



## **Possibilities of the state to support the revitalization of derelict land – A way between public government and financial motivation**

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### **Abstract**

The share of derelict land grows increasingly, although the consumption of land shall be reduced from nearly 115 nowadays (Destatis, 2009) to 30 hectares per day until 2020 (Bundesregierung, 2002). Thus, derelict land affords a chance to reduce land consumption. Revitalization does not present itself as attractive as it should be for reducing land consumption and the capacity of the existing Brownfields. Reasons are obstacles as competition of Greenfields with their favourable development costs, which are regularly higher for Brownfields e.g. because of contaminations (Weitkamp, 2009). There are two opinions for public authorities to stimulate revitalization. On the one hand, they can use their legal power to force a Brownfield development. Planning and regulative law are the mayor public instruments. Planning instruments offer a framework to limit or to prevent development on Greenfields. Regulative instruments manage revitalization by using e.g. German urban development measure, by handling contamination or by ensuring polluter-pays-principle. On the other hand, revitalization could be stimulated by subsidies or indirectly by tax incentives or exemptions (Weitkamp, 2009).

Both ways have pros and cons. Public force is a direct instrument to realize projects, but needs a high commitment of the public authority – possibly against property owner's will. Financial motivation offers an inducement for investors, but the steering effect is less. There are many possibilities to develop both instruments. They could be transferred into a national revitalization company which is an advancement of public development companies (Weitkamp, 2009) like the former LEG-NRW (Ferber et al., 2005) or English Partnerships and the Regional Development Agencies in UK (English Partnerships, 2009). They need legal power and also a budget for e.g. revolving funds, which are used in USA and UK for years (U.S. Environmental Protection Agency, 2006; English Partnerships, 2006) and could be transferred to Germany (Weitkamp, 2009).

### **1 Land consumption and revitalization of derelict land**

The settlement and public area takes a large extent of the total area and rises especially in industrial nations. This increase goes predominantly to expense of agricultural area. In Germany, the land consumption is still very high. In 2008, it amounted to 113 ha per day (Destatis, 2009). In 2002, the German government tackled this subject. In the national sustainability strategy, the government focuses on minimization of land consumption with a quality and a quantity aim. The quality aim plans developing land in a ratio for inner city to outside of 3 to 1. The quantity aim is to reduce the amount of settlement and public area to 30 ha per day until 2020 (Bundesregierung, 2002).

These aims could be realised by revitalization of derelict land. Derelict land can be understood as "land that is so damaged by industrial or other development such that it is incapable of beneficial use without treatment" (Environment Agency, 2002, p. 6). Once developed, the derelict land remains unused until another use and financing is found.



Three types of derelict land can be differentiated:

- Fast-selling sites only remain in an unused situation until an investor or financing is found; costs of development are not higher than the earned benefit. Hence, they do not remain on the market for a long time.
- Not developable sites are not interesting for achieving the aims. In these regions, the market for Greenfields is already bad, so renaturation is the only reasonable reuse.
- Passive developable land offers a potential for reducing land consumption. These passive developable sites are characterized by their need of subsidies to balance the unprofitable costs. They remain unused for a long time, whereas Greenfields in the same area get developed (Ferber 1997).

Derelict land is able to support the quantity aim, because less Greenfields are needed. Often, the quality aim is supported as well, because the sites are often situated in the inner city (Weitkamp, 2009, p. 24 et sqq.).

## 2 Revitalization between public government and financial motivation in Germany

Public authorities have two main options to promote the revitalization. Either they can use their legal power to force the development or the state could stimulate revitalization by subsidies. The public instruments could be divided in planning and regulative ones. Whereas planning instruments present a proposal, the regulative instruments enforces the public will in different levels of intervention. Also the financial motivation can be part of public intervention: in a direct way e.g. by giving grants or in an indirect way e.g. by using tax incentives (Weitkamp, 2009).

