The integrated renewal of Amsterdam’s Bijlmermeer high-rise

Introduction

In recent years, there has been a growing interest all over the world in improving the large housing estates of the 1960s and 1970s. Despite historical variations in economical development, housing policy and social-cultural traditions, the kind of problems are very much the same across different countries around the world. High-rise estates are associated with problematic living conditions, deprived areas, isolated locations, a poor population, a negative image, social isolation, pollution and crime.¹ In short: they are not the most popular areas in town.

One of the finest and most well-known examples is the Bijlmermeer high-rise, located in the south-east extension of Amsterdam (the Netherlands). Over the years there has been only one thing constant in this area: the ongoing call for change. In the beginning, in the 1960s, the area was promoted as the most modern place to live, with its daring and innovative design influenced by the ideas of the CIAM-movement ("Congrès Internationaux d’Architecture Moderne"). Later on, the area became well known for its numerous problems. The media found it easy to report time after time about disappointed residents, pollution, drugs, crime and other misery. Since the 1980s, the Bijlmermeer has continuously received attention because of a wide range of innovative measures and promising experiments to improve the living conditions. Nowadays, the Bijlmermeer is in the limelight because of an integral, very radical solution.²

This paper reports on the approaches used to improve this famous high-rise estate over the last 30 years. We distinguish several phases: upgrading the environment, improving the management, fighting crime and safety, setting up participation projects and formulating integral approaches. The last phase results in demolition on a large scale. The Bijlmermeer is renewing its own future and stands out as the leading example of Dutch renewal policy, not only because of the size of the operation, but primarily because of its integral approach. Without doubt the solutions and experiences in the Bijlmermeer provide ideas and useful knowledge for many other problematic large-scale housing estates.

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Bijlmermeer high-rise: 13,000 dwellings in 10-storey high-rise apartments
The rise of high-rise estates

Between 1960 and the mid-1970s high-rise buildings were constructed in all western countries. High-rise estates dominated the building in this era, and these years proved to be the time of peak housing production in the Netherlands and many other European countries. Housing production had to be optimised by reducing the variation in dwelling types, repetition of construction patterns and using new construction techniques. High-rise fulfilled these requirements. The Figure on top illustrates the Dutch high-rise wave, that started around 1965 and disappeared only ten years later as quickly as it had appeared. In countries like France, Sweden, Germany, Britain and the Netherlands the majority of high-rise was built as public housing.

Besides the shortage argument, high-rise housing should be seen as the result of a period in which planners and politicians aimed to build in the tradition of the CIAM movement philosophy, a group of modern architects, with the Swiss architect Le Corbusier as leader. The modern architect had the task of supporting and creating a new, modern, and egalitarian society. In the eyes of architects, town planners and civil servants, high-rise was the symbol for this modern society. The dwellings themselves were, and in some respects still are, of high quality: large floor space, luxurious sanitary facilities, central heating and their own storeroom. Most of the dwellings are in the social rented sector, though definitely not in its least expensive segments. The aim of the planners was to attract households with children and a middle-income, because the city of Amsterdam already had enough dwellings for low income groups.

14.4 %, or one in seven of all dwellings are to be found in high-rise blocks, with a great variety between countries. Countries such as Britain, Denmark, West Germany, Sweden and the Netherlands with some of the lowest stocks of high-rise flats, have generated most discussion concerning their use and future. These same countries have also undertaken the highest levels of activity in refurbishing or regenerating high-rise estates. The improvement of the Bijlmermeer is one of those.
The Bijlmermeer: three groups of problems

With the urban design philosophy of the thirties and the techniques of 1965 “the city of the year 2000” was built in seven years. However, soon after its realisation problems began and multiplied in the following decades. All these “troubles in Amsterdam’s high-rise paradise” are described in Van Kempen and Wassenberg\(^7\). Verhagen\(^8\) gives a colourful description of the situation in the mid 1980s, describing early protests against the then high rents, the deviant behaviour of some residents, the negative image building in the media, the mix of cultures and the first black town in the country.

