Land Re-adjustment
UN Habitat – FIG

FIG Regional Conference
Montevideo, Uruguay
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Discussion Session

- Introduction by Christiaan Lemmen, FIG
- Introduction by Solomon Haile, UN Habitat
- Discussion
- Coffee break
- Way forward
  - Co-operation UN Habitat – FIG
  - Publication
  - Involvement of FIG members

Terminology

- Land Re-adjustment
- Land Consolidation
- Land Pooling
- Land Re-plotting
- Land Sharing
- Land Re-parcellation
- Land Re-allotment
- Land Assembly
- Land Development

Environment

- Primary cities
- Rural exodus
- Hyper urbanisation
  - Economic development
  - Unemployment
- Dual structure
  - Poor, rural, informal
  - Well off, urban, formal

Challenges

- Lack of supply of housing
- Uncontrolled subdivision
- No urban planning
- Delayed road development
- Inefficient public transport
- Difficulties in land acquisition

Challenges

- Financial resources
- Institutional framework
- Organisation
- Land management
- Tax collection
- Urban development plan
- Expertise
- Coordination
- Compensation
- Clear objectives

Land Re-adjustement

- Land Readjustment is a *legal instrument*which have been instituted for the adjustment of plot boundaries in urban or suburban areas, aiming at the better organisation of some specific area and functioning in larger or smaller scale.

Goals

- Implementation of spatial plans: public facilities and infrastructure:
  - Streets, utilities, schools, hospitals, parks
- Urban renewal, slum upgrading, housing
- Town development, industrial development
- Urban Rural interface

Characteristics

- **Comprehensive Urban Development with extensive use:** Land Readjustment is an urban development measure that construct urban facilities such as roads, parks and utilities, and develop building lots in a project area.
- **Fair distribution of development benefits and cost:**
  Each landowner shoulder fairly land and expenses for development of urban facilities. On the other hand, the benefits that accruing from the development are also fairly distributed among them. LR is a selffinancing tool.
- **Preservation of land titles**: Under a LR project, land titles before a project are transferred to the new plots. Therefore land titles are preserved during a project and a previous regional community remains, contrary to the case of expropriation or sale.
- **Participation of landowners**:
- **Impartial procedures:** the procedures for a LR projectare regulated ensuring transparency. In the case of implementation by a cooperative, general meetings of landowners are organised. In the case of implementation by the local government, an advisory council of representatives of landowners sometimes is constituted in order to follow the procedures.

Evangelia Ball, Hellas

Approaches

- Voluntary or compulsory
- Re-allocation, title conversion or land acquisition/expropriation
- Systematic reduction
- Value or area
- Freeze changes
- Informal – formal land (use) rights

Information Management

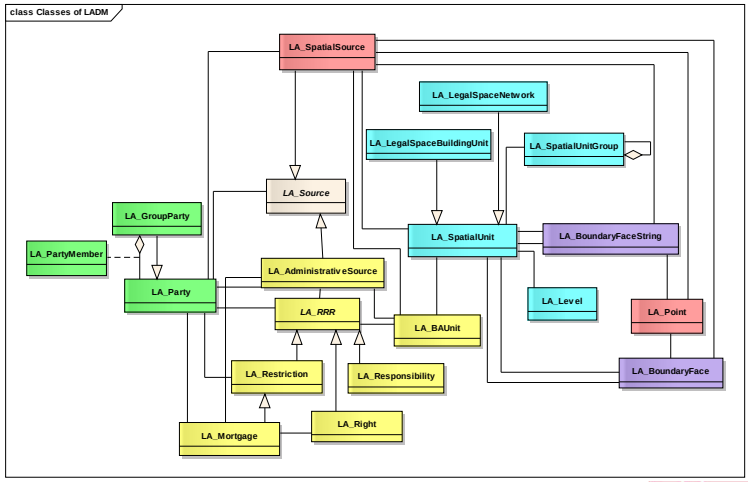
- Area involved
- Old (existing) situation: registration
- Value
- Scenario's: design
- Systematic reduction
- Participation
- Transparent
- New

