

**United Nations
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Business Case Study

**Cooperation Management at the LUWOGÉ for the
Projects „Brunck Quarter“ and „Pfingstweide“**

**A Public Private Partnership between the BASF AG and
the City of Ludwigshafen**

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1 Case Abstract

In this Business Case Study the sustainable urban development projects „Brunckviertel“ and „Pfingstweide“ of the housing enterprise LUWOGÉ are presented. LUWOGÉ is a limited company owned by the chemical company BASF AG. Both are located in Ludwigshafen, Germany.

The objective of the project „Brunckviertel“ is the revitalisation of an urban quarter by a synthesis between refurbishment of existing buildings and construction of new ones. When refurbishing the existing stock measures aimed at reducing energy consumption were taken which turned out to be highly successful as they produced a considerable reduction of CO₂ emissions. By an innovative pilot project called “3-litre-house” an energetic standard has been achieved which meets the criteria of ecological sustainability as well as of economic sustainability (focus ecological perspective according to the UNGC Principles 7-9).

The objective of the project „Pfingstweide“ is the improvement of the attractiveness and the image of a large housing estate. In the framework of a holistic approach technical, organisational, social and public relations measures in the building surroundings are being carried out (focus social perspective according to the UNGC Principles 1-6).

The Business Case Study presented here describes the cooperation management implemented by the LUWOGÉ in the framework of these two projects. This can be considered a part of the overall Public Private Partnership system established between the BASF and the City of Ludwigshafen and substantiates itself in a systematic cooperation with the local authorities, the municipal housing enterprise (GAG), the tenants and several other actors.

The results of the Case Study demonstrate that the success of sustainable urban development projects do not only depend on a consistent overall strategic framework for the company’s asset management but also on a well functioning cooperation management with the stakeholders of the housing enterprise.

2 Introduction

2.1 Company Profile

The LUWOGÉ is a limited company owned by the chemical company BASF AG in Ludwigshafen, Germany. The main objective of the LUWOGÉ is to provide dwellings to the employees of the BASF. LUWOGÉ’s strategy is asset value oriented and the company is not subsidised by the BASF. LUWOGÉ is at present responsible for a stock of about 10.000 rental apartments. More than 80 % of LUWOGÉ housing stock is located in the City of Ludwigshafen, the rest is located in three further communities in the vicinity (Limburgerhof, Mannheim, Frankenthal).

Because there has been a very sharp decline in the amount of new building construction over the past few years, the maintenance and modernization of the existing housing stock has become increasingly in the focus of the company’s activities. Modern standards of housing, attractive ground plans, harmonious surroundings, social compatibility and tenant satisfaction are increasingly important constitutions of a viable and sustainable housing portfolio.

The “Rhine-Neckar-Triangle”, which is the association of companies (among them the BASF

AG), institutions and administrations in the region around Heidelberg, Ludwigshafen and Mannheim, is a member institution of the Global Compact since June 2004 and supports the nine principles of Global Compact with respect to human rights, labour rights and environmental protection.

2.2 Public Private Partnership between BASF AG and Ludwigshafen

Public Private Partnerships (PPP) are usually defined as cooperations between the public sector and private enterprise. The basic approach of such alliances is to utilise synergy effects and to create by a common development and implementation of projects a win-win situation among all participating actors. A reliable and durable partnership between a municipality and private enterprise can not only contribute to the implementation of necessary investments (e. g. in the field of infrastructure development), but also stimulate the economic development of the whole region. These considerations have constituted the public private partnership between BASF and Ludwigshafen which is described in the following.

Ludwigshafen is a 150 year old industrial town located in the South West of Germany with about 167.000 inhabitants in 2003. 40.000 employees are working in the chemistry branch in Ludwigshafen, mainly at the BASF AG with 38.000 employees.

- The population development has already for years been slightly negative.
- The unemployment rate was 10.8 % in 2000.
- The vacancy rate of dwellings in Ludwigshafen amounts to over 10 % .
- The budget deficit of the city amounts to over 50 million Euro.

