

Inception Report

on

Development of Digital
Budgeting System and Capacity
Building for Union Parishads to
Strengthen Transparency

Submitted to
WaterAid Bangladesh

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&
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Abbreviations

Abbreviation	Full Form
GO4IMPact	Improved Climate Resilient Public Service Delivery
UP	Union Parishad
ICT	Information and Communication Technology
HLP	Horizontal Learning Program
SWM	Solid Waste Management
NGO	Non-Government Organisation
BMET	Budget Monitoring and Expenditure Tracking
React	JavaScript Library for UI Development
Laravel	PHP Web Application Framework
Flutter	UI Toolkit for Cross-Platform App Development
MySQL	Relational Database Management System
PostgreSQL	Advanced Open-Source Relational Database
API	Application Programming Interface
RBAC	Role-Based Access Control
JWT	JSON Web Token
OAuth	Open Authorization Protocol
HTTPS	Hypertext Transfer Protocol Secure
GDPR	General Data Protection Regulation
SPA	Single Page Application
UI	User Interface
UX	User Experience
PDF	Portable Document Format
QA	Quality Assurance
UAT	User Acceptance Testing
SSL	Secure Sockets Layer
TLS	Transport Layer Security
FGD	Focus Group Discussion
KII	Key Informant Interview
UNO	Upazila Nirbahi Officer
DDLG	Deputy Director of Local Government
LGD	Local Government Division
NILG	National Institute of Local Government
AACCO	Accounts Assistant Cum Computer Operator
UDC	Union Digital Center
O&M	Operation and Maintenance
SMS	Short Message Service
OTP	One-Time Password
SSO	Single Sign-On
VPS	Virtual Private Server
SLA	Service Level Agreement
DRT	District Resource Team

Table of Contents

1. Executive Summary.....	1
2. Background and Context.....	1
3. Objective of the Assignment	2
4. Understanding of the Assignment.....	2
5. Methodology and Approach	3
5.1 Review of Policy Documents	3
5.1.1 Local Government (Union Parishad) Act, 2009.....	3
5.1.2 Union Parishad (Budget Formulation and Approval and other relevant issues) Rules 2016..	4
5.2 Approach & Design Principles	4
5.3 Inception & Co-design.....	5
5.4 System Architecture & Development Approach.....	5
5.4.1 Frontend Development (React).....	5
5.4.2 Backend Development (Laravel)	5
5.4.3 Platform Strategy	5
5.5 Data Security & Protection	6
5.6 Accessibility & User-Centric Design	7
5.7 Development Process & Prototyping	7
5.8 Quality Assurance & Testing.....	8
5.9 Training & Capacity Building.....	8
5.10 Deployment, Handover & Scaling up.....	8
5.10.4 Deployment & Handover	8
5.10.5 Scaling up	8
5.11 Hosting, Security Certification & Long-Term Support.....	9
5.12 Monitoring, Evaluation & Reporting.....	9
6. Field Assessment Summary.....	10
6.1 Summary of the Focused Group Discussions (FGDs) Findings.....	10
6.2 Summary of KII Findings (Upazila Nirbahi Officers – UNOs)	11
6.3 Summary of KII Findings (Deputy Director, Local Government – DDLG).....	12
7. Stakeholder Analysis	15
8. Work Plan and Timeline	16
8.1 Work Plan (Timeline Overview)	16
8.2 Detailed Work Plan with Work Chart.....	16
9. Risk Assessment and Mitigation Matrix.....	21
10. Draft System Architecture	22
10.1 User Access Layer	22

10.2	Presentation Layer (UI/UX)	22
10.3	Security & Access Control Layer	22
10.4	API Gateway Layer	22
10.5	Application Layer (Business Services).....	23
10.6	Integration Layer.....	23
10.7	Data Layer (MySQL / PostgreSQL)	23
10.8	Audit & Logging Layer	23
10.9	Monitoring & Analytics Layer	23
10.10	Infrastructure & Hosting Layer	23
11.	<i>UX/UI Concept note and User journey maps</i>	24
11.1	UX/UI Concept note	24
11.1.1	Design Direction	24
11.1.2	Platform Structure	24
11.1.3	Website-Main Functional Modules	24
11.1.4	Super Admin-Main Functional Modules	25
11.1.5	Citizen Dashboard, Feedback	26
11.2	Wireframe Designs	27
11.2.1	Super Admin-Main Functional Modules	27
11.2.2	Budget Management	27
11.2.3	Approvals	28
11.2.4	Tracking Analytics	28
11.2.5	Reports	29
11.2.6	Feedback	29
11.3	User Flow	30
12.	<i>Expected Deliverables</i>	30
13.	<i>Conclusion</i>	33
14.	<i>Annexes.....</i>	33
14.1	Annex-1: UP Budget Form Ka	34
14.2	Annex-2: UP Budget Form Kha	35
14.3	Annex-3: UP Budget Form Ga	38
14.4	Annex-4: UP Budget Form Gha	39
14.5	Annex-5: FGD Questionnaire	40
14.6	Annex-6: KII Questionnaire.....	45
14.6.1	KII Questionnaire for UNO	45
14.6.2	KII Questionnaire for DDLG	49

1. Executive Summary

This inception report presents the implementation framework, methodology, and strategic direction for the assignment “**Development of a Digital Budgeting System and Capacity Building for Union Parishads to Strengthen Transparency**” under the GO4IMPact Programme, supported by WaterAid Bangladesh. The initiative aims to digitize the Union Parishad budgeting process in line with the Local Government (Union Parishad) Act, 2009 and the Union Parishad (Budget Formulation and Approval, and Other Related Matters) Rules, 2016, to improve transparency, accountability, and efficiency in local governance.

The assignment will replace paper-based budgeting in Union Parishads with a structured digital system by digitizing the four statutory budget forms, introducing automated reporting and expenditure tracking, and creating citizen-facing dashboards to enhance transparency. The project also includes capacity-building to equip Union Parishad officials with the skills required for sustainable use of the digital platform.

Field assessments in six Union Parishads in Naogaon and Satkhira informed the design and implementation approach. Although Union Parishads generally follow prescribed budgeting procedures, the current system faces challenges including limited human resources, technical capacity, data management, citizen participation, ICT infrastructure, and internet connectivity. Stakeholders expressed strong demand for a user-friendly digital budgeting platform with automated calculations, dashboard reporting, expenditure tracking, approval workflows, and public access.

To address these findings, the proposed solution is a mobile-responsive, low-bandwidth, Bangla-first digital platform with a modular architecture using React, Laravel, Flutter, and MySQL/PostgreSQL. This design ensures scalability, security, and adaptability. The implementation methodology includes stakeholder consultation, participatory co-design, prototype development, pilot and user acceptance testing, phased deployment, and structured training across 39 Union Parishads.

Implementation will occur over five months and include inception, design, development, testing, pilot deployment, training, and final handover. Long-term sustainability will be ensured through five years of hosting, maintenance, security certification, source code handover, and technical documentation. This intervention aims to establish a scalable digital governance model that improves financial transparency, strengthens accountability, and promotes participatory local governance across Union Parishads in Bangladesh.

2. Background and Context

GO4IMPact is a programme supported by the Embassy of Switzerland in Bangladesh. The programme aims to strengthen local governance and improve the equitable, climate-resilient delivery of basic public services, particularly in water and solid waste management (SWM). It adopts a systemic, adaptive, and facilitative approach to enhance the capacities of relevant actors, stimulate dialogue among stakeholders, and encourage participatory and participatory decision-making processes.

Building on the success of GO4IMPact, this initiative seeks to digitise the Union Parishad (UP) budgeting process, aligning with the broader goals of improving local governance. Despite the strong legal framework established by the Local Government (Union Parishad) Act, 2009, which mandates UPs to manage essential services such as water supply, sanitation, and physical infrastructure, many UPs still rely on paper-based systems for budget preparation and service delivery. As a result, planning processes require further strengthening, with improved visibility into which development plans are being adopted in each area and how resources are allocated, alongside stronger sector prioritisation and enhanced transparency, enabling more effective service delivery and greater citizen engagement.

In line with the Local Government (Union Parishad) Act, 2009 and the Union Parishad (Budget Formulation and Approval, and Other Related Matters) Rules, 2016 which require UPs to

prepare, approve, and publicly share the detailed budget, this initiative aims to digitize the four key forms, as specified in the relevant rules, involved in the budget preparation process. This includes the creation of a digital platform that will allow for real-time tracking of budgets, provide easy access to financial data for the public, and enhance accountability through transparency.

By integrating digital tools into the budgeting process, the project will improve the efficiency and accessibility of public services, aligning with national policies such as the National ICT Policy 2018. The initiative also aims to strengthen the capacity of Union Parishads to address climate-related challenges, particularly in regions like Satkhira and Naogaon.

This initiative will strengthen inclusive and transparent local governance, empowering citizens, especially women, marginalised groups, and rural communities, to participate in local decision-making processes. Additionally, this will promote accountability and responsibility by ensuring that budget data is easily accessible, trackable, and publicly available, fostering informed decision-making and encouraging active citizen participation in local government. By making budget information easily accessible and understandable, the platform will also enable better decision-making, support climate-resilient planning, and ensure that resources are allocated in a way that addresses both physical infrastructure and human development needs. Over time, this solution will serve as a scalable model for other Union Parishads across Bangladesh, promoting broader adoption of digital governance and enhancing the responsiveness of public services to the needs of the population.

3. Objective of the Assignment

The overall objective of this assignment is to:

- Develop a comprehensive budgeting service system that will digitise the four forms required by ‘The Union Parishad (Budget Formulation and Approval, and Other Related Matters) Rules, 2016’ enabling efficient budget preparation, approval, and tracking.
- Build a system that automates the generation of related reports, provides a dashboard for real-time budget tracking, and integrates allocation vs. actual expenditure views to ensure transparency and accountability.
- Provide necessary training and support to Union Parishad officials for effective use of the system, ensuring long-term sustainability and proper governance in budget management.

4. Understanding of the Assignment

The assignment titled “**Development of a Digital Budgeting System and Capacity Building for Union Parishads to Strengthen Transparency**” is aimed at helping Union Parishads (UPs) in Bangladesh shift from the current paper-based budgeting model to a digitized, transparent, and rule-based system. It also seeks to increase the institutional capacity of UP officials to operate and use the system sustainably. This initiative has a direct impact on improving local governance, transparency, and citizen confidence, which aligns with the goals of WaterAid Bangladesh’s **GO4IMPact** program and national digital governance objectives.

Currently, UP budgeting is mostly manual, relying on paper forms and fragmented workflows. These practices create several structural issues, such as ineffective monitoring of budgetary allocations and expenditures, inadequate visibility of financial data for decision-makers, long delays during approval procedures, and insufficient citizen access to information regarding how resources are planned and used. These limitations compromise transparency and accountability, and they limit meaningful citizen participation in local governance.

The assignment, therefore, focuses on transforming the budgeting cycle including preparation, approval, reporting, and public disclosure by adopting an elaborate digital budgeting system. The proposed system will computerize the four budget forms required by the **Local**

Government (Union Parishad) Act, 2009, and the **Union Parishad (Budget Formulation and Approval, and Other Related Matters) Rules, 2016**, thereby achieving complete legal and procedural adherence. By integrating statutory requirements into the system's workflows, the solution will facilitate rule-based financial governance and reduce the likelihood of errors, omissions, or non-compliance.

One of the primary focuses of this assignment is the replacement of paper-based workflows with a digital approval process featuring automated computations, built-in validation, and role-based access control. This change will help UP officials design budgets more effectively, monitor approvals transparently, and generate standardized reports more easily. Local-level budgetary allocations and expenditures will be clearly visible through real-time dashboards, enhancing financial management and evidence-based decision-making.

Inclusion and usability are also highly valued in this assignment. The system will be mobile-first and low-band-bandwidth friendly, considering the operational realities of Union Parishads. It will be made accessible to non-technical users such as Administrative Officers, Accounts Assistants cum Computer Operators, and UDC Entrepreneurs through a Bangla interface, simplified navigation, and guided data-entry processes. Simultaneously, an easily accessible public dashboard will enable communities to view approved budget summaries and visualizations, fostering transparency and trust between UPs and citizens.

Capacity building is an essential component of the assignment. Beyond system development, the program involves formal training and practical assistance for UP officials across 39 Union Parishads. This strategy will ensure that users not only learn the technical aspects of the system but also value its contribution toward accountable and participatory governance.

Lastly, sustainability is achieved through a five-year hosting and operation and maintenance (O&M) commitment, alongside local capacity building and comprehensive documentation. Through long-term technical assistance, secure hosting, and knowledge transfer, the assignment aims to entrench digital budgeting as a sustained institutional practice rather than a short-term intervention.

Altogether, this assignment is a strategic digital governance intervention that coordinates legal compliance, technological transformation, inclusivity, and sustainability to enhance transparent, accountable, and citizen-centered budgeting at the Union Parishad level in Bangladesh.