ISO 19152
Land Administration Domain Model

Model for building Land Administration Systems

- Components

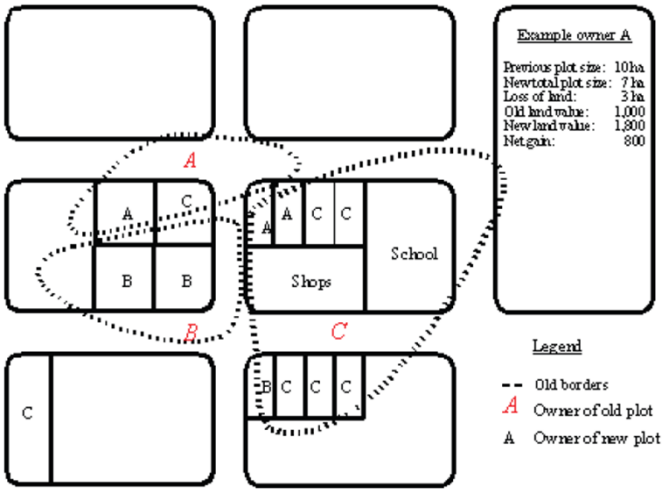
- Parties (green)
- Rights (yellow)
- Spatial Units (blue)
- Surveying (pink)
- Geometry (violet)



Land re-adjustment

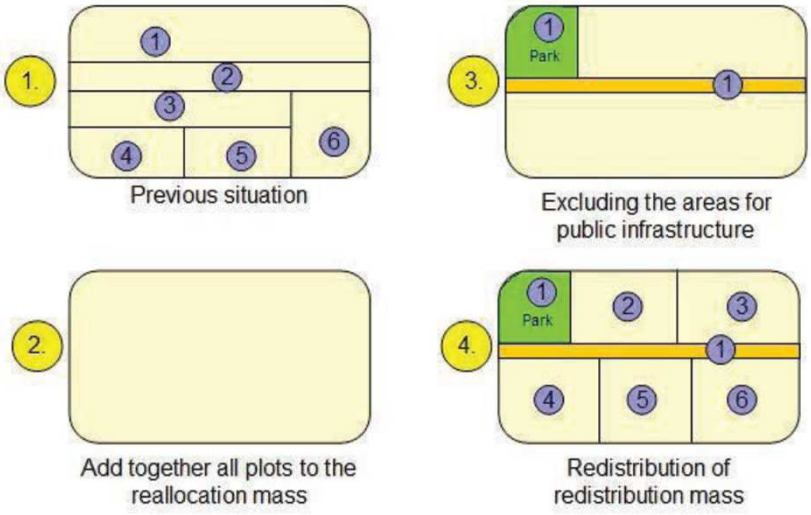
- Lots before
- Pool
- Selling lands
- Systematic Reduction
- Lots after, and benefits:
  - Change in value of the land

Example



UNESCAP, 1995

Example



Technische Universität München

Property boundaries

Larsson

Procedure: Germany

- Commencement
- Preparation
- Value capture and reallocation
- Re-adjustment plan
- Implementation

Commencement

- Define area (based on spatial plan)
- Freeze changes (no transactions)
- Map properties, list owners and users
- Indicate in the land register (if possible)

Preparation

- Merge all properties into one large land
- Assess the (market) value
- Subtract all land for public use, allocate this land to municipality or development company
- Determine the share of each owner/user

