REDATAM
Cambodia Census Online

Regional Training on Using Population Census Data for Planning and Decision Making: Thematic Analysis on Youth (Face to Face Phase II)

Chiba, Japan, 2 – 6 September 2013

Chiba, Japan, 15 – 19 October 2012

Objectives

- The objective of this subject is
  - to learn logic of how to generate indicators from many variables of household surveys
  - by using REDATAM for Cambodia census online

What is REDATAM+SP?

- **RE**trieval of **DAT**a for small **A**reas of **M**icrocomputer
- Software tool developed by CELADE for processing and analyzing census data
- Handles large volumes of micro data in a hierarchical structure and facilitates data processing for small areas

Typical usage of REDATAM

- **Type A:** Internal use within NSO

- **Type B:** Dissemination for the Public

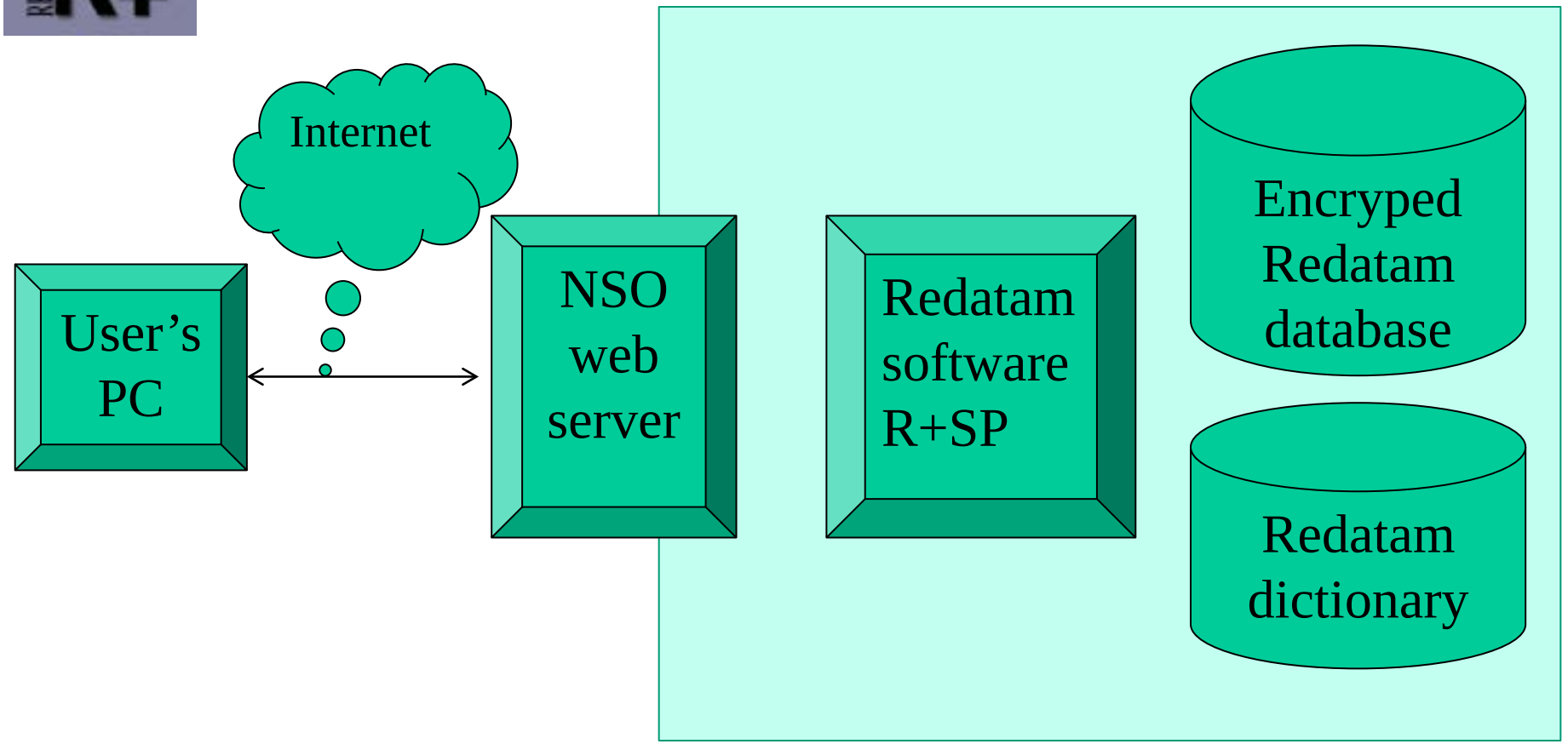
Type A: Internal use within NSO

- Main purpose is tabulation and analysis conducted by NSO staff
- Accessible even to household/person leveldata
- Programmable using comand sets
- Able to develop new indicators

Type B: Dissemination for the Public

- Purpose is dissemination on the web or CD for the public, especially a regional and municipality level.
- Household/person's information is protected
- Ready-made aggregated data is available like CensusInfo/DevInfo
- Customized tables and creation of new indicators are also possible

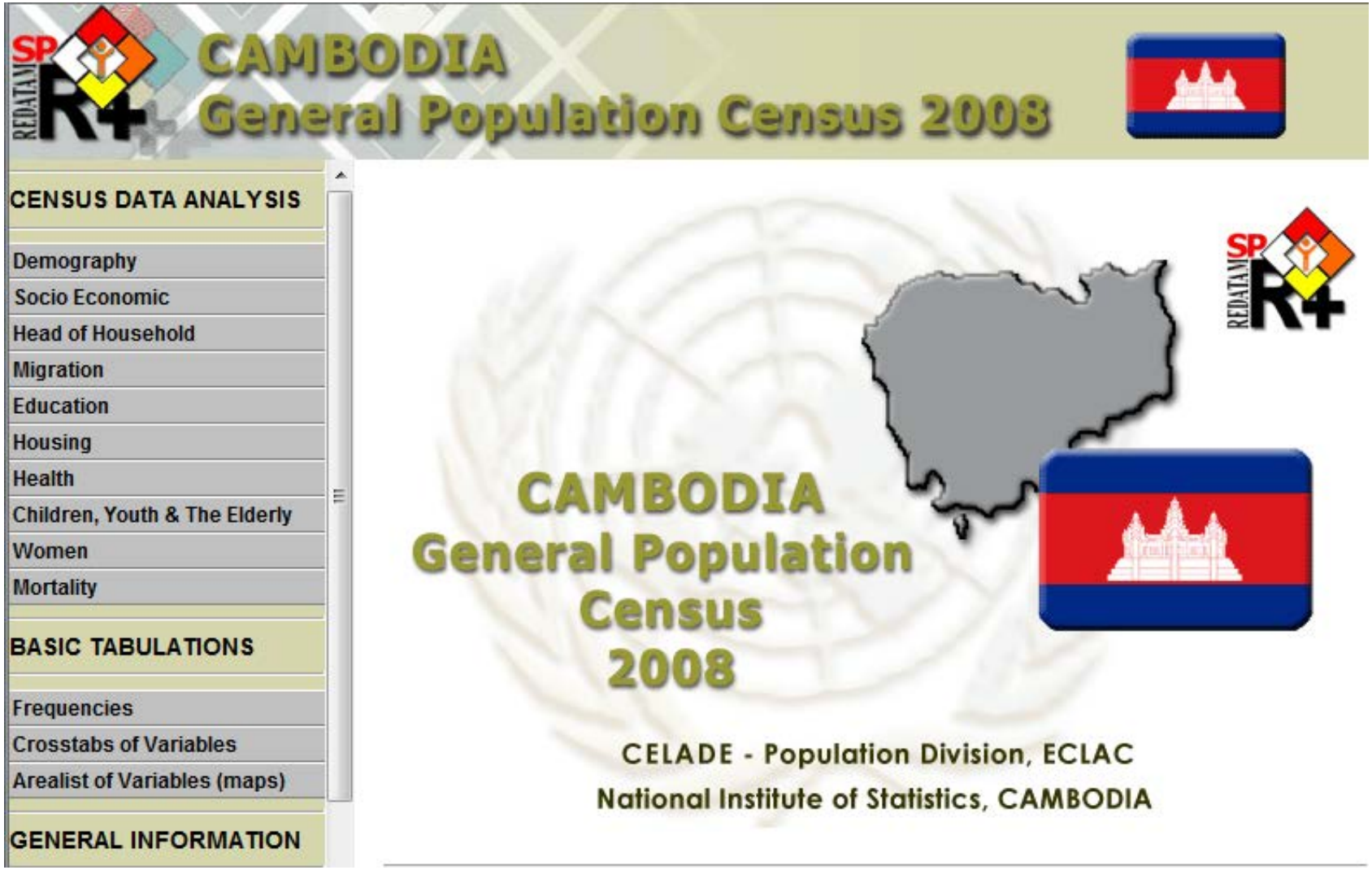
REDATAM online: Dissemination for the public