The BASF and the City of Ludwigshafen have closely interwoven their activities within a broad scope of action areas. In the context of its „Corporate Social Responsibility“, the BASF assumes as the largest employer of the town a social and as a large chemical enterprise an ecological responsibility vis-à-vis the town and its inhabitants. Above that, the BASF makes efforts to improve in several respects the locational attractiveness of Ludwigshafen with the view to improve their position in the international competition for highly qualified labour (researchers, engineers and managers). On the other hand the City does also rely on a positive development of the BASF as this company contributes by tax payments, employment opportunities and social engagements significantly to the development of the locational qualities of the town. In view of this strong interlocking of interests any cooperation, which creates positive, returns to both sides seems indicated. To the range of social engagements supported by the BASF in the past at the location of Ludwigshafen belong:

- Development and protection of labour qualification and training opportunities
- Commitments in schools and universities
- Promotion of cultural and sport activities
- Sponsoring of social activities and development of foundations
- Environmental protection
- Sustainable urban development through the activities of the LUWOGÉ.

The housing policy of the LUWOGÉ has been changed from providing new dwellings to securing a sustainable development of the existing stock. With the programme “Real estate in employees’ hands – Tenants become owners” LUWOGÉ has managed to reduce its stock and gain the necessary financial resources to refurbish the remainder of the stock. Furthermore, this approach contributes to strengthening overall social stability of the city.

Since 1995 the housing company has been active in large-scale urban regeneration projects. The improvement and revitalisation of downtown residential areas has become a joint task with the local authorities and the State Government, with housing development and town planning measures being combined into common housing projects by committed partners. The Pfingstweide project and the Brunck Quarter project are models which can also be applied far beyond the boundaries of Ludwigshafen.

2.3 Cooperation Management

For housing companies which follow modern management tools and procedures cooperation management forms an integral part of the processes derived from the overall strategic management of the respective housing company. This systematic cooperation relates to tenants as well as to other stakeholders (e. g. town administration, police, utility supply enterprise, other housing companies, schools, non governmental organisations etc.).

The cooperation management draws upon the conclusions reached from observations of the phenomenon of „prisoner’s dilemma”, a phenomenon which has been widely discussed among economists and social scientists. Accordingly, particularly in the fields of housing and urban planning a cooperation yields better results than a lacking or insufficient exchange among actors involved.

In the housing field, one can discern between four different types of cooperation management with regard to the intensity of the involvement of the stakeholders:

- Information (basic information and knowledge exchange among partners in advance of planned measures and alongside their implementation)
- Consultation (retrieval of knowledge, opinions and experience among partners in dialogue with the housing company)
- Participation (active participation of the partners in the decision making process, e. g. within projects or working groups)
- Co-Management (transfer of competences and responsibilities in decision making processes to partners).

A systematic cooperation management of any of these types had in the past been applied only by very few housing companies in Europe.

2.4 Intention of the Case Study

Subsequently, the cooperation management of the LUWOGÉ in the projects „Brunckviertel“ (focus on the ecological perspective) and „Pfingstweide“ (focus on the social perspective) will be described in more detail. It can be considered an integral part of the Public Private Partnership between the BASF AG and the City of Ludwigshafen and reifies itself in the cooperation with the local authorities, the municipal housing enterprise (GAG) and several other actors. In the framework of the case study the experience gained by the LUWOGÉ with these cooperation processes will also be described. On that basis, open questions will be discussed which have come about in the projects and which may become pertinent in future cooperation management activities of the LUWOGÉ.

The two projects selected for this Case Study may be considered best practise examples for a sustainable urban development. The aim of such a sustainable urban development is to use the potentials of urbanisation and to improve living conditions in towns while avoiding that the

consequences of these policies become a burden for future generations. Hence in the strategic mission of urban development social requirements, ecological objectives and economic benchmarks need to be incorporated simultaneously. Constitutive elements of the social dimension are for example the creation of an adequate living environment, the social integration and the avoidance of ghettoisation as well as the increase of the rate of owner occupation. The ecological dimension of sustainable urban development enhances for example the reduction of new developments of built up areas and the reduction of carbon dioxide emissions of the buildings. The economic dimension incorporates among others the minimisation of life cycle costs of buildings and the optimisation of refurbishment investments within the framework of a sustainable portfolio management for the housing stock.

However, the success of sustainable urban development strategies depends largely upon the extent to which the various actors involved (among them public administration, housing enterprise, tenant groups) can be incorporated in a network in which they would recognise and substantiate common interests and action potentials. In the “Rhine-Neckar-Triangle“ network, such systematic cooperation in an organised network has been promoted in an exemplary manner.

