

REGISTER BASED STATISTICS IN STATISTICS KOREA(KOSTAT)

2015.9 Tehran, Iran

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Background

Background - Cost

- Increasing Survey costs
 - ▣ Cost of taking surveys has rapidly escalated with growing labor cost

 - ▣ Costs of “Population and Housing Census”

Year	1995	2000	2005	2010	2015	2020
Cost	46m\$	71m\$	110m\$	154m\$	228m\$*	???

* Estimated cost produced by survey.

Background - Response Burden

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□ Changing life-style

▣ 1-person households

Year	1995	2000	2005	2010
Share	12.7%	15.5%	20.0%	23.9%

▣ 1 or 2-person households

Year	1995	2000	2005	2010
Share	29.6%	34.6%	42.2%	48.2%

Background - Response Burden

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□ Changing life-style

▣ Double-income households

Year	2003	2007	2009	2011
Share	25.9%	33.2%	35.6%	43.6%

▣ Population rate of 65yrs old and over

Year	1995	2000	2005	2010
Share	5.9%	7.3%	9.3%	11.3%

Background - Response Burden

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□ Non Response rate

▣ Economically Active Population Survey

Year	2007	2009	2011	2012
Share	2.16%	3.91%	5.95%	6.84%

▣ Household Income and Expenditure Survey

Year	2007	2009	2011	2012
Share	17.2%	19.1%	19.6%	20.1%

Background - Response Burden

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□ Increasing Statistical surveys and questionnaires

▣ Numbers of Statistics on Business / Corporate

Year	2000	2003	2006	2012
Numbers	334	395	454	649

▣ Corporates' Numbers of response per year

Year	2000	2003	2006	2009
Times	20.9	25.1	32.2	33.3

Background - Global Trend

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- Most OECD member countries use tax data by compiling business establishment data
- European countries like the Netherlands, Denmark and Finland introduced register-based Census
- UN Fundamental Principles of Official Statistics
 - ▣ 5th Principle : Data for statistical purposes may be drawn from all types of sources, be they statistical surveys or administrative records. Statistical agencies are to choose the source with regard to quality, timeliness, costs and the burden on respondents.

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- Use administrative data to develop statistical production base that is low cost but highly efficient
 - ▣ Enhance statistical productivity
 - ▣ Reduce response burden
 - ▣ Improve statistical quality
 - ▣ Maximize use of administrative data in new statistics

Frameworks

Legal Frameworks

- April 2007

New clause added to **Statistics Act** on using administrative data

- Statistics Act

24 ① The central or local government may request the administrative data from public agencies if required in order to produce official statistics.

Legal Frameworks

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- February 2009

Basic Law on National Taxes amended to give KOSTAT authority to seek tax data

- Basic Law on National Taxes

82-13 ① · · National Tax Office can provide tax information · · if any of the following conditions are met.

5. National Statistical Office requires tax information for the purpose of producing official statistics.

Legal Frameworks

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- Personal Information Protection Act
- Resident Registration Act
- Act on the Registration, etc. of Family Relationship
- Basic Law on Local Taxes
- Enforcement Decree of the Statistics Act
- Rules for Security on Administrative data