The problems can be divided into three groups of connected issues. First of all, there is the unfinished character of the district. A lot of ideas and planned facilities, like stores and spaces for sport and recreation were not realised because of lack of finances. The second category of problems are the enormous liveability-problems in the Bijlmermeer. It became clear that a normal managing process was not sufficient for high-rise blocks. The numerous uncontrollable semi-public and collective spaces like entrees, alleys, corridors, 13 000 storage boxes on the ground level, 110 kilometres of galleries and 31 parking garages turned out to be blind spots rather than...
cosy places where people could meet each other. Because the flats were in the hands of 16 different housing associations, all based in downtown Amsterdam, management was chaotic. Kwekkeboom states: "Each of the buildings has got over 400 apartments, contain thousands of square metres of public and semi-public space, and elevator and intercom unlocking systems that require constant maintenance. Because the buildings were built in the same period, they all began to show signs of wear at the same time." Successive surveys held among residents uncover the most important grievances: pollution, degradation, vandalism and lack of safety. Almost 80 percent of all residents mention these aspects as the main problems.

The third group of problems refers to the housing market. Demand and supply did not match properly. Even during the construction of the flats there was insufficient demand. The intended inhabitants, middle-class families, preferred other towns around Amsterdam where single-family houses with gardens were built. In 1974, the turnover rate was 30 percent. Letting the flats became a severe problem, which was thought unthinkable in a period when the housing shortage was at the top of the national political agenda. The Amsterdam area was one of the tightest housing markets in the country, but obviously not in the Bijlmermeer!

As a result dwellings were allocated to people with less choice, who did not want to wait long and accepted the Bijlmermeer as second best. They were mostly starters in the housing market, with low incomes. From the late 1970s, the gap between supply and demand was closed by rentals to poorly-housed, low-paid workers, needy social groups and immigrant ethnic minorities. At present, about 40 percent of the population comes from the former colony of Surinam and the Netherlands Antilles, another 40 percent from other countries, particularly West Africa, and only 20 percent have Dutch roots.

In short summarised, a lot of the planner’s ideals changed into disadvantages. Privacy became anonymity, the collective and egalitarian ideas did not catch on, the advantages of traffic security turned into disadvantages of social insecurity, parking garages were hardly used and instead of friendly meetings in the covered walks and hallways, the numerous semi-public spaces were filled with litter, drugs-dealers and homeless people. The Bijlmermeer changed from a citadel of modernism to that of a problem estate, a place of poverty, of aliens and illegal immigrants, petty crime, unemployment, with a high incidence of truancy and drug abuse. The Bijlmermeer was considered to be the worst area in the country, containing all problems in society, culminating in a very negative stigma.

The Bijlmermeer: early solutions

Many solutions were tried. The first one was to stop building new high-rise. Originally, another Bijlmermeer-south was planned, later replaced by a single-family housing area which “emptied” the old Bijlmermeer.

In 1983 a rehabilitation program was drawn up to adapt and to improve the existing spatial concept. At the beginning of the 1980s the Bijlmermeer started to become less isolated when the metro was realised. Public services like a sports hall, indoor swimming pool, police station and mosque were built and at the end of the 1980s a big shopping centre was completed. Management was consolidated into one large housing association, rather than being dispersed over the different associations. Rents were reduced and people were given free use of the parking garages. Structural improvements were made on the buildings. Entrances and the immediate surroundings were improved, covered walks between parking garage and flat were closed, extra elevators and security cameras were installed, the buildings were colour painted, storerooms were closed or transformed into houses with a garden and some of the dwellings were split to meet the demand for small households. Assistance for and welcoming of new inhabitants was initiated as well as other social actions such as co-operation between the maintenance-team and the inhabitants were started. Employees of the housing organisation say that “all thinkable measures have been tried and tested in the area”. Regrettably without great success.
Urban Renewal in the 90’s