3 The Case Story

3.1 The „Brunck Quarter“ Project

3.1.1 Challenge to be addressed by the project

The Brunck Quarter used to be a quarter for industrial workers living in the immediate vicinity of the BASF plant location. The quarter consisted of 150 buildings with more than 850 dwellings and a total living space of 48.000 square metres. The buildings which had been erected in the 1930ies and soon after the Second World War did before the refurbishment no longer correspond to timely standards.

For on the one hand the buildings were due to their age in a bad state of repair and energetic performance. Before refurbishment the buildings in the Brunck Quarter consumed about 24 litres of fuel oil per square metre of living space a year (240 kWh/(m²a)). Thus the quarter produced altogether high CO₂ emissions. The fact that in Germany about 30 % of the CO₂ emissions are caused only by the building sector evidences that an increase of the energy efficiency of buildings is of outstanding strategic importance for a sustainable development (*UN Global Compact Principle 7: precautionary approach*).

On the other hand also the layout and the size of the flats did no longer correspond to today’s requirements of tenants. Consequently the rents in the quarter were significantly below average for their specific flat category in the town. The too small rooms and the high charges for heating caused high vacancies. The vacancy rate before the beginning of the refurbishment activities was between 15 and 30 %.

These ecological and economic problems of the Brunck Quarter were the essential reasons for the decision of the LUWOG to subject the whole quarter until the year 2006 to a comprehensive refurbishment procedure. Energy saving was to be an important element of that activity. However, it was evident that the refurbishment of the Brunck Quarter could not be a matter to be solved by the LUWOG alone. Thus in the framework of a systematic cooperation management all important actors were involved in the processes of planning and

implementation.

3.1.2 Stakeholder perspectives

The perspectives of the stakeholders affected by the investments envisaged in the course of the refurbishment of housing areas are manifold and often ostensibly controversial. By applying a systematic cooperation management, synergies are to be found as well as solutions which are gainful for everybody. In the following, the perspectives of the tenants, the City of Ludwigshafen, the State Government of Palatina and the BASF are outlined.

The *tenants* expect from a refurbishment a timely housing comfort for feasible rent increases and a reduction of housing (particularly heat) charges. Furthermore they expect that any discomfort caused by the refurbishment activities themselves (noise, dirt etc.) is kept within reasonable boundaries. Tenants' requirements are also to be met in cases where the flats need to be evacuated during the time of the refurbishment as in this case the tenants need to move out at least during the period in which the works are carried out. If the refurbishment works proceed stepwise within a quarter, the tenants who are not yet affected may ask themselves whether they can expect to profit from the measures to a comparable extent.

The *City of Ludwigshafen* expects in the framework of the PPP with the BASF AG a contribution by the LUWOGÉ to a sustainable urban development and to environmental protection efforts. Fundamentally, the town is interested in an upgrading and strengthening of the inner urban housing areas as well as in an increased attractiveness of the town as a location in general and as a location for inhabitants in particular. For the town as well as for its housing suppliers it is to be an important objective that the tenants and also the owners are actuated to remain in their housing quarter and not to move away, or respectively to return again to inner urban quarters. The state of the Brunck Quarter had been considered by the town representatives to become increasingly critical as the social balance of the quarter got increasingly lost by a biased pattern of inhabitants (many pensioners, foreigners, low income persons). The revitalisation of the Brunck Quarter would induce new occupational opportunities for small building enterprise and would therefore be subsidised by the municipality.

The *State Government of Palatina* expects from the LUWOGÉ renewal and development projects which have a model character as well as an efficient project management.

The *BASF AG* expects from the LUWOGÉ the supply for its employees of attractive housing facilities located in the immediate vicinity of the plant. Over and above that, the LUWOGÉ must in principle continue to comply with its company mission to make profits within a benchmark corridor defined in advance. A win-win-situation results from the high energetic standards reached through the refurbishment of the Brunck quarter: the LUWOGÉ ensures a sustainable reduction of vacancies and by that its economic success in the long run while offering to the BASF a platform for the launching on the market and the promotion of innovative products in the fields of insulation and construction materials.

