**UNIVERSITY OF CAPE COAST**



**SCHOOL OF ECONOMICS**

**DEPARTMENT OF DATA SCIENCE AND ECONOMIC POLICY**

**DATA CURATION AND MANAGEMENT**

**DMA820**

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**ASSIGNMENT 1**

**NAME INDEX NUMBER**

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**ATTEMPT A**

**Structure of Data Dissemination in District Assemblies**

The structure of data dissemination in a District Assembly is the organized framework through which information is generated, validated, categorized, and shared with the public and relevant institutions. Guided by transparency, accountability, participation, and accessibility, this structure ensures effective communication between the Assembly and its stakeholders.

1. **Data Sources and Generation**  
Departments and units collect and generate data for dissemination:  
- Planning Unit: Development plans and monitoring reports.  
- Finance Department: Budgets and financial statements.  
- Works Department: Infrastructure project data.  
- Education, Health, Agriculture, and Social Welfare: Sector-specific data.  
- Statistics and Monitoring Units: Consolidation and analysis.

2. **Data Validation and Approval**  
Data is formally reviewed and approved before dissemination:  
- Internal review committees ensure accuracy.  
- Executive and sub-committees vet reports.  
- The General Assembly approves major reports and budgets.  
- The Regional Coordinating Council ensures alignment with national standards.

3. **Categorization of Data**  
Information is tailored to specific audiences:  
- Budget & Financial Data: Citizens and development partners.  
- Development Plans & Reports: Central government and NGOs.  
- Service Delivery Information: Service users and citizens.  
- Civic Information: The general public.

**Formats of Data Dissemination**

Data dissemination methods cater to diverse audiences, ensuring inclusivity and accessibility.

1. **Printed Formats**  
- Annual District Composite Budgets: Detailed financial plans.  
- Development Plans: Hardcopy MTDPs and spatial plans.  
- Performance Reports: Progress and challenges over time.  
- Official Notices: Public tenders, recruitments, and meeting schedules.

2. **Digital Formats**  
- PDF Reports via Email: Sent to key stakeholders.  
- Website Uploads: Budgets, reports, procurement plans.  
- Presentations: Shared at stakeholder meetings.  
- Social Media: Facebook, WhatsApp, and Twitter updates.  
- GIS Dashboards: Interactive maps for spatial planning.

**3. Community-Based Channels**  
- Community Information Centers: Local announcements.  
- Town Hall Meetings: Direct interaction with residents.  
- Community Notice Boards: Summarized updates for public viewing.

**Data Sharing Protocols and Procedures**

District Assemblies follow structured protocols to ensure secure, transparent, and lawful sharing of data.

1. **Internal Sharing**  
- Departmental reports are submitted regularly to the DPCU.  
- Data is exchanged during planning and review meetings.  
- Access is role-based, with clearance levels.

2. **External Sharing**  
- Formal requests must be submitted to the District Coordinating Director.  
- Sensitive data may require approval from the DCE, RCC, or relevant ministry.  
- MoUs may define terms for data use with NGOs or researchers.  
- Compliance with Ghana’s Data Protection Act, 2012 (Act 843) is mandatory.

**Data Visibility**

1. **Website-Based Visibility**  
Most MMDAs operate official websites publishing district profiles, MTDPs, budgets, procurement data, and news.

2. **Social Media-Based Visibility**  
Platforms like Facebook, WhatsApp, and Twitter are used to engage communities, share updates, and promote transparency.

**ATTEMPT B**

**Improving and Implementing Data Curation in District Assemblies in Ghana**

Effective data curation is vital for informed decision-making and resource allocation in District Assemblies. This process spans data collection, cleaning, storage, metadata creation, preservation, and dissemination. The following strategies offer a structured approach for enhancing data curation capacity.

**1. Data Collection and Standardization**

Assemblies should design standardized digital and paper-based templates to ensure consistency across departments. Field officers can use mobile data collection tools such as KoboToolbox or ODK for real-time gathering of information on projects, sanitation, education, and population. Continuous training in ethical and accurate data collection, including household surveys and interviews, ensures data integrity.

**2. Data Cleaning and Validation**

To improve accuracy, automated tools like Excel, R, or Python should detect and correct duplicates, missing values, and inconsistencies. Supervisors can validate entries before they are finalized, while real-time feedback mechanisms in digital platforms help reduce input errors.

**3. Data Storage and Management**

A secure centralized repository—such as SQL databases, SharePoint, or cloud systems—facilitates easy access and sharing. Role-based access controls safeguard sensitive data, and regular local and cloud backups prevent loss.

**4. Metadata Creation and Documentation**

Applying consistent metadata standards, including dates, sources, and purposes, improves data usability. Developing a comprehensive data dictionary ensures uniform understanding of indicators, while procedural logs document collection, processing, and updates.

**5. Data Preservation**

Digital archives with secure, labeled storage allow historical data to be maintained. Data migration to updated formats prevents technological obsolescence, and retention policies aligned with national regulations guide proper disposal.

**6. Data Dissemination**

Assemblies can enhance transparency by updating websites and social media with summaries, charts, and infographics. Annual reports, budget summaries, and development updates should be available in both print and digital formats. Community forums, town hall meetings, and inter-departmental briefings strengthen stakeholder engagement.

**7. Capacity Building and Policy Support**

Sustained staff training in data management and curation tools builds institutional capacity. Establishing a local data governance framework aligned with national strategies provides structure, while collaboration with research institutions, NGOs, and national agencies fosters technical support and data sharing.

**Conclusion**

Adopting these strategies can transform data curation in District Assemblies, ensuring accuracy, accessibility, and sustainability. Well-managed data supports effective governance, community engagement, and evidence-based policy-making, ultimately driving development at the local level.