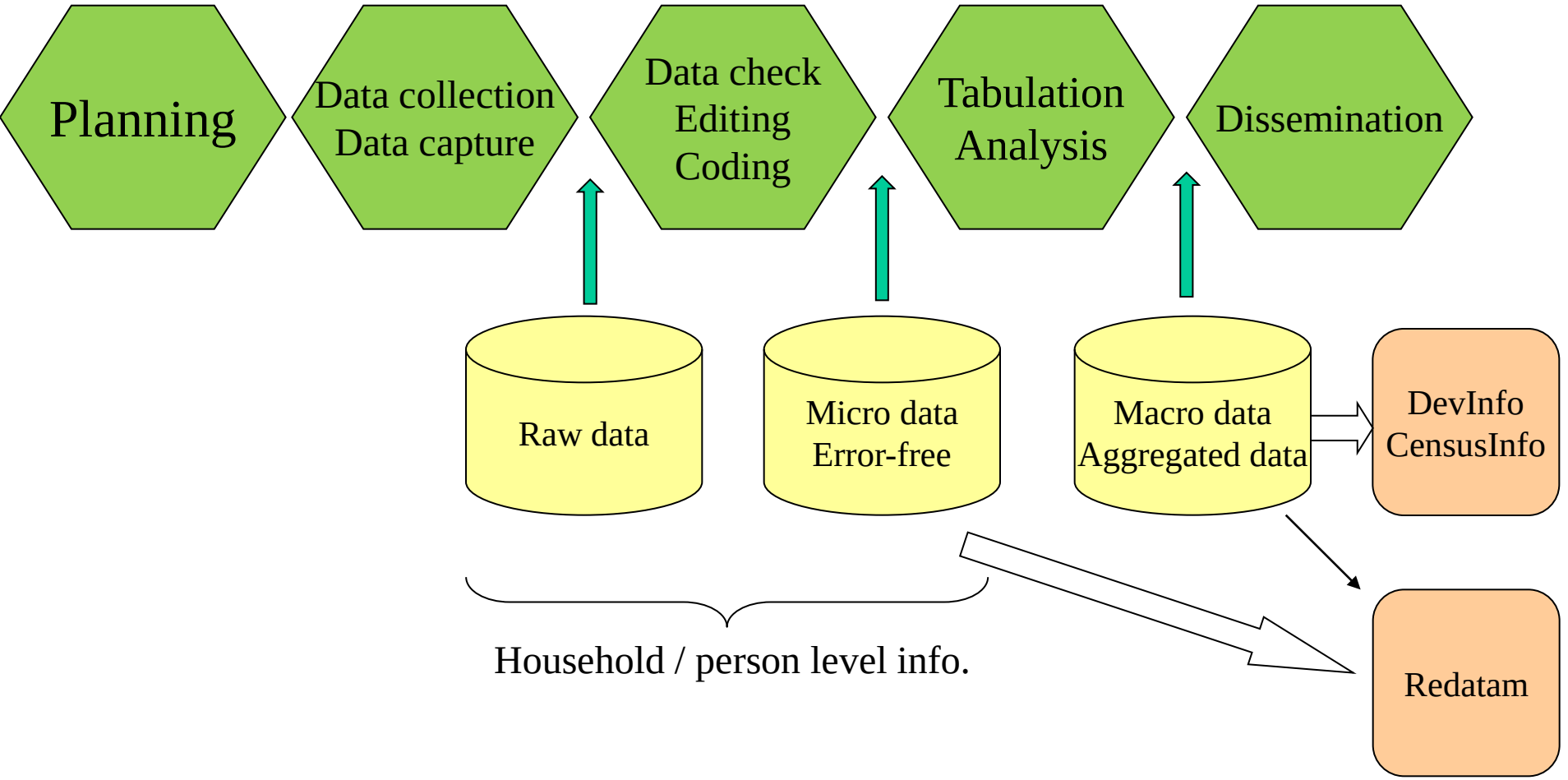
Users can make tables from census micro data.
However, confidentiality of individual data is secured.

