



COST ACTION G9
Modelling Real Property Transactions
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**Some technical, legal, financial and social issues of Land
Readjustment.**
An approach of modelling the Greek LR procedure

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The approach

There are several *legal instruments* and *tools* which have been instituted in different countries, for the adjustment of plot boundaries both in rural and urban areas, aiming at different objectives and functioning in larger or smaller scale.

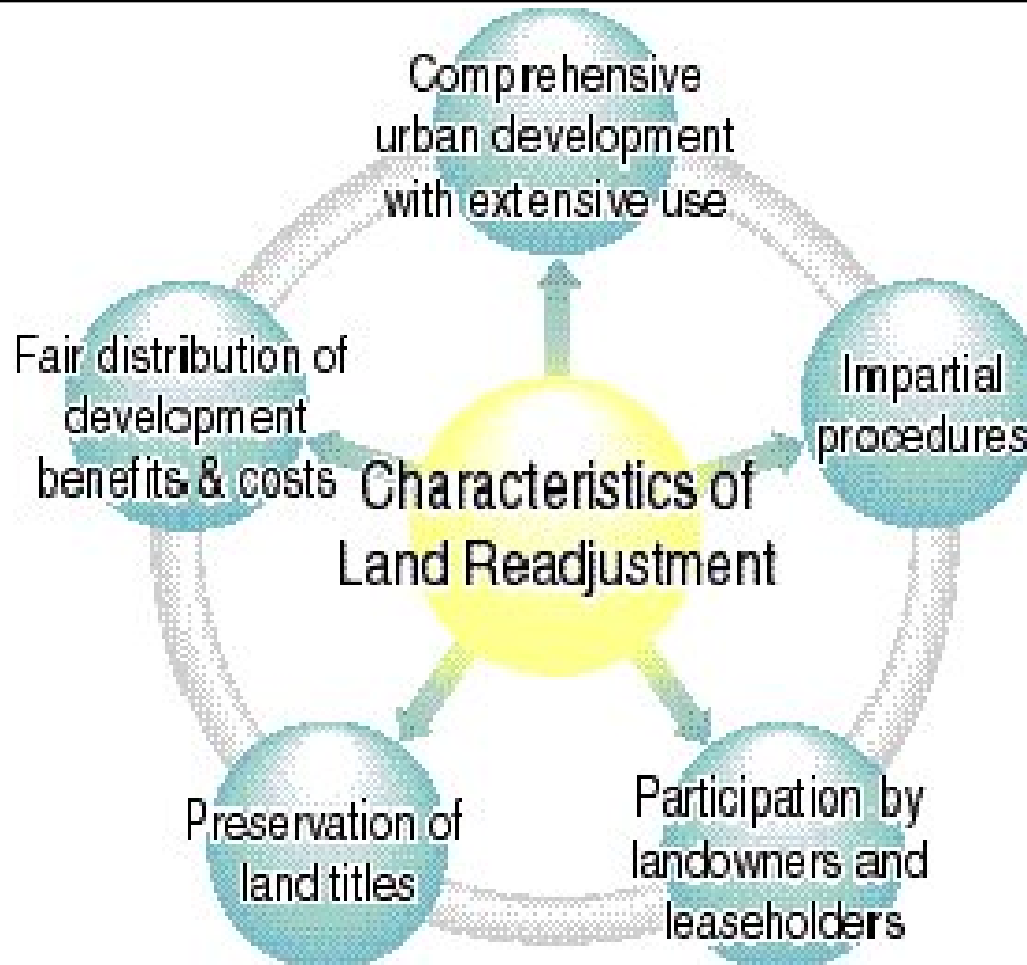
(e.g. Land Consolidation/LC, Land Readjustment/LR etc.)

What is LR

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.

Generally the main objectives of LR is the building area supply or/and the development of an appropriate urban infrastructure.