3.1.3 Description and results of measures

Apart from new layouts of the rooms and an adequate internal facility equipment of the flats all buildings in the Brunck Quarter received by the measures taken a thermal insulation which corresponds to the German legal requirements valid for new construction or does even exceed that standard. Thus in the Brunck Quarter the so called „7 Litre House“ (annual heat energy

requirement of 7 l fuel oil per square metre of living space) constitutes the new standard of energetic refurbishment. By this, a reduction of CO₂ emissions of about 70 to 80 % could be achieved (*UN Global Compact Principle 8: environmental responsibility*).

Above that, the LUWOGÉ decided to launch an innovative pilot project: For one of the buildings it was to be demonstrated that an annual heat energy requirement of only 3 litre of heat fuel per square metre and year can be reached by a measure of stock improvement („3-Litre-House“). (*UN Global Compact Principle 9: development and diffusion of environmentally friendly technologies*).

Among the measures carried out in this pilot project were:

- Installation of a thermal insulation upon the outer walls of a thickness of 20 cm
- Roof insulation (10 cm insulation between the rafters and in addition an insulation of 20 cm above them)
- Insulation of the ceiling of the basement (14 cm below, 6 cm above the ceiling)
- Installation of windows with a 3 pane heat insulation glazing
- Exchange of the old stoves by a central heating system
- Installation of an airing system with heat recovery
- Elaborate measures to avoid thermal bridges.

The pilot project “3 Litre House” resulted in a reduction of about 90 % of the CO₂ emissions. Consequently, the “3 Litre House” corresponds saliently to the long term objectives of climate protection (Kyoto protocol) and was until this point of time unique in Germany. Since its completion it serves as best practise example in Germany and Europe for models for sustainable refurbishment of the housing stock.

By its refurbishment the „Brunck Quarter“ has been considerably upgraded as a housing quarter. Vacancies have no longer appeared in the refurbished buildings. The rents could be moderately increased when the flats were let again. By the refurbishment, the economic and technical life expectancy of the buildings was prolonged, and their value increased. For the tenants, the good energetic state means a “hedging” against possible energy price increases in future. Above that, they enjoy a better housing quality by an increased comfort along with a decrease of heating expenditures. Simultaneously, the letting to new strata of tenants has also promoted a social improvement. Flat vacancies seem avoided for a long time to come.

Harmonizing economy and ecology – this is the aim of the eco-efficiency analysis, developed by BASF AG as one of the first companies of the chemistry branch. Using this method, it is possible to consider economy and ecology together in the development and optimization of products and processes and to select the most eco-efficient alternative. Based on the model of sustainability, its third pillar “society” is also included in the investigation. Such an analysis was carried out for the refurbished “Brunck Quarter” and shows the following results:

Social advantages of the refurbishment carried out:

- Providing job opportunities for additional 350 person years of work (mainly by employing regional small building enterprise in the refurbishment)
- Clearly improved housing quality (e.g. change to central heating, new bathrooms and windows)
- More balanced structure of the occupant profile (age, nationalities and income)

- Satisfaction with living conditions increased significantly despite higher rents.

Ecological advantages of the refurbishment measures carried out:

- Reduction of the energy consumption by 50 % (~ about 13 million litres of fuel oil equivalents over 30 years)
- Reduction of acid rain: saving of 320 metric tons of sulphur dioxide equivalents over 30 years.

Economic advantages of the refurbishment measures carried out:

- Higher rent revenues for the company despite a reduction of the total living space to be let
- Amortisation of the investment after 22 years (in the case of 30 years of use)
- After 30 years, the Brunck quarter still has an additional capitalized asset value of about 42 million €
- Social and ecological advantages justify the higher rent.

3.1.4 Description of cooperation management

Cooperation management with the City and the State

Together with the City of Ludwigshafen and the State of Palatina the LUWOGÉ had elaborated a concept for the comprehensive refurbishment of the Brunck Quarter with total costs envisaged of about 50 million Euros. This concept for the sustainable urban development plan allowed for a synthesis between maintenance and reconstruction on the one hand and deletion and new construction on the other. The overall objective was to adapt with reasonable financial means the settlement and its structures to timely and future user requirements.