Redatam on line

http://www.eclac.cl/redatam



Process of census/survey and role of Redatam



Data structure of Cambodia Census 2008

- Hierarchical structure of entities

CMB2008 (Country)

PROVINCE (Province)

BUILDING (Building Block)

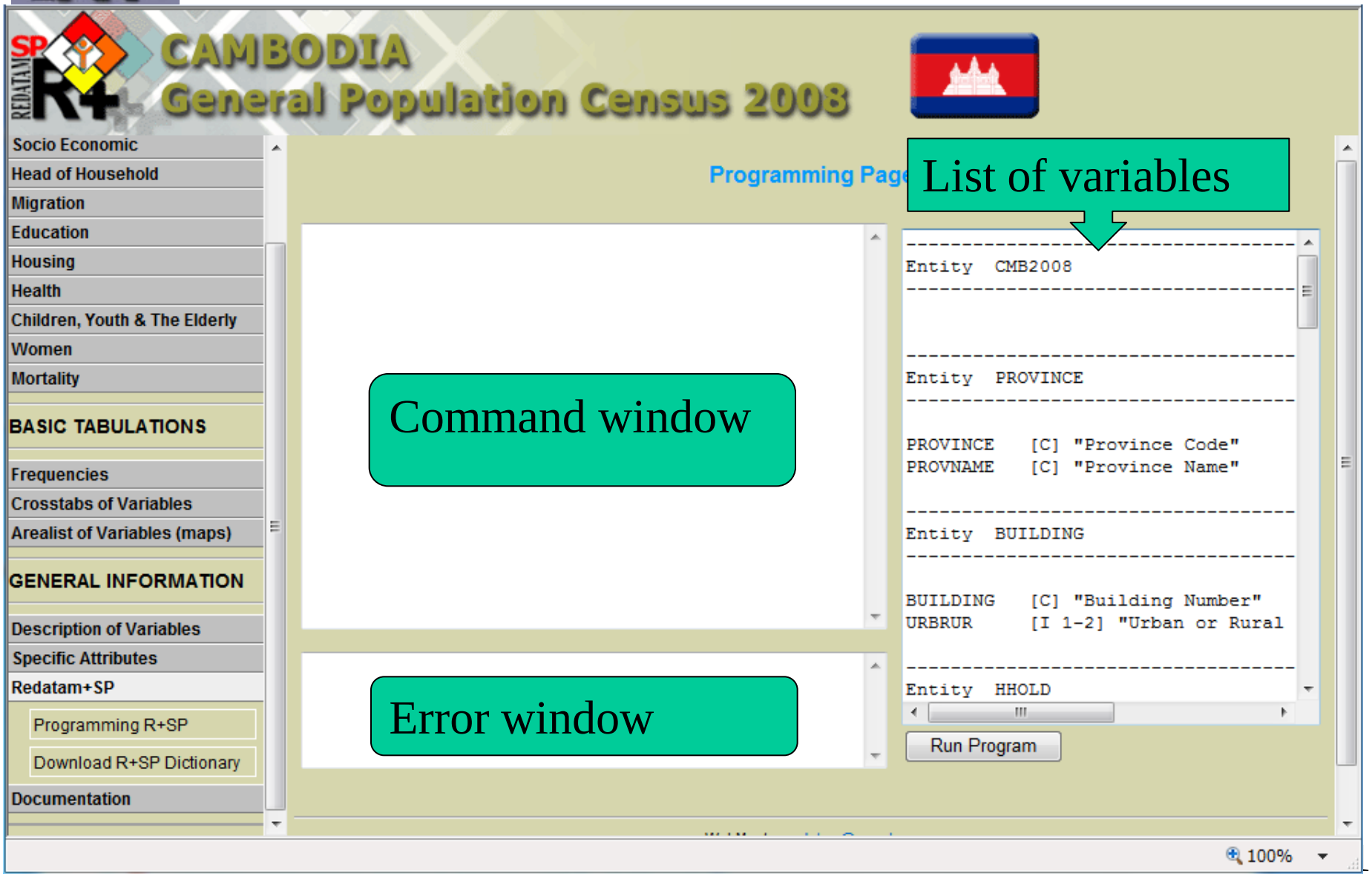
HHOLD (Household)