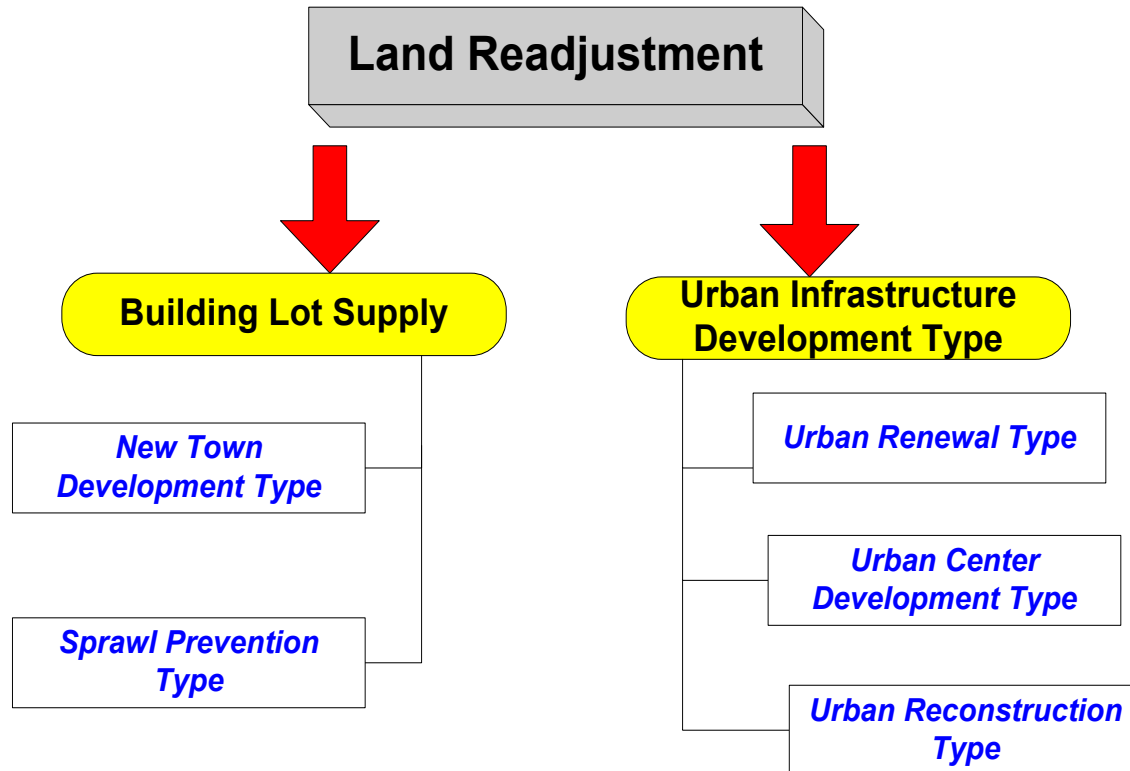
Characteristics of LR



Characteristics of LR

- **Comprehensive Urban Development with extensive use:** Land Readjustment is an urban development measure that constructs urban facilities such as roads, parks and utilities, and develops building lots in a project area.
- **Fair distribution of development benefits and cost:** Each landowner should bear fairly the land and expenses for development of urban facilities. On the other hand, the benefits that accrue from the development are also fairly distributed among them. LR is a self-financing 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 project are regulated to ensure transparency. In the case of implementation by a cooperative, general meetings of landowners are organized. In the case of implementation by the local government, an advisory council of representatives of landowners is sometimes constituted in order to follow the procedures.

Types of Land Readjustment Projects



Types of Land Readjustment Projects



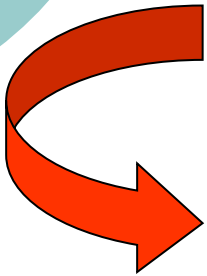
Before the project



After the project

- **New Town Type:**
it is implemented in a suburban area massively and quickly, in order to meet the urgent demand for housing site, especially resulting from concentration of population and industry in large cities during the period of rapid economic growth.

Types of Land Readjustment Projects



- **Sprawl prevention type:** *Comprehensive urban development is carried out in peripheral parts of urbanised areas where spotted developments are emerging and the needs for planned development are urgent, in order to prevent disorderly sprawl and create urbanised areas with good environment in advance*

Types of Land Readjustment Projects

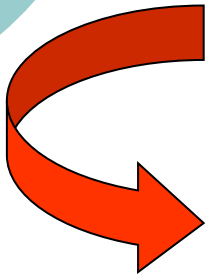


- **Urban renewal type:** *Urban renewal type is carried out in existing built-up areas by development of shopping street, station plazas, etc. with adequate urban infrastructure. As projects are implemented in existing built-up areas, it is necessary to involve complex coordination of land titles featuring a much longer project period and a larger amount of project cost.*