Despite all the efforts the dwellings remained unpopular and the liveability problems were not resolved. Extra maintenance, surveillance, manpower, management, participation and control could not match the huge scale of the area, individual housing preferences and the behaviour of some of the inhabitants. The Bijlmermeer was unable to gain a respectable position in Amsterdam’s regional housing market. During the 1980s vacancies rose again, and in 1985 around 25 percent of the apartments were unoccupied. This led to a critical financial situation of the housing association, that had run up so much debt that it was close to bankruptcy, along with its guarantor, the municipality of Amsterdam. It also destroyed or even prevented the existence of sustainable social structures. After years of debate, it became clear that the urban concept had to change structurally. The Bijlmermeer’s physical layout was considered to be a fundamental mistake in urban design: too massive, too much high-rise and too little differentiation in the housing stock.

As an answer to this monotony, radical plans were introduced in 1990 and worked out in 1992. Step by step, these plans are still being realised. The plans include demolition, sale, renovation and upgrading of the high-rise stock, while new types of houses are realised, including owner-occupied low-rise dwellings. Previously, inhabitants who wanted a single-family dwelling were forced to move out of the Bijlmermeer. Improvements should encourage inhabitants to stay and offer a housing career in their own neighbourhood, as well as attracting newcomers.

Improvement and differentiation of the urban environment was also included in the plans. More functions are being introduced into the living area, like small shops and firms. Parks between the blocks have been, for safety reasons, cleared of bushes, leaving only trees and greens, easy to look through and hard to hide in. The separation of traffic has been changed, by mixing motorised and non-motorised traffic. The argument of social safety wins it over traffic safety. Most of the 31 large parking garages have been demolished or converted into other functions.

Besides the physical renewal the plans are supplemented with both social-economic measures and an intensification of the maintenance to improve liveability. All three elements are important. Social renewal in the Bijlmermeer is strongly focused on job creation. An employment advice bureau and a women empowerment centre have been established, there is education for adults, ethnic entrepreneurship is encouraged and the unemployed are involved in the building activities. Other social interventions support multicultural activities and religious celebrations.

The third element in the plans is to improve safety and liveability and reduce degradation and vandalism. There are watchmen to patrol the buildings and daily management

<table>
<thead>
<tr>
<th></th>
<th>1992 (100 %)</th>
<th>demolition</th>
<th>new construction</th>
<th>2012 (100 %)</th>
</tr>
</thead>
<tbody>
<tr>
<td>High-rise</td>
<td>12.500</td>
<td>6.550</td>
<td>5.950</td>
<td>4.950</td>
</tr>
<tr>
<td>Low-rise apartments</td>
<td>0 (0 %)</td>
<td>0</td>
<td>4.600</td>
<td>4.600</td>
</tr>
<tr>
<td>Single-family dwellings</td>
<td>0 (0 %)</td>
<td>0</td>
<td>2.850</td>
<td>2.850</td>
</tr>
<tr>
<td>TOTAL</td>
<td>12.500</td>
<td>6.550</td>
<td>7.450</td>
<td>13.400</td>
</tr>
</tbody>
</table>

Source: Projectbureau Vernieuwing Bijlmermeer: Finale Plan van Aanpak. Amsterdam 2002
Listening to the people

These new plans were made in close consultation with the residents. In 2001 a large questionnaire was conducted in the areas to be renewed researching which physical renewal measures residents supported. The response rate was extremely high (77 percent), with more than 3,500 households participating, 79 percent of whom were born abroad and represented 81 different nationalities. The results were remarkable, with almost 70 percent of the inhabitants supporting the idea to demolish remaining high-rise blocks. Even when it included their own house, 60 percent still supported demolition. Thus the survey confirmed the assumption that the inhabitants blame the concept of the high-rise estate.

Additionally a firm Social Plan was set up together with the residents. If people prefer to leave the Bijlmermeer, they get priority elsewhere in Amsterdam. Moreover, in the Bijlmermeer as in the Netherlands in general, residents who are forced to leave because of demolition receive compensation for relocation costs, which goes up to €5,000. The rents of the new houses are comparable to the present high-rise flats. If their new house is more expensive the Dutch rent subsidy compensates for it.

