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1. Summary

All projects unanimously point out that the precondition for promising implementation of a restructuring project is an accordingly target-oriented basic attitude and conviction that must be present in all concerned parties and participants, or that must be created with suitable measures.

To create this precondition already in the run-up to planning, an intense exchange of opinions, ideas and knowledge is required, so that the planning builds from the beginning of a rather broad consensus (Gouda). The population and the business enterprises for which in the end these plans are intended must be intensively integrated into the process of forming an opinion, developing the plans and realizing them (Newcastle). The according social potentialities must be stimulated and motivated.

It is also generally considered important that the planned measures be coordinated in a larger spatial context (Leidschendam), and that they need to show vision and clear perspective of the future (Utrecht). For that especially, a coordination of the planning on a horizontal as well as vertical level is necessary (Zuid-Holland). The coordination within a larger framework contains the danger, though, that the (pre-)planning takes a long time, and therefore the approaches become old and out-of-date before the realization phase, possibly making new planning necessary.

Plans for restructuring residential areas and industrial and commercial areas must take into account the changed demands of the potential or actual users of the area. Increased wealth has led to new demands, for example, on the quality of environment and quality of life, which must be satisfied in a sustainable way (Zuid-Holland, Newcastle).

It is also of no use to create sterile, interchangeable “formula” landscapes, as much for residential development as well as for industry and commerce. Characteristics for identification and a unique, unmistakable character, which does not break with all traditions, are considered to be important site factors (Zuid-Holland, Saarland). Open and nearby recreational areas are an essential component of site and living quality, especially in urban areas. Such environmental and living qualities must be secured or newly created (Leidschendam), also in regard to sustainable protection of the environmental resources of soil, water and air.

In individual cases, the strengths of the market are used to realize the goals, for example, by using the actions of private parties which are stringently profit-oriented to reach the objective as well as fixed rules (two-for-one), in order to advance restructuring (Newcastle). In other cases, advance concessions on the part of public authorities, especially regarding infrastructure, are considered useful to start a development that can support itself in the future (Utrecht).

2. Introduction

The long existence and abrupt downfall of industries that once dominated and characterized entire regions, such as the coal and steel, textile or chemical industries, have left behind deep — often devastating — scars on the concerned regions. Large, derelict areas, abandoned and decayed production facilities and buildings ready for demolition, desolate and useless trafficways, diffused urbanisation, visible damage to landscapes, nature that is destroyed or burdened with hazardous materials, consequential ecological damage such as impacted groundwater and contaminated soil are often seen on a scale and an interdependency that leaves hardly any hope for self-healing.

The powers that could craft a way out of such a crisis can hardly be mobilized from within. The population is in a worse financial situation than cities in economically prosperous regions due to the lack of jobs, and this lack of means is reflected in residential areas. The communities are almost unable to act due to a lack of tax revenues, infrastructural and city development problems, prevailing social costs and manifold inherited burdens. Higher-salaried wage earners, young and dynamic people and the capital as such, move more and more to areas “where the world is still intact”. Young and innovative businesses are not interested in the sites of yesterday, and establish themselves on other, aspiring or already-established sites of the future.

Without massive financial incentives from outside as well as from within, without target-oriented intervention,

without sound concepts that can carry themselves, a change for the better can hardly be expected. Restructuring and revitalization is the base for modern development and an economic “getting-into-gear”, though, and that in turn is the base for a future of the cities and regions and the people living and working there.

The possibilities for development of a site, city or region, depend on, amongst others, the possibilities for establishment of business enterprises. But the corresponding decision for investment also depends on how the entire spatial surrounding presents itself to the potential investor. The reutilization of derelict inner-city commercial and industrial sites and their reintegration into the city development is especially suitable for this purpose, not least for reasons of maintaining open areas in urban surroundings.

In the following, the different possibilities to stimulate restructuring and revitalization measures as well as practical approaches to a successful revitalization are to be shown.

2.1 Definition of terms

In the following, the term “implementation” denotes strategies and measures that are required to transfer a restructuring project from the project idea or project conceptualizing phase into the planning and realization phase. Essential influences come from framework conditions that are locally or regionally different, such as political and legal situations or financial possibilities. The chosen form of organization is also decisive for the achievement of the goals.

It is important for a successful implementation that a process that is self-sustaining is started, which supports the desired development beyond the actual project phase.

2.2 The topic in the questionnaire

Generally, realization is the object of each project. It therefore does not come as a surprise that the theme “implementation” was considered by all participating project partners as “very important” or “decisive”. After all, what use is there for visions, ideas and concepts that are nothing but theoretical considerations that are an end in themselves, and that disappear in a drawer after the project is finished to wait to be invented again?

The planning and development mistakes of the past before us — because they are the reason for the required restructuring measures and today’s efforts for their implementation — one is also aware of the power of a faulty strategy for implementation of the restructuring process.

Therefore all project partners stress the importance of

- the communication of the actors and all concerned parties
- the exchange of opinions and knowledge
- of the reaching of a broad, sound consensus and
- the contribution of responsibility (and also finances) from as many participants as possible

3. Implementation as an element in the restructuring process

The question of how structural change is realized, that this, how restructuring is organized and how to implement innovation, modern development and a future-oriented reshaping of outdated structure, is being answered in different ways in different projects and in the participating partner countries, also in view of varying situations. In some instances, integrated planning is considered to be the most important base for the required restructuring; others see the success of implementation as depending on succeeding in getting all the participants in the restructuring process (planner, financiers, development associations, governmental agencies, all owners and users of areas, and neighbours, etc.) to collaborate effectively and in a target-oriented way, for example in the framework of a project organization.