PERSON (Person)

District, Commune, Village and EA are not accessible in Census online

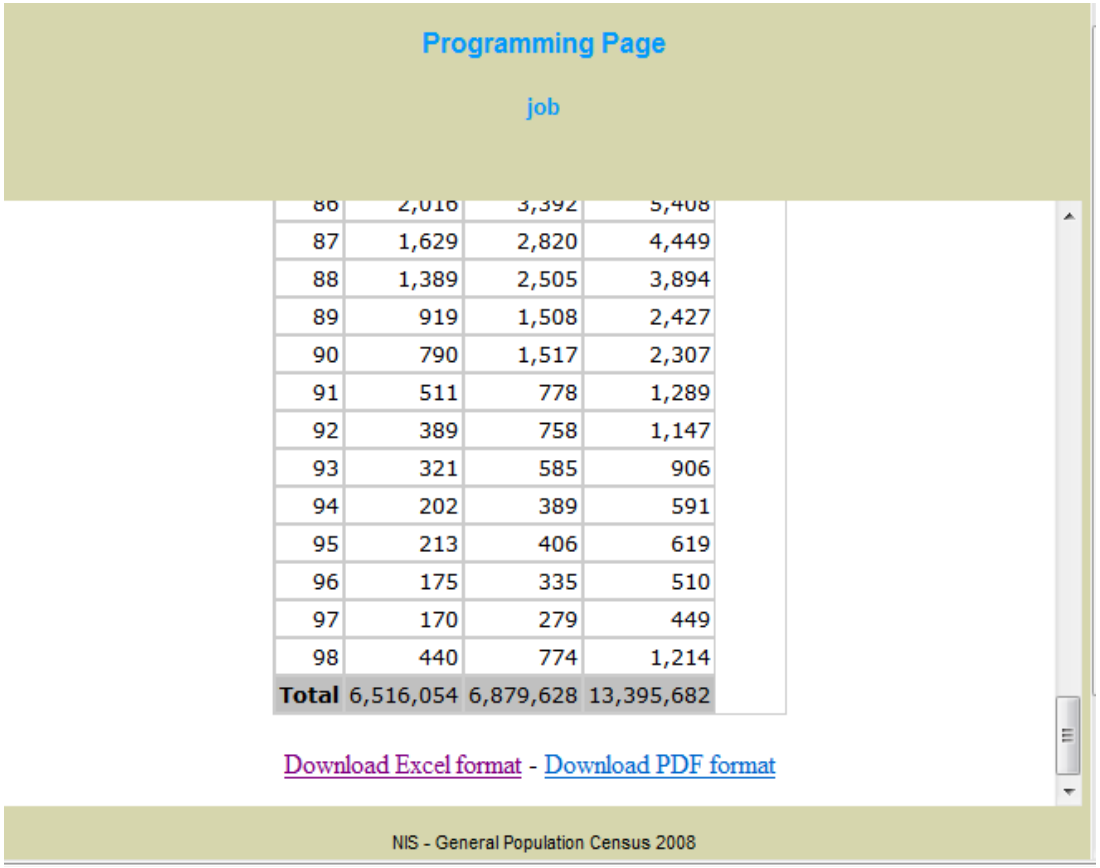
Map of Provinces - Cambodia

Programing R+SP

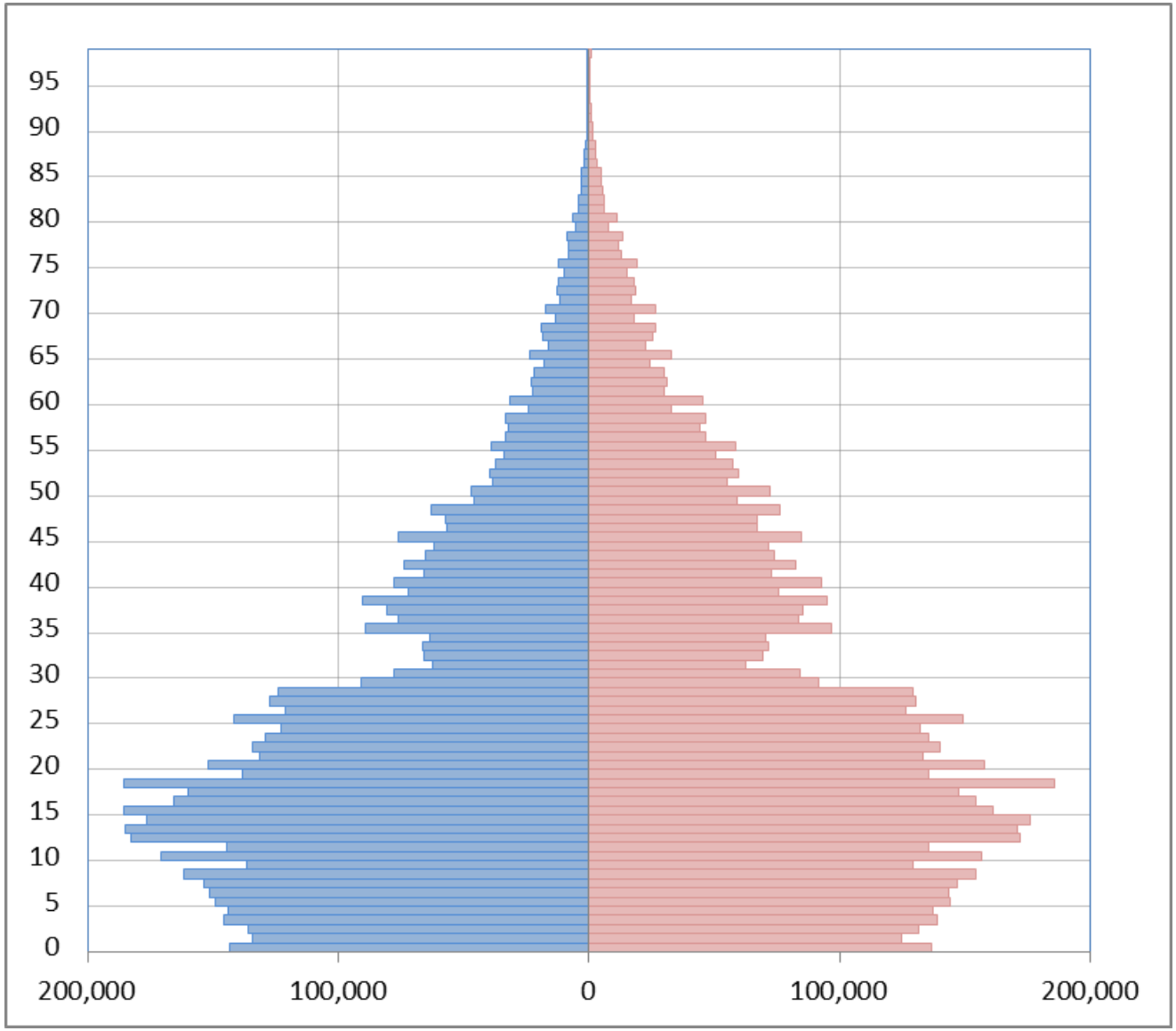


Example of Command

RUNDEF job
TABLE tab AS CROSSTABS
OF PERSON.AGE BY PERSON.SEX



Population Pyramid
Cambodia 2008



Remarks on REDATAM online

- REDATAM online has no function to save commands which you have type-in on the command window.
- You have to save your commands in Notepad/Window file by yourself.
- It is better to write commands using Notepad/Word and then to copy & paste it on the command window.
- Most important is command sets.
  Results will automatically come.

RUNDEF command

RUNDEF jobname
-SELECTION ALL (1)

-SELECTION INLINE,
PROVINCE 12 “Phom Penh” (2)

-UNIVERSE/FOR … (3)

Ex: RUNDEF command

```
RUNDEF job02
