27 September, 2013



Strategy of Korea Cadastral Reform Project

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Korea Cadastral Reform Project

Implementation Strategy

Future Challenges

Background

Background(1)

Renewal in 1960

100 years old

cadastral Map

Digitized Project 1990's to 2003

Renewal in 1970

Renewal in 1948

Renewal in 1980

Accuracy issues due to the

repeated renewal & various scales

Background(2)



- Coordinates from Local Geodetic System needs to convert
 - To use other spatial information (Topography, Underground Facilities)
 - To avoid administrative inefficiency

Background(3)

Limitation of Land rights

- In some cases, the use of individual property rights are limited until agreement is made among stakeholders.
- In some cases, land boundary and land ownership disputes go to the court.



Korea Cadastral Reform Project

Korea Cadastral Reform Project (1)

Overview

- Long-term nationwide project (2012 ~ 2030)
- Project budget : 1,170 Million USD
- Coordinate System : ITRF 2000
- Resurveying 38 million parcels
- Boundary Accuracy : 7cm
- Integrate land information in digital
 - format
- Establish 3D Cadastre
- Easy to access to land information

Korea Cadastral Reform Project (2)

Legislative Progress

- Preliminary study on Cadastral Resurvey : 1992~1993
- Case Study Resurvey : 1994 (Changwon city)
- Cadastral Resurvey Special law legislative notice :
 1996. 8., failed due to the budget & Complaints
- Cadastral Non-Coincidence area : 2007~2009
- Digital Resurvey Pilot project 1: 2008~2011
- Pre-feasibility study conducted by Government : 2010
- Digital Resurvey Pilot project 2: 2011~2012
- Established the Cadastral Resurvey Special Law : finally in 2012.3 Requests by Government

Korea Cadastral Reform Project (3)

Project Budget

Contents		Budget (Million US\$)					Datio
		Step 1	Step 2	Step 3	Step 4	Total	Ratio
Control Point Surveying		15.5	44.6	3.1	1.5	64.6	6.1
Parcel Surveying	Group Non-coincidence Area	51.8	219.1	179.2	89.6	539.7	78.8
	Individual non-coincidence Area	68.0	230.5	0	0	298.6	
	Sub total	120	450	179	90	838	
ITRF 2000 Coordinate Conversion	Coordinate Conversion	9.6	32.4	0	0	42.1	4.4
	Development area	2.2	3.2	0	0	54.0	
	Sub total	11.9	35.7	0	0	47.5	
System Development		16.6	0	0	0	16.6	1.6
Reserve Fund		16.2	53.0	18.2	9.1	96.5	9.1
Total(except of value- added tax)		180	583	200	100	1064	100
Total(inclusion of value-added tax)		198	641	221	110	1,170	

Korea Cadastral Reform Project (4)

Field Survey Process

Triangulation $(\pm 3 \text{ cm})$

Field Survey (±7cm)

Registration online KLIS

Boundary adjustments and agreement

3 Implementation Strategy

Efficient land use and systematic land management is the basis for national economic development (GIM 2012)

- Fair and systematic allocation to 32 local governments (budget & manpower, etc.)
- Priority selection by criteria
 - (e.g. 3/4 land owner agreed..)

S2. Use existing organizations

Organization

1 Ministry of Land, Infrastructure and Transport

Cadastral Reform Planning Division

32 Local governments

Cadastral Reform Support Division

200 City/County/district Offices

Cadastral Reform Team

- With 3400 certified Surveyors
- 50 Researchers
- KCSC was established by the Cadastre, Hydrography, & Survey Act . (one of a quasi-government)

and other survey companies

S3. Public Participation

Facilitate public participation(on-line and off-line)

4 Future Challenges

- Public participation is a key element for success
- Boundary adjustment and conclude agreement with stakeholders may the whole project period delay
- Up-to-date equipment and technology should be applied
- Interoperability with other spatial data set should be considered.

Things need to do

🕅 공간정보업로드관 🖻

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Accurate cadastral surveying data collection

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National Spatial Data Infrastructure(NSDI)

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Thánk you Very much!