5. Methodology and Approach

The proposed methodology ensures the delivery of a fully compliant, user-friendly, and sustainable digital budgeting system for Union Parishads (UPs), in strict accordance with the **Local Government (Union Parishad) Act, 2009**, and the **Union Parishad (Budget Formulation and Approval, and Other Related Matters) Rules, 2016**. The strategy focuses on administrative usability, statutory accuracy, data security, and long-term operational sustainability, ensuring timely delivery within the stipulated implementation period.

5.1 Review of Policy Documents

5.1.1 Local Government (Union Parishad) Act, 2009

The digitization of the UP-budget system is essential to achieve government directives and ensure quality service and governance.

Chapter 8, Clause 50 Utilization of Advanced Information technology and good governance:

- Every Union Parishad, within a certain period, shall use advanced Information technology in view of ensuring good governance.
- The Government shall provide financial, technical and other support.

- The Parishad, through Advanced information technology, shall make arrangement to inform the citizen about the particulars of all services being provided by the Government illustrated in the Citizen Charters.

Chapter 10 Budget and Audit of Accounts, Clause 57 Budget:

- Every Union Parishad shall prepare a statement of its estimated receipts and expenditure on the basis of the priority list received from the Ward Shava, for that year, in the prescribed manner, at least 60 (sixty) days before the commencement of each financial year, hereinafter referred to as the budget.
- The Union Parishad shall organise an open budget session ensuring presence of concerned standing committees and the local people and present the budget thereof and send the copy of the budget, passed in the following meeting of the Parishad, to the Upazila Nirbahi Officer (UNO).

Clause 58. Accounts:

- Accounts of the receipts and expenditure of a Union Parishad shall be kept in the prescribed manner and form.
- An annual statement of the receipts and expenditure accounts shall be prepared after the close of every financial year and present such accounts in the open budget session ensuring presence of all standing committees and the local people.
- The Union Parishad shall send a copy of the statement of the receipts and expenditure accounts to the Upazila Nirbahi Officer, within 60 (sixty) days of the following financial year; The Upazila Nirbahi Officer, in the prescribed manner, shall forward a combined statement to the Deputy Commissioner and the Deputy Commissioner, in the prescribed manner shall forward combined statement to the Government and the Commission.

Digitization of UP Budget system very much in line and required to achieve the directives of the Government and ensure quality services and governance.

5.1.2 Union Parishad (Budget Formulation and Approval and other relevant issues) Rules 2016

The formulation and approval process is elaborated further in the 2016 Rules, which prescribe four mandatory budget forms: Ka (ক), Kha (খ), Ga (গ), and Gha (ঘ). It is expected that all Union Parishads use these forms to align with government rules. The development of the Digital Budgeting System must follow these specific forms to maintain full legal compliance.

Development of Digital Budgeting System of Union Parishad should follow the above mentioned UP Budget forms to align with the Government Rules.

5.2 Approach & Design Principles

The design utilizes an administrative-first method, based on the actual budgeting workflows of Union Parishads. System design decisions are guided by the operational capabilities of UP officials, ensuring the platform remains easy to use for staff with limited technical knowledge. All digital processes are hard-coded to comply with statutory requirements, featuring validation rules, approval processes, and reporting formats defined by the 2016 Rules to minimize compliance risks. The platform will be built as a mobile-first, low-bandwidth-optimized web platform to ensure consistent performance on low-end Android and iOS devices. The architecture incorporates role-based access control (RBAC), secure authentication, and system-generated audit records to protect sensitive financial information and ensure accountability.

5.3 Inception & Co-design

An inception stage will be structured to establish the assignment's purpose, user roles, workflows, acceptance criteria, implementation milestones, and risk mitigation measures. Consultations will be conducted with Union Parishad officials and relevant authorities to validate operational requirements and governance expectations. To ensure the system remains true to statutory processes and field realities, facilitated co-design workshops will map the entire budget lifecycle from preparation and approval to reporting and disclosure. This stage will involve the finalization of digitized statutory forms, approval workflows, and the development of computer-generated report formats.

5.4 System Architecture & Development Approach

The system will be developed using a modular and scalable architecture, allowing for future functional expansion without major redevelopment. The approach focuses on the following components:

5.4.1 Frontend Development (React)

- Core UI Framework: A React-based Single Page Application (SPA) that is mobile-responsive and optimized for smartphones, tablets, and desktops.
- Bangla-First Interface: A localized UI with optional English support, focused on accessibility and low-bandwidth optimization.
- Budget Form Modules: Digitized versions of the four mandatory forms featuring guided data entry, client-side validation, auto-calculation, and real-time summaries.
- Dashboards: An Admin Dashboard for budget preparation and approval workflows (Draft → Review → Approval), and a Citizen-Facing Public Dashboard for read-only access to approved summaries, charts, and visualizations.
- Expenditure Tracking UI: Interfaces for entering and viewing expenditures against approved allocations with year-wise comparison tools.

5.4.2 Backend Development (Laravel)

- API and Core Logic: A RESTful API architecture for secure request handling and server-side validation of budgeting and reporting logic.
- Authentication and Role Management: Secure login and credential management using Role-Based Access Control (RBAC) for Admins, Data Entry staff, Approvers, and Viewers.
- Workflow Engine: Configurable approval steps with comprehensive audit trails that log all actions (submit, review, approve, reject).
- Reporting and Export Services: Automatic generation of official budget reports in PDF and other prescribed statutory formats.
- Expenditure Tracking Engine: Categorization of expenditures and mapping to specific budget heads for allocation versus actual expenditure analysis.
- Data Security and Compliance: Centralized authentication via Laravel APIs, enforced HTTPS, token-based authentication (JWT/OAuth), and audit logging. The system will comply with GDPR principles and Bangladesh data protection laws.

5.4.3 Platform Strategy

Layer	Technology	Purpose
Web Frontend	React	Powers the high-performance Administrative Portal for budget entry and the public-facing Citizen Web Dashboard.

Mobile Apps	Flutter	Provides a unified codebase for cross-platform Android and iOS applications, specifically designed for UP officials to monitor and approve budgets on the go.
Backend	Laravel	Serves as the core engine managing complex business logic, statutory workflows, secure RESTful APIs, and document generation.
Database	MySQL / PostgreSQL	Ensures a robust, relational structure to handle multi-year budgeting data, detailed expenditure tracking, and audit logs.

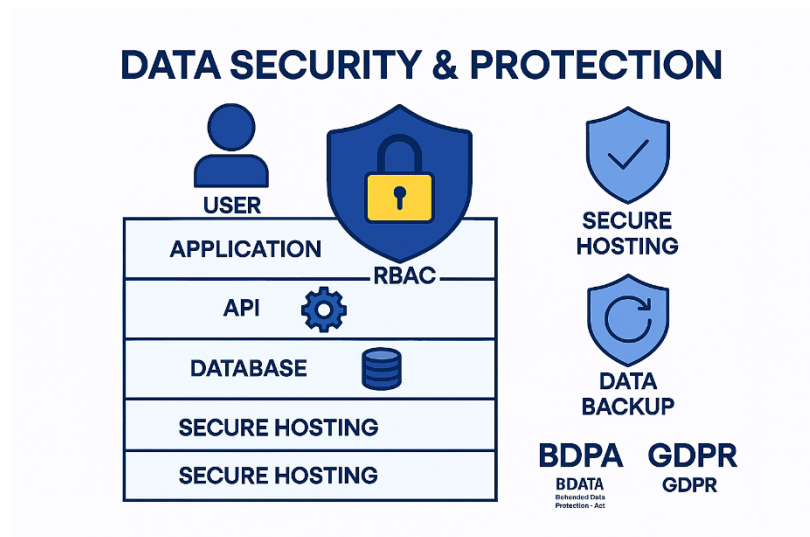
By utilizing React for the web, the system ensures a fast, responsive user experience that works across all modern browsers. The choice of Flutter for mobile development allows the team to deploy native-performance applications to both Android and iOS devices from a single source, which is critical for maintaining consistency in UI and security protocols.

The Laravel backend provides a secure foundation with built-in protections against common vulnerabilities, while the relational database (MySQL/PostgreSQL) is optimized to maintain the integrity of complex financial records over multiple fiscal years. This integrated strategy ensures that the platform is not only technologically advanced but also resilient and scalable as the project expands to all 39 Union Parishads.

5.5 Data Security & Protection

Information will be gathered using structured digital forms in line with statutory formats. Access controls will be implemented through roles, which will effectively separate the functions of data entry, review, and approval.

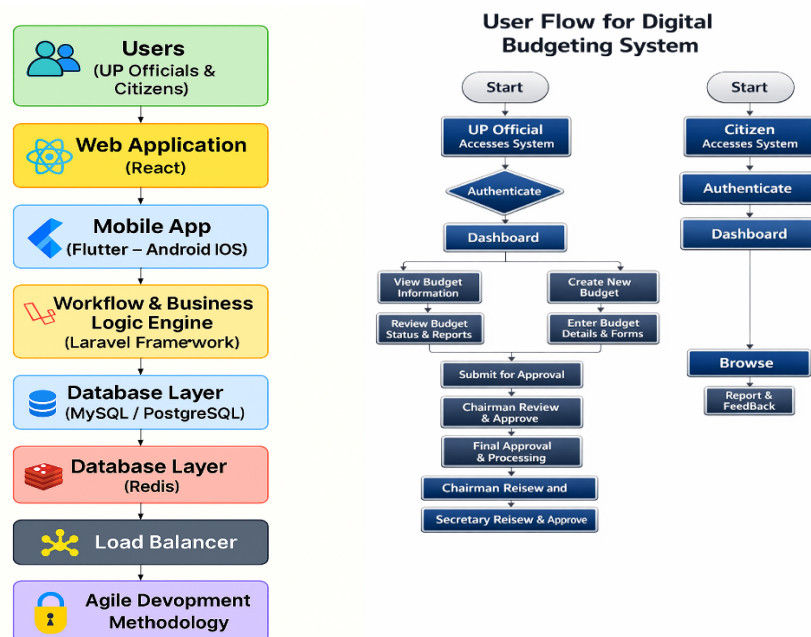
To protect data during transit, all transmissions will be encrypted using industry-standard HTTPS protocols, and access to sensitive financial information will be highly regulated through secure authentication mechanisms. Furthermore, the system will maintain a comprehensive audit trail that documents every action—including data entries, updates, approvals, and report finalizations. This ensures total traceability, reinforces financial governance, and provides a transparent history for future audits or reviews.



5.6 Accessibility & User-Centric Design

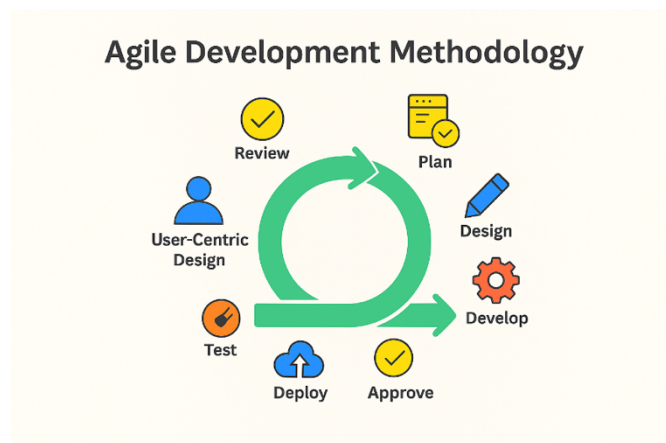
The system will be developed with a Bangla-first interface, with English options available where necessary. The data entry process will be streamlined through organised and simplified layouts, utilizing clear labels and rational form designs in compliance with statutory requirements.

To enhance usability for officials with varying technical backgrounds, the user interface will be touchscreen-friendly, featuring large action buttons, intuitive navigation, and minimized typing requirements. Furthermore, the platform will be optimized for compatibility with low-end hardware and various screen sizes, ensuring high performance across all Union Parishads regardless of local infrastructure constraints.



5.7 Development Process & Prototyping

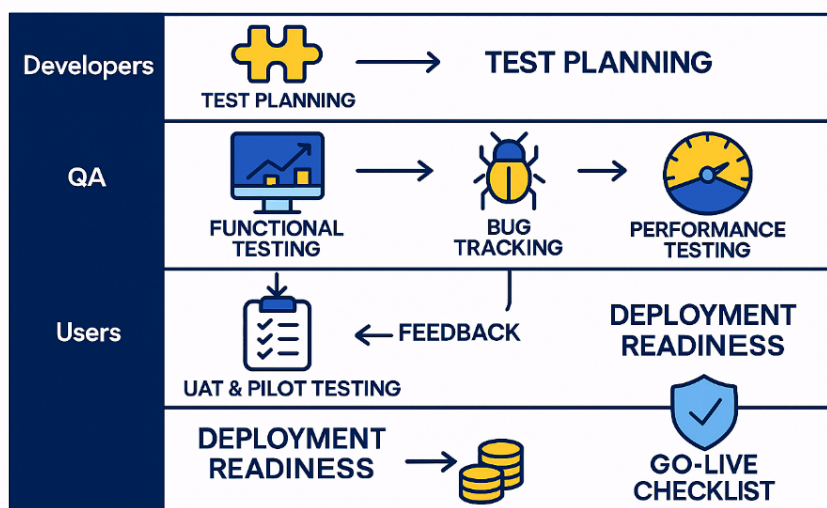
A sprint-based development cycle will be performed iteratively to ensure constant stakeholder validation and early risk identification. Development will be executed through organised prototypes, moving from initial wireframes to fully functional modules that encompass forms, workflows, reporting, and dashboards. At every phase, formal checkpoints will be incorporated to verify statutory compliance, functional correctness, and usability before progressing to the next stage.



