

README

Fast Action for Floods: RCT Evidence on Forecast-based Cash Transfers from Bangladesh and Nepal

This README template is designed to be included in reproducibility packages to provide directions for replicating the results in the research paper. The sections mentioned below should be included to guide users through the replication process. Contents

1. [Overview](#)
2. [Data Availability](#)
3. [Instructions for Replicators](#)
4. [List of Exhibits](#)
5. [Requirements](#)
6. [Code Description](#)
7. [Folder Structure](#)

Overview

The raw data with PII removed is stored on the World Bank's Microdata Repository. All files should be stored in the "Raw" folder for each country. The administrative data and treatment status files should be placed in the third round of data. The do files clean the data and save them in the "Intermediate" folder. From there variable construction creates the outcome variables. Analysis do files replicate the figures and tables in the working paper draft.

Data Sources

Survey data

WFP conducted data collection in Nepal 2022 and Bangladesh 2024 for this study. In Nepal the WFP Nepal country office directly hired enumerators and WFP provided supervision of data collection and training. All 3 rounds of data collection were done in person using SurveyCTO platform. In Bangladesh World Bank's DECDI provided supervision of data collection and training. Phone surveys were conducted in Bangladesh for Round 1-2, while in person surveys were done in Round 3. Data is licensed and not included in the package, users must download these datasets from Microdata Library.

Bangladesh: <https://microdatalib.worldbank.org/index.php/catalog/16881>

Nepal: <https://microdatalib.worldbank.org/index.php/catalog/16882>

Water level data Nepal

Included in the package

- **Filename:** 280 chisapani staff gauge GOGI.csv
- **Source:** Nepal Department of Hydrology & Meteorology; Babarmahal, Kathmandu, Nepal
- **URL:** www.dhm.gov.np
- **Access year:** 2025 requested in person at their Kathmandu office

Water level data Bangladesh

Included in the package

- **Filename:** water_level.dta
- **Source:** Flood Forecasting and Warning Centre (FFWC), Bangladesh Water Development Board
- **URL:** <https://www.ffwc.gov.bd>
- **Access year:** 2024 downloaded from their website daily using a web script.

Statement about Rights

- I certify that the author(s) of the manuscript have legitimate access to and permission to use the data used in this manuscript.
- I certify that the author(s) of the manuscript have documented permission to redistribute/publish the data contained within this replication package. Appropriate permission are documented in the LICENSE.txt file.

Instructions for Replicators

New users should follow these steps to run the package successfully:

1. Open master do file.do.
2. Change global projectfolder to your local Dropbox file path.
3. Run "master do file.do"
4. Exported figures and tables are in "Dropbox folder/output/"

List of Exhibits

The provided code reproduces: All tables and figures in the paper are exported to the output/figures and output/tables folders.

Exhibit name	Output filename	Script	Location
Figure 1	water level bangladesh.png	r 01 graph water level.do (part1)	output/figures
Figure 2	water level nepal.png	r 01 graph water level (part 2)	output/figures
Table 1	combined_1.tex	r 02 main result food consumption.do	output/tables
Table 2	combined_2.tex	r 03 main result psych zscores.do	output/tables
Table 3	bgd_food_consumption.tex	r 04 trad counter bgd food consumption.do	output/tables
Table 4	bgd_psych.tex	r 05 trad counter bgd psych.do	output/tables
Table A1	balance_check_nep.tex	r 06 balance table.do (part 2)	output/tables
Table A2	balance_check_bgd.tex	r 06 balance table.do (part 1)	output/tables
Table A3	fcs_raw_r1.tex	r 07 fcs disaggregation.do	output/tables
Table A4	fcs_raw_r2.tex	r 07 fcs disaggregation.do	output/tables
Table A5	fcs_raw_r3.tex	r 07 fcs disaggregation.do	output/tables
Table A6	combined_4.tex	r 08 main result non-food spending.do	output/tables
Table A7	combined_3.tex	r 09 main result borrow assets savings.do	output/tables
Table A8	non_ag_earnings.tex	r 10 main result non-ag earnings.do	output/tables
Table A9	after_flood_ag.tex	r 11 main results after flood ag.do	output/tables
Table A10	migration.tex	r 12 main result migration.do	output/tables
Table A11	fcs_acceptable.tex	r 13 disaggregated fcs acceptable.do	output/tables
Table A12	flood_damage2.tex	r 14 flood damage.do	output/tables

Requirements

Software Requirements

List all software requirements, including versions, dependencies, libraries, environment setup, and packages installed

Stata version 16.1

- ietoolkit
- iefieldkit

- pdslasso
- winsor2
- sdecode
- raschtest
- xfill

Memory and Runtime and Storage Requirements

Code was run using latest version of MacOS. Replication folder requires 2.05 GB of free space. 16GB memory is recommended but should also run on 8GB.