### 2.1 Public instruments

In Germany, there are a lot of possibilities to use land use regulation as planning instruments. Land use planning is a double-stage process. The legally binding level is the binding land use plan. Contaminations could be respected within this binding land use plan. For this purpose, land can be kept free of buildings. A zoning for developing predominantly derelict land do not exist in Germany (ARGEBAU 2001, p. 14 et sqq.). Such a regulation is only possible, if Greenfields are not zoned as building land. In accordance, developing derelict land gets more attractive. This alternative seems to be problematic, because of the local planning autonomy. The municipalities have a constricted view at land use planning; the increase of tax revenues is one of their mayor aims. The increase of tax revenue is often linked with new building land and a broader view is often missing.

An eligible land use control from a higher administrative level fails due to local autonomy. The obligation to harmonize the local land use planning to the higher-level spatial planning is not totally effective (Weitkamp, 2009, p. 208 et sqq.).

Besides planning instruments, there are three fields of law that provide regulative instruments within revitalization: the urban development, the environmental and the liability law.

The urban development and urban redevelopment measures could be indentified as expedient for revitalizations in urban development. With urban redevelopment measures, an area can be substantially improved or transformed. The purpose is to alleviate urban deficits (Federal Building Code (BauGB), section 136 (2)). The purpose of urban development measures is the development of an area for the first time. The area must have a particular significance for urban development or to make these areas available for new development within the framework of urban reorganisation. The



implementation of the measure requires public interest, because expropriation is possible (BauGB, section 165).

According to Ernst et al. (2006, §§ 136 to 164 b, no. 34), the choice for an appropriate measure is based on the demand for land law instruments. The realisation should implement the aims of the municipality. If an interim-acquisition is necessary, the decision has to lead to the urban development measure, because of its possibility of expropriation. Urban development contracts are other instruments of regulating the cooperation between the municipality and private parties like investors and developers. They are provided by the federal building code. The content of these contracts is to regulate the cooperation in the revitalization. In particular a land improvement contract is used to regulate the handling with contamination, the transfer of costs or the remediation; section 11 (2) sentence 2, alternative 1 – 4 BauGB gives examples (Weitkamp, 2009, p. 53 et sqq.).

The environmental law provides also regulative instruments. According to article 1 Federal Soil Protection Act, the aim is to protect or to restore the functions of the soil as a permanent sustainable basis. This includes the prevention of harmful soil changes, the remediation of contaminated sites and of the affected waters as well as the precautions against negative soil impacts. The act provides the possibility for the government to enact an order to unseal the ground (Federal Soil Protection Act, article 5).

Within liability law, further regulative instruments for revitalization are defined. In Germany, the liability follows the polluter pays principle. The public authority has also the power to choose between owner and polluter to prevent danger. Hence, they can get the most solvent payer to pay the remediation costs. If the solvent payer is not the polluter, he can submit the case to a civil court to get back his money from the polluter (Weitkamp, 2009, p. 54 et sqq.).

## 2.2 Financial instruments

For the passive developable sites, which are commonly understood as derelict land, the added value is not sufficed to finance the revitalization. Subsidies must compensate the unprofitable costs. There are two different kinds of financial instruments: direct und indirect instruments.

In Germany, direct instruments are subsidies granted on European Union, the German State, the Federal States or the municipalities. Most common subsidies for revitalizing derelict land are the Urban Development Grants. Within this programme, national, state and municipal financial resources are combined to realize revitalization. For receiving grants, the revitalization has to be done in an urban (re-) development measure or in an urban restructuring measure (combing of regulative and financial instruments). Some Federal States like North Rhine Westphalia (NRW) have own grants. NRW uses the Grundstücksfonds (property fund) to obtain the revitalization. Within this fund, sites can be revitalized, which are unused, has an inner city location and whose reuse is hindered maybe by unprofitable costs. The capital stock of this property fund is financed by public funds of NRW, European Funds and the income from selling the revitalized sites (Weitkamp, 2009, p. 67 et sqq.). Besides direct instruments, indirect ones are possible as well. An indirect support could be a tax incentive or exemption. The real estate tax can be reduced by the portion of the remediation costs to the market value of the unpolluted property. This is possible for properties, where a remediation is ordered by the authority or stipulated by contract (FinMin. Baden-Württemberg 1998). In area of urban (re-)development measures an expense for modernising and repairing of building is deductible by tax, if the building is not funded. Tax incentives or exemptions are able to compensate unprofitable costs (Weitkamp, 2009, p. 68 et sqq.).