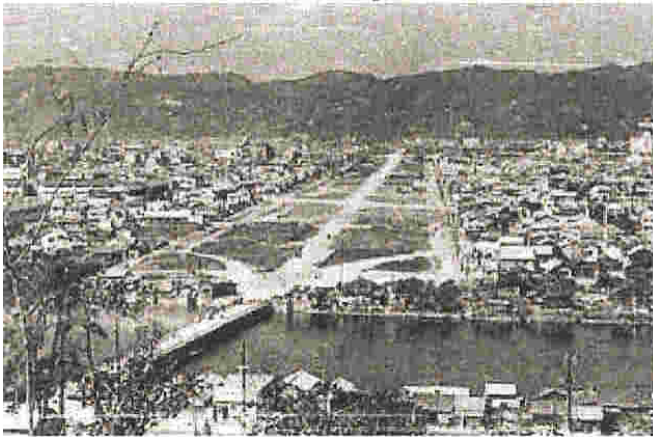
Types of Land Readjustment Projects



- **Urban Center Development:** *This type is located closely to the urban center. Under this type of development, the vacant area caused by the relocation of industries etc., due to changes in the socioeconomic situation is renewed with adequate development of urban infrastructure for the new land use.*



Types of Land Readjustment Projects



- **Urban Reconstruction Type:** *this type of LR has been used for reconstruction of damaged urban areas after wars or natural disasters.*















Legal Issues of LR




- In some countries, where LR is going to be implemented, *new national legislation* will be required and in some cases *constitutional amendment*
- New legislation on LR should define:
 - *The concept and the purpose of LR*
 - *Implementation bodies of LR*
 - *Criteria for the redistribution of the new plots*
 - *The form of the landowners participation*
 - *Financial settlements and compensation form of the landowners*