Cooperation management with the tenants

Tenants have a special position in the LUWOGÉ, since they are simultaneously employees of the BASF. The unions take care of the representation of the tenants' interests in general, but also in individual cases. In addition, however, in the refurbishment project of the Brunck Quarter, the tenants were provided the opportunity to participate in the working groups which had been established to plan and implement the refurbishment measures. Besides active participation in these working groups as such, specific tenant meetings were held, in which tenants were informed about the project. In particular, such special meetings had been organised for future tenants to explain the technical systems. The tenants in the 3-liter house received information and coaching to make them familiar with the new technologies in their flats. Also, one of the challenges was to develop an area with a mixed population. Before its refurbishment, the inhabitants of the Brunck Quarter were mainly senior and retired employees. By developing flats for different target groups, including families, and by selling some of the flats, the Brunck Quarter gained variety and attractiveness.

The cooperation concept applied is described in some more detail in the following:

After the first steps of diagnosis and brief in the refurbishment process, the results regarding the whole area of the Brunck Quarter were submitted to broad discussion with the tenants. A big tent was used as meeting hall where all tenants were invited to come, receive the general information, and for discussion. Additionally they were informed in small groups and individually about perspective consequences for each household.

For the first three sections of the Brunck Quarter, now already finished or under construction, the LUWOGÉ had to find different ways of respecting the interests of the tenants and involving them in the refurbishment process. In the first section (A) this was done by direct participation of the residents. Tenants living in this section (A) had expressed a preference for the refurbishment to be carried out while they would remain in their dwellings. LUWOGÉ followed this demand of the tenants. So in this case all decisions could be submitted to tenants' information and discussion in detail. The advantage was that the tenants knew their personal environment very well and could contribute to the planning with their experience. Yet it turned out that in the course of construction the tenants regretted their decision and would not have voted again for staying in the dwellings while the refurbished works were being carried out.

Because of the problems which had emerged both for the tenants and for the construction work the LUWOGÉ decided to refurbish the subsequent sections only after all tenants had moved out. This all the more as the impact of the refurbishment work upon the existing buildings was much more severe in the following section (B), as ground plans were changed and parts of the buildings had to be demolished. So there were no actual tenants left to participate during the refurbishment process. To be, however, respective of tenants' needs the LUWOGÉ organised workshops concentrated on the social situations and needs of specific groups with special importance for the housing company: elderly people, shift workers and young families. For each issue there were about four workshop sessions monitored by experts. The results were documented and evaluated as a basis for construction brief and design.

In order to select tenants for the Three-Litre-House a public assembly was organised in October 2000. Persons looking for a new dwelling were invited to attend. The Three-Litre-House concept and its technical components were presented in detail. Participants then could apply for a dwelling. There were more applicants than dwellings.

Before the beginning of refurbishment in cleared flats tenants were assisted individually to find a new flat, got the removal organised, were informed about the future rent and the compensations for costs in connection with the change of dwelling. They also were provided the opportunity to decide on several aspects of the equipment and design features of their new flat.

After the refurbishment was finished questionnaires were handed out to the inhabitants of the Three-Litre-House by which their satisfaction was to be appraised. Generally it can be stated that after moving from their old into the new flats the inhabitants did not have strong reorientation difficulties and felt themselves from the beginning quite comfortable in the Three-Litre-House. However, the inhabitants had to become acquainted with the new airing system of which they do however meanwhile make full use. The results of the investigations were reported to and documented for the tenants. Above that, the tenants now pay flat gross rents including heating and other charges, and in case they had consumed particularly little energy in the past period they even receive saved heating costs back in the framework of an event with a lot of publicity.

Cooperation management with the BASF AG

The cooperation with the BASF AG was continuously granted by the establishment of a steering committee in which executives of various corporate sectors of the BASF discussed the project. Above that, the experience gained by the LUWOGÉ and its network partners had been incorporated in a BASF study on the potentials for a CO₂ reduction in the building stock.

Cooperation management with network partners

Especially in the case of the demonstration project „Three-Litre-House“ the LUWOGÉ was successful in establishing a systematic, well functioning network of partners from science, industry and construction enterprise. This external know how turned out to be important for the planning and evaluation of the measures as well as for the application of innovative technologies for demonstration purposes (airing, fuel cell). This now well established network may continue to be used after the finalisation of the project also in other projects.

