

# Bangladesh - HarvestPlus Bangladesh Bio-fortified Rice Project - Baseline Dietary Survey

**University of California, Davis, International Centre for Diarrhoeal Disease  
Research, Bangladesh (ICDDR,B)**

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## Identification

### SURVEY ID NUMBER

BGD\_2007-2008\_HPBBRP\_v01\_M\_v01\_A\_ESS

### TITLE

HarvestPlus Bangladesh Bio-fortified Rice Project - Baseline Dietary Survey

### ABBREVIATION OR ACRONYM

HPBBRP BGD 2007-2008

### COUNTRY

Name	Country code
Bangladesh	BGD

### STUDY TYPE

Individual Food Consumption/Dietary Survey [hh/ifcs]

### ABSTRACT

A multi-stage cluster survey was conducted in two rural rice-producing regions in Bangladesh in 2007-2008 as the initial project of a HarvestPlus multi-stage research program to determine the potential impact of zinc-biofortified rice on the zinc and health status among children in Bangladesh who are at risk of zinc deficiency. The project protocol "Assessment of rice intakes and total dietary zinc intakes in rural Bangladesh" was conducted in collaboration with the University of California, Davis and the International Centre for Diarrhoeal Disease Research, Bangladesh (ICDDR,B). The dataset contains dietary information for the primary caregivers of the children, who were women of reproductive age, non-pregnant, and non-lactating.

### KIND OF DATA

Sample survey data [ssd]

### UNIT OF ANALYSIS

Individuals

## Scope

### NOTES

The survey collected information on:

- SUBJECTS: information on the participants such as age, sex and geographical location.
- CONSUMPTION: information on all foods consumed by each participant in each survey day, including quantities and nutrient values.

## Coverage

### GEOGRAPHIC COVERAGE

Sub-national coverage, only rural areas.

## Producers and sponsors

### PRIMARY INVESTIGATORS

Name
University of California, Davis
International Centre for Diarrhoeal Disease Research, Bangladesh (ICDDR,B)

## Sampling

### SAMPLING PROCEDURE

Within each Upazila, all villages or mauzas identified by the 2001 census were included in the sampling universe. During the first sampling stage, 25 clusters (mauzas or villages) were selected from each study site using systematic sampling with probability of selection proportional to estimated population size. Twenty-four clusters in each district were included in the study; an extra cluster was selected for each district in case logistical considerations made recruitment impossible in a cluster. The extra cluster was used in both sites.

At the second stage of sampling, ten households within each cluster were selected using a global positioning system (GPS) sampling method. Digital maps were obtained from the local government or created by walking the boundaries of the cluster with a local guide and a Garmin Etrex Venture hand-held GPS device (Olathe, KS). Each digital map was overlaid with a grid that had lines at 1-sec intervals, so each square on the grid corresponded to a specific set of GPS coordinates. Random pairs of row numbers and column letters were generated in a spreadsheet, each of which corresponded to one square on the grid. The random pairs were tested sequentially until two squares that fell within the boundaries of the cluster digital map were identified as starting points. Two separate starting points were selected to allow estimation of within-cluster variance. A random transect direction for each starting point was generated. In the field, the medical officers in charge of study recruitment used the handheld GPS device to locate the two randomly-selected starting points within each cluster and to follow the designated transect line. Moving along the transect line, the first five distinct households, each from a separate bari (extended family compound composed of one or more houses in the same area) with a child 24-48 months of age were identified and invited to participate in the study. This was then repeated at the second starting point for each cluster.

In 11 of 48 clusters (23%) logistics made it impossible to recruit from two starting points, so all households in these clusters were recruited from just one starting point. During the initial contact with a potential study household, the field staff collected basic household intake information. If an eligible child was identified, and the household agreed to participate in the study, consent was obtained using the Bangla version of the consent form, and the intake interview was continued. The names, ages, and dates of birth of the selected children, other children (aged 5 years or younger), mother, and father were obtained. The ages of the selected children were verified by checking the immunization cards. The exact day of the birth month was unknown for nine of the selected children and '15' was imputed for the day; for one of the selected children the month and day of birth were unknown so the age was not calculated. The first diet study was scheduled during the next week. Approximately 92% of the originally selected eligible households agreed to participate in the study. The sample size in each of the two districts was 240 selected children. Data were available from 239 households in Trishal because the forms for one household were lost during transit from the field site to ICDDR,B.

### WEIGHTING

No sample weights were used in the survey.

## Data collection

### DATES OF DATA COLLECTION

Start	End
2007-10-01	2008-06-30

### DATA COLLECTION MODE

Face-to-face [f2f]

### DATA COLLECTION NOTES

Dietary intakes were assessed by direct observation in the homes, using 12-h weighed food records and recall of any foods consumed during the subsequent 12-h period. Two dietary recalls were collected by each subject with an average of five days between recalls. The recalls were collected through paper questionnaire.

### DATA COLLECTORS

Name	Affiliation
International Centre for Diarrhoeal Disease Research, Bangladesh (ICDDR,B)	International Centre for Diarrhoeal Disease Research, Bangladesh (ICDDR,B)

## Access policy

### CONTACTS

Name	Affiliation	Email
Food and Nutrition Division	Food and Agriculture Organization of the United Nations	fao-who-gift@fao.org

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### CITATION REQUIREMENTS

HarvestPlus, International Food Policy Research Institute (IFPRI); University of California, Davis; International Centre for Diarrhoeal Disease Research (ICDDR), Bangladesh, 2017, "The 2007-2008 HarvestPlus Bangladesh Biofortified Rice Project Food Intake Dataset", doi:10.7910/DVN/HAZLJG

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## Metadata production

### DDI DOCUMENT ID

DDI\_BGD\_2007-2008\_HPBBRP\_v01\_M\_v01\_A\_ESS\_FAO

### PRODUCERS

Name	Abbreviation	Affiliation	Role
Food and Nutrition Division	ESN	Food and Agriculture Organization of the United Nations	Metadata producer
Statistics Division	ESS	Food and Agriculture Organization of the United Nations	Metadata adapted for FAM

## Data Dictionary

Data file	Cases	Variables
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