



# Comparison of Population Data between Census and Admin Records in Cambodia

F. Nishi

Statistical Research and Training Institute, Ministry of Internal Affairs and Communications, Japan

### Introduction

During the 2000 round of censuses, over 190 countries conducted a population census based on the traditional approach, that is, by enumerator.

Several countries succeeded in using the register-based approach to generate complete count population data, that is, by administrative records.

Since the administrative records called "Commune Data Base" is being operated in Cambodia, we compare population statistics from it against the Cambodia 2008 Population Census results.

Table 1-1. Comparison of merits and demerits of two approaches

	The traditional approach	The register-based approach	
	census by enumerator	by administrative records	
Cost	Extremely expensive	Relatively cheap	
Initial investment	Not necessary	Necessary and expensive	
Data capture	Necessary	Not necessary	
Maintenance	Not necessary	Necessary and expensive	
Topics	Flexible	Fixed	
Adding new topics	Easy	Difficult and expensive	
Coverage	Universal coverage	Usual residents only	
Simultaneity	Easy	Depends on update cycle	
Periodicity	Once in five or ten years	Desired frequency	

Table 1-2. Comparison of Definitions between Census and Administrative Records in Cambodia

	Census 1)	Admin Records 2)
1. Method of enumeration	De facto	De jure
2. Coverage	Universal coverage. If he/she was there on the reference date, he/she is included.	Registered residents, or usual residents staying there for more than six months only.
	they are included.	Homeless or transient people are not included.  Registered foreigners are included.
3. Reference date/month	3 March 2008 at 0:00 AM	December 2008

- 1) Final Results of 2008 Population Census, as of 3 March 2008

  The 2008 Population Census was implemented by the National Institute of Statistics, Ministry of Planning,

  Cambodia with cooperation from UNFPA, the Government of Japan, and JICA.
- 2) Commune Data Base (CDB), as of Dec. 2008

  The CDB has been updated by the Ministry of Planning, Cambodia every year.

  All village chiefs in Cambodia report to the Ministry through its administrative channel.

### Table 2. Cambodia National Level Comparison

# Comparison of Population Data between Census and Administrative Records - Cambodia (2008)

Age	Census 1)	Admin Records 2)	Difference 3)
	A (persons)	B (persons)	(%)
Total	13,395,682	13,850,377	3.4
0-5 years old	1,665,780	1,760,166	5.7
6-17	3,821,928	3,980,667	4.2
18-60	7,135,785	7,186,596	0.7
61 and over	772,189	922,948	19.5

- 1) Final Results of 2008 Population Census, as of 3 March 2008
- 2) Commune Data Base (CDB), as of Dec. 2008
- 3) = (B-A)/A\*100

### Comments on Table 2.

In Cambodia, the population of the admin records are 3.4 % more than that of the census.

The possible difference due to the time lag of 10 months is estimated to be 1.3% only.

The possible reasons are as follows:

1. No report of death

61 years and over shows 19.5% more.

#### 2. Double count

There is no service of network in the registration system.

### Table 3. Phnom Penh City (Capital)

## Comparison of Population Data between Census and Administrative Records - Phnom Penh (2008)

Age	Census 1)	Admin Records 2)	Difference 3)
	A (persons)	B (persons)	(%)
Total	1,327,615	1,080,119	-18.6
0-5 years old	112,033	94,943	-15.3
6-17	265,766	251,914	-5.2
18-60	884,864	655,236	-26.0
61 and over	64,952	78,026	20.1

- 1) Final Results of 2008 Population Census, as of 3 March 2008
- 2) Commune Data Base (CDB), as of Dec. 2008
- 3) = (B-A)/A\*100

### Comments on Table 3.

In Phnom Penh city, the population of the admin records is 18.6 % <u>less</u> than that of the census.

The possible difference due to the time lag of 10 months is estimated to be 2.4% only.

The possible reasons are as follows:

1. No report of migration

Many people have already migrated to Phnom Penh city, but their registrations are still in their home province.

2. Population inflow to the capital city

### **Table 4. Prey Veng Province (near Phnom Penh city)**

# Comparison of Population Data between Census and Administrative Records - Prey Veng (2008)

Age	Census 1)	Admin Records 2)	Difference 3)
	A (persons)	B (persons)	(%)
Total	947,372	1,123,259	18.6
0-5 years old	118,107	135,570	14.8
6-17	277,367	300,361	8.3
18-60	488,101	608,235	24.6
61 and over	63,797	79,093	24.0

$$3) = (B-A)/A*100$$

<sup>1)</sup> Final Results of 2008 Population Census, as of 3 March 2008

<sup>2)</sup> Commune Data Base (CDB), as of Dec. 2008

#### **Comments on Table 4.**

In Prey Veng province, the population of the admin records is 18.6 % more than that of the census.

The possible difference due to the time lag of 10 months is estimated to be 3.0% only.

The possible reasons are as follows:

### 1. No report of migration

Many people have already migrated from this province, but their registrations are still in this province.

### 2. Population outflow from this province

The location of this province is near Phnom Penh city.

### **Table 5. Kratie Province (far from Phnom Penh city)**

# Comparison of Population Data between Census and Administrative Records - Kratie (2008)

Age	Census 1)	Admin Records 2)	Difference 3)
	A (persons)	B (persons)	(%)
Total	319,217	318,813	-0.1
0-5 years old	46,525	46,396	-0.3
6-17	94,362	96,877	2.7
18-60	160,374	154,521	-3.6
61 and over	17,956	21,019	17.1

- 1) Final Results of 2008 Population Census, as of 3 March 2008
- 2) Commune Data Base (CDB), as of Dec. 2008
- 3) = (B-A)/A\*100

#### Comments on Table 5.

In Kratie province, the population of the admin records is only  $0.1 \% \underline{less}$  than that of the census.

The possible difference due to the time lag of 10 months is estimated to be 1.6% only.

The possible reasons are as follows:

- 1. The location of this province is far from Phnom Penh city.
- 2. Relatively fewer migration

### **Conclusion**

In Cambodia, there is still big difference between the results of the population census and the results from the administrative records.

Therefore, it seems that the census is still necessary to obtain accurate population statistics in Cambodia.

### **Related Websites**

### Final Results of Cambodia 2008 Population Census

http://www.stat.go.jp/english/info/meetings/cambodia/final\_br.htm

Commune Data Base (CDB) in Cambodia

http://db.ncdd.gov.kh/cdbonline/home/index.castle