Until now, most new developments have been taken by people who had to leave their homes because of the demolition activities.

tasks on site. While these measures increase safety, it also helps to combat unemployment. Police patrols in the Bijlmermeer were intensified because of a national redistribution of police forces in favour of the big cities. Measures were taken to reduce pollution by introducing an outdoor underground garbage collecting system, instead of the stinking containers within the blocks. And several participation projects were carried out to involve people in their own living environment.

It is also worth mentioning that the relative location of the Bijlmermeer itself has changed radically. Since the mid 1980s various facilities have been opened close by: a metro line, a new stadium for Ajax football club and large cinemas and theatres. This whole area is called the "Amsterdam ArenA". An expensive office area was built just opposite the railway station. All these positive developments nearby have helped to rebuild the image of the Bijlmermeer, provide demand for extra housing and create a lot of jobs at all levels. In fact, the location of the Bijlmermeer has changed from an isolated "satellite of a core city" into a national hot spot, the "core of a network city".

In 1999, after the first years of renewal, a broad evaluation took place. The question arose of whether the physical renewal should be intensified, whether more high-rise dwellings should be demolished, renovated, sold or refurbished.

| Opinion about the physical renewal per measure in 1995, 1999 and 2001 (in percent*) |
|---------------------------------|-------------------------------|-------------------------------|-------------------|
|                                 | (1 500 dwellings, response 55 %) | (800 dwellings, response 63 %) | (4 900 dwellings, response 77 %) |
|                                 | good idea | bad idea | good idea | bad idea | good idea | bad idea |
| Renovation of dwellings         | 62 21 | 73 21 | 37 45 |
| Sale of dwellings               | 38 25 | 53 24 | 42 23 |
| Demolition of high-rise blocks in general | 65 20 | **63-74** 19 | 68 18 |
| Demolition of a part of high-rise blocks | 43 39 | 37 49 | 30 46 |
| After demolition single-family dwellings | 78 9 | 81 12 | 82 6 |
| After demolition low-rise flats | 65 12 | 63 22 | 51 19 |

* category ‘no opinion/don’t know’ is left out of consideration
** 63 % wanted to demolish both buildings, 11% one of the two buildings

and secondly, by other residents in the Bijlmermeer. Recent research in the Netherlands shows that many movers were able to take advantage of their priority status. Their certificate of urgency gives them a head start over regular house-hunters and, as a consequence, the majority of relocated residents improved their housing situation.

Because of the popularity of the new houses, renovating the old high-rise blocks has become a less attractive solution. A comparison of the 2001 survey with two similar earlier surveys in the Bijlmermeer confirms this view (see Table on the left). In 1995 a survey was carried out among inhabitants in the so-called F-neighbourhood (one of the first renewal projects) and in 1999 a similar survey was carried out in two buildings. Although the three surveys did not involve the same respondents, it is possible to distinguish a pattern. A growing number of people support demolition and new building.

Urban renewal in 21st century

After the evaluation and the resident survey, in 2002 the “Final Action Plan” was approved for the urban renewal of the Bijlmermeer for the period until 2012. It is called final because it concerns the last areas in the Bijlmermeer not physically renewed yet. The Final Plan agrees with the residents’ opinions, as mentioned above. According to their preferences, more differentiation is needed: almost 70 percent of the thirteen remaining high-rise blocks are being demolished and replaced with new buildings.

An office called Project Bureau Bijlmermeer, in which a director and some five employees coordinate and plan all activities, implements the process of the renewal. On top of these is a board, made up with the three main actors in the area: the City of Amsterdam, the local sub-municipality of Amsterdam South-East, and the housing association. They decide about the main lines of the renewal. This Projectbureau has all contacts with inhabitants, investors, developers, designers, etc.
The integrated renewal of Amsterdam’s Bijlmermeer high-rise

The Figures above show at the top the situation in 1992, before any plan was started and below in 2012, after the whole Masterplan will be finished. It is easy to see that little will remain of the characteristic honeycomb structure of the large blocks. After the renewal is finished, more than half of the original high-rise blocks will have disappeared and been replaced by low-rise apartments and single family dwellings.

