



**ANNUAL DZONGKHAG STATISTICS  
2010**



**Dzongkhag Administration  
ZHEMGANG**

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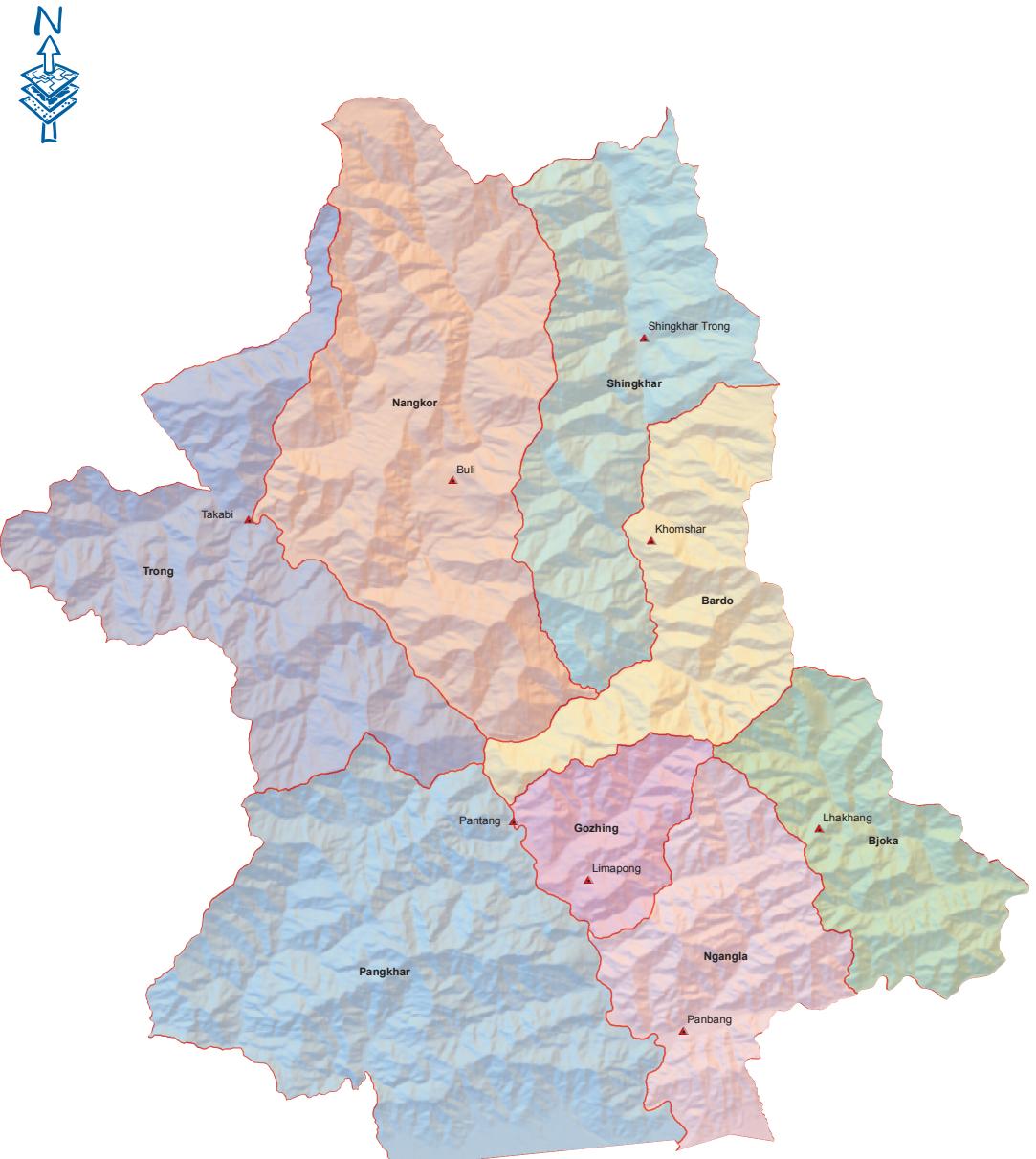
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First Issue  
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# ZHEMGANG DZONGKHAG



## GEWOG CENTRE

Scale: 1:250,000

12,000 6,000 0 12,000 Meters

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## Preface

The Annual Dzongkhag Statistics of Zhemgang is the first in the series of publications. It attempts to provide comprehensive statistics of Zhemgang Dzongkhag and will be published annually.

The report contains statistics on demographic and socio-economic, environment, culture, local governance and infrastructures of the Dzongkhag. The statistical data for this publication are collected and compiled from various sectors and through primary sources.

We hope that this report will serve as a source of information and guiding tool for micro-level planning and decision-making in the Dzongkhag. Statistics office, Zhemgang would like to thank and acknowledge the support and cooperation of all sector heads concerned for providing timely information for this report. Without their support, this publication would not have been possible. Through this initiative, we also hope that the maintenance of sectoral information and updation in the Dzongkhag will become more systematic and efficient henceforth.

Since this report is the first publication and with information source being from numerous sectors, we expect there may be certain deficiencies in terms of coverage and updation. However, there will be continuous efforts made to improve its coverage and quality in our future publications. Your comments and suggestions in this regard will be highly appreciated.

National Statistics Bureau  
Thimphu

## Background

Zhemgang Dzongkhag has a total land area of 2421.74 Sq. km with 1 Drungkhag viz; Panbang and eight Gewogs namely; Bardo, Bjoka, Goshing, Nangkor, Ngangla, Phangkhar, Shingkhar and Trong. For administrative convenience, the Drungkhag Administration at Panbang looks after the 4 southern Gewogs viz; Bjoka, Goshing, Ngangla and Phangkhar.

Zhemgang is considered as one of the least developed Dzongkhags in the country. Most of its Gewogs are still not connected with the road network. Dzongkhag is divided into three ecological zones namely Upper Kheng, Middle Kheng and Lower Kheng. The livelihood for the people of Kheng depends on agriculture and livestock farming. In recent years, mandarin cultivation in Lower Kheng as a source of cash income has been quite encouraging. However, the transportation has been the biggest hurdle for any business or developmental activities to be undertaken.

The forest covers 86 percent of the total land area of the Dzongkhag. Zhemgang is also known for Royal Manas Park, which has been declared as one of the ten internationally recognized “Hot Spot” areas. The Dzongkhag shares the boundaries with Royal Manas Park and other protected areas under Jigme Singye Wangchuck and Thrumshingla National Parks.