5.8 Quality Assurance & Testing

An elaborate quality assurance (QA) plan will be implemented, including functional testing of digitized forms, calculations, approval workflows, and report outputs. Cross-device testing will be conducted specifically on commonly used, low-cost Android smartphones to ensure compatibility. The pilot phase will be guided by User Acceptance Testing (UAT) involving Union Parishad officials. Any detected issues will be prioritized and resolved before full deployment, ensuring the system is secure and production-ready for all users.

QUALITY ASSURANCE & TESTING



5.9 Training & Capacity Building

A structured and role-specific capacity-building program will be implemented for UP Administrative Officers, Accounts Assistants-cum-Computer Operators, and UDC Entrepreneurs. The training will focus on the practical application of the system, covering budget entry, approval workflows, report generation, dashboard interpretation, and managing citizen feedback. To facilitate ease of use, Bangla user manuals and quick-reference guides will be provided. Training sessions will be rolled out across all 39 Union Parishads to ensure a unified understanding and successful adoption of the digital system.

5.10 Deployment, Handover & Scaling up

5.10.4 Deployment & Handover

The system will initially be implemented in a selected group of Union Parishads on a pilot basis to allow for refinement and stabilization. Following a successful validation process, full deployment will be executed across all targeted UPs. To guarantee institutional ownership, a comprehensive handover package will be provided, including the source code, deployment documentation, user manuals, and system administration guidelines.

5.10.5 Scaling up

In the work plan phase, we have proposed a comprehensive strategy for post-deployment and sustainability support to ensure effective system adoption and long-term continuity. Following the successful implementation of Phase 2, we will initiate the scaling up of the digital budgeting system across additional Union Parishads. This expansion will be supported by relevant government agencies, such as the Local Government Division (LGD) and the National Institute of Local Government (NILG), as well as donors, INGOs, and NGOs.

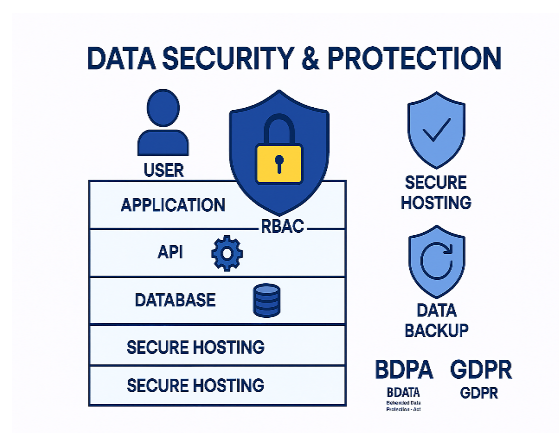
The Right2Grow project has achieved a major milestone by successfully implementing the Budget Monitoring and Expenditure Tracing (BMET) applications in 40 Union Parishads across the Khulna and Barishal divisions. To ensure long-term sustainability, participating Union Parishads have committed to continuing the initiative, with HLPF providing the necessary support to operate the application in both offline and online environments. Notably, several Union Parishads have already allocated specific budget provisions within their annual plans to maintain and operate the BMET system.

The impact of this program extends beyond its initial scope, as partner NGOs are now showing interest in adopting the BMET system within their own working areas. This expansion enables HLPF to generate its own funds, creating a self-sustaining model for the future. Furthermore, government officials from the NILG and LGD have expressed a highly positive attitude toward replicating the BMET applications through formal government channels. These officials have recommended piloting the application in additional unions across diverse geographical locations, with a particular focus on testing its effectiveness in hard-to-reach areas.

5.11 Hosting, Security Certification & Long-Term Support

The organisation will provide and manage secure application hosting for a period of five (5) years. This service includes the provision of server/cloud infrastructure, continuous uptime monitoring, and regular automated backups. To ensure data integrity and user trust, a valid security certificate (SSL/TLS) will be maintained throughout the hosting duration.

Furthermore, comprehensive maintenance and technical support will be provided for the five-year period. This support encompasses bug fixing, troubleshooting, minor system updates, and ongoing operational assistance to ensure the long-term stability and reliability of the system.



5.12 Monitoring, Evaluation & Reporting

System usage and performance will be closely monitored during the pilot and early rollout phases to determine functionality and user acceptance. Implementation challenges and potential threats will be proactively identified and addressed with appropriate corrective measures.

Upon project completion, a comprehensive Assignment Completion Report will be presented. This report will detail delivery progress and results, analyse the primary challenges encountered, and provide strategic recommendations for nationwide scaling and replication.

6. Field Assessment Summary

6.1 Summary of the Focused Group Discussions (FGDs) Findings

The assessment covered six Union Parishads in the GO4IMPact project areas of Naogaon and Satkhira to evaluate existing budgeting systems, ICT usage, challenges, and the capacity and training needs of Union Parishad representatives.

- **Current Status of Budget Preparation and Management:**

Participants in the Focus Group Discussions (FGDs) stated that Union Parishads follow the steps outlined in the Union Parishad (Budget Preparation and Approval) Rules, 2016. These steps include ward meetings, pre-budget meetings, draft budget preparation meetings, open budget meetings, approval, and submission to the Upazila Nirbahi Officer (UNO). Stakeholders collaborate at each stage of the process.

- **Key Challenges in Budget Preparation:**

Participants identified several major challenges in budget preparation: insufficient human resources, limited committee capacity, lack of accurate data, low public awareness, limited citizen participation, reluctance of elected representatives to organise meetings, and inactive standing committees. Additionally, limited funding, irregular grant disbursement, and inadequate revenue generation hinder effective budget implementation.

- **Perception Toward Digital Budget Management:**

All participating Union Parishads considered digital budget management more effective than paper-based systems. They noted that digital systems would reduce time, labor, and errors, while improving data storage, analysis, accessibility, transparency, accountability, and overall efficiency.

- **Expected Features of a Digital Budget Application:**

Participants recommended that a digital budget application include easy data entry, automated calculations and error checking, dashboards and charts, approval and verification workflows, document upload, citizen access to budget summaries, notification systems, and regular income and expenditure tracking.

- **Current Technological Capacity and Limitations:**

Most Union Parishads have access to computers, laptops, printers, and other IT equipment. However, participants reported that device configurations are often inadequate, equipment deteriorates quickly, and slow government internet connectivity creates operational challenges.

- **Existing Digital Services:**

Union Parishads currently provide several digital services, including birth registration, death certificates, trade licenses, inheritance certificates, testimonials, character certificates, holding tax services, marriage certificates, and other citizen services.

- **Challenges in Delivering Digital Services:**

Key challenges in digital service delivery include technical issues with the national or central server, low citizen awareness, a lack of interest in timely birth and death registration, and operational complexity stemming from the absence of unique forms across services.

- **Training and Capacity Development Needs:**

Participants emphasized the need for step-by-step training for all stakeholders, starting from the basic level, to ensure effective implementation of digital budget management

systems. Training should cover budget management, software operation, data entry, reporting, and digital monitoring.

6.2 Summary of KII Findings (Upazila Nirbahi Officers – UNOs)

KIIs with UNOs in selected 4 upazilas (Dhamoirhat, Niamatpur, Assasuni, and Shyamnagar) indicate strong support for introducing a digital budgeting system in Union Parishads (UPs) and identify current gaps and implementation challenges.

- **Legal and Institutional Context:**

UNOs stated that current budget preparation, approval, and publication processes, guided by the Local Government (Union Parishad) Act 2009 and the 2016 Rules, are structurally sound and functional. However, these processes remain largely manual, which limits transparency, efficiency, and citizen engagement. Digitalisation is strategically viable and aligns with national digital transformation objectives, contingent upon adequate infrastructure, a skilled workforce, and robust policy frameworks.

- **Current Budgeting Practices:**

Most UPs manage budgets manually, with limited use of digital tools. Budget preparation involves Ward Shavas, council approvals, and UNO endorsement. Monitoring and reporting depend on manual registers, vouchers, periodic reports, and audits. These manual processes contribute to data inaccuracies, delays, weak accountability, and low citizen participation.

- **Need and Potential of Digital Budgeting:**

All respondents agreed that a digital budgeting system is both necessary and timely. It is expected to:

- ⇒ Enhance transparency and accountability
- ⇒ Enable real-time monitoring and reporting
- ⇒ Reduce errors and corruption risks
- ⇒ Improve public access to budget information
- ⇒ Recommended features include automated calculations, dashboards, approval workflows, document management, citizen access portals, notifications, and multi-user access control.

- **Infrastructure and Capacity Constraints:**

UNOs noted that while the internet and electronic devices are available in many UPs, connectivity quality and equipment reliability are inconsistent. Although UP staff possess moderate digital skills, their current proficiency levels are insufficient to manage advanced systems. There is a strong need for structured, hands-on training in IT, software use, data management, and cybersecurity.

- **Transparency and Citizen Engagement:**

Digital systems are expected to improve transparency by enabling online publication of budgets and open access to financial data. Features such as feedback mechanisms, complaint systems, and participatory tools like surveys and voting can strengthen social accountability and citizen participation.

- **Financial and Resource Requirements:**

Implementation will require additional financial investment in ICT infrastructure, software development, maintenance, and capacity building. UNOs emphasized the need for skilled personnel, reliable internet, and ongoing government support to sustain the system. The

Upazila administration is expected to play a central role as coordinator, supervisor, and technical facilitator, including:

- ⇒ Providing training and technical guidance
- ⇒ Monitoring implementation through dashboards
- ⇒ Ensuring compliance and coordination with higher authorities

- **Key Risks and Challenges:**

- ⇒ Major risks identified include:
- ⇒ Weak ICT infrastructure and unreliable internet
- ⇒ Cybersecurity concerns
- ⇒ Lack of skilled personnel
- ⇒ Resistance to adopting new technology
- ⇒ Initial and recurring costs

- **Policy and Implementation Recommendations:**

- ⇒ Amendments to existing rules to formally integrate digital budgeting
- ⇒ Issuance of government directives/circulars
- ⇒ Development of user-friendly applications
- ⇒ Capacity-building programs and incentives
- ⇒ Awareness campaigns to increase citizen engagement
- ⇒ Strong coordination among UPs, Upazila administration, and the central government

Overall, UNOs strongly support transitioning to a digital budgeting system, viewing it as feasible, necessary, and impactful. However, success will depend on addressing infrastructure gaps, building technical capacity, ensuring policy support, and maintaining effective institutional coordination.

6.3 Summary of KII Findings (Deputy Director, Local Government – DDLG)

The KII with the Deputy Director of Local Government (DDLG), Naogaon, offers key district-level insights into the Union Parishad (UP) budgeting system, its challenges, and opportunities for digital transformation.

