Overview

Identification

**ID NUMBER**
PNG-NSO-DHS-2006-v2

Version

**VERSION DESCRIPTION**
Version 2 (October 2009) - Public use

**PRODUCTION DATE**
2009-10

Overview

**ABSTRACT**
The primary objective of the 2006 DHS is to provide to the Department of Health (DOH), Department of National Planning and Monitoring (DNPM) and other relevant institutions and users with updated and reliable data on infant and child mortality, fertility preferences, family planning behavior, maternal mortality, utilization of maternal and child health services, knowledge of HIV/AIDS and behavior, sexually risk behavior and information on the general household amenities. This information contributes to policy planning, monitoring, and program evaluation for development at all levels of government particularly at the national and provincial levels. The information will also be used to assess the performance of government development interventions aimed at addressing the targets set out under the MDG and MTDS. The long-term objective of the survey is to technically strengthen the capacity of the NSO in conducting and analyzing the results of future surveys.

The successful conduct and completion of this survey is a result of the combined effort of individuals and institutions particularly in their participation and cooperation in the Users Advisory Committee (UAC) and the National Steering Committee (NSC) in the different phases of the survey.

The survey was conducted by the Population and Social Statistics Division of the National Statistical Office of PNG. The 2006 DHS was jointly funded by the Government of PNG and Donor Partners through ADB while technical assistance was provided by International Consultants and NSO Philippines.

**KIND OF DATA**
Sample survey data [ssd]

**UNITS OF ANALYSIS**
- Households
- Individuals

Scope

**NOTES**
The scope of the Demographic and Health Survey 2006 includes:

- **HOUSEHOLD**: Household characteristics, household listing, orphaned children, education, labour, water and sanitation, dwelling characteristics and malaria prevention.

- **WOMEN**: Individual characteristics, reproduction, maternal and child health, family planning, fertility preferences, HIV/AIDS, maternal mortality, attitudes to issues of well-being, and sexual risk behaviour.

- **MEN**: Individual characteristics, family planning, fertility preferences, HIV/AIDS, attitudes to issues of well-being, and sexual risk behaviour.
TOPICS

<table>
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<tr>
<th>Topic</th>
<th>Vocabulary</th>
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<td>Education</td>
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Coverage

GEOGRAPHIC COVERAGE
- National level
- Regional level
- Urban and Rural

UNIVERSE
The survey covered all de jure household members (usual residents), all women and men aged 15-50 years resident in the household.

Producers and Sponsors

PRIMARY INVESTIGATOR(S)

<table>
<thead>
<tr>
<th>Name</th>
<th>Affiliation</th>
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<tr>
<td>National Statistics Office</td>
<td>Department of Planning &amp; Implementation</td>
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OTHER PRODUCER(S)

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FUNDING

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OTHER ACKNOWLEDGEMENTS

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<tr>
<td>Snowy Mountains Engineering Corporation Ltd</td>
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<td>Technical assistance on Project managerial support</td>
</tr>
<tr>
<td>Dr. Socorro Abejo</td>
<td>Philippines National Statistics Office</td>
<td>Technical assistance on Data analysis</td>
</tr>
<tr>
<td>Noel Perez</td>
<td>Philippines National Statistics Office</td>
<td>Technical assistance on Data processing</td>
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Metadata Production

METADATA PRODUCED BY
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<tr>
<td>Mathew Pulah</td>
<td>MPL</td>
<td>PNG NSO</td>
<td>Documentation of survey</td>
</tr>
<tr>
<td>Leslie Wongo</td>
<td>LW</td>
<td>PNG NSO</td>
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**DATE OF METADATA PRODUCTION**
2012-07-09

**DDI DOCUMENT VERSION**
Version 1 (July 2012) - First documentation of DHS 2006 using IHSN Toolkit

**DDI DOCUMENT ID**
DDI-PNG-NSO-DHS-2006-v1
### Sampling

#### Sampling Procedure

The primary focus of the 2006 DHS is to provide estimates of key population and health indicators at the national level. A secondary but important priority is to also provide estimates at the regional level, and for urban and rural areas respectively. The 2006 DHS employed the same survey methodology used in the 1996 DHS. The 2006 DHS sample was a two stage self-weighting systematic cluster sample of regions with the first stage being at the census unit level and the second stage at the household level. The 2000 Census frame comprised of a list of census units was used to select the sample of 10,000 households for the 2006 DHS.

A total of 667 clusters were selected from the four regions. All census units were listed in a geographic order within their districts, and districts within each province and the sample was selected accordingly through the use of appropriate sampling fraction. The distribution of households according to urban-rural sectors was as follows:

> 8,000 households were allocated to the rural areas of PNG. The proportional allocation was used to allocate the first 4,000 households to regions based on projected citizen household population in 2006. The other 4,000 households were allocated equally across all four regions to ensure that each region have sufficient sample for regional level analysis.

> 2,000 households were allocated to the urban areas of PNG using proportional allocation based on the 2006 projected urban citizen population. This allocation was to ensure that the most accurate estimates for urban areas are obtained at the national level.

