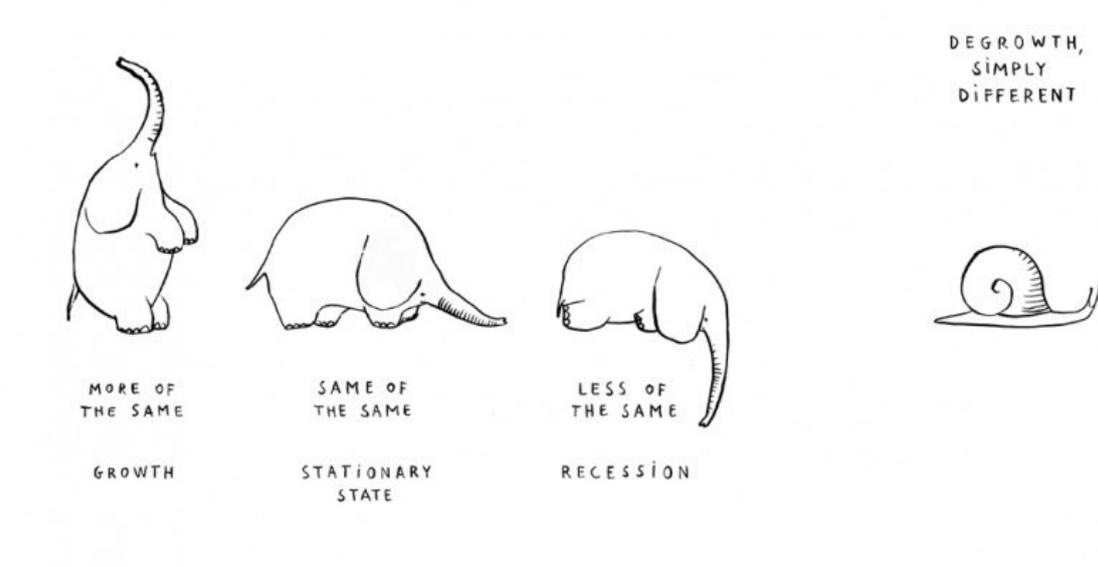


Degrowth and Social Innovation

An Analysis of Social Innovation Initiatives in Berne



Master Thesis

Andrea Winiger

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Université de Genève
Institut de démographie et socioéconomie

Supervisors

Prof. Jean-Michel Bonvin
Institut de démographie et socioéconomie, Université de Genève

Prof. Heike Mayer
Institute of Geography, Economic Geography, University of Berne

Abstract

Given the countless negative side effects of the growth strategies pursued by western economies in the past centuries the time seems ripe for a paradigm shift. The concept of degrowth seems to be a promising approach for replacing the current growth paradigm. This research analyses if innovation and in particular social innovation would be appropriate drivers for such a change towards degrowth. Furthermore, it examines what would be relevant factors for such innovations to be successful. More specifically, the study looks at what factors of success, challenges and framework conditions, four social innovation initiatives in Bern face. The necessary data has been collected through semi-structured interviews and a focus group. A qualitative content analysis has been conducted for analysing the data. The results show that not all types of innovations are equally suitable drivers of change towards degrowth. Non-material innovation, such as for example social innovation, are to be preferred compared to material innovations due to the growth effects of the latter. Moreover, several common factors of success for the social innovation initiatives in Berne were identified. Finally, possible solutions for one particular challenge of the analysed social innovation initiatives were developed during the focus group.

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1. Introduction

“Growth is among the most powerful ideas of modern times” (Teune 1988: 23).

The ideology of growth underlies current socioeconomic and political systems and the pursuit of growth is an accepted key policy goal across all political divides (Schmelzer 2016). Since the twentieth century, such growth policies have caused the standards of life of millions of people to rise (Ibid.). Yet, such growth strategies also have negative consequences. The irreversible damage of nature as well as the unsustainable exploitation of natural resources are the most prominent of these negative effects (Porritt 2005). Another undesirable implication is an increasing inequality as the benefits of such growth policies are distributed very unevenly among countries and social classes (Schmelzer & Passadakis 2011). Further, some scholars question the relation between material growth and well-being saying that growth does not necessarily lead to increased life satisfaction, especially if a certain standard of life has already been reached (Pennekamp 2011). Therefore, in the past years’ growth criticism has gained importance even though it still occupies a marginalized position within the economic sciences and sciences in general not least because of a very strong belief in growth which is deeply anchored in our society. One of the suggested alternatives to the currently predominant growth paradigm is the degrowth approach which advocates a reorganisation and shrinking of the western economies to an environmentally and socially viable level (Schmelzer & Passadakis 2011; Paech 2015; Schor 2016). Given the severity of ecological, social and economic problems facing us today, a change of the economic as well as societal structures in the direction of degrowth seems to be necessary. In this context the question arises how can such a reorganisation be achieved. In order to establish such an alternative organisation of the society and the economy, profound transition processes are needed. Innovation could be a possible driver for such a change and reorganisation towards degrowth. Nowadays in particular social innovations are praised as promising drivers of change (European Commission 2010). However, innovation is considered to generate growth which in the context of degrowth would be unwanted (Paech 2012). Thus, this raises the question if innovation would be an appropriate driver of change towards degrowth and in this regard, are there any differences between different types of innovations.