Code Description

It's important to install xfill manually from <https://www.sealedenvelope.com/>

Master do file.do sets the required paths, install required commands from ssc and then run cleaning, construction and analysis do files in your dropbox folder. Outputs are stored in outputs folder. There you can update the replication.tex file using Latex editor to refresh using the tables/figures you generated. List of do files that run each task are given below:

*clean and construct nepal data

```
qui do "$projectfolder/do files/nepal/round1/round1_MasterDofile.do"
```

```
qui do "$projectfolder/do files/nepal/round2/round2_MasterDofile.do"
```

```
qui do "$projectfolder/do files/nepal/round3/round3_MasterDofile.do"
```

*clean and construct bangladesh data

```
qui do "$projectfolder/do files/bangladesh/round1/round1_MasterDofile.do"
```

```
qui do "$projectfolder/do files/bangladesh/round2/round2_MasterDofile.do"
```

```
qui do "$projectfolder/do files/bangladesh/round3/round3_MasterDofile.do"
```

*analysis

```
qui do "$projectfolder/do files/analysis/r 01 graph water level.do"
```

```
qui do "$projectfolder/do files/analysis/r 02 main result food consumption.do"
```

```
qui do "$projectfolder/do files/analysis/r 03 main result psych zscores.do"
```

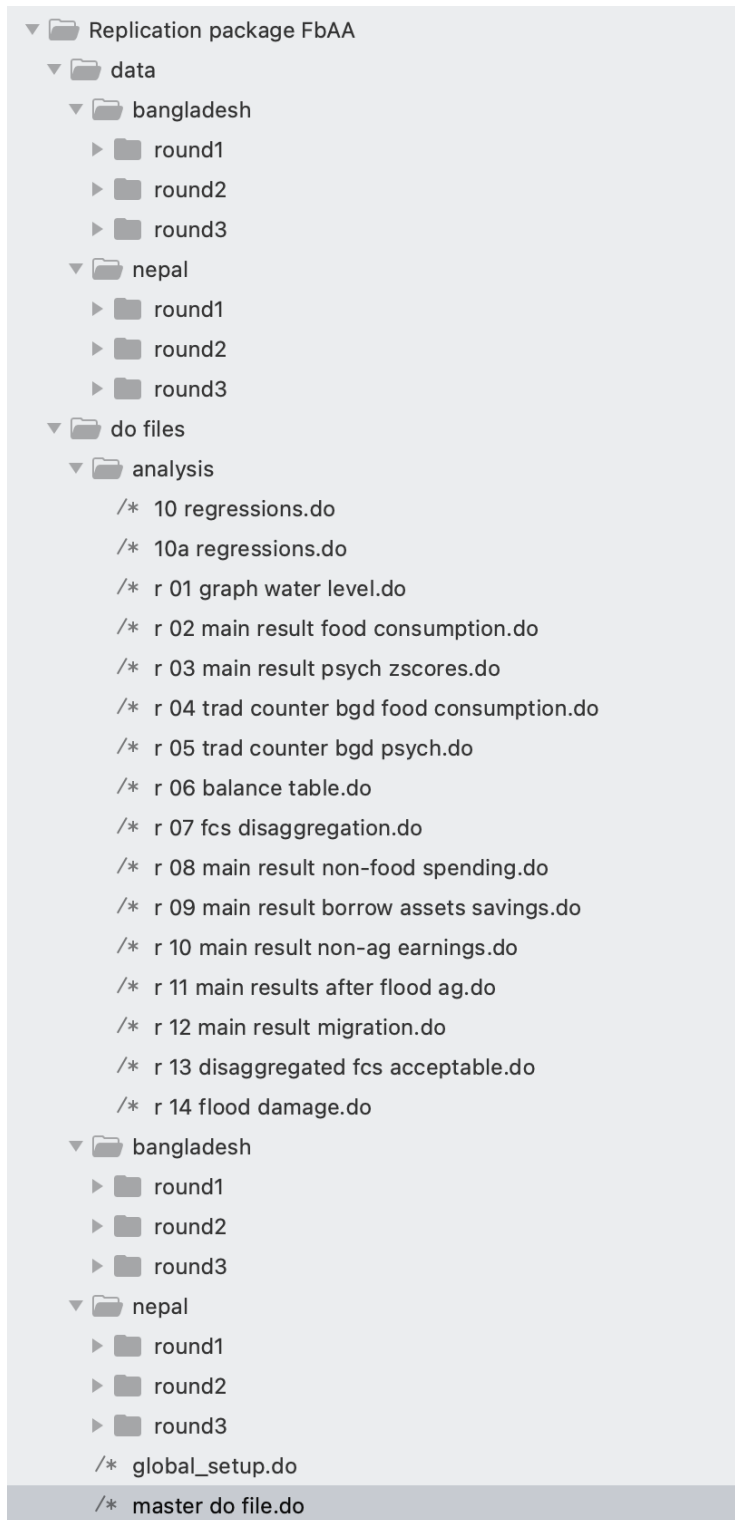
```
qui do "$projectfolder/do files/analysis/r 04 trad counter bgd food consumption.do"
```

```
qui do "$projectfolder/do files/analysis/r 05 trad counter bgd psych.do"
```

```
qui do "$projectfolder/do files/analysis/r 07 fcs disaggregation.do"
```

qui do "\$projectfolder/do files/analysis/r 08 main result non-food spending.do"
qui do "\$projectfolder/do files/analysis/r 09 main result borrow assets savings.do"
qui do "\$projectfolder/do files/analysis/r 10 main result non-ag earnings.do"
qui do "\$projectfolder/do files/analysis/r 11 main results after flood ag.do"
qui do "\$projectfolder/do files/analysis/r 12 main result migration.do"
qui do "\$projectfolder/do files/analysis/r 13 disaggregated fcs acceptable.do"
qui do "\$projectfolder/do files/analysis/r 14 flood damage.do"

Folder Structure



Data and do-files are stored separately. Do files separate cleaning and construction by country from the analysis folder which uses panel dataset from both countries.

Updates Aug 5 2025

- Fixed inconsistent coefficients in Bangladesh Round 2, by consistently dropping duplicate households from raw data.
- Added number of clusters, observations and Post-shock group means by country to every table.
- Added t-test p-values in Bangladesh specific tables.
- Fixed error in outputting flood damage table.