- **Legal and Policy Framework:**

The current legal framework (Union Parishad Act 2009 and related guidelines) supports participatory and transparent budgeting. However, challenges remain, including limited public participation, the absence of digital systems, insufficient human resources, and inconsistent monitoring mechanisms. The framework is partially suitable for digitalisation but requires reforms, including:

- ⇒ Mandatory use of digital platforms
- ⇒ Policies on data security and privacy
- ⇒ Legal recognition of digital documents and e-signatures
- ⇒ Integration with national e-governance systems

- **Role of DDLG:**

The DDLG office serves as the central coordinator and supervisor at the district level, responsible for:

- ⇒ Monitoring policy implementation
- ⇒ Providing technical support
- ⇒ Conducting evaluations and audits
- ⇒ Collecting and consolidating reports
- ⇒ Supporting capacity development
- **Current Budgeting Practices and Challenges:**

Budget processes remain mostly manual and paper-based, with minimal digital adoption. Reports move from UP to Upazila to District and are primarily stored as hard copies. Key challenges include:

 - ⇒ Lack of real-time data
 - ⇒ Weak monitoring and audit systems
 - ⇒ Shortage of skilled personnel
 - ⇒ Absence of standardized data formats
 - ⇒ Limited transparency and citizen access
 - ⇒ Influence of political or local pressure on accountability
- **Transparency and Accountability Issues:**

While mechanisms such as Ward Shavas and open budget meetings exist, transparency remains inconsistent because of:

 - ⇒ Low citizen participation
 - ⇒ Limited publication of budget information
 - ⇒ Restricted access to detailed financial data
 - ⇒ Weak feedback mechanisms
- **Need and Benefits of Digital Budgeting:**

The DDLG emphasized that implementing an integrated digital budgeting system is both important and timely. Anticipated benefits include:

 - ⇒ Real-time monitoring and reporting
 - ⇒ Improved transparency and accountability
 - ⇒ Faster decision-making
 - ⇒ Centralized data management for planning and analysis
 - ⇒ Better coordination across Union, Upazila, and District levels
 - ⇒ Increased citizen access and participation
- **Expected Features of Digital System:**
 - ⇒ Key features highlighted include:
 - ⇒ Easy data entry and automated calculations
 - ⇒ Dashboard and visualization tools
 - ⇒ Approval workflows and document management
 - ⇒ Citizen access to budget data

- ⇒ Notification systems and user role management
- ⇒ Full tracking of income and expenditure
- **Institutional Capacity and Skill Gaps:**

Current capacity-Existing capacity-building initiatives are insufficient and uneven. Key issues include the continuity of training

 - ⇒ Lack of practical, hands-on learning
 - ⇒ Unequal skill levels across Union Parishads
 - ⇒ Need for regular refresher training
 - ⇒ The District Resource Team (DRT) provides support but needs further strengthening.
- **Infrastructure and Implementation Challenges:**

Major barriers are:

 - ⇒ Inadequate ICT infrastructure and unreliable internet
 - ⇒ Shortage of skilled human resources
 - ⇒ Resistance to adopting new technology
 - ⇒ High initial costs and maintenance requirements
 - ⇒ Cybersecurity and data protection risks
 - ⇒ A phased, pilot-based implementation is recommended for nationwide rollout.
- **Financial and Administrative Requirements:**
 - ⇒ Successful implementation requires:
 - ⇒ Adequate budget allocation and ICT investment
 - ⇒ Integrated digital platforms
 - ⇒ Continuous technical support
 - ⇒ Standardized reporting systems
 - ⇒ Strengthened district-level supervision
- **Transparency and Citizen Participation:**
 - ⇒ Digital systems can significantly improve transparency by:
 - ⇒ Enabling real-time tracking of expenditures
 - ⇒ Providing citizen access to dashboards
 - ⇒ Allowing feedback, complaints, and participation through digital platforms
- **Key Recommendations:**

The DDLG recommended:

 - ⇒ A Comprehensive national digital budgeting policy
 - ⇒ Legal and regulatory reforms for digital adoption
 - ⇒ Establishment of centralized digital monitoring systems
 - ⇒ Strengthening district-level technical capacity
 - ⇒ Regular training and capacity building

- ⇒ Strong cybersecurity and data protection measures
- ⇒ Enhanced coordination among all administrative levels

The DDLG strongly supports the digital transformation of Union Parishad budgeting, viewing it as essential for greater transparency, accountability, and efficiency. Success will require policy reform, infrastructure development, capacity building, and coordinated implementation across all levels of government.

7. Stakeholder Analysis

To successfully implement the Digital Budgeting System, all key stakeholders must work together and stay engaged. The main stakeholders for this project are listed below:

- **WaterAid Bangladesh**

WaterAid Bangladesh will oversee the project, set its direction, and coordinate activities to ensure everything aligns with the project goals and donor requirements. As the lead organisation for the GO4IMPact programme, WaterAid Bangladesh is highly involved and invested in the project's success. There will be regular meetings, updates, and reviews to support timely decisions and keep the project on track.

- **ESDO and Rupantar**

ESDO and Rupantar are local partners working with WaterAid Bangladesh on the GO4IMPact programme. They help organise and coordinate field activities, engage with local stakeholders, communicate with Union Parishads, and manage logistics during assessments, pilots, and training sessions. Their local experience is key to making sure field activities run smoothly. Both organisations will join regular planning and review meetings.

- **Union Parishad Officials**

Union Parishad Officials, such as Administrative Officers, Accounts Assistants cum Computer Operators (AACCO), UDC Entrepreneurs, Standing Committees and elected representatives, are the main users of the digital budgeting system. They will use the system to prepare, approve, monitor, and report budgets. Since they are the core users, their involvement is crucial for the project's success. They will receive ongoing support through consultations, design workshops, hands-on training, and post-launch technical assistance.

- **Citizens and Community Members**

Citizens will benefit most from the project because the digital budgeting system is designed to improve transparency, accountability, and access to budget information. Although they play a moderate role in how the project is carried out, they care deeply about better services and clear financial information. Citizens will be engaged through public dashboards, easy-to-read budget summaries, and awareness campaigns to help them take part in local governance.

- **Government Stakeholders (LGD, NILG, UNO, and DDLG)**

Government stakeholders, including the Local Government Division (LGD), the National Institute of Local Government (NILG), Upazila Nirbahi Officers (UNOs), and Deputy Directors of Local Government (DDLGs) are responsible for ensuring the project aligns with government regulations and policies. Their involvement helps the digital budgeting system meet all necessary requirements for Union Parishad budgeting and administration. Because they are so important, there will be regular meetings, technical discussions, and workshops to support government ownership and long-term success.

8. Work Plan and Timeline

8.1 Work Plan (Timeline Overview)

The assignment will be implemented over a maximum period of four months, adhering to the TOR-specified completion timeframe. The work plan follows logical progression from inception to system handover, with parallel **preparations** for training and sustainability.

Month	Key Milestone
Month 1	Inception, stakeholder consultations, UX/UI design
Month 1–2	Core system development
Month 2–3	Prototype development and User Acceptance Testing (UAT)
Month 3–4	Pilot refinement and system stabilisation
Month 4	Full rollout, training delivery, and final handover

8.2 Detailed Work Plan with Work Chart

Phase 1: System Development, Pilot & Capacity Building (Duration: 5 Months)

Phase 1.1: Inception & Technical Planning (Weeks 1–2)

Category	Details
Key Activities	• Inception meetings with WaterAid Bangladesh and relevant stakeholders • Legal and policy review (Union Parishad Act 2009, Budget Rules 2016) • Stakeholder consultations with Union Parishad officials • Mapping of existing budgeting, approval, and reporting workflows
Technical Activities	• Definition of user roles and permissions • Finalization of functional and non-functional requirements • High-level system architecture design • UX/UI wireframes for web-based admin portal and citizen dashboard
Outputs	• Approved inception report • Stakeholder analysis and risk matrix • Draft system architecture • Approved UX/UI wireframes and user journey maps

Phase 1.2: System Design & Prototype Development (Weeks 3–8)

Category	Details
Key Activities	• Finalization of UX/UI designs based on inception feedback • Definition of approval workflows and reporting logic • Specification of dashboard views and statutory reports

Technical Activities	• Backend scaffolding using Laravel • Database schema and API specification development • Development of core modules for budgeting, approval, and reporting • Development of a clickable prototype for stakeholder review • Integration of authentication and administrative dashboard features
Outputs	• Approved system design and architecture documents • Clickable prototype of web and mobile-responsive platforms • API and database documentation

Phase 1.3: Development & Integration (Weeks 6–13)

Category	Details
Backend Development	• RESTful APIs for budgeting, approvals, reporting, and expenditure tracking • Role-based access control (RBAC) and audit logging • Automated report generation and export functionality
Frontend Development	• Web-based admin portal for Union Parishad officials • Citizen-facing public dashboard • Client-side validation and real-time calculations
Integration & QA	• End-to-end integration of frontend and backend components • Internal functional testing and bug fixing
Outputs	• Fully functional web-based digital budgeting system • Integrated admin and citizen dashboards

Phase 1.4: Pilot Deployment, Testing & Refinement (Weeks 12–14)

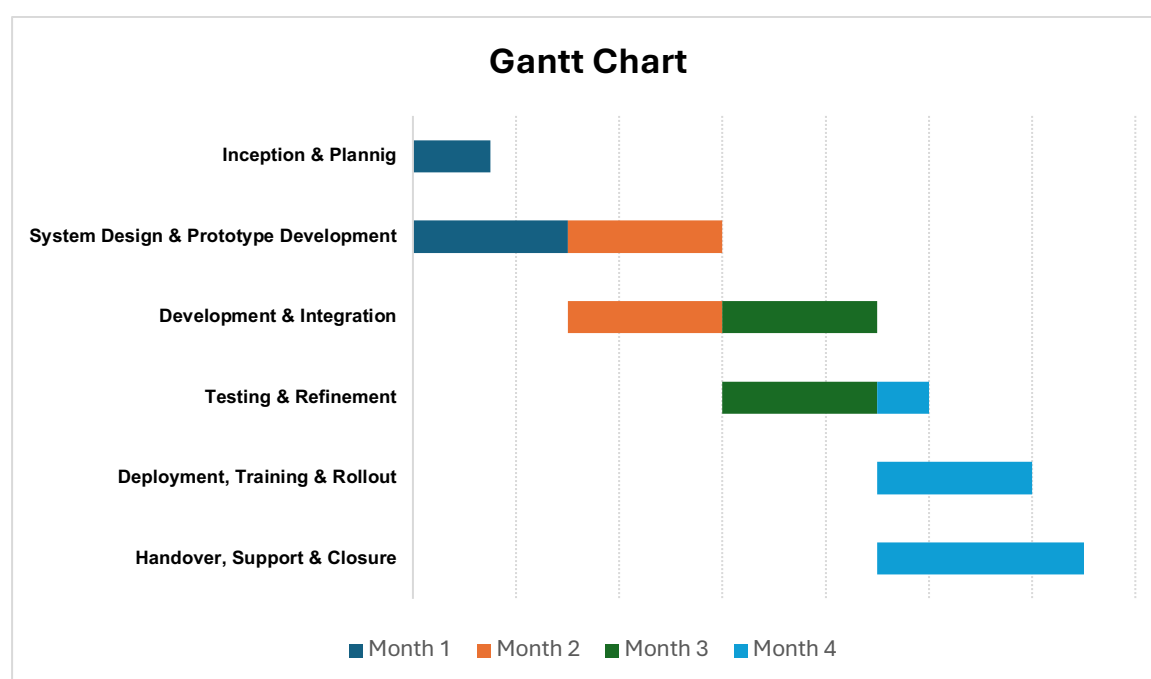
Category	Details
Key Activities	• Pilot deployment in selected Union Parishads • User Acceptance Testing (UAT) with UP officials and stakeholders • Collection and analysis of user feedback
Technical Activities	• Performance, security, and cross-device testing • Refinement of UI/UX and system workflows based on feedback
Outputs	• UAT report • Refined, production-ready system

Phase 1.5: Deployment, Training & Rollout (Weeks 15–17)

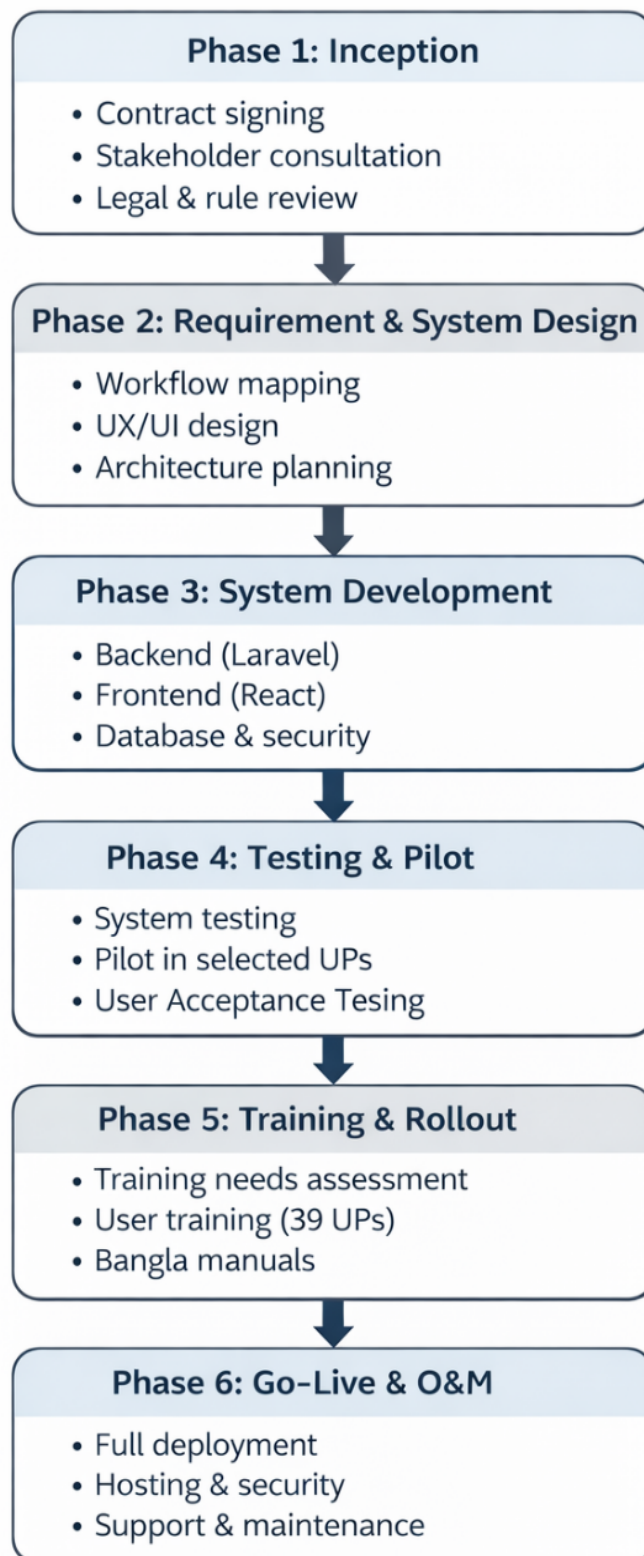
Category	Details
Key Activities	- Deployment of system into production environment with SSL security - Training rollout for UP Administrative Officers, AACCOS, and UDC Entrepreneurs - Training coverage for 39 Union Parishads
Support Activities	- Distribution of Bangla user manuals and training materials - Initial technical support and system monitoring post-deployment
Outputs	- Live production system - Trained Union Parishad officials - Training completion report and user documentation