The existence problems such as high levels of illiteracy, infant and maternal mortality, shortage of skilled and unskilled manpower, limited arable land, limited accessibility to market and out-migration of young and educated population exacerbated the situation.

## Abbreviations

<b>%:</b>	Percent	<b>LFS:</b>	Labor Force Survey
<b>&lt; :</b>	Less than	<b>LSS:</b>	Lower Secondary School
<b>&gt; :</b>	Greater than	<b>Max:</b>	Maximum
<b>AIDS:</b>	Acquired Immune Deficiency Syndrome	<b>Min:</b>	Minimum
<b>Avg:</b>	Average	<b>MSS:</b>	Middle Secondary School
<b>BHU:</b>	Basic Health Unit	<b>n.a:</b>	Not Available
<b>BLSS:</b>	Bhutan Living Standard Survey	<b>N.A:</b>	Not Applicable
<b>Cft:</b>	Cubic Feet	<b>NFE:</b>	Non Formal Education
<b>CPS:</b>	Community Primary school	<b>Nu:</b>	Ngultrum
<b>DPTH:</b>	Diphtheria Parthusis Tetanus Hepatitis B	<b>ORC:</b>	Outreach Clinic
<b>DYT:</b>	Dzongkhag Yargye Tsogdue	<b>PAR:</b>	Poverty Analysis Report
<b>FYP:</b>	Five Year Plan	<b>PHCB:</b>	Population and Housing
<b>GDP:</b>	Gross Domestic Product		Census of Bhutan
<b>GIS:</b>	(Infrastructure mapping): Geographical Infrastructure System	<b>PP:</b>	Pre Primary
<b>Gm:</b>	Gram	<b>PS:</b>	Primary School
<b>GYT:</b>	Gewog Yargye Tshogchung	<b>Pvt:</b>	Private
<b>HIV:</b>	Human Immune Virus	<b>Qty:</b>	Quantity
<b>Hr:</b>	Hour	<b>Sq. Km:</b>	Square Kilometer
<b>HSS:</b>	Higher Secondary School	<b>SYB:</b>	Statistical Yearbook
<b>Inst:</b>	Institute	<b>TV:</b>	Television
<b>Kg:</b>	Kilogram		

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TABLE 1.1: GENERAL INFORMATION, ZHEMGANG, 2005-2009

Details	2005	2006	2007	2008	2009
Dzongkhag area (Sq. Km)*	2126.00	2421.74	2421.74	2421.74	2421.74
Population (Number)	18636	18923	19212	19504	19797
Population density (Persons per Sq. Km)	9	8	8	8	8
Population sex ratio	104	103	103	103	102
Administration (Number)					
Drungkhags	1	1	1	1	1
Gewogs	8	8	8	8	8
Chiwogs	64	64	64	64	64
Villages	n.a	n.a	n.a	n.a	n.a
Households	3379	3379	3379	3379	3379
Towns	3	3	3	3	3

Source: PHCB 2005 and Population Projection 2006-2015

Note.\* Dzongkhag area has been changed after PHCB 2005 area

TABLE 1.2: LOCAL GOVERNANCE, ZHEMGANG, 2007 TO 2009

Details	2007	2008	2009
Local governance (Number)			
Total Gewog Tshogpas	69	69	69
Male	69	69	69
Female	0	0	0
Total Mangmis	8	8	8
Male	8	8	8
Female	0	0	0
Total Chupons	32	32	33
Male	32	32	32
Female	0	0	1
DYT members	17	17	17
Male	17	17	17
Female	0	0	0
GYT members	71	71	71
Male	71	71	71
Female	0	0	0
Polling stations	48	48	48
Eligible voters (18 years and above)	13622	13622	13622
Male	n.a	n.a	n.a
Female	n.a	n.a	n.a
Parliamentarians	N.A	3	3
Male	N.A	2	2
Female	N.A	1	1
Total Dzongkhag Adm. Staff	n.a	n.a	566
Male	n.a	n.a	n.a
Female	n.a	n.a	n.a
Police stations	2	2	2

Source: DYT Secretary, HR Unit and Election Sector, Zhemgang Dzongkhag

TABLE 2.1: POPULATION BY AGE AND SEX, ZHEMGANG, 2005-2009

<b>Age-group by sex</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>	<b>2009</b>
Total	18636	18924	19213	19503	19798
0-4	1813	2003	2130	2253	2375
5-9	2164	1969	1917	1872	1835
10-14	2615	2119	2086	2047	2006
15-19	2543	2083	2090	2094	2092
20-24	1645	1955	1971	1985	1997
25-29	1244	1752	1786	1817	1845
30-34	1007	1457	1506	1557	1606
35-39	964	1217	1249	1281	1318
40-44	747	988	1023	1060	1098
45-49	815	815	835	857	883
50-54	788	672	689	707	727
55-59	555	551	563	576	591
60-64	516	445	453	463	473
65+	1220	898	915	934	952
Male	9492	9618	9747	9878	10013
0-4	863	974	1036	1096	1156
5-9	1099	963	935	912	893
10-14	1349	1044	1026	1005	983
15-19	1318	1041	1040	1038	1034
20-24	881	1008	1009	1009	1008
25-29	643	919	935	948	960
30-34	512	773	797	822	845
35-39	500	648	665	682	701
40-44	361	519	539	560	582
45-49	393	424	434	446	460
50-54	391	348	357	366	376
55-59	298	284	290	296	304
60-64	276	227	231	236	241
65+	608	446	453	462	470
Female	11149	11312	11473	11633	11794
0-4	950	1029	1094	1157	1219
5-9	1065	1006	982	960	942
10-14	1266	1075	1060	1042	1023
15-19	1225	1042	1050	1056	1058
20-24	764	947	962	976	989

TABLE 2.1 (contd.): POPULATION BY AGE AND SEX, ZHEMGANG, 2005-2009

<b>Age-group by sex</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>	<b>2009</b>
25-29	601	833	851	869	885
30-34	495	684	709	735	761
35-39	464	569	584	599	617
40-44	386	469	484	500	516
45-49	422	391	401	411	423
50-54	397	324	332	341	351
55-59	257	267	273	280	287
60-64	240	218	222	227	232
65+	612	452	462	472	482

