

# Social sustainability through Community Land Trusts

*A qualitative study on the impact of a CLT on the social sustainability of a neighbourhood.*



B.C. Mulder - Master Thesis  
Delft University of Technology  
15<sup>th</sup> of June 2022

*In collaboration with*  
The Municipality of Amsterdam & And The People



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Master Thesis

15<sup>th</sup> of June 2022

Master of Science Architecture, Urbanism and Building Sciences, at Delft  
University of Technology, the Netherlands

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# Preface

With pride, I present to you my graduation thesis report. This report is the result of my graduation research in which I have studied the impact of the Community Land Trust (CLT) model on social sustainability at a neighbourhood scale. This is done by examining three distinct perspectives: through theory, through the eyes of organisations involved with CLT, and through the experiences of residents of a CLT. This research was conducted in partnership with the Municipality of Amsterdam and And The People and was conducted over the period from the beginning of September 2021 till the end of June 2022. With the completion of this research, I round off the master track *Management in the Built Environment* at the Faculty of Architecture and the Built Environment of the Delft University of Technology.

Due to the current scarcity in the housing market, other social issues are rising to the surface that will not be solved only by the addition of housing. Our built environment needs solutions that focus on people and the environment that they are living in. Findings such solutions have been the inspiration for this research. I have always had a personal interest in combating social issues within our built environment during my studies. During this research, I have gained more knowledge on the Community Land Trust model and its admirable aspirations within the real estate sector, but also the importance of social sustainability. While the concept is often talked about as an add-on to other dimensions of social sustainability, I believe social sustainability deserves more attention within our society and academics, as it is vital to a better built environment. Therefore, I believe that this graduation research is a step in the right direction.

This graduation process brought me much more opportunities than I could have ever anticipated, and this would not have been possible without all of the people that were involved. First, I would like to thank my supervisors Darinka Czischke and Céline Janssen from the Delft University of Technology for their advice, support and challenging questions during this complex process, which helped me continue and better my research along the way. In addition, I would like to thank Thieme Hennis from And The People for his guidance which brought many new insights to this research. I appreciate all your spent time and effort on this research. And I am thankful for the opportunities that our collaboration brought along that allowed me to bring this study to a higher level. Furthermore, my thanks go out to Richard Ruijtenbeek for his insights into social sustainability from a municipal perspective. Lastly, I would like to thank all of the participants from the European CLT network, especially CLTB for also their consultancy on the case selection for this study, and the participating residents and staff from the London CLT. Without your help and participation, this research would not have been possible. Your passion and enthusiasm for the CLT model are catching and have inspired me every step along the way. Keep up your amazing work!

Finally, on a personal note, I would also like to thank the incredible people in my life, of which first and foremost are my parents. My academic career would not have been possible without their loving support over the past seven years. I am thankful that they have given me this opportunity and allowed me to fulfil these ambitions at my own pace. Furthermore, I am also so very thankful for Tim, my boyfriend, who has been there for every celebratory and also every stressful moment during this graduation process. We both have come out of this year stronger. Lastly, my thanks go out to my brothers and best friends for all the happy moments in between studying that served as a great distraction at times. I love you all.

In the coming years, I look forward to applying the knowledge and experiences that I have gained during this graduation process in my career, through which I hope to contribute positively to our built environment.

I hope you enjoy reading this report and that it will offer you new perspectives on CLT and social sustainability!

Betsy Caroline Mulder

Rotterdam, 15<sup>th</sup> of June 2022

*“We all live somewhere, and a place to live allows us to connect with people, the wider community and natural environment.”*

Perkins & Thorns, 2012, p. 74



# Abstract

The Community Land Trust (CLT) model is regarded by some as a possible solution to the current issues that European housing markets are facing, such as unaffordability and segregation. As this model is able to provide perpetual affordable housing through collaboration between local residents, local authorities and civil experts, the statement could be made that this model develops and maintains housing that is centred around place community to a neighbourhood. This has brought up the idea that CLT might be able to booster social sustainability within this local context. However, the overall concept of social sustainability and the overall impact of the CLT model on social sustainability has both ben limitedly researched. Therefore, the aim of this study is to research the impact of the presence of a CLT on the social sustainability of a neighbourhood by answering the following main research question: *How does a CLT impact the social sustainability of a neighbourhood?* To answer this question, an operationalisation method based on the innovative Capabilities Approach has been constructed. This operationalisation tool was then deployed to gather information on the impact from a theoretical perspective through a literature review, from an organisational perspective through an expert panel with organisations from the European CLT network, and lastly from the residents' perspective through a single-case study of a representative case for the classic CLT model. Based on the theoretical and organisational perspectives, the conclusions were drawn that the CLT model has the potential to positively impact most if not all social sustainability capabilities, meaning that the CLT model is able to increase these capabilities for the residents of the CLT. This positive impact, although not as extensive, has also been observed in practice. From the residents' perspective it was gathered that the CLT model could positively influence the capabilities that have to do with the indicators of accessibility, housing, knowledge & skills, social network & interaction, safety & security, and sense of place, together with participation & democracy. The model is able to do so through implementing frameworks and resources, that could influence social and environmental conversion factors for the better. To be able to provide these frameworks and resources, however, the CLT organisation also needs to have the capability to do so through resources. However, there are limitations to the generalisability of the research findings. This study forms the beginning of a theory on the impact of the CLT model on social sustainability on a neighbourhood level, and further in-depth research is therefore the primary recommendation for future research.

## Key words

Community Land Trust, collaborative housing, social sustainability, sustainability, Capabilities Approach

# Executive summary

## Introduction

In housing markets throughout Western Europe, a dissociation between the monetary value of housing and the social value that housing carries is presenting itself. This has resulted in a scarcity of housing, which is seriously driving up housing prices to a point where more vulnerable households are not able to find adequate housing, pushing other social issues in the housing sector to the surface, such as unequal opportunities and urban segregation. This deepening of social and spatial divides and inequality, together with not meeting the basic human need of housing, results in an urban built environment that is currently socially unsustainable.

Housing development practices are in need of a change to combat these issues and work towards a sustainable urban built environment. Scholars argue that these changes should be in favour of citizens and their fundamental right to decent housing and that these solutions should not only focus on the provision of housing but also on people (community) and the environment (place), to create solutions that not only foster a sustainable built environment but also a sustainable living environment.

One solution that some regard as a viable approach is the collaborative housing model called a Community Land Trust. This model can be deployed for the provision of housing and other facilities. However, what is distinctive about the CLT is that it rejects the market-oriented approach and deliberately chooses to fight speculation within the housing market. Consequently, CLTs are able to provide perpetually affordable housing and have risen in interest in Europe in light of the current unaffordability crisis surrounding housing. Currently, there are new initiatives starting all around the continent, for instance in Germany, Belgium, France, Spain and The Netherlands.

However, besides affordable housing, the model is also able to provide a focus on the community and neighbourhood through resident involvement and stewardship, making it seem like a comprehensive approach to housing provision that also works towards a sustainable living environment by being a booster for social sustainability. Only, it has as of yet to be determined how the workings of the CLT exactly impact the many-sided concept of social sustainability in existing CLT in Europe and what future CLTs can take away from this for their own development and operations. This leaves an opportunity for this study to investigate this phenomenon, which is why the following main research question has been generated: *How does a CLT impact the social sustainability of a neighbourhood?*

## Methodology

To answer this main research question, six research sub-questions have been set up that were answered by deploying an array of theoretical and empirical research methods over three different research phases. The questions, phases and applied methods are depicted in figure I.

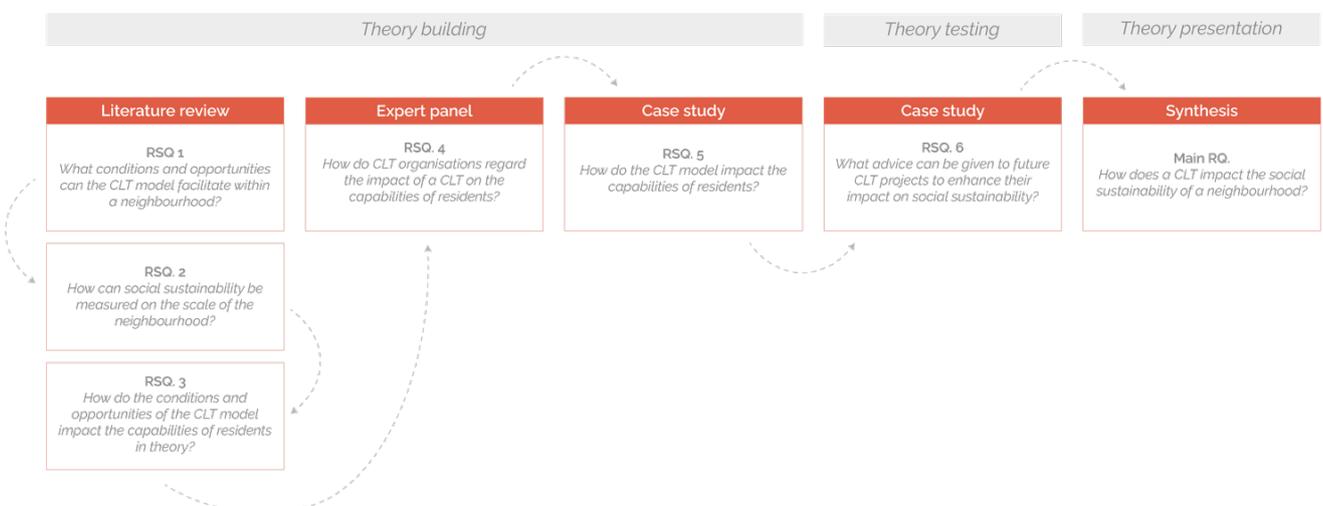


Figure I. Overview of research methods and techniques per research sub-question (Own image).

### *Theory building*

In the theory-building phase, three questions five out of the six research sub-questions are answered. The first three with the deployment of a systematic, rapid literature review of the bodies of literature on social sustainability and collaborative housing and in particular the CLT model. With the fourth research question, the empirical research commences. This question is answered through an expert panel with 15 participants from 11 different organisations that are involved within the European CLT network. During the focus group, the data was collected through a plenary discussion and the filling in of a logic model with post-it notes. The last question of this phase focuses on the residents of a CLT and is therefore answered through a single-case study of the London CLT at their St Clements site in East London. Six semi-structured interviews were conducted to gather the data, of which five were with residents of the CLT and one with a non-CLT resident. The data was analysed using the Grounded Theory Method.

### *Theory testing*

In the theory testing phase, the sixth research sub-question is answered to gain insights into how the outcomes of the single-case study could be applied in different contexts. This is researched with another single-case study, this time of the CLT H-Buurt in the Bijlmer neighbourhood of Amsterdam, the Netherlands. The first CLT project in the Netherlands is still in development. The data is collected through an interview and a focus group with three organisations that are involved with the project and analysed using the Grounded Theory Method.

### *Theory presentation*

In the last phase of the research, the outcomes from the research sub-questions come together to form a comprehensive theory on the impact of the CLT model on social sustainability and thus give an answer to the main research question.

## *Findings*

By deploying the research methods and techniques explained above, the following findings have been identified per research sub-question.

### *1. What conditions and opportunities can the CLT model facilitate within a neighbourhood?*

By analysing the origins of the CLT model, the four main characteristics of dual ownership, perpetual affordability, tripartite governance model and stewardship, the development process of the model, and by comparing this collaborative housing model to others within the same category, the following conditions and opportunities of the CLT model have been identified.

The conditions are the tools that are almost certainly deployed when the classic model is applied within a neighbourhood within Europe. They are as follows:



Development and maintenance of affordable housing

A Community Land Trust is first and foremost a model for the provision of housing. Through the establishment of a CLT within a neighbourhood, perpetually affordable housing is added to the housing stock of the said neighbourhood. The number of units that are realised, depends on the objectives and organisation of the CLT.



Citizen participation in housing development and management

Due to the characteristic tripartite organisational set-up of the CLT model, citizens work directly with local authorities and civil experts on their housing provisions during each phase of the project. This provides the opportunity for residents to have influence over their own housing projects.



Agreements between authorities and citizens

In European countries where the model has been introduced, CLTs have also gained legal recognition as a model for the provision of housing. This means that the CLT also operates within a neighbourhood as a legal entity. This enables the citizens and local authorities to make binding agreements regarding the CLT, setting a precedent that the agreements shall be met and providing security for the future. The form of a legal entity, however, does vary per context.



Security for future generations

The CLT organisation secures each condition and opportunity that they set out to realise within a neighbourhood, in perpetuity through their legal status. This means that not only do the current generations reap the added value of the CLT but these are also ensured for generations to come.

The opportunities are not as guaranteed as the conditions listed above but could be facilitated in a neighbourhood by a CLT when the organisations decide to do so. The following had been identified:



Development and maintenance of affordable (social) facilities

While a CLT is primarily a model for the provision of housing, it does not have to limit itself to this: Other facilities that are vital to social life within a neighbourhood, such as healthcare facilities or spaces for local businesses, can be offered in an affordable manner through the CLT model, retaining these vital functions within a neighbourhood.



Constant dialogue between residents and local authorities

This involvement of residents in an organisation with the local authorities also opens up the opportunity for both parties to be in constant dialogue with each other as the distance between citizens and authority is shortened. The topics of dialogue do not have to limit themselves to the housing that is provided but can also hit on pressing issues or needs within the wider neighbourhood. This way, citizens are able to express their concerns about their local environment better and faster, and local authorities are more up-to-date on the concerns and needs of their city.



Wide community empowerment and inclusion

It is due to the resident participation in the provision of housing, but also the resident betterment initiatives, that CLT can set out to empower their community. These efforts do not have to be limited to the members of the CLT but can be offered to the wider neighbourhood, spreading the benefits of community empowerment outwards.



Diversity within the neighbourhood

By providing affordable housing and other facilities, CLTs are able to diversify a neighbourhood, not only in its housing stock but also in the socio-economic groups that are represented within a neighbourhood.

In neighbourhoods that are exposed to gentrification or spatial segregation, CLT can offer a way to the retainment and representation of certain socio-economic groups that would otherwise be forced out due to displacement.

## 2. How can social sustainability be measured on the scale of the neighbourhood?

On a neighbourhood level, the concept of social sustainability encompasses the extent to which a neighbourhood provides the needed environmental resources and supports the social functioning and health of a community while adhering to the societal precondition of equity.

To operationalise the concept, three key principles that form the foundation of social sustainability have been identified: 1) Equity (blue), 2) Place (green) and 3) Community (red), each consisting of corresponding indicators that are pictured in figure II. Equity encompasses the social precondition of inclusion and accessibility, while Place focuses on the tangible and intangible elements a neighbourhood should provide. Lastly, Community encompasses the social functionings of people within a group.

To be able to translate the key principles and indicators into measurements that can determine the impact of the CLT on the residents, the Capabilities Approach is applied to have a tool of measurement that is more human-centred: This approach focuses on the opportunities and functionings of humans as the output of the built environment, while conventional measurement tools often put resources as the main output of the built environment. The application of the CA resulted in two capability sets, each depicted in figure III.

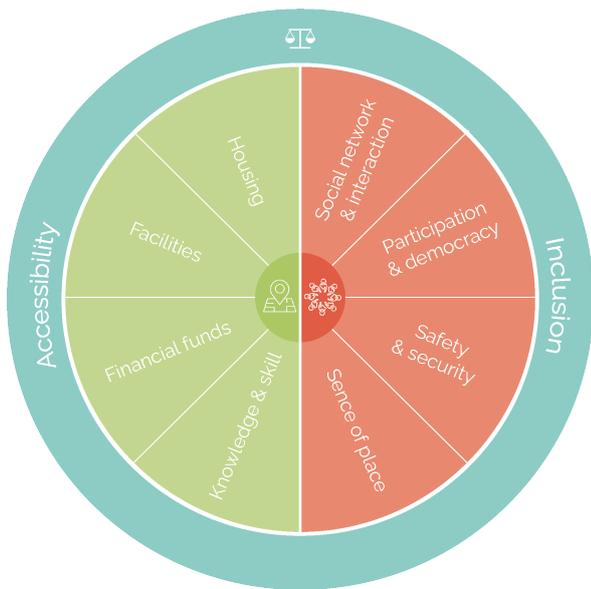


Figure II. Summation of the key principles and corresponding indicators of social sustainability within the circular workings of social sustainability (Own image).

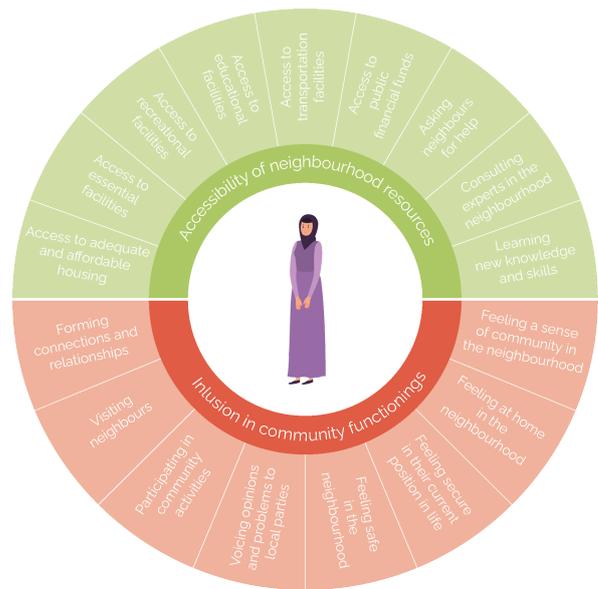


Figure III. Overview of the capability sets that have been used as the measures in the operationalisation of

The capability set of accessibility of neighbourhood resources combines the indicator of accessibility from the key principle of *Equity* with the indicators from the key principle of *Neighbourhood*. The other set, inclusion in community functionings, combines the indicator of inclusion from the key principle of *Equity* with the indicators from the key principle of *Community*.

To determine the impact of the CLT model on social sustainability, for each capability depicted in the outer ring of figure III, the level of impact is assessed by reviewing if a capability increased (positive impact), stayed the same (neutral impact) or decreased (negative impact), in addition to the manner of impact, which is assessed using the CA approach. The CA approach states that a capability can be influenced either by a change in resource or a change in conversion factors. These are also monitored when collecting the data.

### 3. How do the conditions and opportunities of the CLT model impact the capabilities of residents in theory?

To answer the third research sub-question, the answers from the first and second research sub-questions are combined, and existing literature on the impact of collaborative housing practices on social sustainability was reviewed.

What can be concluded from this analysis is that the CLT model is able to influence the capabilities of residents that have to do with social sustainability in both manners: through certain conditions and opportunities, the model is able to provide resources: housing, essential and recreational facilities, and events. And according to the literature, the CLT model is also able to put social and institutional conversion factors into place that have the possibility of increasing certain capabilities of the residents. However, when it comes to the opportunity of bringing diversity to neighbourhoods, there are social conversion factors that could negatively affect the capabilities of social network & interaction. So, the impact of this opportunity is not easily determined. These findings have been brought together in a graph, figure IV, from which can be concluded that the CLT model could bring about a lot of positive impacts on the lives of residents. However, there are capabilities for which the CLT can provide little resources or offer conversion factors according to literature, such as the accessibility of educational facilities, transportation facilities, and financial funds.

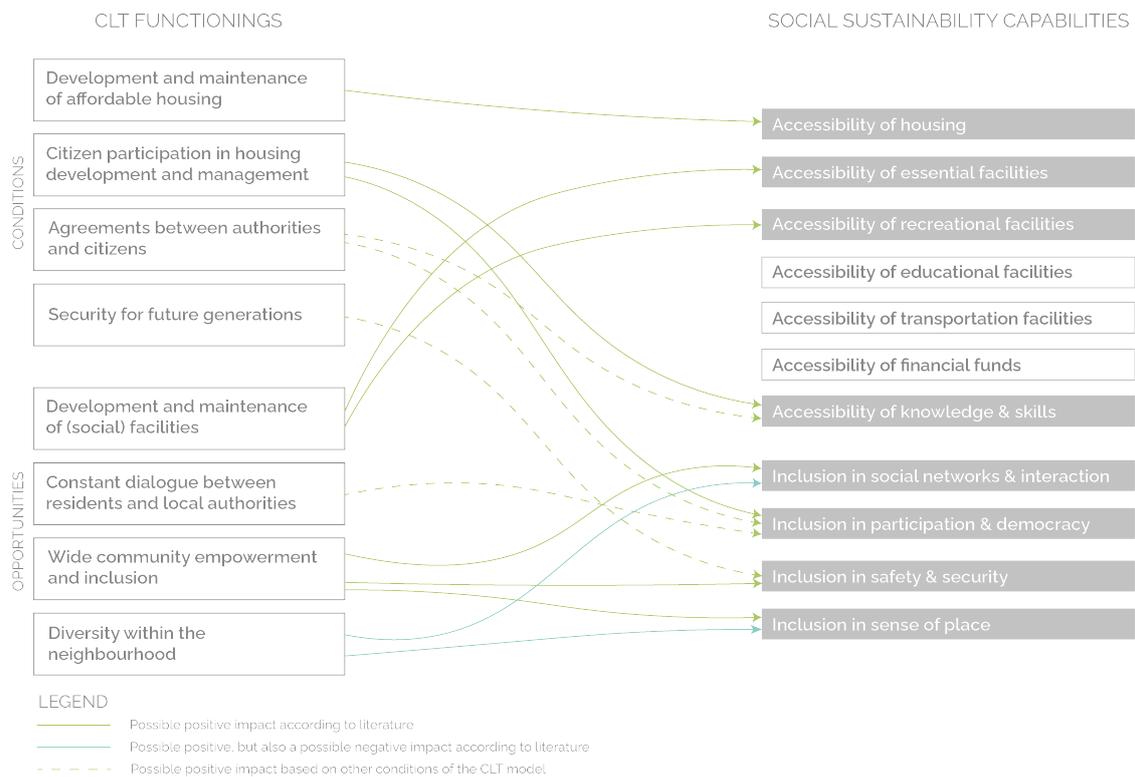


Figure IV. Overview of the expected level of impact of the CLT model on the different capability sets of social sustainability according to theoretical research (Own image)

#### 4. How do CLT organisations regard the impact of a CLT on the capabilities of residents?

The answer to the fourth research sub-question is that the CLT organisation expect their projects have a positive impact on social sustainability as they work on building a community within their project through their objectives for the organisation and the specific projects. They regard this as one of the added values that CLT projects can bring to local areas, and use this to try to generate more awareness of the CLT model and gather additional funding. According to some of the participating organisations, the positive impact can extend to each capability depicted in figure III. This positive impact is generated through the addition of resources in the form of recreational facilities, financial funds, and knowledge and skill, and through the changing of social, environmental and institutional conversion factors for the better.

#### 5. How does the CLT model impact the capabilities of residents?

From these experiences of the LCLT residents, it could be concluded that, overall, most of their social sustainability had increased since moving into the project, as shown in table I. The most significant increases were found in the capabilities of accessibility of housing, the accessibility of local knowledge by asking for help, and the ability to make connections and form relationships. Also, compelling evidence was found that the capabilities that had to do with safety and security, and the sense of community had increased since moving to the CLT site. The LCLT did so by changing conversion factors in compliance with the allocation policy, choosing home ownership as the tenure model, and adding the resources of affordable, adequate housing, and events. From the interviews with the residents, no negative impact of the London CLT on the social sustainability capabilities had been identified.

However, the extent of the positive impact of the London CLT is still hard to express in definitive terms. From the in-depth analysis, it can be concluded that there are also other significant conversion factors and resources that could have an increasing effect on these capabilities, such as the urban and building design when it comes to feeling safe, and the impact of online communication tools on the ability to make connections and ask neighbours for help.

The effect of other conversion factors and resources being significant for social sustainability was also confirmed by interviewing a non-CLT resident. From the interview, it could be gathered that this participant was also capable of performing the social sustainability capabilities within the Mile End neighbourhood, despite living within the CLT. The conclusion could be drawn, that the CLT residents might not have to rely on the London CLT to fulfil the capabilities, but

that the CLT could make it *easier* to fulfil these capabilities. However, as the data from this control group was not as extensive as from the CLT group, this conclusion cannot be made definitively.

Table I. Overview of the change in the capabilities of the CLT residents of their current living situation in the CLT compared to their previous living situation. The change could be an increase (↑), a decrease in capability (↓), or the capability has stayed the same (—) (Own table).

CAPABILITY	PARTICIPANTS				
	A	B	C	E	F
I am able to live in an adequate house I can afford.	↑	↑	↑	↑	↑
I am able to access and make use of the essential facilities that are present in my neighbourhood.	↑	—	—		
I am able to access and make use of the recreational facilities that are present in my neighbourhood.	↑	—	—		
I am able to access and make use of the educational facilities that are present in my neighbourhood.	↑	↑	—		
I am able to access and make use of the transportation facilities that are present in my neighbourhood.	↑	—	↑		
I am able to access the public financial funds that are available for me or my neighbourhood.	—	—	↓		
I am able to ask my neighbours or others in my neighbourhood for help.	↑	↑	↑	↑	↑
I am able to consult experts in my neighbourhood when I have a need to.	—	—			
I am able to learn new knowledge and skills in my neighbourhood.	—	—	↑		↑
I am able to make connections and form relationships with my neighbours.	↑	↑		↑	↑
I am able to visit my neighbours.		—	—	↑	↑
I am able to participate in community activities in my neighbourhood when desired.		—	—	↑	↑
I am able to voice my opinions and problems to local authorities.	↑	—	—	↑	—
I am able to feel safe in my neighbourhood.	—	—	↑	↑	↑
I am able to feel secure within my current position in life.	—	↑		↑	↑
I am able to feel at home in the neighbourhood.		—	—		
I am able to feel a sense of community in the neighbourhood.		↑	↑	↑	

#### 6. *What advice can be given to future CLT projects to enhance their impact on social sustainability?*

*What advice can be given to future CLT projects to enhance their positive impact on social sustainability?* The first step in answering this question was to research a method through which this transference of CLT practices between contexts could be realised. For this, inspiration was taken from the scientific literature on a phenomenon called policy transfer, which is a science that focuses on transferring policy from one context to the other and has been a common practice for years. The following method had been developed based on Rose (1993, in Page, 2000, p. 9):

##### 1. Search for one or multiple sources of lessons

The first step encompasses the context that wants to learn lessons for a certain policy or practice. This step entails the search for an applicable context or contexts from which valuable lessons could possibly be drawn from.

##### 2. Make a model of how the policy or practice works in situ

The next step is to methodically analyse how the policy or practice that is desired to be transferred, operates within the context that it is currently placed in. As Dolowitz and Marsh mention, within policy transfer, the transferability is dependent on the institutional, cultural and economic context, and the complexity of the model itself (2002). These elements should therefore be mapped out in an analysis before moving on to the next step.

##### 3. Create a lesson

The next step is to create the lesson. This means that it should be assessed what elements from the policy or practice that is to be transferred, could produce valuable results in the context that it is transferred to.

##### 4. Prospective evaluation

The last step is then to perform a prospective evaluation in which the lesson that is created in step 3 is evaluated. As Page mentions, lesson drawing is about comparing the conditions of one context to the other, and evaluating how differences could be bridged. For the conditions, he has determined three categories of variables: objectives of the practice, the design variables of the practice, and wider societal variables. During the prospective evaluation, it analysed how the practice or

policy is going to work in the context that is transferred to, and if adaptations would need to be made due to differences in the three categories of variables (2000).

Steps 1 and 2 had already been executed by answering the fifth research sub-question. Therefore, the lesson drawing commenced with step 3. The lessons that had been drawn up consisted of three recommendations that were based on the lessons from the London CLT and the needs of the Bijlmer neighbourhood were discussed in a focus group set-up.

1. Allocation policy: The allocation policy for the homes of the CLT H-Buurt should contain criteria that are focused on connection and participation, just like the allocation policy of the London CLT, to ensure that the people that are allocated a CLT home share the same values that benefit the CLT.
2. Housing ownership: The homes that the CLT H-Buurt will offer to future residents, should be owner-occupied homes to facilitate a feeling of responsibility and in turn, could increase the feeling of feeling at home in the neighbourhood.
3. Facilitating connection: Both before and after the residents have moved into the homes, the CLT H-Buurt must actively commit itself to facilitating and strengthening the connection between residents.

What could be concluded from this session, is that transference of lessons between the London and the Amsterdam context could be possible. For the first and third recommendations, the participants of the focus group were relatively positive that it could work within the Amsterdam project. However, seeing the objectives of the project and contextual differences (culture, local policy, personal conversion factors of the residents etc.), changes would have to be made to have the recommendations fit in the CLT H-Buurt project. This was to be expected. However, sometimes the differences are too great to be bridged, which was the case with the recommendation regarding housing ownership due to the personal conversion factors of the CLT H-Buurt residents. In this case, there is the need to look for different options that could produce the same or even better result in the CLT H-Buurt case. However, it is due to the changes to the recommendations that have to be made, and the contextual differences in general, that it is difficult to predict if a similar or even more positive impact is possible when implementing them.

## *Conclusion*

Altogether, the concluding statement can be made that the CLT model is able to play a significant role in the experience of the social sustainability of the neighbourhood by CLT residents, and it is able to do so by providing resources and setting frameworks into place that can create an environment where CLT residents are able to turn their capabilities into achieved urban functionings. The frameworks consist of institutional conversion factors, such as the allocation policy and tenure model, and the resources can be housing but are sometimes also recreational or essential. These frameworks and resources could then enable other social or environmental conversion factors that enable the resident's capabilities.

However, other contextual factors such as personal conversion factors also play an important role in social sustainability and should not be overlooked. It is therefore difficult to determine the impact of the CLT frameworks and resources within each separate context.

With this elaboration, an answer is given to the main research question: How does a CLT impact the social sustainability of a neighbourhood? And a start has been made in the development of the theory on the impact of CLTs on the social sustainability of neighbourhoods. This theory adds to the body of knowledge on social sustainability by developing a definition of the concept and operationalisation method that applies the Capabilities Approach. The attention that this study sheds on social sustainability is needed, as this pillar of sustainability has been underdeveloped in comparison to the other pillars but should be regarded as integral to the overarching concept. In addition, the theory adds to the body of knowledge on European CLT, an emerging topic within academic literature as the movement is still in the early stages, but it is growing in popularity. By bringing attention to the potential of the model, the diversification of the housing markets in Europe could be stimulated. All with the aim to come to a built environment that supports sustainable cities and communities.

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# Glossary

## List of essential definitions

Capability	The substantive freedoms that an individual (a person) has to execute a functioning (Janssen, Daamen & Verdaas, 2019).
Capabilities Approach	The Capabilities Approach is a conceptual framework that can be deployed in the evaluation and assessment of individual well-being (2017, p. 26). Within this framework, one questions if a person is able to achieve what a person wants to achieve to attain their well-being (Evenhuis et al., 2020).
Collaborative housing	Collaborative housing projects are projects for the provision of housing that are set up through a bottom-up initiative by collectives of people that "share certain values and motivations regarding their way of life, which guide the project from the beginning, shaping a common vision of their housing project" (Czischke, 2019, p. 42).
Community	A community is a group of people that is bound by social relationships, such as shared interests, cultures, or characteristics, as well as environmental proximity, meaning that they have a sense of belonging within an environment (Stevenson, 2021). This study considers the neighbourhood as the environment.
Community Land Trust	A type of collaborative housing model of which the objective is to provide perpetually affordable housing through the separation of ownership between land and dwelling and by fighting speculation in resale prices, all while also putting efforts into benefitting the local community (Paterson & Dunn, 2009).
Conversion factor	Conversion factors relate to the ability of an individual "to convert the available resources into functionings" (Robeyns, 2017, p. 45). They represent how much functioning a person can get out of a resource based on personal, social, environmental and institutional factors.
Environmental conversion factor	Factors that are determined by the physical and built environment in which an individual lives, such as climate, and air pollution (Robeyns, 2017).
Functioning	The doings and beings of a human being (Janssen, Daamen & Verdaas, 2019). Each functioning corresponds with one capability (Robeyns, 2017).
Institutional conversion factor	Factors stemming from the institutions that are present in society, such as public policies or laws.
Neighbourhood	A neighbourhood is "an area in a city with connected areas of blocks of buildings (Dixon, 2019, p. 22).
Personal conversion factor	Factors that are internal to the person, such as sex or physical condition (Robeyns, 2017).
Resource	The means that one can utilize to enlarge people's capabilities (Janssen et al., 2019). Within the CA resources have an instrumental valuation (Robeyns, 2017, p. 27).
Social conversion factor	Factors that are formed by the society in which an individual lives, such as social norms or power relations related to class, gender and race (Robeyns, 2017).
Social sustainability	As defined by the main researcher of this study: Social sustainability describes the extent to which a neighbourhood provides the needed environmental resources and supports the social functioning and health of a community while safeguarding the preconditions of social equity. It can be qualified as a coming together of environmental and social aspects that open up the capabilities of all its residents, now and in the future.

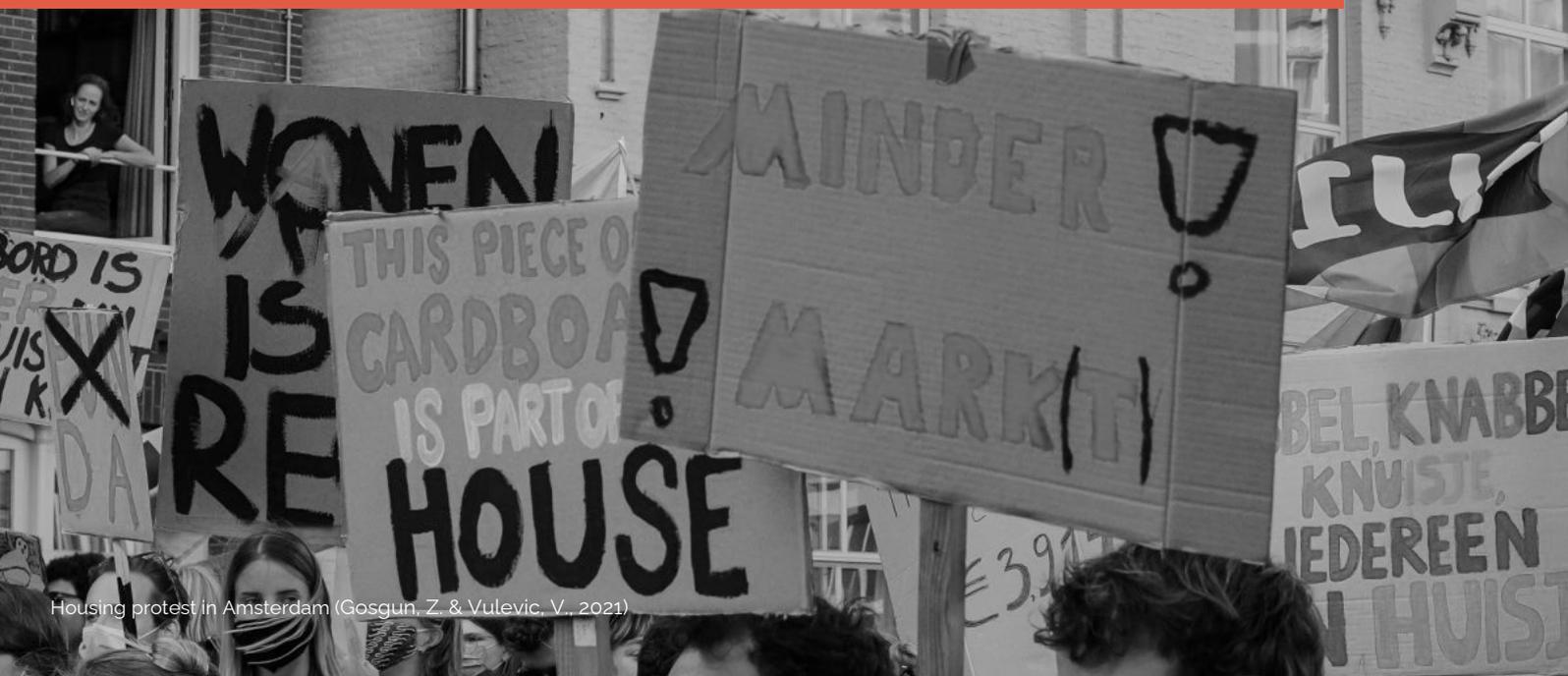
## List of abbreviations

CA	Capabilities Approach
CH	Collaborative housing
CLT	Community Land Trust
CLTB	Community Land Trust Brussel
DMP	Data Management Plan
GTM	Grounded Theory Method
LCLT	London Community Land Trust
SIA	Social Impact Assessment
UN	United Nations



# 1. Introduction

In this first chapter, the introduction of this master thesis report is given. This introduction elaborates on the motivations for this study. It starts with a portrayal of the research context, after which the research problem and questions are stated. The research problem is followed up with the relevance of this study within a broader research context. A reading guide for the remainder of the thesis report closes the chapter.



## 1.1 Research context

To accurately frame the research problem of this study, this report commences by contextualizing the current issues in the housing markets within Europe.

### 1.1.1 Housing issues in Europe

On September 12th 2021 one of the first housing protests of the year took place in the Netherlands. Thousands of people took to the streets to demand radical improvement of the current housing policies that are upheld by the Dutch government (NOS, 2021; Het Woonprotest, n.d.). Dutch citizens are worried about own future and opportunities on the housing market. And their uproar seems valid: The Dutch housing market is showing clear signs of overheating in 2019 (Nijskens & Lohuis, 2019, p. 25). To affirm this statement, in 2021 the Dutch housing market came to the highest price increase for owner-occupied housing in nearly twenty years (CBS, 2021). Scarcity of housing, especially in urban areas, can be seen as one of the main drivers of this overheating (Nijskens and Lohuis, 2019, p. 25).

However, Dutch citizens are not the only ones afflicted. According to a report on European housing policies, most European countries are facing serious price increases in the rental and owner-occupied sectors at the moment (Krapp et al., 2020). This is leading to a deterioration of housing affordability, especially in urban areas, where despite efforts with new construction, the imbalance between supply and demand is growing (FMDV, 2018). This crisis has been growing largely due to the market-oriented approach by the European Union that favours the commodification and financialization of housing (Delclós & Vidal, 2021). This process has led to a greater influence of private stakeholders on the housing sector, which prioritize financial margins over affordability (Czischke & Van Bortel, 2018).

There is a dissociation present in the housing sector between the monetary value of housing and the social value it carries (FMDV, 2018). A significant consequence of this shift is that other social issues are also pushed to the surface:

To start, the housing crisis is supporting the growing wealth inequality in societies. The high prices do not affect each socio-economic group equally. As mentioned by Hochstenbach & Arundel, a house is often the most significant wealth holding for a household. When a household already has a dwelling in ownership, they currently can benefit from the rising housing prices and strengthen their financial position. However, for households that have less to spend and or that want to enter the housing market, such as lower and middle-income households, the rising prices are restricting their access to homeownership (Hochstenbach & Arundel, 2019), leaving them struggling to find adequate housing (Het Ministerie van Binnenlandse Zaken en Koninkrijksrelaties, 2021). The current mechanisms of the housing market are inducing substantial inequality between socioeconomic groups (Ridder, Josten, Boelhouwer & Van Campen, 2020). And research has shown that this divide in housing wealth can overlap or even reinforce other inequalities within society, such as class or racial divides (Hochstenbach & Arundel, 2019).

In addition, this divide in society also extends into the spatial realm, as spatial segregation is increasing. Due to the rising monetary housing values, attractive neighbourhoods are becoming inaccessible to certain income groups, causing a growth in the concentration of lower-income households in “poor neighbourhoods”. Consequently, these poorer neighbourhoods are deemed less and less desirable by higher income groups, ending in a spatial division between socio-economic groups (Boelhouwer, 2020). This division, however, can have dire consequences for the residents of the poor neighbourhoods. Research has shown social connections can play key roles in individual and collective prosperity. However, physical and administrative boundaries can limit the creation of social connections, as people are more likely to make connections with other people that are close to them (Tóth et al., 2021).

Even though these social processes take time to foster as residential turnover is usually quite slow in neighbourhoods, the ongoing polarization within the housing market has been proven to be structural and pervasive in a market of housing commodification and centrality of property wealth (Hochstenbach & Arundel, 2019). Therefore, it can have lasting detrimental effects on society, deepening social and spatial divides and fostering inequality.

### 1.1.2 Social sustainability

Sustainability has been a topic in housing since the birth of the concept of sustainable development in the 1980s. Defined by the United Nations, sustainable development can be described as development that “meets the needs of the present without compromising the ability of future generations to meet their own needs” (World Commission on Environment and Development, 1987, p. 16). It is typically depicted using the three-pillar model (Griessler & Littig, 2005). This model states

that development should meet environmental, economic and social goals in equal measures. Ultimately, the objective of these goals together is to secure the persistence of ecological environments and human societies around the world.

However, in the passing since the conception of the three-pillar model, social sustainability has been the least researched dimension of the three (Shirazi & Keivani, 2017), all while it is deemed as an integral part of sustainability (Shirazi & Keivani, 2019) as it ultimately concerns the well-being and health of humans. As Griessler and Littig said: social sustainability reflects the quality of societies (2005). In sociological theory, social sustainability is achieved when:

1. people within a society can satisfy themselves within an extended set of human needs, while:
2. the institutional arrangements between people safeguard the requirements of social justice, human dignity, and participation together with nature and its reproductive capabilities (Griessler & Littig, 2005, p. 11).

When correlating the issues of the European housing market with the two conditions of social sustainability, it can be assumed that these issues threaten the social sustainability of European communities. For instance, the basic human need for housing cannot be met for some groups of people as they cannot find adequate housing, and the growing inequality is not in line with the notion of social justice.

## 1.2 Problem analysis

There is a consensus on the fact that the European housing market cannot continue as is, and that there is a need to move toward housing development practices that foster sustainable cities with adequate housing and living environments. However, discussion remains on what the right approach to take is.

### 1.2.1 The top-down approach

The European Union and participating countries have set out to create policies for sustainable housing that try to foster environmental sustainability and inclusivity within the built environment by focussing on regulations and better funding (Housing Europe, 2021). However, scholars are sceptical of the approach taken by the EU: The emphasis is largely on funding (Delclós & Vidal, 2021), and in particular on the funding of environmental sustainability within the housing sector, leaving less budget for the provision of genuinely affordable housing (Delclós & Vidal, 2019). In addition, the rise in monetary housing value as a consequence of climate-neutral interventions within dwellings is also often not taken into account in the plans, all while this could have the adverse effect of worsening the unaffordability of housing (Delclós & Vidal, 2019).

And on a smaller, more local scale, such as a regional scale within EU countries, the discussed social issues come to the forefront alongside affordability, which also require attention in housing solutions. Generally, public parties represent these societal interests within housing developments, trying to mitigate such issues, while private parties regularly direct their focus solely on the commercial value of housing. With the current shift toward a more network-oriented relationship between public and private stakeholders within housing development (Heurkens, 2018), stakeholders are experiencing difficulties around safeguarding interventions that try to improve or offset negative effects on social sustainability. Private parties oftentimes regard social interventions as an expense, as they cannot easily be expressed in monetary value (Heurkens & Buskens, 2016). This was also affirmed in an article by Janssen (2020):

*"Nevertheless, it remains difficult in area development projects to justify investments in 'social sustainability' and to express the added social value."*

The conclusion of the large monetary focus on the European as well as the regional level is in line with findings by Jarvis. He states that solutions that are often proposed in combatting housing issues are too fragmented. The solutions only focus on housing as an asset. They do not take into account that housing is also about the place (local environment) and the community present in said place (2015). Comprehensive housing solutions are needed.

## 1.2.2 The bottom-up approach

However, not only are governmental bodies taking action, but the above-elucidated housing crisis has also led to people taking matters into their own hands. One of the ways they do this is through the (re)-emergence of collaborative housing initiatives in Europe (Czischke, 2019). And one of the initiatives that falls under this umbrella term for a wide variety of collective self-organized forms of housing (2018), could propose itself as one of the comprehensive housing solutions that urban areas around Europe are looking for.

### 1.2.2.1 Collaborative housing

To introduce the topic, collaborative housing projects are projects for the provision of housing that are set up through a bottom-up initiative by collectives of people that “share certain values and motivations regarding their way of life, which guide the project from the beginning, shaping a common vision of their housing project” (Czischke, 2019, p. 42). This leads to a high degree of user participation, reciprocal relationships, mutual aid and different forms of crowd financing and governance, which also defines some of the values that CH projects foster (Czischke, 2018, p. 56). The motivations for starting a CH project vary. Among these motivations are political expression, alternative lifestyles, environmental awareness and post-capitalism (Lang, Carriou & Czischke, 2020). These variations in motivations have led to collaborative housing taking on different forms, which can also even differ per country as of the differences in context, such as legislation. Due to the differing forms, CH projects can also cater to a variety of socio-demographic groups, such as middle-income households or the elderly (Lang, Carriou & Czischke, 2020).

### 1.2.2.2 Community Land Trust

In recent years, CH projects with a strong motivation for providing affordable housing have emerged around Europe. These kinds of collaborative housing models try to offset the financialization of property (Thompson, 2020), which has been identified as one of the causes of the current housing crisis in the foregoing paragraphs. One model, in particular, is gaining popularity in Europe: The Community Land Trust model. The objective of this model is to provide perpetually affordable housing through the separation of ownership between land and dwelling and by fighting speculation in resale prices, all while also putting efforts into benefitting the local community (Paterson & Dunn, 2009).

The CLT is created and governed by a non-profit, democratic organisation that is controlled by residents, local authorities and civil society (Dawance et al., 2019). This organisation acquires, owns and controls one or multiple plots of land to develop dwellings on (Paterson & Dunn, 2009). Through this set-up, the organisation can control housing prices and fight speculation during the resale, while the target population is able to buy or rent an affordable and adequate dwelling. The target population of a CLT is often the community that faces the most hardships in the current housing market, such as the lower and middle-income households (Lowe & Thaden, 2015).

Besides living within a CLT, the members are also often strongly involved with the CLT. The organisation lays a strong focus on involving the community, setting out to empower them in societal matters (Dawance, 2019). What sets the CLT model apart from the other CH models is the emphasis on perpetual affordability together with the engagement of and with residents.

## 1.2.3 CLT as a comprehensive housing solution

The current options for housing solutions provided by governmental bodies aim at tackling affordability and social issues, but as explained these are not regarded as comprehensive or are hard to solidify in practice. Delclós and Vidal, therefore, argue that the fundamental shift should be made towards housing practices that are “in favour of citizens and their fundamental right to decent housing” (2021, p. 336). Approaches for the provision of housing should also take the place and community into account. And some argue that the CLT model could be one of the comprehensive approaches that the urban housing markets are looking for (Interreg NWE SHICC, 2020a). Through their organisational setup, CLTs are able to work with local actors on affordable housing, which fits with the recommendation of Delclós and Vidal to create locally tailored housing strategies. The organisational structure also provides formal channels of participation of citizens, which is also seen as a need to improve the housing sector by Delclós and Vidal (2019). The characteristics of the provision of perpetually affordable housing in light of the affordable housing crisis are timely, and when adding the characteristic of community involvement, a CLT has the potential to supply genuinely affordable housing to European communities, while also possibly boosting social sustainability on a local scale. Introducing such a project to a local area, therefore, could be a way of providing housing that is also centred around place and community.

### 1.3 Research problem and objectives

The CLT model is seen by some as one of the possible answers to issues of unaffordability, inequality and segregation that are currently at play within the housing markets in Europe, and even has been speculated to be a booster for social sustainability on a local level through its characteristics (Janssen, 2021). That a CLT is positively associated with social sustainability is a probable assumption, as it is in line with findings by Lang that suggest that collaborative housing models could offer a more bottom-up solution to strengthen elements of social sustainability in the urban context of communities and neighbourhoods (2019). However, his research limited itself to two aspects of the concept of social sustainability. And despite social sustainability being an urgent topic within discussions of European housing practice, the overall topic within CLT, in particular, has been evaluated to be limitedly researched. Lang himself also suggests that the field could benefit from more research (2019). He mentions that collaborative housing projects are inherently place-based. It has of yet been determined how the workings of the CLT model impact the many-sided concept of social sustainability when looking at it on a neighbourhood scale, and if this impact is context-specific due to the place-based nature of CLT practices, or if this impact is inherent to the model. This leaves an opportunity for this study to research this phenomenon and to fill this gap in scientific literature.

Therefore, this study aims to research the impact of the presence of a CLT on the social sustainability of a neighbourhood. The broader reasoning for this is to see if besides the CLT model is a viable option for providing affordable housing, it could also add other values, such as social values, to a neighbourhood and can rightfully be seen as an all-round way of housing provision that also takes the place and community into account. If it does, the model could be one of the fitting solutions to the current issues in European housing markets. To be able to achieve this aim, the following objectives should be reached within this study:

1. To gain an understanding of the CLT model as a collaborative housing form
2. To gain an understanding of what social sustainability on a neighbourhood scale means
3. To create a method for measuring social sustainability on a neighbourhood scale
4. To determine through which elements the CLT makes an impact
5. To determine the level of the impact
6. To give recommendations for the future implementation of the CLT model

### 1.4 Research questions

Based on the problem analysis, problem statement, and aim, the following main research question has been identified:

How does a CLT impact the social sustainability of a neighbourhood?

To be able to answer this main research question and give structure to this research, the following sub-questions have been formulated:

1. *What conditions and opportunities can the CLT model facilitate within a neighbourhood?*

By answering this question, the first objective of gaining an understanding of the CLT model is achieved. Through theoretical research, each of the common characteristics of the model is explored further, and the differences between this CH model and other models of the same classification are analysed. These analyses will result in a list of the conditions, which are elements that the CLT customarily provides for the neighbourhood once the model has been introduced, and in a list of the opportunities, which are the elements that the CLT could provide for a neighbourhood if the organisations set these as their objective.

2. *How can social sustainability be measured on the scale of the neighbourhood?*

The second research sub-question is asked to reach research objectives two and three. Through theoretical research, a definition for social sustainability is sought before creating an operationalisation method for the concept based on this definition. This operationalisation method will form the basis for the last two objectives and is, therefore, a critical element of this study.

3. *How do the conditions and opportunities of the CLT model impact the capabilities of residents in theory?*

Through this third research question, a start is made on the development of the theory on the impact of the CLT model on social sustainability on a neighbourhood level. By taking the conditions and elements from research sub-question 1 and the method from question 2, and combining those with scientific literature, a starting idea is given on what elements of the CLT model can influence social sustainability on a neighbourhood level and in what manner these elements make an impact, forming a theoretical perspective on the topics at hand.

4. *How do CLT organisations regard the impact of a CLT on the capabilities of residents?*

The theory of what elements of the CLT model make an impact on social sustainability is extended by finding an answer to the fourth research question. With this question, the theoretical research comes to a close and the empirical component of this study commences. While the operationalisation method for social sustainability is focused on the experiences of residents that live within the neighbourhood, the perspective of CLT organisations is also introduced within this study to enrich the theory and strengthen it through an organisational perspective.

5. *How does the CLT model impact the capabilities of residents?*

The theory on the impact of social sustainability is then lastly enriched by the answer to this fifth research question that focuses on gaining the residents' perspective. This perspective rounds off objective four, but also makes it that objective 5 is also reached within this study, as their perspective gives an impression of the level of impact the elements from objective four have.

6. *What advice can be given to future CLT projects to enhance their impact on social sustainability?*

As will be explained further, this study is conducted in collaboration with the Municipality of Amsterdam and other partners within the CLT network. As CLT are rising in popularity within Europe, this study also aims to give something back to the growing movement. It does so, by reflecting on the key findings of all the five aforementioned research questions and basing a set of recommendations on these outcomes. Besides general recommendations, also a set of recommendations specifically for the first CLT in the Netherlands is developed.

To conclude, by answering each of these sub-research questions, each of the five listed research objectives is reached, resulting in a theory that forms the answer to the main research question.

## 1.5 Research relevance

In addition to filling the gap of scientific knowledge on the impact of CLT on social sustainability by developing a theory on this topic, this research also adds value to other scientific, societal and practical fields. The relevance of this study is highlighted within this paragraph.

### 1.5.1 Scientific relevance

The scientific relevance of this study has been identified within the two main research topics of this study: social sustainability and Community Land Trusts. This study adds to these fields of research in the following ways:

#### 1.5.1.1 Innovation within the measurement of social sustainability

To start, this study adds to the existing body of scientific knowledge on social sustainability, by defining the topic within the domain of the built environment and on the scale of the neighbourhood. Social sustainability has been the least researched dimension of the popular concept of sustainability. This is especially noticeable in the context of the built environment (Shirazi & Keivani, 2017). The author of this report agrees with Shirazi and Keivani that social sustainability is an integral part of sustainability (2019), and therefore deserves attention within academic studies. This study attempts to bring this attention to the topic.

However, not only does this study try to add to the body of knowledge, but it also attempts to bring innovation to the field by adopting the Capabilities Approach as part of the operationalisation method. Currently, scholars classify social sustainability as a “concept of chaos”, meaning that the concept is over simplified or fragmented (Shirazi & Keivani, 2017, p 1526). Dempsey and colleagues agree with this notion as they mention that concepts related to social sustainability are researched more explicitly than the concept as a whole (2011). This difference in concepts of social sustainability also leads to different, sometimes even possibly conflicting, operationalisations of social sustainability. By applying the CA as introduced by Janssen and her colleagues to the field of social sustainability (2021), this study has attempted to apply a more human-centred approach that is also comprehensive of the concept of social sustainability within the domain of the built environment, through which hopefully some of the differences or conflicts can be bridged.

### 1.5.1.3 Adding to the body of knowledge on Northern-European CLT



Figure 1. A mapping of all the CLT currently established (blue), under creation (green) or supported by a Start Up Fund by the SHICC foundation (red) in Europe (Interreg NWE SHICC, 2020a, p. 19)

As mentioned in the problem analysis, the movement of CLT is gaining traction in Europe. However, the introduction of the model on this continent is much more recent than the conception of the model in Northern America. To give an impression of the differences in context, currently, there are around 500 to 600 CLTs around the world (CLTB, 2021a), of which around only roughly 35% are active or under creation in Europe (Interreg NWE SHICC, 2020a). The active projects are mapped out in figure 1. As can be seen in the figure, countries such as France, Belgium and the United Kingdom have already well-established networks of CLT within their borders (Interreg NWE SHICC, 2020a), but also shown is that the number of countries with initiatives for CLTs is growing. This is largely due to the Sustainable Housing for Inclusive and Cohesive Cities Project (SHICC) started by the Global Fund for Cities.

As the movement of Europe is developing, so is the body of scientific knowledge on this model within this context. This study sets out to offer new insights into the impact of CLT around Northern Europe and will therefore expand upon the body of knowledge.

### 1.5.2 Societal relevance

Besides scientific relevance, it is also of importance to highlight the societal relevance of this study. The following ways in which this study can benefit society, have been established:

#### 1.5.2.1 Moving towards a sustainable society

As the Sustainable Development Goals show, there is a growing urgency to move toward a more sustainable society to safeguard the well-being of people around the globe. However, research has proclaimed that the built environment has one of the biggest impacts on the possibilities of achieving the set targets as around 44% of the targets depend on construction and other activities related to real estate (Raiden & King, 2021, p. 2). This study attempts to gain knowledge to be able to be a step closer to the achievement of SDG 11: Sustainable Cities and Communities. In particular target 11.3, as defined by the United Nations:

*“By 2030, enhance inclusive and sustainable urbanization and capacity for participatory, integrated and sustainable human settlement planning and management in all countries”*

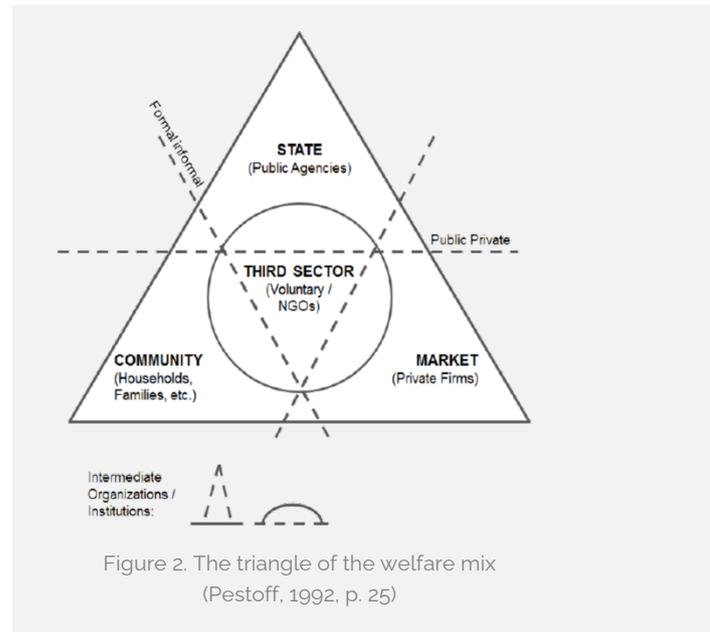
(United Nations, 2015, p. 21)

As the CLT model is based on the involvement of people from the community, could be able to broaden the participation of people within housing development and management and therefore be one of the options to achieve this goal. By researching the impact of the CLT on social sustainability, this study can, partly, determine if through the inclusion of CLT in neighbourhood development more socially sustainable cities and communities can be achieved in Europe.

### 1.5.2.2 Diversifying the housing market through collaborative housing

When using the triangle of the welfare mix by Pestoff, pictured in figure 2, multiple stakeholders that could be responsible for the provision of housing can be identified. For example, housing could be supplied by the state, which is often referred to as social housing. However, the current European housing practices are regularly shaped by commodification and financialization, as the EU has long favoured competition in the housing market (Delclós & Vidal, 2021). This has led to the centre of gravity of housing provision shifting towards the private market. However, as concluded in the research context, the current housing markets in Europe are under great pressure due to the issues surrounding unaffordability and inequality. Ahedo, Hoekstra and Etxezarreta argue that this privatisation of housing can be identified as the facilitator for speculation in housing prices and that this speculation is one of the main causes of the issues of unaffordability of housing and inequality (2021).