Organizational Frameworks

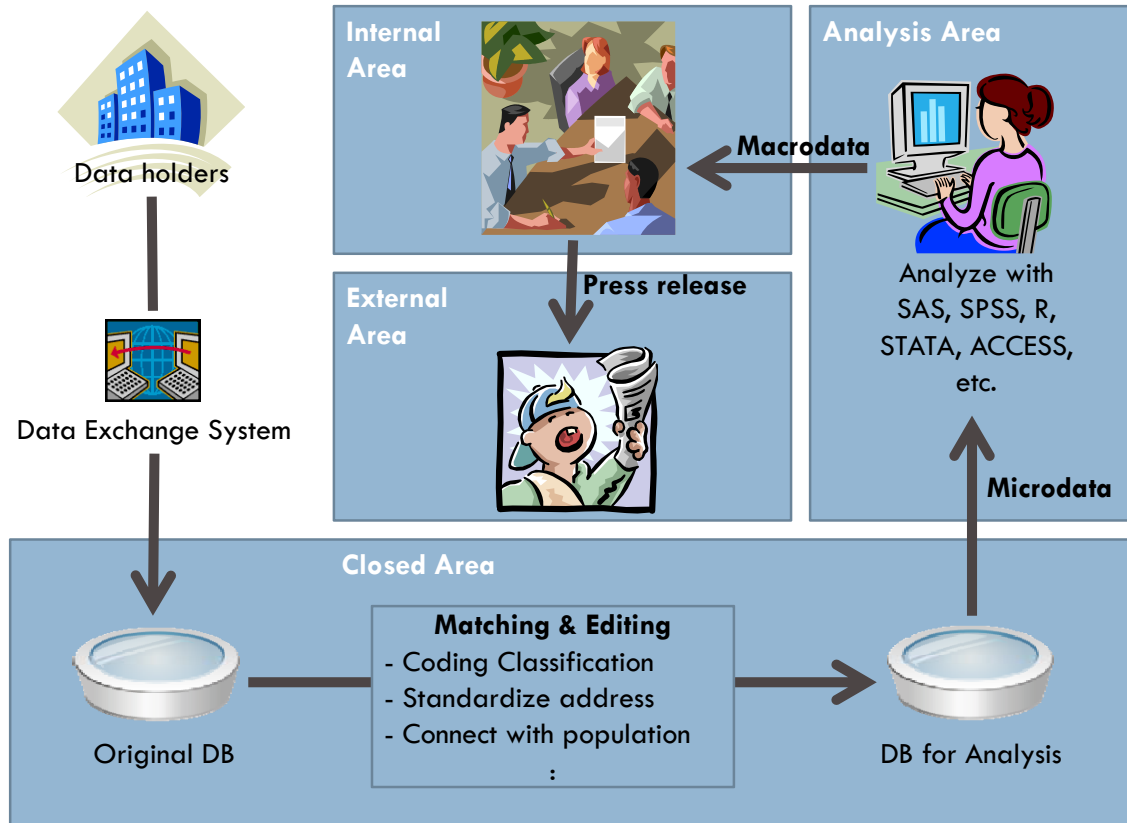
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- Survey Management Bureau
 - Survey Planning Division
 - Population Census Division
 - Economic Census Division
 - Sponsored Survey Division
 - **Administrative Data Policy Division**
 - **Administrative Data Management Division**
 - **Register-based Census Division**
- ✂ June 2011

Technical Frameworks

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- Separated (internal/external) networks block access from outsiders
- Administrative data stacked on closed server
- Encrypt of personal identification numbers
- User control : only approved user can access
- Login with Certificate based authentication
- Users can only access on 'server for analysis' (not PCs)
- Security S/W manages the history of users' command
- Only approved Security USBs can used in PCs



Obtainment

State of Obtainment

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□ Total : 27 agencies*, 85 sets (2009~2014)

	2009	2010	2011	2012	2013	2014
Agency	5	9	15	3	4	4
Data sets	7	13	49	4	6	6

* Overlapped number is eliminated when counting total

Administrative Data - Business

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Agency	Data	Since
National Tax Service	Business registration	2009
	Value added tax	2009
	Corporate tax	2009
National Court Administration	Registration of a juristic person	2009
National Pension Service	National pension	2010
National Health Insurance Service	Health insurance	2010
Korea Employment Information Service	Employment insurance	2010
Korea Workers' Compensation & Welfare Service	Industrial disaster insurance	2010
Ministry of Trade, Industry and Energy	Factory registration	2011

Population & Housing

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Agency	Data	Since
Ministry of Land, Infrastructure, and Transport	Building register	2009
	Declared value on houses	2011
Ministry of Security and Public Administration	Resident registration	2010
Ministry of Justice	Alien Registration	2010
	Immigration	2011
Supreme Court of Korea	Domestic relations registration	2010
Ministry of Health & Welfare	List of Social welfare facilities	2013
Korean Council for University Education	List of University dormitory	2011
Korea Electric Power Corporation	List of electricity consumers	2011
Universities	University students' register	2013