Phase 1.6: Handover, Support & Closure (Weeks 18–20)

Category	Details
Key Activities	- Final system handover to WaterAid Bangladesh - Delivery of source code (Laravel, React) and configuration files - Submission of technical and administrative documentation
Outputs	- Complete source code repository - Deployment and system administration documentation - Final project completion report - Handover report and completion certificate



Work Plan Strategy – Digital Budgeting System



Aligned with 120 working days implementation plan

Phase 2: Post-Deployment Support & Sustainability (Duration: 6 Months)

Phase 2.1: Hands-on Technical Support (Throughout Phase 2)

Category	Details
Key Activities	• Provision of on-site and remote (on call) technical support to Union Parishads • Coordination with Union Parishad officials during defined implementation and support cycles
Technical Activities	• Troubleshooting system issues and resolving software bugs • Continuous performance monitoring and application of minor system enhancements • Execution of structured support cycles (July–August, November–December, March–April)
Outputs	• Improved system adoption, usability, and continuity of use • Documented issue resolution logs and periodic technical support reports

Phase 2.2: Mobile Application Development (Android & iOS) (Weeks 21–25)

Category	Details
Key Activities	• Planning and rollout of mobile application support for Union Parishads • Coordination with WaterAid Bangladesh and Union Parishad stakeholders to finalize mobile feature requirements
Technical Activities	• Design and development of Android and iOS mobile applications • Integration of mobile applications with the existing web-based digital budgeting system through secure APIs • Security testing, performance optimization, and cross-device compatibility testing
Outputs	• Fully functional Android and iOS mobile applications • Deployed mobile applications seamlessly integrated with the core budgeting system

Phase 2.3: Refresher Training (Weeks 26–28)

Category	Details
Key Activities	• Planning, organisation, and delivery of refresher training sessions for Union Parishad officials • Reinforcement of core system functionalities, budgeting workflows, and statutory reporting processes
Technical Activities	• Updating training materials and user guides based on feedback and system updates

	Hands-on demonstrations of advanced system features and mobile application usage
Outputs	- Four refresher training batches completed - Updated training materials, attendance records, and refresher training report

Phase 2.4: Monitoring & Follow-up (Throughout Phase 2)

Category	Details
Key Activities	- Continuous coordination and engagement with Union Parishads and WaterAid Bangladesh - Systematic collection of user feedback and implementation of follow-up actions
Technical Activities	- Ongoing system usage monitoring and analytics review to track adoption and performance - Regular data quality checks and validation of statutory reports and outputs
Outputs	- Periodic monitoring and performance reports - Consolidated user feedback summary with documented improvement actions

9. Risk Assessment and Mitigation Matrix

Identified Risk	Mitigation Strategy
Limited human resources at the Union Parishad level may hinder effective use of the digital budgeting system	Design a simplified and user-friendly system requiring minimal operational complexity; provide role-based task allocation and hands-on training for all relevant staff.
Limited technical knowledge and budgeting capacity among committee members and officials	Conduct comprehensive step-by-step training and refresher sessions on budgeting concepts, software operation, and reporting processes.
Inaccurate or incomplete data entry due to a lack of proper data/information	Integrate validation rules, mandatory fields, and automated error-checking mechanisms within the system to improve data accuracy.
Low public awareness and participation in budgeting/ward meetings	Increase public engagement through citizen-accessible dashboards, awareness campaigns, and publication of budget summaries for community review.

Resistance or reluctance of elected representatives to adopt digital systems	Engage elected representatives during design and piloting stages; demonstrate system benefits and provide orientation on transparency and efficiency improvements.
The inactivity of standing committees may undermine participatory budget oversight.	Encourage structured workflow notifications and digital approval responsibilities to strengthen committee participation and accountability.
Limited funding and irregular grants may affect the implementation of planned budget activities	Incorporate real-time budget vs. expenditure tracking tools to support better financial planning and resource prioritization.
Poor ICT equipment and outdated device configuration may limit system usability	Develop lightweight, low-configuration compatible software; recommend minimum hardware standards and optimize performance for low-spec devices.
Slow internet connectivity in Union Parishads may disrupt system operation	Optimize the system for low-bandwidth environments and ensure efficient loading/performance under weak internet conditions.
Inadequate post-training support may hinder the long-term adoption of the system.	Establish post-deployment helpdesk/technical support and provide refresher training and user manuals for sustainability.

10. Draft System Architecture

10.1 User Access Layer

This layer represents all system users, including Union Parishad officials, Super Admin (LGD), and Citizens. Users access the system through secure web browsers or mobile applications with strict role-based permissions.

10.2 Presentation Layer (UI/UX)

The presentation layer consists of three primary interfaces: the Web Admin Portal, the Super Admin Panel, and the Citizen Dashboard. The web interfaces are built using React.js, while the mobile applications are developed with Flutter. To ensure inclusivity and performance, the UI supports Bangla-native localization, accessibility standards, responsive layouts, and optimization for low-bandwidth environments.

10.3 Security & Access Control Layer

This layer ensures system security through OTP-based authentication, readiness for government SSO integration, and Role-Based Access Control (RBAC). Permissions—including Create, Edit, Approve, and Publish—are strictly enforced at this layer. Additionally, all communication is encrypted using HTTPS/TLS.

10.4 API Gateway Layer

The API Gateway acts as a secure single-entry point for all client requests. It performs request validation, authentication token verification, rate limiting, API version management, and centralized logging before forwarding requests to backend services.

10.5 Application Layer (Business Services)

The Application Layer encompasses all business logic and workflows, implemented using Node.js and Express.js. It consists of several core modules, including the Budget Management Service, the Approval Workflow Service, the Tracking & Analytics Service, the Reporting Service, and the Feedback Management Service. Business rules mandated by the UP Budget Rules 2016 are strictly enforced at this layer.

10.6 Integration Layer

The Integration Layer manages communication with external systems, including SMS gateways (for OTPs and notifications), email services, government SSO platforms (e.g., myGov), and secure cloud storage. The architecture is designed to support future integrations, such as payment gateways, through modular API endpoints.

10.7 Data Layer (MySQL / PostgreSQL)

The core data layer is implemented using relational database management systems such as MySQL or PostgreSQL. This layer stores structured data including Users, Roles, Budget Forms, Fiscal Years, Allocations, Expenditures, Approval Records, Audit Logs, and Feedback. Normalization is applied to ensure data integrity and consistency. Foreign key constraints enforce relationships among entities such as Union, Fiscal Year, Budget Head, and Approval steps. Indexing strategies are used to optimize reporting, tracking, and analytics queries.

10.8 Audit & Logging Layer

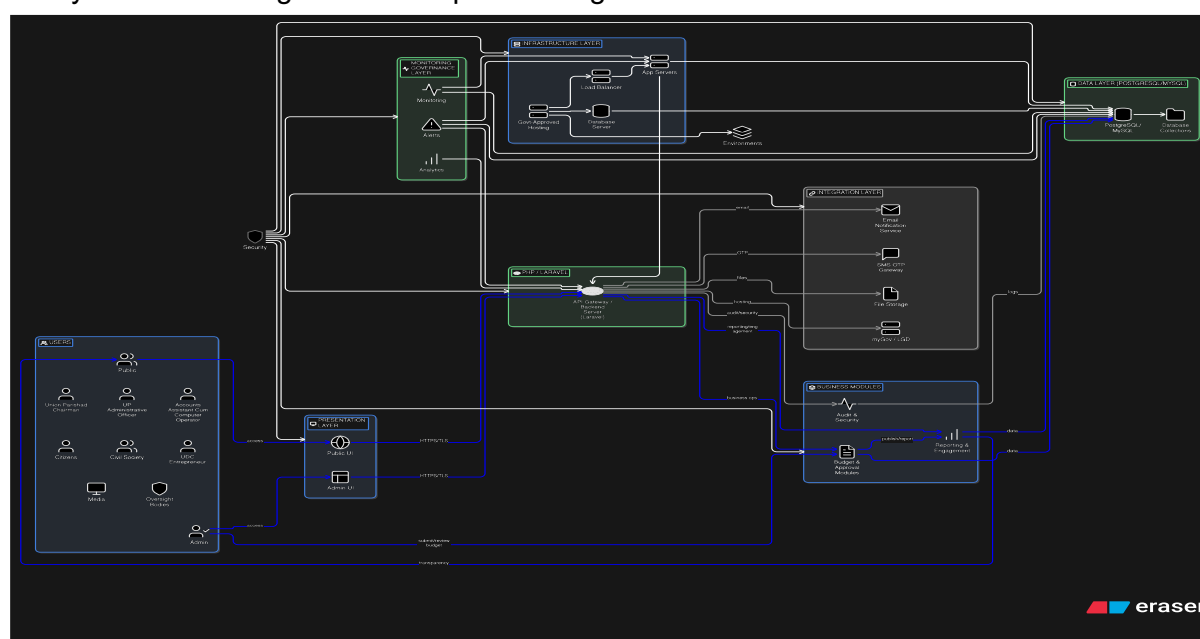
This layer records all system activities, including logins, data modifications, approvals, and configuration changes. Audit logs are immutable and time-stamped, linking user actions with corresponding data changes. This supports legal compliance, accountability, and LGD audits.

10.9 Monitoring & Analytics Layer

The monitoring layer tracks system health, database performance, API response times, concurrent users, and approval workflow bottlenecks. Dashboards provide operational insights and SLA monitoring for administrators and decision-makers.

10.10 Infrastructure & Hosting Layer

The system is hosted on a secure VPS server infrastructure. It includes database replication, automated backups, disaster recovery mechanisms, and compliance with the National ICT Policy 2018 and Bangladesh data protection guidelines.



11. UX/UI Concept note and User journey maps

11.1 UX/UI Concept note

11.1.1 Design Direction

- ⇒ Data-first interface
- ⇒ Clear and structured workflows
- ⇒ Minimal cognitive load
- ⇒ Guided interactions for non-technical users
- ⇒ Consistent layout and predictable behavior across modules

11.1.2 Platform Structure

11.1.2.1 Website (Union-Level) & Citizen Dashboard

Upload, review, approve, and provide feedback for the union parishad budget system, as well as tracking and reporting.

11.1.2.2 Super Admin Panel

Centralized control system for governance, user management, and system-wide monitoring.