There is a need in Europe to shift the centre of gravity on Pestoff's triangle through diversification of the housing sector. When looking at figure 2 again, to diversify the housing sector, there is the option of including more third sector parties. Collaborative housing forms fall under this category, as they can be classified as formal, non-profit organisations. As the CLT especially focuses on non-speculative measures, this form of collaborative housing shows many promises in benefiting the diversification of the housing sector. As this study focuses on broadening the knowledge surrounding CLT, this study is able to add to this movement.



### 1.5.3 Practical relevance

Lastly, besides scientific and practical relevance, this study also has practical relevance for the European CLT network. As mentioned in the scientific literature, this study adds to the expansion of the body of knowledge on CLT. In practice, this knowledge can be applied by actors within the European CLT network. This is specifically the case for the actors involved in the movement of CLT within the Netherlands, as this study is conducted in collaboration with the *Municipality of Amsterdam*, and *And the People*, a company specialised in consultancy and innovation when it comes to circular and inclusive urban area development and the circular economy. Therefore, within this study specific recommendations for the first CLT within the Netherlands, the CLT H-Buurt in Amsterdam are given. Through the findings of the main research question, this study will end with recommendations to this CLT organisation on what elements they should arrange in such a way that the CLT H-Buurt can have the most positive impact on the social sustainability of the H-Buurt by drawing lessons from CLT in other European contexts.

In addition, this collaboration also brought forth that this study contributes to a larger study funded through the Laudes Foundation that focuses on mapping the impact, and barriers of the CLT model in Europe and developing a business plan for the European CLT network. This study contributes to the impact component of this study. It is an incredible opportunity for this study to contribute to the sustaining of the CLT movement in such a way.

## 1.6 Reading guide

The introduction of this master thesis report closes with a reading guide for the continuation of the report. The following chapter gives an overview of the methodology that is applied for each of the research questions listed in paragraph 1.4. It does so by discussing the applied methods and techniques for data collection, sampling, and data analysis. The chapter on methodology is followed up with a chapter on the theoretical framework of this study. Within this chapter, research sub-question 1, 2 and 3 are answered. In chapter 4, the empirical research of this study commences. Through analysing the results of document analyses, a focus group and interviews, answers are given to research sub-question 4 and 5. The last research question on translating the outcomes of chapter 4 into recommendations for future CLT projects, is answered in chapter 5. This chapter is then followed up with a discussion of the research findings in chapter 6, after which the conclusion gives a final answer to the main research question in chapter 7. The master thesis report closes with a reflection on the product, process and planning of this report.

## 2. Methodology

This chapter provides an overview of the research methodology that is applied in this study to be able to give an answer to the research questions. This chapter includes a description of the used and to be used research methods, methods for data analysis, the expected research output, data management plan and the ethical considerations. To conclude an overview of the total research

## 2.1 Research type

While the built environment forms the context for this study, human behaviour and society operating in this environment is seen as the main focus of this study that aims on researching social sustainability within a particular collaborative housing form. Research that plans on performing academic research within a social science field, such as this study, can be classified as social research. The purpose of this type of research is to answer questions that arise from modern social life (Bryman, 2016, p. 3). For this study, the main question that arose was: *How does a CLT impact the social sustainability of a neighbourhood?* And to answer this question, a fitting research approach must be taken. Within social research, different approaches can be taken to answer the main research question. In this research, an *inductive approach* is taken: from observation and findings that are obtained through various research methods, a theory is developed (Bryman, 2016). While in the problem statement, the notion is made that a CLT is associated with social sustainability in previous studies, the theory on how this association comes to be and what the associations are, is still rather unknown. This study, therefore, sets out to generate a theory on this phenomenon through the execution of three different research phases: 1) Theory building, 2) Theory testing, and 3) Theory presentation. Within each phase, various research methods are applied to eventually come to a comprehensive answer to the main research question. This process is depicted in figure 3.

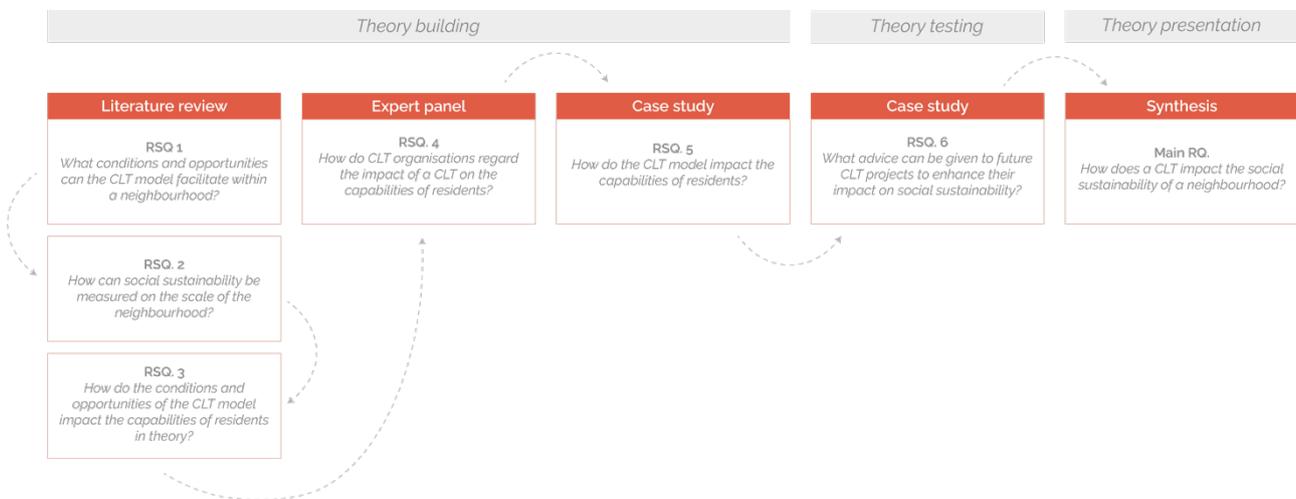


Figure 3. Overview of research methods and techniques per research sub-question (Own image).

The methods that are applied, are a combination of theoretical and empirical research.

Theoretical research is a crucial step in the process of research, as reviewing already existing literature on the topics will broaden the in-depth understanding of them (Bryman, 2016). In this study theoretical research is deployed to develop the hypothesis and deeper theory around the two main topics of social sustainability and CLT, which are needed to answer the first three research sub-questions.

Empirical research is the second method that is deployed. Empirical research can be defined as a systematic, thoughtful process wherein planned observations are made to obtain knowledge on a certain topic (Patten & Newhart, 2017, p. 3). To perform the planned observations, the methods of expert panels and case studies are applied within this study. The data collection within each of these empirical research methods has a qualitative design. The reason that this design has been deemed more fitting is due to the argumentation of Chiu that the assessment of social sustainability within housing projects is not an easy feat as measurements for the concept are not always quantifiable (Chiu). In addition, according to Yin, a qualitative approach produces up-close and in-depth observations of a specific or complex phenomenon. As the objective is to build a comprehensive theory on the impact of CLT on social sustainability, yielding deeper insights is advantageous, making a qualitative empirical research approach a good fit for this study.

Within the following of this chapter, the techniques and methods for data collection, participant sampling, data analysis, and research output are explained for each of the three phases.

## 2.2 Theory building

As shown in figure 3, three different research methods are applied within the theory-building phase. Within this paragraph, the data collection, sampling, and data analysis are explained for each of these methods before ending with an overview of the research output of this phase.

### 2.2.1 Literature review

There are two techniques that literature can be reviewed, a narrative approach and a systematic approach (Bryman, 2016). This study has applied both approaches in the theory-building phase:

#### 2.2.1.1 Narrative approach

In the introduction of this study, a narrative review of literature took place to explore the research problem and motivations for this study. This was done through a critical assessment of the housing markets within the European context and its issues, before following up with an interpretation of the way governing bodies and people throughout Europe are trying to resolve some of these issues. It has done so by examining concepts, theories and approaches relevant to these topics. And has led to the purpose of this research: to examine the impact of CLT on social sustainability.

#### 2.2.1.2 Systematic approach

To be able to answer the first two research sub-questions, a more systematic technique is applied. The choice was made for this systematic approach as scholars argue that this method could produce a more thorough literature study that reflects the biases of the researcher less compared to the narrative approach (Bryman, 2016, p. 98). However, as this study is performed within a limited amount of time, it is important to note that this literature review can more fittingly be classified as a rapid review: a systematic review with more limited scope so it can be performed in a more limited time scale (Bryman, 2016, p. 2). With the rapid systematic approach, the following steps are taken based on research by Bryman (2016) to come to a literature study that is as comprehensive as possible:

#### 1. Defining the purpose and scope of the review

The purpose of the literature review is to give answers to the first three research sub-questions and to construct a theoretical framework. This framework serves as the theoretical basis of this study and is, therefore, a critical element. To make the framework comprehensive, but also operational within this study, the literature review started general, but moved towards a more detailed understanding of the critical concepts within the set scope. This specification of concepts is pictured per critical concept in figure 4 and was used as a guide in the development of the theoretical framework.

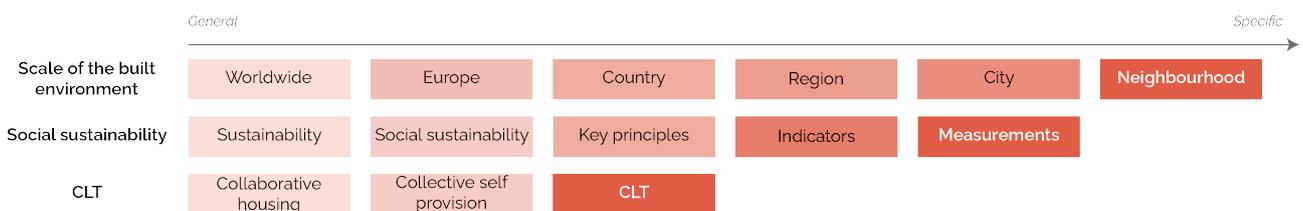


Figure 4. Overview of the eventual scope of the study and the steps that are taken to specify this scope (Own image, n.d.).

#### 2. Seeking out studies relevant to the topic and scope of the review.

The second step is to seek out the literature relevant to the concepts of social sustainability and collaborative housing. For scientific literature, this was done by consulting search engines for scientific literature, mainly World Cat, Google Scholar, and Scopus. To be able to search effectively, a range of keywords was used, focused on the two critical concepts of social sustainability and collaborative housing, and the urban scale of this study. The used keywords are listed in table 1. Literature was searched using one keyword from one of the columns to attain general knowledge of one of the concepts. However, when more specified literature was needed, a combination of keywords from two or more columns was used.

Table 1. Overview of used keywords in search of relevant literature for the literature study (Own table).

SOCIAL SUSTAINABILITY	COLLABORATIVE HOUSING	URBAN SCALE
Social sustainability	Collaborative housing	Built environment
Sustainability	Community Land Trust (CLT)	Neighbourhood / Neighborhood
Sustainable development	Co-housing	Urban form
Brede welvaart	Collective self-provision	Urban area development
	Community-led housing	

Scientific literature was also retrieved by consulting experts in the field of social sustainability or collaborative housing on the literature they have come across during their research. And in addition, literature centred around the topics in practice is also examined. This was done because the concepts of social sustainability and collaborative housing are also relevant topics of discussion in real-life urban development projects. For literature focused on these concepts in practice, regular search engines such as Google were consulted to be able to find publications from European, national and local governmental bodies, or from CLT related organisations. Also, employees from companies working closely on the realisation of the CLT in Amsterdam were consulted for relevant sources.

### 3. Assessing the relevance and quality of each found study to the topic

The method for acquiring the readings resulted in a broad body of science and practice related literature that could fit within the research scope. However, to assess if each body of literature was as relevant to one or more research questions, the title and, when available, abstract and keywords were examined. When after this assessment the publication seemed relevant to one or more research questions, the whole publication was read through. When relevant findings were identified, the publication was added to the used body of literature.

### 4. Extracting and synthesizing the results of each study

The last step in the systematic review of the literature was to extract the results of each study and synthesize the results. As this study focuses on taking a qualitative approach, the key findings from the literature are mainly elaborated on using a narrative approach. Subsequently, these findings were transformed into a framework to serve as the basis for the case study and expert panel within this phase.

#### 2.2.1.3 Explorative observations

In addition to reviewing the literature, the main researcher of this study was able to sit in on webinars that centred around the topic of Community Land Trust as listed in table 1. These webinars were part of the first International Community Land Trust Festival that ran from September to December of 2021 (Center for Community Land Trust Innovation, 2022). In total, 3 webinars and the World CLT Day were attended by the main researcher. The webinars provided general information on the characteristics and workings of the CLT as well as experiences from different CLT organisations around Europe.

## 2.2.2 Expert panel

As shown in figure 3, the method of an expert panel is applied to answer to the fourth research sub-question. This expert panel was conducted as part of a face-to-face gathering for the study financed through the Laudes Foundation, as explained in paragraph 1.5.3. This gathering took place on the 20<sup>th</sup> and 21<sup>st</sup> of April 2022. During the gathering, three expert panels were held by different researchers and organisations involved in the study for the Laudes Foundation, along with other activities, such as site visits of the CLTB projects. The expert panel for this study was the first one to take place on the 20<sup>th</sup> of April 2022. It was conducted in collaboration with the researcher's supervisor from *And The People*. The objective was to explore the impact of the CLT model on social and ecological sustainability according to organisations within the European CLT network within one sitting. In this paragraph, it is explained how participants were sampled, and how the data was collected and analysed.

#### 2.2.2.1 Sampling

The project group working on the study for the Laudes Foundation, consists of multiple representatives from the following organisations: CLT Brussels, And the People, and Space & Matter. To gather input from the European CLT network, this project group invited other organisations from this network to participate in working groups. For the two-day gathering where the expert panel took place, the selection of participants was also conducted by this project group, meaning that the main researcher of this study was not able to influence the sampling of the participants of the expert panel. However, as it was in the best interest of each organisation that was part of the project group, a wide variety of CLT network stakeholders

were invited to join the two-day gathering. A total of fifteen participants joined the expert panel on social and ecological sustainability. The participants and their organisations are listed in table 2.

Table 2. List of organisations of the European CLT and the number of representatives of each organisation that participated in the expert panel (Own table).

ORGANISATION	THE MAIN OBJECTIVES OF THE ORGANISATION	#
SOSCH	SOSCH assists in the planning and realisation of community-led housing initiatives in Scotland (South of Scotland Community Housing, 2022). Partner of the SHICC project.	2
Space & Matter	A design studio that is specialised in architecture, circular area development and vision-making located in Amsterdam, The Netherlands (Space&Matter, n.d.). They are one of the organisations that work with the CLT H-Buurt to realise the first CLT in The Netherlands.	2
And the People	And The People is a company focused on innovation and consultancy in the fields of social, sustainable, and urban development (And The People, n.d.). They are one of the organisations that work with the CLT H-Buurt to realise the first CLT in The Netherlands.	1
FMDV	FMDV is part of the SHICC network and consults all types of actors when it comes to local development financing issues (FMDV, 2017). Within the European CLT network, the FMDV focuses on the financial aspects of CLT.	1
Ville de Lille	Supporter of the OFSML (Organisme de Foncier Solidaire de la Métropole Lilloise), which is a producer of permanently affordable homes in the city of Lille, France. This model follows some of the characteristics of the CLT model (Interreg NWE SHICC, n.d.)	1
London CLT	CLT organisation based in London, United Kingdom, with one realised CLT project in the neighbourhood of Mile End. This CLT organisation is also part of a case study performed in this research.	1
Community Land Trust Network	Network platform for CLT organisations around the United Kingdom. They support CLT initiatives and existing CLTs throughout the country.	1
Self Organised Architecture	A not-for-profit organisation that has the objective to develop and promote the concept of community-led housing and the CLT movement in Ireland (Interreg NWE SHICC, n.d.)	1
CLT Leuven	This is a CLT organisation from Leuven, Belgium, that has researched the possibilities of starting a CLT in Leuven and in 2020 has decided to commence with setting up a project (Stad Leuven, 2020).	1
CLT Ghent	This is a CLT organisation that is located in Ghent, Belgium. The build of their first project Meulestede commenced in early 2022 and they aim to have residents moved in by the start of 2024 (CLT Gent, 2022).	1
CLTB	This is a CLT organisation that is located in Brussels, with five realised CLT projects throughout the region. They are part of the project group for the study that is funded by the Laudes foundation.	3

As can be gathered from the table, there is variety in the roles of the organisations that joined the expert panel. In addition, there was also diversity in the CLT organisation that participated: some organisations already had realised projects, while some were still in the early stages of their first project. This diversity in participating organisations resulted in a rich discussion that considered different organisational viewpoints.

### 2.2.2.2 Data collection

The expert panel was formatted as a focus group. According to Bryman, a focus group is a method for interviewing more than one participant at a time where a joint construction of meaning around a certain specified topic is created through the interaction between the participants (2016). The advantage of this method is that the dynamic that is created during the sessions creates the opportunity to gain insights into how the CLT network collectively views the topic of social sustainability and how they think the model is able to generate impact, while also allowing them to challenge each other's views. The challenging of views is important, as this likely results in more realistic views on the expected impact than if you were to ask the participants individually (Bryman, 2016). As the objective is to gather a general idea of how organisations involved with CLT regard the impact of the CLT model, the technique of a focus group, therefore, offers a time-efficient way to gain comprehensive, realistic insights.

Within the focus group, two methods for data collection are applied to gather as much relevant input as possible within a timeframe of 1,5 hours.

1. Plenary group discussion

The focus group commenced with a group discussion on the question: *Why address social and ecological sustainability?* To gain insights into how and why CLT organisations tend their operations towards social and ecological sustainability. Within this discussion, the researcher and the supervisor were moderators of the discussion, while another representative from *And The People* took notes on a flip-over on all the topics that were discussed during this session. When responses were lacking, one of the moderators would address one of the participants at random to ask for their opinion.

2. Group discussion in two groups by filling in a logic model

After the plenary group discussion, the group was split into two groups to commence with the second activity. The group was asked to make the groups themselves, but representatives from the same organisation were asked to split up as much as possible between the groups to get an even distribution of participating organisations. The second activity consisted of filling in a program logic model for social sustainability and a program logic model for ecological sustainability in two separate sessions. The main researcher of this study was the moderator for both social sustainability sessions with the two groups.

A program logic model is a visual method that can be deployed to “describe and share an understanding of connections among different elements necessary to operate a program” (Knowlton & Phillips, 2012, p. 4). It does so by reviewing the resources from the program, seeing what activities are made possible by these resources, and then seeing what the output of the activities is. These outputs then form certain outcomes that all result in a certain impact. This process is often described as a series of if-then statements. In this focus group, the program logic model is used to evaluate what social sustainability capabilities of residents the CLT organisations think they make an impact, and specifically through which resources and activities they believe that they make an impact. In figure 5, the application of the logic model within the focus group is further elaborated on. What can be seen in this image, is that the intended output, outcome and impact are already filled in for the workshop. This is because the desired impact is already known: social sustainability.

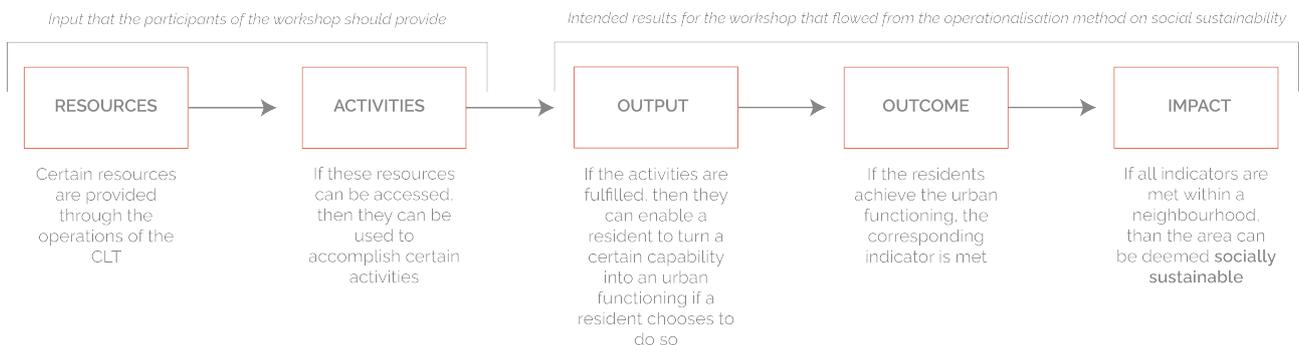


Figure 5. Application of the program logic model within the focus group (Own image)

Through the operationalisation method on social sustainability that is realised by conducting the literature review, the needed outputs and outcomes have already been developed. The participants of the focus group, therefore, filled in the logic model backwards. This is a common approach, as it allows stakeholders to identify strategies that contribute to the sought-after results (Knowlton & Phillips, 2012). This was therefore an easily understandable approach for getting participants to generate results. The two groups of participants were each provided with a simplified version of the program logic model, displayed in appendix I. In this model, the seventeen capabilities that have to do with social sustainability had been filled in as outputs, and the four indicators of the key principle of *Neighbourhood* and the four indicators of the key principle of *Community* were listed as outcomes. It was up to the participants to fill in the resources and activities.

During the two sessions, it became clear that the dynamics and approach to this assignment differed between the two groups. Group A started the assignment by filling in the logic model individually after a short introduction to the seventeen different capabilities. Each participant posted sticky notes within the logic model with notes based on their own experiences or plans within their organisation. This resulted in a logic model rich in different sticky notes, but without a concise overview. After the individual session, a group discussion was commenced in which different sticky notes were grouped into overarching concepts for the resources and the activities. After this discussion, the group drew lines from the different activities to the seventeen capabilities in consultation with each other.

The approach of group B took the route of a group discussion throughout the whole session. The approach chosen was to walk through all seventeen capabilities step by step. Within this group discussion, each participant could individually share their experiences with the group and other participants could link their experiences to theirs. Afterwards, when looking at the results, it can be gathered that this approach faltered in reaching a logic model rich in post-its in comparison to the approach by group A. This was due to there not being enough time to walk through each capability individually within the limited timeframe, as the discussions could take some time. What was significant when it came to this approach, was that it allowed space for the participants to review the operationalisation method that this study applies and allowed the participants to give their feedback on it.

### *2.2.2.3 Data analysis*

It was not feasible to record and transcribe the focus group session due to the large number of participants participating and the set-up with the two groups and the logic model, as this was likely to end up in smaller group discussions that could not be recorded separately. Therefore, the decision was made to take notes on flip overs during the plenary discussion and use the final program logic models as the results of the focus group, and base the findings on these end products. To mitigate any loss of data, the results were processed and analysed as soon as possible. The analysis consisted of comparing the program logic models of the two groups to each other to see if there were any similarities or differences.

However, the program logic model did propose its limits within this study that should be given attention to when processing the results of the workshop. In this study, ultimately the CA is used for determining impact. The input of the CA consists of resources and conversion factors, as elaborated on in paragraph 3.2.3.2. The program logic model does not use this differentiation, it uses resources and activities. As activities cannot be regarded as equal to conversion factors, it is up to the main researcher to interpret if the activity input from the focus group should be classified as resources, or what input should be classified as a conversion factor.

## 2.2.3 Case study

The case study is the last method to be deployed to build the theory on the impact of a CLT on social sustainability. This method is used to be able to gain insights into the residents' perspective on this matter. The decision for a case study was made as the concept of social sustainability is complex and multifaceted (Shirazi & Keivani, 2017). According to Yin, case studies are a better-suited method for examining such complexities than, for example, questionnaires (2009). In this paragraph, the application of the case study method within the theory-building phase is elaborated on.

### *2.2.3.1 Type of case study*

Within case study research, two types of case studies can be identified: A single case study, which entails that only one case is studied, or a multiple case study, which involves the analysis of two or more cases all within their specific contexts (Yin, 2009). The application of a multiple case study often has the preference as there is more opportunity for generalising the case study findings through cross-case comparison. However, a multiple case study requires significantly more time as each individual case can be regarded as its own study (Yin, 2015). Due to time constraints and other limitations in regards to the sampling of participants within CLT cases, which is explained more in-depth in chapter 6 of this report, the selection was made for a single case study. According to Flyvbjerg, this decision has the advantage of gaining deeper insights into a specific phenomenon, by being able to go into depth on the causes and consequences of a given problem (2006). This is a fitting approach, seeing the complexities of the concept of social sustainability overall, but also the complexity of the relationships between resources, conversion factors and capabilities within the applied CA. A single case study allows the researcher room to map out these relationships in detail.

### *2.2.3.2 Case selection*

To safeguard the generalisability of the single-case study to the greatest extent, within the selection of the case for the single case study, it is important to opt for a case that is **representative** of the CLT model. As the findings from such typical cases are "assumed to be informative about the experiences of the average person or institution" (Yin, 2009, p. 48). This means the criteria that the single case is selected on, should reflect the characteristics of the classic CLT model among other criteria that are of importance. Consequently, the following criteria have been identified for this the case selection:

- Location: The CLT must be located within Europe, and within an urban environment, as this CLT focuses itself on the European context.
- Time of operation: The CLT must have been active and habited by residents for at least a year;
- Language: The language spoken by habitants of the neighbourhood and the CLT is preferably English or Dutch, to prevent language barriers during the collection of the data;
- Size: The CLT should consist of multiple units, at least around 10, as a substantive CLT has the preference.
- Information content available: There is a high information content publicly available online on the CLT and the neighbourhood, or relevant information can be supplied through documents and/or interviews.
- Representation: The CLT should reflect most of the classic characteristics of the model

Based on a discussion of these criteria with the CLT Brussels, an important link within the European CLT network, the decision was made to contact the London CLT to request their participation. The London CLT (LCLT) is a CLT organisation operating within the Greater London area in the United Kingdom. They have one realised project of 23 dwellings that have been habited since 2017, and with their tripartite governance structure, provision of permanently affordable dwellings through dual ownership and a resale formula, and an aim for resident stewardship, this CLT ticked all the case selection criteria. Fortunately, the London CLT agreed to participate in the case study.

### *2.2.3.3 Data collection*

According to Yin, a case study method does require an intensive collection of data (2015). The following two techniques for data collection are deployed to find the answer to the fifth research sub-question:

#### 1. Document analysis

While the LCLT has been described as a representative case, context is still of importance within case studies, and especially within collaborative housing research as these practices are inherently place-based (Lang, 2019). To get familiar with the context of the LCLT, an analysis of available and relevant documents is performed. This method has the benefit of being a stable, unobtrusive and exact method for data collection, as it offers broad coverage of time, events and settings (Yin, 2009). However, it does heavily rely on the retrievability and accessibility of information, which could be a threat to the quality and quantity of information to be used. For this reason, the availability of information was made one of the selection criteria. As the LCLT was the first urban CLT within the United Kingdom and as it has been part of the SHICC program, this case has received substantiative attention within research and media. This concern could therefore be dismissed. The contextual elements of the LCLT and the neighbourhood are based on these documents and remarks by the interviewees, as highlighted in the next method for data collection.

#### 2. Interviewing

To gain insights into the experiences of the residents from and surrounding the LCLT, interviews are conducted. The interviews should be regarded as guided conversations, which leads to more of a fluid conversation (Yin, 2009). This type of inquiry is preferred in this study as it wants to take context, personal opinion and other personal factors into account, which is limited in a persisted line of inquiry, as this process tends to be a more rigid approach (Yin, 2009). The questions that are asked during the interviews, aim to gain in-depth information on the manner and level of impact of the CLT on a set of capabilities that have to do with social sustainability.

To assess the level of impact according to the LCLT residents, the participants are asked about their experiences with the capabilities in their current living situation (living in the CLT), and their previous living situation, to assess if any changes have occurred in capabilities since moving into the CLT. The manner of impact is then assessed by asking the participants what factors played a role in enabling or limiting the capabilities. This method is translated into a semi-structured interview protocol that can be reviewed in appendix II. The decision for a semi-structured set-up was made, as this method provides the structure to question all seventeen social sustainability capabilities that are set up within paragraph 3.2 as an answer to the second research sub-question. But in addition, it also allows room for flexibility. This flexibility is needed, as a difference in experiences of the capabilities and the responsible resources and/or conversion factors is expected, which could necessitate differences in the follow-up questions that are asked to a participant.

Another manner to assess the level of impact by the LCLT is to also interview non-LCLT residents to compare their experiences to the experiences of the LCLT residents. This way, it could be assessed if there are any differences between the two groups. Through this approach, the non-LCLT residents could be regarded as a control group.

Due to the location of the London CLT case for the case study, the decision was made by the researcher to perform each interview online with the use of Microsoft Teams. Microsoft Teams is one of the online communication tools that has been approved by the TU Delft for data collection. This meant that no relevant COVID-19 measures had to be taken into account during the interviewing process.

#### 2.2.3.4 Sampling

As the approach to the interview lays out, two samples of participants are sought after for this study: residents from the London CLT, and residents that live in the area surrounding the LCLT. The sampling of participants for the interviews was attempted through the application of three different approaches, of which two were successful. This resulted in a total of 6 participants for the interviews. Five of these participants lived within the LCLT, and one participant was a private homeowner that also lived within the same development as the CLT residents. The residents that participated in the interviews were mostly female (5 out of 6), and each candidate had children. However, among the sample of participants, there was a substantive diversity in ethnicity, profession, and previous living backgrounds.

Table 3. List of interview participants from the LCLT case (Own table).

INTERVIEWEE	TYPE OF RESIDENT	DATE OF INTERVIEW
Interviewee A	A LCLT resident on the St Clements site	29-03-2022
Interviewee B	A LCLT resident on the St Clements site	31-03-2022
Interviewee C	A LCLT resident on the St Clements site	04-04-2022
Interviewee D	A private homeowner on the St Clements site	27-04-2022
Interviewee E	A LCLT resident on the St Clements site	06-05-2022
Interviewee F	A LCLT resident on the St Clements site	06-05-2022

All LCLT participants for the interviews applied for an interview through an **open call for participation** that was placed via e-mail by one of the staff members of the LCLT organisation on my behalf. Within this open call, a leaflet was included to provide the requested with some information on the study and what would be asked of them if they wanted to participate. This leaflet can be reviewed in appendix III. The LCLT residents were asked at the end of the interview if they would know anyone from the LCLT or the St Clements development that would also like to participate in the study. This method is called **snowball sampling** and could be a successful method to acquire a substantive number of participants. However, within this study, this method was only partially successful. One participant offered to place the leaflet in a Facebook group that included residents from the St Clements development. This resulted in the application of one resident that lived outside of the LCLT. Other snowballing attempts did not result in any additional applicants.

The researcher also attempted to sample neighbourhood residents through an open call on another Facebook group that included residents from all over the neighbourhood in which the LCLT is located, by placing the leaflet in a Facebook post. Unfortunately, this method did not lead to any additional participants.

#### 2.2.3.5 Data analysis

The six interviews that have been performed, were all recorded and transcribed. Before starting the interview, participants were asked for their permission to record the interview. They were also informed about their rights and the handling of the data through an informed consent form that had to be filled in and signed by the participant and by the main researcher. During transcription, the acquired data was anonymised, and after transcription, the audio files of the interviews were deleted following the protocol of the DMP. The anonymised interview transcripts serve as the data for data analysis.

The technique applied for the analysis of the data is the Grounded Theory Method (GTM) by Glazer and Strauss (Williams & Moser, 2019). The term coding refers to the process of relating text segments from, for instance, interviews to certain codes (Kelle, 2010). The coding process related to the GTM uses three types of coding procedures to “conform with validity and reliability standards associated with qualitative research” (Williams & Moser, 2019, p. 47). However, the application of these three types of coding procedures should be applied in a non-linear process to be able to evolve the theory. This approach aims to create an open theory that then is consequently narrowed down by rounds of axial and selective coding. The rounds of open coding are of importance within this method to form an unbiased theory on the subject. The transcripts of this study were subject to two rounds of selective coding that were broken up by a round of axial coding. To finalise the theory the second round of axial coding was conducted and one round of selective coding to place the results from the axial coding within the CA. This coding process was performed with the use of the computer program ATLAS.ti and is depicted in figure 6.

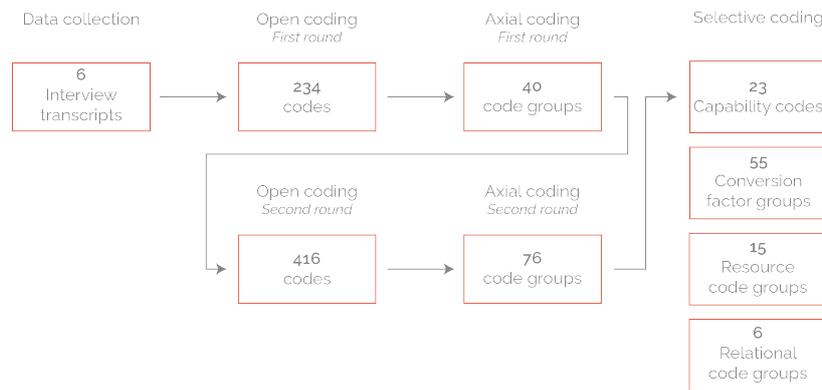


Figure 6. The process of coding applied when analysing the data from the LCLT case study (Own image).

To finalise the data analysis, the capability codes were assigned to the corresponding social sustainability capability in Excel and the conversion factors (Conversion factor groups) and resources (Resource code groups) that had any negative or positive influence (relationship code groups) on a capability were mapped out in the same scheme to showcase the manner of impact. To be able to determine the level of impact, the capabilities were scored on a scale from positive to negative for both the living situations of the LCLT residents and the current living situation of the St Clements development resident. This way, comparisons between these situations could easily be executed and a conclusion on the level of impact of the CLT could be drawn.

### 2.2.3.1 Additional fieldwork

In addition to the case study, also some additional fieldwork had been carried out during the face-to-face gathering in Brussels on a case that could have been a potential candidate for a second case. This fieldwork included joining an organised breakfast at a communal space in one of the CLTB projects, and also a tour of the same project that showcased one of the temporary housing apartments, and a consultation space. Unfortunately, after carrying out the fieldwork, the case study suffered complications that could not be bridged, as elaborated on in chapter 6. However, the fieldwork that was conducted did offer some valuable findings on the workings of communal spaces within CLT. While the case in Brussels could not function as a comprehensive second case, the conducted fieldwork is mentioned within the chapter on the residents' perspective on impact to offer a counter perspective to the LCLT case.

## 2.2.4 Research overview phase 1

When combining all the applied research methods within the theory-building phase, the following overview of the research methods and the research output of this phase can be made:

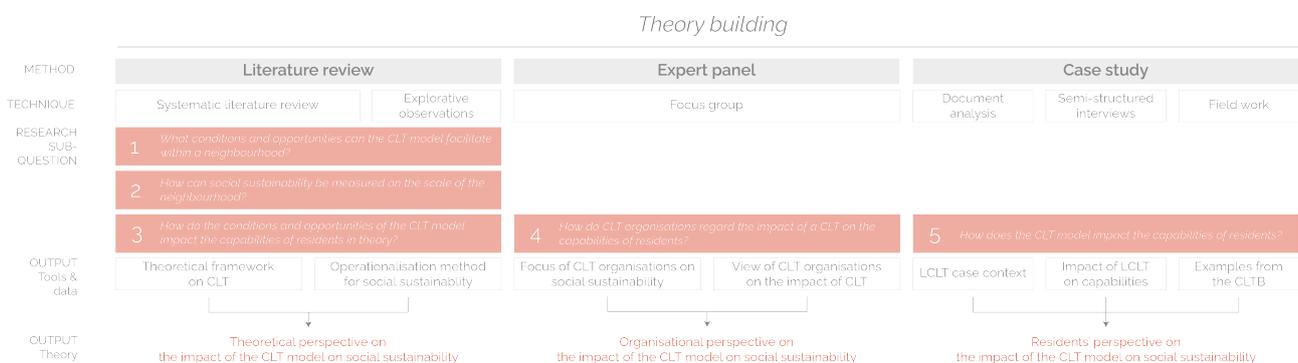


Figure 7. Overview of methods, techniques and output of each the research conducted in the theory building phase of the study (Own image).

## 2.3 Theory testing

As shown in figure 3, the next phase of the study is to test the theory that has been developed in the previous phase. This phase is introduced to examine how the theory on the positive impact of CLT on the social sustainability in neighbourhoods can be transferred to other CLT projects. Like the theory-building phase, this phase also consisted of a combination of theoretical and empirical research. Within this paragraph, the methods for this phase are discussed

### 2.3.1 Literature review

To set up a method for the transference of the findings from the first single case study to other contexts, a brief literature study on the topic of policy transfer was conducted. This literature review was structured similarly to the literature review of the previous phase on the concepts of Community Land Trusts and social sustainability, as described in paragraph 2.2.1.2. Only, in this literature review, the scope of the search for relevant literature was smaller, as it was only reduced to two search terms: *policy transfer*, and *lesson drawing*. For the search, Google Scholar was used. The methods for assessing the relevance and quality, and extracting and synthesizing the results for this literature review were deployed in the same manner as paragraph 2.2.1.2. The output of this literature review was a theoretical framework for lesson drawing.

### 2.3.2 Case study

The literature review is followed up with a case study. This case study examined how the London CLT outcomes can be transferred to one specific context, meaning that this case study is also a single-case study, as described in paragraph 2.2.3.1. The choice for this single-case study approach is taken, as this is fitting with the characteristics of policy transfer. It is general practice to perform lesson drawing only between two systems, as the transference is dependent on the context (Dolowitz & Marsh, 2000). According to Yin, when applying a single-case study to test a theory, the case that is selected should be reviewed as a critical case. In addition, with such a case study the theory that is tested must have clear conditions (2009). The conditions that are tested in this single-case study are determined by the previous case study on the impact of the London CLT on social sustainability, and the method that has been developed in the literature review on policy transfer. Within this paragraph, the case selection, data collection, sampling, and data analysis for the single-case study are elaborated on in further detail.

#### 2.3.2.2 Case selection

The selection for the critical case was made in accordance with the graduation company that has assisted in the development of this research, *the municipality of Amsterdam* in collaboration with *And the People*. In Amsterdam, these organisations are two of the involved parties in the first CLT project in the Dutch context: The CLT H-Buurt. This project has been running since 2018 and is currently in the running to secure a site. As this study is affiliated with two of the main stakeholders of the project, the decision has been made to select this case for the single-case study. Through the affiliation, the researcher had adequate access to information and could sample participants for the data collection methods efficiently. In addition, the CLT H-Buurt case is also an interesting example to test the theory in, as this is the first CLT within the Dutch context as of yet, meaning that the context for CLT is still relatively open and malleable.

#### 2.3.2.1 Data collection & sampling

Within the case study, a mix of data collection methods is deployed to gain an understanding of the context, and the possibilities for lesson drawing between the two contexts.

##### 1. Document analysis

As mentioned in the introduction of this paragraph, the contexts of the two countries between which lesson drawing is taking place are important to the success of the implementation. Therefore, the single-case study will commence with an analysis of available and relevant documents on the CLT H-Buurt case is performed. Documents were searched online through the use of Google. When needed, also relevant contacts of the Municipality of Amsterdam or And The People were contacted were consulted for additional information.

##### 2. Interviews

However, as the CLT H-Buurt case is still a project in development, information on the project that can be retrieved online is quite limited and often not up to date, as circumstances around the project are constantly evolving. For these reasons, the decision was made by the researcher to also include interviewing as a data collection method within this single-case study.

The topics on which information was difficult to gain a full understanding on through online documents, were the needs of the neighbourhood in regards to social sustainability, and if the CLT H-Buurt currently responded or set out to respond to these needs. Through a semi-structured interview with a representative from the CLT H-Buurt association together with a representative from And the People on the 5<sup>th</sup> of May in-depth information was gathered on these topics. These participants were sampled through the supervisor of the main researcher from And The People. During a meeting to consult him on this matter, he believed that they were able to supply the researcher with the needed information.

The structure of the protocol for this interview was less developed and comprehensive than with the interviews with the London CLT residents. This can be viewed in appendix IV, where the interview protocol for this interview is listed. By limiting the structure, the researcher was able to gain a comprehensive understanding of the needs of the neighbourhood from the viewpoint and experiences of the interviewees, as it left room for the interviewees to pinpoint what they deemed important regarding the needs of the neighbourhood or the CLT H-Buurt project, and what was less important. During the interview, the researcher also prompted questions in regards to the organisational set-up of the CLT H-Buurt in response to the answers of the participants. This process resulted in findings that filled the gaps for the analysis of the CLT H-Buurt case in chapter 5.

The interview took place at the current location of the CLT H-Buurt association in the Bijlmer in Amsterdam. This allowed the researcher to look around the common space that has been set up there by the association, in addition to experiencing the feel of the neighbourhood by walking around. At the time of the interview, on the 5<sup>th</sup> of May 2022, no relevant measures in regards to COVID-19 were in effect by the Dutch government, meaning that the interview could take place in person in a safe manner.

### 3. Focus group

To gather data on how the lessons from the London CLT could be applied in the Amsterdam context of the CLT H-Buurt project, a focus group was held with a range of stakeholders that are involved in the development process of the project. The objective of this focus group was to have an open discussion on one general question in regards to the impact that these stakeholders think the CLT could have in the Bijlmer, followed by an open discussion on 3 different recommendations in the form of statements that have been based on the findings from the London CLT case, and the needs of the Bijlmer neighbourhood. The open discussion was led by the main researcher as the moderator. The planning that was adhered to is listed in table 4.

To guide the focus group, the researcher prepared a PowerPoint presentation. This PowerPoint was an elaboration of the contents as listed in table 4. Each introduction of a statement consisted of a summary of how this topic of the statement was handled in the London CLT case and a schematic presentation of the impact that was based on figure 46 in paragraph 5.2.2. During the execution, however, the sequence of the statements was switched to continue on the topics that were already being discussed and to not disrupt the flow of the discussion. This meant that statement 2 was the first statement discussed, which was then followed up with statement 1. In addition, some technical difficulties occurred at the beginning of the focus group, which unfortunately meant that the time to discuss the statements was limited. In the end, each statement was discussed for around 10 minutes.

Table 4. Planning and content of the focus group with stakeholders from the CLT H-Buurt project (Own table).

TIME	TASK
5 minutes	<b>Introduction</b> Explain the objective and the approach to the focus group
5 minutes	<b>Introduction round</b> Have each participant introduce their role within the CLT H-Buurt project
5 minutes	<b>Open discussion question 1.</b> Does the CLT H-Buurt project have the potential to strengthen the social sustainability of the Bijlmer? (Translation of: <i>Heeft het CLT H-Buurt project de mogelijkheid om de sociale duurzaamheid van de Bijlmer te versterken?</i> )
10 - 15 minutes	<b>Statement 1.</b> The homes that the CLT H-Buurt will offer, will be owner-occupied homes. (Translation of: <i>De woningen die de CLT H-Buurt zal aanbieden, worden koopwoningen.</i> )
10 - 15 minutes	<b>Statement 2.</b> The allocation policy for the homes of the CLT H-Buurt should contain criteria stating that future residents should have a link with the neighbourhood and that they are expected to participate. (Translation of: <i>Het toewijzingsbeleid voor de woningen van de CLT H-Buurt zou criteria moeten bevatten waarin gesteld wordt dat toekomstige bewoners een link met de buurt dienen te hebben en dat zij verwacht worden te participeren.</i> )
10 - 15 minutes	<b>Statement 3.</b> Both before and after the residents have moved into the homes, the CLT H-Buurt must actively commit itself to facilitating and strengthening the connection between residents. (Translation of: <i>Zowel voor als na het betrekken van de woningen door de bewoners, dient de CLT H-Buurt zich actief in te zetten om de connectie tussen bewoners te faciliteren en te versterken.</i> )
5 minutes	<b>Rounding of the focus group.</b> Are there any last comments? (Zijn er nog overige opmerkingen?)
	<b>Ending the focus group</b> Thank the participants for their time and their contribution. Ask them if they would like to receive the results of the study

The participants of the focus group were sampled in the same way as the interview participants from the CLT H-Buurt. The supervisor from And The People put the researcher in contact with a range of representatives of stakeholders that are involved in the project through e-mail. This e-mail contained a brief summary of the research and the objective of the focus group. In the end, four participants were able to join the focus group session on the 11<sup>th</sup> of May 2022. The participants that joined the focus group and their organisation's role within the CLT H-Buurt project are listed in table 5. There was an equal of private and public representatives that joined the discussion, which resulted in a rich discussion on certain differing viewpoints.

Table 5. List of participating organisations, their role and the number of representatives of each organisation that joined the focus group (Own table).

ORGANISATION	ROLE OF THE ORGANISATION IN THE CLT H-BUURT PROJECT	#
Municipality of Amsterdam	Plays a facilitating and governing role in the development of the H-Buurt transformation	2
Common City	Plays a supporting role to the CLT H-Buurt association in setting up the housing cooperation	1
And The People	Plays a supporting role to the CLT H-Buurt association in setting up the housing cooperation	1

The focus group took place at one of the locations of the Municipality in Amsterdam located in Zuidoost. Three participants joined the focus group in person, while one joined through Microsoft Teams. As far as the researcher could judge, this dual set-up of the focus group did not limit the ability to participate in the group discussion by any participant. At the time of the interview, on the 11<sup>th</sup> of May 2022, no measures in regards to COVID-19 were in effect by the Dutch government, meaning that the focus group could take place in person in a safe manner.

### 2.3.2.3 Data analysis

The interview and the focus group were both recorded and transcribed. Before starting the interview, participants were asked for their permission to record the interview. In addition, all participants were requested to fill in and sign the informed consent form. During transcription, the acquired data was anonymised, and after transcription, the audio files of the interviews were deleted following the protocol of the data management plan. The anonymised interview and focus group transcripts serve as the data for data analysis.

To analyse these transcripts, also the Grounded Theory Method was applied. Both analyses were handled separately in different projects in ATLAS.ti. However, the approach to both transcripts was the same: one round of open coding, one round of axial coding, and a single round of selective coding was applied. The results of the selective coding were then ordered in the form of a thematic analysis in an Excel document. This document formed the base on which the results were typed out in a narrative form. While multiple rounds of coding are advised for a comprehensive understanding of the research data, this was not possible for the researcher to execute these analyses due to time constraints. To ensure that the final data did not reflect possible biases, the Excel sheet was compared by the researcher to the results of the open coding. After the processing of the data, an answer could be given to the fifth research sub-question of this study.

### 2.3.3 Research overview phase 2

Figure 8 displays an overview of the applied research methods and techniques that are applied in this phase, and the research output that is produced as a consequence of these methods.

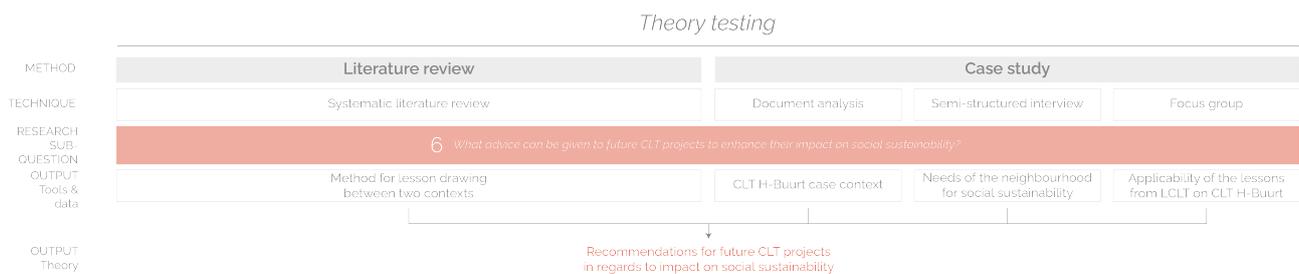


Figure 8. Overview of methods, techniques and output of each the research conducted in the theory testing phase of the study (Own image).

## 2.4 Theory presentation

The last phase of the study is the presentation of the final theory. This theory answers the main research question: How does a CLT impact the social sustainability of a neighbourhood? To answer this question, the results from phase 1 and phase 2 are combined in an overview of conclusions and recommendations. Within this paragraph, it is explained how these results are generated.

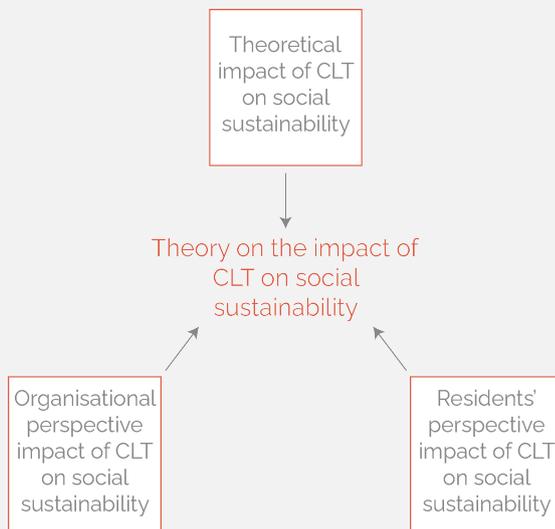


Figure 9. Triangulation of different theories to create a general theory (Own image).

In figure 7 it was depicted that from the phase of theory building, three different types of theory on the impact of CLT on social sustainability on a neighbourhood level are generated through the execution of a variety of research methods. The results of each of these three theories are brought together to answer the main research question, as shown in figure 9. This process is called theory triangulation, which refers to examining multiple theories to gain an understanding of a phenomenon. The benefit of theory triangulation is that it provides a broader, deeper analysis of the findings (Thurmond, 2001). As the main objective of this study is to provide a theory on the impact of the CLT model on social sustainability, such a deeper understanding is valuable.

Within the process depicted in figure 9, the results of each perspective are discussed before possible similarities and differences are examined between the theoretical, organisational and residents' perspectives. If there are differences, the explanation for this is also examined.

The result of this process is a comprehensive theory on the impact of CLT on social sustainability as it considers the impact from each of the different perspectives.

## 2.5 Ethical considerations

As this research involves the participation of humans and personal data is collected through this participation, this study has made statements to ensure the research is carried out in compliance with the law and good practice. Agreements made on how to safeguard this, have been secured in the DPM. The participants of this study will be informed before their participation about the nature and objective of this study, and are obliged to sign an informed consent form before participating in any data collection method. The informed consent form stipulates that participants can withdraw from the study at any moment if they wish to do so.

Furthermore, it is ensured that this study adheres to the FAIR guiding principles (findability, accessibility, interoperability and reusability) for the collected data, as described by Wilkinson and his colleagues (2016). This means that this final document, the graduation thesis report, is uploaded to the TU Delft repository with a CC BY license, meaning that others can distribute, adapt, and build upon the outputs of this study as long as the main researcher is credited.

However, this study also works with personal data, and measures are taken to protect the participants of this study and their personal data. Firstly, most personal data that could directly identify participants is deleted from the transcripts and is not shared without consent from the participant. In addition, a disclosure risk assessment is performed to determine if re-identification is possible. If so, further indirect identifiers were deleted from the transcripts. In the consent form, consent from the participants was asked to also archive the anonymised data in the 4TU.ResearchData repository. This means that appendix IX is uploaded to this repository. This data set can also be requested by e-mailing the main researcher. However, also through e-mail, any non-anonymised personal data from participants is not shared without the consent of the participant.

## 2.6 Data Management Plan

For this study, a data management plan (DMP) has been drawn up and assessed by the data steward from the Faculty of Architecture and the Built Environment, as this is mandatory for studies that work with personal data from research subjects (TU Delft, n.d.). In this study, personal data is collected on participants from the organisations, but also from the residents. The DMP details how the data produced through this study is collected, managed and stored. It also states who can access the data after the completion of the study. This information was also included in an informed consent form that has been signed by the participants. Both the DMP and informed consent form have been approved by the Human Research Ethics Committee (HREC), ensuring that this study does not generate undue harm or take risks when it comes to the participants.

In addition, as this study does collect personal data from participants in the UK, it was important for the DMP to assess if data transference between the UK and EU was possible or if additional measures had to be taken in regard to personal data protection. On the 28th of June 2021, the EU Commission determined that the adequacy decision for the UK have been approved. Their data protection laws are deemed robust enough to ensure data can safely flow between the UK and EU countries. This adequacy will be expected to last until the 27th of June 2025 (ICO, n.d.). This meant that from a European perspective, no additional measures for data protection needed to be taken by the main researcher.

However, collecting data from the UK also meant that the DMP must adhere to the UK General Data Protection Regulation (UK GDPR), just as the main researcher was also obliged to adhere to the General Data Protection Regulation (GDPR) by the EU. Currently, these two documents are aligned (UK Data Service, 2022). This means that as the DMP has the support of the data steward from the Faculty of Architecture and the Built Environment, the main researcher met the set standards of both documents. This meant that also from a British perspective, no additional measures for data protection needed to be taken by the main researcher.

During the execution of this study, the Word file and PDF files have been stored on the personal computer of the main researcher. The interview data has been stored on a dedicated and secure project storage drive, which could be accessed by the main researcher, and by the mentors when requested. No data leaks have occurred during the

As this study will work with the personal data of possibly vulnerable groups of people, the privacy team of the TU Delft has assessed if a Data Protection Impact Assessment (DPIA) was needed. The conclusion was that it was not needed. The DMP and informed consent form have been approved by the HREC.

A black and white photograph of a modern building with a balcony and a person crouching next to a bicycle. The building has a brick facade and a balcony with a metal railing. The person is wearing a dark jacket and shorts, and is crouching next to a bicycle. The background shows other people and bicycles, suggesting a community or learning environment.

# 3. Theoretical framework

In this chapter the theoretical framework for the study is constructed according to the methodology explained in paragraph 2.3. The key findings of this chapter give answer to the first two research questions: the conditions and opportunities of the CLT model are explored and a tool for the measurement of social sustainability is created. The chapter ends with focal points for the case study that follows this chapter.

## 3.1 The Community Land Trust model

As briefly explained in the introduction, a CLT is an organisation that sets out to develop and maintain affordable housing. The CLT model can be seen as the activities and principles that these CLT organisations pursue (Bachus, 2013). In this paragraph, the model is analysed in-depth to answer to the first research sub-question: *What conditions and opportunities does a CLT facilitate for a neighbourhood and its residents?* Within this question, the conditions are the principles that are inherent to the CLT model. They are almost always facilitated when a CLT is active within a neighbourhood. The opportunities are principles that the CLT model could facilitate within a neighbourhood or for the residents when a CLT organisation chooses to do so. Both these types of elements are explored to map out the functionings of the CLT and to examine how this model differentiates from other collaborative housing forms.

### 3.1.1 Origins of the CLT

To gain an in-depth understanding of the CLT model, firstly its origins are researched within this paragraph.

#### 3.1.1.1 Founded in the USA

The CLT model originates from the United States of America. The model can be seen as an extension of different aspects of preliminary concepts from the end of the 1900s, such as the single-tax colonies in the United States, designed on the ideas by Henry George, and the Garden Cities in England by Ebenezer Howard. The precursor of the CLT was the concept of Land Trusts by Ralph Borsodi (Davis, 2014). What all these concepts had in common were the “common ownership of land, individual ownership of buildings, and a long-term ground lease tying the interests of the parties together” (Davis, 2014, p. 13), forming the first building blocks for the CLT model. However, to be able to give communities control of the development process in their neighbourhoods and support broad participation by the community, a tripartite governing board, of which a majority is elected by members of the CLT, was added to the concept by Bob Swann (Davis, 2014), leading to the creation of the full basis of the CLT model.

The aim of the first CLT was to secure agricultural land for an African American community that experienced extreme difficulties surrounding acquiring land due to rising land prices and discriminatory lending practices (Williams, 2018). Through this first project, the first two distinct features of the CLT model were developed: The first feature being the communal ownership of land, as the agricultural land was owned by the community itself, and secondly, the involvement of neighbouring territories in the governance of the land. In this project, this was set into place to “offset the hostility of the surrounding white communities” (Dawance, 2019, p. 130).

It can be stated that the movement, therefore, was born out of aiding underprivileged communities. With the creation of the first urban CLT in the USA in the 1980s, this was affirmed with the acquirement of the third distinctive feature of the CLT: the focus on perpetual affordability through anti-speculative measures. Some founders of the CLT model openly criticized the private property market because of the unequal allocation of resources, which in their opinion formed “one of the underlying causes of poverty and injustice” (Dawance et al., 2019, p. 22). The desire was born to make a stance against the increased cost of housing by setting anti-speculative measures into place. In this way, the least fortunate could benefit from the model (Dawance, 2019).

With the inauguration of the CLT model in US law and, consequently, greater access to federal financing, the model spread across the country (Dawance, 2019). This spread showcased the hybrid character of the CLT: the model could be moulded to fit differences in context or certain objectives, leading to an increase in efficiency, productivity and outreach of the model. Now there are more than 200 active CLTs in the USA (Dawance, 2019).

#### 3.1.1.2 Arrival in Europe

Following the Great Financial crisis, the CLT model arrived in Europe, specifically in the United Kingdom and Belgium (Dawance, 2019). The establishment followed the increase in the participation of civil society alongside public institutions and market actors (Dawance et al., 2019). In relation back to the welfare triangle by Pestoff, pictured in figure 2 on page 14, this movement entailed more involvement of the lower-left corner of the triangle. According to Dawance and his colleagues, this movement was made possible due to the European context being formed by “impoverishment, a crisis of confidence in public management, a rise in populism and a loss of impetus in the social housing model” (2019, p. 22). The involvement of civil society led to community-led movements. Unsurprisingly, this shift also resulted in the re-emergence of collaborative housing practices in Europe (Czischke, 2019) alongside the overall practice of commoning (Dawance et al., 2019). Commoning can be described as “the process of creating and maintaining a resource” by a community of people

(Aernouts & Ryckewaert, 2018, p. 504). The CLT model is often regarded as a model of shared social responsibility (Dawance, 2019) that creates and manages “housing commons” (Aernouts & Ryckewaert, 2018).