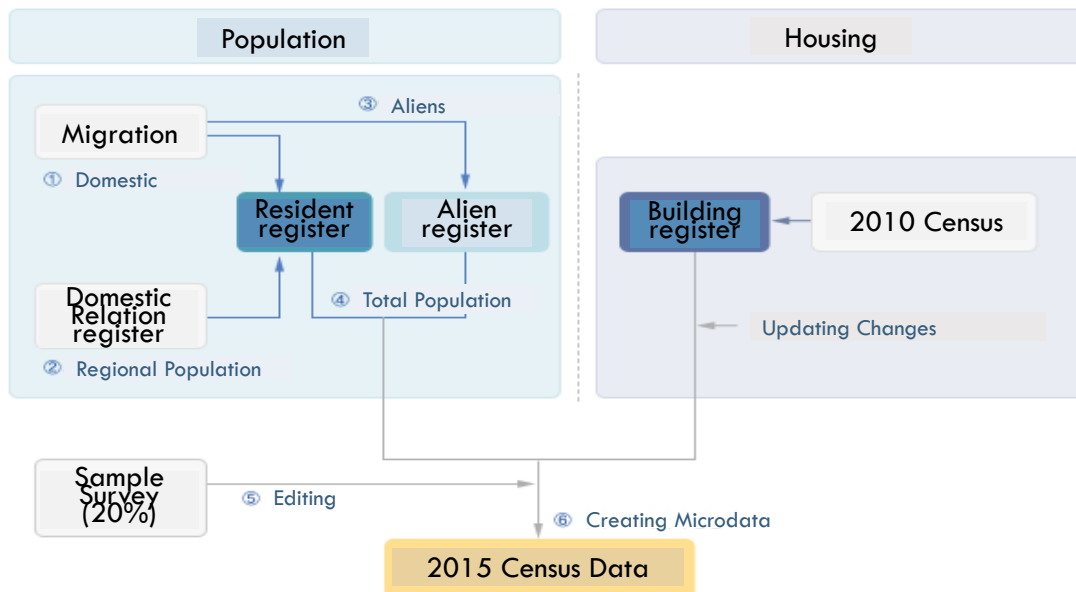
Agriculture, forestry & fishing

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Agency	Data	Since
Ministry of Agriculture, Food and Rural Affairs	Agricultural Company register	2010
	Livestock industry registration	2011
Ministry of Oceans and Fisheries	Fishing boat register	2011
	License on Fishery	2011
Korea Rural Community Corporation	Farmland register	2011
National Federation of Fisheries Cooperatives	Members' list	2011
Korea Forest Service	Members' list	2011
	Forestry Corporation	2011

Use

Register Based Census 2015



Register based Statistics in KOSTAT

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- 2012
 - Wage and Salary Employment Position Statistics
 - Statistics on Returned Farmers and Migrators to Rural Regions
 - Business Demography Statistics

- 2013
 - Profit Corporation Statistics
 - Statistics on Possession of Private Houses

Use of Administrative Data

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- Replacement, Verification, Editing

	2011	2012	2012	2014
TOTAL	35	36	36	37
Replace all items	2	6	6	7
Replace partial items	15	14	19	19
Verify / Edit	18	16	11	11

- KOSTAT produces 58 Statistics

Total	5yrs	2yrs	1yrs	1/2yrs	1/4yrs	Monthly
58	7	1	30	2	3	15

Mid-term Plan

1st Mid-term Plan

- Period : 2011~2015
- Vision : Advancing official statistics
by expanding the use of administrative data
- 4 Strategies & sub-actions
 - ▣ Meet the demand of users & Reduce response burden of respondents
 - Develop new statistics from administrative data
 - 5 statistics are developed
 - Replace survey with administrative data based statistics
 - 26 surveys replace, 11 surveys use it for editing

1st Mid-term Plan

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- 4 Strategies & sub-actions
 - ▣ Manage administrative data efficiently
 - Standardize administrative form
 - standardization of address, classification, etc.
 - Strengthen the ability of the headquarters
 - New Bureau will be created in the end of 2015
 - Guideline book
 - Guideline I (2014) - using administrative data
 - Guideline II (2014) - protecting private information

1st Mid-term Plan

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- 4 Strategies & sub-actions
 - ▣ Strengthen infrastructure
 - Enact the law regarding use of administrative data
 - Statistics Act, Basic Law on National Taxes, etc. are amended
 - Systematic obtainment
 - Periodically obtained by 'Data Exchange System'
 - Build statistical registers
 - Creation of Information Strategy Planning*(ISP) in 2014
 - * Period : 2015~2017

1st Mid-term Plan

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- 4 Strategies & sub-actions
 - Enhancing private protection
 - security for producing statistics
 - Technical frameworks for security enhancement
 - security for local statistical office users'
 - Same as headquarters

2nd Mid-term Plan

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- Period : 2016~2020
- Preparing Steps
 - Review 1st Mid-term Plan
 - Task Force Team for planning
 - Team1 : Develop new statistics
 - Team 2 : Use in Survey statistics
 - Team 3 : Strengthen infrastructure
 - Make detailed action plans
 - Submit plans to National Statistics Committee

Thank you

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