This leads to the two research questions which will guide the first part of this research:

- 1. Can innovations and in particular social innovations contribute to a transformation towards degrowth?**
- 2. What kind of innovations are particularly suitable drivers for change towards degrowth?**

Based on these two research questions this research analyses if innovations are suitable drivers of change in the direction of degrowth. Further it is examined if all different types of innovations are equally suitable or not suitable, or if there are any differences in this regard. With the intention of bringing about a transformation to degrowth, it is important to know which drivers of change are suitable and which are not. Assumed that innovations or at least some particular types of innovations turn out to be appropriate instruments for achieving the wanted change, the next question which arises, concerns the success of these innovations. What makes such innovations successful? After having looked at innovation at a more abstract theoretical level, the attention will be turned to a more concrete and practical level. In the past years various movements and initiatives have emerged which aim at contributing to the transformation towards a society which does not depend on economic growth. This is also true for the city of Berne. The question, what makes these social innovation initiatives successful, is at the centre of the second part of this research guided by the following three research questions:

- 3. What are factors of success of social innovation initiatives in Berne?**
- 4. What are the challenges social innovation initiatives in Berne face and what could be possible solutions for these challenges?**
- 5. In what framework conditions do social innovation initiatives in Berne operate?**

As Matthias Schmelzer and Alexis Passadakis (2011) point out, such initiatives form the basis of a future degrowth economy and society. That is the reason why it is important to have a closer look at such initiatives and analyse what makes them successful. The aim of this empirical analysis is to identify success factors, challenges and framework conditions which successful social innovation initiatives in Berne face.

The research is structured as follows: the first part is dedicated to the theoretical research questions. After looking at the scientific context and reviewing the existing degrowth and innovation literature the two concepts will be brought together for answering the first and the second research question. The empirical research question will be treated in the second part of the research. More concretely, four social innovation initiatives which are active in different contexts will be analysed. The theory of how to create successful change from Kora Kristof (Kristof 2010a; 2010b) will serve as the theoretical framework. Data is collected through interviews and a focus group and analysed with the help of a qualitative content analysis.

2. Scientific context

2.1 Economic growth criticism

Since the twentieth century the ideology of economic growth has been at the core of our socio-economic and political systems (Schmelzer 2016: 1-2). Economic growth is also inseparably linked with the capitalist societies we live in as continuous accumulation of capital and the competition for wealth and power among national states are key features of these societies (Schmelzer 2016: 10). The pursuit of growth has been broadly accepted as key policy goal all over the world. Some scholars describe this overarching focus on growth as a fetish and identify a quasi-religious adoration of growth by economists and policy makers (see Hamilton 2004; McNeill 2001). Furthermore Schmelzer (2016: 1-6) points out, how the corresponding social and economic policies based on the all-encompassing priority of economic growth, have fundamentally changed human life. Millions of people participated in the constantly increasing production and consumption of goods and services (Ibid.:1-6). According to him, thanks to economic growth the living standards of millions of people changed for the better, even though geographically and socially very unevenly. At the same time, the tremendous environmental and social changes caused by economic growth are threatening the livelihood of current and of future generations (Ibid.:1-6). Therefore, he further argues it seems legitimate to question the desirability or possibility of further economic growth in industrialized countries (Ibid.: 1-6). Such growth criticism gained in importance in the past years. The next sections provide an overview of the history of economic growth criticism as well as a summary of the different aspects of current growth criticism.