Value capture and re-allocation

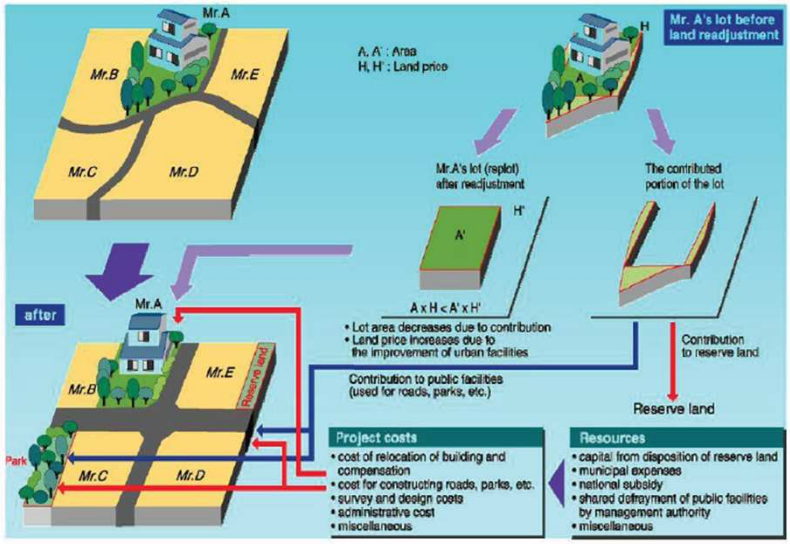
- Determine the value in the re-adjustment gain that owners/users have to pay or that may be retained in land
- Consider the present and proposed uses of the land as well as the needs and suggestions of owners/users
- Allocate re-adjusted plots for each owner/user
- Determine compensation for owners/users who did not receive full share

Re-adjustment plan

- Issue a decision on the plan
- Determine rights and obligations of each party
- Map of new boundaries (legally binding)

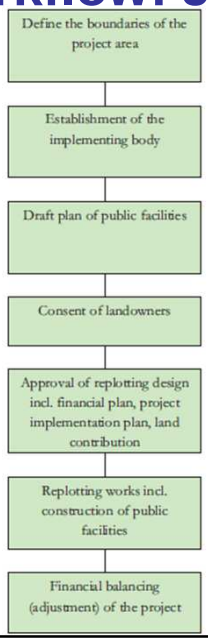
Implementation

- File re-adjustment plan into the land administration
- Monitor the actual implementation of the plan



Japan Internation Cooperation Agency, 2007

Workflow: Japan



Benefits

- Spatialy comprehensive
- Part of project costs recovered by land contibution
- Land titles are maintained
- Existing community stays

Conclusions

- Less financial requirements
- Comprehensive urban development
- Efficient
- No residents evicted
- No expropriation
- Equitibality, acceptance

Mr. A has a plot of 100 m² with the market value of € 50/ m² equals to total value of € 5,000. Value at the time of resolution of LR is € 200/ m² and equals to value of € 20,000 (potential building plot due to planning). Profit of Mr. A = € 20,000 - € 5,000 = € 15,000. Suppose the new plot of Mr. A: 70 m² with the market value of € 300/ m² at the end of LR (building plot due to LR project) equals to value of € 21,000. So, Mr. A must pay the additional money to municipality as much as € 21,000 - € 20,000 = € 1,000. If the landowners get his land back as of 50 m² with the land value at the end of the project equals to € 15,000, so he gets € 20,000 - € 15,000 = € 5,000 additional financial compensation. The basic principle of this calculation by relative value is that the landowner gets the benefit from the increase of value at the beginning of LR project (potential building plot due to planning) and municipality absorbs the increase of value from planning to the completion of LR project- difference from potential building plot and building plot). For more clear view, see table 5-1.

Mr. A	Plot size (m²)		Land contribution (m²)	Value per m²			Land value (€)	Financial compensation (€)	Remarks
	original	redistributed		present	Planning (startof LR)	End of LR			
Unserviced plot	100			50			5,000		Profit marginlandowner: 15,000
Potential buildingplot	100				200		20,000		
Buildingplot		70	30			300	21,000	1,000	Formunicipality
Buildingplot		50	50			300	15,000	-5,000	Forlandowner
Buildingplot		0	100			200	20,000	-20,000	Forlandowner

Supriatna