3.2 The „Pfingstweide“ Project

3.2.1 Challenge to be addressed by the project

The Pfingstweide is a large housing estate which had been erected between 1967 and 1974 at a site which is located outside the built up area of Ludwigshafen. The plans foresaw 2.700 dwelling units for about 8.000 to 10.000 inhabitants, among them one third one-family-buildings and two third rental flats. 60 % of the 2.700 dwelling units were erected by the LUWOGÉ, the other 40 % by the GAG, a municipal housing company of Ludwigshafen. The infrastructure comprises an elementary school with upper classes, a catholic community centre with church and kindergarten, a protestant community centre with kindergarten and home for the aged, a kindergarten and a day-care centre of the City of Ludwigshafen, a district heat power plant, a shopping centre with 4.800 sq. m. sales floor, and two bus lines. The green space with seven children play grounds comprises about 33.500 sq. m..

This housing estate had and partly still has to fight with the „typical“ problems such as a disintegrated location, an anonymous architecture and open space arrangement, high-rise construction, a badly functioning shopping centre and a mediocre image.

Together with the City of Ludwigshafen, the inhabitants and all stakeholders involved the LUWOGÉ wants to achieve an exemplary up valuation of the Pfingstweide housing estate. For this purpose, LUWOGÉ and GAG invest annually 2.5 million Euros into the Pfingstweide. In this context, it should be mentioned that the technical refurbishment of the buildings and flats (facades, roofs, main entries) has already been completed to a very large extent. The new comprehensive approach is therefore to include the development levels physical surroundings (development of the living environment and the common open space), social surroundings (for example clubs, private aid networks in the sense of enlarged neighbourhoods, leisure time offers), virtual surroundings (link to the internet) and symbolic and imaginary surroundings (image improving characteristics stressing the singularity of the place such as art and artists in the estate, permanently established events). These comprehensive development measures are financed by the returns obtained and made available from the privatisation of flats (27 million Euros since 1997). A coherent overall strategy is considered a key factor for the success of privatising rental flats.

For this purpose LUWOGÉ applies cooperation management. In contrast to many other housing estates LUWOGÉ can start with the implementation of its measures at a comparatively high quality standard – at present, there are neither high vacancy rates nor problematic social structures to be fought against. Thus the measures also have a preventive character (maintaining the social stability, providing for a continuation of the low vacancies in the long term future) (*UN Global Compact principles 1-6*).

3.2.2 Stakeholder perspectives

The expectations of the stakeholders correspond in principle to those described in 3.1.2. Different from the Brunck Quarter however the objective of the project Pflingstweide is not a new technically oriented urban development concept but an approach towards improving the attractiveness and the image of a large estate. Therefore, the focus is not on the refurbishment of buildings and flats and the consequences to be derived from that but on the improvement of various levels of the surroundings. Thus the *tenants* mainly expect here an improvement of their quality of housing and life induced by those improvements in the surroundings. These expectations were ascertained in more detail by a survey on the expectations of the inhabitants of the Pflingstweide commissioned by the LUWOG and the GAG in 1997: While the conceptual design of the estate (design and layout of the roads, schools, shopping centre) and the flats as such were met with a broad acceptance among the inhabitants, the then state of repair of certain installations and equipments were very often subject to criticism. Improvements were considered desirable with respect to:

- The cleanliness in the housing quarter
- The equipment and functionality of the playgrounds
- The supply offered by and the attractiveness of the shopping centre
- The terminal bus stop
- The maintenance of the park.

In spite of these critical points the attitude of the inquired inhabitants towards the housing estate was positive (70 % indicated that they were comfortable or very comfortable with the Pflingstweide). Remarkable was the high share of the respondents who expressed their readiness to actively cooperate in the care for the surrounding environment (26 % of the respondents). This readiness and the detailed ideas and suggestions put forward by the inhabitants showed that there were great potentials in the estate and substantiated the LUWOG and the GAG in their intention to initiate together with the inhabitants a continuous process of improvement with the view to thoroughly enhance the housing quality and the external image of the Pflingstweide.

The *City of Ludwigshafen* is interested in assuring the stability of the estate and enhancing the economic performance of the GAG. The *State of Palatina* and the *BASF AG* follow the objectives already described above although the role of the LUWOG as a platform for the promotion of innovative BASF products plays a minor role in this case.