2.1.1 A short history of economic growth criticism

Since the last economic crisis in 2008/2009 the debate about economic growth has been newly revitalized. However, according to Steurer (2010: 423- 424) the controversy about economic growth firstly emerged half a century ago and is nothing new. He presents an historical overview of growth criticism which will be summarized in this section (Ibid.: 423-427). According to him, it all started in the 1950s with the so-called quantitative growth-paradigm according to which all economic, social and political problems can be solved by

economic growth. In the 1970s ecological problems have also been added to this paradigm. As a consequence, economic growth has become (and still is) the primary political goal of governments (Ibid.: 423-427). At the same time first critical voices emerged which focused mainly on social aspects of economic growth (Ibid.: 423-427). The Austrian economist Leopold Kohr was among the first critics. According to him, the western economies have already exceeded the critical size and reached an oversize. As a result, further growth does not bring progress but causes the standard of living to decrease (see Kohr 1962). Some years later the British economist Ezra J. Mishan published a more conservative growth criticism. He argues that economic growth destroys family structures and good morals. Moreover, it threatens the stability of institutions and puts in danger public security (see Mishan 1968). Later E.F Schumacher further developed Kohl's ideas and published 'Small is beautiful: a study as if people mattered'. Schumacher argues that the size, complexity and centrality of technologies are problematic. As an alternative he is in favour of a decentralized, small-scale and needs oriented way of production in which people are engaged in meaningful activities by using their skills and their mind (see Schumacher 2013: 9-17, 1973). These first critics mainly focused on social and societal but not yet on ecological aspects of economic growth and were not able to attract the attention of the general public (Steurer 2012: 423-427). Only at the beginning of the 1970s did growth criticism based on ecological aspects emerge (Ibid.: 423-427). Due to the publication of the famous book 'The Limits to Growth' by Meadow and her co-authors the growth controversy has reached a larger audience. The main message of 'the limits to growth' is that the increase in efficiency due to technical progress is never sufficient to decouple economic growth from resource use (see Meadows et al. 1972). The debate took place not only among experts but also among politicians and the general public (Steurer 2012: 423-427). Until today the field of growth criticism which is putting forward ecological arguments is the most known (Ibid.: 423-427). Around the same time various new social movements critical of the economic system and its growth orientation such as Marxist anticapitalistic movements, movements critical of consumer culture or anti-globalisation movements emerged (Ibid.: 423-427). Likewise, the fields of ecological economics (see Daly 1973; Georgescu-Roegen 1979) and the field of feminist economies (see Warrior 1974) have been evolving. Schmelzer and Passadakis (2011: 62) add that in the late 1960s and early 1970s growth criticism has been widespread and came from social activists, academics as well as politicians. Further, Muraca (2015: 108) argues that the concept of sustainable

development which tries to reconcile growth and ecological objectives has emerged in the 1980s and temporarily overshadowed growth criticism. Steurer (2010: 423- 427) continues by suggesting that the oil crisis and subsequent economic crisis which hit the world economy in the 1970s were two other important factors that weakened growth criticism. Since the financial and economic crisis in 2008/2009 until today growth criticism is on the upswing again. To sum up we can conclude that the growth controversy has a long history and includes various aspects.

2.1.2 Today's economic growth criticism

According to Pennekamp (2011:7) the most often mentioned and most dominant concern in the growth controversy today relates to **ecological aspects**. In this context, the already mentioned publication by the Club of Rome 'The Limits to Growth' plays a key role (Ibid.: 6-7). Advocates of this approach argue that continued economic growth causes irreversible damage of nature and the exploitation of natural resources (Ibid.: 6). Schmelzer and Passadakis (2011: 59) add that the exploitation of nature also destroys the basis of life for future generations. They further specify that the ecological limits are two-fold (Ibid.: 59). The limited amount of available resources constitutes the first limit. The second limit consists of the capacity of the nature to absorb the waste produced by the economy. In other words, infinite growth is not possible on a planet with finite resources (Ibid.: 59). Furthermore, Porritt (2005) argues that the increasing negative impact on the climate is another consequence of the current economic growth model. The debate about decoupling economic growth and the environmental impact plays an important role in that regard as Pennekamp (2011:8) explains. On the one hand, growth critics argue that such a decoupling will never be possible mainly because of rebound-effects¹. Growth advocates on the other hand, argue that decoupling is possible due to technological progress and therefore, economic growth can one day be independent of resource use.

¹ Rebound-effects refer to the fact that an increasing resource-efficiency does not necessarily lead to a decrease in the overall resource-use. This phenomenon will be discussed in more detail at a later stage of this research.