The revitalisation of the Bijlmermeer is the largest Dutch restructuring project so far. Only in Hoogvliet, a satellite city of Rotterdam, are similar numbers of dwellings in one area being dealt with. In the new Bijlmermeer 15 blocks, or parts thereof, will remain of the original 31. Six of them, in the eastern part of the area, together form an ensemble. This is called the "Bijlmermuseum", which will remain on the instigation of active residents who were against demolition. In the middle of this area is the monument on the site where the El Al-Boeing crashed into an apartment block in 1992.

The total investment – the ArenA area not included – is over € 1.6 billion. About € 450 million of this investment produce no returns, which is about € 35,000 per household. This includes all physical and management costs and not the social and economical measures. Of this almost 50 percent is contributed by the City of Amsterdam and over 50 percent by the housing corporation sector, primarily by the Central Fund for Housing. The latter is a national public housing fund, paid by all housing associations and therefore by all tenants of social housing. It is worth mentioning that there are three parties who are deciding about the renewal, while actually two parties are paying for it. The renewal is supported by a grant from the European Communities URBAN fund for related social-economical measures. Furthermore, one private developer (ERA) is involved, who redevelops two blocks with 240 (former) social rented dwellings into a mixed area with low- and high-rise, and rented and owner occupied housing.

The total amount of dwellings will have grown slightly by 2012 compared with 1992 (+7 percent), a precondition set by the central municipality of Amsterdam. A consequence of the change of high-rise into low-rise is that the public space will decrease, which will reduce the costs of maintenance. The integrated policy of the 1990s is continued in the Final Action Plan in the 21st century. There is a wide belief that an integral approach is necessary because the problems cannot be solved by new housing developments alone. The plan also includes new parking facilities, public transport, educational facilities, recreational facilities as well as more social and economic facilities like business spaces, churches, mosques, hotel, day-care centres, and studios. The social economic renewal, the second constituent of renewal, started at the same time as the physical renewal. About a hundred projects, both large and small, have been set up at a total cost of 56 million Euro. Examples are a Women Empowerment Centre, sport and play facilities, a centre to care for drug addicts, surveillance by guards and cameras, facilities for entrepreneurs starting out in business and school facilities. The third ingredient, better maintenance to improve liveability, also has to be intensified, especially as the last blocks will not be demolished before 2009. Intensive maintenance is necessary to guarantee a safe and quiet living for the remaining residents.

**Conditions for success**

I began this article by mentioning that many large-scale housing estates suffer from similar problems. In all countries questions emerge about which measures have to be taken to prevent or solve problems. Obviously one answer lies in the location-specific situations. The international Re-state project (Restructuring Large Housing Estates in European Cities), on renewal of large housing estates, focuses on the local circumstances to explain social, economic and physical developments. Different areas ask for specific solutions. Nonetheless, many “colleague high rise estates” are in a position comparable to the Bijlmermeer and consider similar renewal approaches.

Five characteristic conditions can be distinguished that support the success of the renewal of the Bijlmermeer so far. Identifying them can be useful for the transferability of the approach to other estates in other circumstances. The first condition for success is the improvement of the surrounding Amsterdam ArenA area, which is being used as a catalyst to improve the nearby problematic high-rise area. The second condition is the integrative approach, in which three different strategies are set up in combination with each other. Physical renewal results in more popular housing types and environments. Social and economic renew-
al results in an improvement in the personal situation of deprived people. Improvement of the liveability and maintenance results in a safer and cleaner place to live. All three mingle with each other, and it is essential that all three interrelated problems will be tackled.

