

# Garden Cities between Utopia and Reality (Summary)

Housing conditions for the industrial working class in 1850's England were extremely poor. As a result of the early industrialisation of this country, mass migration of people from rural areas to industrial cities such as London, Liverpool, Manchester and Birmingham took place. This led to a shortage in housing, which in turn resulted in inflated rents being asked for sub-standard accommodation. Due to malnutrition, overpopulation and bad hygiene, infant mortality in London and Liverpool rose to 10 percent, which is twenty times greater than at the present time.

An improvement in living standards was desperately needed and the first to look for a solution were the manufacturers themselves. From around 1870 manufacturers began to build new factories with accommodation for their workers. This meant, however, that residents were entirely dependent upon their employers, giving the latter great power over the social order of each settlement. Moreover, the prosperity of these settlements was influenced directly by the profitability of the factory.

Ebenezer Howard proposed a comprehensive and revolutionary solution to the problem in about 1900 with his garden city model. The garden city was envisaged as a self-contained and autonomous city located in rural areas where both people and industry could exist together. In this model the inhabitants would play an active role in the administration and the cultural life of the city, encouraged by an intimate and secure design of the environment.

The garden city was seen as an integration of industry and agriculture. Howard himself described the

approach as an arranged marriage between town and country.

In order to retain a strong community spirit, a maximum population size of 32,000 was recommended. If more space was needed for housing and industry, new garden cities would be preferred to an expansion of the existing city above the 32,000 threshold.

The Garden City Association was established in an attempt to promote Howard's model and, in particular, to set up a pilot study. The association acquired a 4000 acre plot of land 35 miles north of London and in 1903 the first garden city, Letchworth Garden city, was constructed here. Industrialists were quick to show support for the Garden City Association, but this raised suspicion among left wing politicians (Fabians and Marxists) who preferred to solve the housing problem by means of legislation.

A second hindrance to the garden city movement was the development of Hampstead Garden Suburb. The heiress of an Industrialist, Henrietta Barnett, established this project on the outskirts of London in 1906. Instead of being a self-contained autonomous city, Hampstead was designed as a suburb, an extension of the existing city. Barnett contracted the same architects as Letchworth and their designs achieved international acclaim, even more so than at Letchworth. As a result, the garden city model shifted from a social model to a design model.

At the same time, the garden city model spread to Germany and Austria. Overpopulation and exorbitant rents charged by speculating and profiteering landlords were major problems in many of the large cities of Germany and the Austrian capital Vienna. Ebenezer

Howard's garden city was exactly the model German needed at that time, to stop speculation by the landlords and to provide good housing for urban populations. The Deutsche Gartenstadt Gesellschaft (the German Garden City Association) was established in 1903. The German housing projects were run by the Baugenossenschaften (building co-operatives). Each household was entitled to one vote in the co-operative, which guaranteed a long lasting involvement of residents in the administration of the project. Ownership of the land was retained by the co-operative. Individual properties could be bought and sold by residents, but the Co-operative strictly controlled the prices.

The German and Austrian projects were carried out on a smaller scale than in England. Moreover, they attracted relatively homogenous populations, which lacked the mix of classes and professions characteristic of a self-contained community. In comparison to the garden city movement in England, the Germans appeared to be more radical in their application of the model.

The garden city movement also gained interest in the Netherlands. At the turn of the century approximately 30% of the Dutch population lived in one room together with more than 5 people. As was the case in England, manufacturers led the search for a solution to the housing problem. Dutch manufacturers were responsible for initiating 10-20 garden city-like projects throughout the country, including Utrecht, Rotterdam and the mining area of Limburg (southern Netherlands). The best known example, however, is Tuindorp 't Lansink in Hengelo (eastern Netherlands). This city followed Howard's model the most closely, and, in contrast to the other manufacturer led settlements, allowed residents to participate in the administration of the project. The designers had a romantic vision of this project and used the English examples as sources of inspiration.

The manufacturers also planned the density and use of green spaces along the garden city lines. The average housing density in the reported projects was about 10

houses per acre. Each house was given its own garden large enough to be used as a vegetable garden.

The manufacturer led projects were interesting as a demonstration of good housing but were not numerous enough to contribute significantly to an overall solution for the housing shortage. In 1901 the Government passed the Woningwet (the Housing Act), which prescribed standards for better housing and included financial incentives for developers with non-commercial interests. Many new housing associations were established as a result. In 1918 there was a housing boom and many of the housing associations at this time used the principles of the Garden city model.

In this study, more than 50 examples of housing association garden city projects were found in the Netherlands, of which 8 were subjected to further research. These projects were located in Amsterdam, Rotterdam, and the smaller cities Deventer, Ede and Hilversum (average 200 dwellings per project). These projects were small in comparison to the manufacturer led projects (350 dwellings per project), and were therefore considered more as garden villages than garden cities. Due to their size, these projects were not self-contained with respect to social services such as shops and schools. Nor were they economically independent, with residents having to travel outside the village for work.