All households in the selected census units were listed in a separate field operation from June to July 2006. From the list of households, 16 households were selected in the rural census units and 12 in the urban census units using systematic sampling. All women and men age 15-50 years who were either usual residents of the selected households or visitors present in the household on the night before the survey were eligible to be interviewed. Further information on the survey design is contained in Appendix A of the survey report.

#### Response Rate

Table A.2 of the survey report provides a summary of the sample implementation of the 2006 DHS. Despite the recency of the household listing, approximately 7 per cent of households could not be contacted due to prolonged absence or because their dwellings were vacant or had been destroyed. Among the households contacted, a response rate of 97 per cent was achieved. Within the 9,017 households successfully interviewed, a total of 11,456 women and 11,463 of men age 15-49 years were eligible to be interviewed. Successful interviews were conducted with 90 per cent of eligible women (10,353) and 88 per cent of eligible men (10,077). The most common cause of non-response was absence (5 per cent). Among the regions, the rate of success among women was highest in all the regions (92 per cent each) except for Momase region at 86 per cent. The rate of success among men was highest in Highlands and Islands region and lowest in Momase region. The overall response rate, calculated as the product of the household and female individual response rate (.97*.90) was 87 per cent.

#### Weighting

The sample design was self-weighting. This means that raising factors of the sample units are all equal.
Questionnaires

Overview

Three questionnaires were used in the 2006 DHS namely; the Household Questionnaire (HHQ), the Female Individual Questionnaire (FIQ) and the Male Individual Questionnaire (MIQ). The planning and development of these questionnaires involved close consultation with the UAC members comprising of the following line departments and agencies namely; Department of Health (DOH), Department of Education (DOE), Department of National Planning and Monitoring (DNPM), National Aids Council Secretariat (NACS), Department of Agriculture and Livestock (DAL), Department of Labour and Employment (DLE), University of Papua New Guinea (UPNG), National Research Institute (NRI) and representatives from Development partners.

The HHQ was designed to collect background information for all members of the selected households. This information was used to identify eligible female and male respondents for the respective individual questionnaires. Additional information on household amenities and services, and malaria prevention was also collected.

The FIQ contains questions on respondents background, including marriage and polygyny; birth history, maternal and child health, knowledge and use of contraception, fertility preferences, HIV/AIDS including new modules on sexual risk behaviour and attitudes to issues of well being. All females age 15-50 years identified from the HHQ were eligible for interview using this questionnaire.

The MIQ collected almost the same information as in the FIQ except for birth history. All males age 15-50 years identified from the HHQ were eligible to be interviewed using the MIQ.

Two pre-tests were carried out aimed at testing the flow of the existing and new questions and the administering of the MIQ between March and April 2006. The final questionnaires contained all the modules used in the 1996 DHS including new modules on malaria prevention, sexual risk behaviour and attitudes to issues of well being.
Data Collection

Data Collection Dates

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<th>End</th>
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<td>2007-01</td>
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Data Collection Mode

Face-to-face [f2f]

DATA COLLECTION NOTES

Training for the 2006 DHS was conducted in two phases. The first phase involved the training of master trainers from NSO in Port Moresby in August 2006. The second phase involved training of interviewers, supervisors and quality controllers in the four regional training centres in September 2006.

Data collection began simultaneously in all the provinces in October 2006 and was completed in January 2007. In total, there were more than 230 people involved in the data collection phase. Field monitoring visits were conducted through field visits to the teams by the NSO Senior Management Team. Regular communication was maintained with the teams throughout the duration of the survey.

Data Collectors

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<td>Department of Planning and Implementation</td>
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Data Processing

Data Editing

All questionnaires from the field were sent to the NSO headquarters in Port Moresby in February 2007 for editing and coding, data entry and data cleaning. Editing was done in 3 stages to enable the creation of clean data files for each province from which the tabulations were generated. Data entry and processing were done using the CSPro software and was completed by October 2008.

Other Processing

Technical assistance missions engaged by ADB was undertaken by Dr. Socorro Abejo and Mr. Noel Perez of NSO Philippines in November 2007 and in April 2008 on data processing and analysis. Review of the draft 2006 DHS report by Dr. Socorro Abejo and members of the UAC was completed in May 2009.
Data Appraisal

Estimates of Sampling Error

Appendix B of the survey report describes the general procedure in the computation of sampling errors of the sample survey estimates generated. It basically follows the procedure adopted in most Demographic and Health Surveys.

Other forms of Data Appraisal

Appendix C explains to the data users the quality of the 2006 DHS. Non-sampling errors are those that occur in surveys and censuses through the following causes:

a) Failure to locate the selected household
b) Mistakes in the way questions were asked
c) Misunderstanding by the interviewer or respondent
d) Coding errors
e) Data entry errors, etc.

Total eradication of non-sampling errors is impossible however great measures were taken to minimize them as much as possible. These measures included:

a) Careful questionnaire design
b) Pretesting of survey instruments to guarantee their functionality
c) A month of interviewers' and supervisors' training
d) Careful fieldwork supervision including field visits by NSOHQ personnel
e) A swift data processing prior to data entry
f) The use of interactive data entry software to minimize errors