Performance Dashboard Template

Community-Controlled Water Governance Monitoring

Overview

The Performance Dashboard Template provides comprehensive frameworks for real-time monitoring of water governance transformation while maintaining community ownership of evaluation processes. This dashboard integrates technical indicators with community-defined success measures, enabling adaptive management that serves community empowerment and water justice.

Core Innovation: Combines automated data collection with participatory evaluation, ensuring monitoring serves community learning and improvement rather than external accountability or surveillance.

Key Principles:

- Community Ownership: Communities control what is measured and how data is used
- Real-Time Adaptation: Immediate feedback enabling rapid response and improvement
- Holistic Assessment: Integration of technical, social, environmental, and cultural indicators
- Transparent Governance: Open data and democratic oversight of monitoring systems
- Learning Orientation: Evaluation serving community learning rather than external judgment

Digital Dashboard Implementation

Real-Time Monitoring Systems

Automated Data Collection Infrastructure:

Sensor Network Integration:

Water Quality Sensors:

- pH, turbidity, chlorine residual, bacterial contamination
- Real-time data transmission every 15 minutes
- Community alert system for quality exceedances
- Mobile app integration for community monitoring
- Data validation through community testing

Flow and Pressure Monitoring:

- Water flow rates and system pressure monitoring
- Pump performance and energy consumption tracking
- Distribution network leak detection and alerts
- Storage tank level monitoring and management
- Automated system optimization and control

Environmental Monitoring:

- Weather station data integration (rainfall, temperature)
- Watershed health indicators (soil moisture, vegetation)
- Air quality monitoring and health impact assessment
- Noise level monitoring for community wellbeing
- Ecosystem biodiversity and habitat monitoring

Community Data Collection Integration:

Mobile Data Collection Apps: Household Survey Tools: - Water access, quality, and satisfaction surveys - Health impact and waterborne disease tracking - Economic impact and affordability assessment - Cultural appropriateness and community satisfaction - Gender and social equity impact evaluation Community Participation Tracking:

- Meeting attendance and participation logging
- Voting and decision-making participation tracking
- Volunteer hours and community contribution recording
- Leadership development and capacity building tracking
- Conflict resolution and problem-solving documentation

Service Delivery Assessment:

- Daily service delivery quality and reliability
- Customer complaint and grievance tracking
- Emergency response effectiveness evaluation
- Maintenance and repair activity logging
- Community feedback and suggestion collection

Dashboard Visualization and Interface

Real-Time Performance Displays:

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Executive Summary Dashboard (Updated every hour):
Water Security Status:
Safe Water Access: 94% (Target: 100%)
Service Reliability: 87% (Target: 95%)
Water Quality Compliance: 98% (Target: 100%)
Community Satisfaction: 8.7/10 (Target: 8.0)
Financial Health:
Cost Recovery Rate: 103% (Target: 100%)
Affordability Index: 2.1% income (Target: <3%)</pre>
Reserve Coverage: 8.5 months (Target: 6 months)
Revenue Diversification: 65% (Target: 75%)
Community Empowerment:
Participation Rate: 78% (Target: 70%)
Women's Leadership: 52% (Target: 50%)
Youth Engagement: 43% (Target: 50%)
Transparency Rating: 9.1/10 (Target: 8.0)
Environmental Impact:
Ecosystem Health: 82/100 (Target: 80)
Carbon Neutrality: 95% (Target: 90%)
Biodiversity Index: 74% (Target: 80%)
Waste Reduction: 88% (Target: 85%)
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Trend Analysis and Predictive Monitoring:

Historical Trend Visualization:

Performance Over Time:

- 5-year trend analysis with seasonal adjustments
- Comparative analysis with baseline and targets
- Early warning trend identification and alerts
- Community milestone celebration and recognition
- Continuous improvement trajectory tracking

Predictive Analytics:

- Service demand forecasting and capacity planning
- Financial sustainability projection and planning
- Environmental impact prediction and mitigation
- Community development trajectory and goal achievement
- Risk assessment and preventive action planning

Community-Specific Customization:

Cultural and Contextual Adaptation:

Local Language Integration:

- Dashboard interface in community languages
- Voice narration for accessibility and inclusion
- Cultural symbol and imagery integration
- Traditional calendar and timing recognition
- Community-specific indicator naming and description

Community Priority Focus:

- Community-selected priority indicator highlighting
- Customizable dashboard layout and organization
- Community-defined alert thresholds and triggers
- Local celebration and recognition integration
- Community story and narrative integration

Mobile and Offline Accessibility

Mobile-First Design:

Smartphone and Tablet Optimization:

Responsive Design:

- Automatic screen size adaptation and optimization
- Touch-friendly interface with accessibility features
- Offline functionality for data viewing and collection
- Low-bandwidth operation for limited connectivity
- Battery-efficient operation for extended use

Community Accessibility:

- Voice command and audio feedback integration
- Large text and high contrast options for visual accessibility
- Simple navigation and intuitive user interface
- Multi-language support with automatic translation
- Community training and support for digital literacy

Data Synchronization:

- Automatic data sync when connectivity available
- Conflict resolution for simultaneous data entry

- Backup and recovery for data protection
- Privacy and security protection for community data
- Community ownership and control over data sharing

Offline Functionality:

Local Data Storage and Processing:

Offline Dashboard Access:

- Key indicator display without internet connection
- Historical data access and trend visualization
- Community data collection and temporary storage
- Basic analysis and reporting functionality
- Emergency mode operation during connectivity loss

Community Backup Systems:

- Physical dashboard displays in community centers
- Printed report generation and distribution
- Radio and SMS alert systems for critical information
- Community messenger and notification systems
- Manual data collection backup procedures

Early Warning and Alert Systems

Predictive Monitoring and Risk Assessment

Early Warning Signal Detection:

Service Delivery Warning Indicators: Water Quality Alerts: □ Contamination risk levels exceeding safety thresholds □ Source water quality degradation trends □ Treatment system performance decline indicators □ Distribution network contamination risks □ Community health impact early warning signs System Performance Alerts: □ Infrastructure failure risk assessment and prediction □ Maintenance need prediction and scheduling □ Capacity shortfall prediction and planning □ Energy and resource efficiency decline alerts □ Financial sustainability risk warning indicators Community Impact Alerts: □ Service equity and access gap warning indicators □ Community satisfaction decline trend alerts □ Participation and engagement reduction warnings □ Conflict and tension early warning indicators □ Vulnerable population impact alerts

Financial and Sustainability Warning Systems:

Economic Risk Assessment: Financial Stress Indicators:

□ Revenue shortfall trend analysis and prediction
□ Cost increase impact assessment and planning
□ Debt service coverage ratio decline warnings
□ Reserve fund depletion risk assessment
□ Community affordability stress indicators
Market and Economic Risk:
□ External economic shock impact assessment
□ Energy and material cost increase impact prediction
□ Market demand change impact evaluation
□ Regulatory and policy change impact assessment
□ Regional economic cooperation risk evaluation
Sustainability Risk Assessment:
□ Long-term financial sustainability risk indicators
□ Technology obsolescence and upgrade need prediction
□ Climate change impact and adaptation need assessment
□ Community capacity and leadership succession planning
□ Regional cooperation and network sustainability evaluation

Community Alert and Response Systems

Community Communication Networks:

Multi-Channel Alert Distribution:
Emergency Communication:
$\ \square$ SMS and mobile app push notification systems
□ Community radio and loudspeaker announcement networks
□ Door-to-door messenger and community leader networks
□ Social media and digital communication platforms
□ Traditional signaling and community assembly systems
Targeted Communication:
□ Vulnerable population priority alert and support systems
□ Community leader and decision-maker notification networks
□ Technical team and maintenance crew alert systems
□ Regional partner and mutual aid network communication
□ External support and emergency response coordination
Community Response Coordination:
□ Community emergency response team activation protocols
□ Resource mobilization and mutual aid coordination
□ Decision-making and priority setting processes
□ External assistance request and coordination protocols
□ Recovery and adaptation planning activation

Participatory Response Planning:

Community Response Protocols:
Service Disruption Response:
□ Alternative water source activation and distribution
□ Community rationing and priority allocation protocols
□ Vulnerable population protection and support measures
□ Emergency sanitation and hygiene facility activation

