



National Statistical Office
Thailand



100th Anniversary of Thai Population Census
National Statistical Office

Multimodal data collection : The 2010 Population Census in Thailand

Pattama Amornsirisomboon
National Statistical Office
Thailand
25-27 May, 2011
Korea



The 100th Anniversary of Thailand Population Census (2010)

Ministry of Interior



Conducted

the 1th-5th

(year 1910 → 1947)

Called 'Household census'

National Statistical Office



Conducted

the 6th-10th

(year 1960 → 2000)

1970 added 'housing'

the 11th (2010)

The 100th anniversary of Thailand population census



Census Objectives

- **To collect basic information on the number of population on demographic, socio-economic and housing characteristics**
- **To provide data for small administrative units**
- **To measure changes of population and living quarters over 10 years**

Complete enumeration

- There are two stages conducting at the same time
 - **Listing stage** (by listing form)
for counting the number of population and dwelling unit
 - **Enumeration stage** (by enumeration form)
for enumerating basic and more detailed characteristics of both population and housing

Field Personnel

63,000 enumerators , 9,000 supervisors
Field operation all over the country within 1 month

In ordinary area → **enumerated by local people**
(community volunteers,
municipality officers, teachers, etc)

In special area → **enumerated by private agency officers/**
government officers...
(condominium, hostel, housing estate, prison, military camp, etc.)



Census Training

Subject matter

**Head of NSO officers in
Bangkok and 75 provinces
(76 people)**

**Master trainer
(NSO staff)
(450 people)**

**Coordinators at District
(Bangkok & Provincial NSO officers)
(2,650 people)**

**field supervisors
(9,000 people)**

**(provincial
centers)**

**Enumerators
(63,000 people)**

**(district
centers)**

**Supervisors : at least Bachelor degree
Enumerators : at least secondary school level**



ผมมาจากสำนักงานสถิติแห่งชาติครับ

ตอบที่บ้าน

ตอบแล้วส่งกลับ

ตอบทางโทรศัพท์

ตอบผ่านอินเตอร์เน็ต

มีน้ำใจ
ข้อมูลไม่รั่วไหล

Data collection using (Multi Modal Method)

2010 Census : the first time that NSO has several channels for people to provide in their information

1. Face-to-face interview

2. Self-enumeration

(Drop off and Pick up or mail back)

3. Internet

4. Phone interview



Data collection period

1-30 September 2010



Data Capture

- By Scanning of the questionnaires using ICR
- By filling out a self-administered questionnaire and mailing this back
- By filling out the data on the Internet (Self Interview)
- By phone interview (Telephone Interview Center : TIC)



Benefits of decentralized data processing

- The work is done closer to data source
- Reduce cost of transporting forms
- Decentralized structure allows for more people to become involved in the census and gain further experience and responsibilities from the census



Disadvantages of

decentralized data processing

- Lack of skilled staff to manage the provincial offices
- Local customer service and technical support agents lack skills in support and maintaining
- A too tight implementation plan can force the end result to be delayed.

Lesson learned from using the ICR system

Problems	Solutions
Scanners didn't set up automatically following the standard instruction	Operate first test run and guide to set up following the standard instruction
Unspecified questionnaires paper (wrong size) found that affected scanner feeders	Remove wrong size questionnaires and replace instead
Humidity/wet cause the paper to swell which cause error in the scanner feeders	Store questionnaires from humidity
Handwriting quality was below expected /poor handwriting	Erase unexpected fields and re-written handwriting
Questionnaires stuck during scanning	To adjust the scanner function(paper separation/threshold/contrast)



By filling out a self-administered questionnaire and mailing back

Advantages : Less work for interviewers,
confidentiality

Limits :

- form must be simple and clearly understood.
- Necessary to have forms in different languages
- Have to wait for returning mail.

By filling out data on

the Internet (Self-Interview)

Benefis : accurate and timely data collection and reduction in the processing time

: rapid availability of clean data for statistical analysis.

Lesson learned :

- Internet-based Census form that wasn't the EA boundaries detailed
- To fulfill the Census form, to assign the EA detailed by manual checking with digital EA maps (GIS technology)



By filling out data on the Internet (Self Interview)

Lesson learned :

- The respondents suggestion /Comment Questionnaire shouldn't have too much details
- Ease of access to the internet and respondent friendly self-interview.

By phone interview

(Telephone Interview Center : TIC)

Advantages : Enumerators do not need to go in
the dwellings/high-rise buildings

Limits: A good organization must be informed
the enumerators/respondents

By phone interview

(Telephone Interview Center : TIC)

Lesson learned : Contact/Telephone call center (TIC) line (1111 extn. 6) is hard to connected during the day time, and thus have to dial many times.
: The system was down during the first week of the census period.