In contrast to the USA, where CLTS “mobilise the community to call for federal involvement”, in Europe the CLT is a way of showing what civil society is able to accomplish in regards to providing housing when partnered with representative power (Dawance, 2019, p. 135), meaning that in Europe the CLT movement has much more of a bottom-up approach. However, despite this difference in starting a CLT, the European CLT models share the distinctive features that were developed in the American models, as will be elaborated on in the following paragraph.

### 3.1.2 Characteristics

In the foregoing paragraph, the distinctive features of the American CLT model have been briefly highlighted. CLTs in Europe share these characteristics. In this paragraph the four common characteristics of the CLT model are explained in further detail:

#### 1. Dual ownership

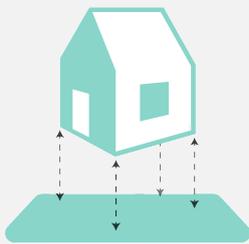


Figure 10. Separation of dwelling and land (Own image, n.d.).

In the CLT model, land is seen as a public asset instead of a private good (Choi, et al., 2018). Therefore, one of the main characteristics of the model is to separate the ownership of land from the ownership of the dwellings built on said land, a so-called dual-ownership model, graphically illustrated in figure 10. The land will be owned by the CLT organisation. The acquisition of the land by the CLT protects the perpetuity of affordability, as the value of the initial investment into the land is retained (Dawance et al., 2019)

The land that is used by the CLT, is acquired by the organisation as part of the trust (Aernouts & Ryckewaert, 2018). As CLTs are non-profit organisations and are non-competitive in the free market, land acquisition is one of the greatest challenges due to high land prices in areas where land is scarce and a lack of funding. CLTs often secure funding through long term loans and/or philanthropic funders. Support is also often given by public authorities, for example through subsidies, discounts on land prices, tax incentives or guarantees on long-term loans (FMDV, 2020; Interreg NWE SHICC, 2020a). Most CLTs in Europe are realised on land that was publicly owned (Interreg NWE SHICC, 2020a), highlighting the importance of involved local authorities.

When the organisation is able to secure the land, the organisation can start the development of affordable dwellings. In the case of the development of owner-occupied housing on the acquired land, the land will stay in the ownership of the CLT trust, while the dwelling is owned by the CLT resident. The realisation of rental housing is also possible. In that case, the ownership of the dwellings is in the hands of a not-for-profit association or cooperation (Engelsman, Rowe & Southern, 2018, p. 105). To make use of the land, the CLT resident leases the land from the CLT through a ground lease (Interreg NWE SHICC, 2020a). This ground lease can take up the form of a monthly rent or royalty that is paid to the CLT (Dawance et al., 2019), and is used according to the economic model of the CLT organisation (FMDV, 2020). Often, these lease payments are used to “cover its operating costs” or “repay the possible loan that enabled the purchase of the land” (FMDV, 2020, p. 30).

Besides providing housing, CLTs are also able to develop non-residential components facilities to benefit the community. These facilities include community spaces and commercial spaces that are rented or sold. The dual-ownership mechanism would still be part of this arrangement (FMDV, 2020). To give an example of facilities that could be realised to benefit the community by using the model, the CLT Ghent organisation sent out a survey of what amenities people lacked. This resulted in the realisation of a supermarket, as the community believed that they needed one (Brownsdon et al., 2021). Another great example is the Homebaked CLT in Liverpool, of which a more extensive description is given in illustration box I.

### Illustration box I. Homebaked Community Land Trust.

One CLT that did not only start with the development of housing, but with the development of a facility is the Homebaked Community Land Trust. This CLT initiated the development of a bakery in the once popular neighbourhood bakery called Mitchell's Bakery. This bakery was located in a neighbourhood that was part of a Housing Market Renewal Initiative that led to the demolition of around 1800 properties in the neighbourhood to make room for 1300 new homes. The redevelopment stagnated due to the economic circumstances of 2008, which led to the neighbourhood declining even further and the Mitchell's Bakery being forced to closing its doors (Homebaked Community Land Trust, n.d.).

However, the local community wanted to take matters into their own hands when it came to the redevelopment of the neighbourhood. They rented the old Mitchell's bakery as a location for public discussion and planning sessions. It was there that the idea came about to start a community-led bakery, which became a reality over the years (Homebaked Community Land Trust, n.d.): Now, the bakery building has been fully refurbished. This included the flat above the bakery that is now the first CLT Homebaked apartment. The three-bedroom apartment is rented out as a shared apartment. On the ground floor of the building, the successful Homebaked Co-operative Bakery is located that offers jobs for locals and has become a meeting place for the community (Homebaked Community Land Trust, n.d.).

The Homebaked CLT also has not stopped. The organisation has plans to further develop the buildings attached to the neighbourhood bakery with a mixed-use scheme, offering housing, commercial spaces and communal spaces (URBED Ltd, 2019).

## 2. Perpetual affordability

The perpetual affordability of the dwellings realised by the CLT forms the second characteristic. This perpetual affordability is instated to give the opportunity of owning or renting a home to people of local communities, and the generations to come, that have little to spend.

As already briefly highlighted, the perpetual affordability is made possible by the dual-ownership model, as in this way the value of the initial investment is retained in a trust (Engelsman, Rowe & Southern, 2018) and allows the organisation to put a control mechanism into place to combat speculation in resale prices (Interreg NWE SHICC, 2020a).

The control mechanism offers a "fair trade-off between the legitimate expectations of sellers and the maintenance of housing accessibility" (Dawance et al., 2019, p. 33), and is fixed within the lease drawn up between the organisation and the resident (FMDV, 2020). It often takes on the form of a resale formula. However, this resale formula can be based on different systems and it also varies between rental and owner-occupied housing (FMDV, 2020). To give some examples, for rental housing in French CLT the resale price is linked to an index. For owner-occupied housing, the resale formula can get more complicated. The sharing of capital gains is a method used in the Brussels CLT, where the limited added monetary value of the sale of the dwelling is shared between the organisation and the reseller. There are also the options to link the resale price to market prices or work with a method that determines the housing prices in relation to the average monthly payments for households (FMDV, 2020). Every method has its benefits and its downsides. It is up to the CLT organisation to determine which resale formula they set into place.

## 3. Community managed

The third distinctive characteristic of a CLT is that it is a community-led organisation (Interreg NWE SHICC, 2020a, p. 17; Engelsman, Rowe & Southern, 2018, p. 103), emphasising on community control (Moore, 2014). This is in line with the understanding within organisations that people are the foundation of a CLT (Williamson et al., 2021). The community, therefore, forms a significant part of the open democratic governance structure (Moore, 2014), as a CLT often applies the distinctive tripartite governance model that is formed by equal parts of CLT residents, representatives from public authorities and representatives from civil society (CLTBa, 2021; Davis, 2006, p. 19; Gray & Galande, 2011), as is displayed in figure 11. The CLT residents within the organisation are often described in research as "the community". However, a distinction should be made. As was mentioned in a webinar on impactful development and community empowerment with CLT, community means different things in different contexts (Algoed et al., 2021). Not all members of a CLT are active within the organisation, and not all members of the CLT habit a CLT dwelling. Mostly, only some of residents are actively involved in the tripartite body of governance, representing the interests of the whole CLT community (Davis, 2006). As Aernouts and Ryckewaert note, the community of a CLT is shaped by opportunity: "the opportunity of affordable housing attracts them to get involved in a housing project" (2018, p. 504). The representatives from public authorities and experts from civil society act as agents and capacity builders as they aid the community in the establishment of the CLT (Moore & Mullins, 2013). In practice, however, it has been proven difficult to have power as a community sometimes, due to some parties not favouring the collaboration with residents (Williamson et al., 2021). This can be seen as an obstacle for some

residents. The community has to adhere to their legitimacy and claim their authority (Algoed et al., 2021), as this collaboration does have benefits for both. It ensures that the short-term interests of the members and residents of the CLT and the long-term interests of the larger community are balanced (Davis, 2006, p. 19). And as the hosting of a variety of socioeconomic functions requires negotiations with a wide array of stakeholders within the urban area development sector, the collaboration with public authorities and civil society can be of aid within this complex process (Thompson, 2020). In illustration box II an example is given of how and why the CLT in Brussels had instated the tripartite governance structure and how they manage the democratic election of members of the board.

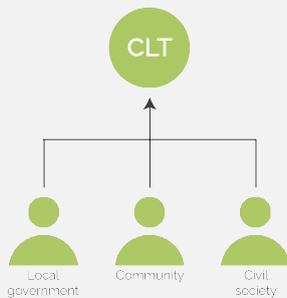


Figure 11. Tripartite governance model (Own image, n.d.).

### Illustration box II. Governance model CLTB

The CLT in Brussels, called CLTB, is governed by two organisations: the Non-profit organisation (NPO) and the Foundation of Public Utility (FUP). Within both of these organisations the tripartite model is applied to ensure that the interests of each party are represented within the organisation (CLTB, 2021c).

The FUP is responsible for the purchasing and ownership of the CLT land and properties. Three resident and three civil society representatives for this organisation are selected through a list of candidates drawn up by CLTB's General Assembly, while three representatives of public authorities are assigned by the regional government (CLTB, 2021c).

The NPO has been assigned the responsibility of the daily management of the properties owned by the FUP. The public authorities, residents and civil society are each represented by five candidates. The resident representatives are selected by all the residents of the CLTB. The civil society representatives are selected by the members of the CLT that do not live in or benefit from the CLTB housing (CLTB, 2021c).

The reasoning behind the choice of the CLTB to separate these two activities over two organisations, was to protect the ownership of the CLTB dwellings and guarantee these dwellings will stay affordable forever (Bachus, 2012, Dawance et al., 2019). Through both these organisations, the CLTB is able to manage and expand their efforts in a democratic manner that benefits all stakeholders.

What should be noted with community involvement in housing development, is that some issues do arise as development within the built environment is a complex process. The ability to participate in this process requires time, education and skill. Not every member of a community possesses these requirements, leading to the discussion within literature surrounding the validity of the democratic character of a CLT (Moore & McKee, 2012).

#### 4. Stewardship

The final characteristic called stewardship has a close relationship with the beforementioned characteristic. Besides that a CLT is a community-led organisation, it is also community-based (Davis, 2006, p.19), as the local community of a certain area or a specific socio-economic group is often the main focus of the organisation (Engelsman, Rowe & Southern, 2018, p. 105). This two-way approach of focusing on and involving the local residents in the governance model ensures meeting the needs of the community by enabling local community empowerment and democratic management of assets (Moore & McKee, 2012). However, Lowe & Thaden argue that the stewardship within CLT can move beyond the tripartite governance structure. They have linked stewardship to the betterment of three main objectives of the CLT model: 1) resident betterment, 2) asset preservation, and 3) community control of land (2016). These objectives focus on empowering the community of the CLT and, sometimes, the community beyond the CLT. Examples of each of these three objectives in practice are given in illustration box III.

The objective of resident betterment focuses on “changing the lives of low-income and minority households through the acquisition of skills, capabilities and wealth” (Lowe & Thaden, 2016, p. 620). This is achieved through, for example, offering training and support, if necessary, and can extend into community development work, such as supporting residents’ initiatives and providing workshops (Dawance et al., 2019, p. 33). These activities can be deployed to offset the difficulties of lack of education and skill mentioned in the characteristic of *Community managed*. Resident betterment can, therefore, also have a subsequent positive effect on the governance of the CLT. However, resident betterment should not limit itself to the adults within the community. As the organisation is often future-focused to main the perpetuity of the project, experts in practice emphasize that support should also be extended to the younger generations living within CLT, as CLT “take

more time than a life". To engage the youth, their interests should also be sparked through participation (Williamson et al., 2021).

The second objective is asset preservation. The CLT organisation is committed to maintaining and sustaining the project to ensure that the CLT contributes to the neighbourhood (Dawance et al., 2019; Lowe & Thaden, 2016). By engaging the residents (Lowe & Thaden, 2016), offering support on how to take care of their homes (Davies, 2006), and resident betterment, the organisation can benefit the vitality and longevity of the CLT. However, each CLT is made up of a unique community, so time should be spent tailoring the appropriate ways of engagement to the needs of the community (Lowe & Thaden, 2016). These needs are specific to the context, but fundamental rights are always needed. It is up to the organisation to establish what fundamental needs and personal needs there are, and how the CLT could provide these (Williamson et al., 2021).

Lastly, the objective of community control of land. The shared control of the land can instil a feeling of responsibility and enable a feeling of "taking back the neighbourhood" and, through the involvement of the wider neighbourhood residents, a deep resident engagement is fostered (Lowe & Thaden, 2016, p. 622; Williamson et al., 2021). CLTs have also been shown to extend their influence outside the CLT, fostering community empowerment and civic leadership for a wider urban area (Lowe & Thaden, 2016). In practice, this kind of participation of the community is vital and there are multiple ways of participation possible (Algoed et al., 2021).

Stewardship thus plays an important role within the other mentioned characteristics, and this built-in resident engagement is one of the elements that differentiate the model from other forms of CH.

### Illustration box III. Stewardship in CLTs

As discussed in the paragraph above, stewardship can be provided in three ways. Within this information box an example for each of these ways will be provided from an active CLT.



Figure 12. An example of resident betterment by the CLTB. In one of the first complexes by this CLT, volunteers teach CLTB residents on how to ride and take care of a bicycle (CLTB, 2022).



Figure 13. The CLT Homebaked shows how the community can be incorporated within the CLT project's development to attain asset preservation. Within this figure, it is shown how people attend a design meeting for the new plans by the CLT (Homebaked Community Land Trust, 2018)



Figure 14. An example of how CLT gain community control of land. Within this picture a community engagement event by the LCLT on one of their new campaigning locations is shown. During this event, the LCLT shows what their proposal for the site in terms of improvement, meeting local need, and design entail (London CLT, 2022; RCKA London Community Land Trust, 2022)

To conclude this paragraph, CLTs are focused on providing genuinely affordable housing and, sometimes, other facilities vital to life within a neighbourhood. It is able to do so by installing a tripartite governance structure and a dual-ownership model to enable resident betterment through resident engagement and perpetual affordability through a financial control mechanism.

### 3.1.3 CLT development

What can be gathered from the four characteristics, is that there is some freedom in the interpretation and implementation of each characteristic. This flexible nature of the model is needed, as the implementation is dependent on the context of each country. The CLT was founded within the Anglo-Saxon system, which already allows for flexibility in ownership structures and support mechanisms. European countries can be more rigid in their regulations, resulting in varying adaptations of the CLT model per European country. In this study, it is one of the objectives to see if the differences in CLT models will lead to differences in the impact on social sustainability, or if the outcomes are the same regardless of the differences. Differences between CLT in Europe can be found within the following elements according to the Interreg NWE SHICC programme (2020a):

- The project leader: Not always does a group of inhabitants of a certain neighbourhood have to be the project leader. This could also be a municipality or a developer or a housing association;
- The target population: While affordable housing is one of the characteristics of a CLT, a differentiation can be made for which socio-economic group affordable housing will be built, such as middle-class or lower. However, a mix of socio-economic groups is also possible;
- The pursued objectives: Often CLTs decide on one or more core objectives that they want to pursue. This could be, for example, affordable housing. But also, retainment of certain facilities within a neighbourhood or securing land could be the main focus;
- The role of the organisation during development: What the role of the CLT organisation is during development can vary. They could focus their efforts on project management, but they could also play more of a role in the land rental or the supporting of households;
- The legal status and governance: As regulations for and the approach to housing development varies per country, differences are found in the legal status and governance of the CLT models in practice. The level of commitment of the various stakeholders should be clearly defined beforehand.
- The CLT business model: The CLT business model is made up of multiple elements that can differentiate:
  - *The development strategy*: This encompasses, for example, how many dwellings, what kind of dwellings, and what other facilities should be developed
  - *Access to land*: It should be stipulated how the land is acquired by the organisation
  - *Access to housing*: This element ties back to the development strategy and specifies what control mechanisms will be set into place to protect the perpetual affordability of the dwellings and control that the target population also ends up being the user of the home.

While implementation of the model varies, the development of an urban CLT within a European country follows a process that is also distinctive for other collaborative housing forms (Interreg NWE SHICC, 2020a). Although some overlap within stages may occur, the development of community-led development projects such as a CLT contains five stages, which are each pictured in figure 15.

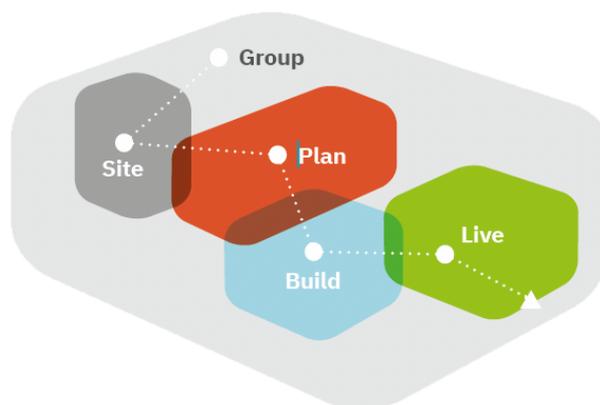


Figure 15. The five steps to community-led housing development (Interreg NWE SHICC, 2020a, p. 17).

The first step, *Group*, is arguably one of the most important steps within the process, as within this step all the above-mentioned elements are defined (Ward & Brewer, 2018), ultimately deciding the direction of the to be realised CLT. This is also the right moment to commence with capacity building with members of the community, as this can benefit the creation of the governance structure, as mentioned in characteristics 3 and 4. However, to keep members engaged, capacity building can be implemented through each step of the process.

Within the case study, the CLTs that are analysed are in stage 5 of the development process. This means that the dwellings and/or other facilities that are built are occupied by CLT members and that the organisation is occupied with the commercial and technical management of the CLT (Ward & Brewer, 2018). The choice for studying CLT in stage 5 was made, as projects within this stage are able to showcase the current impact, instead of an expected impact. The choice for this is made to measure the impact of functioning CLT as these projects can depict the current impact instead of the expected impact.

### 3.1.4 Comparison to other CH forms

The common characteristics and elements of the CLT model have been discussed. However, the CLT is only one of the models within the collaborative housing practice of Europe. In this paragraph, the CLT model will be placed within the broader context of the collaborative housing field.

To start, a distinction in denomination should be made, as this also differentiates between contexts. While this study adopted the European definition of collaborative housing, in Anglo-Saxon contexts, CLT and forms like it are often classified as community-led housing (Thompson, 2020). Community-led housing has been defined as a form of housing provision where people from a local community play “a leading and lasting role” with a focus on “creating genuinely affordable homes and strong communities” (Dawance et al., 2019, p. 24). Housing projects that can be classified under this definition, share the following three core understandings:

1. Community participation and consent should take place throughout the whole development process as described in the foregoing paragraph.
2. The organisation should be able to own, manage and/or steward the dwellings in the way they see fit
3. The housing development should at least benefit the local community of a specific group of people (Dawance et al., 2019).

However, the definition of collaborative housing is broader, but does partly reflect these three core principles: Collaborative housing projects can be described as housing projects set up by collectives of people that “share certain values and motivations regarding their way of life, which guide the project from the beginning, shaping a common vision of their housing project” (Czischke, 2019, p. 42). The taxonomy of CH created by Co-lab Research, makes an important distinction between two types of classes of collaborative housing: 1) community housing, and 2) collective self-provision. With community housing, the objective of the collective of people is to live together with like-minded people when it comes to their way of life, stage of life, or shared values or interests. The housing projects often have collective spaces that are shared by the tenants and function as spaces where they can meet. On the other hand, the shared objective of housing by collective self-provision is to create housing that fits with owner-specified demands, often including an affordability aspect (n.d.). Within this type of collaborative housing, there is more emphasis on the provision of housing and less emphasis on living together with a homogenous group of people.

An overview of the taxonomy is pictured in figure 16. As shown, CLTs are part of the collective self-provision of housing, which is understandable as the common characteristics are affordability and providing housing for a certain socio-economic group. The context of community-led housing does not adhere to the same distinction. However, this study will regard the distinction in taxonomy as significant, which is why this study will regard the practices of community housing as less relevant to the research sub-questions as the collective-self provision of housing. Thus, will this paragraph from now on only focus on the practices of collaborative housing regarding collective-self provision.

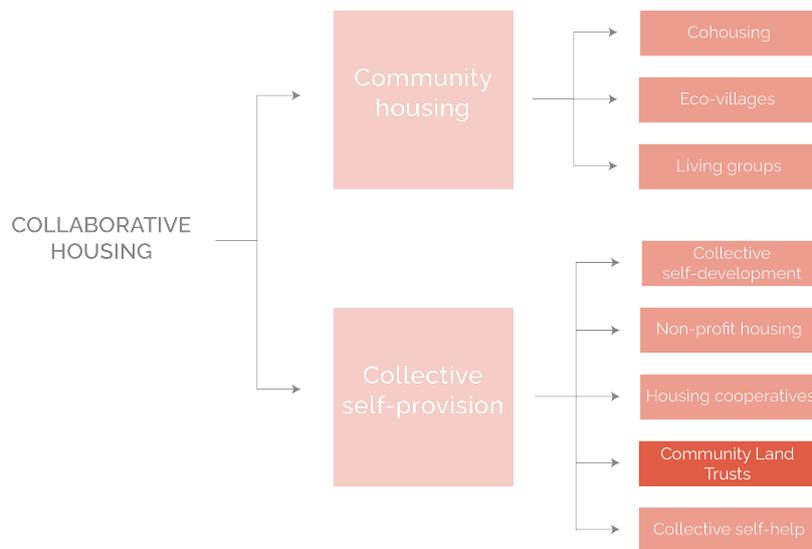


Figure 16. Taxonomy of collaborative housing forms in Europe (Own image, based on Co-lab Research, n.d.)

To determine how the CLT differentiates from the other forms of collective-self provision, the other forms are briefly elaborated on using the descriptions by the Co-lab Research project (n.d.):

#### 3.1.4.1 *Collective self-development*

In collective self-development housing projects, there is an emphasis on developing mostly owner-occupied housing together with a collective of people. This initiative is led by the collective, but often in collaboration with architects and other professionals. The collective is often organized through an association. Collaboration between residents and professionals is concentrated in the design and construction phases. The benefit of collaborating is cost reduction, making this way of housing provision affordable for the collective, along with solidarity between residents. As there is less emphasis on the development of communal or shared spaces, the collaboration between the residents often reduces when inhabiting the project after completion.

#### 3.1.4.2 *Non-profit housing*

As the denomination already suggests, this form of collective-self provision focuses on developing housing through a top-down approach by non-profit organisations. Among these organisations are public and social housing providers. Other objectives of this CH form include: collective self-management, providing affordable housing, creating solidarity among residents and helping certain socio-economic groups re-integrate into society.

#### 3.1.4.3 *Housing cooperatives*

Housing cooperatives are a term for a certain legal form of housing. The term has a history and political background that is not rooted in collaborative housing. However, as of late, the model has transformed. The newer cooperatives focus on collective self-organisation throughout the whole development process pictured in figure 13 on page 36. The main objective still is the provision of affordable housing, but also innovation within construction practices, solidarity and diversity between residents are points of attention for the new generation of cooperatives.

#### 3.1.4.4 *Collective self-help*

Collective self-help initiatives focus their efforts on transforming vacant properties into housing instead of building new dwellings through collective organisation. The efforts are sometimes minimal and are therefore seen as a legal form of “squatting”. Often these projects do get support from local authorities and other professionals.

#### 3.1.4.5 *Commonalities and differences*

When looking at the described models, along with CLT, all models have the creation of affordable housing at the core of their objectives. Another aspect that was often mentioned as one of the core ambitions of the other collective self-provision models was solidarity. This solidarity is commonly achieved through the membership of a community and the sharing of values and is one of the prized benefits of collaborative housing overall (Dawance et al., 2019). Another benefit of collaborative housing can be that it makes the residents less dependent on the market and the economy to meet their

basic housing needs, which reduces their dependence on actors such as banks, corporations, landlords and bosses (Williams, 2018). However, this is only the case for a community-owned property. When it comes to, for example, non-profit housing that is only community-managed, this does not follow through.

When wanting to position the CLT among these models, it can be placed best along with the collective self-development and housing cooperatives due to its people-centred and local action-based approach (Aernouts & Ryckewaert, 2018). However, the CLT model does differ significantly when it comes to the following aspects:

While affordability is often the core objective of the collective-self provision of housing, the CLT model is one of the only models that stipulates safeguarding the affordability in perpetuity. According to Paterson & Dun, this is one of the key elements that distinguishes this model from the other models (2009). As the CLT fights speculation in resale prices, other models can still be prone to the housing market forces during an overturn.

Secondly, as Thompson mentions in his research, cooperatives are “designed to work for the benefit of their members alone” (2020, p. 83) and this accounts for the other models as well. Sometimes they include the community or shared spaces for the residents, but wider engagement is not sought after. The objectives formed during the initiative phase are directed at the members of the collective. In contrast, CLTs are able to aim their positive influences outwards (Thompson, 2020). It is able to do so by engaging the wider community in the organisation through civil actors and providing activities for community development, and sometimes by providing essential facilities to life in a neighbourhood. The collective ownership model forms the basis for these wider benefits. Revenue that is captured from the operation of these “local economic processes” can directly be reinvested in the neighbourhood where the CLT is active (Moore, 2014). In addition, within the American context, the CLT model has been proven to slow negative developments in their neighbourhoods, such as gentrification and its corresponding negative effects such as displacement and unaffordability (Choi et al., 2018). The positive effects of the CLT that were identified by Choi and colleagues for the whole neighbourhood were: increased racial diversity, maintenance of the middle-class ratio and education level, a stabilisation of the income level and an increase in affordability (2018). The presence of a CLT can thus yield an array of benefits for the whole neighbourhood and not just the residents of the CLT.

However, some scholars argue that collaborative housing practices lean elitist, as the housing projects are predominantly started and inhabited by people that are well-educated, middle-income households (Dawance et al., 2019), and could therefore be regarded as exclusive forms of housing. While collective self-provision is already focused on the creation of more affordable housing and therefore could be able to focus on households below middle income, the capacity to be able to participate in such a project is dependent on certain skills and the availability of time, as already mentioned in paragraph 3.1.2. This means that such projects become exclusive to people that possess such resources. However, CLTs often incorporate capacity building activities to include even more vulnerable households. Practices that other forms of collective self-provision might refrain from. One could therefore make the argument that CLTs have a less exclusive character than other CH practices.

However, despite the CLT looking like an admirable way of developing perpetually affordable housing with other benefits, one should stay attentive when implementing and scaling up the CLT model within a context. As the rise of popularity and implementation has shown in the USA, the core principles of the CLT that are mentioned throughout this chapter should be safeguarded. When the objective of a CLT shifts to only the provision of housing, it can be detrimental to all the benefits of empowerment of the residents and the wider community (Dawance, 2019). This process, however, might also make the implementation of a CLT within a country’s context more strenuous on stakeholders within the housing development process than other forms of collective self-provision housing.

### 3.1.5 Conclusion

This paragraph was initiated to find an answer to the following research question: *What conditions and opportunities does a CLT facilitate for a neighbourhood and its residents?* By analysing the origins, characteristics and development process, and comparing this collaborative housing model to others, an answer to this question was sought. According to the findings in the literature outlined in the foregoing paragraphs, a CLT can provide the following elements to a neighbourhood and its residents:

### 3.1.5.1 Conditions

Firstly, through the four characteristics of a CLT, the CLT model can provide the following conditions to a neighbourhood. These means are the tools that are deployed within the model and are commonly found within CLT in Europe.



Development and maintenance of affordable housing

A Community Land Trust is first and foremost a model for the provision of housing. Through the establishment of a CLT within a neighbourhood, perpetually affordable housing is added to the housing stock of said neighbourhood. The number of units that are realised, depends on the objectives and organisation of the CLT.



Citizen participation in housing development and management

Due to the characteristic tripartite organisational set-up of the CLT model, citizens work directly with local authorities and civil experts on their housing provisions during each phase of the project. This provides the opportunity for residents to have influence over their own housing project.



Agreements between authorities and citizens

In European countries where the model has been introduced, CLTs have also gained legal recognition as a model for the provision of housing. This means that the CLT also operates within a neighbourhood as a legal entity. This enables the citizens and local authorities to make binding agreements regarding the CLT, setting a precedent that the agreements shall be met and providing security for the future. The form of legal entity, however, does vary per context.



Security for future generations

The CLT organisation secures each condition and opportunity that they set out to realise within a neighbourhood, in perpetuity through their legal status. This means that not only do the current generations reap the added value of the CLT but these are also ensured for generations to come.

### 3.1.5.2 Opportunities

However, beside conditions, the CLT model does offer opportunities for a neighbourhood. These opportunities are not as guaranteed as the conditions listed above but could be realized and facilitated within a CLT when the precedent is there to do so by the CLT organisation. The organisation can realise these opportunities by taking them into account when determining the CLT objectives, business model, legal status or any of the other elements mentioned in paragraph 3.1.3.



Development and maintenance of affordable (social) facilities

While a CLT is primarily a model for the provision of housing, it does not have to limit itself to this: Other facilities that are vital to social life within a neighbourhood, such as healthcare facilities or spaces for local businesses, can be offered in an affordable manner through the CLT model, retaining these vital functions within a neighbourhood.



Constant dialogue between residents and local authorities

This involvement of residents in an organisation with the local authorities also opens up the opportunity for both parties to be in constant dialogue with each other as the distance between citizens and authority is shortened. The topics of dialogue do not have to limit themselves to the housing that is provided but can also hit on pressing issues or needs within the wider neighbourhood. This way, citizens are able to express their concerns about their local environment better and faster, and local authorities are more up to date on the concerns and needs of their city.



Wide community empowerment and inclusion

It is due to the resident participation in the provision of housing, but also the resident betterment initiatives, that CLT can set out to empower their community. These efforts do not have to be limited to the members of the CLT but can be offered to the wider neighbourhood, spreading the benefits of community empowerment outwards.



Diversity within the neighbourhood

By providing affordable housing and other facilities, CLTs are able to diversify a neighbourhood, not only in its housing stock but also in the socio-economic groups that are represented within a neighbourhood.

In neighbourhoods that are exposed to gentrification or spatial segregation, CLT can offer a way to the retainment and representation of certain socio-economic groups that would otherwise be forced out due to displacement.

## 3.2 Social sustainability

In the introduction of this research, the two basic conditions of social sustainability from a sociological point of view were introduced to assess the current European housing markets. However, these two conditions remained vague, as the extended set of human needs and certain preconditions were not yet clearly defined. By examining the origin, definitions, and operationalisation of the concept of social sustainability, this paragraph examines what these extended set of human needs and preconditions are on the local scale of the neighbourhood and how the concept of social sustainability can be measured on this scale with a focus on the CLT model.

### 3.2.1 Sustainability

As mentioned in the introduction, social sustainability is one of the dimensions of the overarching concept of sustainable development. Sustainability came first to the forefront due to a rise in awareness of ecological destruction and social concerns such as poverty, deprivation and urban degradation that a strategy was created to offset these issues by the means of sustainable development (World Commission on Environment and Development, 1987). From the research that followed the UN report, the well-known triple-bottom-line approach emerged offering a systems perspective on the concept (Sadler & Jacobs, 1994, p. 9). However, while this model was created to work as a base for overall sustainability in development, the Brundtland Commission did not deliver a conclusive understanding of the relation between the three pillars or methods on how they could be measured and evaluated (Eizenberg & Jabareen, 2017). Consequently, the three dimensions have mostly been developed and studied independently in research (Eizenberg & Jabareen, 2017). Consequently, as mentioned, copious attention has been directed toward the environmental dimension of sustainability. This has led to some countries turning away from the overall concept of sustainability. For instance, in the Netherlands, the term “broad prosperity” is used as a comprehensive term for the overall well-being and quality of life (Evenhuis, Weterings & Thisse, 2020). The Dutch are of the opinion that sustainable development has become too associated with its environmental dimension. However, broad prosperity does not differ as much from sustainable development, as they share the same three main categories: 1) material (economic sustainability), 2) social living conditions (social sustainability), and 3) natural living environment (environmental sustainability) (Evenhuis, Weterings & Thisse, 2020).

In past developments, social sustainability has been identified more like an “added-on” to one of the other pillars, economic sustainability or environmental sustainability, than as a separate, valid dimension (Larimian & Sadeghi, 2021 p. 2). Within this study, the social dimension forms the sole focus, as the issues stated in the introduction, such as urban segregation and the unaffordability of housing, show that social sustainability has validity as a point of attention within the sustainable development or broad prosperity discussion. Social sustainability, however, has been described in the introduction as a concept of chaos. To counter this argument, the United Nations report has described sustainable development as a constant process of change that requires choices to be made and is therefore not a fixed state of harmony. The same could be said for the dimensions of the concept. They evolve with time, as such, the concept of social sustainability evolves within this study.

### 3.2.2 Definitions

According to Chiu, three general interpretations of social sustainability can be made. Firstly, social sustainability could be seen as social constraints, in the form of social norms, that limit development. When the social limits are breached, the development fails due to resistance from society. Every development should therefore comply with the social norms and values. Secondly, another interpretation takes a more environment-oriented approach by seeing social sustainability as a set of social preconditions: To achieve environmental sustainability the current social norms and values must be changed accordingly (2003). However, the general definition that is most fitting with the definition of sustainable development by the United Nations, according to Chiu, describes social sustainability as “maintaining or improving the well-being of people in this and future generations” (Chiu, 2003, pp. 224–245). What can be concluded from these general interpretations of the definition of social sustainability, is that social sustainability is people-centred as well as environment-centred, as illustrated in figure 17.

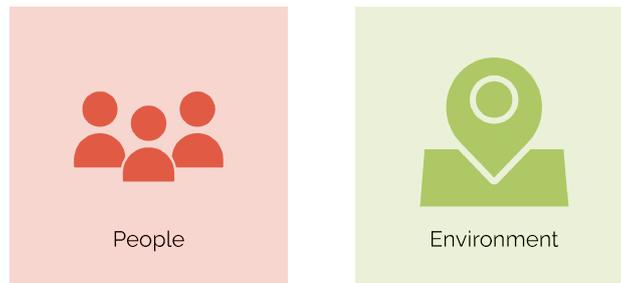


Figure 17. The two dimensions of social sustainability (Own image)

However, when operationalising the definition within a certain domain or scale, the ambiguity of the concept of social sustainability increases leading to social sustainability becoming a “concept of chaos” as mentioned in the introduction of this paragraph. However, this ambiguity does not have to be a disadvantage as Shirazi and Keivani portray: “it reflects the complexity of the social dimension of sustainability and also allows researchers to develop case-specific and place-specific formulations” (2017, p 1539), meaning that the definition can vary on the people and the environment that is focused on. This is also evident in research: In table 6, an exploration of definitions of social sustainability in research is presented. For each of these definitions, the domain and scale have been allotted to showcase what the environment is focussed on. Looking at the definitions in table 6, the conclusions explained in paragraphs 3.2.2.1. and 3.2.2.2 can be drawn.

Table 6. Varying definitions of social sustainability according to different sources (Own table, sources listed in table)

SOURCE	DOMAIN	SCALE	DEFINITION
Polese & Stren, 2000, p. 15-16 in Bramley et al., 2006, p. 3	Planning and development	Scale not specified	“Development (and/or growth) that is compatible with harmonious evolution of civil society, fostering an environment conducive to the compatible cohabitation of culturally and socially diverse groups while at the same time encouraging social integration, with improvements in the quality of life for all segments of the population.”
Shirazi & Keivani, 2019, p. 451	Built environment	Macro- or micro-scale not specified: Built environment	“... a socially sustainable environment is a place with a dialectical character. On the one hand, it is a locality where physical qualities and standards (hard infrastructure) are positively perceived, highly valued, and interactively utilised by the inhabitants through sustaining and enduring social practices (soft infrastructure). On the other hand, it is a place where substantial social qualities (soft infrastructure) are sustained, highly valued, and vividly exercised within an urban setting of high physical quality (hard infrastructure).”
Dixon, 2019, p. 23	Built environment	Micro-scale: neighbourhood	“... about people’s quality of life, now and in the future. It describes the extent to which a neighbourhood supports individual and collective well-being. Social sustainability combines design of the physical environment with a focus on how the people who live in and use a space relate to each other and function as a community. It is enhanced by development which provides the right infrastructure to support a strong social and cultural life, opportunities for people to get involved, and scope for the place and the community to evolve.”
Larimian & Sadeghi, 2021, p. 624	Built environment	Micro-scale: Neighbourhood	“We define a socially sustainable neighbourhood as one that provides residents with equitable access to facilities, services, and affordable housing; creates a viable and safe environment for interaction and participation in community activities; and promotes sense of satisfaction and pride in the neighbourhood in a way that people would like to live there now and in the future.”

### 3.2.2.1 Commonalities

While the definitions of social sustainability vary, they do share certain general features. This sharing of features is not surprising and can even be called necessary, as there should be some form of consensus on the basic concept of social sustainability to be able to achieve it.

What most of the definitions in table 6 have in common, is that they focus on the present and the future, following the general definition of sustainability by the United Nations and the general definition of social sustainability by Chiu. The definitions also partly share the inclusion of change, for instance in the form of community involvement by Dixon (2019) or societal evolution and environmental improvement (Polese & Stren, 2000) as part of keeping a community and environment socially sustainable. This is in line with another commonality between the definitions, the dialectical character of social sustainability. Each definition mentions a connection between people and the environment that they live in, as illustrated in figure 18. This connection is also reflected in the elements of social sustainability that are shared in the definitions, such as social integration, quality of life, well-being, physical environment, interaction, and participation.



Figure 18. Connection between the environment and people form social sustainability (Own image)

### 3.2.2.2 Distinctions

The distinction in the definitions becomes apparent when looking at the domain and scale of the definitions: Polese & Stren focus their definition of social sustainability on development and planning in general, following the general definition of sustainable development of the United Nations mentioned in the introduction of this paragraph. Development as mentioned in these definitions can be defined as a complex of activities that are carried out using material and/or intellectual resources to attain certain social or economic objectives (Chiu, 2003). However, in which sector these activities are carried out, is not specified. As the scope of this study concerns housing projects within the built environment, a definition of social sustainability that applies to this study should be within this domain. As shown in table 6, there are multiple definitions to be found for social sustainability within the built environment.

However, there are also differences to be found between the definitions of social sustainability that focus on the built environment. In their research, Shirazi and Keivani mention that social sustainability has a multiscale character (2019). The concept can be applied through different scales within the built environment. Commonly, these scales are divided into macro-, meso- and micro-scales. An example of such a division is presented in figure 19. These distinctions of scale within the definitions do implicate that each scale is of significance when it comes to achieving social sustainability. This importance of every scale is showcased in illustration box IV, where the situation of the Dutch CLT H-Buurt case is mapped out with the scale division of figure 19 and every operationalisation of the concept of (social) sustainability that is utilised within each macro-, meso- and micro-scale is mapped out. This analysis showcases that each scale can indeed use its own conceptualisation.

However, what should be noted is that Shirazi and Keivani stress that during research upscaling and downscaling between the three different scales should be avoided, as conceptualization and operationalization are specific to context as well as scale (2019). A particular scale should therefore be specified for this study that represents the environment within figure 18. As Evenhuis and their colleagues mention, people do not typically experience their life on a national scale. They case their well-being on their day-to-day life, which mostly takes place in their direct environment. And even in a small country

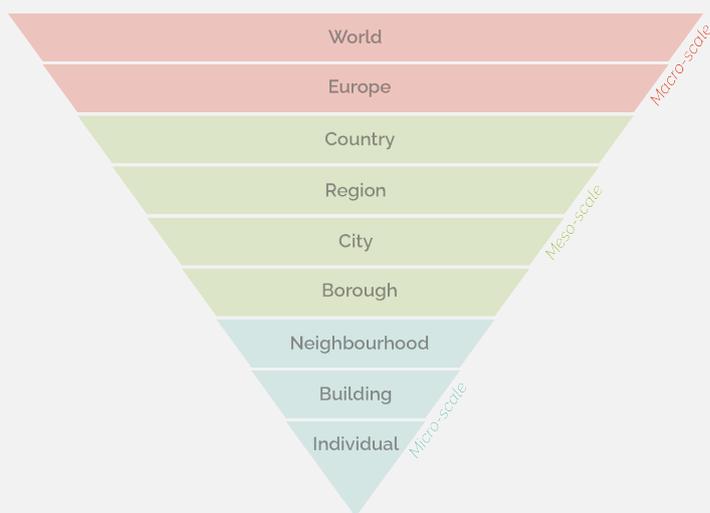


Figure 19. Different macro-, meso- and micro-scales that can be identified within the built environment (Own Image).

like the Netherlands, there are vast differences between regions when it comes to the economic, social and environmental circumstances people might experience (2020). In addition, most (re)development within the built environment takes place on a neighbourhood scale, making this scale important to the overall social sustainability in a larger city, region or country (Dixon, 2019). It is due to these two arguments, that this study recognises the neighbourhood as a valid scale for this study to focus on. Within this study, a neighbourhood is considered as “an area in a city with connected areas of blocks of buildings” (Dixon, 2019, p. 22).

As the environment in figure 18 has already been defined as a neighbourhood, the element of people should also be defined within this study. However, not only can the focus on the environment differ but what can also differ is the people that are focussed on social sustainability according to the definitions in table 6. Within the planning and development domain, Polese and Stren talk about a population which is a broad definition and due to no scale being defined, is unsurprising in their case. When looking at the definition on the micro-scale of the neighbourhood, Dixon mentions the notion of a community while Larimian and Sadeghi talk about residents of a neighbourhood.

#### Illustration box IV. Scales of the CLT H-Buurt and the corresponding operationalisation of social sustainability.

As mentioned, social sustainability has a multiscale character and it is stressed that upscaling and downscaling between the micro-, meso- and micro-scale should be avoided as much as possible. To give an understanding of how this works in practice, the different scales and their corresponding operationalisation method that includes elements of social sustainability are listed in table 7. What this table shows, is that there is a clear understanding on macro-scale on which operationalisation method is used. However, on meso-scale, a distinction can be made between the upper meso-scale, which use “Brede Welvaart” and the lower meso-scale, which use the “Amsterdam City Doughnut”. This clear distinction is due to the fact that on a city scale and lower the local authorities, the municipality of Amsterdam, have chosen to take their own approach towards sustainability and circularity, by adopting the Doughnut Economics model by Kate Raworth as a tool for attaining the city of Amsterdam’s goal of becoming a fully circular city in 2050 (Gemeente Amsterdam, n.d.)

Table 7. Overview of the different macro-, meso- and micro-scales when looking at the location of the CLT H-Buurt and the operationalisation method that is used on each scale (Own table).

SCALE	OPERATIONALISATION OF SOCIAL SUSTAINABILITY
World	Sustainable Development Goals
European Union	Sustainable Development Goals Social taxonomy
The Netherlands	Brede Welvaart (Broad Prosperity)
Metropole region Amsterdam	Brede Welvaart (Broad Prosperity)
Amsterdam	Amsterdam City Doughnut
Zuidoost	Amsterdam City Doughnut
Bijlmer	Amsterdam City Doughnut
Building	-
Individual	-

The term “residents of a neighbourhood” by Larimian and Sadeghi implies that only a spatial barrier ties the people to the neighbourhood. According to Stevenson, the word community can imply that it considers a group of people that share interests, cultures or characteristics without the need to live in physical proximity to each other (2021). But it can also be interpreted on a neighbourhood level as the term encompassing both spatial and social aspects, as it gives a suggestion to people’s social relationships but also can give a sense of belonging within an environment (Stevenson, 2021). Within this study, the term community will be used to describe the people within the set environment of a neighbourhood, the residents, applying the interpretation of Stevenson that a community is bound by social relationships as well as environmental proximity.

These interpretations of the neighbourhood as the environment and a community as the people transform figure 18 into figure 20.



Figure 20. Within this study, social sustainability is formed by the neighbourhood, which functions as the environment, and the community, which is formed by the people from the neighbourhood (Own image).

### 3.2.3 Operationalisation

To be able to determine the social sustainability of a community within a neighbourhood, the concept needs to be operationalised first on the determined scale of the neighbourhood and the scope of the community within that neighbourhood. With the operationalisation, the theoretical framework could be used as a tool for the measurement of social sustainability. With this tool, the objective is to measure what the circumstances surrounding social sustainability are at the moment within a neighbourhood and to determine how a neighbourhood should be for it to be socially sustainable. To note, what should be kept in mind is that this tool of measurement can determine what should be improved when comparing the now with the desired, but it cannot exactly determine the how.

#### 3.2.3.1 Steps of operationalisation

The ambiguity that became apparent when looking at the definitions of social sustainability, carries through in the operationalisation of the concept in literature. As Janssen, Daamen and Verdaas mentioned in their research, there is a comprehensive body of principles, indicators and values within the research field of social sustainability (2021). Research does not fully align on what the exact building blocks for social sustainability within the built environment should be. Most scholars do agree that certain elements form the basis of the concept. However, as the methods of operationalisation differ, the terminology to describe these building blocks also differs. For example, while Bramley et al. and Dempsey et al. talk about ‘underlying concepts’, Lang and, Shirazi & Keivani call them ‘key principles’, and even later on in their studies Shirazi & Keivani move to an operationalisation using ‘dimensions’, like Dixon & Woodcraft and Hemanía, Das & Chowdhury.

To be able to create a comprehensive and clear operationalisation of social sustainability for this study, the distinction within the steps of operationalisation, which is pictured in figure 21, is made. This distinction is based on the approach taken by other operationalisations on the concept of social sustainability and also by the Dutch national government to operationalise the concept of broad prosperity. This study adopts the terminology of **key principles** to form the foundation

of the concept of social sustainability. These key principles are based on the analysis of the definitions of social sustainability. Each key principle is then expanded with a set of corresponding **indicators** that act as the building blocks of the key principle. To be able to operationalise the indicators, they will need to be assigned a way of measurement. For the construction of a set of **measurements** for each indicator, the *Capabilities Approach* is adopted. Consequently, when the measurements are gauged during the execution of the research, the **impact** of each measurement can be determined, as depicted in figure 21.

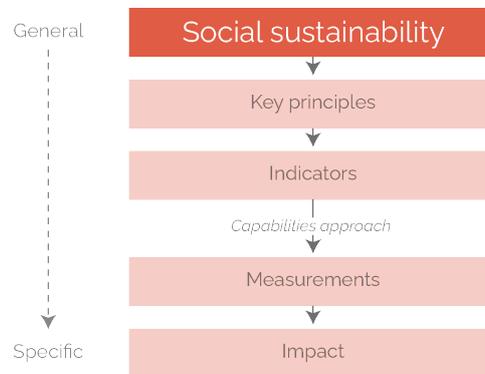


Figure 21. Operationalisation of social sustainability in this study (Own image)

When determining the elements of each step within the operationalisation, literature focused on social sustainability within the built environment, and specifically on the micro-scale of the neighbourhood, is used as the foundation. Elements from broader interpretations, such as broad prosperity, are also taken into account, but with less emphasis.

### 3.2.3.2 The Capabilities Approach

According to Robeyns, in its essence, the Capabilities Approach (CA) is a conceptual framework that can be deployed in the evaluation and assessment of individual well-being (2017, p. 26). Within this framework, one questions if a person is able to achieve what a person wants to achieve to attain their well-being (Evenhuis et al., 2020). Therefore, within this approach, there is an important distinction made between the doings and beings of a human being, called functionings, and the substantive freedoms that an individual has to execute these functionings referred to as capabilities (Janssen, Daamen & Verdaas, 2019). Each functioning corresponds with one capability (Robeyns, 2017). Therefore, people possess a set of capabilities, based on the functionings they desire and value. However, what the valued functionings are and how broad the set of capabilities is, depends on two elements; the available resources and the conversion factors. This is depicted in figure 22.

Resources are referred to as the means that one can utilize to enlarge people's capabilities (Janssen et al., 2019). Within the CA resources have an instrumental valuation (Robeyns, 2017, p. 27). According to Sen, who laid the foundations for the CA, means can only be considered resources if they are material or measurable (Robeyns, 2017, p. 45) To give an example, in the context of the built environment, the facilities and amenities located in a neighbourhood could be classified as resources.

Conversion factors relate to the ability of an individual "to convert the available resources into functionings" (Robeyns, 2017, p. 45). They represent how much functioning a person can get out of a resource based on personal, social, environmental and institutional factors:

- Personal conversion factors: factors that are internal to the person, such as sex or physical condition;
- Social conversion factors: factors that are formed by the society in which an individual lives, such as social norms or power relations related to class, gender and race;
- Environmental conversion factors: factors that are determined by the physical and built environment in which an individual lives, such as climate, and air pollution (Robeyns, 2017);
- Institutional conversion factors: factors stemming from the institutions that are present in society, such as public policies or laws.

It is through these differences in conversion factors that diversity is created in a society (Robeyns, 2017). This is central to the CA and why it is also reflected in figure 22.

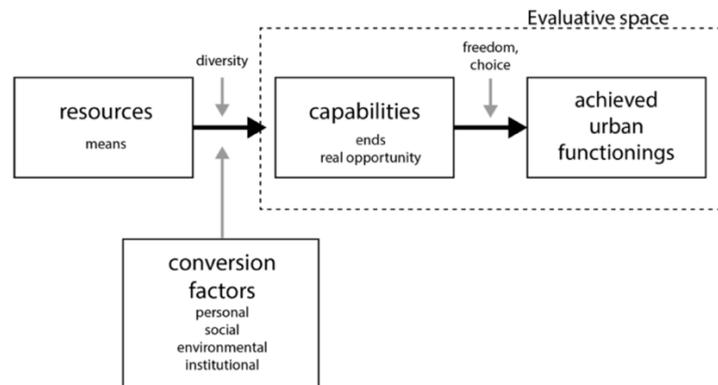


Figure 22. The simplified scheme of the Capabilities Approach' evaluative framework (Janssen, Daamen & Verdaas, 2021, p. 6)

As mentioned, the CA is often used as a way of measuring well-being. It has even been suggested as a method for measuring aspects of broad prosperity in the Dutch context to create policies that are more suitable for attaining this goal of broad prosperity (Evenhuis et al., 2020). However, in this study, it will be applied to the concept of social sustainability. This is a relatively new approach, pioneered by Janssen and her colleagues (2019). They see it as a more comprehensive approach to the operationalisation of the concept of social sustainability as it does not solely focus on resources as outputs, which corresponds with the standard resource-based approach or welfare economics approach. The CA recognizes people's actions and opportunities via the built environment as outputs. Much research on social sustainability has often focused solely on the availability and expansion of resources (Janssen, Daamen & Verdaas, 2019). For example, there is enough public space in this neighbourhood for people to meet so people are connecting and networking here. However, this is a simplistic way of looking at resources and is contested by the CA. Just because a certain resource is present, does not automatically mean that an individual is able to make use of this resource. The CA proclaims it is essential to assess the capabilities to judge the achieved urban functionings. This approach, therefore, better reflects the focus on the two dimensions of social sustainability pictured in figure 18 on page 45, people and community, and is therefore seen as a more appropriate approach for this study.

There might be some concerns with the feasibility of this approach within a study such as this one. To argue against this, according to Robeyns, this approach can be applied in different types of studies. It is possible to apply the CA in a study that focuses on evaluating a range of values (2017). The CA will be used as a way of evaluating the indicators for social sustainability.

However, there are also other concerns surrounding this approach. One critique of the approach is that this method is too individualistic and does not focus enough on groups (Robeyns, 2017). This individualistic approach, however, could also be seen as a strength, as it leaves room for extremely in-depth research before looking at possible patterns and commonalities between people with differing or corresponding capabilities and creating a general understanding. This in-depth manner of research fits with the qualitative nature of this study.

Other concerns, such as that more emphasis is needed on social structures and norms, power and political economy within the CA (Robeyns, 2017), should be taken into account and addressed when looking at the context in which the research of this study will be conducted. However, with indicators that (partly) rely on social norms and political democracy, part of these concerns will already be addressed when constructing the measurements for these indicators.

### 3.2.4 Key principles

As depicted in figure 21 the first step of the operationalisation is to determine the key principles and their corresponding indicators for social sustainability. Through analysing the environmental and social factors from a collection of different factors mentioned in academic literature, it can be concluded that there are many elements connected to social sustainability. There is some consensus on the basic elements of the concept, but there is differentiation in how they are deployed within research. Most studies start their analysis with a distinction between tangible and intangible factors. This is unsurprising, as earlier research often focussed only on environmental factors (Janssen et al., 2021). This focus corresponds with the approach of seeing resources as the ultimate output of the built environment. However, Eizenberg and Jabareen emphasise the importance of including intangible indicators in social sustainability, as tangible indicators are merely indicators of good urban design and planning, and do not consistently show positive effects in cities (Janssen, Daamen, & Verdaas, 2019). The inclusion of intangible indicators can therefore be found in many of the studies listed. To give some examples, Shirazi and Keivani classify their key principles according to the hard (neighbourhood) and the soft infrastructure (neighbouring) in social sustainability, while Dixon makes a distinction between the physical and the social environment. In table 8 the indicators commonly found in the literature are sorted. Firstly, they are assigned to the environmental or social domains that Dixon distinguished, and then in tangibility. Some of the listed factors are also mentioned in the definitions of social sustainability in table 8, such as social mix, quality of life and well-being, community, participation, accessibility and safety, which could be seen as an emphasis of their importance to the concept

Table 8. Overview of environmental and social factors of social sustainability in no particular order from various sources (Own table, based on sources various sources within the body of knowledge on social sustainability).

ENVIRONMENT		PEOPLE
TANGIBLE	INTANGIBLE	INTANGIBLE
Urban form	Accessibility	Social networking and interaction
Public space	Employment	Participation and democracy
Housing	Environmental sustainability	Sense of attachment
Facilities	Education	Community stability
		Safety and security
		Well-being and quality of life
		Social equity
		Social inclusion and mix
		Social cohesion
		Sense of community
		Cultural traditions
		Neighbourhood satisfaction

The distinction between environmental and social indicators is of importance to this study, as it has been determined in paragraph 3.2.2 that social sustainability is in its essence about the interplay between the neighbourhood and the community residing in this neighbourhood, as shown in figure 19 on page 46. This determination in the definitions highlights the importance of both but also shows that they both have their own distinctions. This study will therefore take a similar approach to Shirazi and Keivani, and Dixon in setting up key principles surrounding these two elements. However, as Griessler and Littig have mentioned in their sociological definition of social sustainability, the concept is about being able to satisfy human needs while also safeguarding institutional arrangements. In this study, it is therefore needed to identify what the needs are in regards to the neighbourhood and the community and what institutional arrangements are of importance within the neighbourhood and community for them to be socially sustainable.

Through the analyses of research and other operationalisation methods in practice, the following three **key principles** have been identified:



Neighbourhood

The neighbourhood as the environment forms the last key principle of social sustainability in the context of the built environment, following the conclusions from figure 21. This principle relates to most of the environmental factors that are listed in table 7. It is about the resources that the neighbourhood provides for its community to a certain extent to create an environment where the community can meet their needs.



Community

As identified in figure 21, Community forms one of the two main elements of social sustainability within its definition, which is why this will form the second key principle. Community encompasses all aspects that deal with the processes and interrelations between the people living in the neighbourhood, and their neighbourhood itself, that enable the functioning and health of the community. Therefore, this key principle represents the social needs that a community should meet to create a socially sustainable community.



Equity

Equity, shortened from social equity, has been identified as the first key principle. Equity is one of the most named principles within social sustainability literature according to analysis. This is not surprising, as Shirazi and Keivani state: social equity is the "backbone of a socially sustainable community" (2017, pp.1537-1538). This principle encompasses all basic human rights and can therefore be considered as the set of preconditions that Griessler and Littig mentioned in their sociological approach to social sustainability (2005). Equity forms the basis of social sustainability.

### 3.2.5 Indicators

Subsequent to the identification of the key principles, the indicators for each of these principles have to be identified. This is done using the same analyses on the elements of social sustainability in various academic papers, but also by applying methods from practice.

#### 3.2.5.1 Neighbourhood

As stated in paragraph 3.2.4, the key principle of Neighbourhood encompasses all the primary resources that a neighbourhood should provide for a community to attain social sustainability within the neighbourhood. The identification of the primary resources is of importance, as resources play a key role within the CA, see figure 22 on page 49, which are applied within this study. The neighbourhood forms the environment that this study focuses on. From research, it has been gathered that a well-designed and maintained neighbourhood can encourage residents to also make use of the facilities and amenities their environment has to offer (Larimian & Sadeghi, 2021). This key principle is therefore of importance to the other key principles. The neighbourhood forms the playing field for the functionings of the Community. The indicators identified within this paragraph can have a significant influence on the other aspects of the other key principles of social sustainability.

There is an overpowering consensus that "adequate shelter is one of the most fundamental human needs" (Leckie, 1989, p. 90). What follows from this consensus is that every individual has a right to housing, as without a dwelling it is proven difficult to find such adequate shelter elsewhere. Thereby, housing is also essential for the respect of human dignity and the ability of an individual to meet their other basic needs, such as water, food, and energy, and aids the possibility of enjoying a family life (Mikkola, 2008). **Housing** can therefore be deemed fundamental for the stability and continuity of societies and should be regarded as the primary resource that a neighbourhood should provide.

On a neighbourhood scale, however, housing is not the only necessity. Scholars have identified other **facilities** that individuals should be able to access on a day-to-day basis. In addition to need, implementing a multitude of socio-economic functions has been proven to have a possible positive effect on well-being, feelings of security and social inclusion (Shirazi & Keivani, 2019), providing a variety of facilities as resources, therefore, aids the social sustainability of a neighbourhood. Facilities for education, employment, essentials, recreation, transportation and public space should be among the resources a neighbourhood has to offer (Dempsey et al, 2011; Larimian & Sadeghi, 2021).