The procedure in the state of North-Rhine Westphalia and the planning and implementation model “International Building Exhibition Emscher Park” that was developed there, can be considered trend-setting for Germany. A comparable approach is also planned for the Saarland. The three projects sites, Camphausen Mine, Reden Mine, and Fürstenhausen Coking Plant are integrated into an integrated concept “Industry Culture Saar”.

3.1 Industry culture

The IBA -Emscher Park was and is, after the official closure of the project, understood to be a program of the future for the state of North-Rhine Westphalia. The principles and guidelines that were established at the beginning of the project had the objective of accomplishing the structural change on more than 100 sites within an old industrial region.

To that end the IBA-Emscher Park GmbH was created as a lead organization. It was responsible as the central organ for coordination and mediation of the entire project.

The most important characteristic of the organizational structure was the decentralized responsibility of the project sponsors: the execution of the IBA-Emscher Park was essentially performed by participating municipalities with their citizens and businesses. They stood in the foreground in planning and realization and were responsible for the actual individual projects. The IBA-Emscher Park GmbH only decided whether projects were allowed into the building exhibition or whether they were released. It also coordinated the single projects so that an integrated concept could be recognized.

The state government of North-Rhine Westphalia, which decided for IBA-Emscher Park, stepped back during execution and only created the basis for the political legitimation of the IBA. This organizational structure also led to the question of financing. There was no specific self-support program for financial support from the state government. The individual IBA -projects were supported within their task areas by different support programs of the state of North-Rhine Westphalia, the EU and the government. Along with that came a large share from private investors who expected profits from the projects in the medium- or long-term.

In the Saarland, industry culture shall also acquire new status through a chain of projects. Sustainable concepts shall be worked out for the development of various (older) sites with (old) industrial culture, and for their handling of pronounced industrial monuments, such as the World Heritage monument “Völklingen Steelworks”.

The “Industry Region Saar” commission, which was formed to work out these concepts, is explicitly orienting itself on the positive experiences and practical realizations of the successful model IBA-Emscher Park.

The time frame for the project is 10 years. The final budget it is not defined yet. The approaches up to now have reached a magnitude in the order of approximately DM 390 million. (1) The appropriation of the required financial means shall mainly be accomplished via: (2)

- means of the structural assistance of the European Union EFRE and ESF including counter-financing by the state,
- means for a city development support, environmental policy and economic support of the state, including co-financing shares of the government, if available.

3.2 GIU Model — Burbach Steelworks Example

The former area of the Burbach Steelworks that needs to be revitalized is an area of about 60 hectares which was used industrially for about 100 years, located about 2 kilometers west of the Saarbrücken city center.

The aims of the project are:

- To provide a decent infrastructure for expanding small- and medium-size manufacturers. Existing employment is to be assured, new jobs are to be created.

- To create a new site image. It is aspired to promote the area as a “first choice” location for service enterprises and companies engaged in information technology.
- To reintegrate the site into the surrounding built landscape in order to suspend the area’s functional deadlock (social, economic and psychological).

Since the mid 60s, the former steel mill has been facing great job losses due to structural change in manufacturing. Since 1982 the site gradually turned into industrial derelict land.

The revitalizing process began in 1989. The state purchased the area for DM 28 million from the Saarlöh AG. The state capital of Saarbrücken purchased the derelict site from the state government for a symbolic price of DM 1, and assigned the municipal Society for Innovation and Business Promotion (Gesellschaft für Innovation und Unternehmensförderung mbH, GIU) to develop and market the area. The likewise municipal “KommunalSystem GmbH” (KS) was entrusted with processing and restoration of the site.

First, a student’s workshop was organized. Eight German universities developed a total of 22 suggestions for reactivating the area. These suggestions did not contribute essentially to the concept for a new utilization, since essential facts such as existing ground contamination, continued industrial utilizations on neighboring parts of the areas, etc., were not taken into account and the results therefore had to be considered unrealistic (3).

The objective was then accomplished in Saarbrücken with an open city development framework plan (1992) ordered by the LHS, which was verified and complemented by a feasibility study of the GIU on its economic viability.

From 1990 to 1998 the “restoration and revitalization” of the Burbach Steelworks area model project was conducted within the framework of the “model restoration of contaminated sites” (MOSAL) support measure of the BMBF (4). KS was the institution that conducted the project. From this project, which was conducted parallel to development and marketing, it was realized that the complete contamination clean-up of the entire area could not be done for financial reasons. A contamination clean-up and contamination securing strategy was developed which was oriented on the planned follow-up use and which in turn influenced the planning for the follow-up use.

Essential characteristics of the project work are:

- The project combines communal, regional (the German “Bundesland”), national and supranational regeneration programs. The EU is the major stakeholder.
- There are communal, regional, national and supranational (INTERREG II, URBAN) financial resources. With measures which are not financed by the EU a so called “co-financial-scheme” has been employed: 70 % of the costs are covered by the “Bundesland”, 30 % by the community and the GIU FM at 15 % each.
- All planning steps are set up on a long term perspective, there is no rigid or fixed planning scheme.
- The range of economic activities implemented in the area is widespread. Hence, another structural change is not going to have as severe effects as it had in the past, when there was only one single employer.
- Governmental, public, private (planning process) and business stakeholders (implementation) are involved.

4. The position of implementation

Structural weaknesses and the resulting need for restructuring and revitalizing is a phenomenon that occurs Europe-wide. Structural change is often the only possibility to fundamentally remove economic disadvantages of individual cities or entire regions. Therefore, restructuring is a high-ranking political task.