According to Schmelzer and Passadakis (2011: 59), another argument of academics critical of continuous economic growth concerns **social aspects**. They claim that economic growth does not (always) have a positive effect on peoples' welfare, quality of life or happiness (see for example Gadrey & Jany-Catrice 2006). Some authors argue that initially economic growth can have a positive impact but once a certain level of income has been reached the positive effect vanishes or becomes even negative (see Gadrey und Jany-Catrice 2006). Other scholars believe that there is no relationship between growth and welfare at all (Schmelzer & Passadakis 2011: 59). For yet others, economic growth is even to be blamed for a decreasing quality of life as its social and ecological costs exceed its benefits (Ibid.: 59). According to Siegel (2006) for example, human needs are overfulfilled at a certain production and consumption level. He therefore argues, the limits of growth are the limits of human needs. He further considers that this point of saturation has already been reached in the western world and further growth would have a negative impact on peoples' health and well-being. Pickett and Wilkinson (2013) add that growth leads to social inequality and thus to more individual dissatisfaction, physical and mental health problems, social tensions and structural violence. As Pennekamp (2011: 8) summarizes, all the above mentioned scholars would endorse a redefined concept of welfare which is completely independent of material expansion. According to them, welfare and high quality of life is possible without economic growth (Ibid.: 8).

Still other aspects of growth criticism can be found in the **feminist** context as stated by Bauhard (2013a). She names the central elements of feminist growth criticisms coupled with fundamental feminist critique of capitalism (Bauhardt 2013a; 2013b). At its core stands the organisation of social reproduction in our society, which is ensured by women's unpaid and not marketed care work (Bauhard 2013a). This unpaid work by women is considered to be an infinite natural resource free of charge, the same way as nature is considered to be a free and unlimited resource (Ibid.). According to feminist economists, the exploitation of nature as well as women's unpaid care work is the foundation of growth in capitalist economies (Ibid.). In other words, feminist economists criticise the current growth oriented capitalistic economic system because it is based on the exploitation of unpaid female work in the reproductive sphere (Ibid.).

Among others Binswanger (2006) argues that there are **inherent limits to growth** within the current economic system and ignoring these inherent limits results in economic crisis and instability. In tangible terms, he suggests that unlimited growth causes the quantity of money to increase which leads to speculative financial bubbles and economic instability. Consequently, growth comes with risks which can seriously damage the economic system and in order to avoid such risks in the future, economic growth needs to be decreased (Ibid.).

2.1.3 Alternative economic models

As diverse as the growth criticism literature as diverse is the literature of alternative economic and societal models. According to Pennekamp (2011: 22-35), three different models can be identified; **low-growth, steady state (zero growth) or degrowth.** He characterises these three models as follows (Ibid.: 22-35). Low-growth models propose a decrease of per capita GDP growth (see among others Victor 2008). Steady-State models go one step further and propose an economy which neither grows nor shrinks (zero growth economy) (see among others Daly 2005). In this context Daly argues that except for the last two centuries people have always lived in systems without economic growth. Kerschner (2010: 544-545) adds, the possibility of a stationary steady-state economy has long been part of economic theory. Economists like Thomas Maltus, Karl Marx, John Stuart Mill or Joseph Schumpeter believed in the existence and also desirability of a steady state without economic growth (Ibid.: 544-545). Most of the advocates of steady-state models recommend the stabilization of the economy at today's high level of production and consumption. Finally, Pennekamp (2011: 35) describes the model of degrowth. According to him, its supporters argue that especially western economies have by far already exceeded the level at which a sustainable (steady state) economy would be possible. Accordingly, they call for an organised, coordinated and controlled overall economic contraction as well as a general modification of the economic order (Ibid.: 35). The ultimate goal is a steady-state economy at a lower level of production and consumption in which the basic human needs are satisfied, a high quality of life is ensured, the ecological impacts are minimized and prosperity and well-being are nationally as well as internationally equally distributed (Degrowth Conference of Paris 2010). Given the severity and urgency of ecological, social and economic problems we face today, I believe that the degrowth approach offers the most promising possible solution. Low-growth model might mitigate some of the

above-mentioned problems generated by continuous economic growth, however, it does not solve the cause of the problems. Steady-state economies recommend the stabilization of the economy at today's high level of production and consumption which I believe does exceed the ecological limits of the planet. That is why, a reduction of the current production and consumption level combined with profound changes in the economic and societal order seem to be inevitable from my point of view. Therefore, in the next section the history as well as different approaches of the degrowth movement will be introduced.