Lastly in regards to this key principle, this study also takes into account other public neighbourhood resources that are less tangible than the beforementioned, and are not yet mentioned in table 7. This decision was made according to a method for community development, called the ABCD (Asset Based Community Development) method, the neighbourhood is able

to provide certain assets that are vital for the development of the community and the neighbourhood (Collaborative for Neighborhood Transformation, n.d.). These kinds of softer infrastructures within a neighbourhood are relatively unexplored in social sustainability research. However, as they can play this vital role within neighbourhoods, they should be taken into account.

The first “softer” resource that is vital for neighbourhoods and communities, as they are often under constant development through the movement of people and the building lifecycle, are **financial funds** (Collaborative for Neighborhood Transformation, n.d.), such as subsidies or financial investments. Differentiation can be made between public and private funding. Public funding consists of the financial investments that public stakeholders make. These public stakeholders include any government agency operating on one of many different scales of the built environment that were depicted in figure 19 on page 46, but also other publicly recognised organisations. In illustration box V an example of public community funding is given. Private funding comes from private stakeholders, with often a profit motive. This category includes investors and banks. Both public and private funding are of importance within urban area development (Franzen et al., 2011).

#### Illustration box V. Neighbourhood budgets in Amsterdam

In the Netherlands the municipality of Amsterdam is experimenting with “buurtbudgetten” (neighbourhood budgets) that can be implemented in neighbourhoods that need a boost when it comes to the liveability (Kennisland, Waag & Pakhuis De Zwijger, 2021).

How it works is that a group of residents from the neighbourhoods that have been granted a neighbourhood budget can propose a project within the neighbourhood. When the project has been voted on by the other residents from the neighbourhood, the project is financed through the budget

Residents from the neighbourhood can propose a project within the neighbourhood that can be financed through such budgets. Increasing financial support in neighbourhoods through these kind of budgets has been shown to have a positive effect on community building (IWOON, 2022), and could therefore benefit the notion of sense of place.

Another important resource that should be shared among the neighbourhood, is **knowledge and skill**. According to the ABCD method, each resident of a neighbourhood has their own set of skills and knowledge that could be shared among residents through their homogeneous and heterogeneous relationships (Collaborative for Neighborhood Transformation, n.d.). However, not only do the residents possess certain knowledge and skills but also the institutions and associations that play a role within the neighbourhood possess certain assets for this resource that could be shared with the residents. Fraser and Lepofsky mention that the application of knowledge exchange between residents and such experts can aid the process of community-building and community empowerment through such efforts and can increase the notion of trust between residents and such expert and external stakeholders (2004).

#### 3.2.5.2 Community

The key principle of Community encompasses the social functionings of people within a group. The indicators that will be assigned to this principle thus have to embody the primary social functionings that are necessary to create a community that is socially sustainable.

To start, according to the academic literature social capital forms an important part of this principle. Social capital can be defined as the “social networks and the associated norms of reciprocity” (Putnam, 2000, p. 21 in Dempsey et al., 2011, p. 294) and is therefore about the network of communication between different people within a group. This concept includes the organisational features of social networks such as trust between people, the density of the network, knowledge of relationships within networks and obligations and expectations (Dempsey et al., 2011). These social networks could provide embedded resources that could benefit an individual or even a collective (Lang, 2019). According to scholars, a distinction within social capital can be made between bonding and bridging social capital. Bonding social capital is about the networks between like-minded people. They can be regarded as constrained to their homogeneous networks in the flow of information and behaviour as they socialise with people within their own socio-economic group (Lang, 2019). This kind of social capital is often easier to establish between people due to the similarities shared. It also is an indicator of the social cohesion of a neighbourhood (Lang, 2019). Social cohesion can be defined as “the ongoing integration of behaviours of residents in a given neighbourhood” (Dempsey et al., 2011, p. 294). On the other hand, bridging social capital goes beyond these similarities, and is therefore associated with the heterogeneous relationships that people have (Lang, 2019).

These heterogeneous relationships within people's networks are vital for accessing new information and resources and therefore the integration of people into society (Lang, 2019). The difference between bonding and bridging capital is schematically depicted in figure 23.

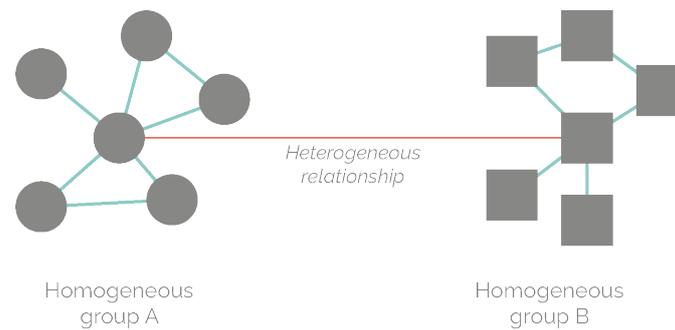


Figure 23. Simplified scheme of bonding and bridging capital in which two networks are depicted. Within each network there are people that share certain characteristics, in this case a shape depicted as a circle or square. When two of the same shape form a relationship, this relationship is homogeneous and is therefore called bonding capital (blue line). When two differing shapes form a relationship, this is called a heterogeneous relationship as they do not share the same characteristic. This is called bridging capital (red line) (Own image)

The relationships within bonding and bridging capital are achieved through social interaction between people. Social interaction can be defined as the broad spectrum of actions that people in their community engage in. These actions can take place between two or more individuals and can be verbal and/or non-verbal (Shirazi & Keivani, 2019). Social interaction is seen as one of the most important aspects of social sustainability by Larimian and Sadeghi, as without it, “residents of a community can only be described as a group of people who live their separate lives” (2021, p. 625), which can lead to a lesser sense of attachment to the community and place. As social capital, networks and social interaction all interplay with each other, they will be comprised into one indicator called **social networks and Interaction** for this function within a community.

Another important aspect of a well-functioning community is a **sense of place** and therefore forms the second indicator for this key principle. A sense of place can be defined as people’s connection with their environment through a sense of attachment to the physical built environment (place attachment), but also to the people and the community (sense of membership/community). These community bonds of attachment can be built through shared interests and values, and common norms in a community and civic society (Dempsey et al., 2011; Shirazi & Keivani, 2019; Larimian & Sadeghi, 2021). The common rule can be applied that the stronger the common values and norms are, the better the sense of community/membership is (Dempsey et al., 2011). Place attachment is brought forth through a vital and vivid environment (Larimian & Sadeghi, 2021) and a feeling of pride: “The premise is that if people are proud of where they live, they have stronger ties to their community and therefore are more likely to want to stay living in the neighbourhood and being involved in its continued development” (Larimian & Sadeghi, 2021, p. 625). Overall, a sense of attachment to place and community has been proven to hold significant advantages to the community and environment, as people who identify themselves with their environment are more likely to take care of it (Shirazi & Keivani, 2019).

What also has a significant effect on social sustainability, is the feeling of **safety and security** within a community and neighbourhood. It can negatively affect the quality of life, and the number of social activities and can increase distrust amongst the residents of the community (Hemania, Das & Chowdhury, 2016). Residents should feel safe moving around the neighbourhood and also when using the resources that it has to offer. When positive feelings in regard to safety and security occur, it can contribute to a greater sense of community and sense of place (Dempsey et al., 2011).

Lastly, while the three mentioned indicators form the primary functionings of a community, within this study **participation and democracy** is also included as an indicator for *Community*. This is done because participation and democracy have an additional positive effect on social sustainability, so it could improve the other mentioned primary functionings when present. The absence of participation within a community does not negatively affect social sustainability or make the social environment unsustainable (Dempsey et al., 2011).

Through networking and interaction within and outside people's socio-economic groups and a strong sense of community and/or place, participation within the community can be stimulated (Shirazi & Keivani, 2019). Attending and taking part in community-related activities is referred to as participation in the context of social sustainability (Dempsey et al., 2011). It can give people a feeling of responsibility for their environment, which influences the level of interest in dealing with issues and future plans for their environment. Participation also involves political participation and the level of democracy in the environment (Dempsey et al., 2011). It stipulates the level of control people want and have over their own environment.

### 3.2.5.3 Equity

Lastly, the indicators for the key principle of *Equity* should be determined. This key principle is seen as the backbone of social sustainability and determines the set of institutional requirements that should be upheld within a community and neighbourhood to create a physical and social environment that is socially sustainable.

The concept of equity is rooted in social justice (Dempsey et al, 2011). Social justice concerns the “fairness in the apportionment of resources in society”, in which resources can be described as social goods (Burton, 2003, pp. 539-540). From this social equity can be defined as the fair allocation and distribution of resources within the built environment (Dempsey et al., 2011). However, this distribution should not have to be equal for it to be equitable, as can be derived from a quote by Rawls: “*All social primary goods—liberty and opportunity, income and wealth, and the bases of self-respect—are to be distributed equally unless an unequal distribution of any or all of these goods is to the advantage of the least favoured*” (1972, p. 303). An example of equitable distribution of resources that highlights the difference with equal distribution is Amsterdam's neighbourhood budgets that were discussed in illustration box V. These budgets are currently only endowed to neighbourhoods where the liveability needed an impulse (Kennisland, Waag & Pakhuis De Zwijger, 2021). Through this initiative, not all Amsterdam neighbourhoods get a budget, only some neighbourhoods that are less favoured than others in terms of liveability received additional financial resources.

Consequently, social equity within social sustainability is most often expressed by the concept of social inclusion. Anyone should be able to live, work, recreate and participate in society in the way that they desire, regardless of their socioeconomic group or personal characteristics (Larimian & Sadeghi, 2021). This embodies the concept that no one should be excluded. However, social inclusion spaces across different contexts: economic, social, political but also material (Silver, 2015). For this study, the social and material contexts are of interest due to the aforementioned key principle of *Neighbourhood* (material dimension) and *Community* (social dimension).

Within the material dimension, social inclusion can be measured through the **accessibility** of resources. As social inclusion entails that no individual should be excluded from resources (Dempsey et al, 2011). All resources that are vital for social sustainability, as discussed in paragraph 3.2.5.1, should therefore be accessible within a neighbourhood that is socially equitable.

When regarding the social dimension, social inclusion embodies the notion that any individual should be able to include themselves within the functionings that are mentioned in paragraph 3.2.5.2 that are vital for a community that strives towards social sustainability. **Inclusion** means that no one should be actively excluded from those functionings. However, what should be considered is that there is some tension between the principles of social capital and social equity. As discussed, social capital is strongly connected to social cohesion, while social equity is dependent on inclusivity. But this is contradictory. It has been researched that the greater the community cohesion, the less inclusive a community may become (Lang, 2019). This is caused partly by homogeneous relationships of bonding of social capital, as these relationships are easier to forge. A balance between social cohesion and social inclusion is needed to strive toward a socially sustainable community. This conundrum also demonstrates the interrelated and sometimes complicated nature of the factors encompassing social sustainability.

To conclude this paragraph a graph has been made that brings the three key principles and their corresponding indicators together in an overview which builds upon the theory discussed above. The graph is shown in figure 24. What should be stressed is that while these three principles are discussed separately, what became apparent from research is that they are connected and interdependent. Equity acts as a precondition that should be safeguarded by meeting the needs of the other key principles. Together they form the concept of social sustainability.

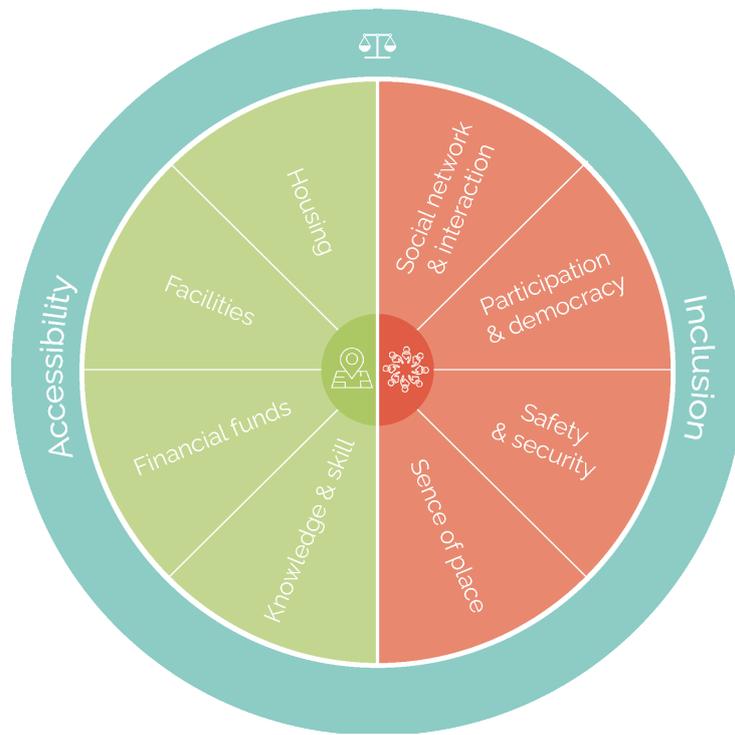


Figure 24. Summation of the key principles and corresponding indicators of social sustainability within the circular workings of social sustainability (Own image)

### 3.2.6 Measurements

The third step according to the operationalisation scheme for social sustainability in figure 21 on page 48 is to translate the key principles and their corresponding into measurements. This step is elaborated on within this paragraph. However, what is also depicted in this figure is that the CA is deployed for this step within the operationalisation process. The scheme of the CA shows that there are multiple elements needed to assess the achieved urban functionings of individuals. As will be elaborated on in the next paragraph on impact, the assessment of the achieved urban functionings of individuals living in and around a CLT is the objective of this study to determine the impact of the CLT itself. For each of these elements of the CA (resources, conversion factors and capabilities) measurements are allocated within this paragraph.

#### 3.2.6.1 Resources

As identified in the foregoing paragraph, the resources in the CA act as the means that can be utilised to enlarge people's capabilities (Janssen et al., 2021). In the environmental context of the neighbourhood, the means that a neighbourhood has to offer these resources. In paragraph 3.2.5.1 on the key principle called *Neighbourhood*, the vital types of resources that a neighbourhood has to offer for its community were identified. A more detailed description of what resources should be provided per type of resource-based on previously analysed literature is given in table 9.

Table 9. Overview of the *Neighbourhood* indicators that determined the vital types of resources and what resources correspond with this type of resource according to literature (Own table, n.d.).

TYPE OF RESOURCE	RESOURCES	SOURCE	
Housing	Adequate housing (decent housing) Affordable housing	Dempsey et al., 2011	
Facilities	Essential facilities	Supermarket Post office Healthcare centre / doctor Bank/money machine Religious centre	Dempsey et al., 2011
	Recreational facilities	Park / public garden Public space Community facility Playground	
	Educational facilities	Primary school	
	Public transportation facilities	Bus Metro Tram Train	
Financial funds	Public funding Private funding	Franzen et al., 2011	
Knowledge & skill	Local knowledge Expert knowledge	Fraser & Lepofsky, 2004	

To elaborate on the specifications within table 9, for housing it has been determined that in order to move towards neighbourhoods that are socially sustainable, the housing within that neighbourhood should be adequate. This means that the housing lives up to the building standards within the country or context to meet a certain physical standard. But the term adequate housing also includes an acceptable level of services of housing providers and local authorities provide for the maintenance of housing. In this way, it can be expected that the housing in question could meet an acceptable level of housing satisfaction, which Larimian and Sadeghi (2021) identified as their measurement for housing. In addition, housing should also be affordable, which is also a relative term such as adequate housing. However, what is of importance is that residents within a neighbourhood should not be prohibited from living in or moving out of different neighbourhoods and areas (Dempsey et al., 2011).

Table 9 also lists all the vital facilities that a neighbourhood should provide according to Dempsey and colleagues (2011). This study will adhere to this list, determining that the listed facilities are needed within a neighbourhood to come to a socially sustainable neighbourhood.

As mentioned, neighbourhoods are under constant development for maintenance of improvement. To accommodate this development, the resources of financial funds, and knowledge and skill are needed, which is why they were identified as vital resources for a neighbourhood. As already mentioned in paragraph 3.2.5.1, financial funding can be split up into public and private funding.

Lastly, for knowledge and skills, a difference can be made in local and expert knowledge according to Fraser and Lepofsky (2004) and both should be considered of importance within a neighbourhood. Local knowledge comes from residents and is created out of their experiences, while expert knowledge comes from the development of expertise in a certain field (Fraser & Lepofsky, 2004), such as law or project management. Oftentimes within neighbourhood development, local knowledge could be vital, but residents are not equipped with the additional knowledge to transform this into practical action. For this, expert knowledge on actualizing the desired change is needed (Fraser & Lepofsky, 2004) However, knowledge and skills are also personal to an individual (, making knowledge exchange between locals also necessary (Collaborative for Neighborhood Transformation, n.d). This makes the exchange of knowledge between two residents or experts also of relevance.

### 3.2.6.2 Capability sets

The determination of the capabilities that are to be measured within this study is one of the most important steps. As this study focuses on researching the impact of the CLT on the social sustainability of a neighbourhood, the objective is to determine the capabilities that individuals within a neighbourhood should all be able to achieve to attain social sustainability. Therefore, the capabilities are based upon the indicators of *Neighbourhood*, *Community* and *Equity* together: the accessibility of the vital resources that a neighbourhood should provide, and the inclusion of individuals in community functions. This is schematically depicted in figure 25.

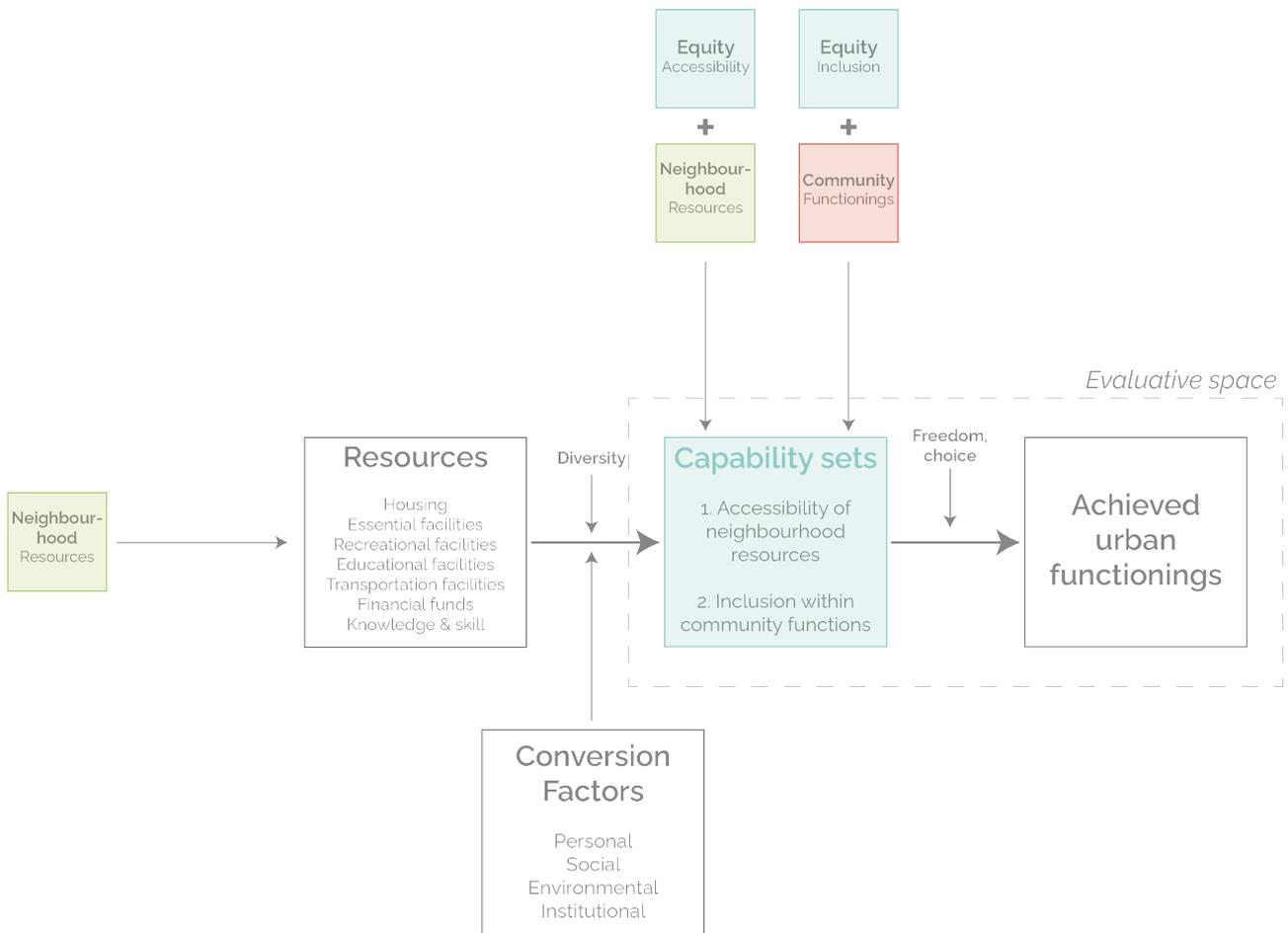


Figure 25. Depiction of the capability sets that to be set up and researched within this study. The capability sets are based upon the key principle and indicator model for social sustainability (Own image, based on Jansen et al., 2021, p. 6).

The result of this method is that there will be two sets of indicators created, as displayed in figure 25. The capabilities are set up by identifying the urban functionings that an individual should perform when the capability is fulfilled. These functionings are identified through the literature on social sustainability that utilizes indicators similar to the indicators in this study. This process is depicted in appendix V. For indicators that were not based on social sustainability literature, such as *knowledge & skill* and *financial funds*, this method could not be used. Instead, for these indicators, the functionings were identified based on the findings and reasonings within paragraphs 3.2.5.1 and 3.2.6.1.

What became apparent from previous analyses, however, is that a multitude of functionings could be identified per indicator. For this study, however, the number of capabilities is limited due to the timeframe of the study and the timeframe set for each interview. The number of indicators that are questioned within the interview should be able to be answered within an hour with a reasonable number of follow-up questions to gain an in-depth understanding of an individual's reasoning for their answer. This necessitated the identification of the most representable function or functionings for each indicator in question. The representation was assessed by the researcher. Table 9 displays all the **17 capabilities** that have been assimilated through this approach for this study. The two capability sets are represented within this table, together with the indicators that are measured through the listed capabilities.

### Capability set 1: Accessibility of neighbourhood resources

The capabilities within the first capability set all surrounded measuring the accessibility of the vital resources that were identified. The study on social sustainability by Larimian and Sadeghi (2021) also partly focussed on the measurement of accessibility of facilities, so their study was used as an example for the development of the capabilities, as shown in table 1 of appendix V. To limit the number of capabilities, some capabilities listed in the appendix are combined into one capability, as can be seen in table 10.

Table 10. Overview of the key principles and corresponding indicators and measurements for social sustainability (Own table)

CAPABILITY SET	INDICATORS TO MEASURE		CAPABILITIES	
	 Equity	 Neighbourhood		
Accessibility of neighbourhood resources	Accessibility	Housing	A1	Resident is able to live in an adequate house they can afford.
	Accessibility	Facilities	A2.	Resident is able to access and make use of the essential facilities that are present in their neighbourhood.
	Accessibility	Facilities	A3.	Resident is able to access and make use of the recreational facilities that are present in their neighbourhood.
	Accessibility	Facilities	A4.	Resident is able to access and make use of the educational facilities that are present in their neighbourhood.
Accessibility	Facilities	A5.	Resident is able to access and make use of the transportation facilities that are present in their neighbourhood.	
Accessibility	Financial funds	A6.	Resident is able to access the public financial funds that are available for them or their neighbourhood.	
Accessibility	Knowledge & skill	A7.	Resident is able to ask their neighbours or others in their neighbourhood for help.	
Accessibility		A8.	Resident is able to consult experts in their neighbourhood when they have a need to.	
Accessibility		A9.	Resident is able to learn new knowledge and skills in their neighbourhood.	
	 Equity	 Community		
Inclusion within community functionings	Inclusion	Social networking & interaction	I1.	Resident is able to make connections and form relationships with their neighbours.
	Inclusion	Social networking & interaction	I2.	Resident is able to visit their neighbours.
	Inclusion	Participation & democracy	I3.	Resident is able to participate in community activities in their neighbourhood when desired.
	Inclusion	Participation & democracy	I4.	Resident is able to voice their opinions and problems to local parties.
Inclusion	Safety & security	I5.	Resident is able to feel safe in their neighbourhood.	
Inclusion	Safety & security	I6.	Resident is able to feel secure within their current position in life.	
Inclusion	Sense of place	I7.	Resident is able to feel at home in their neighbourhood.	
Inclusion		I8.	Resident is able to feel a sense of community in their neighbourhood.	

### Capability set 2: Inclusion within community functionings

The capabilities for the second set were set up by analysing the measurements of Shirazi and Keivani (2019) and again Larimian and Sadeghi (2021) and deriving the urban functionings from them, as shown in table 2 of appendix V. However, both sources listed a significant number of measurements for each indicator. Therefore, the eventual capabilities listed are the most general and encompassing capabilities for the indicator from the appendix, or, are combinations of certain capabilities. All the capabilities, that are tested within the interviews in regards to inclusion within community functionings, are listed in table 9.

### 3.2.6.3 Conversion factors

As mentioned in the explanation of the CA in paragraph 3.2.3.2, there are four types of conversion factors. They are also listed again in figure 25. Conversion factors are of great importance within the CA, as they are important influences on the ability of an individual to possess a certain capability or not. However, as also shown in figure 25, there is diversity within the population of individuals. It is due to the diversity within the population that it is difficult to determine beforehand which conversion factors are of importance within this study. This diversity comes from the personal nature of conversion factors. Personal and social conversion factors can differ from person to person, as they (partly) rely on the characteristics of an individual. Environmental and institutional factors are more universal. However, how they impact an individual's capabilities can also depend on the individual's characteristics. It is due to these reasons that the conversion factors will mostly not be predetermined such as the resources or capabilities.

Only, as personal conversion factors do have to do with the gathering of personal data, personal conversion factors that are expected to possibly influence the capabilities of individuals that participate in this study are identified. This way, measures can be taken to protect the personal data that is produced by these personal conversion factors. However, of course, the measures within the DMP also apply to other personal data that could be collected. The following personal conversion factors were expected to come about during the interviews due to the following reasons:

To start, **age** could play an important role in certain capabilities that are listed in table 9. It could influence the educational facilities that one would need, together with the dependence on public transportation if the person is not legally allowed to drive due to their age. It also could influence the capabilities for participation and democracy, as they might be too young to vote.

Secondly, an individual's **physical condition** could also be of importance, especially when it comes to the accessibility of facilities within the neighbourhood.

And, as the affordability of housing is a topic of interest within this study, **socio-economic background** or **income** are also personal conversion factors that could possibly influence the capabilities, especially when it comes to access to affordable and adequate housing.

Lastly, from practice, it has been gathered that discrimination can influence the feelings of safety and security that an individual experiences (ZO=Zuidoost, 2021). As safety and security are an important factor within social sustainability, personal conversion factors that are prone to influence the level of discrimination that an individual experiences within our society, such as **race**, **gender**, **religion** or **sexual orientation**, could come to the forefront during the assessment of the capabilities with the participants.

## 3.2.7 Impact

As figure 21 on page 48 illustrates, assessing the impact is the last step in the operationalisation of the concept of social sustainability. How the impact is assessed, is further explained in this paragraph.

### 3.2.7.1 Impact assessment

Measuring the social impact of measurements is an established practice within social impact assessment (SIA) (Esteves, Franks & Vanclay, 2012). Its roots lay in "predicting social impacts as part of an environmental impact assessment" (Esteves, Franks & Vanclay, 2012, p. 34), again highlighting that social sustainability often has been regarded as part of environmental sustainability, which is talked about in the introduction of sustainability. However, as the understanding of social sustainability by scholars and researchers has expanded, nowadays social impact assessment focuses mostly on "analysing, monitoring and managing the social consequences of planned interventions" (Esteves, Franks & Vanclay, 2012, p. 34). However, these assessments are often made before the intervention has taken place. In this study, the intervention has already happened, as within this research the CLT can be seen as the planned intervention. And this research only establishes the impact on indicators of social sustainability and no other elements of society that are taken into account with SIA practices. The method of measuring impact is therefore different from these kinds of assessments.

### 3.2.7.2 Manners for making impact

With the application of the CA as pictured in figure 22, social sustainability is measured by questioning if the residents within a neighbourhood are able to fulfil all 17 capabilities that have to do with the indicators of the concept. What can be gathered from figure 22, is that these capabilities can be influenced in two manners:

1. Changes in resources, or;
2. Changes in the conversion factors.

The objective within this study is to determine what resources and/or conversion factors the CLT model is able to change within a neighbourhood and if these changes also had an influence on the capabilities of residents. As discussed, for resources it is significant to determine what vital resources, as listed in table 9, the CLT model is able to provide. There are no conversion factors that are predetermined as vital for social sustainability. So, this study also provides insights into which conversion factors play an important role in social sustainability.

However, what is challenging in this approach, is that within a neighbourhood, there are also other elements that could cause a change in resources or conversion factors and therefore influence the capabilities of residents also, such as other urban area developments/interventions in the neighbourhood, overall changes in conversion factors due to, for instance, societal and political changes, or due to no action being taken at all, which could worsen or improve current conversion factors. Therefore, the determination of causality is significant within this study. To be able to affirm the causality, triangulation is applied in the gathering of the data by using different sources of input for the manner of impact, namely theory, organisations from the CLT network, and residents.

### 3.7.2.3. Level of impact

After the manner is established, the level of impact can be assessed. The capabilities of residents can be affected by a change in resources or conversion factors in three ways:

1. Capability increased
2. Capability decreased
3. Capability stayed the same

As the capabilities come from the perspective of the residents, only residents can be questioned in regards to the level of impact. This will be done through the interviews, as mentioned in the chapter on the research methodology. To look for causality in this assessment, the residents are asked to compare their current capabilities with their capabilities during their previous living situation, and these experiences are compared to the current living experiences of non-CLT residents.

Combining the approach to establishing the manner and the level of impact, the scheme of figure 26 can be made for the assessment of the impact of CLT on social sustainability at a neighbourhood level.

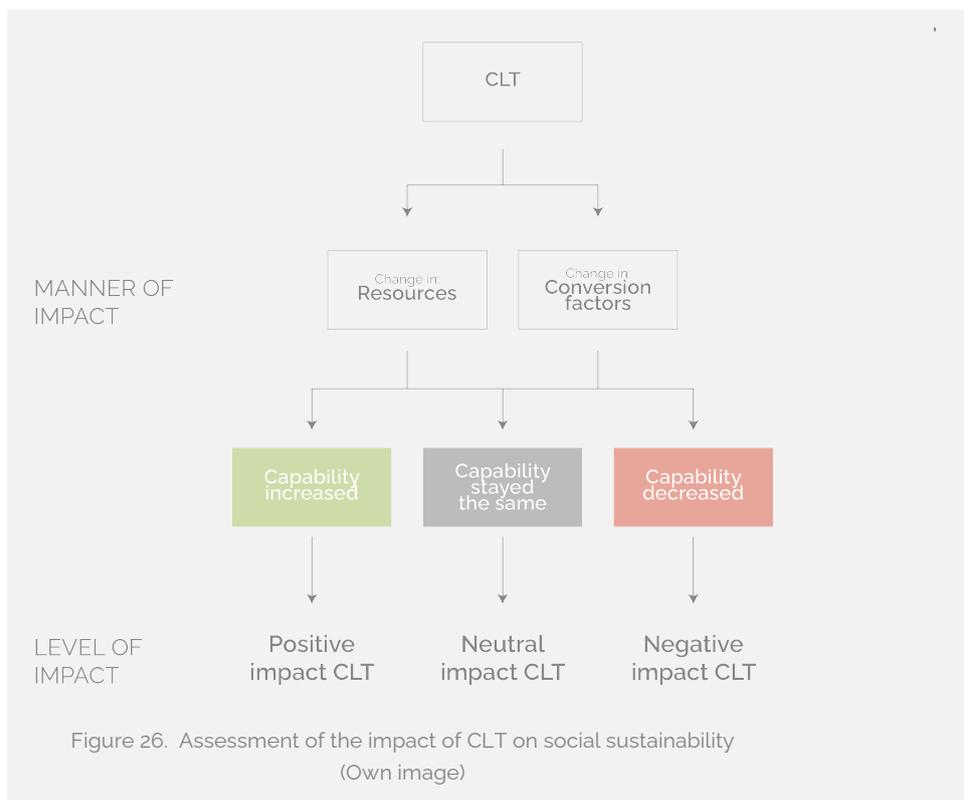


Figure 26. Assessment of the impact of CLT on social sustainability (Own image)

### 3.2.8 Conclusion

In this paragraph, an answer was sought to the question of how social sustainability can be measured on a neighbourhood scale. However, before measuring it was important to determine what social sustainability means within the context of the neighbourhood. Based on the definitions listed in table 6 on page 44, the identified key principles and indicators and the addition of the CA, this study defines social sustainability on the micro-scale of the neighbourhood as follows:

*Social sustainability describes the extent to which a neighbourhood provides the needed environmental resources and supports the social functioning and health of a community while safeguarding the preconditions of social equity. It can be qualified as a coming together of environmental and social aspects that open up the capabilities of all its residents, now and in the future.*

Table 10 lists the capabilities that an individual within a neighbourhood should be able to turn into achieved urban functionings, together with figure 21 which is used to determine the impact of a CLT on said capabilities of social sustainability give an overview of how social sustainability can be measured on a neighbourhood scale and how the impact of a CLT on said social sustainability can be determined.

### 3.3 CLT and social sustainability

In the two previous paragraphs of this chapter, the conditions and opportunities of the CLT model have been mapped out and a tool for the measurement of social sustainability on a neighbourhood level using the CA has been developed. Before the impact of a CLT is assessed through empirical, this paragraph provides an assessment of the impact that a CLT could have on social sustainability. This assessment is based on the possible effects the conditions of opportunities of the CLT model could have according to existing scientific literature. Through this, an answer can be given to the third research question: *How do the conditions and opportunities of the CLT model impact the capabilities or residents in theory?* By finding an answer to this question, a start is made at the development of the theory on the impact of CLT on social sustainability on a neighbourhood scale. This theory then offers areas of focus for empirical research.

#### 3.3.1 Social sustainability within collaborative housing

While the impact of CLT on social sustainability has been limitedly researched, the impact of the overall concept of collaborative housing on social sustainability has come about sporadically in literature. To start the development of the theory, the body of scientific literature on the impact of collaborative housing projects on social sustainability is explored.

Fromm (2012) studied collaborative housing projects within neighbourhoods that are undergoing some sort of transformation. She found that overall CH projects have a positive effect on the wider neighbourhood through the ability to aid the process of collaboration during the beginning stages of the project which can extend into the establishment of community networks in later stages of the project. In turn, she found that collaborative communities can also benefit the feeling of safety in a neighbourhood, as people know each other better when crossing each other on the street and are more likely to extend a helping hand. However, how great the effect and what it specifically affects, depends on the context, and the role and design of the project.

Lang (2019) focused his research on the discussed contradictory relationship between social cohesion and inclusion in collaborative housing practices. By studying the practices of CLT, Baugruppe and co-housing projects, he found that collaborative housing projects can have a positive effect on the social inclusion and social cohesion of the neighbourhood, despite their contradictory relationship. The increase in social inclusion is fostered by the “greater accessibility of collaborative housing schemes for different sociodemographic groups” (p. 211) and the cohesion is stimulated through the stimulation of making connections within the wider neighbourhood. However, he argues that these benefits are mostly possible when the projects are integrated into subsidized housing programs, into area development projects or experience the involvement of local authorities. This is because in these manners, aspects of social sustainability can be introduced as requirements for these projects or local authorities can aid in capacity building. Lang does note that even though the involvement of local authorities benefits the impact of the CH practice, they should also “respect the organisational autonomy of resident groups” to protect these kinds of projects against negative influences on their functionings by top-down institutions.

In conclusion, from this brief analysis of the limited body of knowledge on social sustainability within collaborative housing practices, it can be gathered that collaborative housing practices can have a positive effect on different capabilities of residents that have to do with social sustainability. As can be seen in figure 27, collaborative housing practices are able to influence these capabilities by changing **social conversion factors** for people within the neighbourhood, stimulating collaboration and social bonding, but also by adding the **resource of housing** for certain socio-demographic groups, increasing the capability of living in adequate and affordable housing for *some*. However, another conclusion that can be drawn from this analysis, is that capabilities themselves are able to influence conversion factors, which in turn also open up another capability for some, for example, by being able to make connections, people can also turn the capability of “being able to feel safe in the neighbourhood” into an achieved urban functioning. This can be regarded as some sort of domino effect between the capabilities that have to do with social sustainability.

What can also be gathered from the research by Lang (2019), is that different conversion factors have an effect on the type of connection, homogeneous or heterogeneous (figure 23 on page 53) that people make within the neighbourhood. However, for this study, the types of connections people make are not within the scope.

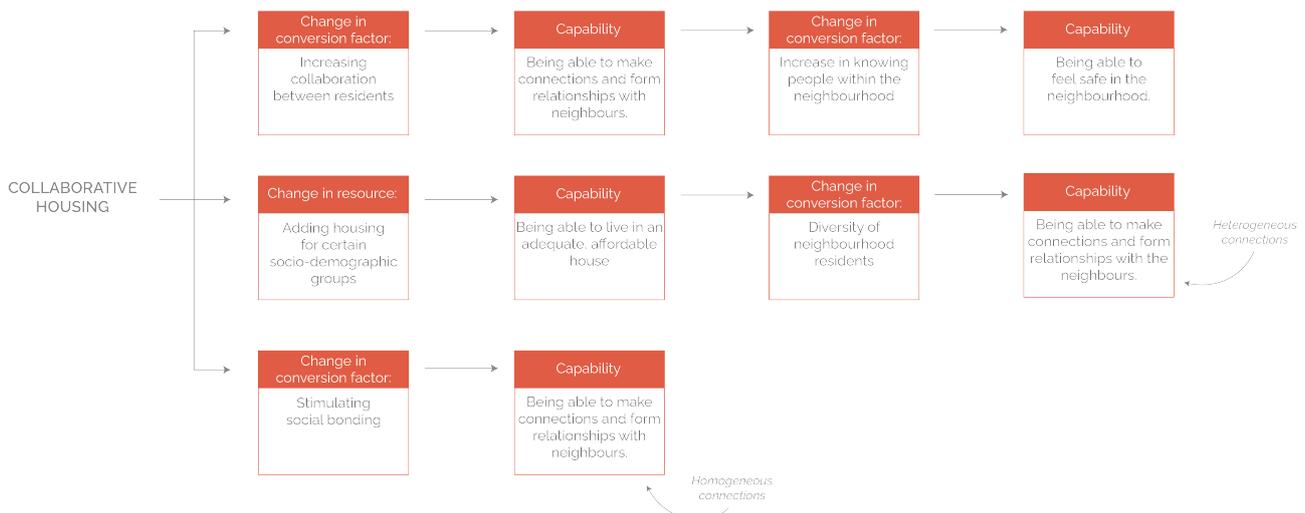


Figure 27. The different elements of social sustainability on a neighbourhood scale that a CH project can have an effect on according to Fromm (2012) and Lang (2019) (Own image).

### 3.3.2 Social sustainability within Community Land Trusts

CLT are a form of collaborative housing, so the above-analysed impact on social sustainability could be expected for this model also. However, as elaborated on in paragraph 3.1, the model is also able to provide other conditions and opportunities that could also impact certain capabilities of residents. In this paragraph, the conditions and opportunities are analysed with the use of scientific literature to theoretically determine the manner in which the CLT model could impact capabilities that have to do with social sustainability. This theoretical model functions as a point of comparison for the empirical findings and also provides focal points for the empirical research.

#### 3.3.2.1 Possible manner and level of impact of CLT conditions

First and foremost, the CLT is a model for the development and maintenance of affordable housing. The target group for affordable housing does depend on the objectives set by the CLT organisation, however, commonly lower and/or middle incomes are the focus. What can be gathered from the analysis in figure 27, when providing the resource of housing for certain socio-economic groups, it can be assumed that the capability for accessibility to housing can be increased. In the case of the CLT model, this capability can be increased for people with a lower and or/middle income.

Another condition of the CLT model is that said housing should be affordable in perpetuity, providing security for future generations in the neighbourhood when it comes to housing. However, it is unclear how this security in perpetuity influences the ability to feel secure in life for current residents. From research, it can be gathered that living in deprived housing has negative effects on a range of issues that negatively influence elements of social sustainability, such as lower quality of life, poor physical and mental well-being, and poorer accessibility to jobs, vital facilities for neighbourhood life (as listed in table 9), and social networks (Winston, Kennedy & Carlow, 2019). CLT provide lower and middle incomes with a chance on bettering their circumstances surrounding housing and, therefore, possibly improve these elements and their housing security. However, the extent of this depends on the previous housing context of the residents, which can be classified as a personal conversion factor.

The next condition of the CLT that was mentioned in the concluding chapter of paragraph 3.2, is citizen participation in housing development and management. According to Michels, there are different forms of participation (2011). In CLT, citizen participation entails that residents are part of the governance board. In the case of CLT, the type of participation can be called interactive governance: it is collective and residents have an influence on the decision-making and outcomes (Michels, 2011). By conducting a study, Michels found that citizen participation in any form has a positive effect on the development of knowledge and skills of participants, but also on civic virtues, which refers to the “public engagement, responsibility, political interest, the feeling of being a public citizen and willingness to be active in public life” (2011, p. 286), showcasing that besides knowledge and skill, overall participation and democracy can be positively impacted as well through increasing the **institutional conversion factor** of citizen participation. And, as mentioned within the paragraph on indicators for the key principle of *Community*, the stimulation of participation and democracy can cause other primary functionings of social sustainability to improve. Meaning, when the capabilities of residents in regards to

inclusion in participation & democracy increase, this could cause other capabilities that have to do with inclusion in community functionings to also increase, again showcasing the domino effect as explained at the end of paragraph 3.3.1.

The condition of agreements between authorities and citizens extends upon citizen participation within local decision-making, meaning that the expectation at the moment is that this condition influences the same capabilities as the aforementioned condition.

### *3.3.2.2 Possible manner and level of impact of CLT opportunities*

In addition to housing, the CLT model also provides an opportunity for CLT organisations to provide other facilities for a neighbourhood. From examples, it can be gathered that the current European CLT focus on providing recreational facilities for the neighbourhood, such as a community space, and even essential facilities, such as a supermarket or bakery. By adding these vital resources to a neighbourhood, the ability to access such facilities could be expanded for CLT residents, and possibly residents of the wider neighbourhood if facilities are opened to them. However, this does depend on the objectives of the organisation. However, when it comes to other vital facilities, such as educational or transportation facilities, CLTs have no known impact, as there have not been examples within Europe that the CLT has provided these. This means, that the impact on the accessibility of these facilities is expected to be neutral.

The next opportunity that the CLT model could provide, is the opportunity for residents to be in constant dialogue with local authorities. This opportunity is also an extension of the condition of citizen participation in the development and management of housing, meaning that when this opportunity is applied within CLT organisations, it could be expected that this enforces the impact of the condition, in particular when it comes to the ability to voicing opinions and concerns to local parties, as a direct link is made between both parties.

Wide community empowerment and inclusion were named as the third opportunity. CLTs are known to work on resident betterment and empowerment through the classic characteristic of stewardship. Resident betterment focuses on involving the residents within different sets of activities that are specified by the tripartite organisation and often based on the needs of the residents. The manner and level of impact of this opportunity depend on the activities that the CLT organisations set out to realise. However, when activities or events for the community are realised, this can create a moment for residents to interact and opens up the opportunity for making connections (2021). A CLT could thus provide **resources** (events) that enable the connections between residents further. In addition, such community activities could also enrich the sense of community, according to Stevenson, as the events are a place where “a shared consciousness” of community identity and values can be created through interaction and participation. However, Stevenson already forewarns that **personal conversion factors** also have an impact on the capabilities surrounding social networks & interaction, and participation & democracy. People that have a personal tendency to engage more, reap the benefits more, (Stevenson, 2021). Community betterment is not only associated with interaction and participation, but it also could imply that residents learn new knowledge or skills through workshops that the CLT provides.

Lastly, the CLT has the opportunity to bring diversity to neighbourhoods. As shown in figure 27, according to research by Lang, diversity could promote the capability of increasing the ability to connect and form relationships, as it provides the opportunity to create relationships outside of the homogeneous group (2019). However, there is also literature that states that people tend to associate with like-minded people more. According to Tóth and colleagues, this association creates a social conversion factor that negatively influences the connections between heterogeneous groups and the sense of community (2021). So, the level of impact that this opportunity has on the capabilities of residents, remains unsure when looking at it from a theoretical perspective.

### 3.3.3 Conclusion

What can be concluded from this paragraph on the impact of the conditions and opportunities of the CLT model on the capabilities of residents based on scientific literature, is that the CLT model is able to influence the capabilities of residents that have to do with social sustainability in both manners: through certain conditions and opportunities, the model is able to provide resources: housing, essential and recreational facilities, and events. And according to the literature, the CLT model is also able to put social and institutional conversion factors into place that have the possibility of increasing certain capabilities of the residents. However, when it comes to the opportunity of bringing diversity to neighbourhoods, there are social conversion factors that could negatively affect the capabilities of social network & interaction. So, the impact of this opportunity is not easily determined.

By combining the research findings of this paragraph in one graph, figure 28, it can be gathered that the CLT model could bring about a lot of positive impacts on the lives of residents. As there are areas which the CLT can provide little resources or offer conversion factors, such as the accessibility of educational facilities, transportation facilities, and financial funds according to theory, these capabilities are no areas of focus within the upcoming empirical research. They are still studied, as this study does want to look at social sustainability as a comprehensive concept, but they will be questioned less in-depth within the focus groups and interviews.

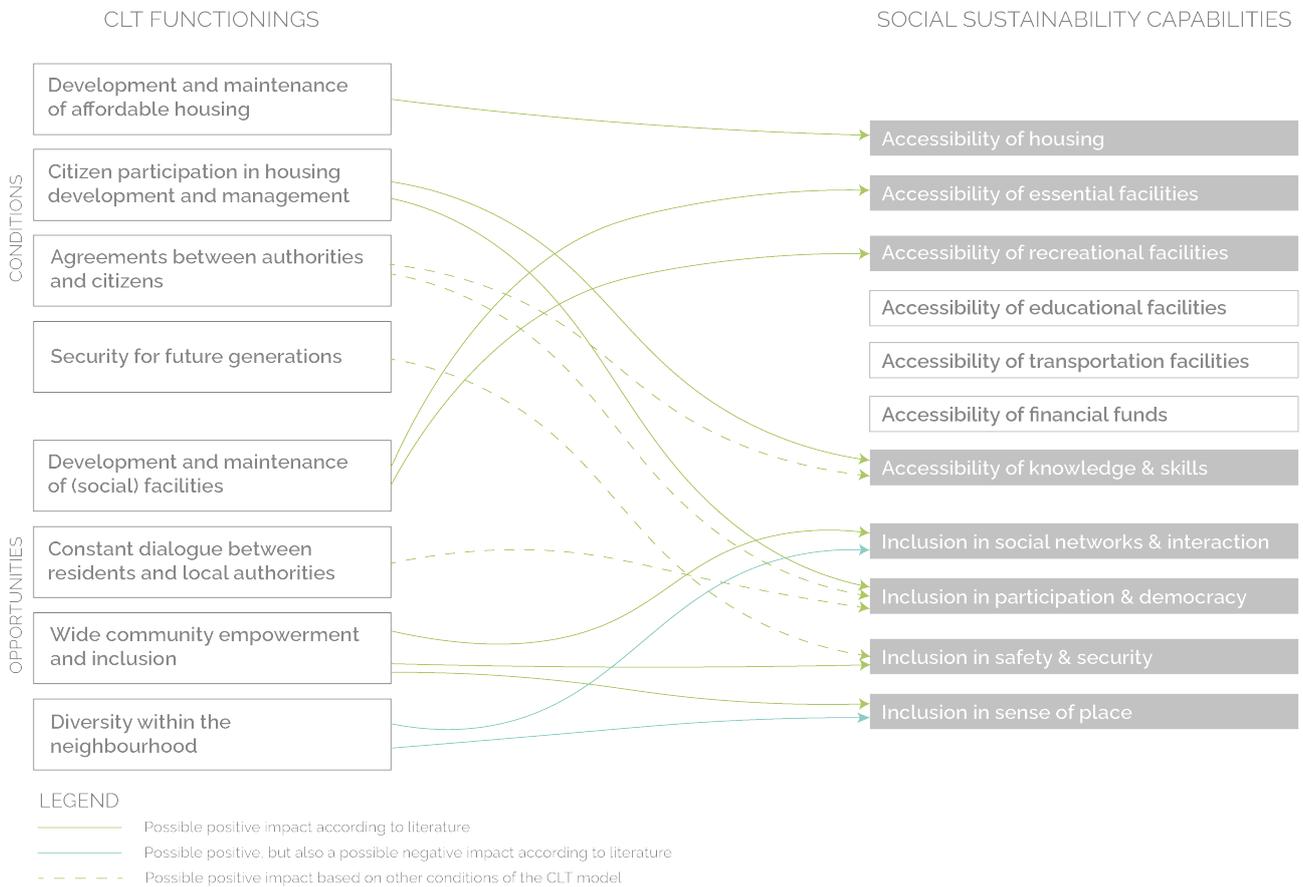


Figure 28. Overview of the expected level of impact of the CLT model on the different capability sets of social sustainability according to theoretical research (Own image)



## 4. Impact measurement

In this chapter the impact of CLT on the social sustainability is assessed by measuring the impact from two different perspectives: the perspective of organisations involved within the CLT network and the perspective of CLT residents from two different CLT in Europe. To be able to achieve this, this chapter first focuses on the organisational perspective by discussing the findings from the expert panel, and follows this up with the perspective of the residents by analysing the London Community Land Trust within a case study. The chapter concludes with a brief discussion on the differences in perspectives.

## 4.1 Organisational perspective

In this paragraph, an answer is given to the fourth research sub-question: *How do CLT organisations regard the impact of a CLT on the capabilities of residents?* The purpose of this research sub-question is to gain insights into the way CLT organisations themselves steer on social sustainability, what they assume their impact on the concept is, and how their assumptions eventually compare to the perspective of the residents in the next paragraph.

As stated also in the chapter on the research methodology of this study, the data that is collected to form an answer to this question was found through a focus group held with an expert panel and also through document analysis. The expert panel was held in collaboration with researchers that focus on the ecological sustainability within CLT. However, the results concerning ecological sustainability are left out within this paragraph. The expert panel consisted of representatives from different organisations involved within the European CLT network. An overview of participants is given in table 2 on page 19.

### 4.1.1 Motivations for social sustainability

To gain an understanding of if CLT organisations tend towards social sustainability within their operations, the focus group commenced with a discussion on the question: *Why address social and ecological sustainability?* The comments during the discussion were written down on a flip over. The result of this is presented in figure 1 of appendix VI.

From the group discussion, the conclusion could be drawn that the representatives of the CLT organisations do consider that they make an impact on social sustainability. They believe that the CLT are of importance to the local area. They are important as they bring affordable housing to local inhabitants, which is the main objective of the organisations. However, the participants also mentioned that the CLT model provides the opportunity for residents to **build up a community**. They regarded this as the *added value* of the model, besides housing.

During the workshop of the focus group, the discussion on this continued within one of the groups. The importance of considering the target groups of the CLT was suggested by one of the participants. They argued that one of the strengths of the CLT model is that they provide housing and the building of community to people with lower and middle incomes, people that might struggle more with being able to meet all the social sustainability capabilities due to their circumstances than other socio-economic groups (see post-its in the opportunities box in figure 13 in appendix VI). When considering this statement, **strengthening the societal position of certain socio-economic groups** could also be seen as the added value of the CLT model.

What also presented itself within this group discussion, is that currently CLT organisations often struggle with getting new projects off the ground due to a shortage of financial funds, which is partly caused by rising costs within the construction sector, and also due to a lack of awareness of the CLT model by other stakeholders within the built environment. The CLT organisation that participated considered that the added value of a CLT to a local area when it comes to elements of social sustainability, and also ecological sustainability, could be utilised as an argument when attracting funders for CLT projects or when convincing policymakers of including CLTs within plans. This showcases that besides an altruistic motivation, there is also interest in making an impact when it comes to social sustainability by CLT organisations to sustain the movement itself.

### 4.1.2 Measuring impact

During the group discussion, the measurement of impact by CLT organisations themselves also came forward as a critical element of the process of steering on social sustainability.

#### 4.1.2.1 Motivations for measuring impact

The reasons why representatives from the organisations were of the opinion that the measurement is important, as it provides proof to be able to make the argument of added value towards policymakers and funders, but it also offers the CLT a moment for learning about their own organisation and objectives and could therefore show possible areas for improvement. Another input for this discussion was that it could create a **benchmark** for the impact of CLT organisations within the European CLT network. This benchmark could be beneficial for showcasing the added value of CLT to funders and policy-makers.

#### 4.1.2.2 Challenges

However, CLT organisations with experience in impact measurement, also shared that they did encounter challenges within the process. The first challenge encountered by the organisations is that the impact on social sustainability by the CLT is often difficult to measure, especially during the early stages of the project. What makes it difficult is that it is an **intensive process** and that they have a lack of resources available to complete this process. To give an example of this, due to the inaccessibility of sufficient funding CLT organisations might need to rely on volunteers to complete the assessment.

In addition, the CLTB shared that even though they have experience with the assessing impact on elements of social sustainability, they have not successfully attracted funding or awareness from relevant stakeholders within the built environment sector by showcasing their positive impact on elements of social or ecological sustainability.

#### 4.1.2.3 Social impact measurement tool

The method that the CLTB used to assess their impact, was the social impact measurement tool created through the SHICC program (CLTB, 2020), constructed by the National CLT Network of England and Wales (Interreg NWE SHICC, 2021). As the name already suggests, the purpose of this tool is to assess *social impact*. As discussed in paragraph 3.2.7, social impact differs from assessing the impact on social sustainability. Social impact assessment often has a broad scope, as the objective is to research the impact of a planned intervention on a multitude of elements within society, including the environment. In comparison, in this study, only the impact of CLT on elements within a neighbourhood that are critical for social sustainability is assessed. As the method by SHICC concerns social impact, it is not surprising that the tool encompasses a great number of indicators and measurements, as it has a broader scope.

The five dimensions of the tool by SHICC are depicted in figure 29. Each of these dimensions consists of its own set of indicators and measurements (Interreg NWE SHICC, 2021), similar to the method of this study. What is notable within this method, is that it combines elements of social sustainability, such as equity, and local capacity and capability, together with characteristics of the CLT, such as controlling land and challenging the status quo, and elements of ecological sustainability (fostering sustainability).

The purpose of the tool is to provide a method for CLT organisations to focus on the areas where they want to generate impact, and to offer an overview of measurements that CLT can use to gauge the quality of their own measurements (Interreg NWE SHICC, 2021). This method, therefore, leaves the approach to the application of the tool quite open for CLT organisations.

Up until now, the CLTB and the LCLT are organisations that have applied the social impact measurement tool. By analysing the documents that they have published on their SIA, it can be determined how this measurement tool functions, and also what impact is of focus



Figure 29. The dimensions of social impact according to the measurement tool (Interreg NWE SHICC, 2021)

#### Social Impact Assessment by CLTB

The CLTB has translated the five dimensions mentioned in figure 29 into four main targets, each consists out of 3 – 5 indicators. The targets were formed by the organisational objectives of the CLTB, and include: 1) *Building affordable and adequate housing*, 2) *Creating a strong, inclusive and resilient community*, 3) *Spreading the Community Land Trust model*, 4) *Promoting a democratic, independent and sustainable governance model* (CLTTB, 2020). Not each of the targets and indicators is directed toward the residents of the CLT, but they also focus on the wider neighbourhoods where their projects are located, on other CLT organisations and other stakeholders to help them with broadening their knowledge and skills,

and also on the CLTB organisation themselves to measure if they are able to sustain and, therefore, continue their practices. This showcases how broadly this social measurement impact tool can be applied.

When it comes to the impact of the CLT on the lives of residents, the CLTB mostly focuses on:

- Involving their residents in the development process and governance of projects;
- Developing feelings of contentment and pride within themselves, and trust in their ability to change/shape their context and circumstances;
- Stimulating bonds between CLTB residents and the wider neighbourhood
- Increasing the well-being and comfort of residents through the realisation of affordable and adequate dwellings (CLTB, 2020).

These indicators do show that the CLTB organisation does concern itself with creating impact in areas that coincide with elements of the social sustainability model that has been developed within this study. And the results for these indicators can be interpreted as mostly positive. For example, 90% of the participating residents are of the opinion that their living situation has been improved since moving into the CLT, and the CLTB has also been able to set up a number of community activities that involve CLT and neighbourhood residents, allowing the residents to bond with their neighbourhood (CLTB, 2020). However, the interpretation of the results is generally quite limited, as there is no weight attached to the impact. The CLTB regards this assessment more as a benchmark and plans on assessing their impact regularly in a similar fashion to monitor the results and make corrections in their practices as needed (CLTB, 2020). This could improve the interpretation of the results, as it does provide points of comparison.

Social impact assessment by LCLT

The London CLT also has performed a SIA using the tool by SHICC. They set up their own “dashboard” that includes their mission statement. The LCLT formed three areas of impact: 1) *Communities creating*, which is defined by the diversity and satisfaction in community involvement, 2) *Transforming neighbourhoods*, which focuses on the facilities and other benefits the CLT sets out to offer the local community, and 3) *Permanently affordable homes*, through which the affordability and quality of homes are analysed. Besides these areas of impact, the CLT also monitors their innovation within the CLT model and influence within the CLT network using the tool by SHICC (London CLT, 2020).