11.1.3 Website-Main Functional Modules

11.1.3.1 Budget Management

Core Features:

- ⇒ Create Budget Form
- ⇒ Edit Budget (Draft Mode)
- ⇒ Submit Budget
- ⇒ View Budget History
- ⇒ Excel Upload (Template-based)
- ⇒ Budget Preview before submission

UX Structure:

- ⇒ Section-based (accordion) form layout
- ⇒ Real-time validation panel
- ⇒ Auto-calculation (total, variance)
- ⇒ Draft auto save
- ⇒ Attachment support

11.1.3.2 Approval Workflow

Core Features:

- ⇒ Submit for approval
- ⇒ Track approval status
- ⇒ View reviewer comments
- ⇒ Resubmit after revision

UX Structure:

- ⇒ Status-based system (Draft / Pending / Approved / Rejected)
- ⇒ Timeline view of actions
- ⇒ Read-only state after submission

11.1.3.3 Tracking & Analytics

Core Features:

- ⇒ Allocation vs Actual comparison

- ⇒ Monthly expenditure tracking
- ⇒ Sector-wise breakdown
- ⇒ Variance indicators

UX Structure:

- ⇒ Filter-based controls (Fiscal Year, Sector)
- ⇒ Chart-first visualization
- ⇒ Drill-down data tables

11.1.3.4 Reports

Core Features:

- ⇒ Generate reports (PDF / Excel)
- ⇒ Year-wise reporting
- ⇒ Download and sharing options

UX Structure:

- ⇒ Predefined templates
- ⇒ One-click export
- ⇒ Print-friendly layout

11.1.3.5 Feedback Management

Core Features:

- ⇒ View feedback list
- ⇒ Categorize (New / In Review / Resolved)
- ⇒ Update Status and respond

UX Structure:

- ⇒ Inbox-style list view
- ⇒ Minimal user information display
- ⇒ Simple status update flow

11.1.3.6 User & Profile Management

Core Features:

- ⇒ Profile update
- ⇒ Password and security settings

11.1.4 Super Admin-Main Functional Modules

11.1.4.1 Master Data Management

Core Features:

- ⇒ Manage Division
- ⇒ Manage District
- ⇒ Manage Upazila
- ⇒ Manage Union
- ⇒ Manage Fiscal Year

UX Structure:

- ⇒ Tab-based navigation
- ⇒ Table with Add/Edit modal
- ⇒ Bulk import support

11.1.4.2 User & Role Management (RBAC)

Core Features:

- ⇒ Create and manage users
- ⇒ Assign roles
- ⇒ Configure permissions (Create/Edit/Approve/Publish)
- ⇒ Activate/deactivate users

UX Structure:

- ⇒ Role-permission matrix
- ⇒ Hierarchical role structure
- ⇒ Status-based control

11.1.4.3 Approval Governance

Core Features:

- ⇒ Monitor all approvals
- ⇒ Override decisions
- ⇒ Audit approval activities

UX Structure:

- ⇒ Priority-based lists
- ⇒ Escalation indicators
- ⇒ Action history tracking

11.1.4.4 System Monitoring & Reports

Core Features:

- ⇒ System-wide analytics
- ⇒ Submission tracking
- ⇒ Approval performance monitoring

11.1.4.5 System Settings

Core Features:

- ⇒ Language settings (BN / EN)
- ⇒ Notification configuration
- ⇒ OTP configuration
- ⇒ System rules and preferences

11.1.4.6 Audit & Logs

Core Features:

- ⇒ Track all system activities
- ⇒ View user action history
- ⇒ Maintain compliance logs

UX Structure:

- ⇒ Log tables with filters
- ⇒ Timestamp and user tracking
- ⇒ Detailed activity records

11.1.5 Citizen Dashboard, Feedback

Core Features:

- ⇒ Total Budget, Total Expenditure, Remaining Balance cards, and feedback

- ⇒ Year-wise & sector-wise budget summaries
- ⇒ Simple visual charts (allocation vs expenditure)
- ⇒ Public report downloads (PDF / Excel)
- ⇒ Mobile-friendly, Bangla-first UI

11.2 Wireframe Designs

11.2.1 Super Admin-Main Functional Modules

The wireframe shows two main interfaces. The 'Union Budget Transparency System' includes a sidebar with navigation links like Dashboard, Budget Management, Approvals, Tracking & Analytics, Reports, Feedback, Union-Based Data Tracking, and Profile & Settings. The main content area has sections for 'Website Admin Dashboard' (with Draft, Pending, and Approved status tabs), 'Approval Details', 'Create Reports', and 'Generate Reports'. The 'Super Admin Dashboard' features a sidebar with links for Super Admin Dashboard, Master Data Management, User Management, Approval Governance, System Monitoring & Reports, and Audit & Logs. The main content area includes 'Manage Master Data' (with tabs for Divisions, Districts, Upazilas, Unions, and Fiscal Years), 'Manage Users & Roles', 'System Monitoring & Reports', and 'Audit & Logs'.

11.2.2 Budget Management

The 'Create Budget Form' wireframe includes a search bar at the top. The left sidebar shows the 'Union Porishod' logo and navigation links: Dashboard, Budget Management (highlighted), Approvals, Tracking & Analytics, Reports, Feedback, Audit Logs, Profile & Settings, and Logout. The main form area has a 'Fiscal Year' dropdown set to '2024-2025'. Below it is 'Section 1' with a 'Budget Name' dropdown set to 'Division' and a 'Description' text area. A table lists budget items with columns for Sector, Allocation, Actual, and Variance. The table shows two items: Sector A (Allocation: 100, Actual: 80, Variance: -30) and Sector B (Allocation: 50, Actual: 40, Variance: -30). A '+ Add Budget Item' button is at the bottom of the table. To the right of the table is a 'Validation Summary' section showing 'Total' as \$150, 'Total Actual' as \$120, and 'Variance' as -\$30. Below this is a 'Potential Issues' section listing 'Variance exceeded for Sector A' and 'Variance exceeded for Sector B'. The 'Attachments' section includes an 'Attach Files' button and two file uploads: 'Budget_Template.xlsx' and 'Supporting_Doc.pdf'. At the bottom right is a 'Budget Preview' button. The form has 'Save Draft', 'Submit', and 'Cancel' buttons at the top right.

Sector	Allocation	Actual	Variance
Sector A	100	80	-30
Sector B	50	40	-30
Total		\$150	-\$30
Total		\$120	-\$30

11.2.3 Approvals

Search

Union Parishod

Dashboard

Budget Management

Approvals

Tracking & Analytics

Reports

Feedback

Audit Logs

Profile & Settings

Logout

Logout

Approval Details

Resubmit for ReviewBack

Back

Approval Status

Draft

Pending Approval

Approved

Rejected

Pending Approval

Submitted on Apr 14, 2026 by Your Name)

Pending Approval

Apr 14, 2026 by Reviewer Name

Submitted for Review

Apr 14, 2026 by Your Name

Draft Saved

Apr 12, 2026

Budget Preview

Reviewer Comments

Reviewer Name

Apr 14, 2026

Budget requires re-visions. Please review the comments below. Also, ensure all attachments are included in the submission.

Response (optional)

Add your response here...

Submit Response

11.2.4 Tracking Analytics

Search

Union Parishod

Dashboard

Budget Management

Approvals

Tracking & Analytics

Reports

Feedback

Audit Logs

Profile & Settings

Logout

Logout

Tracking & Analytics

BackSearch

BackFiscal YearAll SectorsSearch

Allocation vs. Actual

5k

4k

3k

2k

0

Jul

Aug

Sept

Oct

Nov

Dec

Jan

Feb

Mar

Apr

May

Jun

Monthly Breakdown

Monthly Breakdown

Month	Allocation	Actual	Variance
July	\$40k	\$35k	-\$5k
August	\$30k	\$28k	+2k
September	\$20k	\$25k	+5k
Total	\$30k	\$38k	-\$30k

Expenditure Breakdown

Allocation

Actual

Variance

Development

Infrastructure

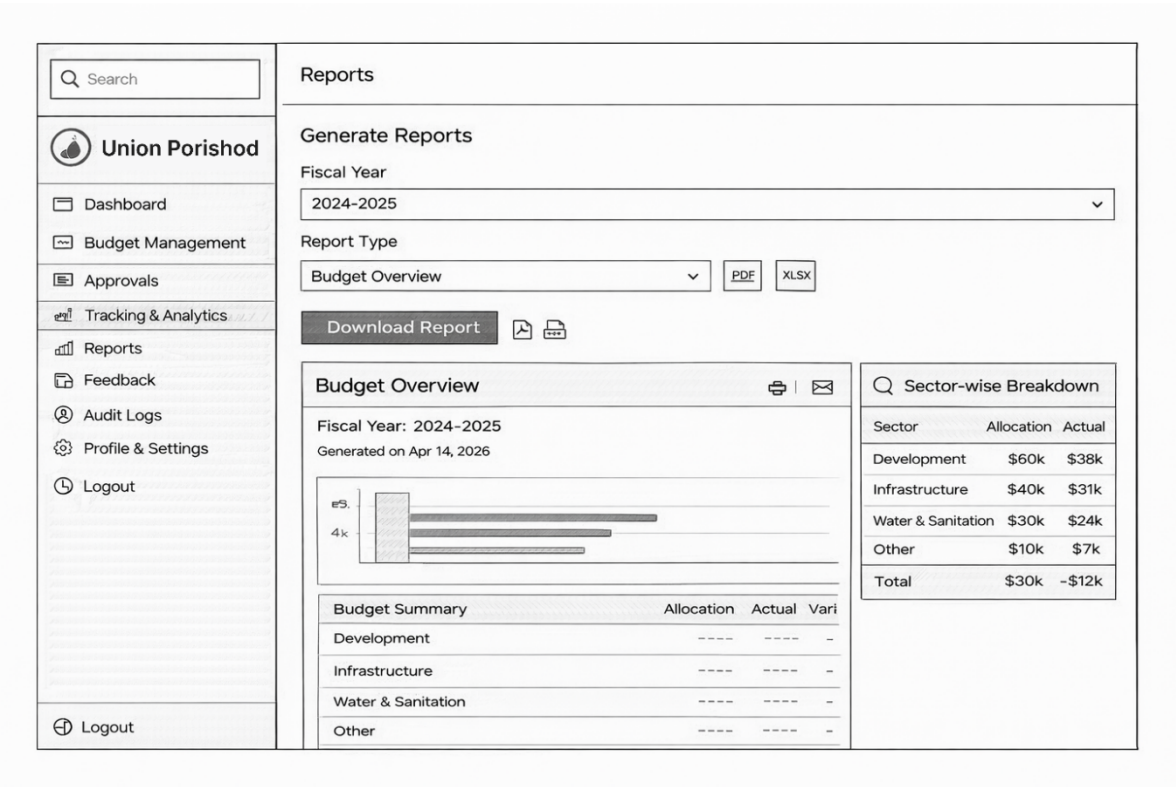
Water & Sanitation

Other -\$3k

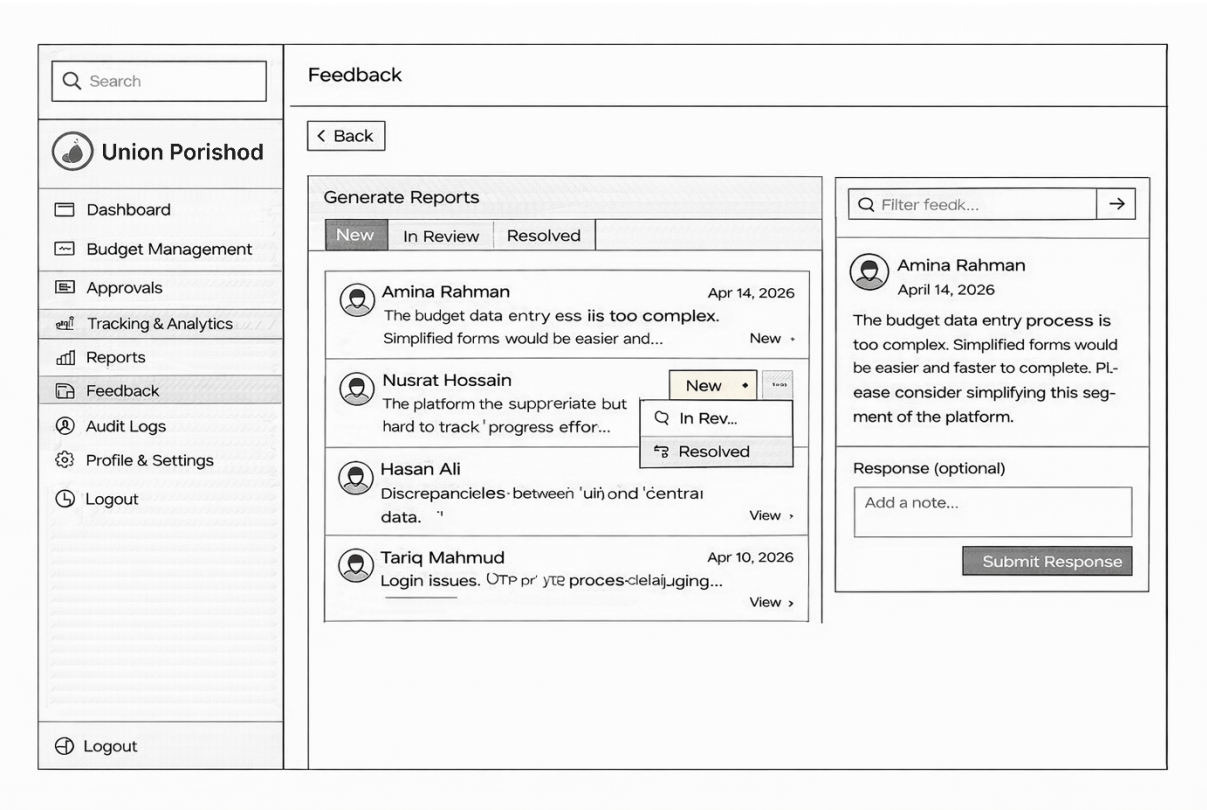
Sector-wise Breakdown

Sector	Allocation	Actual	Variance
Development	\$50k	\$38k	-\$12k
Infrastructure	\$40k	\$31k	-\$3k
Water & Sanitation	\$30k	\$24k	-\$6k
Other	\$10k	\$7k	-\$3k
Total	\$30k	\$38k	-\$12k

11.2.5 Reports



11.2.6 Feedback



11.3 User Flow

PDF File Link:

<https://drive.google.com/drive/folders/1YXf7b60V3G7xD2BuArtlgm03ijLs0MXT>

12. Expected Deliverables

In this assignment, a fully operational, legally compliant, and user-ready digital budgeting system will be delivered to Union Parishads. This delivery includes comprehensive capacity-building initiatives, in-depth documentation, and the establishment of operational readiness.