For restructuring to begin and have a sustainable effect, the preconditions for an economic reorientation in the

planning area must be created. That means that in the project area, an attractive climate must be erected for all participants in the restructuring process through a multitude of measures, so that the powers that are locally available can be mobilized in a target-oriented way, while also having a corresponding external effect which attracts capital, innovative companies and people.

This is the actual goal and the main task of implementation. The creation of economic, social and financial framework data that turns an initiated restructuring process into a self-sustaining one.

The motivation for this may be created by:

- Model projects (residential development, clean-up of contaminated sites, revitalizing of an area, etc.)
- Support programs
- Concrete building measures (infrastructure, environmental protection, restoration of inner cities, etc.)
- Tax incentives (trade tax)

5. Future development

The experiences in Newcastle in particular have shown that approaches that cover too small a space, or that are restricted to fighting specific targeted symptoms, do not lead to the goal of self-sustaining structural change. Structural problems cannot be fundamentally solved this way, but only covered over for a limited time. Half-hearted partial concepts — that is the realization from this — will therefore hardly be successful.

Therefore, in the future the complexity of the subject area will have to be taken into account by interdisciplinary holistic project approaches.

The further scarcity of open area or soil resources will lead to an increasing attractiveness in the future of qualitative growth by utilization of “used natural resources”. The revitalizing of old sites is an outstanding opportunity to ensure an essential precondition for structural change or restructuring, namely, the making available of developed, high-quality industrial and commercial sites in good locations.

The modernizing of residential areas will be an increasingly important task, not only due to currently visible deplorable conditions. Changes in the structure of the population, such as the increasing number of elderly or the increasing number of single households, require structural adaptations in building.

In chapter 28 of AGENDA 21, the final document of the 1992 United Nations conference on environment and development, all municipalities in the world are asked to develop their own strategies for the realization of sustainable development on a local level. Consequently, municipal initiatives for the Local Agenda 21 were established in almost all European countries. Characteristic of a Local Agenda 21 is the presentation of sparing use of natural resources, including land. This aspect will have an increasing influence in the future on residential and urban development. The area utilization will in the long term have to come to a circular-flow economy, since the resources cannot be multiplied, but the demands on open areas will increase. A circular-flow economy will therefore inevitably have to deal with derelict sites and a revitalization of these area potentials.

6. A comparison of the current policies

6.1 Great Britain

“Going for Growth”. The motto here is: sweeping change rather than dribs and drabs. One has learned from the mistakes of the past. The fundamental, structural problems of the city could not be solved by the hitherto pursued tactic of single projects, geographically narrowly defined, concentrated on and reduced to striking problems, with low budgets and short project time frames.

In the course of a project that is designed for 20 years, 20.000 new houses shall now be built, mainly on derelict inner-city sites.

In the framework of the project “Great Park”, altogether 2.500 new high-quality housing units will be built in a hitherto undeveloped greenfield area. Thus, the threat to the city shall be stopped.

Newcastle’s Development Plan policy links the development of new housing in Newcastle Great Park to development of previously used land (known as brownfield sites). In order to achieve this “2 for 1 Ratio”, an average of 170 houses per annum will need to be constructed or renovated on brownfield sites in both the inner and outer urban Areas over a preliminary three-year period.

This Agreement will provide the Council with a mechanism to secure the development of brownfield sites within the city over the long term, which fits in with the 20 year Citywide Going for Growth strategy. The National Targets, set down by the Government, aim for 60% brownfield development and 40% on undeveloped land.

6.2 Federal Republic of Germany

As described above, in Germany the concept of the IBA-Emscher Park is considered a landmark for the restructuring of regions that became economically troubled due to the decline of industries that used to dominate an area and characterized its structures.

An essential characteristic of this approach is the strategy to implement innovation through numerous projects in different locations of the planning area in a pinpointed way, but still covering the whole area. Each one of these individual projects carries the potential to once again create innovation in the surrounding areas.

For the single projects, guiding topics are defined and standards are set. A specific development goal for the entire planning space, however, is not formulated.

6.3 The Netherlands

In general, all the areas participating in the project value greater cooperation, mutual consultation and mutual respect for the private and public project partners on all levels. The population should also be more integrated into the planning. Only by doing that can a sound and appropriate development be initiated. In that a high status is given to a public-private partnership.

The creation of plans and concepts that are not coordinated is generally seen as a long-known problem of spatial planning in the Netherlands and in the end seen as partly responsible for too-lengthy planning times and thus for the local urban structural and spatial deficits. These structural deficits in planning culture also make the implementation of restructuring measures more difficult. An outstanding importance for advancing the restructuring projects is given to integrative planning.

7. The instruments

Management that is integrated into an efficient organizational structure is the base for success or failure of reintegrating a derelict site. Often this requires the interdisciplinary cooperation of actors from different public and private institutions.

The question of a generally suitable form of organization cannot be answered since the tasks can be very different depending on the area and the goals that should be pursued.

Organizational structures that are removed from the usual administrative hierarchies are preferred. Especially for extensive measures, the foundation of development societies with a private legal structure has proven effective. This form has the main advantage that investments that need to be pre-financed do not directly burden the budget of the municipalities, and further possibilities for the financing of measures open up which public

authorities cannot access in the same way, for example, from the private capital market (5).

For the realization of bigger restructuring processes, the involvement of private institutions, for example, in the form of private development corporations, has proven to be effective. One of the reasons for the increasing popularity of this model is the increasing scarcity of public funds.

Even if cooperation takes different forms in practice, a basic pattern may still be discerned. While the public authorities contribute their specific means for action, such as planning authority, the right to access support grants and political/administrative decision processes, the private investor is mostly expected to consider certain imposed project conditions, bring in capital, and to take over later management tasks.