FOR PERSON.SEX=2 AND
 PERSON.RELATION=1


TABLE tab02 AS FREQUENCY
OF PERSON.MARITAL
```

Ex: RUNDEF command

```
RUNDEF job03
FOR PERSON.AGE>=15 AND
 PERSON.AGE<=64


TABLE tab03 AS CROSSTABS
OF PERSON.AGE5Y
BY PERSON.ACTIVITY
```

TABLE command

TABLE tabname AS
-FREQUENCY (1)
-CROSSTABS (2)
-AVERAGE (3)
-AREALIST (4)
OF variable(s) [BY variable]

[FOR …]
[AREABREAK …]
[PCC] [PCR]
[TITLE]

TABLE command: FREQUENCY

TABLE tabname AS FREQUENCY
OF variable

[FOR …]
[AREABREAK …]
[PCC] [PCR]

TABLE command: CROSSTABS

TABLE tabname AS CROSSTABS
OF variable1 BY variable2
[BY variable3]

[FOR …]
[AREABREAK …]
[PCC] [PCR]

Ex: CROSSTABS

Cross tabulation between different level variables

RUNDEF job

TABLE tab AS CROSSTABS
OF PROVINCE.PROVNAME
BY BUILDING.URBRUR

Province Name	Urban or Rural classification		
	Urban	Rural	**Total**
Banteay Meanchey	34,550	101,335	135,885