The LCLT has given some weight to some of their assessed impacts, by determining if a planned contribution is major, significant or minor. For instance, in the dimension of transforming neighbourhoods, the LCLT foresaw in 2020 that they would bring a major contribution to the St Clements CLT through the community space they want to realise there and through the implementation of the Community Foundation (London CLT, 2020). However, these weights have not been assigned to every indicator mentioned within the dashboard, making interpretation of the results also quite limited.

The approaches by the CLTB and LCLT show that the social impact measurement tool could be useful for the organisations to monitor their organisation’s objectives over longer periods of time if the measurement is repeated regularly in the future. However, as the SHICC tool is quite broad and CLT organisations can apply their own focus within the tool, comparison between the two organisations and their impact is limited. This is due to the fact that the approaches used different indicators and measures. Therefore, this tool could only facilitate the creation of a benchmark that is internal to the CLT organisation that applies it at the moment. A benchmark for the impact of CLT organisations within the European CLT, as desired in paragraph 4.1.2.1, can as of yet not be facilitated by this tool, as it leaves room for interpretation by the organisation.

From this analysis of these two applications of the tool, it could be concluded that in terms of assessing the impact on social sustainability, the tool is quite broad and does not encompass all the elements of social sustainability that have been deemed vital to the concept according to this study. However, this could also be due to the organisations choosing the dimensions and indicators that fit with their operations and objectives as a CLT. The elements that are focussed on, predominantly have to do with the community functionings, and with the accessibility of affordable and adequate housing, which was in line with the expectations that the group discussion in paragraph 4.1.1 created.

#### 4.1.3 How CLTs make impact

The group discussion on the motivations for social sustainability and measuring of impact was followed up with filling in a program logic model that was created to gain insights into how CLT organisations themselves reflect on how they make or can make an impact on social sustainability. The results of this exercise are elaborated on in this paragraph.

The first conclusion that can be drawn from reviewing the results of the workshop as displayed in appendix VI, is that CLT organisations do believe that the CLT model is able to positively influence the capabilities that residents should be able to fulfil for a neighbourhood to be socially sustainable. Group A even believed that the CLT model is able to increase all social sustainability capabilities for CLT residents. However, as this increase can only be experienced by the residents, they are also the only actor that is able to determine if this actually happened. So, the realised influence on these capabilities could not be determined through this workshop. What could be determined during the workshop, is the manner in which CLT organisations could generate impact.

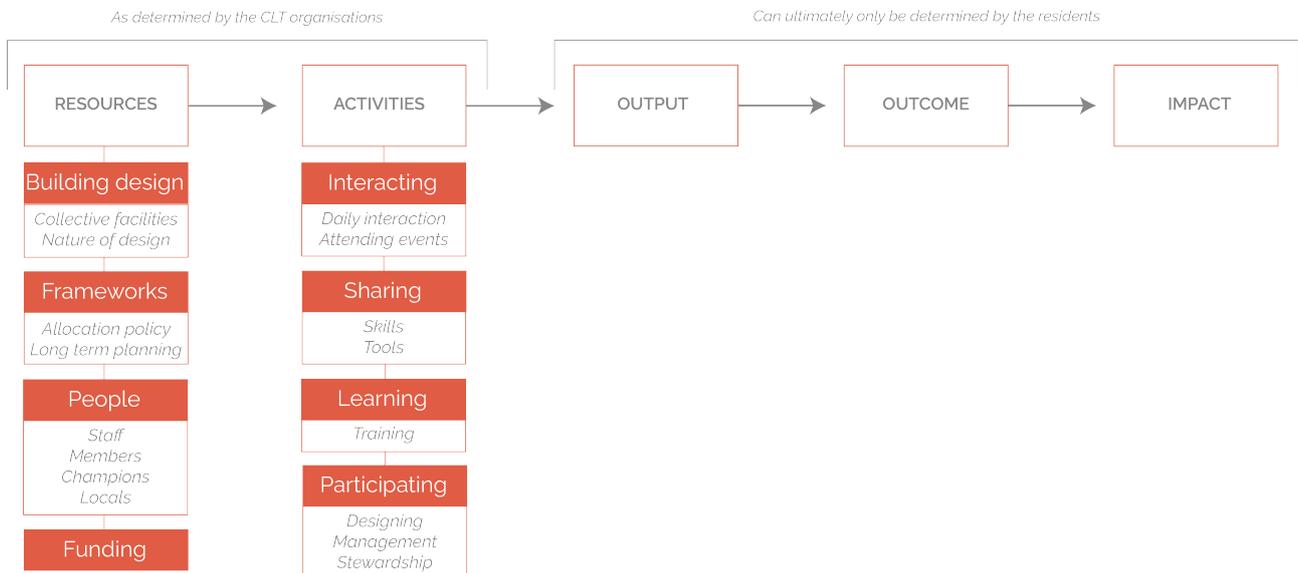


Figure 30. Main results of both group A and B combined in one simplified logic model (Own image)

As elaborated in paragraph 3.2.7, capabilities can only be changed in two ways: 1) change in resources or 2) change in conversion factors. So, what is interesting to note is that from the results of both groups that have been gathered and presented in figure 30, it can be determined that the theory that was presented in paragraph 3.3, that the CLT model is able to influence capabilities due to changes in resources and changes in conversion factors has been upheld within this workshop:

1. Change in resource

CLT organisations are able to make a change in the resources that a neighbourhood offers, by adding them to their projects. According to the participating CLT organisations, funding, people and collective facilities are the main resources that the CLT can add to have a positive influence on social sustainability. And by combining these main resources, CLT can also provide other resources. An example of this, gathered from the results in figure 30, is given in figure 31.



Figure 31. CLT can provide training workshops as a resource to their residents by the bundling of other resources together (Own image).

In table 9 in paragraph 3.2.6.1, a list of all the vital resources for a neighbourhood was given. In table 11 a comparison has been made between these resources and the resources that were mentioned during the workshop. What can be gathered, is that according to the participants the CLT model is able to provide the essential resources of recreational facilities, financial funds, and knowledge and skill to a neighbourhood, which could improve the accessibility of these resources for the residents, positively that none of the organisations mentioned housing exclusively as a resource that CLT provide and that could influence the capabilities of the residents.

2. Change in conversion factors

CLT are also able to change conversion factors according to the resources and activities that the participants of the workshop put in the logic model. For instance, one participant specified within the logic model that the nature of the building design could be seen as one of the resources that could affect the level of interaction between residents within the building. While the logic model approach sees the “nature of design” as a resource, within the CA, this concept would be described as an environmental conversion factor. This brought about the insight that conversion factors could influence other conversion factors, and then in turn maybe influence the capabilities of the CLT residents. For this example, this process is schematically portrayed in figure 32.

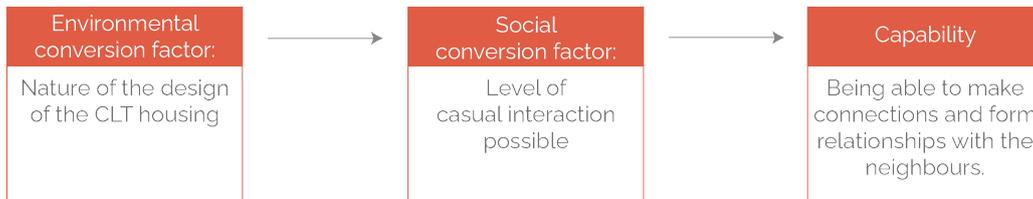


Figure 32. Schematic presentation how one certain conversion factor could increase a capability by influencing another conversion factor (Own image).

However, the nature of design or the level of interaction is not the only conversion factor that the CLT model could influence according to the participants. Table 11 also gives an overview of all the conversion factors that have been mentioned during the workshop and the categories of conversion factors these fall under.

Table 11. Comparison of the needed resources within a neighbourhood and the resources that could be provided by a CLT according to workshop participants, together with a comparison between the different categories of conversion factors and the conversion factors that the CLT could influence according to the workshop participants (Own table).

RESOURCES		CONVERSION FACTORS	
Types of resources	Resources mentioned during the focus group	Categories of conversion factors	Conversion factors mentioned during the focus group
Adequate housing Affordable housing		Personal	
Essential facilities		Social	Level of interaction Level of participation Level of sharing
Recreational facilities	Collective facilities Events	Environmental	Nature of design
Educational facilities		Institutional	Allocation policy Planning Level of participation
Transportation facilities			
Financial funds	Funding		
Knowledge & skill	People Skills Training workshops Tools		

To close this paragraph on how CLTs make an impact, a note needs to be made on an interesting discussion that ensued within group B regarding the longevity of the impact of CLT on social sustainability. Some CLT organisations that were present mentioned that they are looking at ways how to phase out the involvement of the organisation within the CLT projects. This phasing out could have implications for the housing project and could impact the social sustainability within the neighbourhood, as it could have consequences for the resources that are offered or the conversion factors that have been put into place. As social sustainability is a concept that, just like the affordable housing for CLT, should be safeguarded in perpetuity for a neighbourhood (according to the final definition in paragraph 3.2.8), the longevity of impact is a component that should be taken into consideration when looking at the limitations and recommendations of this study.

#### 4.1.4 Conclusion

In this paragraph, an answer was sought to the question: *How do CLT organisations regard the impact of a CLT on social sustainability?* The answer to this question is that the CLT organisation expect their projects have a positive impact on social sustainability as they work on building a community within their project through their objectives for the organisation and the specific projects. They regard this as one of the added values that CLT projects can bring to local areas, and use this to try to generate more awareness of the CLT model and gather additional funding. According to them, this positive impact is generated through the addition of resources in the form of recreational facilities, financial funds, and knowledge and skill, and through the changing of social, environmental and institutional conversion factors for the better.

## 4.2 Residents' perspective

To gain an understanding of the residents' perspective in regards to the impact of a CLT on social sustainability, this paragraph focuses on answering the fourth research sub-question: *How does the CLT model impact the capabilities of residents?* Findings for this research sub-question are generated through a single case study of the London Community Land Trust. As already elaborated on in chapter 2 on the methodology of this study, data is collected through a document analysis, and through interviews with residents. However, within the case study, some examples are given of a different CLT, the Community Land Trust Brussel, to showcase different approaches that could be taken for some instances within the case of the LCLT.

### Case study: London Community Land Trust

The case that is selected as the case study for this research is the London Community Land Trust (LCLT), located in the Greater London Urban Area, United Kingdom. This CLT is often seen by the network as one of the most representative CLTs around Europe, as it tries to stay as close as possible to the classic CLT model as described in paragraph 3.1. The case also met all of the case selection criteria that are mentioned in paragraph 2.3.2.2 of the chapter on the methodology of this study. The LCLT can, therefore, be seen as a significant case that offers findings that could be representative of the CLT model as a whole. However, as already mentioned, context is also of importance within the case study, as collaborative housing practices can be considered place-based (Lang, 2019). Therefore, the case study of the LCLT commences with an analysis of the context of and surrounding the LCLT.

#### 4.2.1 Context analysis

In this paragraph, the wider neighbourhood and the location of the LCLT are examined in detail. This means that different fundamental elements for the neighbourhood and the LCLT are explored. The elements of the neighbourhood context that are important to analyse, are based on the listing on the list of vital resources that a neighbourhood should provide in table 9 on page 56. As it is also of importance to see for who these resources are provided, the population of the wider neighbourhood is also examined. The list of fundamentals of the CLT that are analysed within this paragraph is based on the factors that could differ in CLT, listed in paragraph 3.1.3. This data that is needed to form an image of the context, is gathered through a document analysis and is also partly based on the experiences of the interview participants. The documents that are analysed are case studies of the LCLT performed by other researchers or organisations, websites and reports provided by the LCLT themselves, and websites and reports by local authorities and other local parties.

##### 4.2.1.1 CLT movement in the UK

To commence the context analysis, first, an introduction is given to CLT within the United Kingdom and the legal status this model has within the country.

The United Kingdom knows an extensive network of urban and rural CLTs that has been built up since 2006 (National Community Land Trust Network, n.d. a). This network counts already around 548 CLT around England and Wales (National Community Land Trust Network, n.d. b). In 2008, the model gained legal recognition as a genuine way for the development of housing in the Housing and Regeneration Act (Interreg NWE, 2020a). However, legislation on what CLTs in the UK entail was intentionally drafted in an ambiguous manner with few requirements for what constitutes a CLT. This decision was made as legislators believed that this "would allow CLTs to be expansive and innovative" (Smith, 2018, p. 50). British law only states that a CLT should ensure that "the assets are not sold or developed except in a manner which the trust's members think benefits the local community" (Smith, 2018, p. 50). It is argued that this ambiguous legislation has been part of the success of the CLT model in the UK (Smith, 2018), as the model has spread across the country. This has led to the UK arguably having the most developed CLT network within Europe, which is also visible in figure 1 on page 13.

#### 4.2.1.2 LCLT as an organisation

Within this UK network, the LCLT is one of the few urban CLTs. In this paragraph, the workings of the London Community Land Trust as an organisation are analysed.

As of 2014, the LCLT operates as a London-wide organisation, with multiple locations around the Greater London area, as shown in figure 23 (FMDV, 2019). One project has been fully realised and habited, located in Mile End, displayed with a light blue house in figure 33. The other locations are still in various stages of development, with one location already having made agreements on site and planning (yellow in figure 23).

However, the LCLT did not start with these wider intentions. The organisation came up as a grassroots initiative in 2007 in the lead up to the 2012 London Olympics. Citizens UK, an organisation that aids community organising in local areas (Citizens UK, n.d.), managed to put the development of the first CLT in London on the agenda as part of the Olympic legacy through lobbying. However, before the Greater London Authority (GLA), the overarching body of governance for the greater London area, was willing to provide land for a CLT on the Olympic site, a pilot project had to prove the viability of the model within London (FMDV, 2019). For this pilot, the closed St Clements Hospital site in Mile End was appointed as the potential site in 2008. In 2017, 23 CLT dwellings were finished and the first LCLT residents were able to move into their new, affordable homes (London CLT, n.d. c). This inspired new initiatives around London that the LCLT organisations helps set up through campaigning in those local London areas. Campaigning is, just as with the St Clements site, an integral part of setting up the new projects that are displayed in figure 33.

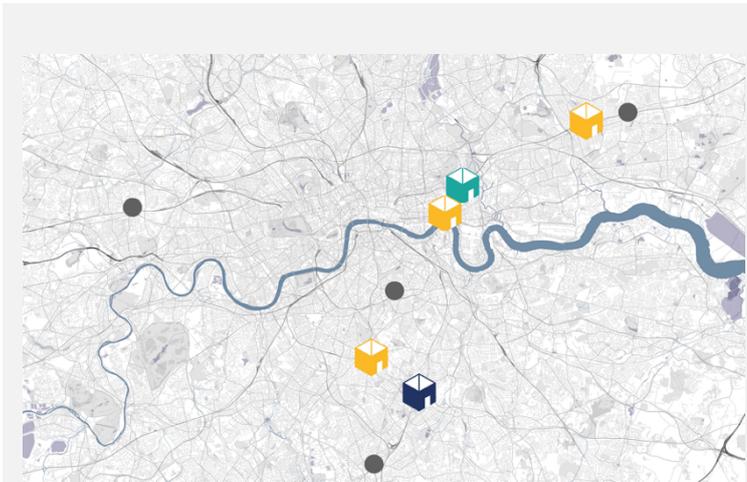


Figure 33. Map of Greater London showcasing the current project sites of the LCLT (London CLT, n.d. b)

The CLT in London is governed by a board that counts twelve people, which includes four residents from the St Clements CLT (London CLT, 2021). The board follows the tripartite governance model of the CLT model, as there are three types of board members. As mentioned, one third consists of residents. The other third of the board consists of community representatives and the last third of people that have certain professional experiences within the built environment sector, which includes local authorities. This board has the legal responsibility for the LCLT (London CLT, n.d. d). The board is democratically elected by LCLT members, as is usual for CLT, and each member has the opportunity to stand for election (London CLT, n.d. d). And the membership of the LCLT is quite extensive as it currently counts around 3500 members in total (London CLT, 2021), with forty being resident members (FMDV, 2019). The other members are either community members, who are people from the local community such as neighbourhood residents, community workers or local businesses that want to be part of or live within the LCLT, or stakeholder members, people that provide certain expertise to the LCLT, such as funders, public officials, academics, etc. (London CLT, 2021).

With the inclusion of members of the community in the organisation, it is evident that the LCLT also has a strong focus on stewardship. This is carried on the values and objectives that the organisation holds together with its members. The main motto of the organisation is as follows:

*"Communities creating permanently affordable homes and transforming neighbourhoods"*

- London CLT, 2021, p. 36

This statement coincides with the areas of impact that the LCLT has integrated into their impact assessment, as mentioned in paragraph 4.1.2.3. As the organisation is born from and still rooted in community organising, the focus on involving the community in the creation of homes and the transformation of neighbourhoods is rational. The community that the LCLT targets, is the already present community local within the areas of their sites. Within these local communities, there are



The neighbourhood dates back to the 13th century, so unsurprisingly the neighbourhood knows a lot of heritage that is characteristic of Mile End (Place Directorate Tower Hamlets, 2021). The heritage is also reflected in the location of the St Clements CLT site, as the CLT is located on the grounds of the old St Clements hospital. Some buildings on the site date back to 1949, with a distinctive style of architecture of which parts are preserved in the new design, such as the distinctive Clocktower, as shown in figure 36.



Figure 35. Impressions of the newly build units on the St Clements development site (JTP, 2022)



Figure 36. Impressions of the old architecture of the St Clements development that has been renovated and fitted with new units (JTP, 2022)



Figure 37. Layout of the St Clements development (Linden Homes, 2022)

The development of the CLT at the St Clements site gained traction due to campaigning and lobbying efforts by the organisation in collaboration with Citizens UK. The campaigning and lobbying were extremely important, as the high open market rates for land in London make it impossible for the LCLT organisation to buy the land themselves (Sustainable Housing for Inclusive and Cohesive Cities, 2019). The organisation set up a consortium and placed a bid on the St Clements site. However, this consortium lost the bid. Only, after joining hands with another major developer on the solicitation of the GLA, the CLT organisation was able to realise its efforts on this site (FMDV, 2019; Smith, 2021). This resulted in a large developed of 252 units that are spread across the site, as can be seen in the layout in figure 37. Some of the units are developed with the historic buildings on site. Other units were also realised in new buildings, with architecture that complements the history, as can be seen in figure 35.

Out of the 252 units, 35% were to be realised as affordable housing, including social housing (Greater London Authority, 2013; JTP, 2022). Of this 35%, 23 units were reserved as CLT homes. And while it can be accustomed for a CLT organisation to develop its own housing, as discussed in paragraph 3.1, in this case, the LCLT purchased the CLT units from the developer upon completion at an affordable price (FMDV, 2019). Within the design process of the development, 350 local residents participated in a Community Planning Workshop (JTP, 2022), which is one of the stewardship efforts that was initiated during the development process.

After the completion of the development, the land was transferred into the hands of a community foundation in the form of freehold, meaning “permanent and absolute tenure of land with the freedom to dispose of at will” (FMDV, 2019, p. 49). The community foundation is represented by key stakeholders from the St Clements area (FMDV, 2019), with representatives from the CLT organisation, the local council of Tower Hamlets and GLA, local businesses and facilities and a resident association (Greater London Authority, 2013), meaning that the classic tripartite governance model that is distinctive for CLT, is also represented within this trust.

The LCLT has ownership of the head lease and has granted an underlease of 250 years to the residents of the CLT homes. For this lease, the residents pay a ground-lease fee at the start of the lease and a small monthly rent that covers the service charges (FMDV, 2019). Consequently, the community foundation will invest these “ground rents” back into the neighbourhood (London CLT, n.d. c).

The 23 units of the CLT were all appointed as owner-occupied housing, meaning that they were sold by the CLT to the first residents. The sale of the units made it possible for the organisation to reinvest some of the earnings toward the development of more CLT housing (FMDV, 2019). The prices of the dwellings were not determined by relating it to market pricing, as the organisation was of the opinion that this defeats the goal of creating homes that locals could genuinely afford. Instead, the prices were linked to the median average wage within the neighbourhood and multiplied 1/3 of this wage out “by a standard set of mortgage assumptions”. The 1/3 principle was set into place as the organisation is of the understanding that “no family should be forced to spend more than one-third of their income on housing” (Smith, 2021, p. 59). The result of this calculation was that the dwellings were sold to the first residents at prices that were approximately 30% of the market pricing in 2017 (FMDV, 2019).

The interest in the dwellings in St Clements was great, around 300 people had completed the eligibility test and 108 people got through to the final application (London CLT, n.d. c), showing casing the need for genuinely affordable housing within the neighbourhood. Currently, all dwellings are occupied, with one being resold in 2020 (Green, 2021). For the resale, the LCLT has put a resale formula into place to keep the dwellings perpetually affordable, as is in line with their motto and the workings of the classic CLT model. The resale price is determined in the same way as the starting prices were determined (Smith, 2021: FMDV, 2019). With this resale formula, the CLT organisation is determined that the CLT homes at St Clements will stay “homes that local people on local wages can afford” (Smith, 2021, p. 59).

As already specified, the CLT at St Clements is part of a larger development, which meant for the management that the CLT works together with the other residents on the management of the site. For this, a residents’ association has been assembled (FMDV, 2019), called the St Clements Residents’ Association (RA) (Stclementsbow, 2019a). The association is open to all residents of St Clements, regardless of their residency model and is there to be a “unified voice” of all the residents towards the other stakeholders surrounding the St Clements project (Stclementsbow, 2019a), according to the participants especially the developer of the project. The management committee of the association is democratically elected each year by all the other residents (Stclementsbow, 2019b), and currently includes residents from the LCLT (Stclementsbow, 2019c). Multiple general meetings are held between the RA and the residents of St Clements to discuss matters concerning St Clements and are also a moment where residents can vote regarding these matters (Stclementsbow, 2019b), reflecting the democratic nature of the CLT model. According to a CLT resident, the intention of the RA is to transform the initiative into a management company for the development, showcasing the intent of the residents to take their housing matters into their own hands.

In addition to housing, the LCLT organisation also has the intention to focus on the realisation of non-housing facilities as a way to support the “wider social justice mission” of the LCLT (Smith, 2021). At St Clements, the organisation is working to create a community space in one of the common spaces on the site: the John Denham building, which is located at the bottom of the site in figure 37 (London CLT, n.d. a: Sustainable Housing for Inclusive and Cohesive Cities, 2019). In line with the philosophy of the organisation around stewardship and democracy, the CLT organisation is consulting with the residents on the future usage of the community space (Sustainable Housing for Inclusive and Cohesive Cities, 2019). At this moment, the space has not been realised yet according to the CLT organisation (personal communication with London CLT employee, March 11, 2022), and there are some speculations going that the developer wants to realise housing units within this building according to one participant.

#### 4.2.1.4 Wider neighbourhood context

The last element of the context analysis is the examination of the wider neighbourhood context, to map out which vital resources are provided and for who these resources are provided.

The people that make use of the neighbourhood, the local population, are first to be examined. However, due to a lack of available data on the neighbourhood scale, population characteristics are determined on the scale of the borough, with input from the experiences of the interview participants.

According to data provided by the local council, the population that makes up the local community can be described as young and diverse. The borough of Tower Hamlets knows the largest proportion of young people compared to other inner London boroughs, making it the 4<sup>th</sup> youngest population in the United Kingdom overall. Besides this, the percentage of older residents is significantly lower than the national average (London Borough of Tower Hamlets, 2020c). More than half of the residents living in Tower Hamlets come from a minority ethnic background and more than 20% were born outside of the United Kingdom (London Borough of Tower Hamlets, 2020a). Despite differences, a majority of residents of the borough are of the opinion that Tower Hamlets is a place where people from different backgrounds can get on well together (London Borough of Tower Hamlets, 2020b).

However, another characteristic of the borough is widespread deprivation and inequality, which influences the well-being of the residents. The disparity in Tower Hamlets is reflected in the ratio of low-to-high pay, which is the largest in Greater London. Most affluence is located in the neighbourhoods along the Thames (London Borough of Tower Hamlets, 2020a), while other parts of the borough are characterised by high rates of poverty, including pensioner and child poverty (London Borough of Tower Hamlets, 2020b). The deprivation and inequality within the area do not go unnoticed by some of the participants. For example, one of the participants that works in the local area mentioned:

*"You can really see the difference, in social and financial differences, where we are."*

LCLT resident

The inequality also extends to the health of the population. There are significant differences in life expectancy between the most and least well-off. When it comes to loneliness and social isolation, Tower Hamlets scores in line with Greater London, which is still quite high in comparison to non-urban areas in the UK (London Borough of Tower Hamlets, 2020a; London Borough of Tower Hamlets, 2020b).

When it comes to housing, the Greater London area is currently one of the overvalued housing markets in Europe (Better Dwelling, 2022), and this trend is expected to follow through in the short-term due to high demands for rental housing as well as owner-occupied housing (Finnerty, 2022).

In the neighbourhood Mile End, the overall effect of this housing crisis is also felt, especially when it comes to the affordability of housing. In the borough of Tower Hamlets, there is a shortage of affordable homes due to the increase in house prices and rents and a welfare reform (Tower Hamlets Council, 2017). The local council even stated: "with the average house price now 22 times the average salary, our residents can't afford to buy them [the newly built dwellings]" (Tower Hamlets council, n.d. a). In addition, the waiting times for social housing within Tower Hamlets run from an average of 3 years for smaller apartments to 12 or 13 years for housing with more bedrooms (Tower Hamlets Council, 2021). In England, social housing is subject to a National Rent Regime, which entails that the dwellings are "allocated on the basis of need" (Czischke & Van Bortel, 2018, p. 6), with the use of "priority bands" (Tower Hamlets Council, 2021). The rental prices are set using a formula (Czischke & Van Bortel, 2018, p. 6). The dwellings are mostly owned and managed by local authorities and housing associations (registered social landlords).

To combat the issues of unaffordability of housing within Tower Hamlets, and thus also Mile End, the local council has set out to focus on providing "genuinely affordable housing": Half of the newly developed affordable housing should fall within the social sector, while the other half would fall into the category of affordable housing, which is a legitimate segment within the British housing sector (Tower Hamlets council, n.d. a). In England, affordable housing is housing that is subject to rent controls that are based on local market rents. The requirement for the rental price of affordable housing is that it cannot be higher than 80% of the local market rent. This segment of housing is mostly provided by housing associations (Czischke & Van Bortel, 2018). In Tower Hamlets, the rent price of affordable housing is determined as 33% of the borough's average household income (Tower Hamlets council, n.d. a), which is similar to the affordable housing prices that the LCLT charged for the units of the CLT in St Clements.

Besides housing, the Mile End neighbourhood is able to provide the following vital resources to its residents:

As pictured in figure 34, there are two areas in the neighbourhood that are counted as the town centres of the neighbourhood. These agglomerations provide all essential facilities that are listed in table 9 on page 56. And due to the central location of St Clements, overall, the residents of the development are positive when it comes to the number of facilities that are offered within the neighbourhood, as mentioned by one:

*"This is a residential area with lots of facilities very close by. It's all within walking distance., There's pretty much everything you need within a very small radius here I think."*

LCLT resident

The praise for the provision of facilities also extends into the domain of recreational facilities. The neighbourhood has sufficient public and green spaces, such as the Tower Hamlets Cemetery Park and Mile End Park (pictured in figure 34), which also includes a leisure centre.

In addition, there are a number of primary schools and secondary schools located within the neighbourhood. Just on the border of Mile End, located left of Mile End Park, is the Queen Mary University of London, which also provides a University Library to the area. This university library provides students with options for expanding their knowledge & skills outside of their academic education. For other residents within the area, the local council provides a range of education and training services throughout the borough, for example through Idea Stores, which are public libraries, and a Professional Development Centre, where meetings, training courses and conferences can be held (Tower Hamlets council, n.d. b). However, these resources are all located outside of the borders of the Mile End neighbourhood. There are also online services available that provide Tower Hamlets residents with information on what knowledge and skills there are to offer throughout the borough (Tower Hamlets council, n.d. c).

When it comes to transportation facilities, the neighbourhood of Mile End has one of the highest ratings when it comes to accessibility of public transportation according to Transport for London (n.d.), There is a number of bus stops along the main roads bordering the neighbourhood, as well as two stops for the metro and a light rail stop in the adjoining neighbourhood of Bromley. However, what is not considered within the rating are the utility of the accessible services or the crowding (Greater London Authority, 2017), meaning that the level of accessibility that the residents of Mile End actually experience might differ from the measured accessibility. The opinion of most of the resident participants in this study agreed with the findings from Transport for London.

Through the council of the borough, residents and businesses in Mile End have different options for public financial funding that they can call on for support. The funding is provided by a number of bodies of governance on differing levels of governance. Currently, there is a multitude of community funding options on a national, regional and local level that focuses on providing aid and relief in the wake of the COVID-19 pandemic (Tower Hamlets council, n.d. d).

However, there are also options that are not Covid-19 specific. Many of these types of grants also focus on funding the provision of other resources related to social sustainability, such as the provision of knowledge and skill through workshops. Examples of such grants are for example the Your Best Friend Fund which tries to provide knowledge around healthy and toxic relationships or the Equity fund by Consortium and Community Collaborators to provide leadership development for LGBT+ groups and organizations (Tower Hamlets council, n.d. d).

To conclude, it could be said that the neighbourhood of Mile End scores well when it comes to the provision of vital resources for its diverse residents. Only resources for knowledge and skill might be located further away from the neighbourhood. However, the area has its issues when it comes to deprivation and inequality among the residents, and the provision of affordable and adequate housing, which is in line with expectations as the Greater London area is dealing with housing shortages and rising housing prices.

#### 4.2.1.5 Conclusion

The London CLT can be described as a very classic CLT as it meets all the four classic characteristics of the CLT. It applies the dual ownership model by keeping the head lease in ownership of the organisation and under leasing the use of the land to the residents and is able to keep the dwellings perpetually affordable through the enforced resale formula. The tripartite governance model is instated in the organisation of the CLT itself, but also extends into the management of the dwellings on the St Clements site. And the LCLT is also making headway when it comes to stewardship. The LCLT can, therefore, rightfully be called a representative case for the CLT model.

In addition, the LCLT also has broader ambitions that build forth on their history of community organising and campaigning, with the intention to also include a community space for the whole community at the St Clements site. This showcases that this CLT not only applies all the conditions of the CLT as they are mentioned in the conclusion of paragraph 3.1, but also strives to fulfil the opportunities of *development and maintenance of affordable facilities, wide community empowerment and inclusion, and diversity within the neighbourhood*, which the interim Chair of the board of the LCL confirms through his following statement on the CLT at St Clements, Mile End:

*"The London CLT at St Clements has never been just about delivering permanently affordable homes. More than that, it is about community, social justice and, quite simply, contributing to happiness in life and emotional well-being."*

Smith, 2021, p. 57

These fulfilled objectives seem a right fit within a neighbourhood that does struggle with issues such as deprivation, inequality, and an overheated housing market but is also able to provide most of the vital resources that are necessary for a community and environment to be socially sustainable.

#### 4.2.2 Impact of the LCLT according to residents

Within this paragraph, the findings from the interviews with residents of the LCLT and with residents from the St Clements development are analysed to find out if indeed the LCLT has been able to make an impact when it comes to social sustainability within Mile End and to determine in what manner and to what extent this has been made possible.

##### 4.2.2.1 Approach to the interviews

As explained in the chapter on the methodology of this study (chapter 2), the data for assessing the impact of the London CLT on the social sustainability of the Mile End neighbourhood has been gathered through conducting semi-structured interviews with six residents, of which five live within a unit provided by the CLT, that followed the interview protocol attached in appendix II. To assess the level of the impact, the experiences of the five CLT residents are compared to their experiences of social sustainability in their previous living situation, and the experience of the non-CLT resident. The outcomes of these comparisons are depicted in appendix VII. The manner of impact is then assessed by setting up a scheme that follows the principles of the CA, meaning that this scheme depicts which resources or conversion factors have led to the possession of the capability by the resident. This scheme can be regarded as an elaborated version of the scheme depicted in figure 32 on page 71. To determine if this impact has been made by the London CLT, it is examined if the CLT was responsible for the contribution of the conversion factor and/or resource, or not. The full scheme is depicted in appendix VIII.

##### 4.2.2.2 General experience of social sustainability in Mile End

The listing of the findings commences with a review of the general experiences of the CLT and non-CLT when it comes to social sustainability in Mile End.

First off, what can be concluded from the analysis in table 1 of appendix VII, is that all participants of the interviews were all able to fulfil most of the capabilities that they should be able to fulfil within a neighbourhood. The argument could therefore be made that when living within the St Clements development, residents could experience their neighbourhood as socially sustainable. When it comes to the capabilities that had to do with the accessibility of facilities, the results were in line with the expectations, as the document analysis showed that the neighbourhood of Mile End offers a variety of facilities within each category, as discussed in paragraph 4.2.1.4. The participants identified only a few barriers to the

accessibility of facilities. Only high costs for the use of facilities were mentioned as a limiting conversion factor by some participants. However, this often only limited the amount of usage of said facility and not the overall accessibility of the facility.

The only capability that none of the participants was able to fulfil, was the **accessibility of public financial funds**. Most participants that answered this question responded in a neutral manner. According to the findings in appendix XI, this can be explained by two different conversion factors: 1) their personal lack of experience (personal conversion factor), this was for instance the case with the community grants that are mentioned in paragraph 4.2.1.4, or 2) their personal income was too high to qualify for additional financial funding (institutional conversion factor).

In addition, some participants were aware of the challenges that the population in the borough of Tower hamlets are facing, such as deprivation, segregation, and a lack of affordable and adequate housing. However, in the experience of social sustainability within the area, these challenges seemed to have little effect according to the findings. Only one participant mentioned that the segregation within the neighbourhood limited the ability to form connections with certain socio-demographic groups in the wider neighbourhood, as they experienced difficulties in communicating with these groups as a result of this segregation. This did not limit their capability of forming connections and relationships with closer neighbours.

The participants also feel safe within their neighbourhood and home. As they mention, crime does take place within the neighbourhood, such as bikes being stolen or antisocial behaviour. But, as they were all already familiar with the area of Tower Hamlets, they see this as something inherent to living in a metropole. The general positive feelings in regard to safety stem from the sense of community that they share with their neighbours (social conversion factor), the open design of the buildings and the development, and general activity on the streets during the day (environmental conversion factors). These factors give the residents the feeling that there is always somebody watching and looking out for them, enhancing their feeling of safety.

And finally, what can be concluded from the findings in appendix VIII, is that one certain type of resource, **online communication tools**, had a positive influence on a multitude of capabilities that have to do with social sustainability. This resource was not taken into account as one of the vital resources that should be provided within a neighbourhood. However, the findings from the interviews depict that these tools can play a significant role in the lives of the London CLT residents. Each participant mentioned at least one of these tools within their interview and expressed their use in a positive manner. The tools that were mentioned most, were *Facebook groups* (by all six participants), and *WhatsApp groups* (by four participants). According to the participants, these tools aided them in making connections with neighbours, sharing their problems and concerns, asking each other and experts for help, and could make it possible for them to learn new knowledge or skills. To give an example of one of these capabilities, the online communication tools form a place where people from the developed could share their issues related to the development, sometimes finding that they shared the same issues. By then combining their voices, the residents felt they could build a stronger case towards the party that they want to share their problems or concerns with.

The use of such online communication tools is not uncommon nowadays, seeing that there is an increase in information exchange between neighbours with the use of such tools around different parts of the world (Dixon, 2018; Mols & Pridmore, 2019). Most research in relation to online communication tools on a neighbourhood scale has been conducted regarding their use for neighbourhood watch programs (Dixon, 2018). However, within these studies, evidence has been found that these tools add to social cohesion (Mols & Pridmore, 2019), and a sense of rootedness for residents within a neighbourhood, which is a term that combines a sense of community with a sense of security (Dixon, 2018). As the findings from this study on the impact of online communication tools are similar to these findings in the literature, the findings from this study can be (partially) supported, and the findings could be more generally applicable than only for the St Clements development.

#### *4.2.2.3 Comparison of London CLT residents with non-CLT residents*

When comparing the capabilities of the CLT resident with the capabilities of the non-CLT resident in St Clements, no outstanding differences can be allocated in the ability to fulfil the social sustainability capabilities. However, differences can be found in the conversion factors and resources that enabled the participants to fulfil the capability. This can be concluded from the findings of the capability that deals with the ability to make connections and establish relationships with neighbours. Both the CLT residents and the non-CLT resident have the capability to do so. However, the London CLT

residents often regarded CLT events before moving in, and the process of getting a CLT home allocated to them, as experiences that allowed them to connect with each other. This is described by one of the CLT residents as follows:

*“And we were going through the process together of this kind of applying and then getting it and waiting. And I think that was kind of bonding for us. I think there is also something that we share the luck. You know, so like, we share the privilege of having this flat and I think that’s all. You know, we often sit and we think “Oh God, we are so lucky to have this place” and I think that’s also kind of bonding.”*

LCLT Resident

The experience of the non-CLT resident relied, partly, on other similar experiences to enable a connection with neighbours, for example, experiences with housing issues, or similar hobbies.

Thus, the conclusion that can be drawn from this comparison is that often CLT residents might not have to rely on the London CLT to be able to realise a capability necessarily. However, the CLT does add conversion factors and resources that could strengthen the ability to bring a capability to fruition. Especially when it comes to establishing connections and relationships between residents, which has been deemed of significant importance for the realisation of other social sustainability capabilities as mentioned in the foregoing paragraph.

#### 4.2.2.4 Comparison between living situations

Another point of comparison that could be used to establish the manner and level of impact of the CLT, was the current and previous living situations of the CLT residents. The assessment of the capabilities of each CLT resident that was interviewed is displayed in appendix VII. In table 12, a comparison of both these situations is displayed. What can be gathered from this table is that, since moving into the St Clements development, the capabilities of the residents that have to do with social sustainability, significantly changed in comparison to their previous living situations. Most changes were positive, as the capabilities increased. The capabilities that have increased most, have to do with the **accessibility of housing**, the **accessibility of local knowledge** by asking for help, and the **ability to make connections and form relationships**. These are then followed up with a compelling positive impact on **feeling safe and secure**, and a **sense of community**.

Table 12. Overview of the change in the capabilities of the CLT residents of their current living situation in the CLT compared to their previous living situation. The change could be an increase (↑), a decrease in capability (↓), or the capability has stayed the same (→) (Own table).

CAPABILITY	PARTICIPANTS				
	A	B	C	E	F
I am able to live in an adequate house I can afford.	↑	↑	↑	↑	↑
I am able to access and make use of the essential facilities that are present in my neighbourhood.	↑	—	—		
I am able to access and make use of the recreational facilities that are present in my neighbourhood.	↑	—	—		
I am able to access and make use of the educational facilities that are present in my neighbourhood.	↑	↑	—		
I am able to access and make use of the transportation facilities that are present in my neighbourhood.	↑	—	↑		
I am able to access the public financial funds that are available for me or my neighbourhood.	—	—	↓		
I am able to ask my neighbours or others in my neighbourhood for help.	↑	↑	↑	↑	↑
I am able to consult experts in my neighbourhood when I have a need to.	—	—			
I am able to learn new knowledge and skills in my neighbourhood.	—	—	↑		↑
I am able to make connections and form relationships with my neighbours.	↑	↑		↑	↑
I am able to visit my neighbours.		—	—	↑	↑
I am able to participate in community activities in my neighbourhood when desired.		—	—	↑	↑
I am able to voice my opinions and problems to local authorities.	↑	—	—	↑	—
I am able to feel safe in my neighbourhood.	—	—	↑	↑	↑
I am able to feel secure within my current position in life.	—	↑		↑	↑
I am able to feel at home in the neighbourhood.		—	—		
I am able to feel a sense of community in the neighbourhood.		↑	↑	↑	

Only on one occasion, a capability decreased. This is the capability that has to do with the **accessibility of financial funds**. As already explained in paragraph 4.2.2.2, this could be because of two reasons. Within this case, the participant did not qualify for financial support due to an increase in income, decreasing the accessibility of these financial funds.

However, a note should be made in regards to the comparison in table 11. Whenever a capability did not change, this did not mean that the conversion factors and resources that made this capability possible, also stayed the same. To give an example of this, the feeling of security as experienced by interviewee A scored before and after moving into the CLT negatively, as can be seen in appendix VII, meaning that the inability to fulfil this capability stayed the same overall. However, as explained by the participant during the interview, the reasonings for these negative scores were different for both instances. When living in their previous living situation, the participant was not able to feel secure due to having to face possible eviction. When moving into their home provided by the CLT, this institutional conversion factor was dissolved and their experience regarding housing security drastically improved. However, due to the current societal circumstances surrounding the war between Russia and Ukraine, and the COVID-19 pandemic, the participant expressed that they are unable to feel secure in life currently. So, even though the level stayed relatively the same, the manner of impact changed.

#### 4.2.2.5 Level and manner of impact by the LCLT

Now that it has been established that overall positive changes have occurred within the capabilities of residents or that current capabilities have been maintained, the last step in this assessment of the London CLT case is to establish if and how the CLT has influenced any of these increases or maintenance of the social sustainability capabilities. When this is finalised, an answer can be given to the main question of this paragraph: *What is the impact of a CLT on the capabilities of CLT residents?*

As mentioned, appendix VIII displays all the resources and conversion factors that had a positive or negative effect on the fulfilment of a capability according to the participants of the interviews. What can be gathered, is that the London CLT organisation has been able to realise a direct impact on five capabilities.

##### 1. Accessibility of housing

As mentioned in the foregoing paragraph, one of the capabilities that saw a significant increase has to do with the accessibility of housing. Concluded from table 2 in appendix VII is that the CLT residents that were interviewed, all struggled with the accessibility of accessing adequate and affordable housing when living in their previous living situation. Participants often expressed that the housing in their previous living situation was not fitting their needs anymore: Their housing was too small for their family. However, finding affordable housing that also fit their need was a struggle. They assigned the overheating of the London housing market as the leading cause for this. Most participants expressed that they would have to leave the Greater London Area for housing that would fit their need and their budget if the CLT had not provided them with the opportunity for genuinely affordable housing in Tower Hamlets. The CLT allowed them to stay within the area where they had already made connections and build their family's lives.

##### 2. Forming of connections and relationships

According to participants of the interview, the CLT model has had an impact on their ability to form connections and relationships in two manners: through the allocation policy that all the CLT residents had to apply to, and through the events that were held by the LCLT with the future residents once they were allocation, before moving into the units. This process has already been described in further detail in paragraph 4.2.2.3.

##### 3. Sense of community

The impact of the London CLT on the capability of feeling a sense of community in the neighbourhood is also influenced by the allocation policy of the CLT. As described in paragraph 4.2.1.2, the allocation policy of the London CLT includes criteria on connection to the neighbourhood and the level of participation within the community. By introducing these criteria, the CLT is able to assign units to people that already share certain values. This sharing of values could benefit the sense of community according to some participants. This confirms the statement by Dempsey and colleagues in paragraph 3.3.1, where it is stated that the stronger shared values and norms are, the stronger the sense of community can be. The allocation policy of the London CLT has allowed the organisation to select residents based on these shared values.

## Illustration box VII. Allocation policy CLTB

As is typical for a CLT, the main objective of the CLTB is to affordable, sustainable and adequate housing (CLTB, 2021d). The CLTB has made an active choice to focus their provision of housing on low-income households throughout the whole Brussels Capital Region. Their dwellings are allocated through an income criteria and the order of registration (CLTB, 2021e). The placement of the residents could therefore be throughout Brussels, meaning that residents might not have a connection to the local area of a CLTB project prior to moving in.

However, the CLTB does actively steer upon stewardship to strengthen the social cohesion within the communities (CLTB, 2021d), which could offset this lack of connection. They do this by attempting to bring out “the intangible links and ethics between its members” (Dawance et al., 2019, p. 80). Within this process, the CLTB does make a difference between two types of communities:

1. The first community is the broader community, which includes current and future inhabitants, supporters of the CLTB, partner associations and the CLTB workers. Within this community, the aim is to “create new forms of solidarity between members of its community” by stimulating the connections between them, and also by stimulating them in their own skills to “construct collective power” (Interreg NWE SHICC, n.d., p. 8).
2. The other community that the CLTB tries to stimulate, is the project-based communities that are formed out of the households that (will) inhabit the CLTB project. During each project, the CLTB stimulates the social interaction between households as early as possible, often before moving in. But they also try to stimulate interaction with the wider neighbourhood. They do this to stimulate the integration of the families into the neighbourhood (Interreg NEW SHICC, n.d., p. 8).

This means that besides housing, the CLTB does also embody a strong focus on social interaction, participation, and knowledge and skills within their objectives as an organisation. This complies with some of the other conversion factors that were identified within the London CLT case to add to the sense of community in the neighbourhood, such as setting up connections before moving in, and sharing experiences through building their knowledge and skills together. However, there is still a possibility that differences in values could occur within this selection process, which could limit the capability of feeling a sense of community.

However, what can be learned from the CLT in Brussels in illustration box VII, is that not every CLT organisation sets the intention to select residents based on such shared values as the London CLT. This could mean, that other resources or conversion factors might be needed to compensate for the lack of shared values for the residents to have a sense of community. The philosophy of the CLTB on how they aim at creating a sense of community and what resources or factors they add, is elaborated on in the illustration box on the next page, together with what this approach could mean for the sense of community.

### 4. Feeling secure

Housing was seen by the participating CLT residents as an important factor for determining their level of security in life, together with financial security and the health and well-being of themselves and their families. While financial security and health and well-being are determined by the personal circumstances of the resident, housing security could be provided through the efforts of the CLT. The ownership model applied by the organisation added, as ownership brought up a sense of permanence and stability within a share of the participants, as they had not been able to have full ownership of their housing before living in CLT housing, as it was not within their price range.

### 5. Feeling at home

In addition to the feeling of permanence and stability, the ownership model of the CLT was also able to bring about a sense of place through feeling at home in the neighbourhood. And as Shirazi & Keivani mentioned, having a sense of attachment to a place, has been proven to benefit the community and environment, as people who identify themselves with their environment tend to take care of it more (2019). This was reflected in a response from one of the participants:

*“I felt less responsible for [my previous flat]. OK, unless I do it, nothing will happen. So, I think, there was less of it. It was present, but it was probably less of me feeling responsible. Maybe it is also something that it wasn't my flat, you know. I was renting. Maybe my mindset was also different. And I know this is the place where I want to stay and live forever. So, this is my home really.”*

LCLT Resident

## 6. Participation in community activities

Lastly, the London CLT has also been able to positively influence the ability to participate in the community. From the interviews, it could be gathered that there is a wide variety of community activities on different scales that can be participated in. Activities take place throughout the wider neighbourhood, but also on the scale of the St Clements development site. A good example of this is St Clements Day, which was held at the end of 2021 and attracted people from the development but also the wider neighbourhood. This event was set up by the residents' association, which plays an important role in the community activities. All questioned participants do participate in some form of activities, and some also aid in organising them. The participation often has increased since living within the CLT, oftentimes because of the motive of socialising and connecting with neighbours. However, two participants have expressed that the CLT has formed their motive for participating, as they want to give back to the London CLT and also promote the concept for future projects. This influence, however, is less about enabling capabilities, and more about convincing the residents about choosing to turn the capability of participating in community activities into an achieved urban functioning.

Besides this direct impact, the impact of the London CLT could reach even further through *indirect* impact. As also mentioned in paragraph 3.3.1, where the impact of collaborative housing on social sustainability in existing literature was studied, when certain capabilities are fulfilled, this could in turn influence other capabilities in a positive way. In this paragraph, this was deemed a "domino effect". In appendix XII, this domino effect between capabilities can also be found, especially when it comes to the capability regarding the forming of connections and relationships. In the scheme, it can be seen that this capability has a positive influence on a multitude of different capabilities. To highlight these, a scheme of all the capabilities that are impacted by established connections and relationships is shown in figure 38.

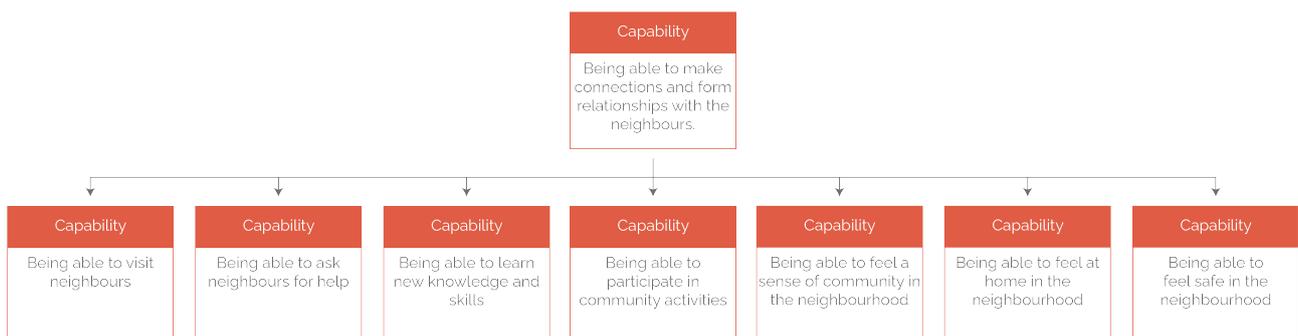


Figure 38. Schematic presentation of all the social sustainability that can be positively affected by the capability of being able to make connections and relationships with neighbours (Own image).

As shown, the impact of making improvements regarding this capability could be significant, and this is, therefore, an important capability for residents to be able to fulfil, and affirms the stance of Larimian and Sadeghi on social interaction being one of the most important aspects of social sustainability, as was mentioned in paragraph 3.2.3.5. How significant the impact could be of social connections and interaction, is shown in a comment by one of the participants that highlighted how the connections and interactions that they have made, allowed them to be more active within the community despite their personal conversion factors:

*"To be honest, I'm a hermit and it's very rare for me to participate. But because we know our neighbours already through CLT, and we have that commonality through that, and they have kids as well. Yeah, I am more open now than before. I'm more sociable than before."*

LCLT Resident

To conclude, however, what the findings in appendix VIII also show, is that the fulfilment of capabilities is dependent on many conversion factors and resources. Some of these also play an important role in the fulfilment of the capabilities that the CLT also influences, such as building design, having children, and personal preferences or characteristics. Within this study, it is therefore difficult to determine the precise share of the impact of the London CLT on the capabilities of social sustainability.

#### *4.2.2.6 Opportunities for impact by the LCLT*

In the document analysis, it was mentioned that the London CLT has intentions to realise a communal space within one of the buildings on the St Clements development site. The objective of this space is to support the wider social justice mission. During the interviews, some CLT residents and also the participating non-CLT resident expressed their wishes for such a space to get together with the community in an accessible way. As the space has not yet been realised, the impact of such a space on the St Clements development cannot be determined as of yet. However, some residents explained the impact that the space could have according to them. The consensus among responses was that the space could benefit the forming of social connections in the neighbourhood, as well as help with learning new knowledge and skills, as this space could function as the main facility where activities for this could be set up.

To examine if these impressions by the residents are grounded, a communal space that has been realised is analysed. The CLT in Europe that has experience with establishing communal spaces for their projects, is the CLTB. During the visit to Brussels for the expert panel with CLT organisations, the researcher and author had the opportunity to conduct fieldwork in a communal space at one of the CLTB projects, the CALICO project. This fieldwork is applied in illustration box VII to examine how a CLT could go about managing such a space, how such a communal space could function within a CLT and what possible impact has been observed during the fieldwork.

Before examining the space, a brief overview of the project context of CALICO should be given. The CALICO project is one of the five realised projects by the CLTB (CLTB, 2021b). It is located in Vorst, a mostly residential municipality within the region (BISA, 2016). The project is a collection of three co-housing clusters, of which one is part of the CLTB. Together these clusters consist of 34 housing units, a birth and end-of-life centre, and the communal space. The housing and facilities have been realised with the objective to integrate multiple generations, cultures, and genders in one project together with the CLT characteristic of anti-speculative housing. This wanted result of this is a place where an intentional community that includes a system of mutualised care that is also linked to the wider neighbourhood, is realised (Smetcoren et al., 2020; Calico, 2021).

As the project combines other co-housing projects and lays such an emphasis on care, it can be regarded as a distinctive project for the CLTB. However, the opportunities that the communal space offers, can be a valuable lesson for the London CLT and other CLTs. What can be gathered from the illustration box VII is that a communal space can act as a space for connection and a facilitator for participation in community activities, which confirms the statements of the London CLT residents. And as communal spaces could improve the ability to make connections and relationships, they could also offer positive influences on other capabilities, as explained in paragraph 4.2.2.5 and shown in figure 38 in that paragraph.



Figure 39. The façade of the CALICO project in Vorst, Brussels (Own image).



Figure 40. Impression of the communal space at CALICO, including the game cupboard (Le Delta, n.d.)



Figure 41. Impression of the shared kitchen in the communal space (Le Delta, n.d.)



Figure 42. Impression of the patio that is located within the collective garden of the project (Own image).

### Illustration box VIII. Communal space at CALICO, CLTB

The communal space is located on the ground floor of the building, that is pictured in figure 39. It includes an open space that could be used for multiple activities (figure 40), a kitchen (figure 41), and a small patio in the shared garden outside where people can also get together (figure 42). It also provides a second room for activities or meetings and WI-FI (Le Delta, n.d.).

#### Objectives

The space is nicknamed the "*Lieu de liens*" (place of connection), and is intended as a meeting place where people can participate and be creative. The people that are referred to in this statement, can be anyone, as this space is open to everyone from the CALICO project, to the municipality of Vorst, and beyond. The argument for this, is to facilitate links between different people from the area, and to combat social isolation. To achieve this link with the wider context, the communal space is integrated into the network of local organisations (Le Delta, n.d. a).

#### Activities

A variety of activities take place here with the aim to bring the people that visit *Lieu de liens* together. Some of these activities are planned, such as the breakfast every Wednesday morning, or creative arts workshops, and a film and pizza night (Le Delta, n.d. b). These activities are communicated to those interested through a program that is listed on the website of the communal space.

There is also room for spontaneous activities, as the space is run by staff members every weekday to do activities, such as board games or crafts, or to just sit and talk while having a cup of tea or coffee (Personal communication with Le Delta staff member, April 20, 2022).

#### Management

The program of the space was determined together by experts, future users, and neighbourhood residents that showed an interest in the project, and is now collectively managed by these same participants in collaboration with the organisation Rézone. This organisation focuses on providing services in regards to mental health within Brussels, and has set up a partnership with the CLTB (CLTB, 2021f) to provide these services within the CALICO project through this communal space. This organisation provides staff that are present in the communal space every weekday at certain hours to facilitate the planned and spontaneous activities. However, within this process the participation and input from the users of the communal space is always encouraged (Le Delta, n.d.).

#### Observations

The researcher of this study joined the breakfast at the communal space on the 20<sup>th</sup> of April from 8 AM to 10 AM. During these two hours, a variety of people walked in to join the breakfast that was prepared by two staff members. Among the participants were employees from the CALICO birth centre, residents of the non-CLTB cohousing clusters, and a resident from outside of the municipality, showcasing the diversity in people that join and how accessible the communal space can be for outsiders.

Music was playing, people talked, and also comforted each other when one participant showed signs of emotional distress, and played a few rounds of the game UNO, showcasing the kind of interaction that could take place during such a planned activity.

What was also observed, is how the space offers opportunities for the sharing of information between residents. Within the *Lieu de liens* there are places where people can put pamphlets on future activities around the area and about other initiatives, for example initiatives by the CLTB.

#### 4.2.3 Conclusion

In this paragraph, an answer to the following research sub-question was sought: *How does the CLT model impact the capabilities of residents?* The answer to this question was sought by conducting a single case study of the London Community Land Trust. Specifically, a study of their currently only realised project at the St Clements site in the neighbourhood of Mile End.

The LCLT qualifies as a representative case for the CLT model, as it implements all its classic characteristics that have been discussed in paragraph 3.1 of this report. By implementing these classic characteristics, the LCLT is able to meet all the conditions of the model. However, the LCLT also extends its efforts, by striving to fulfil the opportunities of *development and maintenance of affordable facilities, wide community empowerment and inclusion, and diversity within the neighbourhood*. By fulfilling these opportunities, the LCLT showed promises when it comes to positively impacting social sustainability.

To be able to form an answer to the sub-question, the impact was reviewed from the perspective of the residents by gathering their experiences through semi-structured interviews. From these experiences of the LCLT residents, it could be concluded that, overall, most of their social sustainability had increased since moving into the project. The most significant increases were found in the capabilities of accessibility of housing, the accessibility of local knowledge by asking for help, and the ability to make connections and form relationships. Also, compelling evidence was found that the capabilities that had to do with safety and security, and the sense of community had increased since moving to the CLT site. This showed great promise to the level of the positive impact the CLT model could have had in this case study. However, to determine this, an extensive analysis of the causes for these increases in capabilities was conducted. What was found, is that there are a considerable number of resources and conversion factors that played a role in creating these increases in capabilities. To determine the impact of the CLT model, it needed to be assimilated what conversion factors and resources were changed by the CLT. The result of this process is pictured in figure 43 on the next page. What can be gathered from this image, is that the London CLT was able to directly impact the capabilities of:

- The resident is able to make connections and form relationships;
- The resident is able to feel a sense of community in their neighbourhood;
- The resident is able to feel at home in their neighbourhood;
- The resident is able to feel secure within their current position in life;
- The resident is able to live in an adequate house they can afford.

It did so by changing conversion factors in compliance with the allocation policy, choosing home ownership as the tenure model, and adding the resources of affordable, adequate housing, and events. From the interviews with the residents, no negative impact of the London CLT on the social sustainability capabilities had been identified.

Additionally, from the experiences of the residents, it could be concluded that the capability of making connections and forming relationships is a key element to increasing other capabilities, as shown in figure 43. Consequently, the London CLT could possibly also have had an indirect positive impact on these capabilities.