In this form of cooperation, it must be considered that with the binding-in of private capital, the private investor's ideas for use receive more weight and a potential for conflict can arise if the interests of the private and public parties drift apart.

7.1 Building exhibition

Since the middle of the 19th century, increasingly complex questions of innovations in building technique, building arts, culture of living, urban development or regional planning have been presented to the European public in the framework of building exhibitions, with varying emphasis. In these exhibitions, the leading edge of development trends becomes apparent, that are or were showing the direction for the following epochs.

Important building exhibitions in Germany were the Constructa building exhibition of 1951 in Hannover, the Interbau of 1957 in Berlin, and the IBA of 1987, also in Berlin. The latter has, since its end and up to today, positively influenced Berlin's building activities.

In the framework of the initiative for the future of the regions in North-Rhine Westphalia (ZRN), the state government of North-Rhine Westphalia founded the building exhibition (IBA) Emscher Park in 1989 as a 10-year development and structure program, and has founded a corresponding planning society. It was the goal of the IBA-Emscher Park to reorganize a region whose main buildings are witnesses to industrial history. Its lead projects connect the reorganization of the landscape and the water system, the repurposing of the industrial monuments, future-oriented workplaces in attractive commercial areas, new residential forms and cultural innovations to an integrated action concept.

The programs and projects of the IBA-Emscher Park not only integrate urban and housing development support, but also environmental policy, economic support, labour-market and cultural policy, and have thus contributed to the structural change of the Emscher region, i.e. the entire northern Ruhr area.

The "International Building Exhibition of Stuttgart 2002 to 2007 — the City" shall also answer questions of city development and architecture in today's technological, economic and societal framework conditions. A crystallizing point is the project Stuttgart 21. This is a rail-track area at the main station. The area should be restructured. The project, in a central location, offers a unique opportunity to realize a city development program in individual projects.

The project's management is mainly concerned with the cooperation with the decision makers for Stuttgart 21 and especially of the preparation and conducting of competitions, of the presentation of themes and results to the public, and the execution of projects with investors. The financing concept "International Building Exhibition 2002-2007 - the City" shall mainly be worked out with the participation of the state capital of Stuttgart, the Deutsche Bahn AG, and the state of Baden Württemberg.

7.2 Contractor competitions / contractor prizes (8)

The intention of this is the optimal realization of existing quality planning, to motivate investors and contractors by creating prizes to make the desired goals their own. In Germany, such a prize was created by the Association of Cities (Städtetag), the League of German Architects (Bund Deutscher Architekten) and the Central Association of the Cooperative Housing Industry (Gesamtverband der gemeinnützigen Wohnungswirtschaft).

Thus, for example, a prize for contractors was granted within the framework of a nationwide competition for the experimental redesign of a Soviet-era facility in the former East Berlin district of Marzahn. Three renovated 10-story residential buildings were connected by a modern four-story transverse building with 45 apartments and a row of shops on the ground floor. Within four years, a new urban development ensemble with new qualities was created through connecting restoration, new development, and measures to design the residential surroundings. The nationwide contractor competition of 1997, which had the motto “high quality – affordable costs” awarded the “contractor prize for modernizing” to the residential building cooperative project at Marzahn (WBG). The goal of the competition: a model showing how qualitative value can be added to a prefabricated concrete-slab construction area by modernizing existing buildings and by supplementing new buildings.

7.3 Definition of guiding principles

The guiding principles of a viable structural and innovation policy are (10):

- low flow of resources
- low flow of energy
- use of regenerative energy
- avoiding irreversible consequences such as damage to landscape, extinction of species, etc.
- avoiding of quasi-irreversible consequences such as damage to climate, destruction of cultural treasures
- maintaining local, regional and global mobility
- reduction of social disparities

For the requirements of a regional structural change and the evaluation of site factors, these guiding principles must be concretized and operationalized, for example, by measures such as

- sparing use of resources
- technical and organizational increase in efficiency, for example, via suitable logistics systems
- the substitution of nonrenewable with renewable resources
- the revitalization of derelict industrial sites and traffic areas
- the increase of the rate of regeneration of renewable raw materials
- strategies for avoiding and reducing emissions through application and development of avoiding and reducing technologies
- reuse and further use of products and partial products
- reuse and further use of materials
- improvement of cleaning and neutralizing technologies
- creation of new perspectives for living and working in the region
- mobilizing and qualifying of endogenous potentials for new objectives and projects

- firming of old and new regional identities
- creation of new social-cultural environments, adapted to the changed conditions of the surroundings by new offerings for social and cultural activities
- increase of the readiness and capability for innovation of the people and institutions in a region
- avoiding the use of technologies and facilities whose ecological and social implications cannot be gauged or that could lead to irreversible damage
- maintaining and reconstruction of landscape; regaining of sealed areas
- preservation and new definition of old industrial monuments
- promotion of new, residential, recreational and cultural projects that correspond to the changed conditions of the surroundings and of new aesthetic means of expression.

7.4 Instruments based on the building code

There are several provisions that give hands and feet to the effort to promote deregulation, encourage public-private cooperation and expedite planning procedures (11):

- Infrastructure development, that is, the preparation of a usable area by connecting it to the supply and disposal network of the municipality. Generally, the development of lots is an up-front contribution of the municipality. The instrument of the development contract and of the urban development contract allows the municipality to also allow private third parties to execute the development measures.
- Urban development restoration measures can be conducted by suitable restoration sponsors that are privately organized, such as building corporations or development corporations. These can also be project corporations that were founded especially for the solution of a specific task.
- Urban development measures are suitable for the first-time development of parts of a municipal area in agreement with their special importance for the urban development of the state, area or region, and in accordance with the desired development of the state, area or region; they may also lead to new development in the framework of a reorganization of the structure of the urban development. The municipality may decide to assign an area in which an urban development measure may be conducted as an official urban development area.