□ Community health protection and disease prevention
System Failure Response:
□ Emergency repair and restoration protocols
□ Temporary service provision and alternative systems
□ Community labor mobilization and coordination
□ External technical assistance request and coordination
□ Community communication and information sharing
Financial Crisis Response:
□ Emergency funding and resource mobilization
□ Community contribution and mutual aid activation
□ Cost reduction and efficiency improvement measures
□ External financial assistance request and advocacy
□ Long-term sustainability and recovery planning

Performance Analysis and Adaptive Management

Continuous Improvement Frameworks

Monthly Performance Review Protocols:

Community Performance Assessment:
Participatory Evaluation Process:
□ Community scorecard completion and discussion
□ Service delivery quality and satisfaction assessment
□ Financial performance and affordability evaluation
□ Governance effectiveness and participation review
□ Environmental impact and sustainability assessment
Stakeholder Feedback Integration:
□ Household and individual user feedback collection
□ Community organization and group feedback integration
□ Technical staff and volunteer feedback evaluation
□ External partner and supporter feedback assessment
□ Regional network and peer community feedback integration
Performance Analysis and Action Planning:
□ Trend analysis and performance pattern identification
□ Root cause analysis for performance challenges
□ Success factor identification and replication planning
□ Improvement opportunity identification and prioritization
□ Action plan development and implementation assignment

Quarterly Strategic Assessment:

Strategic Performance Evaluation:
Goal Achievement Assessment:
□ Annual goal progress evaluation and trajectory analysis
□ Community vision and long-term objective progress review
□ External commitment and obligation compliance assessment
□ Regional cooperation and network contribution evaluation
□ International solidarity and movement participation review

Learning and Knowledge Management

Community Learning Systems:

Systematic Learning Processes: Experience Documentation: Success story and best practice documentation Challenge and failure analysis and learning documentation Innovation and adaptation experience recording Community wisdom and traditional knowledge integration Intergenerational knowledge transfer and preservation
 Knowledge Sharing and Exchange: Community-to-community learning and exchange programs Regional network participation and contribution International solidarity and movement learning engagement Research and academic collaboration and knowledge contribution Policy and advocacy learning and evidence contribution
Capacity Building and Education: Community education and skill development programs Leadership development and succession planning Technical capacity building and innovation support Cultural preservation and traditional knowledge education Youth engagement and intergenerational leadership development

Innovation and Adaptation Management:

Continuous Innovation Processes: Technology and System Innovation:
□ Community-controlled technology development and adaptation
□ Traditional knowledge and modern technology integration
□ System design and process improvement innovation
□ Resource efficiency and circular economy innovation
□ Community ownership and governance innovation
Social and Cultural Innovation:
□ Community empowerment and participation innovation
□ Cultural preservation and adaptation innovation

- □ Conflict resolution and peace-building innovation
 □ Gender equity and social justice innovation
 □ Intergenerational cooperation and leadership innovation

 Regional and Movement Innovation:
 □ Regional cooperation and mutual aid innovation
 □ Network development and solidarity innovation
 □ Policy advocacy and systemic change innovation
 □ International cooperation and learning innovation
 □ Movement building and transformation innovation
- **X** Dashboard Implementation Tools and Templates

Community Dashboard Setup Guide

Phase 1: Community Preparation and Planning (Weeks 1-4):

Week 1: Community Consultation and Buy-in □ Community education about monitoring and evaluation benefits □ Community consultation on monitoring priorities and indicators
□ Community concerns and questions about data collection and privacy
□ Community agreement on monitoring approach and governance
□ Community committee formation and responsibility assignment
Week 2: Indicator Selection and Customization
□ Community priority indicator identification and selection
□ Community-specific indicator customization and adaptation
□ Alert threshold setting and trigger point determination
□ Community success definition and measurement approach
□ Cultural and traditional indicator integration and respect
Week 3: System Design and Configuration
□ Dashboard layout and interface design with community input
□ Data collection method and frequency determination
□ Technology and equipment selection and procurement
□ Training and capacity building plan development
□ Privacy and data security protocol establishment
Week 4: Pilot Testing and Refinement
□ Pilot system deployment and community testing
□ Community feedback collection and system refinement
□ Training delivery and community capacity building
□ Final system configuration and customization
□ Launch planning and community celebration preparation