Technical Issues of LR

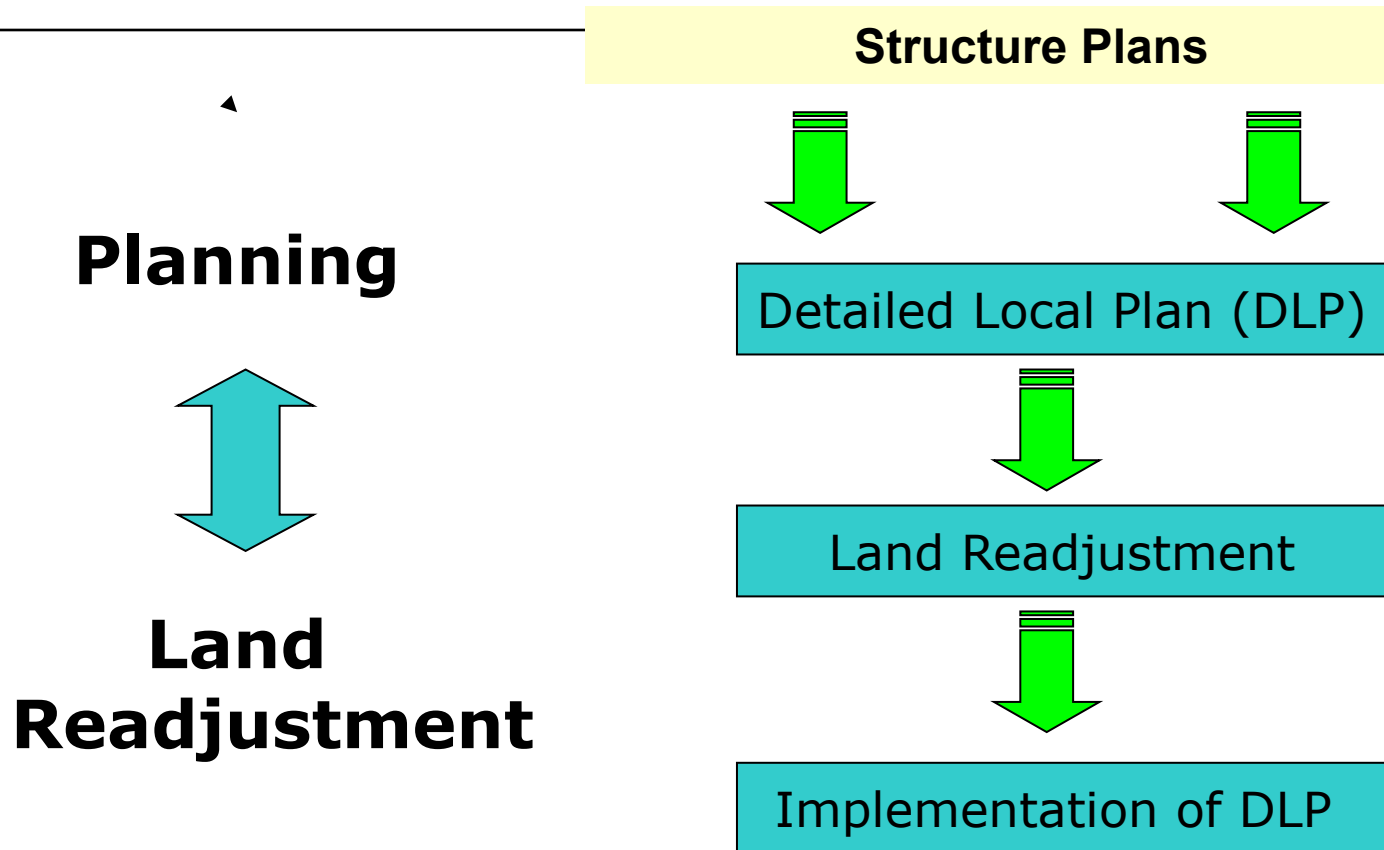
IMPLEMENTATION BODIES OF LR

- Individuals
- Cooperatives
- Local authorities-Prefectures
- Public authorities
- Public organisations (*Public Housing Corporation, Land Development Corporations etc.*)

Land Uses & Type of LR project		Implementation Body of LR		
		Local Authority	Cooperatives	Public Organisation
Built up area Type of LR: Urban Renewal	Commercial Zone			
	Residential Area			
Suburban Area				
New Town Type				

-  (indicated body),
-  (appropriate body but experience required),
-  (not appropriate)

Technical Issues of LR

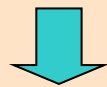


Technical Issues of LR – Land contribution

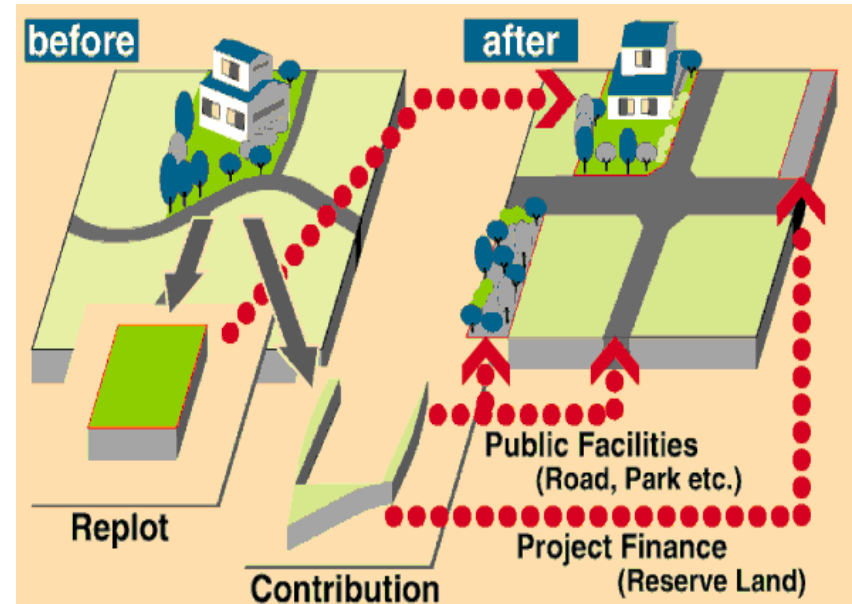
- Detailed Local Plan (*roads, green spaces etc.*)



- Land Contribution



- Creation of public spaces



Technical Issues of LR

- *Property owners are as far as is possible to be allocated from the redistribution mass plots, with a comparable or with an equivalent location to the plots which have been contributed*

Criteria for Redistribution:

- *Redistribution by Value*
- *Redistribution by Size*



Technical Issues of LR

- The appraisal of the plots before and after the reallocation procedure is a crucial stage in the whole LR process
- For the protection of the landowner's interests, the relevant legislation should ensure and provide transparent, and objective methods of valuation, carried out by an adequate and well-trained real property appraisers corp.