2.2 Degrowth

2.2.1 History of the degrowth movement

Today degrowth is still a much marginalised concept not least because of a very strong belief in growth which is deeply anchored in our society. However, a growing number of scholars and activists endorse the idea of economic and societal structures which are not based on growth. Muraca (2015: 108-110) offers a useful overview of the history of the degrowth movement which will be summarized in this section. According to her, the publication of the book '*Demain la décroissance*' by Nicholas Georgescu-Roegen in 1979 can be seen as the origins of today's degrowth movement. She further suggests that after the publication, the term *décroissance* has entered into the intellectual and scientific debates in France. Then in the 1980s the concept of degrowth has been overshadowed by the new concept of sustainable development (Ibid.:108-110). An UNESCO colloquium in Paris in 2002, at which the current development model has been questioned radically, can be considered the hour of birth of the new degrowth movement (Ibid.: 108-110). In 2004 and 2006 the French economists Serge Latouche, an important pioneer of the degrowth movement, published his degrowth approaches which have been further developed in his book 'Farewell to Growth' (see Latouche und Macey 2009) (Ibid.: 108-110). According to Muraca (2015: 108-110), around the same time, in 2008 the first international degrowth conference named 'Economic degrowth for Ecological Sustainability and Social Equity' took place in Paris. Ever since, the degrowth movement has been gradually growing and has been acknowledged as multifarious international movement (Ibid.: 108-110). The international degrowth conferences have also continued and are held every second year (Ibid.: 108-110). The next international degrowth

conference in 2018 will take place at three different venues; in Malmö, Brussels and Mexico City (Degrowth Webportal).²

2.2.2 Defining degrowth

It is not simple to capture the meaning of degrowth³. Degrowth is neither a clearly defined economic, political or social concept nor is it a theory or a description of a ready-made system (Latouche 2006: 16; Martínez-Alier et al. 2010). Degrowth is rather what Kallis (2011: 874) calls an ‘umbrella keyword’; a multi-faceted pluralistic framework that brings together researchers, politicians and activists critical of growth (Pennekamp 2011: 34; Posse 2015: 26-27). Under the banner of degrowth, they develop alternatives to the current growth driven model of society (Latouche et al. 2015: 25-26). However, their backgrounds, views and ideas are very heterogeneous and can be found across the entire political spectrum (Eversberg & Schmelzer 2016:11). Nevertheless, a common denominator can be identified. They share the same opinion regarding today’s overarching focus on growth; economic growth should no longer be a key economic goal. It is true that this is a very general common denominator. Critics might therefore argue that the concept of degrowth is ambiguous and lacks a clear definition which is often required in the scientific context. Yet, I agree with Kallis (2011: 873) that many concepts in social science are characterized by some degree of ambiguity which in no way compromises their usefulness. Various approaches and concepts of degrowth emerged during the last years. The different degrowth approaches explore different models of societies and economies beyond the paradigm of endless growth. Schmelzer (2015: 118-121) has categorized these various approaches into the following five categories;

1. Conservative degrowth approach
2. Degrowth approach focused on social reform
3. Degrowth approach focused on sufficiency
4. Feminist degrowth approach
5. Degrowth approach critical of capitalism

² For more information about the international degrowth conferences see:

<https://www.degrowth.info/en/conferences/> (visited 28.03.2018)

³ Other terms which are sometimes used as synonyms are post-growth or post-capitalism. In French the term *Décroissance* and in German the term *Postwachstum* are common.

On the following pages these different approaches and tendencies of degrowth will be introduced. As this research will be based on the feminist degrowth approach as well as the degrowth approach critical of capitalism, they will be explained in greater detail compared to the other approaches.

2.2.3 Conservative degrowth approach

According to Schmelzer (2015: 118-119), proponents of the conservative degrowth approach believe a shrinking of the economy is necessary due to systemic growth limits, ecological limits, glutted markets and excessive welfare states (see for example Miegel 2010). According to them, shrinking is an inevitable fate of all modern industrial societies because they have all lived beyond their means and therefore need to tighten their belts now (Ibid.: 118-119). They further argue that in order to compensate this economic shrinking various measures will be necessary as Schmelzer (2015: 118-119) explains. Firstly, they support a change in values towards more personal responsibility and more importance of volunteer work. Secondly, they demand a dismantling of the welfare state as private voluntary donations should replace public redistribution mechanisms. Finally, they would like to strengthen patriarchal family structures and with that, increase the unpaid care work carried out by women. The conservative degrowth approach is influenced by neoliberal ideology and often serves as justification for cuts in social services, privatisations and a return to or consolidation of a gender discriminatory division of labour (Ibid.: 118-119).

2.2.4 Degrowth approach focused on social reform

As Irmi Seidl and Angelika Zahrnt (2010) point out, a growth-driven society is characterized by policies and institutions which are predicated upon ever increasing production and consumption. As a consequence, social and economic problems such as rising inequality, unemployment, public debt, social tensions, and even an undermining of democracy will be reinforced by decreasing growth (Schmelzer 2016: 5). Therefore, some authors focus more on social reform of growth-dependent institutions than on the process of degrowth itself (see Seidl & Zahrnt 2010). Like the proponents of the other degrowth approaches they object and criticise the political prioritisation of economic growth (Seidl & Zahrnt 2010:19-22). However, their main objective is to reorganize existing growth-dependent institutions and

structures such as pension systems, health care, education, employment, consumption, tax system or financial markets in order to make them growth-independent (Ibid.: 18). In doing so, they leave open the question whether or not the economy would continue growing (Ibid.: 34). Ecological tax reform, policies of sufficiency, sustainable consumption, alternative indicators for measuring prosperity or a citizens health insurance system based on the principle of solidarity are some of the reorganisation measures they propose (Schmelzer 2015:118-119).