Battambang	33,739	165,263	199,002
Kampong Cham	23,463	321,645	345,108
Kampong Chhnang	7,892	89,902	97,794
Kampong Speu	10,271	135,377	145,648
Kampong Thom	6,386	122,352	128,738
Kampot	9,611	117,507	127,118
Kandal	34,236	203,829	238,065
Kep	935	5,969	6,904
Koh Kong	6,985	16,211	23,196
Kratie	7,005	53,413	60,418
Mondul Kiri	916	9,823	10,739
Otdar Meanchey	3,448	33,573	37,021
Pailin	3,079	10,678	13,757
Phnom Penh	202,767	16,228	218,995
Preah Sihanouk	16,979	25,142	42,121

TABLE command: AVERAGE

TABLE tabname AS AVERAGE
OF variable(s)
[BY variable]

[FOR …]
[AREABREAK …]

TABLE command: AREALIST

TABLE tabname AS AREALIST
OF entity, var1, var2, var3,…

[FOR …]
[PCC] [PCR]

DEFINE command

DEFINE new_varname AS
-COUNT
-RECODE
-SUM
-Arithmetic/logical expression

[FOR …]
[TYPE INTEGER/REAL]
[RANGE …]
[DECIMALS …]
[VARNAME]
[VALUELABELS]