Financial issues of LR

- The basic concept on LR, is that it is a self-financing tool used to provide basic infrastructure and facilities in the urban development/redevelopment process.

Financial Issues of LR

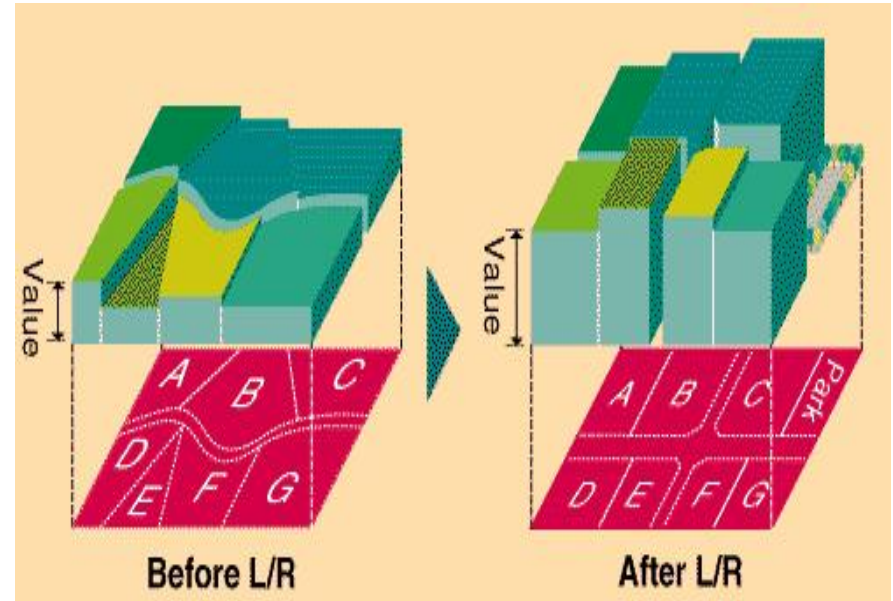
LR Readjustment



Surplus values

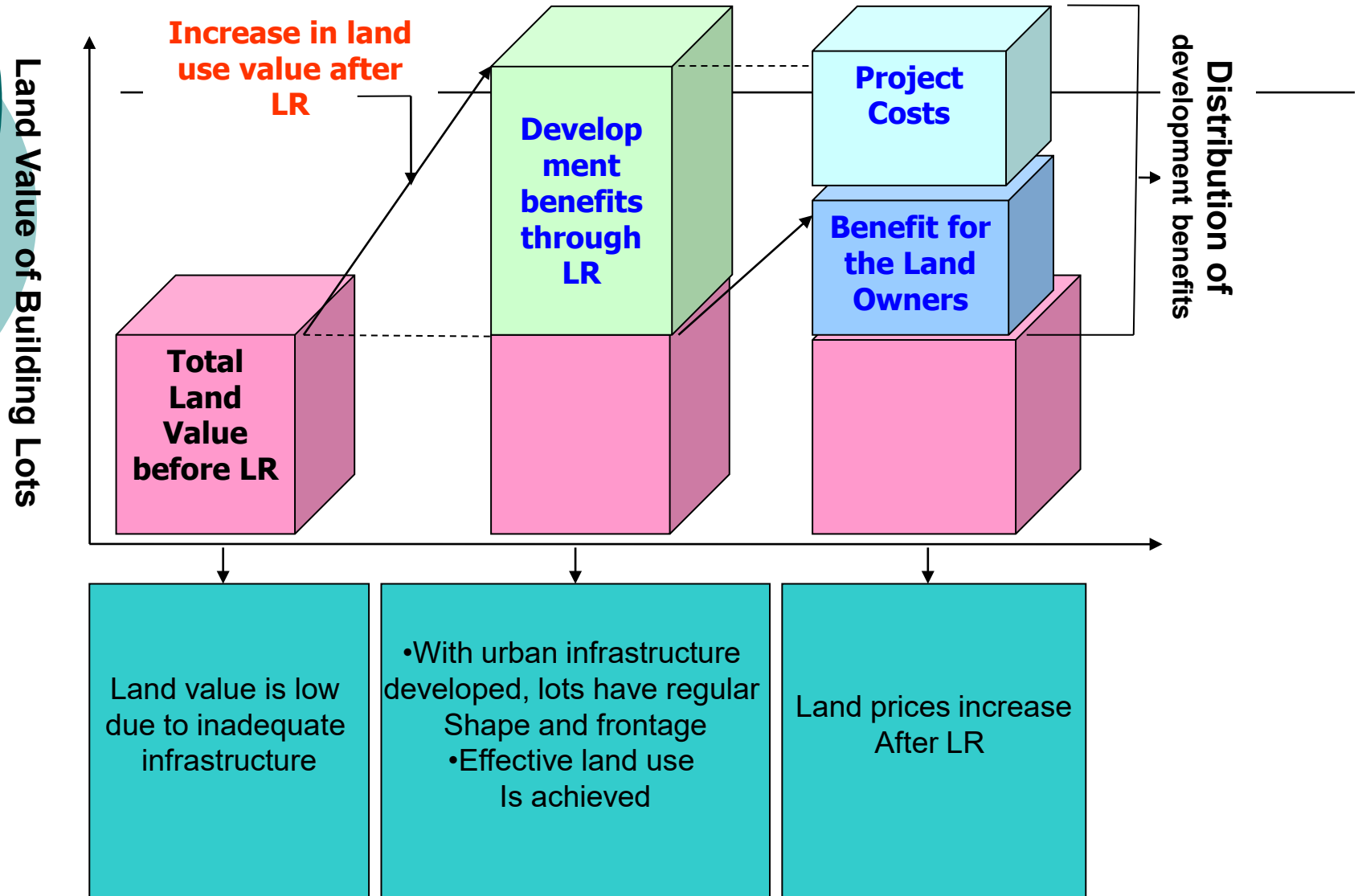


Financing of a LR project



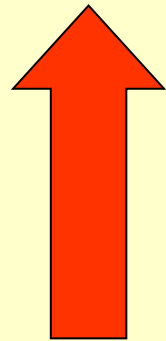
LR ⇒ self-financing tool for urban development

How to distribute development benefits



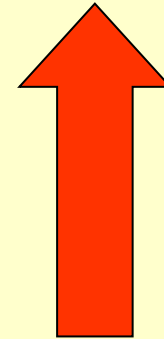
Financial Issues of LR

- Financing of LR



- Increase of Land Values

- The extent of self-financing of LR



- Percentage of increase of land values b/a LR

Financial Issues of LR

- Specifically, the finance of a LR project, in most countries can be achieved through the following methods:
- ***Sale of Reserve land*** (Japan, Korea)
- ***Money contributions*** from the landowners equivalent to the difference of the plot's value before/after LR (Germany)
- ***Financial levy*** in the landowners according to the plot's value after LR (Greece)