### 3 Factors of success and improvement opportunities

In general, there are a lot of instruments in Germany. They provide a good overall assistance for the revitalization of derelict land. Certain adjustments are able to produce a better result in the revitalization process.

A factor of success of the planning instruments is a better control of planning through a higher level (state or national level). Self-interest of the municipalities (e.g. more tax revenues) to develop Greenfields sites can be avoided.

The regulative instruments of urban development provide two mayor improvement opportunities. The municipality should minimize the transfer of costs on the developer by urban contract. This would raise the possibility to earn better profits and a project could be realized without or less subsidies. Altogether, the attractiveness of the revitalizations will rise.

Another possibility to raise the interest of developers is the implementation of a proposal system for urban development measures like for project and infrastructure plans. Nowadays, the municipalities are responsible for the urban development measures. According to section 167 Federal Building Code, private developers only act as development agencies. The municipality appoints them as a suitable agent to prepare and implement the urban development measure. A wider opening of this instrument for developers could mean a possibility to make an application for running an urban development measure. The only remaining function of the municipality would be the decision to allow or to dismiss the application. If the application is allowed, the municipality has to do the administrative decisions like expropriation for the investor – everything else would be done by the developer (Weitkamp, 2009, p. 208 et sqq.).

Concerning the instruments of environmental and liability law, a German-wide consistent register of contaminations, which has an unrestricted access for all investors, would be advantageous. A deduction of capital to handle the risks of getting derelict land would have also a favourable effect on remediation costs (Weitkamp, 2009, p. 211 et sqq.).

Embracing all instruments, a coordination of public and private stakeholder is needed to minimize time of revitalization. A revitalization agency like English Partnerships and the Regional Development Agencies in England is a good opportunity (English Partnerships, 2009). First approach is the former LEG-NRW (Ferber, et al., 2005). Despite privatization of the LEG, the section “Public Services” which includes the revitalization is hived off and carried over to the federal state. The reason is its relevance for the public interest, which points the meaning of that function. The national revitalization agency should have governmental power through public instruments to revitalize derelict land in combination with special expert knowledge. This would mean a very successful possibility of revitalization (Weitkamp, 2009, p. 221 et sqq.).

Public instruments offer a good possibility to control the revitalization process and if necessary, to force public will. Motivation is always a better way than forcing people. Only a limited budget is needed to realise persuing this strategy. Financial subsidies motivate to follow the public will by monetary assistance. In addition, passive developable sites need public grants because of their unprofitable costs. Direct subsidies have to be preferred to indirect ones like tax incentives and exemptions. Both ways mean an investition of the government, but in case of the direct subsidies, the control is higher. The state could chose the eligible project, whereas the tax incentives and exemptions are accessible for everybody. This could be an advantage, because it is easier to get financial assistance, but the way of windfall gains is open as well. In times of limited public money, the direct way of subsidies has to be preferred. The budget of revitalization must be extended to increase the revitalization activities. A revitalization agency that controls the subsidies would be advantageous.



Expert knowledge, coordinating function and governmental power should complement the financial budget of this agency (Weitkamp, 2009, p. 214 et sqq.).