The primary technical output is the digitization of all four statutory Union Parishad budget forms, ensuring they are fully aligned with the Union Parishad (Budget Formulation and Approval, and Other Related Matters) Rules, 2016. These digitized forms will be integrated into a rule-based workflow system, ensuring that budget preparation, review, approval, and finalization strictly adhere to statutory procedures and validation rules.

An expenditure tracking module will be incorporated to streamline the recording of actual spending against allocated budgets, thereby strengthening financial management and transparency. The system will feature a secure administrative portal with Role-Based Access Control (RBAC), granting authorized Union Parishad officials the ability to perform data entry, manage approvals, generate reports, and handle system administration. To enhance transparency and citizen engagement, an open, public-facing dashboard will be established to provide approved budget overviews and simple visualizations in a read-only format.

This assignment will deliver a comprehensive Operations and Maintenance Manual, a Bangla User Guide, and a Training Manual to ensure long-term sustainability and foster institutional ownership. These resources will be paired with the coordinated training of officials across the 39 Union Parishads. The assignment will conclude with a comprehensive system handover, including the full source code, technical and deployment documentation, system credentials, and all training materials. This ensures operational continuity and allows for future scalability without external dependency.

Table-1: Deliverables and Timeline Setting

Deliverable	Description	Timeline
Inception report	- Conduct online inception meetings with Union Parishad and relevant stakeholders. - Prepare an inception report including work plan, stakeholder analysis, risk matrix, and draft system architecture. - Submit UX/UI concept notes, wireframes, and proposed user journey maps for review and approval.	1 -15 April (10 Working Days)
System design & prototype development	- Finalise approved wireframes and UX/UI designs. - Develop system architecture, database structure, and API specifications. - Deliver a clickable prototype of both mobile and web platforms for stakeholder feedback.	16 April - 30 June (50 Working Days)

	• Develop and configure the core modules for budget preparation, approval workflows, and report generation. • Integrate authentication, SMS/OTP, payment gateway, and admin dashboard functionalities. • Conduct internal testing and validation of the core system features.	
Testing & refinement	• Conduct user acceptance testing (UAT) with Union Parishad officials and relevant stakeholders. • Perform functional, security, and performance testing to ensure system stability. • Incorporate revisions and refinements based on feedback from UAT sessions. • The Agency shall conduct structured training sessions for Union Parishad officials, including UP Administrative Officers, Accounts Assistant Cum Computer Operator (AACCO), and UDC Entrepreneurs. • Training shall be rolled out across all 39 Union Parishads under the GO4IMPact programme, including hands-on practical sessions on form completion, approval workflow, dashboard use, and report generation. • The Agency shall provide Bangla user manuals, quick reference guides, and video tutorials as part of the training package.	1 - 31 July (21 Working Days)
Deployment & training	• Deploy the mobile and web applications into the production environment. • Conduct comprehensive training sessions for Union Parishad officials, providing user manuals and video tutorials in Bangla. • Provide initial technical support and monitor system stability post-deployment.	1 - 31 August (20 Working Days)
Long-term Hosting and Maintenance	• The Agency shall provide and manage application hosting for the digital budgeting system for a period of five (5) years from the date of final deployment. • This responsibility includes the provision and management of server/VPS/cloud infrastructure, domain or subdomain configuration, SSL/TLS certificate management and renewal, routine	

	backups, uptime monitoring, and basic security hardening of the system. The Agency shall provide technical maintenance and operational support for the same five (5) year period, including bug fixing, troubleshooting, minor updates, and technical assistance required to keep the system operational and stable.	
Final Report	- Deliver fully tested versions of mobile and web platforms, technical documentation, and domain and hosting access and credentials. - Submit a project completion report summarising the development process, key challenges, and recommendations for scaling. - Provide all source codes, configuration files, and deployment documentation. - Include training materials such as manuals, guides, and tutorials, along with a handover report and completion certificate - The Agency shall provide complete system documentation, deployment instructions, database schema, administrative credentials, and source code repository access, ensuring that WaterAid Bangladesh can independently operate or migrate the system if required.	1 - 21 September (15 Working Days)
Ownership, Source Code, and Future Maintenance Rights	- All software, source code, databases, system architecture, configuration files, documentation, and related materials developed under this assignment shall be the exclusive property of WaterAid Bangladesh. - Upon completion of the assignment, the Agency shall provide WaterAid Bangladesh with full access to the complete source code repository, database structure, deployment scripts, system architecture documentation, and administrative credentials, enabling independent operation and maintenance of the system. - WaterAid Bangladesh shall retain full rights to modify, update, replicate, migrate, or expand the system at its discretion without requiring further consent from the Agency.	22 September (1 Working Day)

	• If the Agency is unable or unwilling to continue system hosting, maintenance, or technical support, WaterAid Bangladesh reserves the right to assign hosting, maintenance, or further development responsibilities to any third-party service provider or internal technical team, using the delivered source code and documentation without restriction. • The Agency shall cooperate in good faith during any transition process to ensure smooth transfer of the system, hosting environment, and technical knowledge to WaterAid Bangladesh or its designated partner.	
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13. Conclusion

The proposed digital budgeting initiative aims to modernize how Union Parishads manage their finances and improve transparency, accountability, and efficiency in local government budgeting. By moving the budgeting process online and adding real-time reporting, expense tracking, and public transparency tools, the project will help Union Parishads work more effectively and meet higher standards of governance.

Field assessments show that Union Parishads have basic budgeting procedures and some ICT readiness, but they still face challenges with staffing, technical skills, data management, infrastructure, and digital literacy. These results highlight the need for a digital budgeting system that is easy to use, accessible, and tailored to local needs, along with strong training and technical support.

The approach described in this report matches national laws, stakeholder needs, and the real situation in Union Parishads. By involving users in the design, building a strong technical system, rolling out the project in phases, and offering thorough training, the project aims to provide a budgeting solution that works now and can grow in the future.

If this initiative succeeds, it will help Union Parishads manage public funds better, build citizen trust, encourage more participation in local government, and support better decision-making. The digital budgeting system could also become a model for other Union Parishads across Bangladesh, supporting the country's goals for digital governance and decentralization.

14. Annexes

14.1 Annex-1: UP Budget Form Ka

‘ইউনিয়ন পরিষদ বাজেট ফর্ম ক’

[বিধি ৩ (২) দ্রষ্টব্য]

বাজেট সার-সংক্ষেপ

বিবরণ		পূর্ববর্তী বৎসরের প্রকৃত বাজেট	চলতি বৎসরের বাজেট বা চলতি বৎসরের সংশোধিত বাজেট	পরবর্তী বৎসরের বাজেট
অংশ-১	রাজস্ব হিসাব			
	প্রাপ্তি			
	রাজস্ব অনুদান			
	মোট প্রাপ্তি			
	বাদ রাজস্ব ব্যয়			
	রাজস্ব উদ্ধৃত/ঘাটতি (ক)			
অংশ-২	উন্নয়ন হিসাব			
	উন্নয়ন অনুদান			
	অন্যান্য অনুদান ও চাঁদা			
	মোট (খ)			
	মোট প্রাপ্ত সম্পদ (ক+খ)			
	বাদ উন্নয়ন ব্যয়			
	সার্বিক বাজেট উদ্ধৃত/ঘাটতি			
	যোগ প্রারম্ভিক জের (১ জুলাই)			
	সমাপ্তি জের			

14.2 Annex-2: UP Budget Form Kha

‘ইউনিয়ন পরিষদ বাজেট ফরম খ’

[বিধি-৩ (২) এবং আইনের চতুর্থ তফসিল দ্রষ্টব্য]

----- ইউনিয়ন পরিষদের বাজেট

অর্থ বৎসর-----

অংশ-১- রাজস্ব হিসাব

প্রাপ্ত আয়

আয়			
প্রাপ্তির বিবরণ	পূর্ববর্তী বৎসরের প্রকৃত আয়	চলতি বৎসরের বাজেট বা সংশোধিত বাজেট	পরবর্তী বৎসরের বাজেট
১	২	৩	৪

অংশ ১-রাজস্ব হিসাব

ব্যয়

ব্যয়			
ব্যয়ের খাত	পূর্ববর্তী বৎসরের প্রকৃত ব্যয়	চলতি বৎসরের বাজেট বা সংশোধিত বাজেট	পরবর্তী বৎসরের বাজেট
১	২	৩	৪
১। সাধারণ সংস্থাপন/ প্রাতিষ্ঠানিক ক. সম্মানী/ভাতা খ. কর্মকর্তা ও কর্মচারীদের বেতন-ভাতাদি (১)পরিষদ কর্মচারি (২) দায়যুক্ত ব্যয় (সরকারী কর্মচারী সম্পর্কিত) গ. অন্যান্য প্রাতিষ্ঠানিক ব্যয় ঘ. আনুতোষিক তহবিলে স্থানান্তর ঙ. যানবাহন মেরামত ও জ্বালানী ২। কর আদায়ের জন্য ব্যয় ৩। অন্যান্য ব্যয় ক. টেলিফোন বিল খ. বিদ্যুৎ বিল গ. পৌর কর ঘ. গ্যাস বিল ঙ. পানির বিল চ. ভূমি উন্নয়ন কর ছ. অভ্যন্তরীণ নিরীক্ষা ব্যয় জ. মামলা খরচ ঝ. আপ্যায়ন ব্যয় ঞ. রক্ষণাবেক্ষণ এবং সেবা প্রদানজনিত ব্যয়			

অংশ ২- উন্নয়ন হিসাব

প্রাপ্তি

আয়			
প্রাপ্তির বিবরণ	পূর্ববর্তী বৎসরের প্রকৃত প্রাপ্তি	চলতি বৎসরের বাজেট বা সংশোধিত বাজেট	পরবর্তী বৎসরের বাজেট
১	২	৩	৪
১। অনুদান (উন্নয়ন) ক. উপজেলা পরিষদ খ. সরকার গ. অন্যান্য উৎস (যদি থাকে, নির্দিষ্টভাবে উল্লেখ করিতে হইবে) ২। স্বেচ্ছা প্রণোদিত চাঁদা ৩। রাজস্ব উদ্বৃত্ত			
মোট প্রাপ্তি (উন্নয়ন হিসাব)			

অংশ ২- উন্নয়ন হিসাব ব্যয়

ব্যয়			
ব্যয় বিবরণ	পূর্ববর্তী বৎসরের প্রকৃত ব্যয়	চলতি বৎসরের বাজেট বা সংশোধিত বাজেট	পরবর্তী বৎসরের বাজেট
১	২	৩	৪
১। কৃষি ও সেচ ২। শিল্প ও কুটিরশিল্প ৩। ভৌত অবকাঠামো ৪। আর্থ-সামাজিক অবকাঠামো ৫। ক্রীড়া ও সংস্কৃতি ৬। বিবিধ (প্রয়োজনে অন্যান্য খাতের এইরূপ ব্যয় উল্লেখ করিতে হইবে) ৭। সেবা ৮। শিক্ষা ৯। স্বাস্থ্য ১০। দারিদ্র হ্রাসকরণ : সামাজিক নিরাপত্তা ও প্রাতিষ্ঠানিক সহায়তা ১১। পলী উন্নয়ন ও সমবায় ১২। মহিলা, যুব ও শিশু উন্নয়ন ১৩। দুর্যোগ ব্যবস্থা ও ত্রাণ ১৪। সমাপ্তি জের			
মোট ব্যয় (উন্নয়ন হিসাব)			

14.3 Annex-3: UP Budget Form Ga

‘ইউনিয়ন পরিষদ বাজেট ফর্ম গ’

[বিধি-৫ (১) (ক) দ্রষ্টব্য]

ইউনিয়ন পরিষদ কর্মকর্তা ও কর্মচারীদের বিবরণী

অর্থ বৎসর-----

বিভাগ/শাখা	ক্রমিক নং	পদের নাম	পদের সংখ্যা	বেতনক্রম	মহার্ঘ ভাতা (যদি থাকে)
১	২	৩	৪	৫	৬

প্রদেয় ভবিষ্য তহবিল	অন্যান্য ভাতাদি	মাসিক গড় অর্থের পরিমাণ	বাৎসরিক প্রাক্কলিত অর্থের পরিমাণ	মন্তব্য
৭	৮	৯	১০	১১

14.4 Annex-4: UP Budget Form Gha

‘ইউনিয়ন পরিষদ বাজেট ফর্ম ঘ’

[বিধি-৫ (১) (খ) দ্রষ্টব্য]

ইউনিয়নের কোন বিশেষ প্রকল্প বাস্তবায়নের জন্য উপজেলা পরিষদ, জেলা পরিষদ ও সরকার হইতে
প্রাপ্ত অর্থের বিবরণী

অর্থ বৎসর-----

ক্রমিক নং	প্রকল্পের নাম ও সংক্ষিপ্ত বিবরণী	উপজেলা পরিষদ, জেলা পরিষদ ও সরকার হইতে প্রাপ্ত অর্থের পরিমাণ	চলতি অর্থ বৎসরে ব্যয়িত অথবা সম্ভাব্য ব্যয়ের পরিমাণ	সম্ভাব্য স্থিতি	মন্তব্য
১	২	৩	৪	৫	৬

14.5 Annex-5: FGD Questionnaire

Development of Digital Budgeting System and Capacity Building for Union Parishads to Strengthen Transparency

Checklist for Collecting Information for the Inception Report through Focus Group Discussion (FGD)

1. General Information

Name of Union Parishad:

Upazila:

District:

Type of participants in the discussion (Tick ✓ where applicable):

- ☐ Chairman / Administrator
- ☐ Chairperson of the Standing Committee on Finance and Establishment
- ☐ UP Administrative Officer
- ☐ Accounts Assistant cum Computer Operator
- ☐ UDC Entrepreneur

2. Budget Preparation Process

**2.1) What steps are currently followed in the budget preparation process?
(Tick ✓ where applicable)**

- ☐ Ward Shava
- ☐ Pre-Budget meeting at UP level and review of proposals received from standing committees and ward shavas
- ☐ Draft budget preparation and dissemination through the Finance and Establishment Standing Committee
- ☐ Open budget meeting
- ☐ Inclusion of citizen opinions through the Finance and Establishment Standing Committee
- ☐ Final budget preparation through the Finance and Establishment Standing Committee
- ☐ Approval in UP meeting (regular monthly meeting / special budget meeting)
- ☐ Submission to the UNO
- ☐ Addressing UNO comments (if any)

2.2) What are the major challenges in the current budget preparation process?