Source: Population Projection 2006-2015

Note: Figures for the year 2006 onwards are based on the projected population

TABLE 3.1: NUMBER OF SCHOOLS, INSTITUTIONS, TEACHERS AND STUDENTS, ZHEMGANG 2008-2010

Details	CPs	Ps	ISS	MSS	HSS	College	Pvt.	Other Inst.	NFE Centres	Daycare Centres	Total
											2008
Number of schools and institutions	9	15	4	1	1	0	1	0	n.a	0	31
Teaching staff											
Bhutanese	21	74	64	20	17	N.A.	2	N.A.	n.a	N.A.	198
Male	19	63	43	17	14	N.A.	2	N.A.	n.a	N.A.	158
Female	2	11	21	3	3	N.A.	0	N.A.	n.a	N.A.	40
Non-Bhutanese	0	0	8	1	9	N.A.	5	N.A.	n.a	N.A.	23
Male	0	0	5	1	6	N.A.	5	N.A.	n.a	N.A.	17
Female	0	0	3	0	3	N.A.	0	N.A.	n.a	N.A.	6
Temporary teachers	n.a	n.a	n.a	n.a	n.a	N.A.	n.a	N.A.	n.a	N.A.	n.a
Male	n.a	n.a	n.a	n.a	n.a	N.A.	n.a	N.A.	n.a	N.A.	n.a
Female	n.a	n.a	n.a	n.a	n.a	N.A.	n.a	N.A.	n.a	N.A.	n.a
Number of students	408	1938	1824	447	754	N.A.	36	N.A.	n.a	N.A.	5407
Male	190	1009	958	246	415	N.A.	17	N.A.	n.a	N.A.	2835
Female	218	929	866	201	339	N.A.	19	N.A.	n.a	N.A.	2572
Student to teacher ratio	19	26	25	21	29	N.A.	5	N.A.	n.a	N.A.	

TABLE 3.1 (contd.): NUMBER OF SCHOOLS, INSTITUTIONS, TEACHERS AND STUDENTS, ZHEMGANG 2008-2010

Details		GP	PS	ISS	MSS	SHS	College	Pvt.	Other Inst.	NFE Centres	Daycare Centres	Total
<b>2009</b>												
Number of schools and institutions		7	18	3	2	1	0	1	0	20	0	52
Teaching staff												
Bhutanese		17	81	48	37	20	N.A.	2	N.A.	20	N.A.	225
Male		14	70	30	31	14	N.A.	2	N.A.	n.a.	N.A.	161
Female		3	11	18	6	6	N.A.	0	N.A.	n.a.	N.A.	44
Non-Bhutanese		0	1	5	11	8	N.A.	7	N.A.	n.a.	N.A.	32
Male		0	1	2	4	5	N.A.	7	N.A.	n.a.	N.A.	19
Female		0	0	3	7	3	N.A.	0	N.A.	n.a.	N.A.	13
Temporary teachers		n.a.	n.a.	n.a.	n.a.	n.a.	N.A.	n.a.	N.A.	n.a.	N.A.	n.a.
Male		n.a.	n.a.	n.a.	n.a.	n.a.	N.A.	n.a.	N.A.	n.a.	N.A.	n.a.
Female		n.a.	n.a.	n.a.	n.a.	n.a.	N.A.	n.a.	N.A.	n.a.	N.A.	n.a.
Number of students		354	2299	1217	800	719	N.A.	119	N.A.	342	N.A.	5850
Male		163	1153	621	454	392	N.A.	67	N.A.	97	N.A.	2947
Female		191	1146	596	346	327	N.A.	52	N.A.	245	N.A.	2903
Student to teacher ratio		21	28	23	17	26	N.A.	13	N.A.	17	N.A.	
<b>2010</b>												
Number of schools and institutions		7	17	3	3	1	0	1	0	n.a.	0	32
Teaching staff												

TABLE 3.1 (contd.): NUMBER OF SCHOOLS, INSTITUTIONS, TEACHERS AND STUDENTS, ZHEMGANG 2008-2010

Details		GPs	PS	LSS	MSS	HSS	College	Pvt.	Other Inst.	NFE Centres	Daycare Centres	Total
Bhutanese		19	80	47	49	18	N.A.	2	N.A.	n.a	N.A.	215
Male		17	65	29	37	14	N.A.	2	N.A.	n.a	N.A.	164
Female		2	15	18	12	4	N.A.	0	N.A.	n.a	N.A.	51
Non-Bhutanese		0	1	5	7	9	N.A.	7	N.A.	n.a	N.A.	29
Male		0	1	2	4	6	N.A.	7	N.A.	n.a	N.A.	20
Female		0	0	3	3	3	N.A.	0	N.A.	n.a	N.A.	9
Temporary teachers		n.a	n.a	n.a	n.a	n.a	N.A.	n.a	N.A.	n.a	N.A.	n.a
Male		n.a	n.a	n.a	n.a	n.a	N.A.	n.a	N.A.	n.a	N.A.	n.a
Female		n.a	n.a	n.a	n.a	n.a	N.A.	n.a	N.A.	n.a	N.A.	n.a
Number of students		329	2071	1157	1183	668	N.A.	128	N.A.	n.a	N.A.	5536
Male		150	1000	592	619	360	N.A.	70	N.A.	n.a	N.A.	2791
Female		179	1071	565	564	308	N.A.	58	N.A.	n.a	N.A.	2745
Student to teacher ratio		17	26	22	21	25	N.A.	14	N.A.	n.a	N.A.	