Phase 2: System Deployment and Training (Weeks 5-8):

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Week 5-6: Technical Installation and Configuration

□ Hardware installation and network configuration

□ Software deployment and system integration

□ Data source connection and automation setup

□ Security and backup system implementation

□ Testing and quality assurance completion
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Week 7-8: Community Training and Capacity Building
□ Community monitoring committee training and certification
□ Community member dashboard usage training
□ Data collection and analysis training for community monitors
□ Alert response and problem-solving training
□ Ongoing support and troubleshooting capacity development

Data Collection Templates and Protocols

Community Survey Templates:

Household Water Satisfaction Survey (Monthly):
Basic Information: Date: Surveyor: Household ID: Location: Household Size: Income Level:
Service Quality Assessment: 1. Water availability (hours per day): 2. Water quality satisfaction (1-10): 3. Water pressure adequacy (1-10): 4. Service reliability (1-10): 5. Cultural appropriateness (1-10):
Affordability and Access: 6. Monthly water expenditure: \$ 7. Affordability assessment (1-10): 8. Payment method preference: 9. Support needed for payment: 10. Equitable access rating (1-10):
Community Participation: 11. Participation in water governance (frequency): 12. Satisfaction with participation opportunities (1-10): 13. Transparency of information (1-10): 14. Conflict resolution effectiveness (1-10): 15. Overall community empowerment (1-10):
Environmental and Health Impact: 16. Health improvement since service (1-10): 17. Environmental quality improvement (1-10): 18. Traditional practice accommodation (1-10): 19. Cultural and spiritual needs met (1-10): 20. Future sustainability confidence (1-10):

Community Focus Group Discussion Guide:

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Water Governance Community Discussion (Quarterly):

Discussion Topics:

1. Service Quality and Satisfaction:

- What aspects of water service are working well?
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- What challenges or problems need attention?
- How has service quality changed over time?
- What improvements would you like to see?
- 2. Community Participation and Governance:
 - How effectively can community members participate in water decisions?
 - Are all community groups represented and heard?
 - How transparent and accountable is water governance?
 - What governance improvements are needed?
- 3. Equity and Inclusion:
 - Are all community members receiving equitable access and treatment?
 - What barriers exist for marginalized groups?
 - How can service delivery be more inclusive?
 - What support is needed for vulnerable populations?
- 4. Cultural and Traditional Integration:
 - How well does water service respect cultural and traditional practices?
 - Are traditional knowledge and practices being preserved and integrated?
 - What cultural needs are not being met?
 - How can cultural integration be improved?
- 5. Sustainability and Future Planning:
 - How sustainable is the current water system financially and environmentally?
 - What are the main threats to long-term sustainability?
 - How prepared is the community for future challenges?
 - What investments or changes are needed for the future?

Documentation Protocol:

- □ Audio recording with community consent
- □ Note-taking by community member and facilitator
- □ Summary preparation and community validation
- $\hfill\Box$ Action item identification and responsibility assignment
- □ Follow-up planning and timeline establishment

Dashboard Configuration Templates

Community Priority Indicator Selection Worksheet:

Community Dashboard Customization:
Step 1: Priority Area Selection (rank 1-5, 1 = highest priority)
□ Water Access and Service Quality: Rank
□ Financial Sustainability and Affordability: Rank
□ Community Governance and Participation: Rank
□ Environmental Protection and Climate Resilience: Rank
□ Cultural Preservation and Traditional Integration: Rank
Step 2: Specific Indicator Selection (select top 3 in each priority area)
Water Access and Service Quality:
□ Population with safely managed water access
□ Service reliability and availability hours
□ Water quality compliance and community satisfaction
□ Cultural appropriateness and accessibility
□ Emergency response and backup system effectiveness