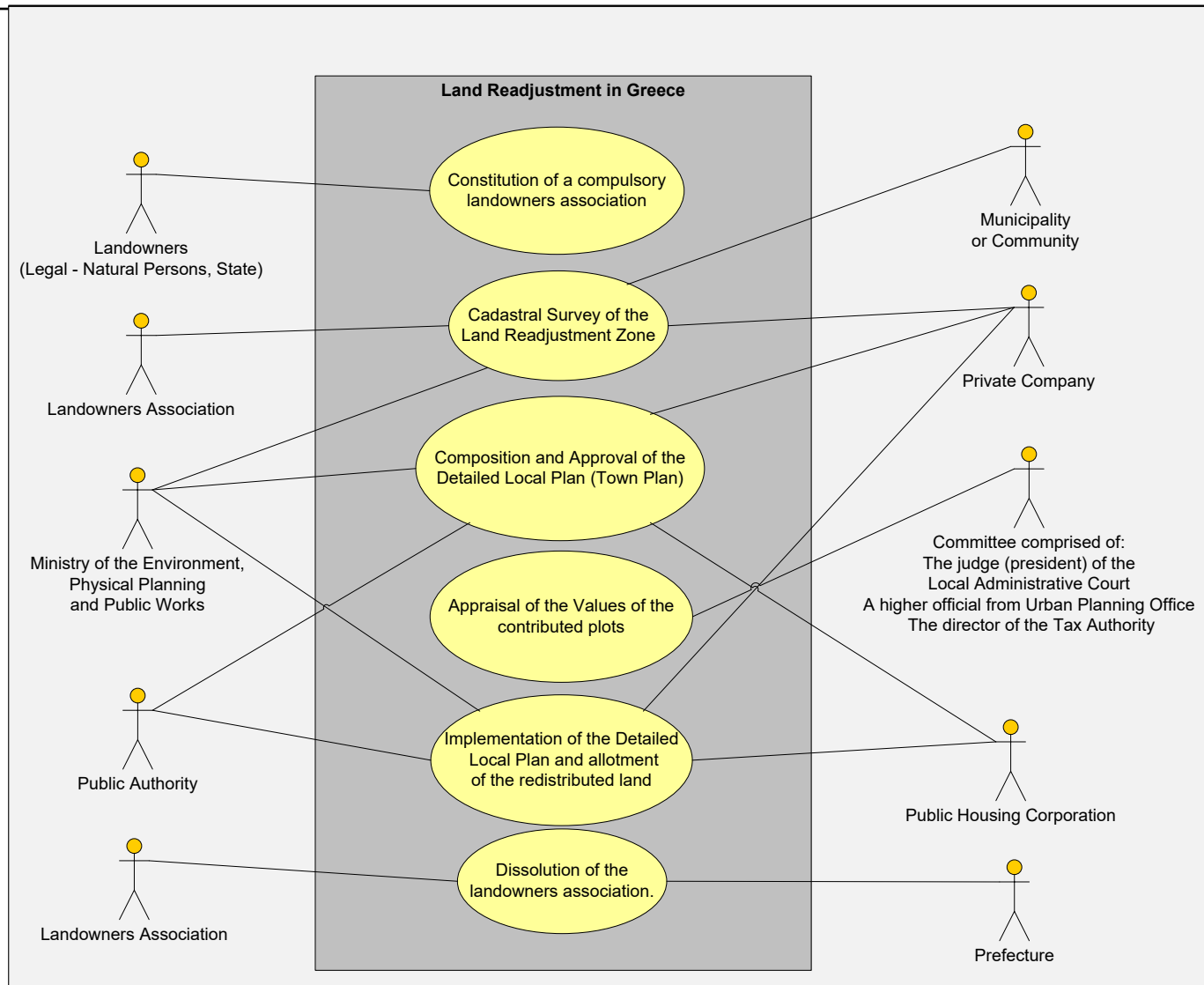


Social Issues of LR

- In urban development there should be an aim that the provision of the private interests should not conflict with publicly desirable development
- LR-in contrast with expropriation or sale of the land-is a tool which balances private and public interests