However, the extent of the positive impact of the London CLT is still hard to express in definitive terms. From the in-depth analysis, it can be concluded that there are also other significant conversion factors and resources that could have an increasing effect on these capabilities, such as the urban and building design when it comes to feeling safe, and the impact of online communication tools on the ability to make connections and ask neighbours for help. In addition, the residents felt that it could also be further improved with the addition of a communal space. As the CLTB showcases at the CALICO project, such communal spaces could be beneficial when it comes to neighbours meeting each other and conversating with each other.

The effect of other conversion factors and resources being significant for social sustainability was also confirmed by interviewing a non-CLT resident. From the interview, it could be gathered that this participant was also capable of performing the social sustainability capabilities within the Mile End neighbourhood, despite living within the CLT. The conclusion could be drawn, that the CLT residents might not have to rely on the London CLT to fulfil the capabilities, but that the CLT could make it *easier* to fulfil these capabilities. However, as the data from this control group was not as extensive as from the CLT group, this conclusion cannot be made definitively.

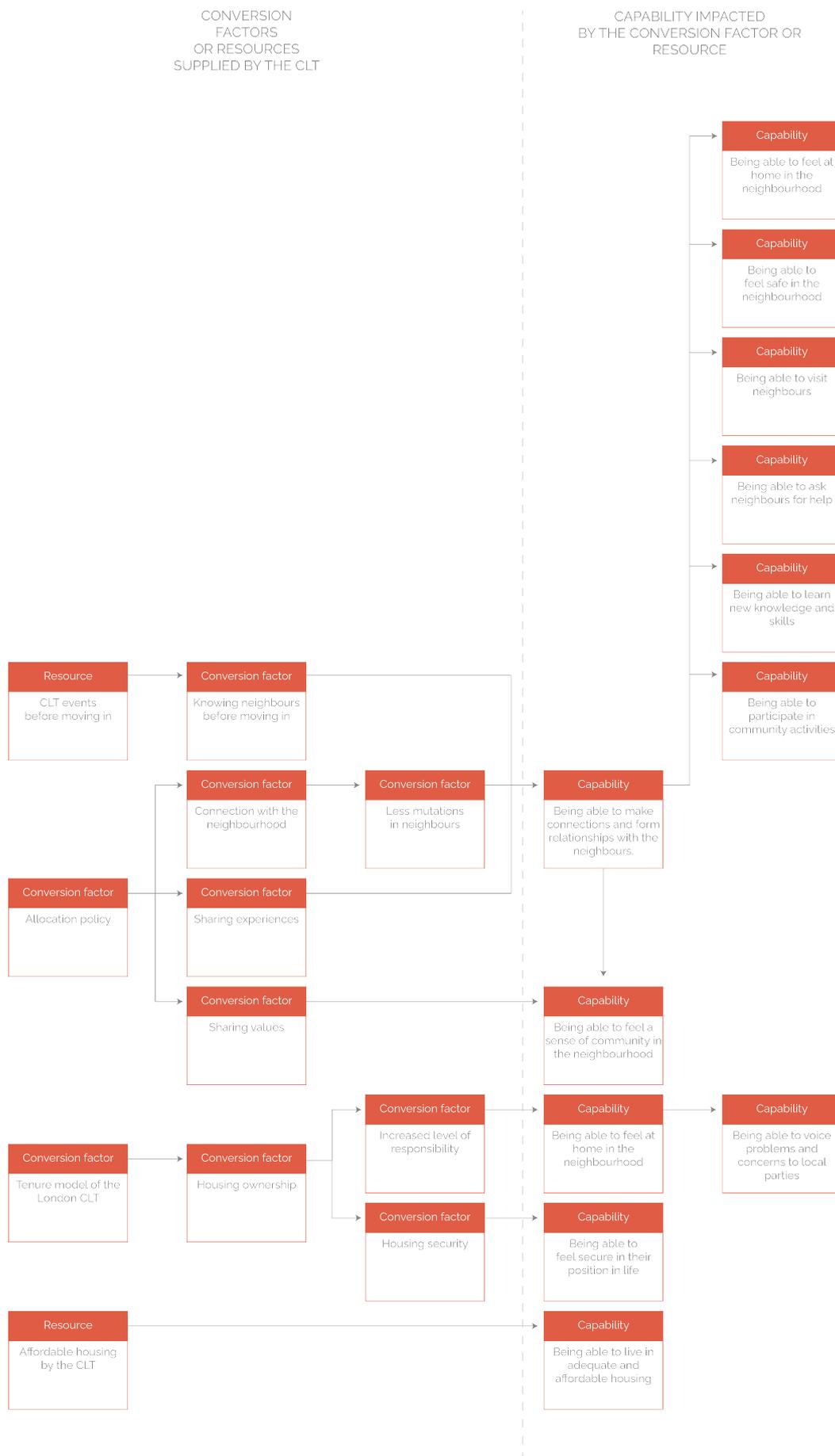


Figure 43. Scheme of all the capabilities of the LCLT residents that have been positively influenced by conversion factors and resources that have been provided through the LCLT (Own image).



## 5. Impact transfer

In chapter five, it is examined how the positive findings from the impact assessment of the case study in the foregoing chapter can be transferred to different contexts to benefit future CLT projects. This is achieved by drawing on literature on *lesson drawing* and *policy transfer* and by giving an example through another single case study of the CLT H-Buurt in Amsterdam, the Netherlands. Through this approach, this chapter provides an answer to the last research sub-question: *What advice can be given to future CLT projects to enhance their positive impact on social sustainability?*

## 5.1 Policy transfer

As mentioned on diverse occasions within this study, collaborative housing practices are place-based (Lang, 2019), meaning that the functioning of one model in a certain context, could differ from the workings of the model in another context due to the contextual differences. This results in the fact that (positive) outcomes of one model often cannot simply be replicated within a different context due to those contextual differences. However, within this study, it is desired to be able to transfer the findings of the London CLT case study to benefit the social sustainability of neighbourhoods around different countries in Europe and to strengthen the functioning of the CLT model in Europe overall. This practice of countries learning from one another is not new. Within this paragraph, the concepts of policy transfer and lesson drawing are explored in-depth, before describing how these methods can be applied within this study to be able to transfer the outcomes of the London CLT into different contexts, and within this study, specifically to the Dutch context.

### 5.1.1 Theory on lesson drawing

The process of transferring “knowledge about policies, administrative arrangements, institutions and ideas” from one political system for the development of knowledge about “policies, administrative arrangements, institutions and ideas in another political system” has increased in popularity since the turn of the century (Dolowitz & Marsh, 2000). This process is often referred to as policy transfer and has been described by Evans as “a rational and progressive learning activity” (2004, p. 4). Also, according to him, there are three different processes of policy transfer that could be followed: 1) lesson drawing, 2) negotiated transfer, and 3) direct coercive transfer. The second and third options involve varying degrees of coercion, while the first method is rational and action-oriented (Evans, 2009). Within this study, the method of lesson drawing is applied as no level of coercion is applicable within the transferring of outcomes.

According to Page, lesson drawing is about understanding the conditions from one context, and whether and how these conditions could be (re)created within a different context to make them work similarly (2000). The process of lesson drawing consists of the following steps according to Rose (1993, in Page, 2000, p. 9):

#### 5. Search for one or multiple sources of lessons

The first step encompasses the context that wants to learn lessons for a certain policy or practice. This step entails the search for an applicable context or contexts where valuable lessons could possibly be drawn from.

#### 6. Make a model on how the policy or practice works in situ

The next step is to methodically analyse how the policy or practice that is desired to be transferred, operates within the context that it is currently placed in. As Dolowitz and Marsh mention, within policy transfer, the transferability is dependent on the institutional, cultural and economic context, and the complexity of the model itself (2002). These elements should therefore be mapped out in an analysis before moving on to the next step.

#### 7. Create a lesson

The next step is to create the lesson. This means that it should be assessed what elements from the policy or practice that is to be transferred, could produce valuable results in the context that it is transferred to.

#### 8. Prospective evaluation

The last step is then to perform a prospective evaluation in which the lesson that is created in step 3 is evaluated. As Page mentions, lesson drawing is about comparing the conditions of one context to the other, and evaluating how differences could be bridged. For the conditions, he has determined three categories of variables: objectives of the practice, the design variables of the practice, and wider societal variables. During the prospective evaluation, it analysed how the practice or policy is going to work in the context that is transferred to, and if adaptations would need to be made due to differences in the three categories of variables (2000).

When all steps are performed, it is assessed if and how a certain policy or practice could be transferred from one context to the other. Meaning, that this approach is only applicable for one-on-one transfer, as it compares both contexts to each other. If it is desired by another context to transfer the same policy or practice, they will have to perform another lesson drawing exercise that follows the four steps again.

## 5.1.2 Applied method

As explained in the introduction of this chapter, in this chapter an example is given of how lesson drawing could be applied to transfer the outcomes of the case study of the London CLT to a different context. For the example, the context to transfer the outcomes to is the CLT H-Buurt in Amsterdam, The Netherlands.

The context that the lessons are drawn from, is also known, as this is the case from the case study to gain insights into the residents' perspective of the impact of the CLT model on social sustainability on a neighbourhood level. This means that step 1 from the lesson drawing process is already realised. And by performing the case study and analysing the results, the same goes for steps 2 and 3, as is schematically presented in figure 44.

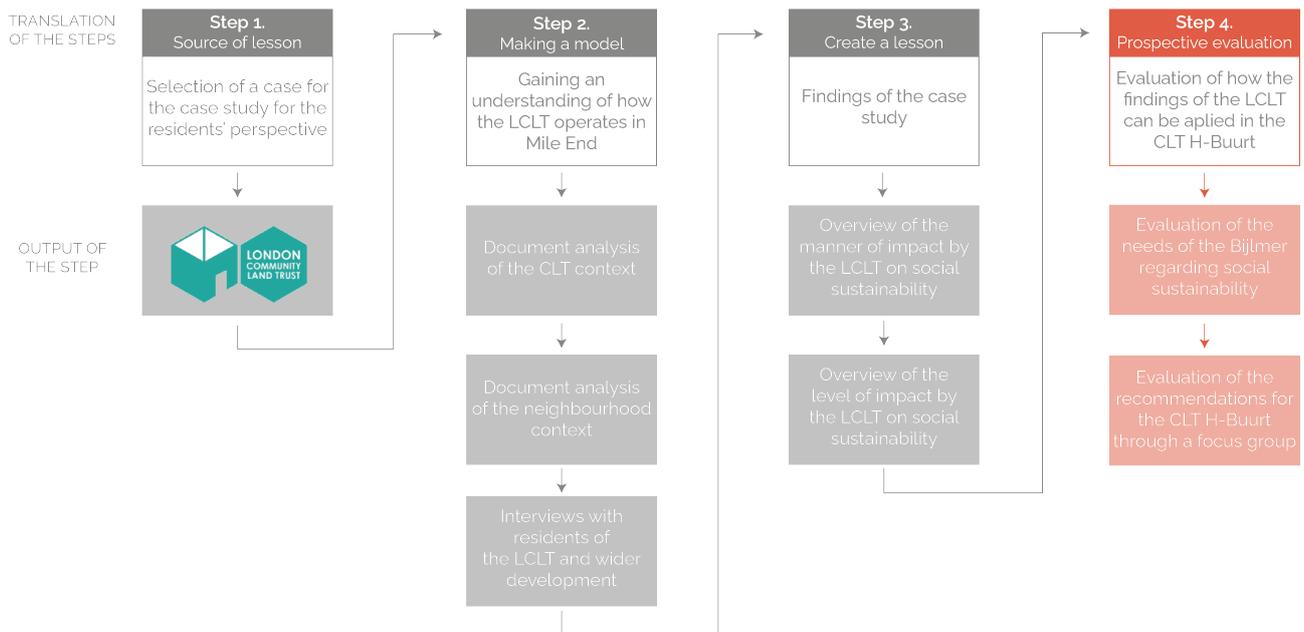


Figure 44. Overview of the steps taken to draw lessons from the London CLT for the CLT H-Buurt using the method for lesson drawing by Rose (1993) (Own image).

To complete the lesson drawing process, the only step that needs to be accomplished is the fourth and final step: the *prospective evaluation*. As mentioned in the last paragraph, the prospective evaluation revolves around comparing the contexts and evaluating what needs to be adapted to come to similar outcomes. As presented in figure aa, the approach for this evaluation is to split it up into two parts. First, the context of the CLT H-Buurt case is mapped out through a document analysis. In addition to the document analysis, an interview with people from the CLT H-Buurt organisation is held to gain a deeper understanding of the needs in the neighbourhood and the workings of the CLT. Based on the document analysis and the interviews, the needs of the neighbourhood when it comes to the different aspects of social sustainability are mapped out. These needs are then compared to the abilities of the CLT in London to increase certain capabilities and see if they fit the needs of the neighbourhood. If they fit the needs, a recommendation is made. This recommendation is then tested in a focus group with stakeholders from the CLT H-Buurt project. Through this focus group, the implementation of the lessons from the London CLT is discussed to gain insights into what adaptations might need to be made according to the recommendations to make implementation possible, and if these adaptations are possible. With the performance of the expert panel, the prospective evaluation is completed and conclusions can be drawn on what lessons the CLT H-Buurt in Amsterdam can draw from the London CLT in London.

## 5.2 Prospective evaluation

As showcased in figure 44, the prospective evaluation consists of an evaluation of the needs of the CLT H-Buurt neighbourhood, and an evaluation of the implementation of the lessons from the London CLT. Within this paragraph, both of these evaluations are performed and the results are described.

### 5.2.1 Evaluation CLT H-Buurt context

To map out the needs of the CLT H-Buurt, a document analysis of relevant documents is performed and an interview was performed with a representative of the CLT H-Buurt association and a representative of And The People that work closely on the CLT H-Buurt project. In this paragraph, the needs of the CLT H-Buurt that flowed from these research methods are mapped out, after a brief description of the CLT context and the neighbourhood context is given.

#### 5.2.1.1 CLT organisation

The CLT H-Buurt project commenced in 2018 when the decision was made to explore and develop the possibilities for a pilot CLT project within the neighbourhood de Bijlmer in Amsterdam, The Netherlands. Until then, the concept of CLT was not yet considered within the Dutch context (And The People & CLT Bijlmer, 2020). After the feasibility study of the project, the CLT H-Buurt project is on its way to being realised. To get the project off the ground, a neighbourhood association called CLT H-Buurt was set up. From the start, this association has had close links to a local church organisation *Stichting Maranatha Community Transformation Centre*, which has been actively involved within the H-Buurt since 2006 as community builders (And The People & CLT Bijlmer, 2020; Transcript interviewees G & H in appendix IX). The CLT H-Buurt association has grown into a movement within the neighbourhood, counting around 80 interested neighbourhood residents and local entrepreneurs in 2020 (And The People & CLT Bijlmer, 2020). The association has been allocated a space for gathering, located on the possible future site of the pilot project. The location of this can be seen in figure 45. In total, around 30 meetings have taken place already with the members of the association (Transcript focus group CLT H-Buurt in appendix IX), and a vegetable garden has been realised here as temporary use of the site to bring the neighbourhood together (Amsterdam Donut Coalitie, 2021). In addition, the CLT H-Buurt association hosts a range of different activities here, such as breakfasts for the children on their way to school, a 'weggeefwinkel', and a sewing group for women from the neighbourhood (Transcript interview G&H in appendix IX).

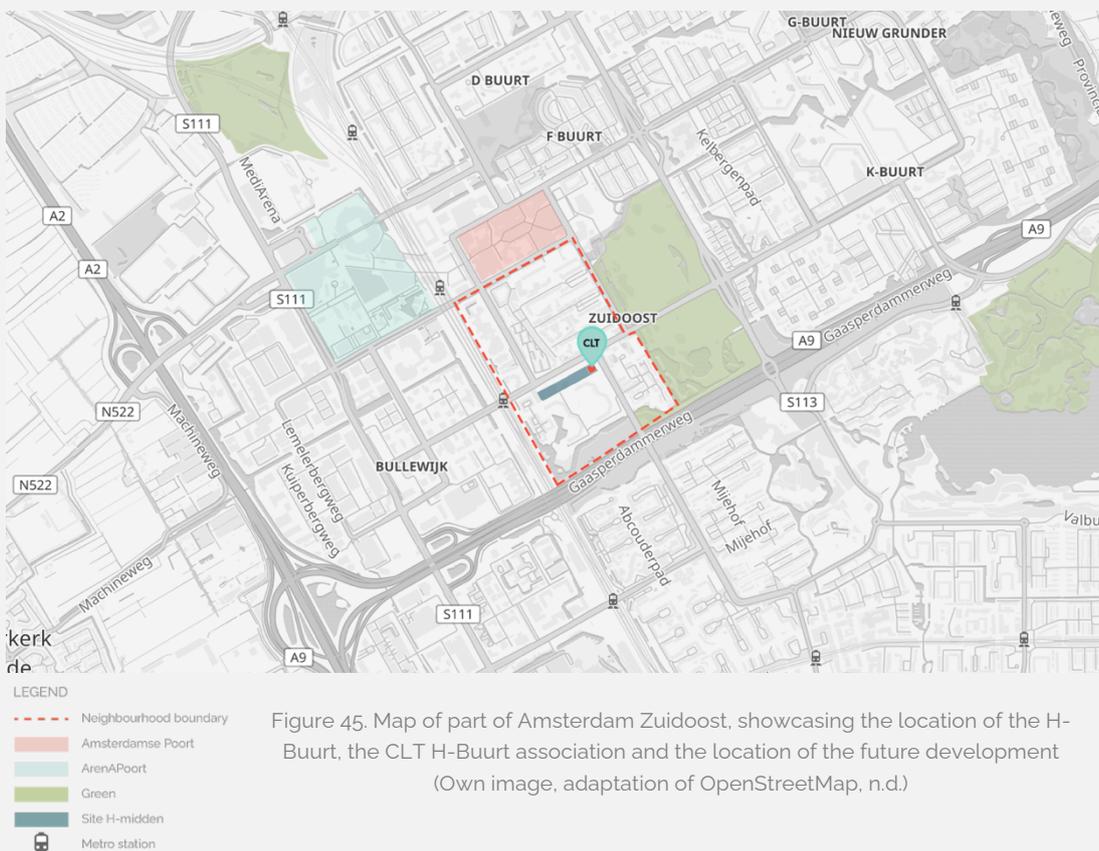


Figure 45. Map of part of Amsterdam ZuidooSt, showcasing the location of the H-Buurt, the CLT H-Buurt association and the location of the future development (Own image, adaptation of OpenStreetMap, n.d.)

### 5.2.1.2 Neighbourhood context

The CLT H-Buurt association is located in the H-Buurt neighbourhood. This neighbourhood is part of the larger area nicknamed the Bijlmer, in one of the boroughs (*stadsdelen* in Dutch) of Amsterdam, called Amsterdam Zuidoost. This neighbourhood was developed roughly 50 years ago as “the green city of the future”, inspired by the ideologies of the CIAM and the architect Le Corbusier. These ideologies were translated into a neighbourhood where the functions of living, working and recreating were separated, and with a distinct architectural design of flats separated by green spaces (And the People & CLT Bijlmer, 2020), which is deemed characteristic of the Bijlmer area nowadays. These design principles still determine the identity and use of the neighbourhood. Nowadays, the Bijlmer is a neighbourhood full of life, counting over 150 nationalities (And the People & CLT Bijlmer, 2020), but the separation of neighbourhood functions is still present. To make use of essential facilities and most recreational, residents of the Bijlmer neighbourhood have to go to designated areas for these facilities, for example, the *Amsterdamse Poort* and the *ArenAPoort*, which are also depicted in figure 45. The neighbourhood also has a clearly defined infrastructure for cars, bikes and pedestrians. Through a connection with the metro, the neighbourhood is linked to the other boroughs of Amsterdam.

### 5.2.1.3 Development of the CLT project in H-Midden

Within the H-Buurt, the CLT H-Buurt association is attempting to bring their effort to fruition, by placing a bid in a tender that is rolled out by the municipality of Amsterdam for the transformation of H-Midden, a site within the H-Buurt (indicated in figure 45 with the colour blue). The municipality has plans to transform this site into a mixture of housing, business and facilities, with a total of 500 dwellings (Gemeente Amsterdam, 2021). Within this urban development plan, the space of around 30 dwellings is reserved for a *wooncoöperatie*, a Dutch form a housing cooperative, as briefly described in paragraph 3.1.4.1 (Gemeente Amsterdam, 2021). This form of collaborative housing entails that a development project is collectively executed and financed, which results in the collective ownership of the dwellings. The individuals within the collective each rent their unit from the collective *wooncoöperatie*. The financing of the project is eventually paid off in a not-for-profit construction through the collected rent payments, all while the collective ownership of the building gives the residents control over their own living environment (Gemeente Amsterdam, n.d.). The CLT H-Buurt association has opted to adopt this model in their construction as opposed to the classic CLT model, as this opened up possibilities for the organisation. The classic CLT model is still rather unknown in the Netherlands. The lack of recognition of the model has led to policies by local authorities that are inadequate for the implementation of the classic CLT model, and consequently resistance within these local parties to the concept (Transcript interviewees G & H). To still stay close to the CLT model, the CLT H-Buurt association takes up the role of the membership organisation of the CLT, that supplies the members of the *wooncoöperatie*, and is responsible for the community operations, such as capacity-building (Interreg NWE SHICC n.d. b), while the *wooncoöperatie* will act as the responsible party for the affordable housing in H-Midden. With this approach, the *wooncoöperatie* model can be seen as a middle way to be able to realise a CLT within the current legal and governance framework of The Netherlands.

In addition to the *wooncoöperatie*, the CLT H-Buurt association is also working on setting up another initiative, a *buurtplatform* (neighbourhood platform), as part of their objective to better the community of the whole neighbourhood. According to the representative of And The People, this platform aims to function as a linking pin organisation in the form of a website, meaning that it will connect different initiatives within the neighbourhood online. The objective of the platform is to inform residents of the neighbourhood make it easier for them to organise and participate in community activities.

When summarizing the functionings of the CLT H-Buurt project in Amsterdam according to the conditions and opportunities that have been developed in the theoretical framework on CLT in paragraph 3.1, it can be said that the CLT H-Buurt project will meet all the conditions of the CLT model despite providing housing through the *wooncoöperatie* model, as this model is still able to provide housing that could be affordable in perpetuity. In addition to these conditions, the CLT H-Buurt also sets out to provide opportunities in the neighbourhood, in the form of development of facilities (online through the *Buurtplatform* and in the built environment through the temporary meeting space), and wide community empowerment and inclusion by holding a range of activities that bring people from the neighbourhood together and support them in their livelihoods.

#### 5.2.1.4 Needs of the neighbourhood in regards to social sustainability

To review what lessons could be useful to take away from the London CLT, it is first needed to review what the challenges within the H-Buurt are in regards to social sustainability. This way, the positive impact of the CLT on the neighbourhood could be maximised. To gain an understanding of the challenges of the H-Buurt and Bijlmer, the document analysis was explored further, and also an interview was conducted with a representative of the CLT H-Buurt association, and a representative from And The People. As they have been actively involved in setting up the CLT together with the residents of the neighbourhood, they have a comprehensive idea of what is at play within the area. From the document analysis and the interview, the following challenges have been identified:

##### Housing and gentrification

To start, Amsterdam Zuidoost possesses a monotone housing stock that is currently not able to meet the needs and wishes of the current residents. The borough is habited by a relatively large number of youth and young adults that are looking for an affordable home within the lower and middle segment. However, new construction often falls outside of this price range. As they are not able to find affordable housing, people find that they need to move out of the borough, draining the neighbourhoods of Zuidoost (ZO=Zuidoost, 2021). The interviewees also recognised this problem. Gentrification as a result of neighbourhood transformation has been assigned as the leading cause for this within the Bijlmer. However, besides the unaffordability of housing, gentrification could also lead to current residents of the Bijlmer feeling neglected or feeling as if they do not fit in with the neighbourhood anymore according to the representative of the CLT H-Buurt. If correct, this could also have a degrading effect on certain capabilities of social sustainability, such as feeling at home in the neighbourhood or feeling a sense of community. The CLT has set out to combat the negative effects of gentrification through collective empowerment. Together with the provision of affordable housing, combatting gentrification is the main motivation for setting up the CLT movement within the H-Buurt.

##### Facilities

What was also brought up during the interview with the two representatives, was the lack of accessibility to essential and recreational facilities in the neighbourhood. As explained in the neighbourhood context, the Bijlmer knows a strict separation of functions within the neighbourhood. This separation negatively affects the accessibility of essential facilities, due to the distance from the neighbourhood. In addition, they recognised that the neighbourhood lacks a supply of recreational facilities, especially for younger people. The negative side effect of this, according to the interviewees, is that due to boredom this target group is more prone to do activities that do not benefit the neighbourhood or community, such as hanging out in the street. The need for a place for youth to come together was also one of the outcomes of the human-centred design sprint that was organised by the CLT H-Buurt association with its members to fill in the program of the H-Buurt project (Community Land Trust H-Buurt, 2018). Other facilities that are missed in the neighbourhood according to this design sprint, are childcare facilities and an event space. The objective of the CLT H-Buurt is to explore if all of these needs can be brought together in one space (Community Land Trust H-Buurt, 2018).

##### Safety

Crime and discrimination are often experienced within the neighbourhoods of Amsterdam Zuidoost. The high crime rate has led to residents feeling unsafe, while the discrimination has adults feeling excluded and lonely (ZO=Zuidoost, 2021). The representative from the CLT H-Buurt mentioned in the interview that they have seen improvements in the H-Buurt in comparison to 10 years ago, but that safety is still a concern within the neighbourhood. This has been amplified by the societal circumstances of the past years, such as COVID-19, which results in some people not feeling safe enough to leave their flat, for example.

##### Democracy

This lack of safety, together with a feeling of lack of participation of the local authorities in resident initiatives has resulted in an uprising in distrust towards local authorities, but also corporations and the police within Amsterdam Zuidoost (ZO=Zuidoost, 2021; Transcript interviewees G&H). As democracy is an important facet of community functionings with a neighbourhood, this distrust negatively influences the social sustainability of the H-Buurt.

##### Connection

Lastly, the CLT H-Buurt association recognises that social cohesion is of importance within the social fabric of a neighbourhood. However, the social cohesion has been put under pressure by all the challenges that the Bijlmer faces. As the representative of the CLT H-Buurt association put it:

*"So, when we really have a community where everybody brings in their talents and their values, I think it will add value to the whole community together. Because there are so many potential values around, and it's not harvested because there's no place, there is no platform. So, that's our goal. Because there are problems of debt, problems of loneliness... There are so many things. But we need a place where we are connected, then we can deal with all those issues in the neighbourhood."*

Representative CLT H-Buurt association

What can be concluded from this listing, is that the social sustainability of the Bijlmer is under pressure, as it could be stated that there are residents within the neighbourhood that cannot meet all social sustainability capabilities, especially the ones that have to do with the accessibility of housing, feeling at home in the neighbourhood, feeling a sense of community, accessibility of essential and recreational facilities, feeling safe in the neighbourhood, being able to voice problems and concerns, and the making of connections within the neighbourhood.

### 5.2.2 Lessons from the London CLT

It can be stated that the social sustainability of the Bijlmer is under pressure as not all residents are able to fulfil every social sustainability capability they wanted to do so. The realisation of a CLT could offer some relief by providing ways to increase the opportunity for residents to fulfil certain capabilities. In the conclusion of paragraph 4.2, figure 43 displays all the capabilities that can be increased through the resources and conversion factors that the CLT model supplies according to the case study of the London CLT. In figure 46, these capabilities are compared to the capabilities that certain groups of residents of the Bijlmer neighbourhood might currently be unable to fulfil according to the findings from the document analysis and the interviews. What can be concluded from this figure, is that according to the findings from the London CLT, the CLT model is able to provide a manner to increase the capabilities of residents.

According to figure 46, applying the CLT model in the H-Buurt of the Bijlmer, the need for more affordable housing can be fulfilled by supplying perpetually affordable housing. As the provision has been identified as one of the main objectives of the CLT H-Buurt association, the possibility to fulfil this need through the CLT model is expected.

However, less expected is how the allocation policy and an ownership tenure model of the CLT could aid in offsetting the negative effects of the possible gentrification, by enabling the capabilities of feeling a sense of community and feeling at home in the neighbourhood. How the London CLT has handled their allocation policy and their tenure model could therefore provide valuable lessons for the CLT H-Buurt. Therefore, based on both these conversion factors, a recommendation is made toward the stakeholders involved in the CLT H-Buurt project:

4. Allocation policy: The allocation policy for the homes of the CLT H-Buurt should contain criteria that are focused on connection and participation, just like the allocation policy of the London CLT, to ensure that the people that are allocated a CLT home share the same values that benefit the CLT.
5. Housing ownership: The homes that the CLT H-Buurt will offer to future residents, should be owner-occupied homes to facilitate a feeling of responsibility and in turn, could increase the feeling of feeling at home in the neighbourhood.

In addition to the allocation policy and housing ownership, the London CLT also offers a recommendation for other needs of the Bijlmer neighbourhood. When it comes to the need to increase safety, and maintain and strengthen the connections within the neighbourhood, facilitating the capability of forming connections and relationships is crucial for the CLT. In the London CLT case, one way this was achieved was by holding CLT events before moving in. In addition to possibly fulfilling these needs, the facilitation of the capability to form connections and relationships also offers benefits for a range of other capabilities. This means that when a CLT facilitates this capability, it could have additional beneficial effects on the neighbourhood. For this reason, it could be additionally worthwhile for the CLT H-Buurt to consider this. The recommendation for this project in regards to facilitating connection and relationships is therefore as follows:

6. Facilitating connection: Both before and after the residents have moved into the homes, the CLT H-Buurt must actively commit itself to facilitating and strengthening the connection between residents.

During the focus group, the recommendations are stated more briefly to increase the understandability of the participants. An overview of how they are stated is given in table 4 in paragraph 2.4.2.1.

However, for some capabilities listed in figure 46, the findings from the London CLT cannot offer relief, meaning that the CLT H-Buurt might not be able to fulfil the need of the Bijlmer neighbourhood that correlates with this capability. This is the case for the need to increase trust between the residents and the local authorities, and the need for better accessibility of essential and recreational facilities. The conclusion that can be drawn from this, is that the realisation of a CLT within the Bijlmer neighbourhood will likely improve the social sustainability within the neighbourhood, but is probably not able to make the neighbourhood fully socially sustainable.

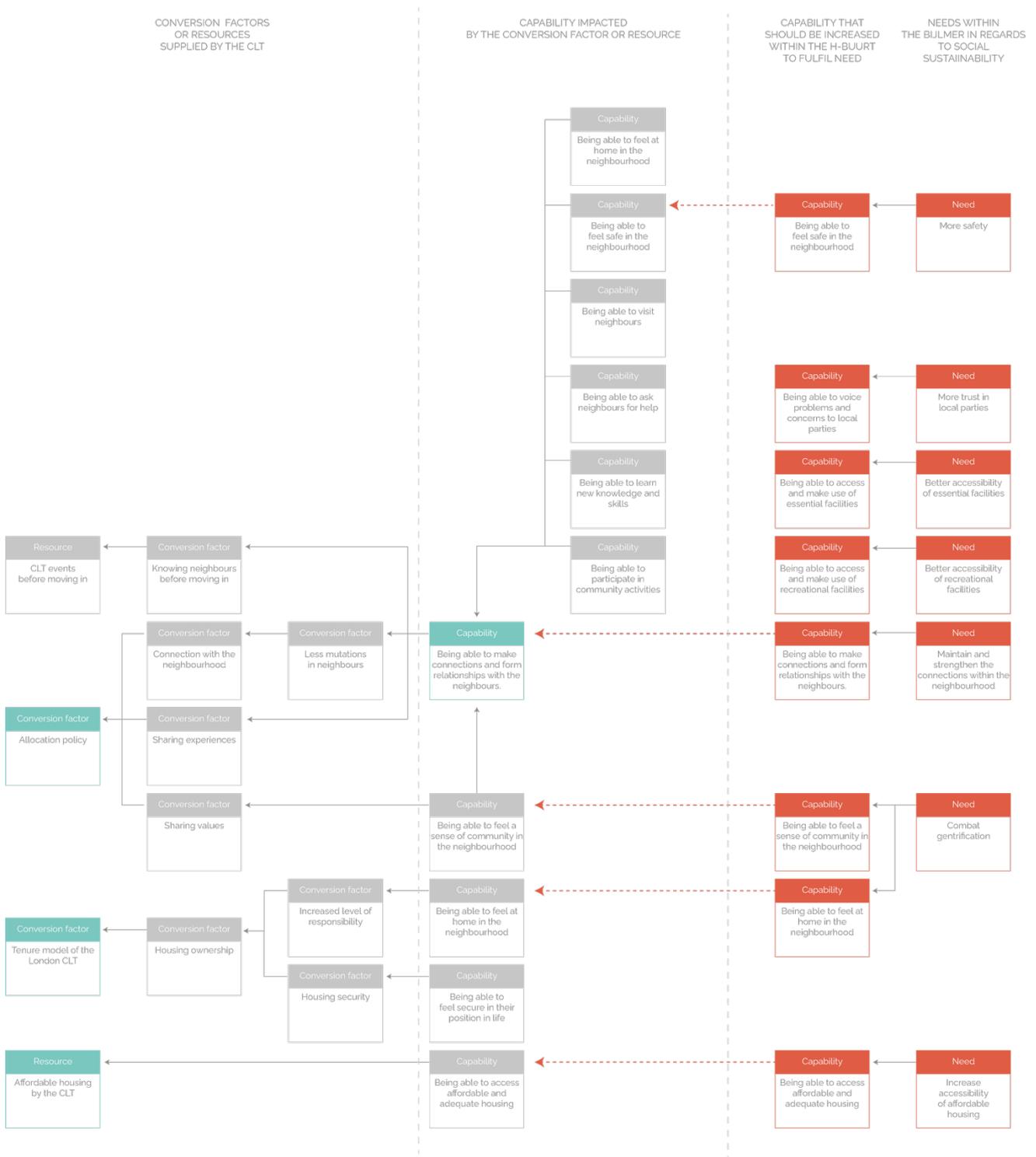


Figure 46. Comparison of the capabilities that have been positively influenced in the London CLT case and the needs of the Bijlmer neighbourhood (Own image).

### 5.2.3 Implementation of lessons

To gain insights into how the three recommendations could be implemented within the CLT H-Buurt project, a focus group with 4 stakeholders within the project was held. For the list of participants, table 5 in paragraph 2.4.2.2 can be consulted. In this paragraph, the results of the focus group in regard to each of the 3 recommendations based on the findings from the London CLT are elaborated on.

#### 5.2.3.1 General impact of the CLT H-Buurt on social sustainability

The focus group commenced with a discussion on what the participants expected the impact of the CLT H-Buurt would be with the question: *Does the CLT H-Buurt project have the potential to strengthen the social sustainability of the Bijlmer?* This was done to gauge how the different stakeholders regard the impact a CLT could have within the Bijlmer context. What could be gathered from the discussion on this, is that overall, the stakeholders are positive in regards to the level of social sustainability that is already present within the neighbourhood. This was quite unexpected, as the needs that are listed within the foregoing paragraph suggest otherwise. The municipality of Amsterdam accredited this level of sustainability to the rich identity of the neighbourhood that has been shaped by the current residents of the neighbourhood.

The participants acknowledged that gentrification, as a consequence of the planned urban area development, is putting pressure on the residents. Consequently, the sustainability of this rich identity in the Bijlmer is threatened. And this is where the CLT model could make a difference within the Bijlmer, by creating a way through which this identity of the Bijlmer and the residents that make it happen, can be maintained within the area.

#### 5.2.3.2 Recommendation 1: Allocation policy

The initial reaction to the recommendation to implement a similar allocation policy to the London CLT that includes criteria on aspects such as connection, and participation, was positive. The representative of And The People confirmed that they were already working on an allocation policy that included similar criteria, such as *connection to the H-Buurt, community involvement, and housing need*.

However, they are of the opinion that the criteria should be fitting for the objectives of the CLT H-Buurt project. The key objective that the stakeholders want to achieve with the allocation policy, is to select people that **add value** to the Bijlmer neighbourhood. This value could be economical, or ecological, but should be predominantly social. For the stakeholders, added social often meant the social network that people have within the neighbourhood or the participation in activities that benefit the neighbourhood.

For this approach, the participants of the focus group did identify barriers. The first barrier is that added social value is hard to define, as there is a broad range of the concepts of social connection, and also participation. And in addition, when criteria are defined, they should also be assigned a weight, which is another area of difficulty. Lastly, there are also concerns about the allocation process. One participant worried that through a rigid allocation policy, the ones that scream the loudest might be allocated a unit sooner than people that might not be as vocal, but possible add more value to the neighbourhood. Another participant also had concerns regarding 'piggy backers'.

To overcome the first and second barriers, the stakeholders themselves acknowledged that the assessment of the right criteria and weight of that criteria should be carried out in collaboration with the members of the CLT H-Buurt. This way, the allocation policy reflects the values of the CLT and the people that are selected for a unit will most likely reflect these values also. By sharing these values, the positive impact of the London CLT on the capability to feel a sense of community in the neighbourhood could also be realised within the CLT H-Buurt. However, one of the participants from the municipality of Amsterdam did doubt if the positive effects of the London CLT could be duplicated within the Dutch context at all, due to differences in culture.

The concerns surrounding the allocation process could be mitigated by adopting a similar process that the London CLT managed. Their process consisted of an online questionnaire and an interview round with an independent panel. The added interview round could be an opportunity to weed out the 'piggy backers', and to provide people with the opportunity to tell their stories in their own way. However, this process could be classified as labour-intensive, which is something that the CLT H-Buurt association should also take into account when considering this option.

Another point of discussion with the group of participants was the inclusion of target groups as part of the criteria. The municipality of Amsterdam recognised that there are certain socio-demographic groups that are struggling more than

others, such as adults up to 35 years, the elderly, and the self-employed. However, the inclusion of such criteria also depends on the objectives of the CLT H-Buurt association.

#### 5.2.3.3 Recommendation 2: Housing ownership

In contrast to the foregoing recommendation, the reaction to the implementation of housing ownership within the group of participants. The reasoning for this is that the concept of housing ownership and the affiliated mortgage is a concept that is rather unknown among the residents of the Bijlmer according to one representative from the municipality of Amsterdam. In addition to this, the current residents of the Bijlmer also struggle to obtain a mortgage if they would be interested in one, according to the participant from Common City. Both these factors would limit the options for people that are interested in a CLT unit in the H-Buurt significantly.

The representative from Common City argued that the current form, rental housing supplied through a wooncoöperatie, could offer the same impact on social sustainability, if not better. Through this model, the housing units that will be supplied will also be perpetually affordable, just as with the classic CLT model. However, this model has the added value that people collectively own the building and land of the development which could also lead to a greater feeling of community among the collective. In addition, this collective ownership is also perpetual, meaning that this feeling of community could also be safeguarded for the long term. However, this phenomenon has not been proven as of yet.

One representative of the municipality of Amsterdam did recognise the possible added value of owner-occupied housing in the CLT H-Buurt, as this could offer an approach to retaining the people that reflect these strong social values within the neighbourhood for longer than maybe rental housing would. Therefore, they suggested the middle way of a rent-to-purchase model. This way, if the resident has proven during the rental phase of the dwelling that they add value to the dwelling, they are able to buy the unit and experience the benefits that this could bring to their feeling of social sustainability in the neighbourhood. However, within this approach, the barriers of lack of familiarity with the concept of a mortgage together with the inaccessibility of mortgages are not solved. To improve the familiarity with the concept, the other representative offered that there are possibilities to educate people in this regard.

#### 5.2.3.4 Recommendation 3: Facilitating connection

Finally, when it comes to the last recommendation of the CLT H-Buurt needing to facilitate connection before and after the residents have moved into the units as much as possible, all participants agreed that this is something the CLT H-Buurt is possible to do and that it can be beneficial. However, one representative of the municipality did mention that this facilitation should be a two-way street. Residents should also be required to have an active attitude towards making connections and forming relationships. In this, the allocation policy plays another important role. As this allocation policy could be a tool to select people with this positive attitude when this is taken into account in the criteria.

When discussing how the connections could be facilitated by the CLT H-Buurt when the residents have moved in, the need for a communal space came up, together with online communication tools such as WhatsApp groups. Both these resources have been extensively covered in the case study of the CLT and how these could be beneficial for connection, but also other capabilities. However, when it comes to the communal space, there are uncertainties among And The People and Common City on who is going to provide the communal space, as this is unclear within the tender procedure currently.

According to the representative of And The People, the CLT H-Buurt association currently already facilitates the making of connections between residents of the Bijlmer to some extent through the thirty meetings that they have already had with their members. When following the recommendations of the London CLT, these meetings should be continued with the residents when the units have been allocated.

## 5.3 Conclusion

In this paragraph, an answer was sought to the sixth and final research sub-question: *What advice can be given to future CLT projects to enhance their positive impact on social sustainability?* The first step in answering this question was to research a method through which this transference of CLT practices between contexts could be realised. For this, inspiration was taken from the scientific literature on a phenomenon called policy transfer, which is a science that focuses on transferring policy from one context to the other and has been a common practice for years. By executing a concise literature review a method for lesson drawing was developed. However, as transference of policy is generally a practice

between two contexts, the transference of the lessons from the London CLT was tested through a single-case study of the CLT H-Buurt project in the Bijlmer neighbourhood in Amsterdam, The Netherlands.

Three recommendations based on the lessons from the London CLT and the needs of the Bijlmer neighbourhood were discussed in a focus group set-up. What could be concluded from this session, is that transference of lessons between the London and the Amsterdam context could be possible. On two of the three recommendations, the participants of the focus group were relatively positive that it could work within the Amsterdam project. However, seeing the objectives of the project and contextual differences (culture, local policy, personal conversion factors of the residents etc.), changes would have to be made to have the recommendations fit in the CLT H-Buurt project. This was to be expected. However, sometimes the differences are too great to be bridged, which was the case with the recommendation regarding housing ownership due to the personal conversion factors of the CLT H-Buurt residents. In this case, there is the need to look for different options that could produce the same or even better result. However, it is due to the changes to the recommendations that have to be made, and the contextual differences in general, that it is difficult to predict if a similar or even more positive impact is possible when implementing them.

For future CLT projects, the same recommendations that are discussed within this chapter are relevant to implement when wanting to make strides when it comes to positively impacting social sustainability. However, to implement them, the advice is twofold:

1. Firstly, it is advised to gain an understanding of the fact if the recommendations that have been subtracted from the London CLT case could be duplicated in their local neighbourhood context, they should also perform a lesson drawing study. This study could take up the form of an open discussion with the CLT organisation or other involved stakeholders to walk through the possible implementation of the three recommendations from the London CLT, as discussed in this chapter.
2. When a recommendation cannot be implemented due to contextual differences being too great, this could be mitigated by developing a different method to achieve the same result. As identified within the previous chapter of this study, there is an array of different conversion factors and resources that could also impact social sustainability in a positive manner, and could therefore also be an option to implement within the CLT project. These recommendations are discussed in paragraph 7.2.1.

# 6. Discussion

In this chapter, the conclusions that have been drawn for each research sub-question are interpreted and validated. This is done by examining the success of the measurement tools that have been developed in the theoretical framework, and by examining the theoretical, organizational and residents' perspective on the impact of the CLT model on social sustainability.

## 6.1 Interpretation of the findings

As the validity of the research methods and findings has been assessed and found adequate by the main researcher, the main findings from this study can be assessed. This paragraph describes what this research has added to the existing bodies of knowledge on Community Land Trusts in Europe and the concept of social sustainability on a neighbourhood scale.

### 6.1.1 Theoretical framework for CLTs

The research of this study commenced with the development of a theoretical framework on the CLT model to answer the first research sub-question: *What conditions and opportunities can the CLT model facilitate within a neighbourhood?* Through an analysis of the four classic characteristics and development process of the model, together with a comparison to other collaborative housing practices, the answer to this question were four conditions that the model is always able to create within a neighbourhood when applied in the classic form, and four opportunities, which are elements that the CLT could supply if there opt to do so, but they are not inherent to the four classic characteristics. The decision was made by the author of this report to develop these two categories of attributes to be able to differentiate between the operations of different CLTs throughout Europe. Early on in the literature review on the CLT model, the researcher became aware that even though the CLT model is distinctive due to the dual ownership model, perpetual affordability, tripartite governance structure and focus on stewardship, CLTs that currently operate in Europe apply these characteristics in varying manners and to varying degrees. To be able to distinguish different CLT organisations from each other, a different distinction other than the four classic CLT characteristics was needed, resulting in the four conditions and four opportunities.

Within the empirical research of this study, these four conditions and opportunities were applied to summarise the context analyses on the London CLT, and the CLT H-Buurt in Amsterdam. What was found, is that the difference in CLT lies within the application of opportunities that create the most difference. As conditions are tied to the four characteristics, these are not expected to differentiate a lot. CLT can be set apart on which opportunities they seize, and especially by *how* they seize them. For example, the London CLT and the CLT H-Buurt both strive to develop and maintain facilities other than housing (first opportunity mentioned in paragraph 3.1.5.2). While the London CLT is working on a physical communal space at their site, the CLT H-Buurt also wants to provide an online platform in addition to such a communal space. What can be gathered from this, is that if the objective is to make a clear distinction between CLT organisations, the conditions and opportunities could be expanded upon in future research. For this study, the distinction that this framework offered was satisfactory to the researcher, meaning that the framework was able to measure what it was supposed to measure. When a framework is able to measure the concepts that it sets out to measure, this is called construct validity (Yin, 2009). Thus, for the theoretical framework for CLTs construct validity has been achieved.

However, besides construct validity, frameworks can also be evaluated on their external validity, which concerns itself with generalisability. The framework of conditions and opportunities has been based on a comprehensive literature study using a robust body of literature on the concept, which complements the possible generalisability of the framework. However, this study has only applied the framework to one operating and one developing CLT organisation within the European context, which is a small sample to base the integrity of the framework on. This means that it could be concluded that the external validity cannot be made definite as of yet. Through the analysis of additional CLT organisations around Europe using this framework, the integrity of the framework could be tested more in-depth.

### 6.1.2 Operationalisation method for social sustainability

The next step in this study was to construct an operationalisation method for the concept of social sustainability to answer the second research sub-question: *How can social sustainability be measured on the scale of the neighbourhood?* This meant that social sustainability had to be made measurable. However, the existing body of literature on the concept supplies a multitude of operationalisation methods that can sometimes even be contradictory to each other. This is due to the fact that the concept of social sustainability can be applied in different fields and on different scales. As this study focuses on housing models, the built environment was set as the domain for the concept and operationalisation method and within this domain, the scale of the neighbourhood was assigned as the appropriate scale. To argue this, CLTs often operate on a building level, but as discussed in the conditions and opportunities of the CLT, the model is able to extend its efforts beyond the building walls. In addition, people often experience their daily life on the scale of the neighbourhood, making this arguably one of the most important scales within the built environment.

Within the domain of the built environment and on the scale of the neighbourhood, the existing body of literature does supply a number of definitions and operationalisation methods. However, the researcher of this study opted to set up their own operationalisation method based on the CA. The argumentation for this was the inspiration and fascination that this approach brought about, as it could bring innovation to the field of social sustainability by adding a more human-centred approach to the already existing body of knowledge. However, as this method is still a novelty within the social sustainability field, an extensive examination of the method is appropriate. In the coming subparagraphs, the individualistic nature, the manner of influencing capabilities, and the validity and overall impression of the method are discussed.

#### 6.1.2.1 *An individualistic and cross-sectional approach*

Within this study, the concept of social sustainability was defined by the main researcher as *social sustainability describes the extent to which a neighbourhood provides the needed environmental resources and supports the social functioning and health of a community while safeguarding the preconditions of social equity. It can be qualified as a coming together of environmental and social aspects that open up the capabilities of all its residents, now and in the future.* And to measure this concept, seventeen capabilities divided over two capability sets had been developed. One set focused on the environmental aspects, while the other focused on the social aspects. These sets are listed in table 10 on page 58.

To achieve a neighbourhood that is socially sustainable, each resident should be able to turn each of these seventeen capabilities into an achieved urban functioning within the neighbourhood if they desired to do so. Therefore, this approach can be deemed an *individualistic* approach to social sustainability, as it focuses on each individual within a neighbourhood separately. As was discussed in paragraph 3.2.3.2 and showcased in the CA scheme in figure 47, diversity does play a role within this approach, as relevant conversion factors differ from person to person. This individualistic approach to measuring social sustainability, therefore, could pose problems to the generalisability of the findings. To mitigate this, in the analysis it was looked at how many times certain conversion factors were mentioned by different participants, and commonalities were sought. And these commonalities were also found in the data from the interviews with the residents of the LCLT, such as the importance of the online communication tools, the building design, and having children to make connections. However, diversity remains an integral element of the Capabilities Approach, and this also came about when interviewing the LCLT residents, such as people's personalities that determined their desire to visit their neighbours or participate in community activities. As these personal conversion factors do play a role in the achieved urban functionings of individuals in their environment, they should not be dismissed or ignored. They showcase that even the experience of social sustainability can differ from person to person.

In addition, the individualistic approach was chosen by the main research also did not take into account the social sustainability of the collective. As mentioned in the applied definition of social sustainability, the concept within the domain of the built environment is about the coming together of the environment and the community. The concept of community implies a collective, but in this study, the focus was on the capabilities of the individuals that make up this collective community. The main researcher justifies this approach from the viewpoint of equity, a concept that was identified as one of the key principles of social sustainability. As discussed in paragraph 3.2.5.3, equity encompasses the fairness in the distribution of social goods among individuals within a society, meaning distribution should be equitable and not equal leading to a society where **no individual** is excluded. As already discussed in the foregoing argument, there is diversity within communities. This makes equity harder to measure on a collective scale as it is an individualistic concept, meaning that the individualistic approach by the main researcher is justified as equity is integral to social sustainability. However, the main researcher does recognise that the collective also plays a role in social sustainability, as it opens up the individual to possible new capabilities. This was also something that was mentioned by some participants in the case study of the London CLT. For example, when it came to the ability to voice opinions and problems to local parties, some participants found that they had a stronger case when they joined forces with others that experienced similar issues. The impact of CLT on collective social sustainability is, therefore, something that could be looked into more in future studies, as described in paragraph 7.2.1 on recommendations for future research.

Furthermore, the approach for the measurement of social sustainability in this study was a cross-sectional case study, meaning that the London CLT case and the CLT H-Buurt case were examined at only one moment in time. As opposed to a longitudinal case study, where the same participants are questioned for a number of moments over time. This means that the data that is collected within this study with the applied approach is not able to showcase the long-term impact of CLT on social sustainability, all while social sustainability is a concept that concerns itself with the *now* and the *future*, as mentioned in the definition. This study has only been able to focus on the *now* due to the timeframe of this research being

limited, meaning that this set-up does not encompass the definition of social sustainability completely. Additional research on the longevity of the impact of CLT is therefore recommended.

### 6.1.2.2 Determining the manner of impact

To examine the impact of a CLT on social sustainability, the impact of the CLT on each of these capabilities had to be studied. From the simplified scheme of the CA by Janssen and colleagues (2021) in figure 22 on page 49, it was gathered that the CLT could impact these capabilities in two ways: either by a change in resource or a change in conversion factors. The resources that are vital to social sustainability had been preterminal based on relevant literature. Also, relevant personal conversion factors had been determined in paragraph 3.2.6.3. Some of these personal conversion factors, age, income, and religion, did come about during the interviews, while others, physical condition, race, gender and sexual orientation, did not come about. The ones that were mentioned, were also not always mentioned in the context that was expected in paragraph 3.2.6.3. In addition, a range of other conversion factors did come about. This showcases how complex the concept of social sustainability is, as it is impacted by a wide variety of factors and resources.

However, during the theoretical research on the impact of CLT on social sustainability, it already became apparent that impacting a capability is more complex than just one change in either one resource or one conversion factor. Pictured in figure 47 are all the other ways for a capability to be influenced that have been identified through the execution of this study.

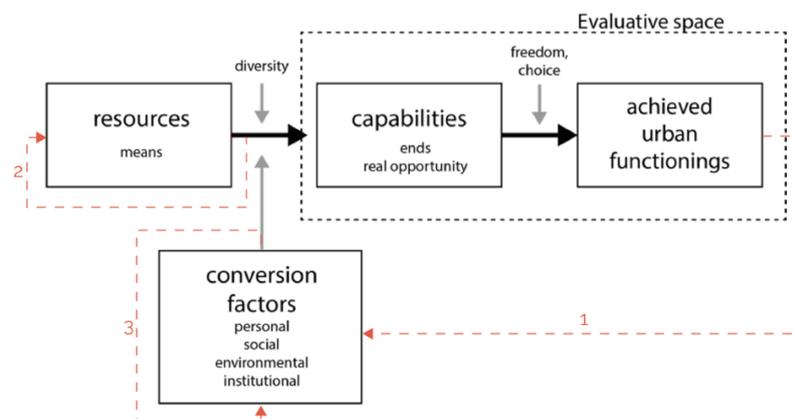


Figure 47. Elaboration on the simplified scheme of the Capabilities Approach (Own image, adaptation of Janssen et al., 2021, p. 6).

#### 1. Achieved urban functioning changes conversion factors

During the theoretical exploration of the impact of collaborative housing models on the social sustainability capabilities, it became apparent that turning one social sustainability capability could have an effect on a conversion factor, which in turn has an increasing effect on another capability. This effect was also witnessed during the analysis of the key findings of the residents' perspective on the impact of the CLT model on social sustainability. An example of such a capability is the capability to make connections and form relationships with neighbours. Figure 38 on page 85 shows what social sustainability capabilities could be positively influenced when this capability is turned into an achieved urban functioning.

#### 2. Additional resources can be added by combining other resources

The combining of resources could enable the creation of other resources that could have an impact on one or more of the social sustainability capabilities. This effect is elaborated on in figure 31 on page 70, where three resources are combined to form another resource that eventually has an influence on a capability. However, if one of the resources is missing at the start, this effect would not occur.

#### 3. Conversion factors change other conversion factors

What has also been observed in the theoretical, organisational and residents' perspective on impact, is that conversion factors could enable other conversion factors that eventually have an influence on a capability. An example of this from the organisational perspective is shown in figure 32 on page 71. Here the environmental conversion factor 'nature of design', could have an effect on the social conversion factor of 'level of interaction', and it is the social conversion factor

'level of interaction' that then has a positive influence on the capability to make connections and form relationships with neighbours.

What can be gathered from these three effects, is that there are significant dependencies within the CA that determine if an individual is capable to perform a capability if they choose so or not. These dependencies ultimately had an effect on the analysis of the findings, as it had been proven difficult to distinguish sometimes if a resource or conversion factor had a direct impact on a capability, or not.

### 6.1.2.3 *Validity of the operationalisation method*

The objective of this study was to measure social sustainability within CLT projects. As mentioned in the paragraph on the scientific relevance of this study, the concept of social sustainability is ambiguous and envelops many different elements over various domains and scales. The first step in constructing validity was to set boundaries in place that tied the concept to one domain (the built environment) and one scale (the neighbourhood). The tool for the data collection around social sustainability should be fitting for this domain and scale. By using multiple theoretical resources for the collection of indicators and measures that comply with social sustainability within the built environment and the scale of the neighbourhood, a comprehensive understanding of the concepts, and approach to measuring social sustainability has been developed for this study, complimenting the construct and external validity.

Additionally, the success of a measuring tool also depends on the **understandability** of the measurement tool by the participants of the study (Yin, 2009). For this study, the approach to measuring social sustainability was translated into two tools for data collection:

1. a logic model for the first expert panel with CLT organisations to research the ways CLT organisations influence the indicators and measures of social sustainability
2. an interview protocol to research the ways and level of impact CLT have on social sustainability according to residents.

The first expert panel was held with representatives of different organisations within the European CLT network. All participants beforehand already had a clear understanding of the CLT model. However, while some organisations had some experiences with social impact, it could not be assumed all organisations had a clear understanding of the concept of social sustainability. To ensure participants of the expert panel understood the logic model and the elements of social sustainability, participants were informed about the concept of social sustainability, and the functionings and purpose of the logic model through a presentation before starting the logic model exercise. The participants also had the opportunity to ask clarifying questions before and throughout the exercise. This approach was successful, as no noticeable difficulties by any of the participants were experienced in the end.

To ensure the understandability of the questions by the participants of the interviews, the concepts and questions were formulated in plain English and as briefly as possible, as can be observed in appendix I. The participants were also able to ask for clarification on a question if they were not sure. Most questions were easily answerable by the participants. Only on the following broad terms, participants often asked for clarification:

- The term *experts* in the question: *How do you contact experts in your neighbourhood when you are in need of a service?*
- The term *financial funds* in the question: *Do you make use of any public financial funds that are available to you in your neighbourhood?*

These terms were then explained to the participant by giving them examples, these examples are also listed in the interview protocol. However, it is notable that these two questions were met with the most confusion, as these questions regarded two of the concepts, financial funds and knowledge & skill, that were not based on existing literature on social sustainability. These two concepts were added as indicators to the operationalisation method by the researcher, based on the importance of these concepts in literature on urban area development from a community perspective. This confusion could be an indicator that the theory and consequently the questions regarding these concepts were not developed enough within the operationalisation method.

Overall, the main researcher believes that the operationalisation using the CA has resulted in a measuring tool for social sustainability through which the level, as well as the level of impact, could be determined comprehensively. As this method

with the CA puts the experiences of the residents of their community and their environment central, compared to other approaches that often regard the residents and the resources as two separate entities to be measured, the main researcher is of the opinion that it is better suited when looking at the key principles of social sustainability. And as it puts residents central, it allows room for their input through which they can highlight their personal experiences and opinions on what they deem important when it comes to the different elements of social sustainability. This has resulted in rich findings that could be relevant to the whole field of science on social sustainability.