Financial Sustainability and Affordability: □ Community affordability and cost recovery rates □ Community economic impact and wealth building □ Revenue diversification and sustainability □ Financial transparency and democratic oversight □ Long-term financial security and reserves
Community Governance and Participation: Community participation and democratic engagement Leadership diversity and representation Transparency and accountability effectiveness Conflict resolution and community harmony Community empowerment and self-determination
Environmental Protection and Climate Resilience: □ Ecosystem health and biodiversity enhancement □ Climate adaptation and resilience building □ Resource efficiency and circular economy □ Pollution reduction and environmental restoration □ Traditional ecological knowledge integration
Cultural Preservation and Traditional Integration: □ Traditional practice continuation and respect □ Cultural protocol integration and accommodation □ Spiritual and ceremonial needs fulfillment □ Intergenerational knowledge transfer □ Community identity and pride strengthening
Step 3: Alert Threshold Setting For each selected indicator, set community alert thresholds: Indicator: Green Zone (good performance): Yellow Zone (attention needed): Red Zone (immediate action required): Community response protocol:

Technology Integration and Digital Tools

Community-Controlled Digital Infrastructure

Open Source Dashboard Platforms:

Community Ownership Requirements: Data Sovereignty Protection: Community ownership of all data and intellectual property Local data storage and processing with community control	
□ Transparent algorithms and open source code	
□ Community authority over data sharing and access	
□ Privacy protection and surveillance prevention	
Technical Accessibility:	
□ Low-cost hardware requirements for community affordability	
$\ \square$ Low-bandwidth and offline functionality for rural and remote areas	

□ Multi-language support with community language integration □ Accessibility features for people with disabilities □ Simple interface and community training support	
Community Governance Integration:	
□ Democratic governance of technology decisions and updates	
□ Community technical capacity building and ownership	
□ Local technical support and maintenance capability	
□ Community innovation and adaptation authority	
□ Regional network cooperation and solidarity support	

Mobile and Communication Integration:

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Community Communication Networks:
SMS and Mobile Integration:
SMS alert and notification systems for critical information
□ Mobile data collection and reporting capability
□ Voice message and audio communication for accessibility
□ Community language and cultural communication integration
□ Emergency communication and rapid response systems
Community Radio and Media Integration:
□ Community radio programming and information sharing
□ Local media and communication platform integration
□ Community storytelling and narrative sharing
□ Cultural and traditional communication method integration
□ Regional network and solidarity communication
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Blockchain and Distributed Technology

Transparent Governance and Accountability:

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Blockchain for Community Governance:
Democratic Decision Recording:
□ Community vote and decision recording with transparency
□ Financial transaction and budget tracking with accountability
□ Resource allocation and distribution tracking
□ Performance data and monitoring result verification
□ Community agreement and commitment tracking
Community-Controlled Blockchain:
□ Community ownership and governance of blockchain systems
Energy-efficient and environmentally sustainable blockchain
□ Integration with traditional governance and decision-making
□ Cultural protocol and traditional knowledge protection
□ Regional cooperation and network blockchain integration
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Peer-to-Peer Learning and Solidarity:

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Decentralized Knowledge Sharing:
Community Learning Networks:
□ Community-to-community experience and knowledge sharing
□ Traditional knowledge documentation and protection
□ Innovation and adaptation sharing with intellectual property protection
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- □ Regional solidarity and mutual aid coordination
- □ Global movement and network participation and contribution

Implementation Support and Resources

Technical Assistance and Capacity Building

Dashboard Implementation Support Organizations:

- **Community Technology Cooperatives**: Community-controlled technology development and support
- Open Source Water Monitoring Networks: Collaborative technology development and sharing
- Participatory Evaluation Organizations: Community-controlled monitoring and evaluation support
- **Digital Democracy Platforms**: Technology for democratic governance and participation **Training and Education Resources**:
- Community Monitoring Training Programs: Hands-on training in participatory evaluation
- Digital Literacy and Technology Training: Community capacity building for technology use
- Data Analysis and Interpretation Training: Community skills for data understanding and use
- **Democratic Governance and Participation Training**: Community empowerment and selfdetermination

Technology and Equipment Resources

Hardware and Equipment Suppliers:

- Community Technology Cooperatives: Affordable hardware with community support
- Appropriate Technology Organizations: Technology designed for community control
- Open Source Hardware Networks: Community-controlled technology development
- Regional Technology Sharing Networks: Equipment sharing and cooperative purchasing