7.5 Public-Private Partnership

Models of the Public-Private Partnership take effect if project corporations with public and private participation are founded for the restoration and development of areas.

The term Public-Private Partnership (PPP) encompasses a multitude of possible models of cooperation between public and private partners and refers to a broad range of public activities from development of infrastructure to urban development, economic support, technological development, waste economy, all the way to clean-up of contaminated sites.

In Utrecht and the Zuid-Holland province, the PPP-construction is to contribute decisively to the implementation of restructuring, because without the active participation of the local businesses no redevelopment is affordable.

8. Implementation as an element of the planning process

The planning and realization of measures to revitalize areas are not working stages that can be looked upon in isolation, but

rather they form a flowing entity with reciprocal repercussions and interactions. In revitalizing projects for large areas and restructuring measures over longer periods of time, planning and execution of the first measures are often done simultaneously.

Important measures for an optimal realization of projects are:

- Political goals, meaning the recycling of derelict land, should be put into practice by actually directing public investments towards regeneration projects.
- Incentives for private investors (financial support, tax deductions) to participate in recycling derelict land projects.
- Public information like brochures or posters and public participation in hearings and workshops. Citizens have to be integrated into the preparation phase as they have to participate in the implementation of measures as well (i.e. setting up a playground).

9. Realization of projects for revitalizing areas

In the framework of restructuring and revitalization measures, old sites and derelict areas especially have to be put to a meaningful new utilization. These sites and areas were used partially, intensively and for many years, and have inherited from that manifold burdens — visible signs: old buildings, old facilities, contaminated ground, outdated infrastructure, etc.

These projects pose — in contrast to the use of open areas that were not used up to now — special requirements on the planners and the building contractors.

9.1 Preparing an area for use

The preparation of an area for use, for example, for commercial utilization, occurs in various stages. Within these stages, stages that have no significant impact alternate with other stages and measures that sometimes have a significant impact on the environment.

To the characteristics with little or no significant impacts belong:

- Site examination
- Program considerations
- Building ground examination, soil analysis
- Pre-planning
- Idea competitions
- Reports and
- Expert analysis

The characteristics of preparing an area for a commercial utilization that have significant effects can be distinguished as follows:

- Preparation of the area and development
- Condition of the area

- Utilization of the area

9.1.1 Preparation of the area and development

This includes all necessary measures in the public and private arena so that the lots can be used according to the urban development principles and the legal building regulations, and can be connected to the public traffic network as well as to the supply and disposal network. These are especially:

- the preparation of the area (cleaning; clearing of trees; demolition or selective dismantling of buildings, building parts and foundations; if necessary, exploration, restoration and securing measures; ground movement) and
- the development of the area (wastewater facilities; water, gas, electricity and long-distance heating; telecommunication installation, traffic installation and green areas).

In the required building measures it is necessary to strictly separate contaminated and noncontaminated material in order to minimize disposal cost.

9.1.2 Condition of the area

The condition of the area is characterized by

- the traffic area (complete street body, pedestrian and bicycle routes, areas for parking)
- the characteristics (industrial, commercial, residential)
- kind and degree of building use as well as the way of building and surface that can be built on are regulated by the Federal Land Utilization Ordinance (Bau NVO).

Due to the previous use of an area — often for years — and the existing buildings, the ground of old sites often contains, apart from the natural soil, a wide spectrum of filled soil, partly interspersed with leftovers from walls and foundations. Such a nonhomogeneous subsoil has varying load-bearing capacity. An adaptation of the foundations of new building substance to a low or changing load-bearing capacity often is laborious, as well as expensive and time-consuming (12).

9.1.3 Use of the area

The rearrangement of an area that was so far used industrially or commercially into an open area, or the new designation of a derelict area as a green area generally meets unanimous approval from the public. Mostly positive effects for the quality of life of local residents and for the environment as such are expected. A use of open area by pedestrians or people searching for tranquility, etc., is connected with hardly any burdens.

A new utilization by commerce, however, is tied to manifold effects on the environment and therefore has a specific relevance for urban development and spatial structure. Business use requires trafficways, infrastructure, production buildings, machine and equipment halls, parking spaces, etc., which affect the environment visually, and in unfavorable cases, also with emissions.

9.2 Contamination risk

When processing old sites and derelict areas, often known and examined contamination must be removed according to the intended plans. In practice, though, it has been found that even in supposedly noncontaminated sites, the discovery of contamination must be taken into account at any time. The older the building and more intense the industrial or commercial utilization was, the higher the probability.

Workers can therefore be exposed to manifold risks when working in contaminated areas that often appear in

connection with civil engineering work on old sites (13). Often these occurrences cannot be foreseen. The following risks may appear:

- Poisoning, carcinogen risks, allergies
- Damage to skin and lungs from corrosive materials,
- Infections from germs such as anthrax,
- Explosions, fires,
- Injuries, falls, collapses or breakthroughs, such as in dilapidated underground canals, tunnels, shafts and installations.

The situation must be examined and if needed a work safety concept adapted to the planned work needs to be developed. Here again, diligent planning and early coordination with responsible authorities has proven to be successful.

Within the work safety concept, technical, organizational and personal protection measures are distinguished.