Solutions to the problem : Set up the additional lines

End of September : the progress of data collection report was only 50%

Solutions : Extend the fieldwork period

- * Telephone Interview Center – till 31st October 2010
- * Internet - till 30th November 2010
- * Mopping up fieldwork – October 2010

Data collection progress : on 30th November 78% of hh. received from multi-modal methods

Mopping up : December 2010



Response of Internet & TIC

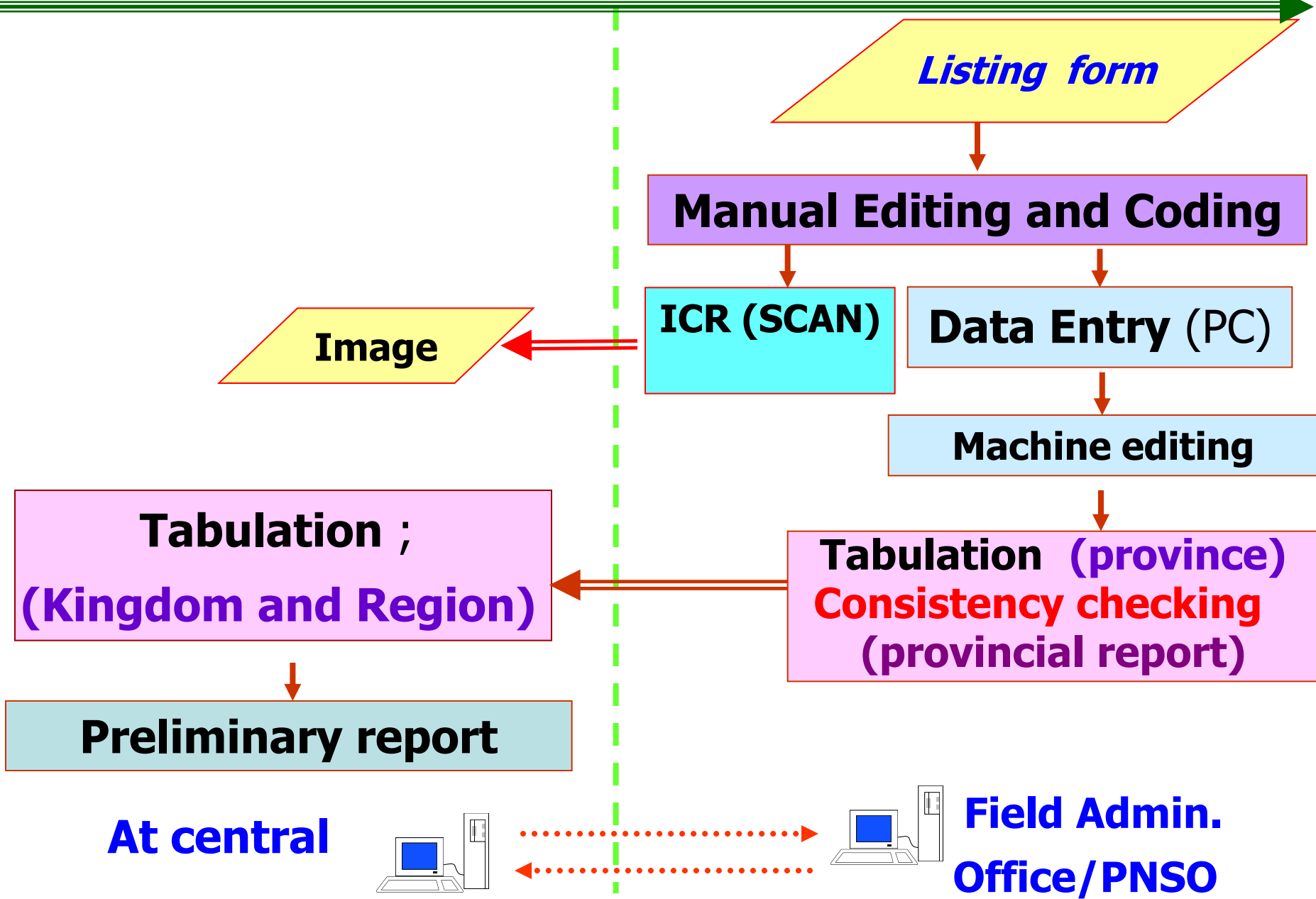
- ICT survey in 2010 : the using internet household was 2.24 million.
- The census schedule plan expected to receive response rate on Internet about 10%(0.224 million households).
- The response of Internet and TIC was 2.47% (55,367 households).