2.2.5 Degrowth approach focused on sufficiency

The German economist Nico Paech is one of the best-known advocates for the sufficiency based approach of degrowth (see Paech 2012; 2015). He shares the point of view of many scholars in the field of degrowth that a decoupling of economic growth from environmental degradations is not possible (Paech 2015: 71-111). That's why, from his point of view degrowth is unavoidable given the ecological limits of our planet (Ibid: 13-25). Paech (2015: 113-141) is one of the few academics to propose a concrete model of a degrowth economy based on two keystones. The first keystone refers to an individual strategy of sufficiency and cutting consumption. He frames this reduction of individual consumption as a liberation from abundance rather than the loss of consumption possibilities. A radical reduction of the supply of goods and services from the outside combined with the development of regional and local economies constitutes the second keystone of Paech's degrowth economy. More concretely, he suggests for example a redistribution of gainful employment, an increase in self-sufficiency or the expansion of repair work of everyday objects.

2.2.6 Feminist degrowth approach

What Schmelzer (2015: 21) calls the feminist degrowth approach, has its origins in the field of feminist economics and has not been explicitly developed in the context of the degrowth debate (see Bennholdt-Thomsen 2010; Biesecker 2011; Netzwerk Vorsorgendes Wirtschaften 2013; Bauhardt 2013a). Still, it constitutes an important source of inspiration and some authors explicitly refer to the concept of degrowth in their work (see for example Bennholdt-Thomsen 2010 or Biesecker & Winterfeld 2013). One of the major points of criticism of feminist economists is the current differentiation between the sphere of production and the

sphere of reproduction and the resulting non-recognition of the latter (Biesecker 2011: 75). Only activities which lead to marketable goods and services are considered to be productive and are public, socially recognized and remunerated (trouble everyday collective 2017: 308-309). On the other hand, care work⁴ activities belong to the sphere of reproduction and are carried out in private, mostly unpaid or badly paid and are not socially recognized (Ibid.: 308-309). Reproduction activities are the basis for any economic system to function, as it serves the purpose of maintaining and reproducing human labour (Knobloch 2013: 30). Neumann and Winker (2017: 84) record that from the day of their birth people are dependent on the care of others in order to survive. Even when grown-up and healthy, people rely on other people in their daily life and are in need of reproduction activities. According to Biesecker (2011: 75-77), feminist economists therefore argue, that economic growth within a capitalist system is actually based on the exploitation of the sphere of reproduction and the destruction of nature which causes today's socio-ecological crisis. Consequently, they conclude that the capitalist system is generating economic growth and wealth by destroying its own basis for existence (Ibid.: 75-77). This kind of economy is not able to survive in the long term and therefore another economy is needed (Ibid.: 75-77). Hence, the question how to organise the economy in order to enable a decent life for all human beings, is one of the core questions in the field of feminist economics where the main focus lies on the needs of the people and how to meet them (trouble everyday collective 2017: 308-309). Further feminist economists claim that the so far neglected sphere of reproduction is to be recognized and actively organized (Biesecker 2011: 75-77).

A more concrete approach towards how such an economy could look is proposed by the 'Network Caring Economy'⁵ (*Netzwerk Vorsorgendes Wirtschaften*), an association of women scientists and practitioners from Germany, Austria and Switzerland. Biesecker (2011: 77-82) summarized and describes this approach as follows. In order to capture the integrity of all

⁴ Care work refers to: "...the unpaid and paid work with and for the following four dependent group of persons such as: children, people which are temporarily sick, elderly in need of care or other support, people with permanent intellectual or psychological impairments. As a fifth group often the unpaid care work with or for adult people living in the same household is mentioned" (Gubitzer und Mader 2011: 12).

