



The State Of Maintenance: Can Government And Citizens Cooperate For Improved Water Access?

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This review verifies the reproducibility of the exhibits included in the paper “*The State Of Maintenance: Can Government And Citizens Cooperate For Improved Water Access?*”.

Contents in this review:

1. Main findings
2. List of exhibits and reproducibility status
3. Reproduction Environment

Main findings

- **Every exhibit in the main section of the paper and in the appendix were reproduced accurately**
- The code was successfully executed on a new computer after:
 1. Updating the file path in *01_master.do* do-file and running the code.
- The output demonstrates consistent stability across multiple runs. Specifically, executing the code two times consecutively yielded identical results.
- The code takes approximately 3 minutes to run.
- We conducted our reproducibility analysis based on the paper shared by the authors in the reproducibility package.
- **Verification Process and Data Handling:**
 - The reproducibility package relies on three types of data: open, forthcoming, and restricted data. See details in the README file).
 - Open data is included in the public reproducibility package.
 - Reviewers used forthcoming/restricted data provided directly by the authors to conduct the reproducibility verification, and this is not included in the public reproducibility package. The data is forthcoming on the World Bank Microdata Library.
 - *data_hash_report.csv* lists the SHA256 hashes of all files in the Data folder to support data integrity checks. Users who acquire the forthcoming/accessible/limited-access/restricted data can use this file to verify that the data has not been altered.
- **Reproducibility Summary:**

- **Data:** Some data is restricted/forthcoming and has not been included in the reproducibility package. For more details, please refer to the README file.
- **Code:** All code files (from cleaning to analysis) are included in the reproducibility package.
- **Outputs:** All outputs are generated by code included in the reproducibility package.
- **Dependencies environment:** The reviewers reproduced an existing environment for dependencies using dependency files or an environment metadata file provided by the authors.

List of exhibits and reproducibility status

Results in the Main Section of the Paper

- **Figure 1 Reproduced.** Verified against Table B2 of the paper.
- **Figure 2a Reproduced.** Verified against Figure XA_Survival rate CDMT - Balanced panel Aug2018 Full_Below5yo sample combined.png.
- **Figure 2b Reproduced.** Verified against Figure XB_Survival rate CDMT - Balanced panel Aug2018 Full_Below5yo sample combined.png.
- **Figure 3 Reproduced.** Verified against Figure X_hardware_issues_share_aggregate.png.
- **Figure 4 Reproduced.** Verified against Fig4.png.
- **Table 1 Reproduced.** Verified against TableX_Distribution_Point_Functionality_binary_baseline_func_0.5_0.tex.
- **Table 2 Reproduced.** Verified against TableX_Village_Maintenance_Index_3_Panels_equal_weight_non-std_binary_baseline_func_0.5_0.tex.
- **Table 3 Reproduced.** Verified against TableX_District Maintenance Index 3 Panels_equal_weighting_non-std_binary_baseline_func_0.5_0.tex.
- **Table 4 Reproduced.** Verified against TableX_Village_Investments_by_Sector Consistent Sample.tex.
- **Table 5 Reproduced.** Verified against TableX_Channels_binary_baseline_functionality_0.5_0.tex.

Results in the Annex

- **Figure B1** Does not show analysis results.
- **Figure B2 Reproduced.** Verified against Figure X_Map treatment villages.png.
- **Table B1 Reproduced.** Verified against AppendixX_Spillovers.tex.
- **Table B2** Not verified. Table was manually constructed by the authors by compiling manually extracted figures from a literature review.
- **Table B3** Does not show analysis results.
- **Table B4** Does not show analysis results.

- **Table B5** Does not show analysis results.
- **Table B6 Reproduced.** Verified against AppendixX_balance_table.tex.
- **Table B7 Reproduced.** Verified against TableX_District Maintenance Index 3 Panels_anderson.tex.
- **Table B8 Reproduced.** Verified against TableX_Village_Maintenance_Index_3_Panels_Anderson.tex.
- **Table B9 Reproduced.** Verified against TableX_Distribution_Point_Functionality.tex.
- **Table B10 Reproduced.** Verified against TableX_Village_Maintenance_Index_3_Panels_equal_weight_non-std.tex.
- **Table B11 Reproduced.** Verified against TableX_District Maintenance Index 3 Panels_equal_weighting_non-std.tex.
- **Table B12 Reproduced.** Verified against AppendixX_Village Maintenance Index Full Variables (Raw scores).tex.
- **Table B13 Reproduced.** Verified against AppendixX_District Maintenance Index Full Variables (Raw scores).tex.
- **Table B14 Reproduced.** Verified against TableX_VE0Invest_3Panels_Interaction.tex.
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- **Table B8 Reproduced.** Verified against AppendixX_baseline comparison functionality.tex.
- **Table B9 Reproduced.** Verified against AppendixX_District Maintenance Index Full Variables (Raw scores).tex.
- **Table B10 Reproduced.** Verified against AppendixX_Village Maintenance Index Full Variables (Raw scores).tex.
- **Table B11 Reproduced.** Verified against TableX_VE0Invest_3Panels_Interaction.tex.
- **Table B12 Reproduced.** Verified against TableX_VE0Invest_3Panels_Interaction.tex.
- **Table B13 Reproduced.** Verified against TableX_VE0Invest_3Panels_Interaction.tex.
- **Table B14 Reproduced.** Verified against TableX_VE0Invest_3Panels_Interaction.tex.
- **Table B12** Does not show analysis results.

Reproduction Environment

Paper exhibits were reproduced on a computer with the following specifications:

- OS: Windows 11 Enterprise
- Processor: Intel(R) Xeon(R) Gold 6226R CPU @ 2.90GHz
- Memory available: 32.0 GB
- Software version: Stata 19.5 MP, R 4.5.1