Nevertheless, these 8 projects met the standards of the garden city model in most other respects. This was certainly true of the administration of the projects. Residents were entirely free to organise the village's social life according to their own needs and preferences. In some instances the management of public spaces and accommodation was entrusted to the residents. The average housing density of these projects was higher than prescribed in the garden city model (sometimes as high as 25 dwellings per acre) due to their proximity to the neighbouring city and the high cost of land. Gardens were also generally smaller and not suitable for vegetable gardens. Green spaces were planned for public use, such as children's playgrounds.

The constant factor in all examples of garden city projects in the Netherlands is design. In almost all cases, the English garden cities were the source of inspiration for the Dutch designers. The designers were quite successful in following the principles of the garden city movement, even in cases where the housing density was above the optimum level and in spite of the relatively small scale of their projects.

Do current residents recognise and appreciate the qualities of their garden city? The answer to this question was investigated in the form of a survey using a structured questionnaire in 3 garden villages (Maarn, Ede and Brunssum). Each project was compared to a non-garden city housing project in the same urban area. The most important findings of this comparison were that residents of the garden villages experienced a greater sense of community, had a greater appreciation for their immediate environment and had a greater appreciation of the village design.

The availability of social services in the garden villages (the self-contained character of the village) produced a high score, especially regarding accommodation for social activities.

Garden village residents considered having a private garden important. This was supported by the reportedly intense use of the gardens (e.g. vegetable gardens).

The variation in housing types and architecture also received a high score from the survey of the garden villages.

The Dutch Ministry of Housing in 1995-1997 carried out a large-scale study into the satisfaction of residents of different types of developments. During this research residents of garden villages reported a high level of general satisfaction. Using the results of this study, the level of satisfaction could be compared between the garden villages and two other types of pre-Second World War housing developments: the type which was common just before the garden city model and the type which was common just after its extinction. The first type had long, narrow streets and very small gardens, whereas the second type had the same housing density

(sense of space) as the garden village type but with less variation in the architecture. The level of satisfaction was found to be slightly higher in the garden villages in comparison to these other two types of development. Further indications of high satisfaction were provided by interviews with the managers of housing associations, who reported a strong preference of their members for the garden village, especially where there was a family connection (e.g. parents who are/were residents of a garden village).

In the case of two garden villages that were studied, the majority of residents voted to return following major renovations and just 1-4% requested a house outside the garden village.

Regardless of the source of information, all indicators pointed to a high level of satisfaction from residents of garden villages.

An analysis of correlation between the variables was carried out to investigate the hypothesis that the most typical characteristics of the garden city model have a strong influence on the level of satisfaction of residents.

The sense of community and the urban design showed the highest correlation with the level of satisfaction. The correlations produced between satisfaction and other factors, such as housing density (sense of space) and the use of green spaces, were not statistically significant.

## **New garden cities?**

How can the findings of this study be applied to the decision process for future housing projects? In order to answer this question, the possible connection of the garden city model to recent trends in housing was investigated, or more specifically, the connection with garden village model to recent trends was investigated. Examination of recent housing literature (national housing policy as well as housing research reports) reveals two trends: future residents acting as their own developers and self-management of urban areas by residents.

The majority of new houses in the Netherlands are being built by developers and housing associations, but for an anonymous market. In 2000, only 18% of new houses were built by their eventual residents. The Government has decided to create better conditions for people to build their own house and aims to increase the figure to 30%.

The Government wants to give incentives for collective development projects. The garden village model could be used as a source of inspiration in such instances, especially if the development group is interested in landscape, nature, ecology, gardening or sustainability.

Once constructed, the housing project could be organised as a private community managed, at least in part, by the residents themselves. The garden village model is a suitable source of inspiration for private communities.

Who should take the initiative for the realisation of the new garden villages?

Groups of future residents should take the initiative in the first instance. Groups of this kind should select a suitable location for their project, acquire the plot and hire an architect to design the desired plan. Eventually, the group would probably need to contract a developer or a housing association for expert advice or project management. Local authorities would also need to co-operate with (future) resident groups as much as possible with regards to the adaptation of the zoning plan and the granting of planning permission.

After construction, the group should maintain its relative autonomy. A process of negotiation between the resident group and the town authorities should be initiated to divide up responsibilities and secure financial compensation for maintenance work carried out by the residents that would otherwise be done by the town authorities.

This kind of arrangement resembles the administration model for autonomous groups that was so characteristic of Howard's original garden city model. At that time such arrangements were considered a

utopia, certainly on the relatively large scale proposed by Howard (32,000 inhabitants). A century later, this utopia could become a reality, although on a much smaller scale.