- Technical safety measures, such as ventilation measures that prevent the release of hazardous materials or keep hazardous materials away from workers
- Organizational safety measures that prevent danger by coordinating and supervising technical safety, training and education, measures regarding behavior and hygiene, as well as occupational medicine supervision
- Personal protective equipment, such as protective suits, hand, foot and face protection to protect employees from danger

The ranking of safety measures is defined: Technical measures have preference over organizational and personal safety measures. Personal protective measures are only applied if dangers cannot be excluded by technical and organizational measures.

Independent from these safety measures, in specific single cases ongoing monitoring with measurements may be needed to recognize the possible exposure of workers or neighbors to hazardous materials.

Decisive for planning, organization and execution of a work-safety concept are the “Regulations for Safety and Protection of Health for Work in Contaminated Areas” (ZH 1/183) (14). For real property of the government, additionally the guideline “Work Safety in the Framework of Planning and Execution of the Securing and Restoration of Contaminated Sites” (15) is applicable.

It must also be considered that existing buildings are not part of the actual contamination and therefore are not considered in the processing of the contamination. They can become important for the planning of work safety measures, though. Asbestos and artificial mineral fibers must be mentioned in this context. Asbestos was used in the building industry in earlier times to a large extent for insulation, paneling, pipes and roof tiles. In the years from 1979 and 1984, use was first limited with the ban of spray asbestos and the ban of asbestos-containing lightweight paneling sheets, when it was realized that asbestos is carcinogenic when inhaled. Since 1993, the production, use and distribution of asbestos is totally forbidden.

The handling of materials containing asbestos is essentially only allowed in demolition, restoration and maintenance work. In spite of its high potential to pose danger, this material is seldom of relevance for the examination and evaluation in the course of processing of a contaminated site, since it is generally stored in a stable location and does not endanger the public nor protected resources. This can change when asbestos is found in, for example, a demolition or renovation, where the possibility exists that it will be set free, and it may then require special provisions.

9.3 Building grounds risk

Aside from the risk of contamination, an old site might have a risky building ground due to the existence of an underground with low load-bearing capacity and/or which is nonhomogeneous. Leftover walls and foundations, supply and disposal lines, canals and hollow spaces that are not or only partially filled in, increase the complexity of the building situation.

Since industrial areas were preferred bombing targets during war, unexploded bombs in the ground must also be taken into consideration (16).

A careful examination of the building ground is therefore mandatory already in the run-up to planning.

When building new on a derelict site, three essential factors of interest must be weighed and reconciled (17):

- Protection of humans and the environment from dangers possibly posed by existing contamination of the ground
- Securing a foundation that is permanently safe
- Interest of investors, i.e. economic efficiency of the undertaking

A technically flawless building must be realized while taking economic interests and the requirements of regulating authorities into account. Contamination clean-up or securing concepts that might be required should be coordinated with the concepts of the building foundation.

Foundation conception and an intended new building interdependently influence each other. The kind of intended utilization, especially whether it is a high or low building and which kind of cellar is intended, is the decisive basis for the foundation conception and the avoidance of settling, and here in particular ground settling differences have especially grave effects.

To avoid differences in ground settling, the following measures are suited (18):

- Use of existing foundations
- Soil exchange
- Condensing the underground
- Deep foundations
- Settling calculations

10. Affecting the outcomes of the different case studies

In the regions participating in the project, different strategies are pursued to realize restructuring concepts.

10.1 Newcastle — West End

The West End of Newcastle has lost a significant proportion of its population in the last 25 years, leaving problems of empty properties, demolition and low demand. Unemployment is a major problem, with each district having over twice the national rate and some areas having over 20% male unemployment. Crime, anti-social behaviour and intimidation are the reasons for the mass exodus of residents, leaving only the poor, elderly and problem tenants behind. Education suffers in the areas due to poor reputations and spare places in every school. The local economy is weak due to the lack of spending power, causing many local shops to close. In one

district 6 corner shops serve a population of 5,000.

Uncoordinated approaches in the past that were too small and concepts that were too narrow, as well as programs with too little funding, were not able in the past to create a critical mass for a sound development and to lastingly combat the “slumming” tendencies in the West End of Newcastle. Since 1960 almost every national and local regeneration scheme has been tried or tested on various districts in the West End of Newcastle, with only limited success at best.

The Council decided on the latest course of redevelopment in July 1999, taking a comprehensive, citywide strategic approach in an effort to solve all the problems of the city in one scheme. The inner areas will undergo a holistic Master Planning exercise to plan the future regeneration strategies and redevelopment of the West End. Unlike earlier schemes, the public and local communities are involved from an early stage, to help create environments where they would like to live. The Council will pursue funding from a variety of sources to guarantee long term commitment to the area, and resources for regeneration, construction and management over the 20 year period of the plan. The private sector is involved from the start and is invited to invest heavily in the area, creating communities with facilities and services alongside the housing developments. New housing sites will be linked to shopping, schools, transport and jobs to generate a vibrant and sustainable local economy. This allows the Council to take a greater management role, and provide less public funding.

The plans follow all the latest government guidance and best practice, aimed at creating sustainable communities.

As a weak element is considered that the Council does not legally have to consult or listen to any comments from stakeholders or residents, and their thoughts or suggestions could be ignored as the Council follows its own agenda. People are not used to the non-statutory process so do not know how to react or behave regarding the consultation process.

10.2 Newcastle — Great Park

The Joint Venture and Section 106 agreements strictly limit the amount and nature of development to be undertaken each year. The housing development will take place in 3 phases each lasting 4 years, and no more than 250 dwellings may be completed per annum. The first planning application for housing development outlines plans for 175 houses on a 15 hectare site. Planning permission will be sought for small-scale, individual development sites, within in the scheme, taking a sequential approach.