However, using the CA also results in a more complex method. The understandability of the Capabilities Approach on its own might not be as high as more conventional methods. During supervisions and presentations with experts, questions often arose around definitions of the different elements of the CA and how they exactly interplay with each other. And in addition, as highlighted in the foregoing subparagraph, this interplay in itself can also become quite complex, as the resources, conversion factors and capabilities all have their influences on other elements of the approach.

In addition to complexity, the method is also rather intensive in data collection as well as analysis. As it is such an individualistic approach that leaves room for input from the individual, the most fitting approach according to the main researcher to gain insights into the residents' perspective is to conduct interviews, with the use of questionnaires a researcher might not be able to gather such in-depth knowledge. However, interviews do require more actions such as transcription which takes up a lot of time. The data analysis in addition can be experienced as intensive due to the complexity in the manner of impact.

All in all, the chosen method was the right fit for the objectives of this study and for the definition of social sustainability. The method was set up in a valid manner that resulted in a comprehensive set of findings. Therefore, the main researcher does believe that the CA is a valuable approach to the body of knowledge on social sustainability. However, it is recognised that it might not be a method that is applicable in every study due to the complexity and intensity.

#### 6.1.2.5 Recognition for the concept of social sustainability

Another note to make in regards to the understandability of the measurement tool by participants of the interviews is that the understanding of social sustainability is often confused with an understanding of ecological sustainability. The interview questions “Do you have any recommendations for the CLT when it comes to social sustainability?” and “Is there anything that you would personally like to add to the interview in regards to your neighbourhood, social sustainability or the CLT?”, sometimes led to residents given recommendations on how the development of CLT could improve in regards to ecological sustainability. These questions could therefore have been rephrased within this study to collect answers that do have to more with social sustainability and is, therefore, a note of attention for other researchers looking to ask similar questions to their participants. However, these answers also re-enforce the argument that is made by Shirazi and Keivani in paragraph 3.2.1. They argue social sustainability is seen more as an added-on, and that ecological sustainability is a more discussed topic within research. As residents are more familiar with ecological sustainability, the relevance and importance of this study are highlighted, as it showcases that more attention is needed on social sustainability, in academics as well as in society.

#### 6.1.3 Impact of the CLT model on social sustainability

As explained in paragraph 2.5 on theory presentation, to answer the main research question with a comprehensive theory, the three perspectives on the impact of the CLT model on social sustainability are examined. Each perspective that was researched within this study, was linked to a different research sub-question. Table 13 provides an overview of each perspective and the corresponding research sub-question.

Table 13. Overview of the three different perspectives on the impact of the CLT model and their corresponding research sub-question (Own table).

PERSPECTIVE	CORRESPONDING RESEARCH SUB-QUESTION
Theoretical	<i>How do the conditions and opportunities of the CLT model impact the capabilities of residents in theory?</i>
Organisational	<i>How do CLT organisations regard the impact of a CLT on the capabilities of residents?</i>
Residents'	<i>How does the CLT model impact the capabilities of residents?</i>

The reasoning by the main researcher to examine these three different perspectives is validation and diversification of the findings. As discussed in the foregoing paragraph, the method for measuring social sustainability and the impact of the CLT on this concept on a neighbourhood scale focused on the individual perspective of residents. This meant that the residents' perspective on social sustainability is central in the findings of this research study as through measuring their experiences, the actual *realised impact* of a CLT on social sustainability could be measured. To validate these findings, a theoretical examination of the impact was executed to see if these outcomes could be validated by existing literature on social sustainability. The organisational perspective, however, was added later on during the study as an opportunity arose to do so. The decision was made to include this perspective, as it could diversify the insights into the impact of CLT on social sustainability as it could generate an understanding of how CLT think they make an impact or would like to make an impact. However, the note should be made that the impact on social sustainability by the CLT model according to the theoretical and the organisational perspective is the *expected impact* and not realised impact, as this impact is not observed by the main researcher or the organisations themselves. While this does not mean that the findings are not valid, the implication of this is that these findings should be regarded differently. These findings represent possibilities for CLTs to impact social sustainability of which the exact impact is unknown, while the realised impact that consists of the findings from the case study of the LCLT is known. However, even for the latter-mentioned findings, there are some notes to be made, as is explained further on in the paragraph.

For the discussion of the findings from the different perspectives, an overview of the manner of impact according to each perspective is given in table 14, and an overview of the level of impact according to each perspective is given in table 15.

#### *6.1.3.1 Findings from the theoretical perspective*

The findings for the theoretical perspective were generated by analysing literature on the impact of collaborative housing on aspects that have to do with social sustainability, together with analysing the impact of the conditions and opportunities of the CLT model on the social sustainability capabilities, that had been developed in the operationalisation, also by looking at existing literature on the concept of social sustainability. The findings from this approach were mostly focused on the level of impact, meaning could the CLT model increase or decrease capabilities, and less on the manner of impact, meaning through what interventions the CLT model makes an impact. Only a few manners of impact were identified from the literature, as shown in table 14.

As can be seen in table 15, the level of expected impact according to literature is mostly positive. Only on the capabilities that have to do with social networks & interaction, and a sense of place, the expected impact could be positive or negative, and this is due to the diversity that a CLT could bring to a neighbourhood. Diversity has been positively linked to these indicators, but also negatively in literature. The effect is therefore difficult to predict. This was notable, seeing as diversity is an integral element of the CA.

In addition, a neutral level of impact was determined for capabilities which focus on the accessibility of educational facilities, public transportation facilities, and financial funds. This was due to the fact that no relevant argumentation could be found in the literature that CLT has had an impact on these facilities.

The theoretical perspective was the first perspective that was developed for this study, meaning that this perspective could function as a source for expectations of the other perspectives. And as explained in the introduction of this paragraph, these findings could therefore be used to validate the findings from the other perspectives. However, this method did rely on the capability of the main researcher to find relevant literature regarding each capability in relation to the conditions and opportunities of the CLT model. This method was time-intensive as it required searching through a vast body of scientific literature. However, this study did have a limited timeframe, which could mean that relevant sources might have been overlooked in the process. For the sources that have been used, their relevance and validity had been determined before their use in the literature review.

#### *6.1.3.2 Findings from the organisational perspective*

The findings for the organisational perspective were developed through a focus group with 15 participants from 11 different organisations that were all involved in the CLT network in Europe. Most organisations were CLT organisations in various stages of development, and other organisations fulfilled a supporting role within the network. This diversity in participants was beneficial, as this meant that data triangulation could be achieved due to the participation of different data sources (Yin, 2009). Data triangulation is constructive for the construct validity of the findings from this perspective (Yin, 2009).

During the focus group, data was gathered through a group discussion and the filling in of a logic model, where the output was filled in with the social sustainability capabilities that had been developed. This meant that the participants from the organisations needed to think about how their CLT organisation or CLTs, in general, could impact the lives of their residents. As most participating organisations had not measured their impact on social sustainability, and when they did, such as the CLTB or LCLT, the imagined impact of the participants reflected the expected impact according to the organisations. As showcased in table 15, organisations within the European CLT network are optimistic about their impact, as they believe that through different resources or the changing of mostly social and institutional conversion factors, CLTs could be able to impact each capability that has been developed for the concept of social sustainability positively. However, their discussion did imply that this largely depends on the decisions that the CLT organisation makes. Some of these decisions that CLT could consider according to the participants are shown in table 14.

What is interesting in the findings from the organisational perspective, is that the resource of financial funds had been explicitly mentioned by the organisations in the focus group as one of the important resources for a CLT to be able to make an impact. Without funding, the other resources that the CLT adds, such as housing, events, collective facilities, and training workshops that are listed in table 14, would not be possible. This means that some of the social sustainability capabilities do rely on the accessibility of funding, however, not on the accessibility by the resident, but on the accessibility of funding by the CLT organisation. Meaning, that the CLT organisation also has to possess certain capabilities to make an impact. It is findings like these, that showcase the added value that the organisational perspective has brought to the research findings. Other capabilities that the CLT organisation should possess to make the positive impact according to the findings in table 14 are hiring to obtain people with certain skills and knowledge, planning and organising for events and lobbying, and designing frameworks, such as the allocation policy and tenure model, but also possibly designing capabilities for the buildings and urban spaces.

However, for the execution of this focus group, the timeframe set for the group discussion was a significant limiting factor to the acquirement of extensive insights into these interventions, and what intervention causes what effect, as there was limited time at the end of the discussion to draw the lines between the input and output within the logic model. While the group was already split into two separate discussion groups, the time available for a comprehensive discussion on each of the 17 capabilities of residents that have to do with social sustainability, was proven to be quite difficult. Consequently, there is the change that significant findings have been missed within this approach.

Another limitation in the approach that was chosen for the focus group, is that, afterwards, the individual views of each organisation were hard to identify. The current findings **reflect the group view** on the impact of CLT on social sustainability. It would have been interesting to see if different types of organisations within the European CLT network shared the same views on impact or if there were significant differences.

### 6.1.3.3 Findings from the residents' perspective

As mentioned, the residents' perspective forms the view on the impact on social sustainability that has been realised by a CLT in practice. This was studied through a single case study of the St Clements site of the London CLT, located in the Mile End neighbourhood in East London. This location counted 23 CLT homes that were part of a larger development of 252 homes. The data was collected through five semi-structured interviews with LCLT residents and one non-CLT resident that lived in the St Clements development. This means that the data that has been acquired predominantly focuses on the impact of the CLT model on the experiences of CLT residents when it comes to social sustainability, and not on the impact of the CLT model on all neighbourhood residents. This is one of the shortcomings of this study, and the limitations as to why this focus is chosen are explained in paragraph 6.2. The analysis of the conducted interviews using the GTM generated the following findings on the impact of CLTs on social sustainability through the eyes of the residents:

As also shown in table 15, the LCLT had a direct positive impact on certain capabilities that had to do with *social networks & interaction*, *sense of place*, *safety & security* and *accessibility of housing*. And consequently, the capability of making connections and forming relationships from social networks & interaction also enabled a set of other capabilities. This indicates that the LCLT also had an indirect effect on these as according to the LCLT residents at St Clements, their ability to form these connections and relationships increased due to efforts and interventions by the LCLT organisation. While the importance of connections had already been highlighted by Lang (2019) in paragraph 3.3.1, it was interesting to gather from the participants what capabilities exactly could be increased as a consequence of these connections with neighbours. The results were that these connections enabled the capabilities that are indicated with a light green colour in table 15 in addition to the capability to feel at home in the neighbourhood and to feel a sense of community, which are two capabilities that are also positively impacted by the LCLT in other ways.

The LCLT was able to make a positive impact by introducing resources to the neighbourhood, such as housing and events, which are also listed in table 14, as well as by institutional conversion factors that had an influence on social or even some personal conversion factors. These personal conversion factors in addition to environmental conversion factors, however, also play an important individual role in social sustainability according to the findings from the LCLT case study. From the findings, it could be gathered that these factors played a determining role outside of the influence of CLTs. An example of such a personal conversion factor is the family composition. Participants with children were likely to connect with neighbours that also had children. The building design and urban design of the St Clements site are examples of environmental conversion factors that played an important role in the capabilities of sustainability, especially when it came to the capability to feel safe in the neighbourhood. In the case of the LCLT, it is unclear if the CLT organisation had any influence on the building design and urban design and therefore has contributed to these designs in any shape or form. However, for other CLTs, this could be something to take into account.

Another surprising finding from the residents' perspective, was the importance of online communication tools, such as Facebook groups and WhatsApp groups. According to the CLT participants as well as the non-CLT participant, these tools increased their capability to make connections with neighbours, share their problems and concerns, ask each other and experts for help and could make it possible for them to learn new knowledge or skills. As the use of such online communication tools, is not uncommon nowadays, it is interesting to see what kind of impact they can make. These findings prompt further research into the impact of online communication tools on social sustainability.

For this perspective, the data was analysed using the Grounded Theory method. Within the GTM, the data is analysed in different phases. As the first round of data analysis is open-ended through this method, the researcher is able to stay open to other variables that have an impact on the dependent variable and leaves the researcher open to rival theories that arise from the data analysis. These rival theories are also mentioned in the research, for example, the theory that the personal characteristics of the participants also have a significant influence on certain elements of social sustainability. The occurrence of rival theories was also unsurprising within this study. As already reflected upon significantly, this study made use of the CA. Within this approach, it is clear that resources, as well as different categories of conversion factors, have an influence on the capabilities of residents. It was therefore expected that also other factors could influence the capabilities of residents that have to do with social sustainability besides the CLT. This also showcases the added value of the CA, as it is a method that allows room for rival theories to develop on the manners of impact on social sustainability.

The strength of the causal effect between elements of the CLT and the elements within this study was determined by the number of participants that confirmed this effect within their interviews. As a control, the confirmations of the participants were also compared with the experience of the participants that belonged to the control group (participants that did not live in the CLT), to rival the causal effect as well.

However, concerning internal validity, this study does have some shortcomings. This study has used focus groups and interviews as the main forms of data collection. This means, that most results have not been directly observed by the researcher, but are based on the answers and results of the used data collection methods. This indicates that inferences have likely taken place (Yin, 2009). Through the explained methods for data analysis, it has been attempted to limit the negative effects on the validity of this study as much as possible.

The generalisability of the research findings can also be seen as a topic of concern within this case study, as the study makes use of a single-case study to determine the realised impact of the CLT on social sustainability. As single case studies do not provide a point of comparison, the findings are harder to generalise. For this reason, the preferred method for this study was a holistic multiple case study to determine the realised impact. However, due to limitations that are discussed in paragraph 6.3, this approach was not applicable within the timeframe of this study. However, some fieldwork was conducted on a possible second case (the CALICO project by the CLTB) prior to running into difficulties. This fieldwork did offer some insights into the possibilities of the CLT model, and therefore the data was too valuable to not include within the research. This meant, that on certain topics, such as the allocation policy, the CLTB project was used as a project to provide alternative approaches to certain elements of the CLT model. However, as the CLTB project could not function as a comprehensive second case, this case cannot provide a proper comparison to validate the research findings.

To combat this issue of lack of generalisability of a single-case study, this study applied the following measures to strengthen the generalisability of the research findings:

- Using a representative case: The LCLT was selected as the main case for the single case study, as this case can be regarded as representative of the CLT model, as it applies all four main characteristics of the CLT. With this approach, the research findings do reflect the outcomes that a classic CLT model could provide when placed in a similar context.
- Using existing theory: According to Yin, to strengthen the findings of single case studies, theory should be used (2009). Within the paragraph on the findings from the residents' perspective, some key findings have been additionally compared to other literature to strengthen the argumentation and generalisation of the finding.
- Multiple types of participants: Within each of the two single case studies, there are also multiple types of participants present to deliver a rich set of data. This way, input from the participants can be compared to each other. Within the LCLT case study, the residents that do not live within the CLT acted as a control group.

With these measures in place, the findings for the residents' perspective as displayed in table 14 and table 15 could be substantiated to an acceptable level of generalisability. However, additional research on the impact of CLTs according to residents is advised to further develop the theory from this perspective, which would be valuable to the body of knowledge as the residents' perspective out of the three perspectives could be valued the highest, as it reflects the realised impact of a CLT and therefore does not speculate on possible findings such as the other two perspectives. This is further discussed in paragraph 7.2 on the recommendations for future research.

Table 14. Resources and conversion factors that are facilitated by the CLT model that can increase the capabilities of residents that have to do with social sustainability according to the three different perspectives within this study. The colour green indicates if the resource or conversion factors has been significantly mentioned (Own table).

RESOURCES		THEORY	ORGANISATIONS	CLT RESIDENTS
Adequate housing	Housing			
Affordable housing				
Essential facilities				
Recreational facilities	Collective facilities			
	Events			
Educational facilities				
Transportation facilities				
Knowledge & skill	People			
	Skills			
	Training workshops			
	Tools			
Financial funds	Funding			
CONVERSION FACTORS		THEORY	ORGANISATIONS	CLT RESIDENTS
Personal	Connection with the neighbourhood			
	Level of responsibility			
Social	Level of interaction			
	Level of participation			
	Level of sharing			
	Level of collaboration			
	Knowing people			
	Diversity			
Environmental	Nature of design			
Institutional	Allocation policy			
	Planning			
	Level of participation			
	Tenure model			
	Housing ownership			
	Number of mutations			
	Housing security			

Table 15. Overview of the level of impact according to the theoretical, organisational and residents' perspective. Dark green indicates a significant positive influence of the CLT model according to the perspective, light green indicates an indirect or limited positive influence, and light orange indicates that a definitive answer on positive or negative influence of the CLT could not be determined (Own table).

CAPABILITY	THEORY	ORGANISATIONS	CLT RESIDENTS
Resident is able to live in an adequate house they can afford.			
Resident is able to access and make use of the essential facilities that are present in their neighbourhood.			
Resident is able to access and make use of the recreational facilities that are present in their neighbourhood.			
Resident is able to access and make use of the educational facilities that are present in their neighbourhood.			
Resident is able to access and make use of the transportation facilities that are present in their neighbourhood.			
Resident is able to access the public financial funds that are available for them or their neighbourhood.			
Resident is able to ask their neighbours or others in their neighbourhood for help.			
Resident is able to consult experts in their neighbourhood when they have a need to			
Resident is able to learn new knowledge and skills in their neighbourhood.			
Resident is able to make connections and form relationships with their neighbours.			
Resident is able to visit their neighbours.			
Resident is able to participate in community activities in their neighbourhood when desired.			
Resident is able to voice their opinions and problems to local authorities.			
Resident is able to feel safe in their neighbourhood.			
Resident is able to feel secure within their current position in life.			
Resident is able to feel at home in their neighbourhood.			
Resident is able to feel a sense of community in their neighbourhood.			

#### 6.1.3.4 Commonalities and differences

Now that each perspective has been discussed separately, a short reflection is given on the perspectives in relation to each other by looking at the commonalities and differences between the perspectives within this paragraph.

First and foremost, what can be gathered from table 15 is that the perspectives agree on the fact that the CLT model has the ability to predominantly make a positive impact on the different measures for social sustainability. However, there is a difference between the expected impact from the theoretical and organisational perspective and the realised impact from the residents' perspective. The expected impact shows that the CLT model has the potential to positively impact most, if not all social sustainability capabilities of residents if the right manners of impact are implemented. The residents' perspective shows that in the case of the London CLT this was not observed. In the case study, it came about that the CLT at St Clements impacted ten out of them seventeen capabilities directly or indirectly, substantiating the findings from the other perspectives on these ten capabilities but not eliminating the findings for the positive impact on the other seven capabilities that have been in substantiated in the theoretical or organisational perspective. These two perspectives showcase that the CLT model possibly has the potential to achieve impact on more capabilities than has been observed in practice through the LCLT case at the moment.

However, this potential to achieve a positive impact on one or more capabilities does depend on a set of elements. Each of the three perspectives showcased a different view on what elements are needed. Starting with the theoretical perspective, the findings for this third research sub-question revealed that CLTs can make an impact on social sustainability by adding resources, predominantly housing in the classic CLT model, and changing social conversion factors. The residents' perspective added to this discovery regarding social conversion factors. It showcased that it is the institutional factors that a CLT sets into place that is able to influence social, personal and environmental conversion factors that eventually increase certain capabilities. These institutional factors by the CLT can be seen as the organisational framework that CLT organisations set up.

What could be gathered from the organisational perspective, is that for the CLT organisation to set the framework and resources into place, a CLT organisation requires the capacity to do so through attaining certain resources and capabilities itself, as was highlighted in the discussion on the research findings from this perspective in paragraph 6.1.3.2. An example of needing capability is the realisation of a communal space at the St Clements site by the LCLT. Up until now, the organisation has not been able to realise this resource due to the collaboration with the real estate developer.

While this research has focused on mapping the framework and resources that a CLT provides and their effect, this research also has its shortcomings due to the amount of research possible within the limited timeframe. And the main researcher, therefore, acknowledges that there are probably other possible conversion factors and resources facilitated by the CLT that also could have an impact. Especially since the diversity that is found in the experiences by residents of the concept of social sustainability, also counts for the application of the CLT model around Europe. So, not only does the neighbourhood context matter, but the CLT context is also made of the framework and resources. This makes the specification of the general impact of the CLT model more difficult to pinpoint. However, the three perspectives that have been discussed within this study each highlighted different elements of the level and manner of the impact of the CLT model on social sustainability at a neighbourhood scale. Together they form a substantiative picture of the **possibilities** of the CLT model regarding the level of impact, and the manners through which this could and also has been achieved in practice.

#### 6.1.4 Transferability of theory

To test the theory from the residents' perspective, it was examined how lessons from the London CLT could be transferred to another context within Europe, specifically the Dutch context by examining how the outcomes can be translated within the CLT H-Buurt project, the first CLT project on Dutch soil. For the transfer of the theory, a method was developed through a concise literature study on the concept of policy transfer. The method deployed was based on principles of lesson drawing. Following the method, three recommendations for the CLT H-Buurt case were extracted from the London CLT case by comparing the needs of the Bijlmer, the neighbourhood in which the CLT H-Buurt is located, with the outcomes of the London CLT case. This process resulted in a recommendation for the allocation policy, the ownership model of the units, and a recommendation regarding facilitating connections between neighbours.

#### 6.1.4.1 Challenges

As already expected due to the findings from the three perspectives highlighting that collaborative housing practices are place-based, which means that it depends on the neighbourhood context as well as the organisational context of the model that is applied (as discussed in paragraph 6.1.3.4), the possibilities of transferring according to the participants of the focus group, was not always straightforward. The contextual differences that came about in the focus group were organisation, such as the objectives of the CLT model applied by the CLT H-Buurt organisation, but also focused on differences in personal and social conversion factors between the residents of the St Clements CLT and the residents of the Bijlmer neighbourhood. The importance of personal conversion factors from this focus group is in line with findings from the residents' perspective from the theory-building phase, strengthening the argumentation for this finding.

These differences meant changes would need to be made to the recommendation before it could be implemented in the Dutch context. However, when lessons change to fit the context, it cannot be guaranteed that the impact that was generated in London, could be duplicated in the Dutch context. In addition, one participant argues that they are not sure that the same impact as in the London CLT could ever be achieved due to contextual differences that cannot be bridged. This discussion, therefore, highlighted the difficulty of lesson drawing and the eventual generation of a similar impact.

#### 6.1.4.2 Opportunities

What was notable during the discussion on facilitating connection, was that the participants brought up the need for communal space and online communication facilities at their own instigation. Both of these resources had also come up in the interviews with the residents as tools that could benefit the community and in turn the experience of social sustainability in the neighbourhood. However, more research on the impact of online communication tools on social sustainability could be valuable first. Moreover, this conclusion also strengthens the argumentation from previous findings from the theory based on the residents' perspective and highlights that communal spaces and online communication tools are resources that a CLT organisation could focus on to attempt to influence their positive impact on social sustainability for the better.

#### 6.1.4.3 Validity

The CLT H-Buurt functioned as a single-case study for transferring the outcomes of the general LCLT case study into a different context, with the Dutch context as the main focus and the CLT H-Buurt as the case bringing about the same limitations regarding generalisability and external validity. when it came to the other single-case study. However, within this instance, this is less of a concern, as it is common practice in policy transfer that transfer takes place between only two contexts. So, while the outcomes of this discussion might not be directly applicable to other contexts around Europe, the session could offer an insight into how other contexts could approach the transferability of research outcomes when it comes to CLT impacting social sustainability.

For internal validity, the collected data was enriched by the variation in stakeholders from the project who took part in the discussion, offering insights from people with different backgrounds, which could be compared to each other. In addition, the understandability of the introduction and the statements were deemed of an adequate level, as no difficulties were experienced during the focus group, and no explanatory questions were asked. The discussion was rich and had a nice flow. Each participant had the opportunity to have their say regarding every statement.

### 6.1.5 Reliability of the research findings

Reliability is the last component of research validity according to Yin (2009) and refers to the replicability of the study. To ensure that this study could be replaced by other researchers, transparency has been weaved into the whole thesis report, especially when it comes to the methodology. This way, future researchers could follow the same methodology to test the replicability.

In addition, the data produced by this study will be uploaded to the repository of the TU Delft according to the FAIR principles, this includes the transcripts of the interviews and the focus group with actors involved with the CLT H-Buurt project, and the codes for each of these transcripts. The uploaded data is anonymous and the possibilities for re-identification of participants have been reduced by eliminating some indirect indicators from the interview transcripts. Prior to collecting the data, permission for data sharing was requested from each of the participants through an informed consent form.

## 6.2 Limitations

As is general in academic research, this study has its limitations. These are listed in this paragraph.

### 6.2.1 Limitations of sampling method of cases and residents

During the execution of this study, the main researcher ran into difficulties with the sampling of cases and residents. The result of these difficulties was that in a late stage of the research, the methodology was switched from a holistic multiple-case study for gaining insights into the manner and level of impact from a residents' perspective, to a single-case study. This switch had to be made due to the following limitations:

#### 6.2.1.1 Sampling of cases

Before case selection, case selection criteria were instated to make sure that the cases that were selected fit the research problem and methodology, and that selection bias by the researcher could be limited. These case selection criteria were discussed with representatives from the CLTB, a well-connected CLT organisation within the European CLT network, to gather if there were cases within Europe that fit these criteria. However, from this discussion, the conclusion could already be drawn that the number of cases within Europe would be limited. Currently, most realised CLT projects are located within the United Kingdom, or within French-speaking regions where the knowledge of the English language is limited. In other regions or countries, where the English language is more manageable, current CLT projects are still in the early stages. This meant that **language barriers** were a significant hindrance in the sampling of cases that limited the selection. For non-French-speaking researchers into CLT, this limitation should be kept in mind with the selection of cases.

In addition, within cases that could possibly be a fit for this study in terms of matching the case selection criteria, **participant fatigue** among the residents posed another stumbling block. As the CLT movement is growing, also is the interest in researching the model. This means that the few representative cases that are out there in Europe, are also extensively studied by different researchers. In some cases, this has led to residents getting overworked, and growing weary of participating in studies. This has led CLT organisations and residents of CLT projects to be more selective of the studies in which they choose to participate, or means that data collection within cases goes at a slower pace to accommodate the feelings of the residents better. Unfortunately, as this study deals with a limited time frame, it was not possible for the researcher to slowly immerse themselves within a case with such participant fatigue. Unfortunately, this phenomenon was also present within the CALICO project by the CLTB and was the reason why the addition of this second case fell through in the end stages of the execution of the empirical research.

By not being able to include a second case for cross-case comparison, the **generalisability** of the research findings of this study is limited. Already mentioned in the discussion on the residents' perspective, efforts have been made to ensure some level of generalisability of the current findings.

#### 6.2.1.2 Sampling of participants

Within the case study on the LCLT for impact measurement, there were also limitations to the sampling of participants that could have had consequences on the research outcomes. As the LCLT is located in London, the analysis of this case took place remotely. Therefore, the participants also had to be contacted remotely. The approach to finding LCLT residents that were willing to participate was to reach out to them through an employee of the LCLT organisation. The message that was sent to them was an open call that included a leaflet that gave some information about the research objectives and what their participation would entail. This leaflet can be found in appendix X. So, if the LCLT resident had an interest in participating in an interview, they could contact the main researcher to express their interest. The limitation of this approach is that this sampling method can attract participants that have a positive bias towards participation. This could mean the research findings from the interviews might not be representative of all LCLT residents.

To combat this issue, this study also used the snowballing effect to acquire new participants and also reached out to the neighbourhood residents through a Facebook group that is frequented by Mile End Neighbourhood residents. While the snowballing technique did lead to additional interview participants, the open call through Facebook, unfortunately, did not yield any results.

### 6.2.2 Limitations of the focus group

Within the execution of the focus group with the CLT network, the largest limitation on acquiring extensive insights into how these organisations perceive the impact of CLT on social sustainability, was the **time frame** that was set for the focus group. While the group was already split into two separate discussion groups, the time available for a comprehensive

discussion on each of the 17 capabilities of residents that have to do with social sustainability, was proven to be quite difficult. Consequently, there is the change that significant findings have been missed within this approach.

Another limitation in the approach that was chosen for the focus group, is that, afterwards, the individual views of each organisation were hard to identify. The current findings **reflect the group view** on the impact of CLT on social sustainability. It would have been interesting to see if different types of organisations within the CLT network shared the same views on impact or if there were significant differences.

### 6.2.3 Limitations of the interview protocol

The following limitations within the approach chosen for the interviews with residents are also recognised by the researcher:

#### 6.2.3.1 *Bias inferred by researcher*

Data collection bias refers to the bias that the personal preferences or beliefs of the researcher could infer during the data collection process. This bias could have presented itself within this study due to the limited experience of the main researcher with conducting extensive semi-structured interviews. In the interview protocol, lists of probing questions per each main question were set up. However, as the interviews were semi-structured, sometimes other probing questions were asked. What came about in the analysis of the transcripts, is that sometimes the probing questions were closed questions that sometimes included negative or positive steering, as these types of questions came up quicker than open-ended ones. As the researcher paid close attention to this bias during the analysis of earlier interviews, attempts were made to eliminate this bias as much as possible by focussing on asking open-ended probing questions.

#### 6.2.3.2 *Bias inferred by participants*

By using interviews as the form of data collection, bias can also be introduced through a phenomenon called **demand characteristics**. Consciously or subconsciously, the participants in the interviews might have changed their behaviours or responses based on information or cues supplied to them before and during the interview. Efforts were made by the researcher to limit the amount of information that the participants received in regards to the research question beforehand. However, information sharing could not be avoided entirely as residents needed to be convinced to participate in the study beforehand. As the importance of this study and what it could add to the research field of CLT and the CLT network in practice, is a compelling factor, these elements were mentioned to the participants beforehand. However, during the interviews, it was made clear to the participants to speak about their personal experiences which aided the reduction of demand characteristics.

Another bias that could have played a role in the research findings, is the **recall bias** of the participants. The interview questions were set up in such a manner that sometimes the participants were asked to reflect on their previous living situation. For some, it had already been quite some years that they lived in their new CLT home. This could mean that inaccuracies could occur within their memories of their previous living situation. For this reason, not only does this study make a comparison between the previous and the current living situation of CLT residents, but also introduced non-CLT residents as a control group. With this approach, the capabilities of the CLT residents in their current living situation can be compared to two other sets of data, increasing the validity of the research findings.

### 6.2.4 Limitations due to time constraints

Overall, this study had a time constraint of roughly 9 to 10 months in which the theoretical and empirical data had to be gathered, analysed and reported. This constraint meant that certain activities could not be performed within the **limited timeframe**, such as a second case study to improve the generalisability of the research findings. This, however, does leave the door open for future research to continue on this path of examining the impact of CLT on social sustainability. More on this is stated in paragraph 7.2.2.

To conclude this paragraph, it is important to note that all these limitations should be kept in mind when applying the research findings from this study in future research or practice.

# 7. Conclusion

This chapter gives a conclusion to this study by giving an answer the main research question and rounding of the study with recommendations for future research, future CLT projects, and for a social impact measurement tool.



## 7.1 Answer to the main research question

In this study, an answer was sought to the main research question: *How does a CLT impact the social sustainability of a neighbourhood?*

The motivation to find an answer to this question stemmed from the desire to find a comprehensive solution to the current pressing issues in European housing markets: the unaffordability of housing and the consequential inequality in opportunities in the housing market, spatial segregation and social segregation, which are leading to a built environment that is socially unsustainable. Some argue that the Community Land Trust model could be a comprehensive solution to these issues. However, it has as of yet to be determined in scientific literature how the workings of the CLT model impact the many-sided concept of social sustainability when examining it on a neighbourhood scale. Through this study, an attempt has been made to start to fill this gap in scientific literature.

The answer to the main research question was developed by examining the impact of the CLT model on social sustainability in two ways: 1) the level of impact on social sustainability, which could be positive, neutral or negative, and 2) the manner of impact on social sustainability. Theories on the manner and level of impact were developed from the viewpoint of three different perspectives: 1) a theoretical perspective, 2) an organisational perspective and 3) a residents' perspective that was also tested in the context of a developing CLT project. These perspectives were then brought together in a comprehensive theory that values the findings of each perspective individually as well. In this paragraph, this theory on the level and manner of impact is presented.

### 7.1.1 Level of the impact of the CLT model on social sustainability

This study regarded social sustainability on a neighbourhood scale as the extent to which a neighbourhood provides the needed environmental resources and supports the social functioning and health of a community while safeguarding the preconditions of social equity. It can be qualified as a coming together of environmental and social aspects that open up the capabilities of all its residents, now and in the future. The concept was operationalised using the innovative Capabilities Approach, which resulted in seventeen capabilities that each resident of a neighbourhood should be able to fulfil within their neighbourhood if they desired to do so. These capabilities functioned as the measurements for the concept through which the impact could be assessed, and are depicted in figure 48.

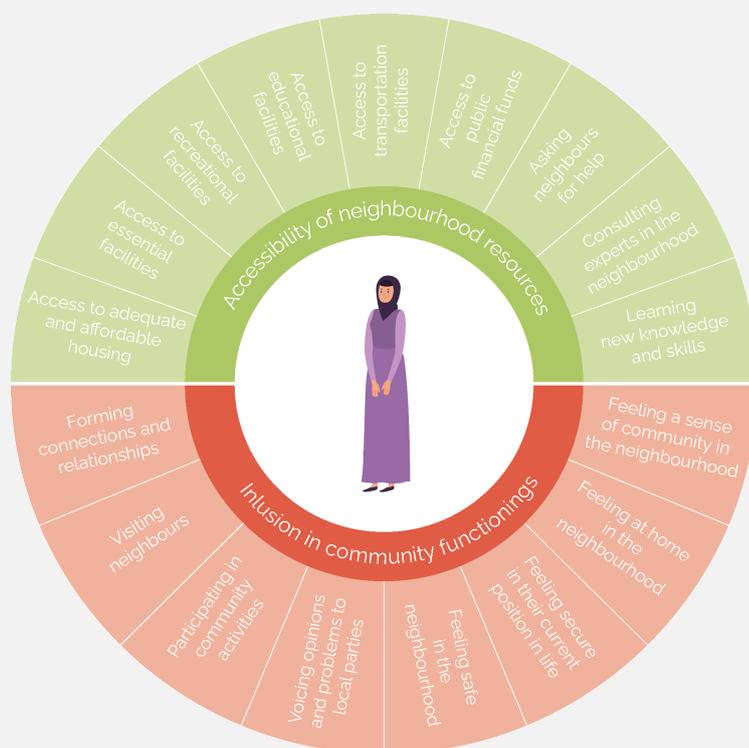


Figure 48. Overview of the capability sets that have been used as the measures in the operationalisation of social sustainability (Own image).

What can be concluded from all three perspectives that have been examined within this study, is that the CLT model has the ability to make a predominantly **positive impact** on the social sustainability capabilities. The positive impact entails that the CLT model is able to increase a capability of a CLT resident.

However, within this study, a distinction should be made between the expected impact formed by findings from the theoretical and organisation perspective, and the realised impact, which is the impact that is actually observed in practice through the residents' perspective.

The expected impact showcases that the CLT has the potential to impact all capabilities positively if the right interventions are taken by the CLT organisation. Therefore, it can be concluded that the CLT model has considerable potential to achieve a positive impact on social sustainability.

In practice it has been observed that the CLT model is able to positively impact the capabilities of *making connections and forming relationships, feeling a sense of community in the neighbourhood, feeling at home in the neighbourhood, feeling secure within their current position in life, and access to adequate and affordable housing*, directly. Indirectly, the CLT model is also able to increase the capabilities of *visiting neighbours, asking neighbours for help, learning new knowledge and skills, participating in community activities, feeling a sense of community, and feeling safe in the neighbourhood* by facilitating the capability of *making connections and forming relationships*. This finding showcases the importance of the social network of an individual within a neighbourhood to social sustainability. However, what also can be concluded from this is that the full potential for the impact of the CLT model according to the theoretical and the organisational perspective has therefore not been observed in practice in this research.

### 7.1.2 Manner of the impact of the CLT model on social sustainability

Each of the three different perspectives highlighted different elements of the manner in which the CLT is able to make such a positive level of impact. All the different elements have been brought together in one overarching scheme, displayed in figure 49.

#### Capabilities of the CLT organisation

What was concluded from the findings of the organisational perspective, is that the manner of impact starts with the CLT organisation. Just as residents need certain resources and conversion factors to enable their capabilities, a CLT organisation itself needs certain resources and conversion factors to enable its operation. These resources include funding, people, organisation and planning skills, and design knowledge among others.

#### CLT Frameworks

The CLT organisations it then able to set frameworks into place, which often reflect institutional conversion factors. From the residents' perspective, it was concluded that some of the most important frameworks of the CLT are the allocation policy and the tenure model.

#### CLT resources

In addition to the frameworks, the CLT organisation can then also put resources into place. First and foremost, the CLT model is a development method for affordable housing. It is therefore inherent to the model that it provides the resource of housing to a neighbourhood. However, the CLT can also add other resources that are beneficial to the social sustainability of the neighbourhood, such as collective facilities, events, and training workshops. Following the CA, it can be concluded that adding resources has a positive effect on capabilities. This notion was strengthened through every perspective in this study. However, the addition of resources could also influence conversion factors, like the CLT frameworks that change conversion factors that increase certain capabilities.

#### Conversion factors

The conversion factors that are influenced by the frameworks and the resources are predominantly social and environmental conversion factors according to each perspective, as personal conversion factors are harder to influence due to them being inherent to an individual. The social and environmental conversion factors make it possible for CLT residents to turn a capability into an achieved urban functioning.

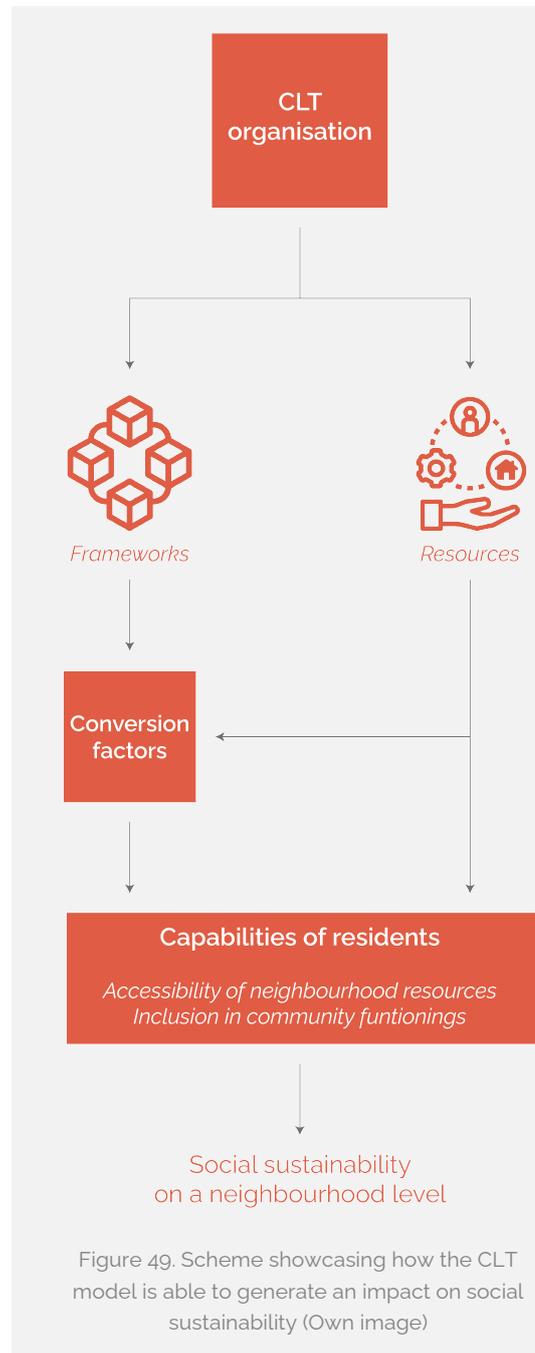


Figure 49. Scheme showcasing how the CLT model is able to generate an impact on social sustainability (Own image)

The testing of the transference of the research outcomes to another context revealed that the possibility to transfer the outcomes of this study into a new CLT project depends on the characteristics of the context, including personal conversion factors, and the CLT frameworks and resources that the CLT organisation has set out to implement within the area.

Altogether, the concluding statement can be made that the CLT model is able to play a significant role for the experience by CLT residents of the social sustainability of their neighbourhood, and it is able to do so by providing resources and setting frameworks into place that can create an environment where CLT residents are able to turn their capabilities into achieved urban functionalities. However, other contextual factors such as personal conversion factors also play an important role in social sustainability and should not be overlooked. It is therefore difficult to determine the impact of the CLT frameworks and resources within each context. With this elaboration, an answer is given to the main research question: *How does a CLT impact the social sustainability of a neighbourhood?* And a start has been made in the development of the theory on the impact of CLTs on the social sustainability of neighbourhoods. This theory adds to the body of knowledge on social sustainability by developing a definition of the concept and operationalisation method that applies the Capabilities Approach. The attention that this study sheds on social sustainability is needed, as this pillar of sustainability has been underdeveloped in comparison to the other pillars but should be regarded as integral to the overarching concept. In addition, the theory adds to the body of knowledge on European CLT, an emerging topic within academic literature as the movement is still in the early stages, but it is growing in popularity. By bringing attention to the potential of the model, the diversification of the housing markets in Europe could be stimulated. All with the aim to come to a built environment that supports sustainable cities and communities.

## 7.2 Recommendations

Based on the outcomes of the discussion and conclusion, the following recommendations can be made toward CLT organisations in Europe, future research, and the European CLT network in regards to a social impact measurement tool.

### 7.2.1 Recommendations for CLT organisations

Based on the findings from the three perspectives on the impact of the CLT model on social sustainability together with the testing of the theory with the focus group with stakeholders involved with the CLT H-Buurt project, opportunities when it comes to CLT making a positive impact on elements of social sustainability have been identified. This paragraph sums up the opportunities in the form of recommendations. So, if a CLT organisation desires to increase their positive impact on social sustainability, it could follow one or more of the following recommendations based on the findings from the six research sub-questions. However, as mentioned, the realised level of impact of each recommendation cannot be quantified, as this is dependent on the context of the CLT itself (frameworks and resources) and the local neighbourhood (environmental conversion factors and resources) and community (social and personal conversion factors). This means that the exact outcome of the recommendations within a certain context is rather unknown. It is up to the CLT organisation to implement the recommendation as best as they see fit. This could be done in dialogue with the local (CLT) residents to gain a solution that fits best with the local context.

#### **Recommendation 1.** Implement fitting frameworks

Following the scheme for the manner of impact in figure 49, the first recommendation to CLT organisations is to implement CLT frameworks that work within the local context. From the LCLT case, it could be gathered that an allocation policy that also focuses on the connection and the level of participation of the future residents was beneficiary for making connections and forming relationships, as well as a sense of community and feeling at home. And that the tenure model chosen was also beneficiary for feelings of security. However, from the theory testing, it was gathered that a similar, but slightly different allocation policy would fit better with the objectives of the CLT H-Buurt project according to the stakeholders and that the tenure model of the LCLT would not work due to the personal conversion factors of residents of the Bijlmer, showcasing how different contexts can respond to the same intervention. Therefore, CLTs need to select frameworks that work for their context.

#### **Recommendation 2.** Add needed resources

The same scheme in figure 49 also showcases that the addition of resources is another great point of attention for CLT organisations. A positive impact could be achieved through the addition of perpetually affordable housing in housing markets that are dominated by high prices, as could be concluded from the LCLT case. However, there are also other

resources that could be considered by CLT organisations to make a positive impact on social sustainability. Among these resources are events for residents to get to know each other, workshops to broaden knowledge & skills, communal spaces where residents can get together and also organise, and possibly also online communication tools to further those connections and relationships, as this was experienced by the LCLT residents and argued by the stakeholders of the CLT H-Buurt as possible beneficiary resources.

#### **Recommendation 3.** Facilitate connection & relationships

This addition of resources and frameworks ties into the third recommendation, which is about facilitating connection and relationships as much as possible. The facilitating of these connections is important, as it was discovered in the findings from the LCLT case and backed up by the literature on social networks and interaction, that connection between neighbours is vital to social sustainability, especially seeing that these connections could enable an array of other social sustainability capabilities.

#### **Recommendation 4.** Focus on design

The last recommendation toward CLT organisations is to also look at the building and urban design of the CLT dwellings when the CLT frameworks allow it. From literature and the findings of the LCLT case, it could be gathered that design has an impact on the feelings of safety and the connection between residents. When not done the right way, the building design could have a negative impact on social sustainability. From the LCLT residents, it could be gathered that the open building design with common spaces was beneficiary to the experience of safety and security and the interaction possible between residents. However, design considerations could also be tied to social conversion factors, such as cultural preferences. Therefore, it could be beneficiary to include the residents in the design process of the dwellings and site.

### 7.2.2 Recommendations for future research

Based on the limitations of this study that were discussed in paragraph 6.3, and interesting findings that come along during the execution of this study, this paragraph presents different recommendations for future academic research, and also includes bit of advice for researchers that are interested in researching CLT projects in the future.

#### *7.2.2.1 More in-depth research*

The objective of this study was to build a theory on how the CLT model impacts social sustainability on a neighbourhood scale, as there was a gap in academic research in regards to this subject. However, filling this gap is not an easy feat. As elaborated on in paragraph 6.2, this study had its limitations, also ones that impacted the generalisability of the research findings. Therefore, the recommendation is to keep building this theory through more research to strengthen the overall generalisability of the research findings, and in turn also strengthen the positive impact CLT could make on communities and environments around Europe, as the movement is growing and societies are changing. The in-depth research could take on a more qualitative approach through case studies, to build forth on this study and to provide a second or even third case to be able to perform a cross-case comparison with the LCLT case from this study. This qualitative research could then be followed up with quantitative research to further solidify the theory on the impact of the CLT model on social sustainability on a neighbourhood scale.

#### *7.2.2.2 Longevity of impact on social sustainability*

In addition to more in-depth research on the phenomenon, the fields of study could also benefit from a longevity study of the impact on social sustainability. As mentioned in paragraph 6.2.4, the methodology of this study was designed in such a way that the impact that was measured, was measured at one point in time for the residents. However, as mentioned in paragraph 3.2.8, social sustainability should be safeguarded for now and *in the future*. Neighbourhoods are constantly transforming. Therefore, a longitudinal study of the impact would be interesting, as then it could be observed if and how the impact of CLT on social sustainability changes over the life cycle of the project and the neighbourhood. This is especially an interesting topic, as some CLT organisations mentioned during the focus group in paragraph 4.1 that they do intend to phase out their involvement within their project after some years. It would be interesting to see how this would impact the social sustainability of the project and neighbourhood. The effects of this phasing out on social sustainability could be also studied through a longitudinal case study.

### *7.2.2.3 Impact on social sustainability during different project phases*

Another interesting approach to further the theory is to see how impact evolves during the different project phases. This study examined a case that was in the last step of the community-led housing development process, as elaborated on in paragraph 3.1.3. However, as mentioned in the findings of the LCLT case, residents already started forming connections and relationships and participating in earlier stages of the process. For the development of a comprehensive theory on the impact of CLT on social sustainability, looking at earlier stages of the development process could also be beneficial.

### *7.2.2.4 Research on the impact of other CH models on social sustainability*

Similar research on the impact on social sustainability at a neighbourhood scale could also be performed for other collaborative housing forms. Figure 16 on page 39 displays the taxonomy of collaborative housing forms in Europe. Conducting similar studies on the capabilities of residents that habit one of these forms other than a CLT could bring about different points of comparison that would be enriching to the body of knowledge on collaborative housing and social sustainability. Through this approach, it could also be established if the differences between the CLT model compared to other collective self-development models, as discussed in paragraph 3.1.4, really make a difference when it comes to social sustainability.

### *7.2.2.5 Research on the impact of online communication tools on social sustainability*

An interesting finding from the LCLT case study was the importance of online communication tools within life within the neighbourhood. For capabilities that had to do with participation and democracy, and knowledge and skills, these online facilities played an important facilitating role according to multiple participants. This might be linked to the recent COVID-19 pandemic, which restricted people's social interaction with these online communication tools due to social distancing measures. However, the interviews for this study were conducted in a period with relatively little to no COVID-19 measures in place, and most that mentioned the tools, talked about them in a positive manner and confirmed that they were still active on them. It would be interesting to research how these online communication tools impact the overall social sustainability in neighbourhoods and if they add to the concept in a positive manner, or if there are also downsides to the usage of these online communication tools.

### *7.2.2.6 Advice for future researchers*

While this paragraph lists a multitude of future research for CLT projects, this paragraph on recommendations for future research will end with a word of caution for future research when it comes to these kinds of projects. As elaborated on in the paragraph on the limitations of this study, current CLTs can be quite saturated with other researchers that already gathered or are also trying to gather data on these transformative projects. This great interest in these projects is greatly understood, as they are pioneers within the European context, and as the projects are very relevant in today's society due to the affordable housing crisis. However, it also has its downside that it can cause participation fatigue among the residents, and could therefore hinder the progression of significant studies within the field of collaborative housing research. The aim of this paragraph is, therefore, not to discourage other researchers from researching CLT projects, as they are a proven initiative that is able to bring affordable housing to neighbourhoods and people in desperate need. The objective is to advise future researchers to consider the saturation of researchers on pioneering CLT projects around Europe, and to adapt the methodology of their research accordingly. Data can definitely be collected, but have the understanding that the process of data collection could be quite slow-paced.

## 7.2.3 Recommendations for social impact measurement tool for CLT

During the expert panel with organisations that are involved within the European CLT network, the desire for a benchmark for the impact of CLTs was expressed. The reasoning for such a benchmark was twofold: 1) For CLT organisations themselves to track their impact, 2) To construct a convincing argument for funders and policymakers to include CLT projects in their plans. While the CLTB shared that their efforts in regards to the second objective have not paid off yet, having a reliable benchmark might be able to make a difference. In this paragraph recommendations for constructing a tool that could offer such a benchmark are given. These recommendations could be used by the European CLT network to set up an impact measurement tool for CLT. To note, this tool for impact assessment should not have to be limited to only measuring the impact on social sustainability. A comprehensive tool for other areas of impact, such as ecological sustainability, could be of added value to organisations. However, within this paragraph, the recommendations are limited to the assessment of social sustainability, but could also apply to other areas of impact.

### 7.2.3.1 Challenges

As mentioned in paragraph 4.1.2, currently, the network has a social impact measurement tool that can be used by CLT organisations to see what the areas of focus for impact are for the organisations and gives an array of indicators and measures that could be used to assess the realised impact. However, the challenge with this tool is that it focuses on the internal impact of the CLT organisation, and therefore does not supply concrete points of comparison, as the organisations themselves give substance to the indicators and measures they eventually deploy to assess their impact. Therefore, this tool is hard to deploy when the objective is to set out a benchmark for CLT around Europe.

Another challenge that the CLT organisations stumble upon with impact measurement, is that it is an extensive exercise that requires a substantive number of resources, such as time and manpower that CLT organisations themselves might not have at their disposal.

### 7.2.3.2 Design principles for the new tool

To create a tool that is useful and successful for the European CLT network, the recommendations that are supplied in this paragraph have been constructed in such a way that they attempt to combat the challenges mentioned in the foregoing paragraph as much as possible.

#### **Recommendation 1.** Include a restricted set of universal indicators

To start, the impact assessment tool should at least consist of a set of indicators and measurements that would be universally applied in the assessment by all the CLT organisations that are affiliated with the European CLT network. The reasoning for this is that this will enable the network to easily compare impacts between the organisations. And through this comparison, the strengths and weaknesses of each CLT could be identified, and lesson-learning could increase as CLTs can share their successes with others, and weaknesses could be mitigated by drawing from the successes of other CLTs.

CLT organisations could then make their own decision to add to the compulsory list of indicators with their own set of indicators and measurements based on their organisation's objectives, as is done with the current SIA tool.

#### **Recommendation 2.** Decide on a practical scale for the indicators

For the set of indicators for social sustainability, the operationalisation method of this study could of course be applied, as it is a comprehensive approach that measures the impact on a scale that is relevant to the scale of CLT projects. However, an argument can also be made to base the set of indicators on existing practical tools for measuring social sustainability, to be able to easily compare the impact of CLTs with the impact of other housing models around Europe. This comparison is useful for the CLT network, as it could supply evidence for the added value of CLT projects. Existing tools that could be considered are the SDGs or the European social taxonomy. The downside of these tools, however, is that they apply to a different scale in the built environment, as can be seen in table 7 in illustration box IV. The European CLT network, therefore, has to weigh the pros and the cons of each approach, and decide which one they see fits better with their desired objectives of the impact measurement tool.

#### **Recommendation 3.** Restrict the number of indicators

As mentioned by the CLT organisations themselves during the expert panel, the process of impact assessment can be quite labour intensive due to the many measurements that need to be acquired. To limit the amount of work that has to be performed, the set of indicators that are determined should be restricted to only include the essential elements of social sustainability. For reference to what is essential to the concept of social sustainability, the theoretical framework of this study summarised in figure 24 on page 55 could be applied.

#### **Recommendation 4.** Put residents central in the measurement of indicators

As discussed in the expert panel with CLT organisations, the building of community and the strengthening of the social position of certain socio-economic groups are considered the added value of the CLT model. The point of departure within both of these values is the residents, as both set out to benefit the residents of the CLT projects and beyond. To showcase this, it is logical that the experiences of residents are put in a central position within the impact measurement tool. To give an example of how this could be practically translated within the tool is that input of the measures is not obtained from the organisation but from the residents. However, as experienced within this study, residents could experience some participation fatigue. It is therefore important that data for impact assessment is acquired in an accessible manner that

requires little effort from the residents. An example of this could be a concise online survey. Participant fatigue could, in this case, also be a compelling argument to keep the number of indicators and measures as restricted as possible.

**Recommendation 5.** Do not “mark your own homework”

Lastly, another recommendation to possibly reduce the workload of impact assessment is to instate an independent organisation that performs the impact assessments for CLTs that are affiliated with the European CLT network. This would also improve the reliability of the outcome of the assessments, as organisations are not “marking their own homework”, meaning that the outcomes are not determined by the CLT themselves, which also strengthens the argumentation.

If an independent organisation for impact assessment is not feasible for the network, the reliability of impact assessments could also be improved by having CLT organisations assess each other’s impact. However, a consequence of this approach is that workload might increase instead of decrease, as it does require CLT to immerse themselves in the workings of other organisations. Increasing the reliability of impact assessments does have the benefit of strengthening the argument of positive impact and added value of the CLT.

To conclude the formal assessment of this research report, the CLT model poses a lot of potential for a positive impact on social sustainability and this impact relies on the decisions that the CLT organisations make for their objectives and their organisational structure. It is important that CLT organisations recognize this responsibility. In addition, academics should also take up their responsibility to pay more attention to the pillar of social sustainability within the broader concept of sustainability to work towards. Only when social sustainability, ecological sustainability and economic sustainability are balanced we can work towards a built environment that supports sustainability cities and communities.

# 8. Reflection

In this concluding chapter, the author of this Master thesis report reflects back on the process of conducting the research, the products that the study has produced, and also her personal experiences during the study. This reflection is written from her point of view.



I am proud to have presented to you the report for my graduation thesis. This report forms the product of eight months of intensive research within the fields of collaborative housing and social sustainability. While time flew by fast, my passion for both social sustainability and the Community Land Trust model has grown significantly. My aim for this report is to function as the stepping stone for more research to come on the impact of the CLT model on social sustainability. As this report is coming to a close, it has opened doors for more insights and further development of the theory that has been presented.

## 8.1 Process

Within this paragraph, I will take you through the process of how this study eventually came to be.

### 8.1.1 Topic selection

September of 2021 marked the official start of my graduation thesis. Fresh-faced after finishing a 6-month long internship at a real estate management company, I was ready to get back into the academic field. During my internship, my personal interest in residential real estate manifested itself. However, what I also experienced during my internship was the growing scarcity of housing in the Dutch housing market and the rising prices as a consequence. This inspired my first general idea of focusing the topic of my graduation thesis on affordable housing. During the first week of the graduation process, I met with Drs Ing Gerard van Bortel, an Assistant Professor of Housing Management from the master's track Management in the Built Environment. During our talk, he mentioned that I could look into the concept of Community Land Trusts, as this model was able to provide perpetually affordable housing. My interest was piqued, and as I scrolled through websites and scanned a few scientific papers on the concept, I was certain that I wanted to focus my graduation thesis on CLT. The decision to go for this topic, also solidified my collaboration with Dr Darinka Czischke, an associate professor at the Faculty of Architecture and the Built Environment, as my main mentor due to her extensive experience with collaborative housing models. However, the concept of CLTs was still a novelty to me. Luckily, September also marked the month of the first global CLT festival, which consisted of webinars and an online conference where people from practice shared their experiences with the CLT model. By attending these Zoom sessions, my basic understanding of the conception and the workings of the CLT model grew significantly and solidified my intentions to make this collaborative housing one of the main focusses of my graduation thesis.

However, finding a point of focus within the CLT model for my graduation topic proved to be quite a struggle. I was able to overcome this hurdle when Darinka introduced me to Céline Janssen, a PhD researcher focussing her study on social sustainability within urban area development. As we started talking and extracting information on the topic of social sustainability, I became aware of the fact that social sustainability is the most underreached pillar of sustainability. The topic is often seen as an added on to ecological sustainability or overlooked. This is a shame, as it is an important aspect of sustainability, and more relevant than ever in our evolving society. Humans are social animals and it is in our nature to live within a society. It is important to our own well-being to sustain them. With the motivation to fill part of the research gap on social sustainability, the choice was made to add the dimension of social sustainability to the topic of my graduation thesis.

### 8.1.2 Towards the P2

In the lead up to the first presentation moment, the P1, the focus was on developing a theoretical understanding of my main research topics and developing the main research problem. At this moment, my scope was limited to the Dutch context. And as there are no realised CLT projects in the Netherlands as of yet, coming to a fitting research question proved to be a difficult process. I was going back and forth on how I could focus the thesis on CLT and other collaborative housing projects.