Source: Education Sector, Zhemgang Dzongkhag

TABLE 3.2: SCHOOL ENROLMENT BY LEVEL OF EDUCATION, ZHEMGANG,  
2008 TO 2010

<b>Class</b>	<b>2008</b>	<b>2009</b>	<b>2010</b>
Primary level			
Total	3685	3578	3462
Class PP	525	470	410
Class I	561	524	457
Class II	601	529	516
Class III	536	588	547
Class IV	525	519	564
Class V	472	509	487
Class VI	465	439	481
Male	1882	1790	1659
Class PP	256	241	187
Class I	285	252	222
Class II	313	262	238
Class III	275	301	270
Class IV	256	257	276
Class V	245	250	240
Class VI	252	227	226
Female	1803	1788	1803
Class PP	269	229	223
Class I	276	272	235
Class II	288	267	278
Class III	261	287	277
Class IV	269	262	288
Class V	227	259	247
Class VI	213	212	255
Secondary level			
Total	3720	3939	4077
Class VII	410	473	435
Class VIII	391	430	450
Class IX	325	369	447
Class X	303	308	352
Class XI	144	187	194
Class XII	139	163	189
Male	2961	3069	3060
Class VII	213	253	216
Class VIII	217	219	241

TABLE 3.2 (contd.): SCHOOL ENROLMENT BY LEVEL OF EDUCATION,  
ZHEMGANG, 2008 TO 2010

<b>Class</b>	<b>2008</b>	<b>2009</b>	<b>2010</b>
Class IX	173	196	242
Class X	155	164	199
Class XI	105	116	66
Class XII	90	112	86
Female	759	870	1017
Class VII	197	220	219
Class VIII	174	211	209
Class IX	152	173	205
Class X	148	144	153
Class XI	39	71	128
Class XII	49	51	103

Source: Education Sector, Dzongkhag

TABLE 3.3: STUDENTS BY AGE-GROUP, SEX AND EDUCATION LEVEL,  
ZHEMGANG

Details	2008	2009	2010
Students in primary school level (Class PP-VI)			
Total			
Age < 6 years	n.a	n.a	n.a
Age 6-12 years	n.a	n.a	n.a
Age 13 & above	n.a	n.a	n.a
Male	n.a	n.a	n.a
Age < 6 years	n.a	n.a	n.a
Age 6-12 years	n.a	n.a	n.a
Age 13 & above	n.a	n.a	n.a
Female	n.a	n.a	n.a
Age < 6 years	n.a	n.a	n.a
Age 6-12 years	n.a	n.a	n.a
Age 13 & above	n.a	n.a	n.a
Student in LSS level (Class VII-VIII)			
Total	n.a	n.a	n.a
Age < 13 years	n.a	n.a	n.a
Age 13-14 years	n.a	n.a	n.a
Age 15 & above	n.a	n.a	n.a
Male	n.a	n.a	n.a
Age < 13 years	n.a	n.a	n.a
Age 13-14 years	n.a	n.a	n.a
Age 15 & above	n.a	n.a	n.a
Female	n.a	n.a	n.a
Age < 13 years	n.a	n.a	n.a
Age 13-14 years	n.a	n.a	n.a
Age 15 & above	n.a	n.a	n.a
Students in MSS level (Class IX-X)			
Total	n.a	n.a	n.a
Age < 15 years	n.a	n.a	n.a
Age 15-16 years	n.a	n.a	n.a
Age 17 & above	n.a	n.a	n.a
Male	n.a	n.a	n.a
Age < 15 years	n.a	n.a	n.a
Age 15-16 years	n.a	n.a	n.a
Age 17 & above	n.a	n.a	n.a
Female	n.a	n.a	n.a
Age < 15 years	n.a	n.a	n.a

TABLE 3.3 (Contd.): STUDENTS BY AGE-GROUP, SEX AND EDUCATION LEVEL,  
ZHEMGANG

Details	2008	2009	2010
Age 15-16 years	n.a	n.a	n.a
Age 17 & above	n.a	n.a	n.a
Students in HSS level (Class XI-XII)			
Total	n.a	n.a	n.a
Age < 17 years	n.a	n.a	n.a
Age 17-18 years	n.a	n.a	n.a
Age 19 & above	n.a	n.a	n.a
Male	n.a	n.a	n.a
Age < 17 years	n.a	n.a	n.a
Age 17-18 years	n.a	n.a	n.a
Age 19 & above	n.a	n.a	n.a
Female	n.a	n.a	n.a
Age < 17 years	n.a	n.a	n.a
Age 17-18 years	n.a	n.a	n.a
Age 19 & above	n.a	n.a	n.a

TABLE 3.4: SANITATION, WATER SUPPLY AND TRAVEL DISTANCE, ZHEMGANG,  
2008 TO 2010

Details	2008	2009	2010
Number of schools with toilet facilities			
Flush toilet	31	32	32
Pit latrine	10	11	11
Other type	5	6	6
No toilet	0	0	0
Number of schools with water facilities			
Tap/pipe water	31	32	32
Pond/spring	0	0	0
Stream	0	0	0
Other	0	0	0

Source: Education Sector, Zhemgang Dzongkhag

TABLE 4.1: TYPE OF HEALTH INFRASTRUCTURE, FACILITIES & PERSONNEL,  
ZHEMGANG, 2007 TO 2009

Details	2007	2008	2009
Number of hospitals	1	1	1
Number of BHUs	14	14	14
BHU grade I	2	2	2
BHU grade II	12	12	12
Number of ORCs	28	28	28
Number of indigenous units	1	1	3
Number of doctors	2	2	2
Number of hospital/BHU beds	54	54	54
Persons per doctor *	9606.5	9751.5	9899
Persons per hospital bed	5	6	7
Total morbidity attendance	48711	49135	51759
Health Assistants	15	19	20
Basic health workers	6	6	5
Sister and nurses	9	9	13
Technicians	9	11	15
Indigenous dungtsho	1	1	1
Indigenous compounders/Menpas	1	1	3
Malaria workers	1	1	1
Village health workers	45	51	51
Births attended by skilled personnel	146	87	81
Number of births in medical facility	70	69	64
Number of children immunized			
Polio	415	388	379
DPTH	416	385	375
Measles	377	447	381
Others	na	na	na
Family planning acceptors by type	79283	74940	55986
Condom distributed	75228	70129	51189
Pills	1329	1570	1999
Injection DMPA	2406	2903	2798
IUD	106	112	na
Vasectomy	172	161	na
Tubectomy	42	65	na
Others	na	na	na

Source: Health Sector, Zhemgang Dzongkhag

Note: \*population based on population projection

TABLE 4.2: TOP TEN MORBIDITY, ZHEMGANG, 2009

Type of diseases (Incidence)	2009
Common Cold	13709
Skin diseases	6570
Diarrhoea/dysentery	3413
PUS	3207
Eye diseases	2906
Acute Pharyngitis/Tonsilitis	2734
Other Musculo-skeletal disorders	2144
Other Respiratory & Nose Diseases	1756
Other dis. of digestive system	1747
Dental Caries	1197