⁵ For more information about the Network Caring Economy: www.vorsorgendeswirtschaften.de (visited 23.02.2018)

economic activities the concept of (re)productivity⁶ (*(Re)Produktivität*) is introduced (Ibid.: 77-82). It includes activities in the productive and reproductive sphere as well as the productivity of nature. Instead of following a logic of maximalization, the authors of the network suggest a logic of maintenance (Ibid.: 77-82). Biesecker (2011: 77-82) further explains that the proposed caring economy suggests three operational principles namely, care (*Vorsorge*), cooperation (*Kooperation*) and to be oriented towards what is necessary for a decent life (*Orientierung am für ein gutes Leben Notwendigen*). The principle of care refers to caring for the needs of the current generation, the future generations and the regenerative capacity of nature (Ibid.: 78). Human beings are considered to be social beings that live in social relationships and care for themselves and others rather than independent subjects (Ibid.: 78). Cooperating refers to the idea of collectively looking for new ways of producing, consuming and working together rather than individually (Ibid.: 78). In this context the notion of responsibility is important because future generations, as well as nature do not have any voice (Ibid.: 87). Accordingly, the current generation is responsible to take their interests equally into account (Ibid.: 78). To be oriented towards what is necessary for a decent life means to aim at the fulfilment of everybody's needs rather than for an increase of individual profit or growth rates (Ibid.: 79). Regarding the suggestion what does it mean to lead a decent life the authors refer to the capability approach of Martha Nussbaum and Amartya Sen⁷ (Ibid.: 79). At the same time they add that what is necessary for a decent life can vary from one culture to another and needs to be constantly redefined and renegotiated through a collective dialogue (Ibid.: 79). The care economy further includes three criteria for economic activities (including productive, reproductive and ecological activities) which are also elaborated by Biesecker (2011: 80-82). The first criterion refers to the social-ecological quality of economic activities (Ibid.: 80-81). More concretely, the authors envisage to collectively negotiate criteria for decent work and to organize all activities of (re)productivity accordingly (Ibid.: 80-81). This includes according to them, a reduction of gainful employment, a revaluation of care work and civil engagement as well as the equal redistribution of all tasks among genders. Sufficiency is the second criterion (Ibid.: 81). The idea behind it is that people are currently used to the principle of growth and 'to always want

⁶ For more information about the concept of (re)productivity see Biesecker und Hofmeister 2013

⁷ For more information about the capability approach see Nussbaum 1998; Bonvin & Farvaque 2008;

to have more' (Ibid.: 81). Sufficiency is seen as a protection against overstepping ecological and social boundaries which is resistant against growth pressure (Ibid.: 81). Finally, gender equality constitutes the third criterion (Ibid.: 81-82). It is based on the conviction that a reorganisation of the economy is only feasible if gender equality in all fields is given (Ibid.: 81-82). Furthermore, all economic activities are organised democratically on local, regional, continental and global levels (Ibid.: 81-82). In other words, decisions about quality, technologies, forms of employment, distribution of work, and the like are no longer left to markets but are made by people in democratic processes (Ibid.: 81-82).

2.2.7 Degrowth approach critical of capitalism

According to Schmelzer (2015:20-21) supporters of the fifth degrowth approach critical of capitalism emphasise the encompassing societal changes which a socio-ecological transformation would involve (see Schmelzer und Passadakis 2011; Schmelzer 2015; Burkhart et al. 2017a). They identify the capitalistic compulsion to grow and the ongoing commercialization and privatisation of more and more areas of life as the main causes of the current social and ecological crisis (Schmelzer 2015:20-21). Therefore, they take a stand for a non-capitalistic economic order. One of these possible economic orders is proposed by Schmelzer and Passadakis (2011: 76) under the designation "solidary degrowth economy" (*Solidarische Postwachstumsökonomie*). In a nutshell they suggest a strict social and ecological transformation of the current way of production and way of life which includes a democratically organised reduction of production and consumption (Ibid.: 67). The goal of such a solidary degrowth economy is to orient production and consumption towards a maximal satisfaction of needs without exceeding ecological borders by using only a minimum of labour, resources and production activities (Ibid.: 71). In order to reach this goal, the approach of solidary degrowth economy shares its orientation towards what is necessary for a decent life with the feminist approach (Ibid.: 67). It further supports cooperation instead of competition, it focuses on (re)production instead of separation between production and reproduction, it relies on collective use instead of private consumption, it prefers the principle of care to the retrospective treating of symptoms and it promotes decentralisation, and deglobalisation (Ibid.: 67). More specifically, Schmelzer and Passadakis (2011.: 74-89) put forward the following seven rough guidelines and some corresponding instruments for this