The Development Plan is the statutory document that sets out Council objectives and guidelines for the scheme, and is the basis for all subsequent designs and building applications. It was crucial to have this document in place before any development could take place as it controlled and regulated the plans for the scheme.

The Section 106 agreement ensured the financial support and the strict Council control over the development, guaranteeing a high quality development that meets the objectives of local government.

The master plan contains detailed designs and intentions for the NDA. This allows the public to see how the development will look, shows the process the scheme will follow and puts constraints on the developers. Therefore it gives a simple and transparent picture of the entire project.

The agreement with the Government’s Highways Agency to allow connections with the national Trunk Road system was crucial for the success and viability of the scheme.

10.3 Reden Mine

By preserving the special characteristics of the site with its experiencable signs of the past industrial culture, an extraordinary investment site shall be created for businesses searching for a special site with unusual ambiance.

For the execution of the urban development concept, as well as the model, three development stages are planned

(19):

10.3.1 Immediate and short-term

Some of the facilities shall be opened for visitors of the mine immediately after the most important securing measures are conducted. The existing conditions, with dirt, humidity, partial decay, etc., belong to the experience of industrial history.

The additional utilization as offices and service facilities in the “Kauengebäude” building can be started immediately. Additional utilizations that are to be established immediately are simple food facilities and a kind of a “mine shop”, which, comparable to Cologne’s “Dombauhütten”, continuously conducts the necessary repair and maintenance work on buildings and the shaft.

10.3.2 Mid-term

In a further development stage, the shaft, which is in operation for water supply, shall be opened to let visitors to the mine experience depth. This offer should be supplemented by two additional “Underground Events”; one thinks especially of events with an informative character regarding mining technology.

In the mid-term, the following additional facilities and utilizations shall also be realized:

- Restaurant with an up-market gastronomy in the machine house
- Stairways and serpentine ways to the top of the waste-stone heap
- Scenic view tower on top of the heap
- Skating rink and other trend-sport facilities at the bottom of the waste-stone heap
- Start-up center for technology in Repair Hall 2
- Start-up center for handicrafts in the building of the former mechanic shop or the carpentry building
- Offices and services in the technology park

10.3.3 Long-term

The central idea for Reden Mine is that the site shall be made valuable with its characteristics intact and shall be preserved for uses that can currently not be foreseen, but that will value these characteristics. Therefore, the long-term development cannot be concretized yet. From today’s view, a development with the emphasis on leisure time/recreation in connection with seminars and conventions could be imagined, as well as the establishment of development departments of private industry with an emphasis on technology or ecology.

For both developments, the train connection that still exists, the train station at Landweiler-Reden, could again become of interest.

10.4 Camphausen mine (20)

Due to its special site qualities

- favourable traffic infrastructure,
- high recreation quality in close proximity to the city,

- integrated into the town district of Fischbach,
- can be used relatively independent from the immediate surroundings, valuable building substance

the mine shall be restructured and utilized in a new, sustainable way that can be implemented in the short- and mid-term without negating the historic identity of the town.

Crucial for the realization of the concept for remodeling and new use of the coal washing facility (Kohlenwäsche) is the pleasant arrangement of the surroundings. The commercial area shall receive a special character which can motivate qualified companies to establish in the area.

10.5 Fürstenhausen Coking Plant (21)

The Fürstenhausen Coking Plant site shall be processed for a new commercial utilization in the course of the realization of a statewide industry culture development concept, which is currently being discussed in the Saarland. For several years, effects from underground mining can be expected. It is planned to shape this area in the sense of a “temporary nature” concept with specific landscaping measures until the impairments subside, and to furnish advance concessions for a later use.

Preservation of landmarks plays an important role in this. If the goal should be reached to preserve single buildings and structures of the coking area, such as the gasometer, cooling tower, battery of coking ovens and administrative buildings, then these landmarks are in line with other buildings (cooling towers, chimneys) as well as with the furnace installation and the slag heaps of the World Cultural Heritage Monument “Hermann und Dorothea” in Völklingen at the edge of the Saar Valley.

In the realization concepts, the demands of the site-community are taken into consideration, which are laid out in the “Guidelines of the Völklingen City Development”. The necessary demolition work will be done in stages until 2002 by the Deutsche Steinkohle AG-DSK.

Since the coking batteries and the gasometer on their own do not have sufficient decorative strength to organize this area and to develop it as a special site, expanding the preservation to other facilities is suggested. This is not in order to leave the production procedures recognizable from an industrial monument protection point of view, but it comes from the desire not to lose possible economic potential for the development of the value of this area that is due to the existence of industrial relics. The main objective for action therefore must be to secure the above mentioned facilities. To that end, coordination between the city of Völklingen, the state and the DSK are still necessary.

10.6 Gouda

In the model, “the town with 4 faces”, the most justice is done to the rural identity and the social dynamism of the various town perimeter zones. A link was also made to one of the more serious problems that The Netherlands will be facing in the near future: the water problem. Extra room will also have to be found in the vicinity of Gouda for the storage of water and unexpectedly large quantities of rainfall. The lowest parts of The Netherlands, up to 6 meters under sea level, are to be found in the Gouda area.

There is an integral spatial development model for the four town perimeter zones: a draft master plan for a policy relating to the development of the Gouda region. The most important projects to be implemented have been selected within this development model, under the following themes: water, nature and landscape, living and working, infrastructure and recreation.

A regional main structure of interconnected strategic projects is now being determined for Gouda’s four town perimeter zones, in the form of a long-term Project Plan. Next, the drafts of the master plan and the project plan (the plan phase) may be finalised, and the publication and public consultation phases may commence. After public consultation and administrative decision-making, the Interreg III procedure may be commenced.