Source: Health Sector, Zhemgang Dzongkhag

TABLE 5.1: NUMBER OF INDUSTRIAL ESTABLISHMENT & TRANSPORT,  
ZHEMGANG, 2007 TO 2009

Details	2007	2008	2009
Trade and Industries (Number)			
Micro & retail trade licences issued	n.a	n.a	n.a
Micro & retail trade licences in operation	n.a	n.a	241
Wholesale trade licences issued	n.a	n.a	n.a
Wholesale trade licences in operation	n.a	n.a	2
Services licences issued	n.a	n.a	n.a
Services licences in operation	n.a	n.a	173
Manufacturing licenses issued	n.a	n.a	n.a
Manufacturing licenses in operation	n.a	n.a	16
Public Transport operators (Numbers)*	n.a	n.a	n.a
Bus	n.a	n.a	n.a
Taxi	0	2	2
Others	210	232	n.a
Industries by type (Number)	14	14	26
Agro based	1	1	4
Forestry based	13	13	21
Mineral based	0	0	0
Others	0	0	1
Industries by scale (Number)	n.a	n.a	321
Large	n.a	n.a	0
Medium	n.a	n.a	1
Small	n.a	n.a	2
Cottage	n.a	n.a	318
Contract firms (Number)	46	46	289
A	0	0	0
B	0	0	0
C	9	7	9
D (Petty)	37	39	280

Source : Regional Trade and Industry Office, Trongsa

\*Road safty & Transport Authority, Regional Office, Gelephu

TABLE 6.1: RENEWABLE NATURAL RESOURCES, ZHEMGANG 2005 TO 2008

Agriculture	2005	2006	2007	2008
Irrigation for agriculture				
Number of irrigation channels	36	37	40	43
Functional	34	35	38	41
Non Functional	2	2	2	2
Total length of channels (Km)	82.72	85.22	87.92	90.92
Area covered by irrigation (Acres)	n.a	n.a	n.a	n.a
Number of households benefitted	994	1042	1079	1146
Number of food processing units	0	1	1	1
Number of agriculture mills *	n.a	n.a	n.a	n.a
Number of livestock product processing units	0	0	0	0
Number of farmer association/groups	n.a	n.a	n.a	n.a
Agriculture	n.a	n.a	n.a	n.a
Livestock	n.a	n.a	n.a	n.a
Forestry	n.a	n.a	n.a	n.a
Number of power tillers	8	14	15	19

Source : Agriculture Sector, Zhemgang Dzongkhag

TABLE 6.2: AGRICULTURAL PRODUCTION, ZHEMGANG 2007 TO 2009

Details	2007	2008	2009
Paddy			
Area (Acres)	2012	1328.86	1267
Production (MT)	1793	1989	1117
Price per Kg(Nu.)	n.a	n.a	n.a
Maize			
Area (Acres)	2328	3620.0073	3226
Production (MT)	1916	3773.53	3028
Price per Kg(Nu.)	n	n.a	n.a
Wheat			
Area (Acres)	693	140.79	177
Production (MT)	319	89	93
Price per Kg(Nu.)	n.a	n.a	n.a
Barley			
Area (Acres)	296	95.6137	97
Production (MT)	132	57.4	47
Price per Kg(Nu.)	n.a	n.a	n.a
Buckwheat			
Area (Acres)	428	365.56	n.a
Production (MT)	186	239	n.a
Price per Kg(Nu.)	n.a	n.a	n.a
Millet			
Area (Acres)	1151	305.5637	n.a
Production (MT)	300	160.47	n.a
Price per Kg(Nu.)	n.a	n.a	n.a
Fruits			
Apples			
Number of fruit bearing trees	449	n.a	103
Production (MT)	1	n.a	3
Production (Nu.)	n.a	n.a	n.a
Oranges/ Mandarin			
Number of fruit bearing trees	n.a	n.a	n.a
Production (Kg)	n.a	n.a	n.a
Production (Nu.)	n.a	n.a	n.a
Banana			
Number of fruit bearing trees	10801	n.a	2812
Production (MT)	149	n.a	39
Production (Nu.)	n.a	n.a	n.a

TABLE 6.2 (contd.): AGRICULTURAL PRODUCTION, ZHEMGANG 2007 TO 2009

Details	2007	2008	2009
Pear			
Number of fruit bearing trees	1904	n.a	44
Production (MT)	83	3.9	1
Production (Nu.)	n.a	n.a	n.a
Plum			
Number of fruit bearing trees	949	n.a	176
Production (MT)	25	5.9	6
Production (Nu.)	n.a	n.a	n.a
Areca Nut			
Production (Pon)	2139	n.a	3163
Production (Nu.)	15	n.a	59
Vegetables and Spices			
Potato			
Production (MT)	226	966.2	319
Production (Nu.)	n.a	n.a	n.a
Chili			
Production (MT)	122	214.8	141
Production (Nu.)	n.a	n.a	n.a
Onion			
Production (MT)	n.a	n.a	20
Production (Nu.)	n.a	n.a	n.a
Cabbage			
Production (MT)	55	39.85	36
Production (Nu.)	n.a	n.a	n.a
Cauliflower			
Production (MT)	24	14.42	12
Production (Nu.)	n.a	n.a	n.a
Asparagus			
Production (Bundles)	n.a	3.77	n.a
Production (Nu.)	n.a	n.a	n.a
Tomato			
Production (MT)	19	6.38	18
Production (Nu.)	n.a	n.a	n.a
Carrot			
Production (MT)	4	3.52	2
Production (Nu.)	n.a	n.a	n.a

TABLE 6.2 (contd.): AGRICULTURAL PRODUCTION, ZHEMGANG 2007 TO 2009

Details	2007	2008	2009
Egg Plant (Brinjal)			
Production (MT)	65	n.a	22
Production (Nu.)	n.a	n.a	n.a
Raddish			
Production (MT)	136	213.41	167
Production (Nu.)	n.a	n.a	n.a
Ginger			
Production (MT)	59	50.57	23
Production (Nu.)		n.a	
Cardamom			
Production (MT)	n.a	1.57	n.a
Production (Nu.)	n.a	n.a	n.a
Garlic			
Production (MT)	23	27.8	3
Production (Nu.)	n.a	n.a	n.a
Oil seeds and legumes			
Lentils			
Production (MT)	n.a	n.a	n.a
Production (Nu.)	n.a	n.a	n.a
Mustards			
Production (MT)	91	109.2	87
Production (Nu.)	n.a	n.a	n.a
Beans			
Production (MT)	96	117.87	56443
Production (Nu.)	n.a	n.a	n.a