DEFINE command: COUNT

```
RUNDEF job41

DEFINE PROVINCE.THH AS
COUNT HHOLD

TABLE tab41 AS AREALIST OF
PROVINCE,
PROVINCE.PROVNAME,
PROVINCE.THH
```

DEFINE command: COUNT

```
RUNDEF job42

DEFINE HHOLD.NCHILD AS
COUNT PERSON
FOR PERSON.AGE<=15


TABLE tab42 AS FREQUENCY OF
HHOLD.NCHILD
```

DEFINE command: RECODE

```
DEFINE PERSON.AGEGR3 AS
RECODE PERSON.AGE
(0 – 14=1) (15 – 64=2) (65 – Highest =3)
TYPE INTEGER
RANGE 1 – 3

TABLE tab43 AS CROSSTABS
OF PERSON.SEX   BY   PERSON.AGEGR3
PCR
```

Complete the command set!

DEFINE command: SUM

```
DEFINE PROVINCE.NCAR AS
SUM OF HHOLD.CAR
```

Complete the command set!

DEFINE command: Arithmetic/logical expression

```
DEFINE PROVINCE.TOTPOP AS COUNT …

DEFINE PROVINCE.WKAGE AS COUNT …

DEFINE PROVINCE.DEPRATIO AS
(PROVINCE.TOTPOP – PROVINCE.WKAGE)
 / PROVINCE.WKAGE * 100
TYPE REAL
RANGE 0 – 100
DECIMALS 1
```

Complete the command set!

DEFINE command: Arithmetic/logical expression

```
DEFINE HHOLD.NCHILD AS
COUNT PERSON
FOR PERSON.AGE<=15

DEFINE HHOLD.CHILD AS
(HHOLD.NCHILD > 0) * 1 + (HHOLD.NCHILD = 0) * 2
TYPE INTEGER
RANGE 1 - 2
```

Complete the command set!

Let’s Practice!

- Learn not only REDATAM commands but also how to proceed analysis.
- Any statistical software make the below analysis possible if microdata set is available.

School attendance

- School in Cambodia is 6-3-3 year system from 6 years old.
- Prepare basic data for the below chart of school attendance rate of person aged 5 to 24 by single-year age.

RUNDEF job02

FOR PERSON.AGE>=5 AND PERSON.AGE ……

TABLE tab02 AS CROSSTABS OF

…….. BY PERSON.SCHOOL_ATT

PCR

School attendance

Which province shows the highest proportion of children 6-11 (elementary school age) not attending school?

RUNDEF …….

FOR PERSON.AGE>=6 AND ……..

TABLE tab04 AS CROSSTABS OF

…….. BY PERSON.SCHOOL_ATT

PCR

Exercise

Number of household by number of spouses in the household

RUNDEF job

SELECT ALL

DEFINE HHOLD.Nspouses

As Count …….

For Person.Ralation=2

Table T1 AS Frequency of ……..

* How many household?

Make table of sex ratio by province

RUNDEF job01

DEFINE PROVINCE.MALE AS …… PERSON
FOR PERSON.SEX=1

DEFINE PROVINCE.FEMALE AS COUNT PERSON
FOR …….=2

DEFINE PROVINCE.SEXRATIO AS
(----------------/PROVINCE.FEMALE)*100
TYPE REAL
RANGE 0-200
DECIMALS 1

TABLE tab01 AS AREALIST OF PROVINCE,
PROVINCE.PROVNAME, PROVINCE.SEXRATIO

Labour force participation rate by five-year age group and sex (age 7 and over)

RUNDEF job
FOR PERSON.AGE >=7 and
PERSON.ACTIVITY >=1 AND PERSON.ACTIVITY <=3

TABLE tab01 AS CROSSTABS OF PERSON.AGE5Y
BY PERSON.SEX

Number of unpaid family workers by industry and sex

RUNDEF job
FOR PERSON.AGE >=7 and
PERSON. ……=4

TABLE tab01 AS CROSSTABS OF ……(p.industry)
BY PERSON.SEX