

## Title

**Restructuring Green Space in Low Income Urban Neighbourhoods**

## Short description

There were two green space interventions in Dutch low income urban neighbourhoods, one in Rotterdam and one in Breda. In both neighbourhoods, green space was restructured to improve the quality of the neighbourhood and increase the use of the green space. To make it as useful and accessible as possible, residents were involved in the design process.

In Rotterdam the intervention has been completed. Although satisfaction with the neighbourhood and with the targeted green space increases a bit, residents were not really satisfied with the restructuring in general. In addition, there were several elements in the process that could be improved. Eventually the intervention failed because the residents did not maintain the green space in the way the housing association (which owned the green space) wanted. Therefore it was partially reverted back into its original state.

In Breda, the restructuring is almost ready but unlike the outcome in Rotterdam, it seems to be promising. The process surrounding the redesign and interaction between the professionals and the residents seem to be satisfactory, and activities, partially organised by residents themselves, are already taking place. A baseline measurement was conducted, and RIVM, together with the municipality and others, have applied for a subsidy to fund follow-up measurements. While each project to restructure green space was initiated independently, they are best described together, since it is useful to compare the successes and failures of each iteration to find the best practices.

## Topic

Living/Green spaces: Improving availability, quality and use

## Characteristics (type, level)

Intervention, Local

## Country/Countries of implementation

The Netherlands

## Aims and Objectives

Restructuring green space to improve quality of the neighbourhood and increase the use of the green space

## Target Group

Residents living in neighbourhood with a low socio-economic status.

## Status

Ongoing (Breda) and finished (Rotterdam).

## Start and Completion dates

In Rotterdam, green space was restructured in 2011. After approx. 1.5 years it was changed back.

In Breda, the restructuring is almost finished, and the first organized activities in the restructured park have taken place.

### Lifestyle and Behavior Change

By creating a green space that meet the needs of the residents, it is expected that the green space would be used more for physical exercise, social contacts, and relaxation. Involving people in the design, maintenance and organization of activities in the green space may make people feeling more responsible for the green space and their neighbourhood and create social cohesion.

### Effects on:

<p><b>Health and Wellbeing</b></p>	<p>If the green space is used more for physical exercise, social contacts, and relaxation, it can improve physical and mental health.</p>
<p><b>Vulnerable populations</b></p>	<p>People of these low socio economic neighbourhoods were invited to be involved in the design, maintenance and organization of activities in the green space may make people feeling more responsible for the green space and their neighbourhood and create social cohesion.</p> <p>It was/is expected not only to improve their health and the quality and attractiveness of their neighbourhood, but also make them feel more responsible for the green space and their neighbourhood.</p>
<p><b>Environment</b></p>	<p>The direct environmental impacts were/are expected to be limited.</p>

### Initiated and/or implemented by

In both cases the municipality initiated the practice, to make the neighbourhood more attractive and increase the use of the green space.

### Stakeholders and sectors involved

In Rotterdam: welfare organization, housing association, municipality, neighbourhood professionals.

In Breda: municipality, together with neighbourhood professionals, housing association, municipal health services, sport coaches, residents' organization, and schools.

### Financial support

The municipalities.

### Evidence-base

From scientific literature we know that green space can have a positive effect on mental and physical health, since it may reduce stress, stimulate social contacts as well as physical exercise (particularly in children). There is some evidence that it can in particular be beneficial to lower socio-economic populations.

### Main activities

In both Rotterdam and Breda: restructuring of green space based on the desires of residents.

In Breda: several activities in the neighbourhood park, including sports activities and physical exercise related activities, organized for and with residents.

### Evaluation

Before and after the intervention:

- Questionnaire survey among residents
- In depth interviews with both professionals and residents
- Attending participation events on the restructuring of the green space.
- Observation of (activities in) the green space before and after the intervention.
- Process evaluation

In Rotterdam, the intervention study is finished. There, RIVM together with the municipal health services conducted a case control study.

In Breda, only the baseline measurement (before the intervention) has been conducted, and no control population has been included. RIVM together with the municipalities and other partners recently applied for subsidy for follow up measurements.

