needs in support of policy works and decision making

Objectives:-

Gathering harmonized and internationally comparable data to support:

- Availability of <u>timely</u>, <u>accurate</u> statistical information enables countries to address a wide range of issues in today's rapidlyevolving global economic and social landscape
- Improve the <u>efficiency</u> of data and metadata collection, validation, processing, storage and dissemination;
- Improve <u>quality</u>, eliminating errors and incoherencies and
- shortening statistical **publication cycles**, and
- enhance the <u>accessibility</u> and visibility of the Organization's statistical outputs .

Structure:-

The overall architecture of the Statistical System consists of three layers :

- Production layer: collection, validation, processing and management of statistical data and metadata
- Storage layer: validated statistics and related metadata are stored
- dissemination layer: for producing statistical publications and online/offline interactive statistical products

The three layers (or pillars in the architecture modular) supported by a <u>workflow</u> system which automates statistical and publication processes wherever possible, and tracks the steps involved.

Components of the Integrated Statistical System

Data Sources:

- Censuses
- Sample surveys & Specialized Studies
- Administrative records from Line ministries

Processes:

- Design and testing
- Data collection
- Processing and analysis
- Dissemination
- Monitoring & Evaluation

Features:-

- Process based approach
- Interoperable
- User Centric
- Sustainable
- Flexible
- Collaborative
- Reusability
- Central repository: (include all standalone databases)
- Modalities of publication; online
- External accessibility/ linking other government bodies

Implementation Activities:-



Testing:-



Data Migration:-



Training:-



Critical Success Factor:-

Subject Matter

- Business and Technical Architect
- System Integration Expertise
- Implementation Expertise

Experts

- Active participation during discussions
- Identify Issues and Requirements
- Timeliness of Respond
- Decision Making

BENEFITS of ISS:-

- 1. More Effective Monitoring of the Census/Survey
- 2. Efficiency of Census/ Survey Processes
- 3. Centralized Integrated Statistical System
- 4. Extend Dissemination of Statistical Information
- 5. Data Visualization
- 6. Knowledge Sharing
- 7. Addressing CHALLENGES

*More Effective Monitoring of the Census/Survey

- Complete information on the Census / Survey
- Pro-active Monitoring mechanism.
- Number of Sample Case assigned to each officer

* Efficiency of Census/Survey Process

- Reduce the number of processes
- Edit Spec Validation
- Census/Survey Data available for review after each submit
- the batch for validation.
- Automate Manual Processes.
- Automate Manual Processes
- Report Preparation

Centralized Integrated Statistical System

- flexibility to transfer data between disparate Systems
- Data Consistency and Up –To– Date
- Data at "finger tips"

Extend Dissemination of Statistical Information

- Mechanism for publishing Census/ Survey Reports on website
- Dissemination of Data Requests
- Dissemination of Customized Census/ Survey Reports
- Feedback from the "Customer"
- Customer Service

* Data Visualization

- Analyzing information using Maps (Geospatial Database)
- Performance Management System
- Business Intelligence.

Knowledge Sharing

- Turning personal knowledge into corporate knowledge that can be shared throughout the organization
- Platform for collaboration, sharing and disseminating knowledge throughout the organization
- Knowledge Repository.

*ISSUES & CHALLENGES:-

- Data migration to central repository;
- Knowledge gap related to complicated statistical analysis
- Timeline is usually a challenge
- Time needed to have new system architecture and system development tools and training and migrating to the new system

Some Features of the Jordan Population Census, 2015

Substantive/ Technical Preparations

Technical designs and testing

Training

Human resources & modalities of work

Geographical Preparations

- Geo-coding System of cities, villages, cams and admin affiliations
- ✓ Office demarcation of digital maps
- ✓ Field digital demarcation & clearing/adoption
- Listing of Buildings, Housing units and households with GPS9 (eligibility for enumeration)
- ✓ Data transition cycles/ data migration to the center
- ✓ Quality assurance, (role of call center)
- Management of operations

Processes of Data Collection

- > Needs and mobilization of human resources
- > Training, tasking and deployment
- Monitoring performance
- > Analysis, production of process indicators, and progress indicators

Work flow line in support of quality assurance

Data transition processes

Three cycles of data transition

- Transfer of demarcation data, starting with office demarcation of digital maps, ending with field demarcation and accreditation
- Listing transfer, starting with listing BLGs, HU & HHs in handed demarcated areas, accreditation and storing
- Enumeration data transfer, including visiting and interviewing HHs
- Storage and security of data

Data Processing

In electronic solutions I particular, processing of data is continuous throughout all stages including the enumeration In addition, electronic processing for

Consistency, completeness and range check
During preparation of tables
During analysis and evaluation

Processes of producing results

Sets of indicators:

- Preliminary indicators
- Main indicators
- Detailed indicators
- Census tabulation plan

Census reports

Thank you