3.2.3 Description and results of measures

In the last years measures on different development levels has been carried out:

Physical surroundings

- Layout and maintenance of the surrounding environment
- Recreation of playgrounds together with the children living in the Pflingstweide
- New design and layout of the central place
- Construction of further garage places.

Social surroundings

- Involvement of the inhabitants and institutions of the Pflingstweide through working

groups in order to commonly discuss and decide upon measures to be taken

- Establishment of aid networks in the neighbourhoods
- Activities of clubs on focal subject matters (e.g. activity of the dog sport club on the subject “dogs in the estate”).

Virtual surroundings

- Equipment of all flats with an internet link. The user costs for it are contained in the rent for the flat
- Installation of an intranet (cooperation with TWL) to induce the internal communication among inhabitants.

Imaginary surroundings

- Art and artists in the estate
- Events.

3.2.4 Description of cooperation management

The cooperation management in the project „Pfungstweide“ relates to all actors involved. In its nucleus is certainly the cooperation with the municipal enterprise GAG and the city administration. Of further eminent importance are the tenants and inhabitants of the Pfungstweide whose opinions and participation in working groups and competitions form an integral part of management and decision-making. But also several other actors are incorporated in the project by cooperation management: clubs, churches, schools and kindergartens, utility companies, home owners etc.

For the success of the cooperation management, the LUWOG considers the following to be the crucial points:

1. The creation of networks with various organisations and partners at the regional and the supraregional levels
2. The organisation of the cooperation by working groups and steering committees, of activities etc. Personal supervision by **one** confidant
3. The participation of tenants and further stakeholders in the planning and implementation of measures by data collection and evaluation, information at an early stage, participation in working groups, competitions of ideas etc. For example, in the year 2003 a competition of ideas and creativity was held together with the GAG under the title „Future Workshop Housing“. 80 ideas were submitted in 6 categories by various participants. The participants came from quite different backgrounds such as politics, clubs, institutions and from among the inhabitants. Among others, the following proposals were made as future oriented concepts to enhance the quality of life in the Pfungstweide:
 - Development of service centres
 - Engagement of a „Hotel-Concierge“
 - Light installations at the facades of the high rise buildings
 - Creation of neighbourhood networks
 - Installation of a workshop for musicians
 - Organisation of common meeting days

- Concepts for the layout of greeneries and communication centres.
4. The creation of a climate of confidence for example through common celebrations, addressing all inhabitant groups, and closeness to tenants practised in a credible manner
 5. The installation of a sustainable concept for the future for example through city marketing strategies, partnerships among housing corporations, local authority and inhabitants, and the installation of a citizen service as contact point.

4 Assessing the Alternative Options

In its overall strategic mission the LUWOG is focused upon long term asset optimisation and sustainability. The measures carried out in the “Brunck Quarter” have been derived from this mission. For the LUWOG, alternatives would have been not to invest in refurbishment of the quarter at all or to sell it altogether to another investor. Both alternatives would have been in line with the nowadays widespread strategies of housing companies in EU countries focused on a short term cash flow maximisation. This would however not have been compatible with LUWOG’s mission. Another option would have been a refurbishment where the energy saving standard to be reached would have been reduced to just the level required in legal and normative guidelines. This however would have been second best in terms of long term capital asset optimisation conditions in view of the assumption that higher energy standards would prolong the economic and technical life time of the building stock and reduce vacancy risks. Furthermore, the high energy standards realised did comply to the wishes of the BASF for demonstration projects for its new insulation material products. In that light the refurbishment decision actually taken was the logical consequence of both the long term oriented mission of the LUWOG itself and the interests of the mother BASF.

Also the „Pfungstweide“ investments have been guided by the company mission of long term asset maximisation and sustainability. In the light of this mission and the PPP agreement with the City of Ludwigshafen, a sale of the assets in the estate cannot be considered a reasonable long term alternative. Without a comprehensive refurbishment of the surroundings in the estate the risk would have persisted of a long term destabilisation connected with its economic consequences (vacancies, tenant quality etc.). The focus on the surroundings is plausible as the flats and the buildings have already been refurbished while in the view of the tenants and inhabitants the surroundings possessed considerable deficits. The cooperation with the municipal housing company GAG and the tenants in the process of the improvement of the image of the estate provides in the sense of a „common responsible action“ a chance of a utility increase for all partners involved. However, in order to finance the measures a conversion of rental into owner occupied flats is required. This however can be implemented all the faster if the attractiveness of the estate can be improved.