Indicators used in the questionnaire surveys among residents:

- Satisfaction with green space/neighbourhood
- Use green space (frequency + activities)
- Expectation of green space intervention
- Satisfaction with process
- Social contacts
- Physical activity
- Stress/relaxation
- Health and well-being
- Involvement with/attachment to neighbourhood
- Background characteristics

## Main results

### Rotterdam:

The evaluation study showed that the impact of the green space adaptation on health and well-being was limited one year after the intervention. Other problems in the neighbourhood (littering, maintenance, worries about new residents) had a larger effect on the residents' well-being. Furthermore, the intervention was smaller than initially expected and the use of the green space had hardly increased. Residents did not increase their physical exercise and did not increase their social contacts in the neighbourhood by using the green space for community activities. However, children did play more after the intervention and residents recreated more and were slightly more satisfied about the green space and maintenance. Less than 50% of the respondents think that green space near their homes influences their wellbeing. An important prerequisite for the restructuring of the green space was that residents would help to maintain the green space. Since this did not happen sufficiently according to the housing association, the green space was 'taken over' by the housing association and transformed back in the more original state.

### Breda:

The baseline measurement showed that the green space before the restructuring was hardly used. People were not really satisfied about it, in particular not about the opportunities to use it for the activities they would like to undertake there. 75% of the people expect that after the restructuring they will use it more often, in particular to meet people and going for a walk with the dog. At that moment no activities were planned as yet. 41% of the study participants was known with the restructuring plans, and 18% was actively involved.

## Key success factors and barriers

### Success factors:

#### Rotterdam:

Residents were satisfied with the new playground for children. Some of the residents were satisfied with the communication around the redesign (but others were not!). Project partners were happy about the knowledge sharing before the intervention, the cooperation between the project partners, and the involvement of residents at the start of the project, and the positive energy around the project at the start of the project.

#### Breda:

Before the intervention: the participation process related to the redesign and the communication about it was valued as fairly positive by the residents of the neighbourhood. Furthermore, professionals from both the social and physical domain worked together with residents already for some time. In addition, the process was guided by an external facilitator, and creative activities were undertaken to get insight into what residents wanted with regard to the green space. Last, activities were organised in the targeted green space for and with residents already before the restructuring took place, to get residents involved.

### Barriers:

#### Rotterdam:

Residents were negative about the green space intervention in itself. According to them there were larger problems related to the quality and maintenance of the dwellings and changing population constitution in the neighbourhood that needed to be tackled first. They were also negative about some of the changes that did not match with their ideas, and were

experienced as messy and dangerous. Contrary to the project partners they found that realising the restructuring lasted too long. The project partners were dissatisfied with the communication, and concluded that they had not used existing information about the neighbourhood sufficiently. Furthermore, they had not analysed problems and chances of the target area on forehand sufficiently. The involvement of residents could have been conducted better, and the cooperation with the housing association- the owner of the targeted green space- was difficult.

Breda:

No barriers as yet.

### INHERIT Perspective

In both interventions, green spaces were restructured with community involvement to increase the use and attractiveness. This may increase physical exercise, social contacts, and relaxation, and therefore improve health. Involving people the design and activities may create more responsibility for the green space and the neighbourhood and result in more social cohesion. Comparing the successes and failures of each intervention may prove useful for creating a model which can be used to provide the best outcomes, potentially leading to a triple-win.

### More information

Rotterdam:

Report 'Eindverslag Overschiese Groentjes Projectnet ZonMW 28 juni 2013'

<https://www.zonmw.nl/nl/onderzoek-resultaten/preventie/programmas/projectdetail/preventieprogramma-4/creating-healthy-green-space-in-practice-evaluation-of-apilot-project-in-a-low-ses-neighbourhood-i/verslagen/>

<http://www.ggdrotterdamrijnmond.nl/filmpjes/overschiese-groentjes.html>

Breda:

RIVM report describing the baseline measurement (to be finalized)

<http://www.greenandso.nl/project/39/>

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