The degree of support for the new approach and the readiness of the participating parties to accept the new consultative form are crucial to the success of realizing implementation of the project.

10.7 Zuid-Holland Province

The approach of the project focuses on three elements:

- Developing a vision on the areas in the Southwing that have a potential for restructuring.
- Elaboration of some more practical aspects of restructuring: e.g. building more dense and using underground space.
- Making an attempt to elaborate a number of concrete proposals for reconstruction together with most of the involved parties: project developing companies, housing corporations, financial institutions, big cities etc.

The commitment of partners with interest is considered crucial for the success of the project. Deliberation with mutual respect on the different interests must be as well considered as crucial to achieve implementation.

Urban regeneration is actually a task of the local authorities, but with direction and stimulation on regional level, a more effective result and quicker implementation may be possible.

10.8 Utrecht

In order to redevelop the three case study areas into high quality business areas, the functional and aesthetic qualities need to be improved. The Municipality of Utrecht wants to involve the businesses active in the area in the development of their spatial vision. They will have a lot of knowledge about the area and have a significant interest in the future economic, social and environmental development taking place in the city. Conflicts of interest between those companies, landowners and residents on the one hand and the municipal government on the other will have to be resolved. Because public funds are insufficient to cover all of the measures to be taken, developing strategies to attract investments from other sources will be an important part of the case study.

Of great importance is the public-private partnership, because the direct financial benefit of new infrastructure is the rise of land-rent values. These can only be incorporated in the project if the businesses owning and or occupying these land cooperate in the project. The question is to be answered: where to start and who is the one to invest first: the local government in the new infrastructure and public space, or the private owner of the ground, or the company that wants to be on a better location.

Utrecht wrote in the questionnaire: We think the approach will be successful because of the public private partnership (“ppp”). This means that the companies are willing to cooperate and to look for solutions for their own company but also for the whole area. In the mean time they are willing to invest in the new infrastructure and the upgrading of the public space. The new infrastructure can be (financially) realised, if the ‘ppp’ is successful. Simultaneously the area will be upgraded en become a real entrance of the town.

10.9 Leidschendam

The main problem here is an unorganized growing together of urban structures in the Randstadt Holland. Because of renewed ideas of spatial quality, the quality of open landscapes, spatial diversity the urban fringes have been detected as areas which need thorough consideration. Therefore it is important to maintain the differentiation between town and country, the urban and rural areas, for orientation, diversity and last but not least for the sake of nature and ecological reasons.

The Leidschendam project looks at the possibility of increasing the landscape and recreational values, as well as enhancing environmental and ecological qualities around Leidschendam. Therefore in the ‘Duivenvoerde-corridor’ a large number of greenhouses must be removed to be replaced with housing areas. In the “Driemanspolder” the aim is to create a water based recreational area, and the “Vlietboundary” needs to be

reconstructed for better access, increased coherence and to make it an attractive location for institutes and other enterprises who like to be situated on inner city green areas. The study will find the best possible method for reconstructing the area by cooperating with neighbouring municipalities, the province of South Holland and national ministerial departments. However, cooperation with private partners is the most important element as securing enough financial resources to achieve the highest possible environmental quality is the main objective of the project.

Implementation is considered important to stop the ongoing process of threatening urbanisation. Implementation in the nearby future also is important to the land price development. The longer it takes, the higher the prices will rise, the more difficult the government can purchase land or commercial exploitation is inevitable.

The Government (local, provincial, national) as landowner must be considered as crucial to achieving implementation, in order to control possible speculation by market parties as well as to control the future land use (by active conservation or selling to the right party).

Important in regard to a successful implementation are:

- Consensus between parties involved about the spatial plan and the idea of redevelopment.
- The cooperation of landowners involved.
- The willingness of governmental departments to put money in the redevelopment.

11. Recommendations

Implementation must become an (economic) process that supports itself. To that end, it is first necessary to develop and establish a vision that follows a conclusive and understandable ideal or motif. This ideal in turn has to be developed through suitable public relations that take into account all participating and concerned parties as well as the spatial circumstances and the historic developments, and it has to be nurtured in the course of the restructuring process.

It is important that this ideal for development agrees with framework conditions existing in reality, such as permit realities and other rights. The new planning for an area or the new structuring of a region would otherwise remain a theoretical exercise. It is also of importance that the development goals are oriented on the political, legal, financial and societal framework conditions that can realistically be developed.

The path that is developed under these preconditions should show a direction toward the goal and thus give an orientation for the future; it should not, however, be a tight, irrevocable corset with irrefutable planning data and fixed stage objectives. It must always be possible to critically reflect the distance covered or to integrate new aspects if needed, and also to implement necessary corrections. On the other hand, this development ideal has to be stable enough for private parties to believe in the success, and show a willingness to invest. Vague development perspectives or even changing development directions are not suitable for creating an appropriate climate for investment.

12. Conclusions

The development of guidelines, perspectives or visions is important for a sustainable project development. The initial catalyst for a project often does not come from the visions or ideals, though. It is the economic success that is important in the case of economically motivated restructuring. Thus, economic success can be stimulated, for example, with the aid of the instrument of economic support as a kind of catalyst for sparking further success.

To implement a restructuring process that is thus shaped, a flexible organizational structure is required apart from the development of a sound ideal. Within this organization, for example, a project corporation, private parties and public institutions can work together. Of advantage is, amongst others, that in such a structure,

different interests are pursued together and directed toward a common goal. If this corporation includes, apart from the owner of land and the public authorities, the marketers of the land and/or future users or owners, then these measures can be coordinated better still. The protection of trust that develops by the inclusion of multiple participants is not least to be judged positively.

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