5 Lessons Learned and Unanswered Questions

The example of the „Brunck Quarter“ demonstrates that a systematic and functioning cooperation management constitutes a decisive success factor for a sustainable urban regeneration project. In this context, the following points are particularly crucial:

- Innovative project management couples the various interests of stakeholders and creates opportunities for win-win situations in refurbishment projects.

- Human resources are the linking pins between strategic management, research and development and project management.
- Technological innovation paths should be integrated with social innovation paths.
- Clear and communicative targets increase the chances on success of a project.

On the other hand, some questions remain open to us:

- The selection of the inhabitants of the 3-Litre-House
- Partly very high refurbishment costs (fuel cell driven heating etc.)
- The qualification of the small building enterprise involved was partly inadequate.

The example of the “Pfingstweide” demonstrates that the success of sustainable urban regeneration projects is ultimately determined by the acceptance by the inhabitants of the measures taken. This acceptance may be measured through tenant satisfaction indicators, vacancy rates, damages caused by vandalism or the external image of the quarter. A basic condition for a successful improvement of the attractiveness and the image is that the wishes and expectations of all partners are acquired at an early stage and incorporated into the planning. The experience in the “Pfingstweide” shows that the incorporation of the inhabitants, especially the tenants, was crucial. Similarly important was the cooperation of the LUWOG with the municipal housing enterprise GAG. Only by that common strategy guided procedure it became possible to keep the interests of both corporations. Also pertinent were the integration of further stakeholders in the project management and the provision of a sufficient financial liquidity by the returns from the privatisation of rental flats. Only by a cooperation management of that depth a win-win situation for all stakeholders can be safely constituted. A constitutive success factor is however the availability of a person who promotes the project as a „motor“. Without such a “confidant” the communication and cooperation structures are not provided for safely and durably and the success of the project is strongly at risk.

6 Concluding Thoughts

Large refurbishment projects in the housing and planning fields require increasingly the cooperation among several stakeholders. Why increasingly? Because the hierarchical structures between public and private institutions which had prevailed in former times have been weakening or even ceded to exist, not the least due to financial difficulties of the public sector, but also to a shift in the understanding of the reasons for existence of public bodies. Equally important: as in many West European countries housing shortages have been overcome, the inhabitant and particularly the tenant as customers with own preferences and opinions are to be taken more serious by the suppliers.

In such cooperation management just getting everybody on the table is not enough. There must be a well defined common mission and strategy and a continuous management of the programme envisaged. A continuous dedication of the stakeholders requires not the least a very strong and convincing personality on the top.

The type of cooperation varies over time and project phase very rapidly between information, consultation, participation and co-management, and the projects have shown that one must not consider any of these types superior to the others without taking into account the concrete tasks and circumstances. However, a number of other success factors for cooperation management in refurbishment activities were observed in the present two projects and have been pinpointed in this report.

As a conclusion then, can this LUWOG approach to cooperation management be spread as

best practise everywhere? Here, some obstacles are to be observed:

- The market conditions in Ludwigshafen are particularly favourable for complex refurbishment as the mere presence of the BASF and the exorbitant transaction costs which would occur to this company if it decided to move elsewhere guarantee long term revenues for the city as well as for the housing company, provided they are ready to adapt the quality of their supplies to the demands so that the residents do not prefer to reside elsewhere.
- The BASF is also ready to invest in sustainability and to support the LUWOGÉ and the City on a permanent basis in their respective efforts. Without this strong “corporate citizenship” of that company any cooperation management would be much more difficult.
- The approach taken dwells at least indirectly on the feasibility of social integration without the acceptance of ghettos for minorities to emerge. Under other conditions however certain housing suppliers would have to focus on serving the poor even at the risk of disinvestments as nobody else would do this job.

So, do we have it to do with a unique situation with lessons not worth to be spread? Why not turning the counterarguments around and postulate more corporate citizenship among all large companies as prerequisite for success stories such as the LUWOGÉ one? At least it has now been proven that it is possible to create win-win situations for everyone by complex refurbishment investments managed in a strong cooperation among stakeholders. And if you do not have equally good framework conditions – just create them!

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