This changed when I came into contact with my graduation company, the municipality of Amsterdam. One of my personal study targets was to combine my graduation thesis with a graduation internship to gain insights into topics from an academic and a practical perspective in one process. At the suggestion of Darinka, I reached out to the AMS Institute with a synopsis of my current research framework. What snowballed from there was a meeting with the Municipality of Amsterdam and And The People, two organisations that are working on the first CLT project in the Dutch context. They informed me that one of their objectives for 2022 was to determine the ecological and social impact of the CLT model as part of a larger study in collaboration with the European CLT network, which is funded through the Laudes Foundation. As

my graduation thesis topics happen to coincide with their aim, I was welcome to join their efforts. Richard Ruijtenbeek from the Municipality of Amsterdam and Thieme Hennis from And The People joined my graduation team. This collaboration with the larger European CLT network, allowed me to broaden my scope from the Dutch context to the European context, and consequently to solely focus on the CLT model and its impact on social sustainability.

As my scope was more defined, I was able to present my main research question at the P2 presentation together with a research problem, and an already well-developed theoretical framework on the concepts of CLT and social sustainability. The development of the theoretical framework was executed through a systematic literature review. While research on the CLT model proved to be smooth sailing, the concept of social sustainability proved to be more complex. The concept embodies many different elements, indicators and principles, which are not applied in a consistent manner in the existing body of knowledge. I made the decision to develop my own operationalisation method for social sustainability, which allowed me to adopt the innovative approach that Céline is pioneering in social sustainability research: the CA. Since Céline joined my graduation team, she had told me about this new approach that she is researching in her own work. The approach was hard to grasp at first, as it does require a shift in perspective from focussing on the built environment, as we are so often taught in our studies, to focussing on the human perspective *within* the built environment. But during my literature review, this human-centred approach seemed to fit my findings and own understanding regarding social sustainability better than the foregoing approaches in literature.

In addition to the theoretical framework, for the P2 it was also required to start developing the research methodology. As the adopted CA works from a human-centred perspective, it felt only natural to also research the impact of the CLT model from the perspective of neighbourhood residents. This perspective was the point of departure around which I designed a research methodology that obtained empirical data through a holistic multiple case study using two cases, each within a different European context. Within each case, the idea was to conduct around 7 semi-structured interviews. With this approach, I went into my P2 presentation with excitement.

### 8.1.3 Towards the P4

The main feedback from the P2 presentation was that my research needed some creativity and innovation. I was compelled to think more outside the box and get my hands dirty in the field of qualitative research. The first few weeks after the P2 presentation, I was conflicted about how I could implement this critique. As most of my days were spent working on the graduation thesis, tunnel vision ensued. This often felt detrimental to my own creativity. Little did I know, that in the lead up to my P4 my creativity would be challenged more than ever before in my academic career, which forced me to adopt a flexible mindset when it come to my research.

The passing of my P2 also marked the start of my graduation internship. Within the internship process, most of the focus was on the study in collaboration with the Laudes Foundation, as the findings from this research report would be of contribution to that study as well. Bi-weekly meetings with Thieme Hennis were scheduled, where we would discuss the process of my research and Thieme would offer his insights into possible useful frameworks and broadening literature on the topics of social sustainability and the Community Land Trust model.

With most of the theoretical research completed, the time had come to make a start on the empirical research of the study. Being part of the study by the Laudes Foundation through And The People gave me the opportunity to consult with the CLT Brussels on possible cases for my research. During this meeting, I was advised to temper my expectations slightly. As the CLT network is still a novelty in Europe, there were not many cases to choose from, and within the cases that fit the criteria, participant fatigue was a growing hurdle in finding residents willing to participate. The result of this meeting was a selection for the first case, with the plan to report back for a second case as the first case was wrapping up.

The London CLT was the first case to be selected. While the process of getting interviews off the ground was quite slow at the start. I had grown apprehensive due to the participant fatigue. But, after a change in mindset to become more proactive, I found a collective of residents that were willing to share their stories with me. The interviews took place online through MS Teams. During the interviews, the interview protocol also evolved from a protocol that used more abstract questions during the first two interviews, to a more direct list of questions in a refined version. However, the differences in interview protocol did not yield significant differences in findings.

Right before the P3 presentation, I was presented with two opportunities. For the Laudes project, a face-to-face gathering in Brussels was coming up where I was given the opportunity to set up a workshop together with Thieme to gain insights into the organisational perspective on the impact of CLT on social and ecological sustainability. This perspective was not part of my original research methodology, as my operationalisation method for social sustainability focused predominantly on the perspective of the residents. However, as time was running out and the second case had not been selected yet, I decided to seize this opportunity, as it would be a great way to gather more insights and also it would allow me to extend the theory.

The second opportunity was the possibility of a second case. During another meeting with the CLTB, the CALICO project by the CLT Brussels was presented as a possible option. I was eager to take this opportunity as the Brussels visit also allowed me the opportunity to see this project in person. Unfortunately, after an energising two-day trip with a successful focus group, I was informed that due to participation fatigue interviews with residents from the CALICO project would not be possible in the short term. As my P4 deadline was approaching, I was at a crossroads. I had built my methodology on a holistic multiple-case study approach to allow for the generalisation of the research findings, and there was no time to look into different options for a second case. While in the London CLT case I had become more proactive when running into similar issues, in this case, I had decided to not push further. I emphasised with the residents of the CALICO project. What I had learned from the interviews with participants from the London CLT case, is that people can go through sincere hardships when in desperate need of housing that is also affordable. As these people had just moved in a few months ago, I understood that they might need an adjustment period to their new life within a new home, and maybe even a new neighbourhood. I did not want to impose on them at such an irregular moment in their lives. Therefore, it was my active responsibility to not press, and to switch my research methodology less than a month before my P4 deadline, for which I did consult Céline. I was able to switch my methods without too much of a loss of generalisability, as the focus group with the organisational perspective gave me extra input that could be used to strengthen the data through theory triangulation. This sudden switch brought about some stressful moments before the end.

One of the last steps in gathering data for this research was to test the theory that I had developed from the experiences of the LCLT residents, in a different context. This was done using the method of lesson drawing that is based on the concept of policy transfer. The case used for this was the Dutch case in the H-Buurt of the Bijlmer in Amsterdam. This case is what brought me to this topic of CLT at the start of this graduation process. By conducting interviews and holding a focus group with different stakeholders that are involved with the case, I was able to develop recommendations for this case specifically to enhance the impact of the CLT H-Buurt on the social sustainability of the H-Buurt. In addition, recommendations on how lessons from one CLT in regards to social sustainability could be transferred to other contexts could be made based on the findings from this testing of the theory phase.

I presented these findings for the P4 on the 24<sup>th</sup> of May to my mentors from the TU Delft and the delegate of the Board of Examiners with success, as I was granted a *go* to finish my graduation process with the P5 presentation.

#### 8.1.4 Towards the P5

To successfully finish my master thesis, I received feedback from my mentors and the delegate at the end of the P4 presentation. This feedback stipulated that within the discussion and conclusion, the theories from the different perspectives on the impact of the CLT model on social sustainability could be decoupled to have a more well-rounded conclusion and, therefore, a stronger basis for further research. In addition, they advised that the reflection on social sustainability and the use of the Capabilities Approach could be expanded upon. I agreed with these comments and I translated these advisements into the thesis in a way that I thought fit with the overall research set-up and main research question. This resulted in a finished master thesis study and report that is presented to my mentors from the faculty and the Board of Examiners delegate, as well as my supervisors from my graduation internship, together with my dear family and friends on the 22<sup>nd</sup> of June 2022.

## 8.2 Product

This report is the end-product of this graduation process that has just been described. The report that lies before you is different from what I had envisioned at the start of, and even during the process. The biggest change to the final product is definitively the addition of the organisational perspective to the theory. As described already, the original idea was to look at the impact of the CLT model purely from the perspective of the residents living in such projects. However, as the

opportunity presented itself, the organisational perspective was a way to further enrich the theory on the impact of the CLT model and it was interesting to see the differences between what CLT organisations might envision their impact to be, and the actualised impact as experienced by residents. Therefore, this change only benefited the quality of the end product.

Overall, I am satisfied with the product that I have produced. It has three distinct phases: theory building, theory testing and theory presentation. I believe that these phases bring a simple structure to the report that makes it easy to follow.

Additionally, after the P2 I received feedback from the board of examiners delegate that the theory in my report was not easy to follow for someone that is not well-versed in the subjects at hand. The concepts were too abstract. I have attempted to mitigate this issue by adding illustration boxes throughout the report that give examples of how the theory that is discussed, is applied in practice. In my opinion, these illustration boxes take away most of the abstraction that was present. Also, the approach of the CA can be quite hard to grasp. To mitigate confusion over the resources, conversion factors, and capabilities by the reader, I have tried to work with tables and schemes as much as possible to showcase exactly how the resources and conversions impact capabilities and vice versa.

To end the reflection on the project, I will briefly elaborate on the relation of this product to the master track and graduation lab. This research is conducted to complete the master's track Management in the Built Environment and obtain a master's degree in Architecture, Urbanism and Building Sciences at the faculty of Architecture and the Built Environment of the TU Delft. Within this master track, there are three domains: Real Estate Management (REM), Design & Construction Management (DCM) and Urban Development Management (UDM). This graduation thesis has positioned itself within the REM domain. Research conducted within this domain concerns itself with developing knowledge that is focused on strategy design, decision making and implementation of real estate to move towards a future proof-built environment. Within REM specifically, this research has positioned itself within Housing Management. Housing management is one of the REM chairs and concerns itself with housing stock. One of the current key themes of this chair is the principles of environmental and social sustainability and how these can be implemented and managed within the housing stock. As this study is focused on researching the impact of collaborative housing developments on social sustainability on a neighbourhood scale, it is tightly connected with this main theme. The objective is to research how the CLT makes an impact: what elements of social sustainability do it or does it not secure within a neighbourhood and what is the reasoning for this. When it is able to secure sustainability, the CLT might be a housing practice that could be considered more in housing practices and neighbourhood development. This also highlights that, as this research looks at wider neighbourhood development and citizen participation within governance structures, this study also touches upon elements of Urban Development Management. The backgrounds of the two mentors that have guided this research, therefore, also fit well with the topics at hand in this graduation thesis.

### 8.3 Personal note

While 2022 has been a tumultuous year for me personally, and the graduation process was quite overwhelming at times due to the setbacks, I will look back on this process and product fondly. And this is mostly due to the valuable social connections I was able to make during this process, which proves the argument that this graduation thesis has been trying to make all along.

I am thankful for all the insights Darinka, Céline, Thieme and Richard have provided me, and for the active participation and warm encouragement of each interview and focus group participant. It was also a great learning experience to meet different actors from the European CLT network in person in Brussels and to be able to see and learn from their work. Their efforts and enthusiasm for CLTs are infectious and inspired me all throughout my last sprint to the deadline. This thesis also allowed me to broaden my horizons by giving me the opportunity to visit the beautiful city of Brussels for the first time, which is an experience that will not be forgotten soon.

To conclude, this graduation process brought me much more opportunities than I could have ever anticipated and I am proud to say that I have seized them all, bringing me out of my comfort zone, and giving me the opportunity to learn so much in such a short period of time. I feel that this graduation thesis was the learning experience that I was still missing from my academic career, and has put me in the right mindset to finish my master's degree and kickstart my career in real estate, through which I plan to keep putting effort in creating socially sustainable living environments.

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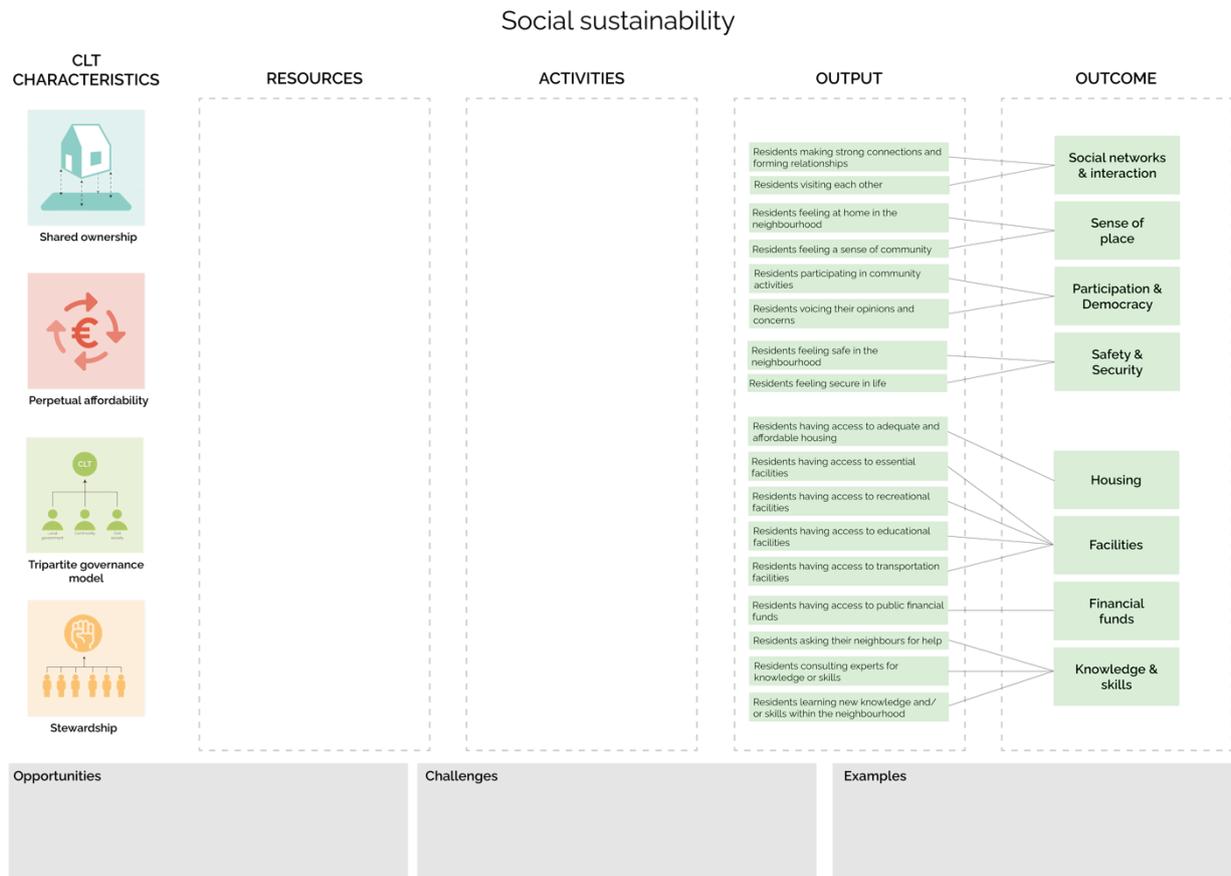
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# Appendixes

# Appendix I. Simplified logic model for the focus group of the first expert panel.



## Appendix II. Interview protocol for the interviews of the London CLT

### Recording of the interview

*I want to start this interview with telling you that the information that is gathered during this interview will of course be treated confidentially. The information will only be used for academic purposes. If there are any questions that you would not like to answer for any reason, then this can be indicated and the question will of course be skipped.*

*I am also going to ask for your permission to record the interview. I will ask this question two times, once before starting the recording, and once after. This way it is on record that you are aware that this interview is being recorded and that you have given your permission to do so.*

- Do you give your permission to record this interview? (*Before recording*)

#### **\*Start recording\***

- Do you give your permission to record this interview? (*After recording*)

### Introduction by the interviewer

*Now that that is settled, I will give a short introduction of myself and the study that you will be contributing to.*

*Hello, my name is Betsy. I am a Dutch student from the Delft University in Technology. Currently, I am in the end stage of my master's programme called "Management in the Built Environment" and to finish my masters, I am writing a graduation thesis on the topics of Community Land Trusts and social sustainability in collaboration with the European CLT network.*

*The reason why I am researching this, is to see if the CLT model could be why of housing provision that also boosts social sustainability. Currently, the social sustainability of European societies and environments is under threat due to issues that have flowed from the overall scarcity on the housing market, such as unequal opportunities between income groups and urban segregation. However, little is known about the effects of CLT on social sustainability and I am attempting to fill this gap.*

### Introduction by the interviewee

*For social sustainability, I have set up 17 main questions that all have to do with different elements of social sustainability. I will walk you through these questions during the interview. But first, it would like to ask you to briefly introduce yourself.*

- What do you do in your everyday life?
- What does a day in your life look like?

General neighbourhood

**How long have you lived within your current neighbourhood?**

**What is the most important to you in a neighbourhood?**

**How is this reflected within your neighbourhood?**

Community Land Trust resident

**Since when do you live within the CLT?**

**How did you get into the CLT?**

**How do you feel about living within a CLT?**

- What are the advantages according to you?
- What are the disadvantages according to you?

**What about the CLT has made the biggest impact on your life?**

**What did your living situation look like before the CLT?**

- What are the biggest differences between then and now in your everyday life?

**OR**

St Clements development resident

**Since when do you live within the St Clements development?**

## Capabilities: Inclusion within community functionings

Sense of place	<p><b>How do you feel about your neighbourhood?</b></p> <ul style="list-style-type: none"> <li>▪ Do you feel at home? <ul style="list-style-type: none"> <li>○ If not: Why not?</li> <li>○ If yes: What is it that makes it feel like home?</li> </ul> </li> <li>▪ And in your previous living situation, how was your experience with feeling at home in the neighbourhood then?</li> </ul> <p><b>Do you feel a sense of community in the neighbourhood?</b></p> <ul style="list-style-type: none"> <li>▪ If not: What is limiting this sense of community?</li> <li>▪ If yes: What elements do you think have added to this sense of community?</li> <li>▪ Did you experience a sense of community in the neighbourhood in your previous living situation?</li> </ul>
Social networking & interaction	<p><b>With who in the neighbourhood have you made connections or formed relationships?</b></p> <ul style="list-style-type: none"> <li>▪ What was important in the forming of the connections and relationships?</li> <li>▪ Is there anything that limits the making of connection and relationships?</li> <li>▪ How have your connections and relationships changed compared to your previous living situation?</li> </ul> <p><b>Who do you visit in the neighbourhood?</b></p> <ul style="list-style-type: none"> <li>▪ What factors have made it possible for you to visit them?</li> <li>▪ What limits you in visiting the people in your neighbourhood?</li> <li>▪ How has this changed since moving into the CLT?</li> </ul>
Participation & democracy	<p><b>In what community activities do you participate within your neighbourhood?</b></p> <ul style="list-style-type: none"> <li>▪ Why do you participate?</li> <li>▪ What makes it possible for you to participate?</li> <li>▪ What limits you in participating in activities?</li> <li>▪ Who sets up these activities?</li> <li>▪ Has your participation in community activities changed compared to your previous living situation? <ul style="list-style-type: none"> <li>○ What factors brought about this change?</li> </ul> </li> </ul> <p><b>How do you voice your opinions and problems to local parties?</b></p> <ul style="list-style-type: none"> <li>▪ What local parties?</li> <li>▪ What factors make it possible for you to voice your opinions and problems?</li> <li>▪ Is there anything that limits you in voicing your opinions and problems?</li> <li>▪ Did you also voice your opinions and problems to these parties when you lived in your previous living situation? <ul style="list-style-type: none"> <li>○ Why not?</li> <li>○ Why yes?</li> </ul> </li> </ul>
Safety & security	<p><b>How safe do you feel in your neighbourhood?</b></p> <ul style="list-style-type: none"> <li>▪ What about the neighbourhood makes you to feel safe?</li> <li>▪ What about the neighbourhood makes you feel unsafe?</li> <li>▪ How safe did you feel in your previous living situation?</li> </ul> <p><b>How secure do you feel in your position in life currently?</b></p> <ul style="list-style-type: none"> <li>▪ What factors do you feel endanger your current position in life?</li> <li>▪ What are the reasons why you feel secure in your current position in life?</li> <li>▪ How did you experience this in your previous living situation?</li> </ul>

## Capabilities: Accessibility of neighbourhood facilities

Accessibility of adequate, affordable housing	<p><b>How would you score your current housing when it comes to fitting your needs, quality and affordability?</b></p> <ul style="list-style-type: none"> <li>▪ Why?</li> <li>▪ How would you score your previous living situation when it comes to adequacy and affordability?</li> <li>▪ What made it possible for you to live in adequate, affordable housing?</li> <li>▪ What limited you in living in adequate, affordable housing?</li> </ul>
Accessibility of essential facilities	<p><b>Which essential facilities do you make use of in your neighbourhood?</b></p> <ul style="list-style-type: none"> <li>▪ What motivates you to make use of these facilities?</li> <li>▪ What limits you in making use of these essential facilities?</li> </ul>

	<ul style="list-style-type: none"> <li>▪ Do you avoid certain essential facilities? <ul style="list-style-type: none"> <li>○ Why?</li> </ul> </li> <li>▪ How has your use of essential facilities changed since moving into the CLT? <ul style="list-style-type: none"> <li>○ Why?</li> </ul> </li> </ul>
Accessibility of recreational facilities	<p><b>Which recreational facilities do you make use of in your neighbourhood?</b></p> <ul style="list-style-type: none"> <li>▪ How has your use of recreational facilities changed since moving into the CLT? <ul style="list-style-type: none"> <li>○ Why?</li> </ul> </li> </ul>
Accessibility of educational facilities	<p><b>Which educational facilities do you make use of in your neighbourhood?</b></p> <ul style="list-style-type: none"> <li>▪ How has your use of educational facilities changed since moving into the CLT? <ul style="list-style-type: none"> <li>○ Why?</li> </ul> </li> </ul>
Accessibility of transportation facilities	<p><b>Which public transportation facilities do you make use of in your neighbourhood?</b></p> <ul style="list-style-type: none"> <li>▪ How has your use of public transportation facilities changed since moving into the CLT? <ul style="list-style-type: none"> <li>○ What were the reasons for this change?</li> <li>○ What were the reasons this has stayed the same?</li> </ul> </li> </ul>
Accessibility of financial funds	<p><b>Do you make use of any public financial funds that are available to you in your neighbourhood? Such as community grants, subsidies, allowances</b></p> <ul style="list-style-type: none"> <li>▪ If yes: Which public financial funds? Why those?</li> <li>▪ How did you get to know about the public financial funds?</li> <li>▪ If not: Why not? Are there any factors that limit your use of these financial funds?</li> </ul>
Accessibility of knowledge and skill	<p><b>Do you ask your neighbours or people within the neighbourhood for help when you are in need of certain knowledge or skills?</b></p> <ul style="list-style-type: none"> <li>▪ What factors enable you to ask your neighbours for help?</li> <li>▪ What factors limit you in asking your neighbours for help?</li> <li>▪ How did you experience this in your previous living situation?</li> </ul> <p><b>How do you contact experts in your neighbourhood when you are in need of a service? Such as legal aid, a plumber...</b></p> <ul style="list-style-type: none"> <li>▪ What helps you with contacting experts?</li> <li>▪ Is there anything that limits you from contacting experts?</li> <li>▪ How did you experience this in your previous living situation?</li> </ul> <p><b>How do you learn new knowledge or skills within your neighbourhood?</b></p> <ul style="list-style-type: none"> <li>▪ Where? By whom?</li> <li>▪ What factors have enabled this?</li> <li>▪ Are there any factors that limit you from learning new knowledge or skills within the neighbourhood?</li> <li>▪ Did you also learn new knowledge and skills when you lived in your previous living situation? <ul style="list-style-type: none"> <li>○ Why not?</li> </ul> </li> </ul>

## Ending the interview

**Do you have any recommendations for the CLT when it comes to social sustainability?**

**Is there anything that you would personally like to add to the interview in regards to your neighbourhood, social sustainability or the CLT?**

*Well, thank you very much for your participation in this interview and study.*

**Do you have any questions for me regarding the interview, handling of the data or the study overall?**

**Is there anyone that you might know in your neighbourhood that you think would also like to participate within this study?**

**Would you like to receive the results of this study?**

## Appendix III. Information leaflet to reach out to residents of the LCLT at St Clements and the wider neighbourhood of Mile End.

### Dear resident of Mile End,

We are looking for your participation!

**We are currently looking residents of the Mile End neighbourhood that would like to participate within a study that researches the impact of a Community Land Trust (CLT) on the social sustainability of a neighbourhood.**

#### YOUR PARTICIPATION

As a resident of the Mile End neighbourhood, you have the first-hand experience of the social sustainability within your neighbourhood, and which is why we are interested in hearing about your experiences.

We are looking to do so by interviewing you. The interview would be completely anonymous and would take around **45 minutes** to complete.

The interview would take place **online** with the use of Microsoft Teams. No account is needed for this service, only a stable internet connection!

The questions that would be asked during the interview will have to do with your capabilities in regards to different elements of social sustainability. To give some examples of capabilities that could be questioned: your ability to access adequate housing, your ability to meet with your neighbours and your ability to feel secure within your neighbourhood.

#### THE STUDY

The study is conducted as part of a collaboration between different actors from the European CLT Network.

In light of the current housing crisis, the provision of affordable housing has become crucial within urban areas. However, not only has the housing crisis been detrimental to the affordability of housing, it has also heightened certain social issues within urban areas such as inequality and urban segregation. This is threatening the social sustainability of urban areas. Current housing solutions should therefore not only tackle the affordability of housing, but should also take into account the community and the environment.

One of the solutions that is seen a comprehensive approach as it does also take community and environment into account, is the Community Land Trust model. The CLT is a community-led way for providing perpetually affordable housing.

However, the impact of the model on social sustainability has been very limitedly researched up until now. Which is why we are asking the question: *What is the impact of CLT on the social sustainability of a neighbourhood?*

To be able to answer this question, we are asking for your help!

Your participation within this study would be greatly appreciated and would aid in the strengthening of the European CLT Network, add towards more adequate policy on CLT, and would overall help future CLT projects all around Europe with maximising their impact on social sustainability!

Thank you for your time and consideration.

#### Interested in finding out more and possibly participating?

We would be happy to hear that you are interested in participating!

The study is conducted by Betsy Mulder. She is the main researcher responsible for this study and will be the one conducting the interviews. She represents the Delft University of Technology in The Netherlands

If you have any questions or would like to participate, please contact Betsy through:

[B.C.Mulder@student.tudelft.nl](mailto:B.C.Mulder@student.tudelft.nl)



## Appendix IV. Interview protocol for the interviews of the CLT H-Buurt, Amsterdam case.

### Het interview opnemen

*Ik wil dit interview beginnen met te zeggen dat de informatie die tijdens dit interview wordt verzameld uiteraard vertrouwelijk zal worden behandeld. De informatie wordt alleen gebruikt voor academische doeleinden. Mochten er vragen zijn die u om welke reden dan ook niet wilt beantwoorden, dan kan dit worden aangegeven en wordt de vraag uiteraard overgeslagen.*

*Ik ga ook uw toestemming vragen om het interview op te nemen. Ik zal deze vraag twee keer stellen, een keer voordat ik de opname start en een keer daarna. Zo staat vast dat je op de hoogte bent dat dit gesprek wordt opgenomen en dat je hiervoor toestemming hebt gegeven.*

Geef je toestemming om dit interview op te nemen? (Vóór opname)

#### **\*Begin met opnemen\***

Geef je toestemming om dit interview op te nemen? (Na opname)

### Behoeften van de buurt

#### **Wat zijn volgens jullie de behoefte van de buurtbewoners als het gaat om...**

- Het ombouwen van een sociaal netwerk door middel van connecties
- Het participeren in activiteiten in de buurt
- Het kunnen delen van problemen en meningen met lokale partijen
- Veilig voelen in de buurt
- Zeker voelen in het leven
- De beschikbaarheid van betaalbare en kwalitatieve woningen in de buurt
- De bereikbaarheid van faciliteiten in de buurt
  - Essentiële faciliteiten
  - Faciliteiten voor recreatie
  - Educatieve faciliteiten
  - Faciliteiten voor openbaar vervoer
- Toegang tot publieke financieringsmiddelen
- Toegang tot kennis en kunde

#### **Hoe speelt de CLT H-Buurt hierop in?**

## Appendix V. Translating of measurements for the key principles

Table 1. Translating of measurements for the key principles of Equity and Community into capabilities.

KEY PRINCIPLES	WHAT TO MEASURE	MEASUREMENT(S) IN LITERATURE	URBAN FUNCTIONING	CAPABILITIES
 EQUITY		Source: Larimian & Sadeghi, 2021	Functioning that can be derived from the measurement of the source or from general findings from literature	Functioning translated into capabilities
	 NEIGHBOURHOOD	General findings from literature		
Accessibility	Housing	Housing in my neighbourhood is affordable	Affording housing Living in adequate housing	I am able to live in an adequate house. I am able to afford a house in my neighbourhood. I am able to afford my housing expenses.
Accessibility	Facilities	Access to essential facilities (Supermarket, sundry shop/convenience store, post office, healthcare centre/doctor, bank/money machine, religious centre) Access to recreational facilities (Sports field, park/public garden, indoor community facility, playground) Access to educational facilities (early childhood education, primary school, secondary school)	Accessing essential facilities Making use of essential facilities Accessing recreational facilities Making use of recreational facilities Accessing educational facilities Making use of educational facilities Accessing transportation facilities Making use of transportation facilities	I am able to access essential facilities in my neighbourhood. I am able to use the essential facilities in my neighbourhood I am able to access recreational facilities in my neighbourhood. I am able to make use of the recreational facilities in my neighbourhood I am able to access educational facilities in my neighbourhood. I am able to make use of educational facilities in my neighbourhood I am able to access public transportation facilities. I am able to make use of public transportation facilities.
Accessibility	Financial funds	Public funding Private funding	Accessing public funding for the neighbourhood Accessing public funding for certain socio-economic groups	I am able to access financial funds that are available for my neighbourhood. I am able to access the public financial funds that are available for me in my situation.
Accessibility	Knowledge and skill	Local knowledge Expert knowledge Knowledge exchange between locals, experts and between a local and an expert. Expansion of knowledge through capacity building activities	Accessing local knowledge when needed Asking for help from locals (fellow neighbourhood residents) Accessing expert knowledge when needed Asking for help from experts Expanding knowledge / learning Capacity building	I am able to ask my neighbours or others in my neighbourhood for help. I am able to consult experts in my neighbourhood when I have a need to. I am able to learn new knowledge and skills in my neighbourhood

Table 2. Translating of measurements for the key principles of Equity and Neighbourhood into capability

KEY PRINCIPLES	WHAT TO MEASURE	MEASUREMENT(S) IN LITERATURE	URBAN FUNCTIONING	CAPABILITIES	
 EQUITY	 COMMUNITY	Source: Shirazi & Keivani, 2019	Source: Larimian & Sadeghi, 2021	Functioning that can be derived from the measurement of the sources	Functioning translated into capabilities
Inclusion	Social networking & interaction	<p>Number of neighbours known by name</p> <p>Frequency of meeting neighbours</p> <p>Number of friends in the neighbourhood</p> <p>Asking help from neighbours</p> <p>Exchange of help and support with neighbours</p>	<p>I know the first names of my next-door neighbours</p> <p>I am satisfied with the level of contact I have with my neighbours</p> <p>I visit my neighbours in their homes</p> <p>I believe my neighbours would help me in an emergency</p> <p>I borrow things and exchange favours with my neighbours</p> <p>I regularly stop and talk with people in my neighbourhood</p> <p>The friendships and associations I have with my neighbours mean a lot to me.</p>	<p>Connecting with neighbours</p> <p>Meeting neighbours</p> <p>Visiting neighbours</p> <p>Asking help from neighbours</p> <p>Helping neighbours</p> <p>Borrowing things from neighbours</p>	<p>I am able to make connections with my neighbours</p> <p>I am able to interact with my neighbours</p> <p>I am able to stop and talk with people in my neighbourhood</p> <p>I am able to visit my neighbours</p> <p>I am able to ask my neighbours for help.</p> <p>I am able to help my neighbours</p> <p>I am able to borrow things from my neighbours.</p>
Inclusion	Participation & democracy	<p>Knowing community-based organisations</p> <p>Membership in community organisations</p> <p>Participation in religious activities</p> <p>Being involved by local authorities</p> <p>Level of respond to local authorities</p> <p>Knowing neighbourhood problems</p>	<p>I am willing to work together with others on something to improve my neighbourhood</p> <p>I participate in activities in a social group in my neighbourhood (e.g., golf, church, etc.)</p> <p>I have done some volunteer work in my neighbourhood within the last 12 months</p> <p>We have a strong and active community in our neighbourhood</p> <p>I want to be a part of things going on in my neighbourhood</p>	<p>Participating in community activities</p> <p>Participating in religious activities</p> <p>Volunteering</p> <p>Being involved by local authorities</p> <p>Participating in local authorities</p>	<p>I am able to participate in community activities in my neighbourhood</p> <p>I am able to participate in religious activities in my neighbourhood</p> <p>I am able to volunteer in my neighbourhood</p> <p>I am able to voice my opinions and problems to local authorities</p> <p>I am able to participate in local authorities</p>
Inclusion	Safety & security	<p>Feeling of safety in daytime</p> <p>Feeling of safety after dark</p> <p>Safety of open spaces</p> <p>Children safety on the streets</p> <p>Safety of pavements and sidewalks</p> <p>Presence of police at the neighbourhood</p>	<p>I feel safe when out and about in the neighbourhood during the day</p> <p>I feel safe to walk alone in the neighbourhood after dark</p> <p>I don't worry about crime in my neighbourhood</p> <p>I am not aware of crimes committed in the neighbourhood within the last 12 months</p>	<p>Feeling safe during daytime and after dark.</p> <p>Safely walking around the neighbourhood during daytime</p> <p>Safely walking around the neighbourhood after dark</p> <p>Reporting crime</p>	<p>I am able to feel safe in my neighbourhood</p> <p>I am able to safely walk around in the neighbourhood during daytime</p> <p>I am able to safely walk around in the neighbourhood after dark</p> <p>I am able to report a crime when I have witnessed one</p>
Inclusion	Sense of place	<p>Feeling of neighbourhood attachment</p> <p>Neighbourhood pride</p> <p>Feeling of being at home in the neighbourhood</p> <p>Missing neighbourhood while away</p> <p>Desirability of neighbourhood</p> <p>Desire to leave the neighbourhood</p>	<p>I miss this neighbourhood when I'm away from it for too long</p> <p>I feel like I belong to this neighbourhood</p> <p>Living in this neighbourhood gives me a sense of community</p> <p>I like to think of myself as similar to the people who live in this neighbourhood</p>	<p>Feeling attached to the neighbourhood</p> <p>Feeling at home in the neighbourhood</p> <p>Feeling of belonging to the neighbourhood</p> <p>Feeling of sense of community</p> <p>Missing neighbourhood while away</p>	<p>I am able to feel attached to the neighbourhood</p> <p>I am able to feel at home in the neighbourhood</p> <p>I am able to feel like I belong in the neighbourhood</p> <p>I am able to feel a sense of community in the neighbourhood</p>

Appendix VI. Results expert panel with organisations from the European CLT network.

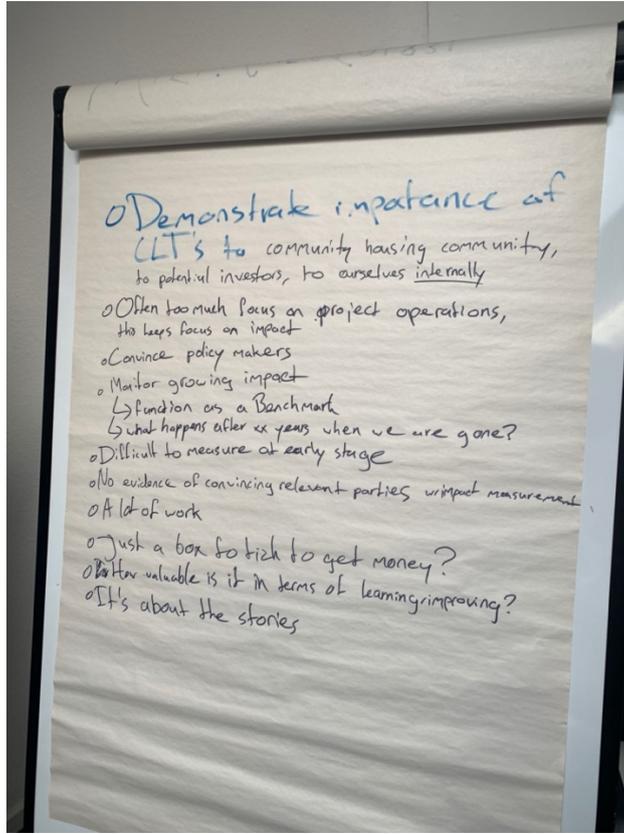


Figure 1. Results group discussion to the question: Why address social and ecological sustainability?

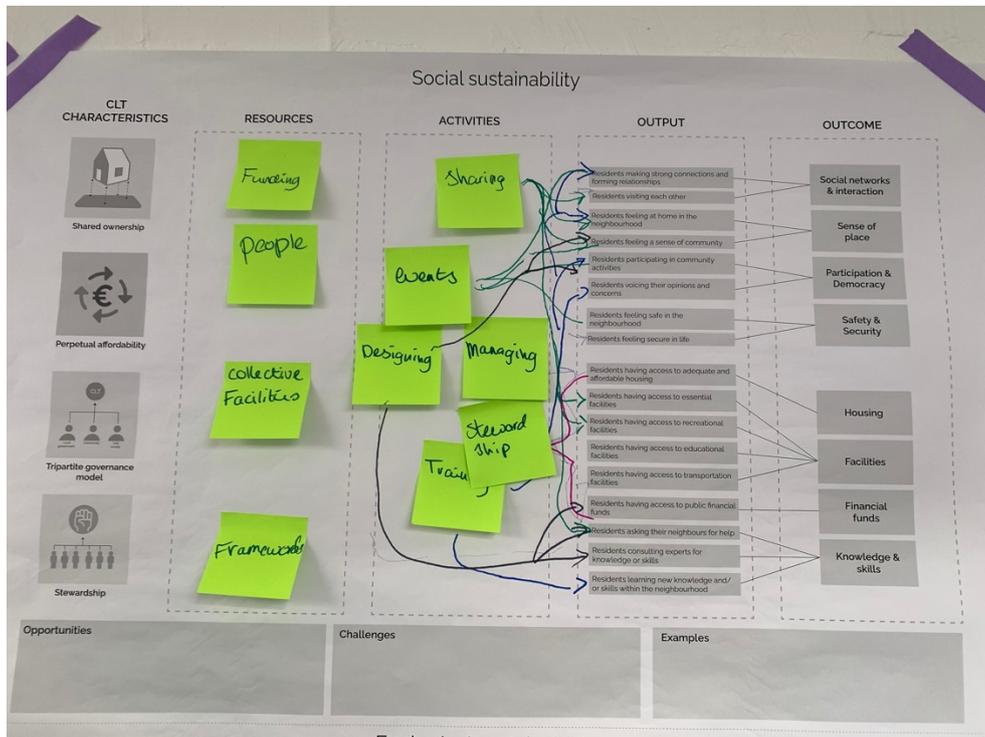


Figure 2. Results of filling in the local model by group A.

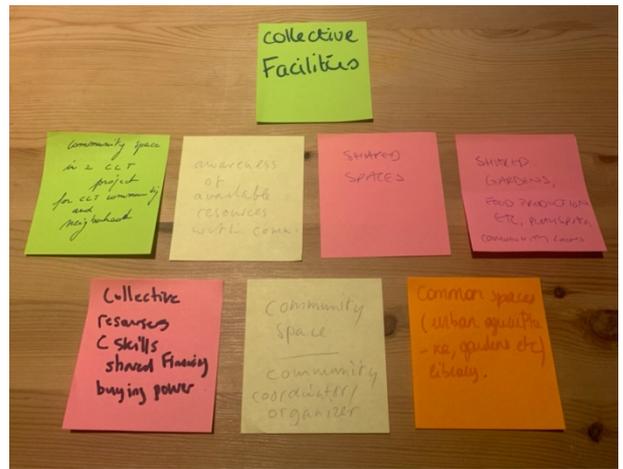
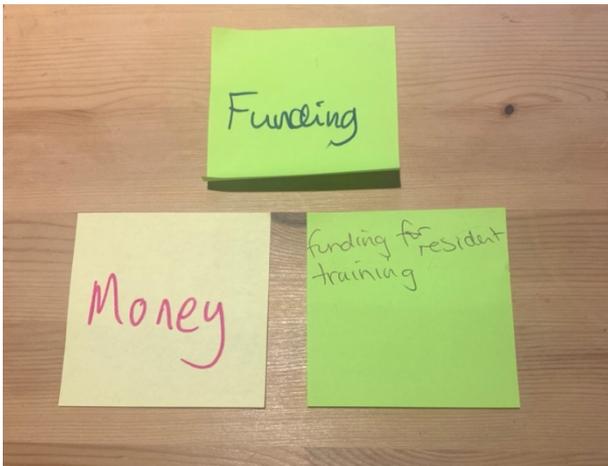
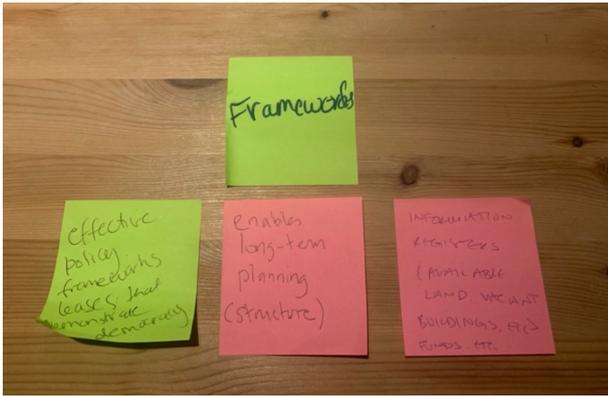


Figure 3 – 6. All the different resources identified by group A per category of resource shown in the logic model of figure 2.

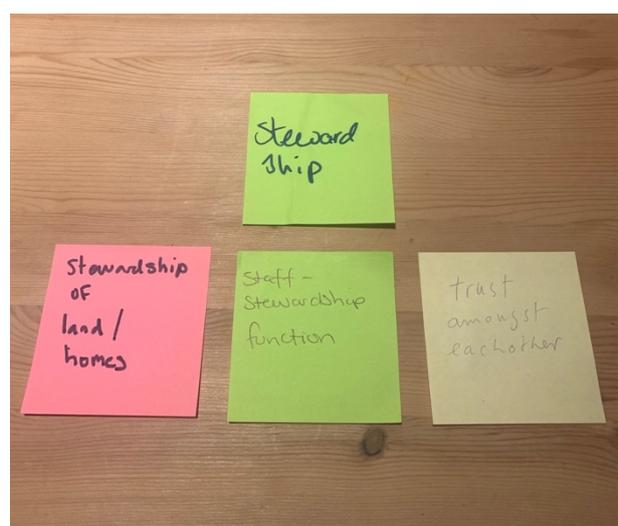
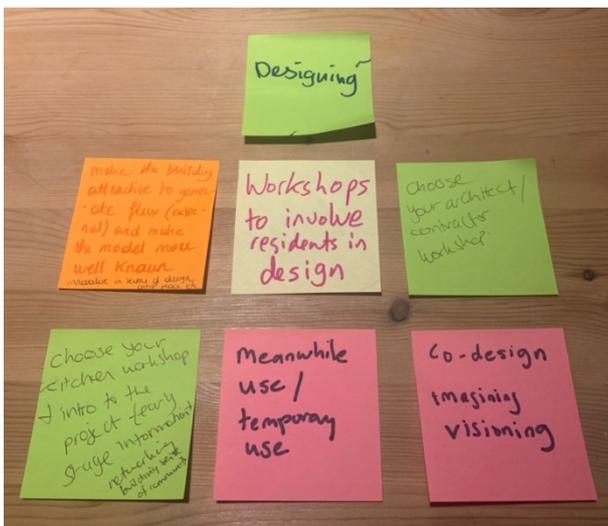
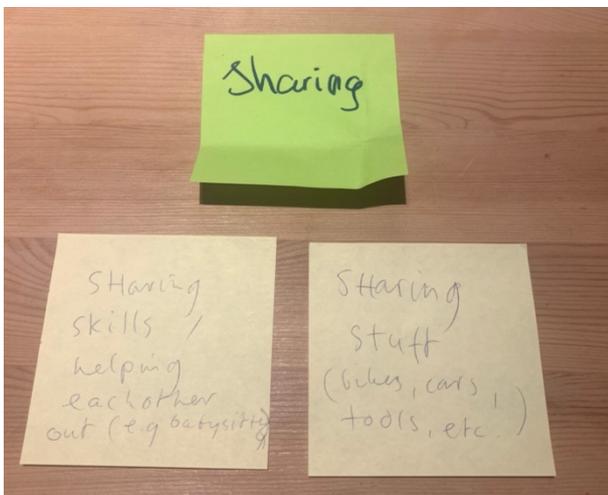
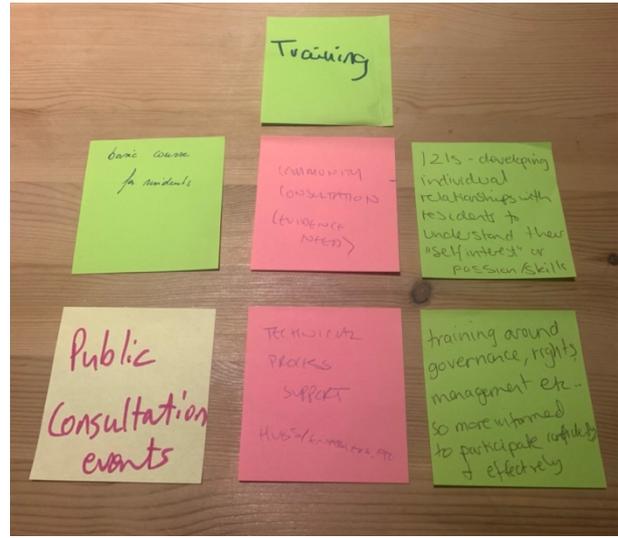
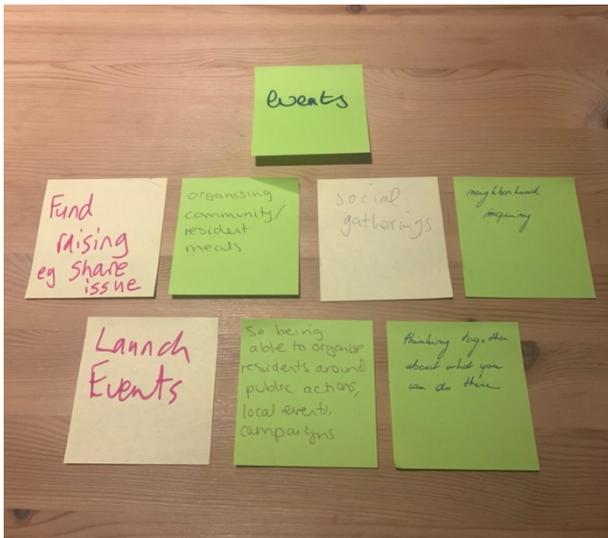


Figure 7 - 12. All the different activities identified by group A per category of activity shown in the logic model of figure 2.



Figure 13. Results of filling in the local model by group B.

## Appendix VII. Overview of the realisation of capabilities according to interviewees from the London CLT

Table 1. Realisation of capabilities when living in the St Clements development according to the interviewed residents

CAPABILITIES	INTERVIEWEES					
	CLT residents					Non-CLT residents
	A	B	C	E	F	D
I am able to live in an adequate house I can afford.	Green	Green	Green	Green	Green	Green
I am able to access and make use of the essential facilities that are present in my neighbourhood.	Green	Green	Green	Green	Green	Green
I am able to access and make use of the recreational facilities that are present in my neighbourhood.	Green	Green	Green	Green	Green	Green
I am able to access and make use of the educational facilities that are present in my neighbourhood.	Green	Green	Orange	Green	Green	Green
I am able to access and make use of the transportation facilities that are present in my neighbourhood.	Green	Green	Green	Green	Green	Red
I am able to access the public financial funds that are available for me or my neighbourhood.	Orange	Orange	Green	White	Orange	Orange
I am able to ask my neighbours or others in my neighbourhood for help.	Green	Green	Green	Green	Green	Green
I am able to consult experts in my neighbourhood when I have a need to.	Green	Green	Green	Green	Green	Green
I am able to learn new knowledge and skills in my neighbourhood.	Green	Orange	Green	Green	Green	Green
I am able to make connections and form relationships with my neighbours.	Green	Green	Green	Green	Green	Green
I am able to visit my neighbours.	White	Orange	Green	Green	Green	Green
I am able to participate in community activities in my neighbourhood when desired.	Green	Green	Green	Green	Green	Green
I am able to voice my opinions and problems to local authorities.	Green	Green	Green	Green	Orange	Green
I am able to feel safe in my neighbourhood.	Green	Green	Green	Green	Green	Green
I am able to feel secure within my current position in life.	Red	Green	Green	Green	Green	Green
I am able to feel at home in the neighbourhood.	White	Green	Green	White	Green	Green
I am able to feel a sense of community in the neighbourhood.	Green	Green	Green	Green	Green	Green

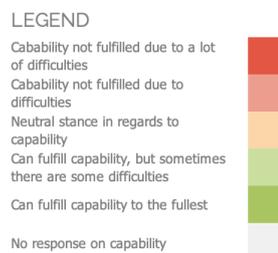
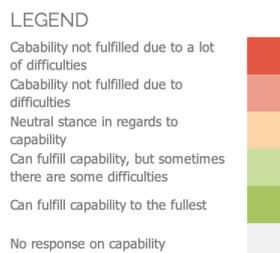


Table 2. Realisation of capabilities when living in their previous living situation according to the interviewed residents

CAPABILITIES	INTERVIEWEES				
	CLT residents				
	A	B	C	E	F
I am able to live in an adequate house I can afford.	Red	Red	Light Red	Light Red	Light Red
I am able to access and make use of the essential facilities that are present in my neighbourhood.	Green	Green	Green	Green	White
I am able to access and make use of the recreational facilities that are present in my neighbourhood.	Green	Green	Green	Green	White
I am able to access and make use of the educational facilities that are present in my neighbourhood.	Green	Green	Green	Green	White
I am able to access and make use of the transportation facilities that are present in my neighbourhood.	Green	Green	Green	Green	White
I am able to access the public financial funds that are available for me or my neighbourhood.	Orange	Orange	Green	White	White
I am able to ask my neighbours or others in my neighbourhood for help.	Green	Green	Green	Green	Light Red
I am able to consult experts in my neighbourhood when I have a need to.	Green	Green	Green	White	White
I am able to learn new knowledge and skills in my neighbourhood.	Green	Orange	Red	White	Light Red
I am able to make connections and form relationships with my neighbours.	Green	Light Red	Green	Green	Green
I am able to visit my neighbours.	White	Orange	Green	Light Red	Light Red
I am able to participate in community activities in my neighbourhood when desired.	White	Green	Green	Orange	Orange
I am able to voice my opinions and problems to local authorities.	Orange	Green	Green	Orange	Orange
I am able to feel safe in my neighbourhood.	Green	Green	Green	Light Red	Light Red
I am able to feel secure within my current position in life.	Light Red	Light Red	White	Light Red	Light Red
I am able to feel at home in the neighbourhood.	White	Green	Green	White	White
I am able to feel a sense of community in the neighbourhood.	White	Light Red	Light Red	Light Red	White



## Appendix VIII. Overview of manners of impact on capabilities according to interviewees from the London CLT.

Green arrows mean an increasing influence, red arrows mean a decreasing influence.

	Influence	Conversion factor	Resource	Influence	Conversion factor	Resource	Influence	Conversion factor	Resource
I am able to live in an adequate house I can afford.	←		Housing by the CLT						
	←	Plenty of space							
	←		Transportation facilities						
	←	Adequate financial funding							
	←	High housing costs							
	←	Low of income							
I am able to access and make use of the essential facilities that are present in my neighbourhood. I am able to access and make use of the recreational facilities that are present in my neighbourhood.	←	High costs							
	←	Personal characteristics							
	←	High costs							
	←	School did not need to change	Staying in the local area						
	←	School did not need to change				Transportation facilities			
	←	Nearness to school	Location						
I am able to access and make use of the educational facilities that are present in my neighbourhood.	←	High costs							
	←	Location of development							
	←	High costs							
	←	Personal ignorance							
	←	Lack of promotion							
	←	Level of income 2x							
I am able to ask my neighbours or others in my neighbourhood for help.	←	Connection with neighbours 1x		←	Sharing experiences				
	←	Connection with CLT neighbours 1x		←	Knowing each other before moving in			CLT events before moving in	
	←		Online communication infrastructure		←				
	←	Sense of community 3x							
	←	Personal cultural background 1x							
	←	No connection with neighbours		←	Lack of shared interests 2x				
	←	Personal characteristics							
	←		Online communication infrastructure		←	Sense of community			
	←		Expert knowledge from neighbours		←				Job
	←		Expert knowledge from neighbours		←				Online communication infrastructure
I am able to consult experts in my neighbourhood when I have a need to.	←	High costs (2x)							
	←	Connection with neighbours 1x		←	Sharing experiences				
	←	Connection with neighbours 1x		←	Sharing facilities				
	←	Sharing experiences		←	Diversity within the community				Formal meetings
	←	Formal meetings		←	Organisation by CLT				
	←	Connection wider neighbourhood							
	←	Online communication infrastructure 3x							
	←	Personal characteristics							
	←	No time							
	←	No connection with neighbours							
I am able to learn new knowledge and skills in my neighbourhood.	←	No shared communal space							

Influence	Conversion factor	Resource	Influence	Conversion factor	Resource	Influence	Conversion factor	Resource
I am able to make connections and form relationships with my neighbours.	Connection to the wider neighbourhood	↓	Essential facilities in the neighbourhood	↓	Recreational facilities in the neighbourhood	↓		
	Connection to the wider neighbourhood	↓	Participation in activities in the wider neighbourhood	↓		↓		
	Connection to the wider neighbourhood	↓	Difficulties in communication	↓		↓		
	Connection to the wider neighbourhood	↓	Urban design of development	↓		↓		
	Connection to the wider neighbourhood	↓	Knowing each other before moving in	↓		↓		CLT events before moving in
	Connection with CLT neighbours	↓	Sharing experiences	↓		↓		Allocation policy CLT
	Connection with CLT neighbours	↓	Collaboration on housing issues	↓		↓		
	Connection with CLT neighbours	↓	Children	↓		↓		
	Connection with CLT neighbours	↓	Proximity to each other	↓		↓		Building design
	Connection with CLT neighbours	↓	Duration of stay	↓		↓		Connection with the area
	Connection with neighbours	↓	Interaction with neighbours	↓		↓		Communal space
	Connection with neighbours	↓	Personal characteristics	↓		↓		
	Connection with neighbours	↓	Community events	↓		↓		
	Connection with neighbours	↓	Interaction with neighbours	↓		↓		Casual meetings
	Connection with neighbours	↓	Interaction with neighbours	↓		↓		Building design
	Connection with neighbours	↓	Small acts of service	↓		↓		
	Connection with neighbours	↓	Children	↓		↓		
	Connection with neighbours	↓	Sharing experiences	↓		↓		
	Connection with neighbours	↓	Sharing information	↓	Online communication infrastructure	↓		Online communication infrastructure
	Connection with neighbours	↓	Mutation in tenants	↓		↓		
	Connection with neighbours	↓	Differences in values	↓		↓		
	Connection with neighbours	↓	Lack of community events	↓		↓		
	Connection with neighbours	↓	Building design	↓		↓		
	Connection with neighbours	↓	Personal characteristics	↓		↓		
I am able to visit my neighbours.	Proximity to each other	↓						
	Children	↓						
	Personal characteristics	↓						
	Lack of personal time	↓						
	Personal characteristics	↓						

	Influence	Conversion factor	Resource	Influence	Conversion factor	Resource	Influence	Conversion factor	Resource
I am able to participate in community activities in my neighbourhood when desired.	←	Connection with neighbours							
	←	Connection with CLT neighbours							
	←	Giving back to the London CLT		←	Gratitude		←		Housing by the CLT
	←	Religion							
	←	Personal preference							
	←	Personal cultural background							
	←	COVID-19							
	←	Lack of personal time							
	←	Personal characteristics							
	←	Collaboration							
I am able to voice my opinions and problems to local authorities.	←	Level of responsibility		←	Housing ownership		←		Tenure model CLT
	←	Profession							
	←	Online communication infrastructure							
	←	Level of responsibility							
	←	Level of action							
	←	Connection with neighbours							
	←	Building layout							
	←	Open space		←	Urban design				
	←	Level of activity							
	←	Sense of community							
I am able to feel safe in my neighbourhood.	←	Housing quality							
	←	Location of development							
	←		Communal space	←	Urban design				
	←	Lighting							
	←	Building layout							
	←	Major societal events							
	←	Criminal activity							

	Influence	Conversion factor	Resource	Influence	Conversion factor	Resource	Influence	Conversion factor	Resource	Influence	Conversion factor	Resource
I am able to feel secure within my current position in life.	←	<b>Housing security</b>		←		<b>CLT housing</b>		←				
	←	<b>Housing security</b>		←	<b>Housing ownership</b>		←	<b>Tenure model CLT</b>				
	←	Financial security		←	Job security							
	←	Health and well-being										
	←	Personal mindset										
	→	Major societal events										
	→	Increase in costs of living										
	←	Connection with neighbours										
	←	Housing ownership		←	Tenure model CLT							
	←	Connection with CLT neighbours		←	Knowing each other before moving in							CLT events before moving in
I am able to feel a sense of community in the neighbourhood.	←	Safety										
	→	Housing needs not met										
	→	No housing ownership										
	←	Connection with CLT neighbours		←	Knowing each other before moving in							CLT events before moving in
	←	Connection with CLT neighbours										
	←	Diversity		←	Mixing tenure							
	←	Shared values		←	Allocation policy CLT							
	←	Building design										
	←	Sharing experiences										
	→	Mutation in tenants										
→	Building design											
→	Differences in values											
→	Personal characteristics											