Software and Platform Resources:

- Open Source Dashboard Platforms: Community-controlled monitoring software
- Community Data Collection Tools: Mobile and web-based data collection systems
- Participatory Evaluation Platforms: Tools for community-controlled evaluation
- Democratic Governance Software: Technology for transparent and participatory governance

Call to Community-Controlled Monitoring

For Communities Ready to Implement Performance Dashboards

Immediate First Steps (This Month):

- 1. Community Education: Organize sessions about monitoring benefits and community control
- 2. Priority Setting: Community discussion about monitoring priorities and success indicators
- 3. **Committee Formation**: Establish community monitoring committee with diverse representation
- 4. **Resource Assessment**: Evaluate community capacity and technology access for dashboard implementation
- 5. Partner Identification: Connect with technical assistance and support organizations

Three-Month Implementation Goals:

1. **Dashboard Design**: Complete community-controlled dashboard design and configuration

- 2. System Installation: Install and configure monitoring technology with community training
- 3. Data Collection: Begin community data collection and dashboard operation
- 4. Training Completion: Build community capacity for dashboard operation and maintenance
- 5. **Evaluation Integration**: Integrate monitoring with community decision-making and governance **One-Year Transformation Vision:**
- 1. Adaptive Management: Use dashboard for continuous improvement and adaptive management
- 2. Community Empowerment: Strengthen community governance through monitoring and evaluation
- 3. Performance Improvement: Achieve measurable improvements in water access and governance
- 4. **Knowledge Leadership**: Share experience and support other communities in monitoring implementation
- 5. Regional Networks: Participate in regional monitoring networks and solidarity cooperation

For Technical Professionals and Support Organizations

Technical Service Opportunities:

- Dashboard Design: Community-controlled dashboard development and customization
- Training Delivery: Community capacity building in monitoring and evaluation
- Technical Support: Ongoing support for dashboard operation and maintenance
- Innovation Development: Community-controlled technology innovation and adaptation **Institutional Support Priorities:**
- Open Source Development: Contribute to community-controlled monitoring technology
- Capacity Building: Support community empowerment through monitoring and evaluation
- Network Building: Connect communities for peer learning and solidarity
- Policy Advocacy: Advocate for community-controlled monitoring and evaluation standards

For Funders and Policy Makers

Funding and Policy Priorities:

- Community Control: Fund monitoring systems that prioritize community ownership and control
- Capacity Building: Support community technical capacity and empowerment
- Open Source: Prioritize open source and community-controlled technology development
- Network Support: Fund peer learning networks and solidarity cooperation

Integration Opportunities:

- Accountability Standards: Integrate community-controlled monitoring with accountability requirements
- Evidence-Based Policy: Use community monitoring data for policy development and improvement
- Regional Cooperation: Support regional monitoring networks and cooperation
- International Learning: Share community monitoring innovations globally

Community-Controlled Monitoring Transforms Governance: When communities control monitoring and evaluation, they build capacity for continuous improvement, democratic governance, and community empowerment. This Performance Dashboard Template provides comprehensive tools for community-controlled monitoring that serves learning and improvement rather than external accountability or surveillance.

Start Your Community Dashboard Today:

- Assess Community Readiness: Use the preparation tools to evaluate community capacity and interest
- Design Community-Controlled System: Customize dashboard indicators and systems for community priorities
- **Build Community Capacity**: Train community members in monitoring, evaluation, and technology use
- Connect with Networks: Join regional and global networks of communities using participatory monitoring

Contact for Dashboard Implementation Support:

- Email: globalgovernanceframework@gmail.com
- Subject: "Performance Dashboard Implementation"
- Include: Community location, monitoring priorities, technology capacity, and support needs

Monitoring is Community Power: When communities control their own monitoring and evaluation, they build the information systems needed for effective governance, continuous improvement, and community empowerment. Community-controlled dashboards demonstrate that accountability can serve communities rather than controlling them.

The Performance Dashboard Template is part of the Global Framework for Water & Sanitation (WASH) Governance. For complete framework access, monitoring tools, and global network connection, visit globalgovernanceframework.org