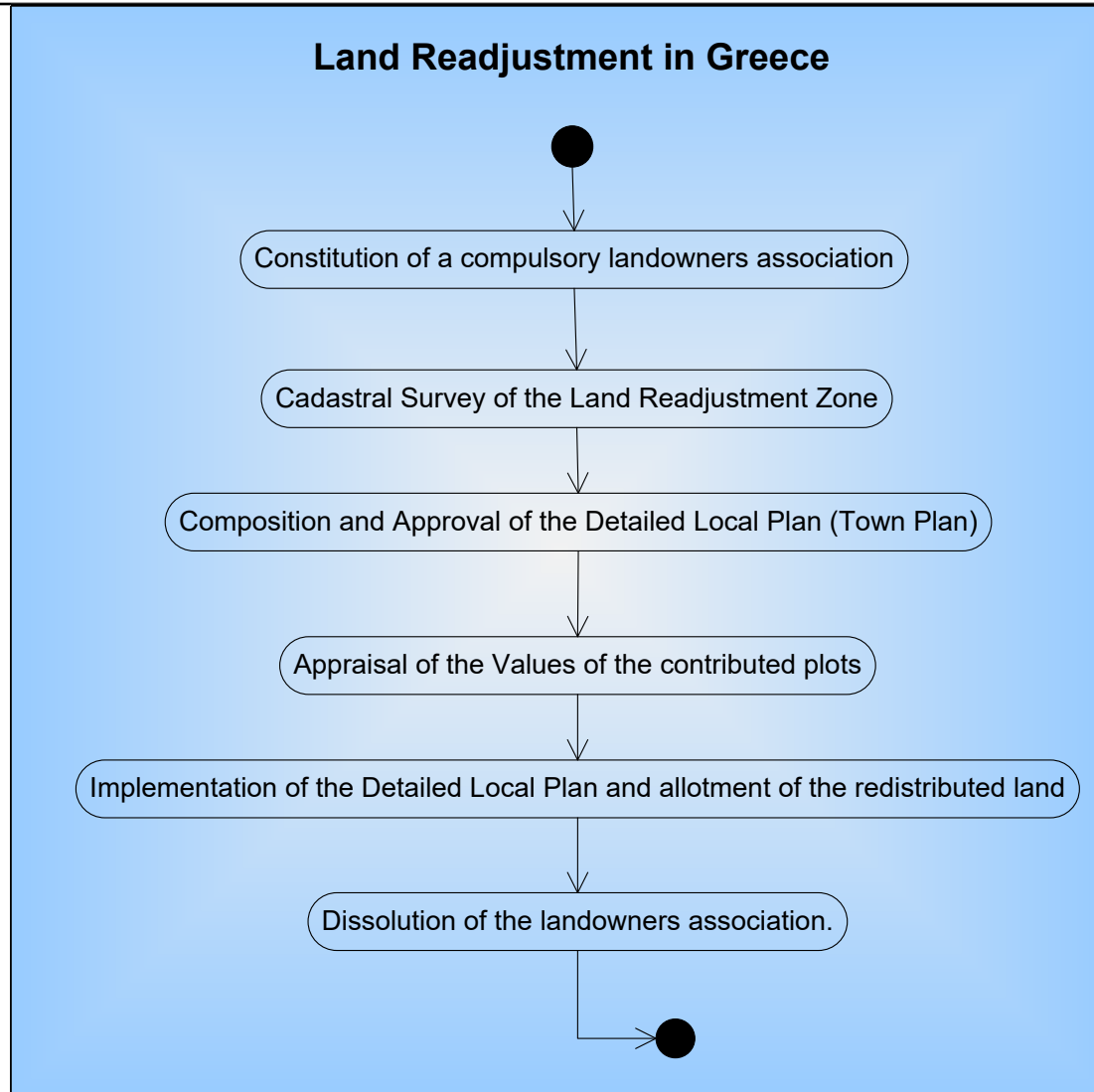
Use Case diagram - LR in Greece

A first approach



Activity diagram – LR in Greece

A first approach





THE ROLE OF CADASTRE AND LAND REGISTRATION SYSTEMS IN THE L-R PROCEDURES

BEFORE L-R

- Comprehensive and secure Information about the land tenure at the specific area
- Appropriate and updated Spatial data
- Good knowledge about land uses and values
- E.t.c.

THE ROLE OF CADASTRE AND LAND REGISTRATION SYSTEMS IN THE L-R PROCEDURES

AFTER L-R

- New land parcels
- Different location of existing land parcels (l-p)
- Different shape, size, use and value of l-p
- New land owners (mainly the public authorities and the municipalities)
- Preservation of the old land owners but the land rights are executed now at different l-ps)
- E.t.c.

THE MAIN COMMON PROBLEM OF LAND READJUSTMENT AND LAND CONSOLIDATION PROCEDURES

- THERE IS AN AREA IN WHICH THE SPATIAL DATA ARE MODIFIED AFTER AN ADMINISTRATIVE DECISION
- ALL THE LANDOWNERS HAVE NEW LAND PARCELS (LESS IN NUMBER OR/AND AREA)
- THE PUBLIC AUTHORITIES OR THE LANDOWNERS ASSOCIATIONS ACQUIRE NEW LAND RIGHTS
- SO THE PROBLEMS FROM A SPECIALIST ON CADASTRE POINT OF VIEW HAVE COMMON SOLUTION...
- THE USE OF GIS AND MODELLING PROCEDURES HELPS US TO PROPOSE THE BETTER SOLUTION.