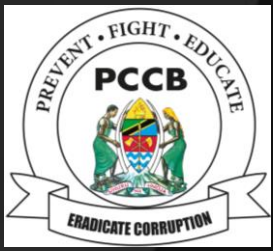# Leveraging Capabilities of AI for Transparency and Accountability in Tendering

Presenter: Joseph Gamba (Researcher)

Project Period: 29 Nov 2023 - 22 May 2025

PI: Dr Michael S. Mollel (PCCB)

Co-PI: Prof Baraka Maiseli (UDSM)

Project Timeline and Current Phase

- Phase 1 (Current): Data collection and processing (Nov 2023 - Feb 2024)

- Phase 2: Data analysis and AI model development (Mar 2024 - Aug 2024)

- Phase 3: Model testing and refinement (Sep 2024 - Dec 2024)

- Phase 4: Deployment and evaluation (Jan 2025 - May 2025)

- Status: In Phase 1 - Data collection and processing
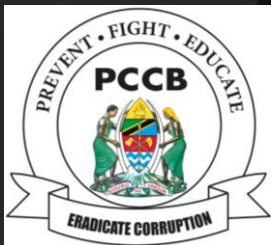
Data Collection Goals

- Initial Objective: Collect a comprehensive dataset of corruption cases related to procurement

- Adapted Objective: Collect any cases prosecuted by PCCB due to the limited availability of procurement-specific cases

- Purpose: Train and fine-tune the machine learning model to identify irregularities in tender documents
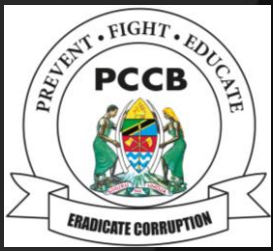
Unforeseen Challenges in Data Collection

- **Primary Challenge:**
  - Lack of digital data; most documents in hardcopy or handwritten format

- **Impact:**
  - Delayed progress in data collection
  - Increased resource requirements for digitization
  - Potential delay in subsequent project phases

- **Lesson Learned:**
  - Importance of digital preparedness and data management strategies in research
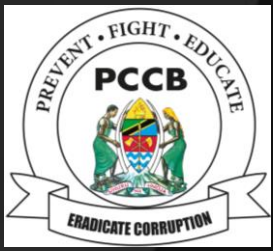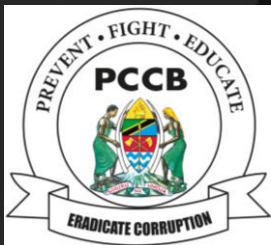
Overcoming Data Collection Hurdles

- PCCB Financial Support:
  - Engaged staff across regions for scanning and digitizing documents
  - Result: 1,400 case files collected and digitized

- Adaptive Strategy:
  - Broadened scope to include all PCCB-prosecuted cases
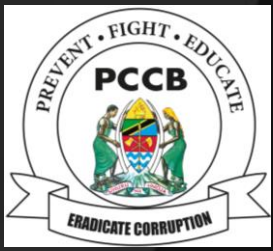 - Ensures a larger dataset for more robust AI model training
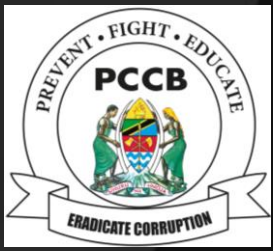
Ensuring Data Privacy and Legal Compliance

- Challenge:
  - PCCB law requires anonymization before sharing data with partners (e.g., University of Dar es Salaam)
  - Time-consuming process to convert 1,400 scanned files to typed format

- Legal Implications:
  - Strict adherence to data protection laws
 - Maintaining confidentiality of sensitive information

Efficient Data Processing While Ensuring Privacy

- Secretarial Support:
  - Budget allocation for 28 secretaries (1 per region)
  - Cost: 33,600,000 TZS (40,000 TZS daily rate, 30 days)

- Technological Solutions:
  - Exploring automated tools for efficient conversion
  - Ensuring tools comply with data privacy requirements

- Timeline Adjustment:
  - Reallocating timelines for subsequent activities to accommodate delays

Strategic Financial Management

- **Original Plan:**
  - Equipment budget (AI machine): 71,000,000 TZS
- **Budget Optimization:**
  - Collaboration with the University of Dodoma for machine access
  - Reallocation of 33,600,000 TZS to secretarial support
- **Result:**
  - Cost-effective solution without compromising project quality
  - Demonstrates adaptability and resource optimization
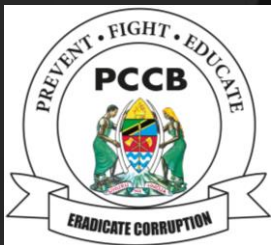
Operational Costs and Accountability

- Online Meetings:
  - 6 meetings, 13 participants
  - Budget: 3,700,000 TZS for internet bundles
  - Cost-saving measure: Shifted from in-person to online meetings

- Specialized Tasks:
  - Two-day intensive session for file extraction: 170,000 TZS
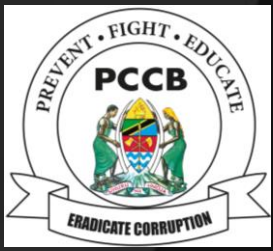 - Quarterly report writing (PI and Co-PI): 2,000,000 TZS

Financial Summary and Project Outlook

- Financial Summary:
  - Total Project Budget: 150,000,000 TZS
  - First Quarter Disbursement: 88,678,289 TZS (59% of budget)
  - First Quarter Expenditure: 9,805,000 TZS
  - Cash Balance: 78,873,289 TZS

- Next Steps:
  1. Complete file conversion and anonymization (Est. completion: June 2024)
  2. Proceed with data analysis and AI model development (Jun-Aug 2024)
  3. Continuous budget monitoring and adaptive planning
  4. Regular financial and technical reporting to COSTECH

Financial Summary and Project Outlook

- Project demonstrates fiscal responsibility, adaptability, and commitment to legal compliance

- Strategic budget reallocations ensure project continuity despite challenges

- On track for developing an AI-driven solution for transparency in tendering processes