Cambodia Population Census 2008 round 2010

by Has Bunton

EGM on IT in Census, UNESCAP, BKK, 10-12 Dec. 2007

Agenda

1. Organization and Preparation
2. Census Mapping and Issues
3. Data Processing and Tabulation
4. Presentation and Dissemination
Organization

- Sub-Decree on organization of 2008 population census was in effect since 30th Jan. 2006
- National Census Committee (NCC) has been formed within the sub-Decree above
- Census Technical Committee (CTC) has been appointed by the NCC in 22th May, 2006
- Assignment of Regional Officer, Provincial Census Officer, District Census Officer, Commune Census Officer
Questionnaire Preparation

- The traditional questionnaire design is selected for PC data processing and de facto data collection method.
- Census questionnaire had been drafted, revised, consulted with data users, tested, then finalized, and approved by the CTC and NCC. It also passed the census pilot.
- Sections: ID, present member, visitor, absent member, individual particular, literacy, education, disability (+1998), economic activity, employment, fertility, housing condition, mortality (+1998).
- Manuals is finalized.

Coding and Issue

- Industry coding uses UN’s ISIC Rev. 4
- Occupation coding uses UN’s ISCO-08
- Issue on comparability to previous census (1998) result. To establish conversion table. Though, there are 1↔Many and 1↔0 relationship.
- Other coding such as education, minority, mortality reason might not be completely comparable across countries.
Mapping

- 30 staff is assigned to manually delineate enumeration area (EA) in their field work throughout the country, Together with EA map, a village questionnaire is requested to fill.
- An EA database is produced from the village questionnaire. It is used for census management and quality assurance.
- Village boundary digitization was outsourced, and 20 staff was assigned to assist in verification.
- Census mapping is worked in coordination with Ministry of Land Management and Ministry of Interior.

Mapping Activities (1)

- Field staff is requested to coordinate with village chief, commune council, previous census’s EA map, 2003 health facility & administrative map, and satellite image where available and applicable in drawing EA map for census.
- 120 households is the maximum number of household in an EA or more than one EAs in a village are drawn.
- This EA map will be used in proper census period to draw details household location with constant landmark, start point, and direction of enumeration.
- 30 GPS was also used to get the point of village chief office/house.
- To work in consultation with village chief/commune council in filling the village questionnaire consisting of information on EA identification, school, health facility and services, other basic accessibility, and duration of traveling to those key points.
Mapping Activities (2)

- Information on EA is stored as a database for the other census applications such as for completeness checking, labeling, progress tracking, record and storage tracking, ...
- Village boundary digitization is done based on 2003 health facility and administrative mapping for the purpose of dissemination. It was outsourced but the work is far from perfect even for statistical purpose and more input is required.

EA Delineation
EA Database Applications (1)

EA Database Applications (2)

Label for Census 2008

Get Label
**EA Database Applications (3), Labeling**

![Labeling Image]

**EA Database Applications (4), Barcode Tracking**

![Barcode Tracking Image]
Census Mapping Issues

- Changing of village boundary, new creation, merging, deletion – approved and not approved. To help, a request made to the Ministry of Interior to postpone the changes 6 months before the census date.
- Household movement by season, workplace, tradition.
- No clear or no boundary, reserved areas.
- Outsourcing, and multiple sources of technical assistance can be an issue.

Some Communes, the Boundaries Are Absent

These two Communes have no boundaries in between.

The two communes, Reang Til and Srae Sdok are in Pursat Province.
Some Areas Reserved and No Boundaries

There supposed to have administrative boundary in the large area of "Dragon Tail"

Some Communes, The Boundaries Are Not Clear

There are no clear boundary for this concentrated communes and villages
Some communes was asked to have unofficial boundary

The boundaries covers only the people living, the empty area did not know in any villages, it is also difficult to digitization village boundaries. No belong to vil
Some Communes, expansion of boundary is not agreed by neighboring communes

The commune chief asked to extent his commune boundary without consensus of neighboring communes.

Data Processing and Tabulation

- PC-based keying processing system was adopted.
- Manual coding is selected
- Data entry program developed using CSPro with real time error control.
- Verification will be required, and gradually reduced based on accuracy of keyer
- Data editing and imputation will also be done using CSPro
- 70 priority tables are defined using all sections and variables of the census. Other tables are defined as extended tables. CSPro also will be use to generate tables, although we are currently facing minor difficulty with the tabulation module.
- Data store is proposed to be in text file of CSPro and SQL Server for analysis and dissemination.
**Presentation and Dissemination**

- Presentation and dissemination will mainly follow the last census 1998 with improvement and minor addition.
- The main hard copy outputs shall be Final Census Report, Census Atlas, pamphlet, and specialized sector reports such as fertility, mortality, migration, gender, labour and employment, literacy and education.
- For electronic products, there shall be report on CD-ROM, website, shape file and indicators to replace PopMap, Table Retrieval System, Micro Data Access System (WinR), Raw Database, CamInfo using Census Data, and potential use of SuperStar online and offline.
- Hosting a professional statistical web site can be difficult or impossible in some countries. A proposal is that UN host or have a web server to share countries in need.
- In combination with household survey data, it will be able to produce also poverty mapping.

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**Census and GIS**
On-Line Dissemination

CamInfo (DevInfo) – MDG Monitoring Tool

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<th>Province</th>
<th>Female</th>
<th>Male</th>
<th>Total</th>
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<td>87.1</td>
<td>87.1</td>
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<tr>
<td>Bat Dambang</td>
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<td>93.8</td>
<td>90.7</td>
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<td>Kampong Cham</td>
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<td>Kampong Chhnang</td>
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<td>Kampong Thum</td>
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<td>86.9</td>
<td>87.0</td>
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<td>Kampot</td>
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<td>89.8</td>
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Graphs

Net enrolment ratio at Province Level 2002-2003

Map
Cambodia has got a discounted license of SuperStar. The potential use is for on-line and off-line data access and dissemination.
Thank You