The third condition of the Bijlmermeer’s renewal is the search for radical solutions. Even with improvement, renovation, maintenance and residents’ involvement the Bijlmermeer did not become an attractive proposition on the Amsterdam housing market. Liveability problems, like pollution and safety, caused major problems over the years. Moreover, the Bijlmermeer never rid itself of its very negative stigma. Once an area has got a stigma, it is very hard to lose it. As an ultimate solution low-rise flats and ordinary single-family houses replace half of the high-rise blocks. An interesting question is whether other high-rise estates in Europe will follow the radical solution of the Bijlmermeer. At the moment, demolition is not being considered in most countries, at least not to the same extent as in the Bijlmermeer. This is rightly so, as demolition should not be the starting point of any renewal process, it should rather be, as argued above, in relation to measures that can solve social and economic problems. However, in the Bijlmermeer these approaches proved not adequate enough. Demolition here is the drastic, but only way.

The fourth condition is financial. There is money for major investments, in which an important factor is the role of the Central Housing Fund, which pays half of all costs, but which is not government money. The whole renewal process is very costly because technically reasonable and not paid off dwellings are demolished. Another financial condition is the residents. New dwellings are sold at moderate prices or have the same rent level as the former high-rise blocks. People who cannot afford it, get allowances.

The fifth and last condition for success is the way it is done, together with inhabitants. In other cases demolition goes together with a lot of protest, displacement of poor people, breakage of social networks and loss of affordable housing. In the Bijlmermeer, inhabitants have an important vote in the whole process. The starting point of the renewal approach must be that the present inhabitants will profit, either by getting a better house in a better area in the Bijlmermeer, or if they prefer it, somewhere else. To offer perspectives to inhabitants is one of the basic elements for success in renewal. In this way social networks can be preserved and a stronger bond to the neighbourhood can exist.

Nevertheless it would be wishful thinking to suspect that all the problems like litter, crime, drug abuse, and unemployment will be completely solved. This might be a major problem in the future for various reasons. Firstly, unemployment is still high at the neighbourhood level. Secondly, improving some of the blocks results in a concentration of problems with drug addicts, crime and safety in the remaining blocks. The results halfway pointed to a displacement of problems, where the renewal works like a waterbed: sit on one place and it goes down there, but another spot comes up (Ouwedand, 1999). This was one of the reasons both for making the final plan immediately rather than leaving some blocks and for intensifying the integral approach.

Another concern is where all the drug addicts, delinquents, tramps and other people with anti-social behaviour are moving to, when the safety situation is seriously addressed in the Bijlmermeer. Those people are not welcome in the newly built areas, but neither will they disappear. Allowing the continuous spread of the problems is not a sustainable solution, it is the roots of the problems that needs to be addressed, however difficult this will be.
Conclusions

The Bijlmermeer originated on the drawing-board as the peak of modernity and as a shining example of housing where “the people of today could find the residential environment of tomorrow”. Unfortunately, residents avoided this city of tomorrow. Problems occurred and, in spite of numerous improvements, only grew. The history of the Bijlmermeer is symptomatic of high-rise estates as tomorrow’s idealistic cities. The ideas in the 1960s were astonishing, the problems were astonishing, the several measures were astonishing and the present renewal is astonishing. When the renewal is finished in about 2012, the Bijlmermeer will have been for over 40 years a shining example for people who are interested in large housing estates all over the world.

Right now, the renewal approach for the Bijlmermeer aims to demolish over half of the original high-rise blocks and to relinquish the original planning ideas. This demolition is not based on the idea of deconcentrating poverty, like in many American cities.\(^23\) The inhabitants choose the measures and the new houses are being built, at moderate prices, for them. Problems are being tackled using an integral approach. History has proven here that not only maintenance, nor social-economical measures, nor participation, nor physical measures alone are sufficient. Any strategy has to be in combination. The drastic redesign involves an intensive process with residents, in which their preferences are one of the starting points of the renewal. The challenge in the Bijlmermeer is to end up with a neighbourhood that is attractive to residents who want to stay, that gets rid of its stigma, that offers several kinds of dwellings and living environments and that offers future prospects for both residents and the housing association. Conditions for success are the incorporation of the problematic high-rise area into the wider region, the integrative approach, the radical solutions, an adequate financial structure and decent participation of the residents involved. If this approach is successful, it will be an example for other cities with problematic large housing estates.
Frank Wassenberg: The integrated renewal of Amsterdam’s Bijlmermeer high-rise

Footnotes


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