.....
.....

3. Current Status of the Budget System

3.1) Budget size in the last fiscal year:

Subject	Revised Amount	Expenditure Amount	Percentage
Development Budget			
Revenue Budget			
Total			

3.2) What is the nature of the current budget system?

- ☐ Paper-based
- ☐ Partially digital
- ☐ Fully digital

3.3) Do you think a digital budget system is better than a paper-based budget system?

- ☐ Yes
- ☐ No

Please explain the reason for Yes or No:

.....

.....

.....

3.4) Which budget forms are used in UP budget preparation?

.....

3.5) Are the budget forms prescribed in the Union Parishad (Budget Formulation and Approval and Other Related Matters) Rules, 2016 followed?

- ☐ Yes
- ☐ No

4. Citizen Participation and Information Exchange

4.1) Do citizens want to know budget-related information?

- ☐ Yes
- ☐ No

4.2) How is the information shared?

.....

4.3) How comfortable are you in using digital systems?

.....

4.4) Is regular internet connectivity available?

.....

4.5) Through which medium would you prefer to share budget-related information? (Tick ✓ where applicable)

☐ Website

☐ Mobile App

☐ Notice Board

☐ Others (please specify):

5. Possible Features of a Digital Budget App

5.1) If a digital budget-related app is developed, what features do you think it should have? (Tick ✓ where applicable)

☐ Easy budget data entry and editing

☐ Automatic calculation and error checking

☐ Dashboard with charts and visual summaries

☐ Approval and verification workflow

☐ Document upload (resolution, estimates, etc.)

☐ Facility for citizens to view budget summaries

☐ Notification and alert system

☐ Multiple user roles and access control

☐ Audit trail and activity monitoring

☐ Others (please specify):

5.2) Who do you think should enter budget data into the app for convenience?

☐ UP Administrative Officer

☐ Accounts Assistant cum Computer Operator

☐ UDC Entrepreneur

☐ Others:

5.3) Through which medium would you feel comfortable using the digital budget system?

☐ Mobile Phone

☐ Computer

☐ Both (Mobile and Computer)

5.4) Would it be helpful to see budget allocation vs expenditure in charts or dashboards?

.....

5.5) If citizens can view the budget through the digital budget system, do you think it would be helpful for them?

.....

6. Roles and Current Practices in Budget Management

6.1) How do you contribute to the budget preparation process?

.....

6.2) How do you currently track budget expenditures?

.....

.....

7. Technology and Existing Digital Services

7.1) What types of IT equipment/gadgets are currently used in your Union Parishad?

.....

7.2) What challenges do you face in using IT equipment/gadgets?

.....

7.3) What digital services are currently provided by your Union Parishad? (e.g., birth registration, death certificate, trade license, citizen certificate, holding tax, etc.)

.....

7.4) Is birth registration done through an online system?

☐ Yes

☐ No

7.5) What challenges are faced in birth registration?

.....

7.6) How is the death certificate service provided? Is the process digital or manual?

☐ Digital

☐ Manual

☐ Both

7.7) What challenges are faced in death certificate registration?

.....

7.8) What challenges are faced in providing digital services?

.....

8. Training and Capacity

8.1) Did you get any training on budget preparation and/or the use of digital technology in other activities you are performing?

☐ Yes

☐ No

8.2) If yes, please mention:

.....

8.3) What type of training do you think is needed for using digital budget systems and/or technology in other activities?

.....

9. Website-Related Information

9.1) Do you have a website?

☐ Yes

☐ No

If not, please mention the reason:

.....

9.2) Is the website active and regularly updated?

☐ Yes

☐ No

If not, please mention the reason:

.....

9.3) Who is responsible for regularly updating the UP website?

.....

9.4) Mobile number and email of the person responsible for regularly updating the UP website:

.....

10. Approval Levels and Workflow of UP Budget

10.1) Are the current approval levels and workflow appropriate, or are additional levels/changes needed?

.....

10.2) Proposed approval levels:

Draft Preparation Level – Accounts Assistant cum Computer Operator / Entrepreneur / Assigned Staff

Verification Level – UP Administrative Officer

Final Approval Level – UP Chairman

10.3) Optional:

Supervision / Monitoring / Intervention (if needed) – Admin / UNO / Project Authority

10.4) Approval Flow:

Accounts Assistant cum Computer Operator / Entrepreneur / Assigned Staff

↓
UP Administrative Officer (Review / Verification)

↓
UP Chairman (Final Approval)

↓
Published / Open to the Public

11. Additional Functional Requirements

11.1) Is there any provision for preparing revised or supplementary budgets during the year?

.....

11.2) Should government grants and project funds be tracked separately?

.....

11.3) Should the system support budget revisions or reallocations during the fiscal year?

.....

11.4) Should the system retain approval history and decision records for compliance purposes?

.....

11.5) Should the system allow uploading of resolutions, approval notes, estimates, and other supporting documents?

.....

11.6) Should the system include a user activity log or audit trail?

.....

We sincerely express our gratitude and thanks to you for your cooperation by providing the above information and your valuable time.

14.6 Annex-6: KII Questionnaire

14.6.1 KII Questionnaire for UNO

Development of a digital budgeting system and capacity building for Union Parishads to strengthen transparency

Respondent: Interview with Upazila Nirbahi Officer (UNO)

Basic Information

- Name:
- Upazila:
- District:

- Date of Interview:

1. Legal, Policy, and Institutional Framework

1.1 According to the Local Government (Union Parishad) Act, 2009 and the Union Parishad (Budget Preparation, Approval and Related Matters) Rules, 2016, how effective do you think the current practices of budget preparation, approval, and publication in Union Parishads are?

.....

.....

.....

1.2 Considering the existing policies, guidelines, and administrative structures related to Union Parishad budget management, how feasible do you think it is to introduce a digital budgeting system? Please share your opinion.

.....

.....

.....

1.3 What role can the Upazila administration play in introducing a digital budgeting system?

.....

.....

.....

2. Current Status of Union Parishad Budgeting

2.1 What is the current method of budget preparation, approval, preserve, and presentation in Union Parishads? (Manual / Partially Digital / Fully Digital)

.....

.....

.....

2.2 How are budget implementation, expenditure monitoring, and financial progress currently supervised in Union Parishads?

.....

.....

.....

2.3 What types of irregularities, limitations, or challenges are observed in ensuring accountability in budget management, implementation, and expenditure tracking?

.....

.....

.....

3. Digital Budget System: Needs and Possibilities

3.1 What is your opinion regarding the necessity of introducing a digital budgeting system in Union Parishads?

.....

.....

.....

3.2 If a digital budget application is developed, which features do you think should be included? (✓ mark)

- ☐ Easy budget data entry and editing
- ☐ Automated calculations and error checking
- ☐ Dashboard with charts and visual summaries
- ☐ Approval and verification workflow
- ☐ Document upload (resolutions, estimates, etc.)
- ☐ Citizen access to budget summaries
- ☐ Notification and alert system
- ☐ Multiple user roles and access control
- ☐ Tracking of all stages of income and expenditure with regular monitoring
- ☐ Others (please specify):

3.3 What potential benefits do you think a digital system for budget preparation and expenditure monitoring may bring?

.....

.....

.....

3.4 What potential risks, barriers, or challenges do you foresee in implementing a digital budgeting system?

.....

.....

.....

4. Infrastructure and Capacity

4.1 What is your opinion on the availability of internet and digital devices in Union Parishads?

.....

.....

.....

4.2 What is your opinion on the digital skills and technological capacity of the relevant officials and staff of Union Parishads?

.....

.....

.....

4.3 What kind of training would be required for Union Parishad officials and staff to effectively operate a digital budgeting system?

.....

.....

.....

4.4 What types of technical support and administrative arrangements are needed for effective implementation, maintenance, and supervision of the digital budgeting system?

.....

.....

.....

5. Transparency and Citizen Participation

5.1 How can a digital budgeting system enhance transparency in Union Parishads?

.....

.....

.....

5.2 What features can be added to strengthen social accountability through a digital budgeting system?

.....

.....

.....

6. Financial Management

6.1 Do you think the current Union Parishad budget structure, accounting system, tracking, and reporting are suitable for digital transformation?

.....

.....

.....

6.2 Will additional funding, technological investment, or human resources be required to introduce and manage a digital budgeting system? If yes, what kind of support would be needed?

.....

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7. Recommendations

7.1 Do you think any policy changes, regulatory amendments, or administrative directives are required for successful implementation of a digital budgeting system? If yes, please specify.

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7.2 What kind of support, coordination, or supervision can the Upazila administration provide for successful implementation of the digital budgeting system?

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7.3 What is your recommendations for the successful implementation of the digital budgeting system?

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We express sincere gratitude and thanks to you for your cooperation with the above information and time.

14.6.2 KII Questionnaire for DDLG

Development of Digital Budgeting System and Capacity Building for Union Parishad to Strengthen Transparency

Respondent: Deputy Director, Local Government (DDLG)

Basic Information

Name:

District:

Date of Interview:

1. Institutional and Policy Framework

1.1 What is your assessment of the effectiveness of current laws and regulations in the preparation and implementation of Union Parishad budgets?

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1.2 Is the current framework suitable for a digital budgeting system? If not, what kind of policy reforms are needed?

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1.3 What is the specific role of the DDLG office in the current budgeting system of Union Parishads?

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1.4 How can coordination between district administration and the local government division be made more dynamic in budget monitoring?

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2. Current Status of Budgeting System

2.1 How transparent do you consider the current process of budget preparation and approval in Union Parishads?

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2.2 How are budget-related reports currently collected and stored at the district level?

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2.3 What are the main challenges in budget implementation and expenditure tracking?

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2.4 What are the key challenges related to irregularities or accountability in budget management?

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3. Digital Budget System: Needs and Possibilities

3.1 What is your opinion on the importance of introducing an integrated digital budgeting system in Union Parishads?

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3.2 If a digital budget application is developed, which features should be included?

- ☐ Easy budget data entry and editing
- ☐ Automated calculations and error checking
- ☐ Dashboard with charts and visual summaries
- ☐ Approval and verification workflow
- ☐ Document upload
- ☐ Citizen access to budget summaries
- ☐ Notification and alert system
- ☐ Multiple user roles and access control
- ☐ Tracking income and expenditure
- ☐ Others:

3.3 How much easier will district-level budget monitoring and reporting become with a digital system?

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3.4 What potential risks, barriers, or challenges do you foresee in implementing a digital budgeting system?

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3.5 What is your opinion on implementing digital budgeting across all Union Parishads nationwide?

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4. Institutional Capacity and Skill Development

4.1 Are current initiatives sufficient to enhance digital skills of Union Parishad officials and staff?

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4.2 What is the capacity of the District Resource Team (DRT) in strengthening technical capabilities?

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5. Transparency and Citizen Participation

5.1 How can a digital budgeting system improve financial transparency and citizen accountability?

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5.2 How can digital platforms support social accountability and public participation?

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6. Financial and Administrative Aspects

6.1 What kind of administrative support and coordination are needed at national and district levels?

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6.2 What are the potential risks and mitigation measures?

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7. Recommendations

7.1 What policy and administrative recommendations do you have for the successful implementation of a digital budget system?

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7.2 What kind of changes are needed at the district level to strengthen the monitoring of the digital budget system?

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7.3 Other comments:

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We express sincere gratitude and thanks to you for your cooperation with the above information and time.