# Bhutan - Renewable Natural Resources, 2009

## Policy & Planning Division (PPD)

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## Overview

## Identification

ID NUMBER BTN\_2009\_RNR\_v01\_EN\_M\_v01\_A\_OCS

#### **Overview**

#### ABSTRACT

The Ministry of Agriculture will be conducting its nationwide second Renewable Natural Resources (RNR) Census in 2009 for the production year 2008. The first census was conducted for the production year 2000 in 2001 which has provided baseline indicators for preparation of the first ever decentralized geog (sub-district) based 9th Five Year Plan and been serving as the baseline data bank for the RNR sector until now. Although, the initial plan was to carry out the RNR census after every 5 years, it could not be done due to limited financial and human resources capacity.

The main objectives of this census are as follows:

• Provide basis for development and improving the ongoing agricultural statistical information system in the country.

• Provide updated and reliable statistical information on RNR activities at national, dzongkhags and geogs level for efficient monitoring, planning and policy making.

• Enable an efficient study of small holdings communities (which is the case in Bhutan) to facilitate government plans and programs to assist small farmers effectively.

• Provide baseline data for monitoring of millennium development goals (MDGs) particularly poverty and food security situations and

• Facilitate the ongoing Royal Government's effort to streamline information sharing, monitoring and evaluation of planned development activities through the planning & monitoring system (PLAMS) initiated by the Gross National Happiness Commission (GHNC).

KIND OF DATA Census/enumeration data [cen]

UNITS OF ANALYSIS Households

#### Scope

#### NOTES

The scope of the RNR census 2009 covered agriculture (including forestry), livestock, income and food security.

#### TOPICS

Торіс	Vocabulary	URI
Community Driven Development	FAO	
Infrastructure	FAO	
Access to Finance	FAO	
Agriculture & Rural Development	FAO	
Food (production, crisis)	FAO	

Livestock	FAO	
Forests & Forestry	FAO	

### Coverage

GEOGRAPHIC COVERAGE National coverage

#### UNIVERSE

The statistical unit was the farm household, defined as a person or group of persons operating as one economic unit and engaged in agricultural production.

## **Producers and Sponsors**

#### PRIMARY INVESTIGATOR(S)

Name	Affiliation
Policy & Planning Division (PPD)	Ministry of Agriculture (MoA)

OTHER PRODUCER(S)

Name	Affiliation	Role
Department of Agriculture		Technical assistance
Department of Livestock		Technical assistance
Department of Forests and Park Services		Technical assistance

#### FUNDING

Name	Abbreviation	Role
Danish Agency for International Development	DANIDA	Funding
Swiss Agency for Development Cooperation	SDC	Funding
International Food Policy Research Institute	IFPRI	Funding
Royal Government of Bhutan	RGoB	Funding

### **Metadata Production**

#### METADATA PRODUCED BY

Name	Abbreviation	Affiliation	Role
Office of Chief Statistician	OCS	Food and Agriculture Organization	Adoption of metadata for FAM
Census team, Statistics Division	ESS	Food and Agriculture Organization	Metadata producer

DDI DOCUMENT VERSION BTN\_2009\_RNR\_v01\_EN\_M\_v01\_A\_OCS\_v01

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# Sampling

## **Sampling Procedure**

The RNR Census 2009 aimed for complete enumeration of all households in the country engaged in RNR activities and production. However, of the 61,578 households listed as having engaged in the RNR activities only 57,412 households could be captured and 4,166 (6.77 percent) households turned out to be absentees. The absentees were those households whom the enumerators either failed to established contact with or found nobody representing them for enumeration even after three visits. The reasons for the absentees were to do with people on migration, involved in distant located offfarm activities, and away on pilgrimage and business. The census frame was built on the basis of the list of households provided by the Geog (subdistricts) RNR Extension Centers (structures of the MoAF).

#### **Response Rate**

93.23 percent

# Questionnaires

## Overview

Data were collected using one single questionnaire collecting:

- Accessibilities of rural communities to motor roads, markets and extension facilities / services
- Main sources of income
- Availability of serviceable farm machineries and tools
- Agricultural land holdings and tenure
- Crop (cereals and horticulture) productions, sold and cash earned
- Organic and chemical fertilizers, and plant protection chemicals used
- Livestock population and productions
- · Livestock productions and live animals sold, and cash earned
- Death of animals and common causes of deaths
- · Livestock feed and fodder
- Forest products collected, forest byproducts produced, sold and cash earned
- Issues related to forest resources, rules and acts
- Farming constraints
- Households' food security

The RNR 2009 census questionnaire covered 12 of the 16 core items2 recommended for the WCA 2010 round. The following four items were not covered:

(i) "Legal status of agricultural holder"

- (ii) "Household size"
- (iii) "Presence of aquaculture on the holding"
- (iv) "Other economic production activities of the holding's enterprise".

# **Data Collection**

### **Data Collection Dates**

Start	End	Cycle
2009-01	2009-08	N/A

#### **Data Collection Mode**

Face-to-face [f2f]

#### **Data Collection Notes**

Data collection was done by means of face-to-face interviews using paper forms, that is, the PAPI method. The enumerators visited the households; however, in a few cases, because of the scattered nature of settlements and the distances between them, the respondents (farmers) had to be gathered at appropriate locations to be interviewed.

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# Data Processing

## **Data Editing**

#### Data Processing

The database was designed in MS Access Software and data entry was done in 20 computers by 20 temporary recruits, meaning the database was replicated into 20 files. After completion of the data entry, the contents of these 20 files have been merged to form a single file through establishment of union queries followed by once again validation wherever necessary and synchronization of data. Transformation of some variables (from codes to names, names to codes and check and tick boxes to absolute numbers) was required depending on the type and purpose of the data. The entire data organization and processing was performed through establishing queries in the MS Access program. Some analyses were also done in the same program but for major and in-depth analytical and graphical presentation purposes the dataset generated by the Access queries were exported to MS Excel program.

# Data Appraisal

## Other forms of Data Appraisal

The data validation was scrutinized at three key stages, to decrease errors: (i) at questionnaire design;3 (ii) at field data collection;4 and (iii) at data computation.

The RNR 2009 census results were disseminated by means of printed reports, which were distributed to all relevant departments and agencies of the Royal Government of Bhutan. The final census reports, published in two volumes, included extensive methodological explanations. The PDF version of the RNR 2009 census report is available on the institution's website.