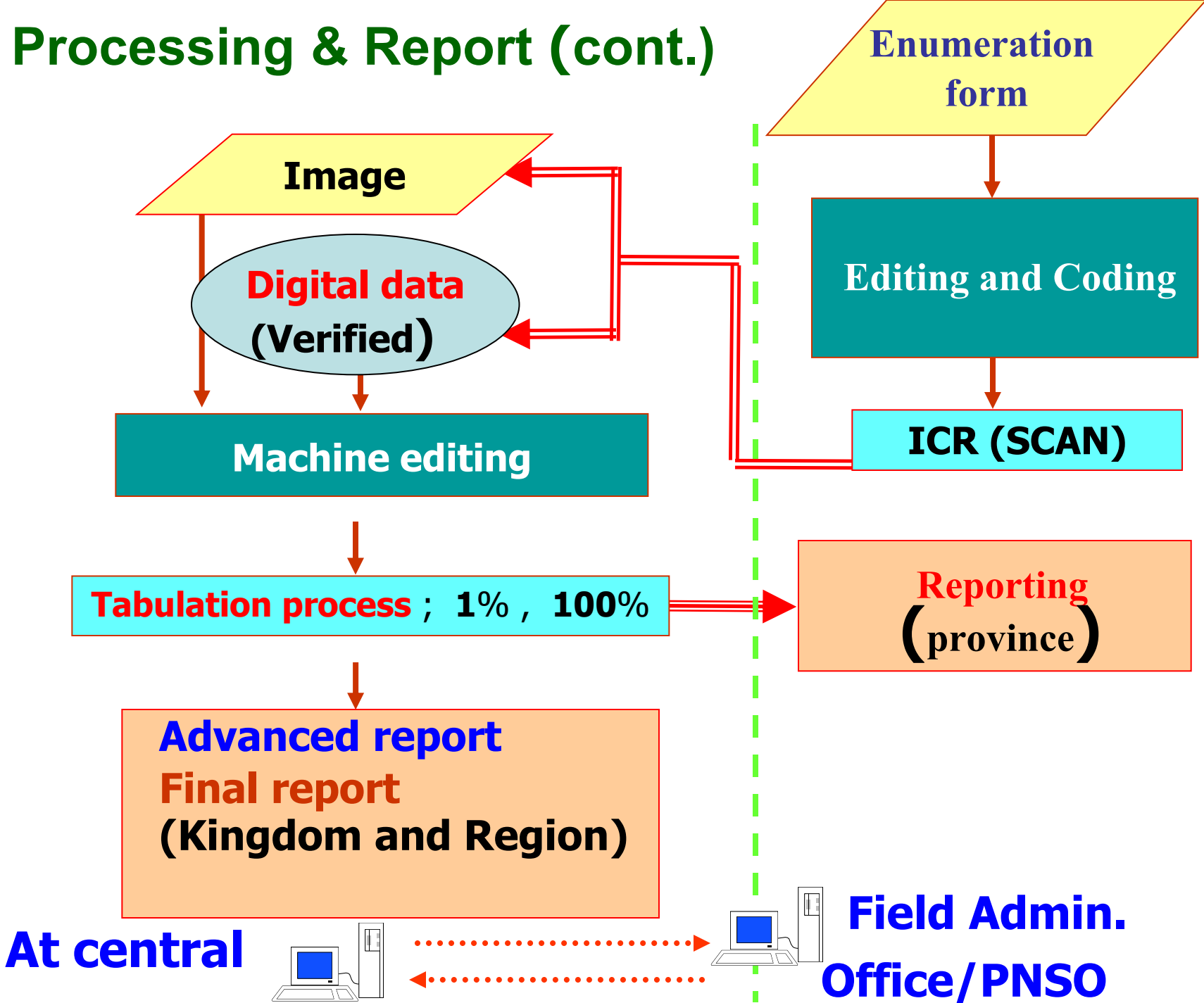
Data aggregation

- The aggregation and checking of data accuracy will be done after field work completion.
- All data collected from four methods of data capturing will be stored on database.
- Some duplicated data would be eliminate by using Machine editing.
- Any way the data will be thoroughly checked and computerized.

Data Processing & Report



Data Processing & Report (cont.)



Dissemination products

Two main categories of census products

1) Off-line electronic dissemination products

- CD-ROM**
- Table Retrieval System**
- Micro data**
- Data Warehouse**
- Census Info**

2) On-line electronic dissemination products



สำนักงานสถิติแห่งชาติ



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Thank you for your attention

