

# Bangladesh - Poverty and Groundwater Salinity Survey, 2016

**Monica Yanez-Pagans**

Report generated on: February 5, 2021

Visit our data catalog at: <https://microdata.fao.org/index.php>

## Overview

### Identification

#### ID NUMBER

BGD\_2016\_PGSS\_v01\_EN\_M\_v01\_A\_OCS

### Overview

#### ABSTRACT

The main objective of the Bangladesh Poverty and Groundwater Salinity Survey (BPGSS) 2016 is to understand the linkages between groundwater salinity and poverty in coastal areas in Bangladesh. It is also to assess the extent to which high water salinity might be associated with poor health outcomes among women and children, and identify potential coping and adaptation mechanisms, which households might be using to address high water salinity in these areas.

#### KIND OF DATA

Sample survey data [ssd]

#### UNITS OF ANALYSIS

Households

### Scope

#### NOTES

The scope of the survey includes the following:

- Household: Household characteristics, employment, assets, land, livestock, utilities, remittances, water and sanitation, farming
- Household members: age, sex, education, hypertension, pregnancy complications
- Migration: reasons for migration

#### TOPICS

Topic	Vocabulary	URI
Water	FAO	
Agriculture & Rural Development	FAO	
Land (policy, resource management)	FAO	
Environment	FAO	
Environmental Health/ Pollution Management	FAO	
Access to Finance	FAO	
Nutrition/Social protection	FAO	
Health	FAO	
Infrastructure	FAO	
Labor	FAO	
Livestock	FAO	
Migration & Remittances	FAO	

Population & Reproductive Health	FAO	
----------------------------------	-----	--

## Coverage

### GEOGRAPHIC COVERAGE

Regional coverage

## Producers and Sponsors

### PRIMARY INVESTIGATOR(S)

Name	Affiliation
Monica Yanez-Pagans	The World Bank

## Metadata Production

### METADATA PRODUCED BY

Name	Abbreviation	Affiliation	Role
Office of Chief Statistician	OCS	Food and Agriculture Organization	Adoption of metadata for FAM
Development Data Group	DECDG	The World Bank	Documentation of the DDI

### DDI DOCUMENT VERSION

BGD\_2016\_PGSS\_v01\_EN\_M\_v01\_A\_OCS\_v01

### DDI DOCUMENT ID

DDI\_BGD\_2016\_PGSS\_v01\_EN\_M\_v01\_A\_OCS\_FAO

# Sampling

## Sampling Procedure

---

### SAMPLING PROCEDURE

The Bangladesh Poverty and Groundwater Salinity Survey 2016 collected data from a total of 1,500 households in three sub-districts or upazilas in Bangladesh - 500 households in each upazila distributed across 50 primary sampling units (PSUs). The three upazilas selected for this study are the following: (i) Taltoli upazila in the Barguna district of the Barisal division; (ii) Morrelganj upazila in the Bagerhat district of the Khulna division; and (iii) Shyamnagar upazila in the Satkhira district in the Khulna division. Each upazila was allocated an equal size of households in order to get poverty estimates of similar precision. The sampling frame consists of a list of all rural villages developed by the Bangladesh Bureau of Statistics (BBS) based on the Census Enumeration Areas (CEAs) constructed for the 2011 Census of Population and Housing. PSUs are constructed by dividing rural villages into listing blocks or Enumeration Areas (EAs) of around 50 households each and then randomly selecting one block for listing.

The three upazilas included in this study were selected based on discussion with a water salinity expert in Bangladesh and practical considerations using a two-stage procedure. In the first stage, we combined upazila level poverty data from the official 2010 Bangladesh Poverty Maps with upazila level information on groundwater salinity collected by the Bangladesh Water Development Board (BWDB) with support from the Institute of Water Modelling (IWM). Using these combined dataset, we classified all 146 upazilas in coastal areas in four groups: (i) high water salinity and high poverty rate; (ii) high water salinity and low poverty rates; (iii) low water salinity and high poverty rate; (iv) low water salinity and low poverty rates. Figure 1 shows the spatial distribution of coastal area upazilas based on these four categories. In the second stage, we selected one upazila from each of the first three categories as focal areas for this study after discussion with a groundwater expert on availability of other water-supply options (e.g. managed aquifer recharge) and practical considerations. This categorization of upazilas also serve as our three sampling strata - high water salinity and high poverty rate, high water salinity and low poverty rates, and low water salinity and high poverty rate.

# Questionnaires

## Overview

---

The household questionnaire is available in Bengali and English under the Related Materials tab.

## Data Collection

### Data Collection Dates

---

Start	End	Cycle
2016	2016	N/A

### Data Collection Mode

---

Face-to-face [f2f]

### Questionnaires

---

The household questionnaire is available in Bengali and English under the Related Materials tab.

## Data Processing

### Data Editing

---

Data entry and editing was done by Survey CTO.

## Data Appraisal

No content available