Revitalization funds like the “English Cities Fund“ and the “Igloo Regeneration Fund“ in England would be a possibility that shows a great promise of success (Jakubowski 2007). This funds should have a public and a private financial stock. Public money could contain ordinary subsidies like Urban Development Grants. Private money could be raised from socially responsible investors (Lützkendorf et al. 2006) or from the industry, which wants to assume responsibility for caused contaminations (the AAV NRW, a remediation association of the polluting industry in NRW, could be named as a Best Practice (AAV 2003)). All the money should be merged in a revolving fund. This has the benefit, that a part of the investment could be revolved by selling the developed area. The advantage of such an investment for the private investors is the risk assumption by the state. A national revitalization agency would be the best administrator of such a revolving loan fund (Weitkamp, 2009, p. 217 et sqq.).

Besides this possibilities, the general profit of revitalization measures could rise. Especially a comprehensive restriction of Greenfields development would increase the attractiveness of developing derelict land. If possible, a minimization of net built area could rise the income (Weitkamp, 2009, p. 212 et sqq.).

#### **4 Contribution of revitalization to reduce the land consumption**

Both, public government and financial motivation, are possibilities of the state to support revitalization of derelict land. A target-orientated combination of the instruments would lead to best results; a good knowledge of revitalization of derelict land is necessary. If more derelict land can be revitalized, the land consumption could be reduced. As described in chapter 1, the German government formulated a quality and a quantity aim. Revitalization fulfills both of this aims. Most derelict sites are located in the inner-city. By developing the site, a contribution of the quality aim is done. Each revitalized site saves directly Greenfields. Therefore, the revitalization of derelict land could contribute the quantity aim (Weitkamp, 2009, p. 229 et sqq.).

According to this statement, the question remains in which effect the revitalization of derelict land could help to achieve the 30 ha per day aim until 2020. Based on the fact of a land consumption of nearly 115 ha per day, 85 ha per day have to be reduced or covered e.g. by revitalization of derelict land. The potential of derelict land is estimated to 128000 ha and includes commercial, postal and railway sites (BBR 2004b).

Derelict land is able to satisfy the demand only for four years, if the development of Greenfields is restricted and the spatial distribution is neglected. Certainly, the potential of derelict land and the demand for building land cannot be found normally in the same locality. Besides, not every Brownfield site cannot be revitalized economically at all. Based on a building land survey, the Federal Office for Building and Regional Planning estimates a potential of 49000 ha, which could be re-used. Thereof are 28500 ha usable for commercial (BBR 2004a).

Hence, the additional demand of the 85 ha per day could only be covered for one and a half year.

Consequently, for a reduction to 30 ha per day until 2020, additional instruments are needed for the reduction of land consumption. Revitalization itself could not reach the aims (Weitkamp, 2009, p. 229 et sqq.).

#### **5 Conclusions**

The public authorities have a lot of instruments to support revitalization. There could be some advantages in combination of public and financial instruments. Besides the possibility of public



intervention, a financial motivation is created. Both bundles of instruments are needed to develop passive developable sites, where a lot of unprofitable costs limit revitalization. Financial motivation does not often suffice to activate private investors. Public instruments are needed in addition. Because of the limited budget of funding, not every site could be revitalized. Also, not every site is needed for a future land use. For realisation of the quantity aim of the German government, funding budget has to be increased and revitalization must be complemented by other instruments of reducing land consumption (e.g. ground value tax or land designation certificates).

Revitalization of derelict land is one instrument, which offers a direct possibility to reduce the land consumption. Possible savings are directly measurable. Revitalization offers a potential to defuse the historical mix of urban cities as well as to remediate contaminations and to encourage investments in the neighbourhood.

In the future, private investors are needed for revitalization more often, because of the declination of public money. Hence, new ways – like revolving funds – are needed, to activate private capital for revitalization. If public money will decrease, the public authorities should use their public planning and regulative instruments to support private investors.

The revitalization of derelict land is an ambitious task. Improvement opportunities could be assessed, but the public authorities offer a lot of instruments for their own duties as well as for supporting private developers yet.

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