Source : RNR Census 2009 and Agriculture Statistics 2007 & 2009, MoA, Thimphu

Note: [www.rnrstat.bt/csbhutan/](http://www.rnrstat.bt/csbhutan/)

Table 6.3: LIVESTOCK POPULATION, ZHEMGANG, 2007 TO 2009

Details	2007	2008	2009
Livestock (Number)			
Cattle	13556	12109	11705
Local breed	12290	10451	9915
male	4376	3524	3438
Female	7914	6927	6477
Improved breed	1266	1658	1790
male	316	453	478
Female	950	1205	1312
Mithun	133	141	na
Buflalo	n.a	n.a	n.a
Male	n.a	n.a	n.a
Female	n.a	n.a	n.a
Horse	1425	1330	1304
Local breed	1360	1315	1262
Improved breed	65	15	42
Yak	N.A	N.A	N.A
Male	N.A	N.A	N.A
Female	N.A	N.A	N.A
Sheep	N.A	N.A	N.A
Local breed	N.A	N.A	N.A
Improved breed	N.A	N.A	N.A
Pig	1106	1042	996
Local breed	514	459	645
Improved breed	592	583	351
Poultry	7812	6365	7413
Local breed	6366	5261	5742
Improved breed	1446	1104	1671
Goat	290	575	66

Source : Livestock Sector, Zhemgang Dzogkhag

Table 6.4: LIVESTOCK PRODUCTS, ZHEMGANG, 2007 TO 2009

in MT

Details	2007	2008	2009
Livestock products			
Fresh Milk (Liters)	895.6	783.99	595.53
Butter (Kg)	59.32	35.06	39.34
Fresh Cheese (Kg)	520.11	153.53	98.52
Processed cheese (kg)	n.a	n.a	n.a
Eggs (Dozen)	166773	33381.58	34197
Fish (Kg)	n.a	n.a	n.a
Beef (Kg)	56.69	19.49	41.57
Pork (Kg)	27.02	14.36	18.03
Yak Meat (Kg)	N.A	N.A	N.A
Mutton (Kg)	146.55	0.07	0.06
Honey (Gm)	n.a	n.a	n.a
Chicken (Kg)	2.54	2.97	1.64

Source : Livestock Sector, Zhemgang Dzongkhag

Table 6.5: FORESTRY PRODUCTS, ZHEMGANG 2007 TO 2009

Details	2007	2008	2009
Wood Forest Product			
Log Form (Cft)	117894.46	78849.86	65299.1
Fire wood (Cubic metres)	1320	848	992
Flag Poles (Number)	n.a	n.a	n.a
Shinglap (Number of trees)	n.a	n.a	n.a
Cham (Number of trees)	n.a	n.a	n.a
Tsim (Number of trees)	n.a	n.a	n.a
Non-Wood Forest Product			
Mushroom (Kg)	n.a	n.a	n.a
Mushroom (Nu.)	n.a	n.a	n.a
Medicinal and Aromatic plants (Kg)	n.a	n.a	n.a
Cordyceps (Kg)	N.A	N.A	N.A
Cordyceps (Nu.)	N.A	N.A	N.A
Sand (Truck Load)	n.a	n.a	n.a
Stones (Truck Load)	n.a	4	277
Bamboo (Number)	n.a	n.a	n.a
Cane (Bundles)	n.a	n.a	n.a
Lemon grass (Kg)	n.a	n.a	n.a

Source : NRDCL, Zhemgang

TABLE 7.1: INFRASTRUCTURE, ZHEMGANG, 2007 TO 2009

Details	2007	2008	2009
Roads (Length in Km)	376.01	382.76	395.04
Farm roads	18.25	25.00	37.28
Feeder roads	62.70	62.70	62.70
Forest roads	13.06	13.06	13.06
Highways/Dzongkhag roads	282	282	282
Bridges (Number)	22	25	25
Suspension bridges	6	7	7
Suspended	16	18	18
Bailey bridges	n.a	n.a	n.a
Traditional bridges	n.a	n.a	n.a
Auto workshop centres	1	1	1
Bus stations	1	1	1
Post offices	2	2	2
Banks	1	1	1

Source:Agriculture Sector, Planning Unit and Engineering Sector, Zhemgang Dzongkhag

TABLE 8.1: TELECOMMUNICATION, ZHEMGANG 2007 TO 2009

Details	2007	2008	2009
Telecommunications (Number)			
Households with fixed telephone connections	473	520	547
Community information centres	0	0	1
Gewogs accessible to mobile services	2	2	2
Households with internet access	n.a	n.a	n.a

Source: Bhutan Telecom, Zhemgang

TABLE 9.1: ENVIRONMENT, ZHEMGANG 2007 TO 2009

Details	2007	2008	2009
Total cultivated land (Acres)	n.a	n.a	n.a
Temperature (Degree Celcius)			
Avg. Max (Annual)	n.a	n.a	n.a
Avg. Min (Annual)	n.a	n.a	n.a
Rainfall (Millimeter)			
Avg. Annual rainfall	n.a	n.a	n.a
Number of snowfall occurred at Dzongkhag head quarter	0	0	0
Damages caused by landslides			
Farmland (acres)	n.a	n.a	n.a
Houses (Number)	n.a	n.a	n.a
Roads (Km)	n.a	n.a	n.a
Damages caused by floods			
Farmland (acres)	n.a	n.a	n.a
Houses (Number)	n.a	n.a	n.a
Roads (Km)	n.a	n.a	n.a
Crops affected by drought (acres)	n.a	n.a	n.a
Crops damaged by wild animals (acres)	n.a	n.a	n.a
Incidence of earthquake (Number of cases reported)	n.a	n.a	n.a
Houses damaged by earthquakes (Number)	n.a	n.a	n.a
Number of forest fires	n.a	n.a	n.a
Acreage destroyed by forest fires	n.a	n.a	n.a
Acreage of reforestation	n.a	n.a	n.a
Houses/structures damaged by fires (Number)	n.a	n.a	n.a
Mining sites (Number)*	n.a	n.a	n.a
Quarry sites (Number)*	n.a	n.a	2
Municipal waste disposal sites (Number)*	2	2	2
Environmental clearance issued*	6	15	14

Source: \* Environment Sector, Zhemgang Dzongkhag

TABLE 10.1: DZONGKHAG 9TH AND 10TH FIVE YEAR PLAN OUTLAYS,  
ZHEMGANG

( in million Nu.)

