

# Land Evaluation in Urban Development Process in Germany

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## ABSTRACT

In free market economy land values are a result of supply and demand. To create land market transparency for everybody, throughout Germany independent public land evaluation boards have been established for the areas of the cities and regional administrative districts to give detailed information on the local land market.

The urban development as a general task of the municipalities usually costs the public budgets a lot of money by their planning activities, land management and construction of public infrastructure. The urban development process from agricultural land to building land on the other hand causes land value increases that can be used for financing (parts of) the urban development and to motivate landowners in the urban development process. The financial result of urban development is getting more and more important according to the smaller public budgets. Therefore urban development needs reliable calculations of the costs and receipts for the municipalities.

Different instruments of providing building land will be discussed. The knowledge of land values and land evaluation is very crucial for successful urban development in all its different strategies and projects.

Land readjustment is a very elegant and economic way for urban development and urban redevelopment. Land readjustment is able to equalize the advantages and disadvantages of urban planning and to finance great parts of the costs of the urban development. In Germany land readjustment has a very long tradition and really a large number of projects has been completed with thousands of hectares of new building land.

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# **Land Evaluation in Urban Development Process in Germany**

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## **1. LAND VALUES IN FREE MARKET ECONOMY**

In free market economy land values are a result of supply and demand. That means that in regions with a dense population and higher demand land prices usually are higher than in sparsely populated regions. Besides those regional aspects other criteria like the individual location, the existing legal circumstances and actual characteristics and general condition influence the amount of the land value. In particular the kind of land use (agricultural land, building land for residential, industrial or commercial use) and the intensity of building use (number of complete stories, gross floor space etc.) have to be taken into account.

## **2. LAND EVALUATION BOARDS IN GERMANY**

To create land market transparency for everybody, throughout Germany independent public land evaluation boards have been established for the areas of the cities and regional administrative districts to give detailed information on the local land market. Based on the Building Law Code those land evaluation boards are obliged to collect and analyze all contracts of purchase of land and condominiums. The main tasks besides these collection and analysis of land prices is :

- to produce individual valuation reports on application,
- to publish standard land values,
- to derive special data required for valuation and
- to publish reports on the property market.

But there are also lots of (private) licensed land evaluators in Germany whose business it is to produce land value reports, often also based on the information and publications of the public land evaluation boards.

## **3. PHASES, LAND VALUES AND COSTS OF URBAN DEVELOPMENT**

According to the increased demand on individual residential floor space and migration processes from some regions to other regions or from agricultural to metropolitan areas there is a need for the municipalities to provide building land for residential use as well as for industrial and commercial use.

The process of urban development in Germany can be described in three phases:

- planning
- land management (including land readjustment)
- construction of public infrastructure.

When the municipalities have completed these three phases of urban development the private landowners can build up their plots.

The legal basis of urban development in Germany is the Building Law Code. The municipalities have a comprehensive planning authority. The use of land for buildings or for other purposes is mainly prepared and controlled by legally binding land-use plans (also called detailed district plans or local plans; in German: 'Bebauungsplan' or 'B-Plan') making legally binding designations on the specific type and on the degree of building and land use.

The urban development as a general task of the municipalities usually costs the public budgets a lot of money by their planning activities, land management and construction of public infrastructure. The urban development process from agricultural land to building land on the other hand causes land value increases that can be used for financing (parts of) the urban development.

The financial result of urban development is getting more and more important according to the smaller public budgets. Therefore urban development needs reliable calculations of the costs and receipts for the municipalities.

Another important aspect of land values is motivating the land owners to cooperate by making profit in the urban development process, too.

#### **4. LAND MANAGEMENT STRATEGIES IN URBAN DEVELOPMENT PROCESS**

Because usually the land ownership situation is totally different from the planning scheme there is a need to readjust the original plots according to the planning aims. To realize those planning concepts there are different instruments and different strategies in Germany to achieve a comprehensive and successful urban development.

The instruments of providing building land can be split up into

- Models of interim purchase
- Activities of private investors
- Voluntary or official land readjustment.

##### **4.1 Models of Interim Purchase**

The voluntary municipal interim purchase of the land has to be done for the whole project area. That means the willingness of all landowners and the financial ability of the municipality to purchase all plots. If the municipality is able to purchase the land before the planning process has been started the land may be cheaper but the time of interim finance may be very long. By selling the developed building land again after the construction of the public infrastructure (streets, sewerage etc.) the municipality can arrange building and using obligations within the contracts with the private land purchasers. With the difference between purchasing price and selling price (parts of) the development of the land can be financed. The voluntary interim purchase of the land can also be done by private companies or private investors.

A special kind of municipal interim purchase is the so called special urban development project. In contrary to the voluntary interim purchase, which needs the willingness of all landowners to sell their plots, in the special declared urban development project the municipality can expropriate the individual landowner if he denies to sell his plot(s).

But the special urban development project can only be implemented if the special requirements are given as

- The benefit of the general public, that the aims cannot be reached by the regular way of urban development with planning – land readjustment – construction of public infrastructure.
- The aims and purposes are not capable of being achieved through the use of urban development contracts.
- The swift implementation must be possible.
- The development of the area must have a special importance for the municipality.

The municipality is obliged to purchase or to expropriate all plots in the project area and to dispose of those plots that are not needed for construction of public infrastructure (streets, green areas etc.). After readjustment and construction of local public infrastructure the land has to be sold to those persons who are willing to build on it in accordance with the designations of the 'B-Plan' and the requirements of the special urban development measure within a reasonable period of time. In first instance consideration is to be given to the previous landowners (with consideration being given to broad sections of the population).