Sectors	9 FYP		10 FYP	
	Current	Capital	Current	Capital
Civil	78.1	21.3	n.a	48.2
Agriculture	34.5	26.5	n.a	22.5
Livestock	20.3	14.1	n.a	4.6
Forestry	8.3	5.0	n.a	4.0
Education	195.3	164.6	n.a	n.a
Health	99.3	28.5	n.a	49.0
Urban Development & Housing	3.8	64.4	n.a	119.0
Roads	9.2	n.a	n.a	n.a
Bhutan post	n.a	n.a	n.a	n.a
Telecommunication	n.a	n.a	n.a	n.a
Power	5.9		n.a	n.a
Trade & Industry	3.5	13.5	n.a	n.a
Total	458.2	337.8	0.0	247.3
Total plan outlay		796.0		247.3

Source:FYP Document

TABLE 10.2: DZONGKHAG 9TH AND 10TH FIVE YEAR PLAN EXPENDITURE,  
ZHEMGANG

( in million Nu.)

Sectors	9 FYP		10 FYP	
	Current	Capital	Current	Capital
Civil	n.a	n.a	n.a	n.a
Agriculture	n.a	n.a	n.a	n.a
Livestock	n.a	n.a	n.a	n.a
Forestry	n.a	n.a	n.a	n.a
Education	n.a	n.a	n.a	n.a
Health	n.a	n.a	n.a	n.a
Urban Development & Housing	n.a	n.a	n.a	n.a
Roads	n.a	n.a	n.a	n.a
Bhutan post	n.a	n.a	n.a	n.a
Telecommunication	n.a	n.a	n.a	n.a
Power	n.a	n.a	n.a	n.a
Trade & Industry	n.a	n.a	n.a	n.a
Total	n.a	n.a	n.a	n.a
Total plan expenditure	n.a	n.a	n.a	n.a

TABLE 10.3: GEWOG 9TH AND 10TH FIVE YEAR PLAN OUTLAYS, ZHEMGANG  
 ( In million Nu.)

Sectors	9 FYP		10 FYP	
	Current	Capital	Current	Capital
Civil	8.0	10.8	n.a	24.3
Agriculture	n.a	22.0	n.a	76.4
Livestock	n.a	5.9	n.a	1.9
Forestry	n.a	3.4	n.a	4.1
Education	n.a	23.0	n.a	n.a
Health	n.a	9.1	n.a	31.7
Urban Development & Housing	n.a	n.a	n.a	n.a
Roads	n.a	13.5	n.a	18.3
Bhutan post	n.a	n.a	n.a	n.a
Telecommunication	n.a	n.a	n.a	n.a
Power	n.a	n.a	n.a	n.a
Trade & Industry	n.a	n.a	n.a	n.a
Total	8.0	87.6	0.0	156.7
Total plan outlay		95.6		156.7

Source:FYP Document

TABLE 10.4: GEWOG 9TH AND 10TH FIVE YEAR PLAN EXPENDITURE,  
 ZHEMGANG

( In million Nu.)

Sectors	9 FYP		10 FYP	
	Current	Capital	Current	Capital
Civil	n.a	n.a	n.a	n.a
Agriculture	n.a	n.a	n.a	n.a
Livestock	n.a	n.a	n.a	n.a
Forestry	n.a	n.a	n.a	n.a
Education	n.a	n.a	n.a	n.a
Health	n.a	n.a	n.a	n.a
Urban Development & Housing	n.a	n.a	n.a	n.a
Roads	n.a	n.a	n.a	n.a
Bhutan post	n.a	n.a	n.a	n.a
Telecommunication	n.a	n.a	n.a	n.a
Power	n.a	n.a	n.a	n.a
Trade & Industry	n.a	n.a	n.a	n.a
Total	n.a	n.a	n.a	n.a
Total plan outlay	n.a	n.a	n.a	n.a

TABLE 11.1: GROSS AND NET ENROLMENT RATIO BY EDUCATION LEVEL,  
ZHEMGANG, 2005

Details	2005
Primary school level (Class PP-VI)	
Gross enrolment ratio	99.1
Net enrolment ratio	72.2
LSS level (Class VII-VIII)	
Gross enrolment ratio	62.7
Net enrolment ratio	16.7
MSS level (Class IX-X)	
Gross enrolment ratio	45.4
Net enrolment ratio	17.9
HSS level (Class XI-XII)	
Gross enrolment ratio	36.7
Net enrolment ratio	15.7

Source: Socio Economic Development Indicator 2005

TABLE 11.2: LITERACY RATE BY SEX, ZHEMGANG, 2005

Literacy rate	2005
Male	65.7
Female	46.4
15-24 years	77.6
Male	83.7
Female	70.8

Source: Socio Economic Development Indicator 2005

TABLE 11.3: DISTANCE TO THE NEAREST SCHOOL

Details	
Percent of household proximity to nearest school by foot	
< 1 hr	n.a
1 - 2 hrs	n.a
2 - 3 hrs	n.a
> 3 hrs	n.a

TABLE 12.1: HEALTH FACILITIES, ZHEMGANG, 2005

Details	
Population covered by health care (%)	n.a
Population access to safe drinking water (%)*	79.6

Source: Socio Economic Development Indicator 2005

Note: \* Access to improved water source indicate safe drinking water

TABLE 12.2: DISTANCE TO HEALTH CENTRES, WATER SOURCES AND SANITATION, ZHEMGANG, 2005

Details	2005
Walking distance to health facility (% of households)	
< 1 hr	n.a
1 - 2 hrs	n.a
2 - 3 hrs	n.a
> 3 hrs	n.a
Sources of drinking water & sanitation facility (% of households)	
Tap/pipe water	2625
Stream water	684
Other sources	70
With toilet facility	2946
Without toilet	433

Source: PHCB 2005

Note: Stream water includes spring, river and pond

TABLE 13.1: ECONOMIC ACTIVITIES, ZHEMGANG

Details	
Proximity to nearest market (% of households)	n.a
<1 hr	n.a
1-2 hrs	n.a
2-4 hrs	n.a
>4 hrs	n.a