An essential aspect of the special urban development project is the evaluation of the original plots. Purchasing the original plots the municipality has only to pay a special low land price (without expectations to the special urban development project). Therefore great parts of the land value increase caused by the development can be taken to finance the project costs and the construction of the public facilities

Therefore many landowners refuse this kind of urban development because they want to get a higher portion of the land value increase for themselves. That makes this instrument very unpopular. The landowners institute proceedings which can delay the development project and arise intermediate finance and project costs.

In 1997 two special urban development measures with together about 350 ha have been started in Frankfurt. Some landowners appealed for the court but they failed. Last summer the court confirmed both special urban development measures as legal.

## **4.2 Activities of Private Investors**

According to the regulations of the Federal Building Law Code there are two ways to involve private investors in the urban development process

- The engagement of a third party by the municipality with so called urban contracts and
- The initiative of a private investor to develop areas that can be realized with a so called project and infrastructure plan (as a part of a municipal statute in combination with an urban contract).

In both ways the municipality may delegate the preparation and implementation of planning and its realization to a third party. This can include land readjustment, soil remediation and drawing up of the urban plans. It is also possible to agree upon the assumption of responsibility for the costs and other expenses which the municipality incurs in respect of urban development and which are either prerequisites or consequences of the proposed development project. The advantage for the municipality can be the relief in working power and in particular a cost reduction. Usually the private investor has to be the owner of the total project area, at least to be entitled to use the land.

That usually also means that the investor is able to finance the whole project development with its three phases planning, land management and construction of public infrastructure. And he only will do that if he has the chance to make enough profit out of the project, usually a result of the difference between purchasing and selling land price minus the project costs.

## 5. LAND READJUSTMENT – THE SPECIAL GERMAN WAY

Land readjustment project is a special land exchange method. The basic idea of land readjustment is to add together all plots of the project area to the so-called readjustment mass. But this only happens in a mathematical way and not by purchasing all plots. Out of this readjustment mass there have to be excluded the areas for public infrastructure (streets and green spaces including children's playground, provisions for protection against environmental conditions etc.). All those spaces are intended primarily to serve the requirements of residents of the readjustment area.

The common way of land readjustment is redistribution by value. Hereby the so-called redistribution mass (that means the total readjustment area minus the areas for public use or easier the net building land) has to be divided up proportionately on the basis of the degree to which each of the owners is involved in the readjustment. All plots have to be evaluated twice: before and after land readjustment. By land evaluation the land contribution rate as well as the entitlements of the landowners and financial adjustments have to be determined. All plots have to be evaluated twice:

- Before the land readjustment project: undeveloped land (so called input value) and
- After the project: building land (redistribution value).

Each landowner gets a plot with the market value at least equal to the market value of his original plot.

Example for landowner Mr. A:

Old plot (input land):  $1,000 \text{ m}^2 * 160 \text{ €/m}^2 = 160,000 \text{ €}$ (undeveloped land)

New plot (redistribution):  $600 \text{ m}^2 * 300 \text{ €/m}^2 = 180,000 \text{ €}$ (building land)

Contribution of landowner Mr. A in land readjustment project:

in land:  $1,000 \text{ m}^2 - 600 \text{ m}^2 = 400 \text{ m}^2$

in money:  $180,000 \text{ €} - 160,000 \text{ €} = 20,000 \text{ €}$

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TS 8.2 Land Readjustment and Consolidation of Land

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The main financial result is depending on the land value level of the project area (city) and the difference between input value and redistribution value.

Land readjustment does not need financial budgets for purchasing the land, because it is an instrument of land exchange. The additional construction of local public infrastructure has to be financed by the municipalities, but they usually get up to 90% of the construction costs back by a landowners financial contribution.

In Germany there is an increasing number of municipalities that is going to combine land readjustment with urban contracts. So the municipalities try to get the agreement of all landowners for their higher contribution in money and/or land. This may be done by the way that landowner Mr. X who has a plot of 2,000 m<sup>2</sup> agrees on getting 50% - these are 1,000 m<sup>2</sup> - back and on paying an additional amount of for instance 100 €/m<sup>2</sup> for financing planning and the construction of public facilities.

## **6. CASE STUDIES**

- 1.1 Special Urban Development Project
- 1.2 Land Readjustment Project for Urban Development
- 1.3 Land Readjustment Project for Urban Redevelopment

(Photos and maps not included)

## **7. CONSEQUENCES**

In Germany there are different ways for urban development and for providing building land. But there is no way with a success guarantee. Out of the different instruments we have to choose the instrument with regard to the circumstances, the preconditions and the wanted results that is lawful and effective. Facts to be considered are the location of the area, the number of the landowners and their willingness to take part in the project, the financial situation of the municipality, the intended period and the project costs.

The knowledge of land values and land evaluation is very crucial for successful urban development in all its different strategies and projects. It enables to finance (parts of) urban development and to motivate landowners in the urban development process.

Land readjustment is a very elegant and economic way for urban development and urban redevelopment. Land readjustment is able to equalize the advantages and disadvantages of urban planning and to finance great parts of the costs of the urban development. In Germany land readjustment has a very long tradition and really a large number of projects has been completed with thousands of hectares of new building land.

## **BIOGRAPHICAL NOTES**

**Mr. Rainer Müller-Jökel** graduated as a land surveyor from the University of Bonn, Germany with main subjects concerning land management and land evaluation. He is working for the Municipal Survey Office of Frankfurt am Main as the Head of the Department of Land Readjustment.

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Rainer Müller-Jökel is Lecturer at the University of Applied Sciences Frankfurt am Main and the Institute of Town Planning Berlin as well as Deputy Chairman of the Land Evaluation Board of the City of Frankfurt am Main.