Source: Socio-Economic & Demographic Indicator 2005

TABLE 13.2: ACCESS TO CREDIT FACILITIES, ZHEMGANG

Details	
Households by access to credit/loan facilities(%)	n.a
Bank	n.a
BDFC/RICB	n.a
Relatives/friends	n.a

TABLE 14.1: EMPLOYMENT BY INDUSTRIES, AGE-GROUP AND SEX, ZHEMGANG,  
2005

Details	2005
Total labour force (Number)	6078
Total employed (%)	95.38
Male	95.15
Female	95.61
Unemployment rate	4.62
Total employed in Agriculture (%)	36.44
Male	28.17
Female	49.21
Total employed in Industries (%)	17.82
Male	24.27
Female	7.87
Total employed in Services (%)	10.3
Male	13.29
Female	5.69
Total unemployed by area (%)	
Urban	4.08
Rural	4.77
Total un-employed by education (%)	
Total unemployed grade XII and above	n.a
Total unemployed below grade XII	n.a
Total under employed (%)	n.a
Employed by age-group (%)	
15-17 years	n.a
18-24 years	n.a
25-64 years	96.4
65 years and above	97.61
Unemployed by age-group (%)	
15-17 years	n.a
18-24 years	n.a
25-64 years	3.6
65 years and above	2.39

TABLE 14.1 (contd.): EMPLOYMENT BY INDUSTRIES, AGE-GROUP AND SEX,  
ZHEMGANG, 2005

Details	2005
Labor force participation rate (%)	32.61
Male participation rate	38.85
Female participation rate	26.14

Source: PHCB 2005

Note: industry includes mining/quarrying, manufacturing, electricity/gas/water, construction and retail/wholesale trade.

service includes hotel/restaurant, transport/communication, finance/insurance, public administration/security, education and health service.

TABLE 15.1: RENEWABLE NATURAL RESOURCES, ZHEMGANG

Agriculture	
Wet land holding (Number)	
Holdings < 1 acre	n.a
Holdings 1-5 acres	n.a
Holdings >5 acres	n.a
Total wet land (Acres)	
Dry land holding (Number)	
Holdings < 1 acre	n.a
Holdings 1-5 acres	n.a
Holdings >5 acres	n.a
Total dry land (Acres)	
Orchard land holding (Number)	
Holdings < 1 acre	n.a
Holdings 1-5 acres	n.a
Holdings >5 acres	n.a
Total orchard (Acres)	
Pasture land (Acres)	n.a

Source: [www.rnrstat.bt/csbhutan/index](http://www.rnrstat.bt/csbhutan/index) (land use database)

TABLE 16.1: INFRASTRUCTURE, ZHEMGANG, 2005

Details	2005
Walking distance to road head (% of households)	
< 1 hr	44.3
1-2 hrs	1.7
2-5 hrs	8.6
>5 hrs	45.5

Source: Socio Economic Development Indicator 2005

TABLE 17.1: PERCENTAGE OF HOUSEHOLDS HAVING TELECOMMUNICATION,  
ZHEMGANG, 2005

Details	(in percent)
Households with TV sets	11.9
Households owning computer	0.7
Households owning radios	61.3

Source: Socio Economic Development Indicator 2005

TABLE 18.1: NUMBER OF CULTURAL INFRASTRUCTURE AND RELIGIOUS PERSONNEL, ZHEMGANG

Details	
Number of Dzongs *	n.a
Number of Chortens **	n.a
Number of Lhakhangs **	n.a
Private	n.a
Community	n.a
Government	n.a
Number of Temples	n.a
Private	n.a
Community	n.a
Government	n.a
Number of Chukhor/Dungkhор **	n.a
Number of religious personnel, centres and sites **	
Nuns	n.a
Gelongs	n.a
Gomchens	n.a
Pawo/jomo/terda/nyerjom	n.a
Shedra	n.a
Gomdeys/Drubda	n.a
Cremation grounds	n.a
Community tshechus	n.a
Hot springs	n.a
Menchu	n.a
Pilgrimage sites (Nyes)	n.a
Drupchu	n.a
Number of Cultural industries and units	
Movie making	n.a
Weaving centre	n.a
Dapa/phop	n.a
Wood and craft	n.a
Bhutanese paper manufacturing	n.a
Number of households manufacturing	
Dung	n.a
Jaling	n.a
Drum (nga)	n.a
Bangchung	n.a
Tshazow	n.a

TABLE 18.1 (contd.): NUMBER OF CULTURAL INFRASTRUCTURE AND RELIGIOUS PERSONNEL, ZHEMGANG

Details	
Singing/Dancing	n.a
Mask Dances	

Source: - \* GIS Infrastructure Mapping 2008, NSB, Thimphu.  
 - \*\* Gewog Administration Office, Bumthang Dzongkhag.

TABLE 19.1: ENVIRONMENT, ZHEMGANG, 2005

Details	2005
Forest coverage (%) *	
Households using fuel wood (%)	78.9
Households using electricity (%)	17.0
Number of Protected spring water sources	n.a
Number of Lakes	n.a

Source: Socio Economic Development Indicator 2005 & FYP Document

Note: Fuel wood & electricit use for cooking

TABLE 20.1: POVERTY, DEPENDENCY RATIO AND HOUSING CONDITION,  
ZHEMGANG, 2005 & 2007

Details	2005
Population below total poverty line (%) <sup>a</sup>	52.9
Households below total poverty line (%) <sup>a</sup>	44
Population below food poverty line (%) <sup>a</sup>	18
Households below food poverty line (%) <sup>a</sup>	13
Households availing rural credit (%)	n.a
Average annual household expenditure (Nu.) <sup>b</sup>	
Landless households (%)	n.a
Dependency	
Child dependency ratio	61
Old age dependency ratio	11
Overall dependency ratio	72
Housing condition	
Household with straw/leaves roof (%)	26
Household with bamboo roof (%)	9
Household with metal roof (%)	53
Household with concrete/tiles roof (%)	1
Household with shingles roof (%)	8
Number of persons per room	
Number of households living in own dwelling	77
Number of households living in rented house	368
Ownership of assets (Number)	
Households with land/plot	2637
Households owning livestock	1715
Households owning vehicle	138
Households owning refrigerator	209
Households owning washing machine	28
Households owning rice cooker	n.a

Source: PHCB 2005, <sup>a</sup>-PAR 2007, <sup>b</sup>-BLSS 2007