new economic and social order. They start with the solidarity-based economy (Ibid.: 74-75). Firstly, they emphasize the necessity to reverse the currently ongoing processes of commodification of vital goods such as water, air, oceans, forests, soil, food supply, living space and knowledge (Ibid.: 74-75). From their point of view neither the market nor the state should be in charge of the organisation and distribution of these goods (Ibid.: 74-75). Instead, they should be administered collectively and solidary (Ibid.: 74-75). Secondly, they welcome the process of commoning⁸ which refers to the expansion of common natural resources and goods, also in the field of production (Ibid.: 74-75 ; 89). They notice that there are already many solidarity-based economy initiatives and social movements all over the world which re-appropriated certain branches of production such as housing cooperatives, producer cooperatives, consumer cooperatives, community-based agriculture and so on (Ibid.: 74-75). Such a solidarity-based economy builds the foundation of the envisaged solidary degrowth economy (Ibid.: 74-75). However, they argue that these emerging initiatives and social movements operating in economic niches are not sufficient to bring about a real transformation (Ibid.: 75). Moreover, in the long term their existence is threatened through the growth pressure and competition of the capitalistic economy (Ibid.: 74). That is the reason why, Schmelzer and Passadakis (2011: 74-89) propose that these pioneer projects need to be accompanied by a strategy targeting at a higher-level economic transformation which is outlined by the remaining six guidelines. One of these higher level transformation guidelines concerns investment control (Ibid.: 76-78). In general, they suggest a reduction of investments as they stimulate growth (Ibid.: 76-78). The remaining investments should be reoriented toward the fields of the solidary degrowth economy and decision about investments need to be taken democratically and at a regional level (Ibid.: 76-78). Another guideline relates to the shrinking and regulation of financial markets which according to Schmelzer and Passadakis should be deglobalized and be subjected to genuine democratic control (Ibid.: 79-80). Further they suggest to abolish the field of investment banking and to democratize money creation⁹ (Ibid.: 79-80). The reorganisation of labour is the content of another guideline put forward by

⁸ For more information on commoning see Helfrich 2009

⁹ At the moment a political initiative in Switzerland also wants to change the way money is created by only granting the rights to do so to the national bank (and no longer to private banks). More information: <https://www.vollgeld-initiative.ch/>

the two authors (Ibid.: 80-82; 89). Its main goal is to redistribute labour fairly among all people (Ibid.: 80-82). The shrinking of the production and consumption will lead to a reduction in employment (Ibid.: 80-82). At the same time, a post-fossil and partially deindustrialised economy will need more workers in some sectors (Ibid.: 80-82). However, overall, the total amount of gainful work is to be reduced while at the same time the levels of incomes are to become more alike (Ibid.: 80-82). As a consequence, the time gained thanks to this reduction could enable a radical redistribution of the reproduction work equally among the genders (Ibid.: 80-82). Furthermore, Schmelzer and Passadakis (2011: 80-82) point to the fact that the additional free time also allows to acquire new knowledge and skills which can be useful in a solidary degrowth economy. Another inspiration as to what could be done with the surplus time is offered by the economist Frigga Haug (see Haug 2011). She suggests using the time for reproduction work, civic and political engagement and cultural self-realisation. The fifth guideline by Schmelzer and Passadakis (2011: 82-83) refers to a democratic economic policy. They argue that market mechanisms are of limited suitability as a means of guiding the necessary economic and social transformations. Instead they suggest democratic mechanisms of formulating economic policy. A global and national redistribution of income and wealth is proposed by the guideline about redistribution and social security (Ibid.: 84-86). A basic income securing a minimum subsistence level and social participation as well as a ceiling on high incomes are some of the proposed instruments (Ibid.: 84-86). Finally, the authors put forward a guideline concerning deglobalisation (Ibid.: 86-88). Arguing that the global free trade regime has ecologically and socially failed, they advocate for a decentralised and local production whenever reasonable. They list energy production or food production as sectors suitable for decentralised production. However, certain highly industrialised goods such as for example electronic devices are more reasonable to produce at a national or even continental level (Ibid.:86). Even though Schmelzer and Passadakis propose quite concrete guidelines and instruments for a transformation to a solidary degrowth economy they strongly highlight the fact that they do not want to suggest a ready-made model or a finalised plan (Ibid.: 67). Instead they intended to put forward some initial ideas and suggestions and emphasize that a great deal of further intellectual work is still necessary (Ibid.: 67). Moreover, they also insist on the fact that economic and social transformation to a solidary degrowth economy is a very complex process for which there is no simple solution (Ibid.: 91). On the contrary, as diverse political and economic interests are present, conflicting negotiation

processes are indispensable (Ibid.: 91). According to them these societal conflicts about the organisation of new ways of production and consumption and alternative ways of life are essential for the transformation process towards a solidary degrowth economy (Ibid.: 67).

After having given an overview of the different degrowth approaches, some considerations about what understanding of degrowth this research is based on will be outlined hereinafter. Neither the conservative approach, nor the approach based on social reform aim at deliberately bringing about economic shrinking with the objective of a decent life for everybody. Also, do they merely propose corrective measures within the system rather than profound modifications aiming at encompassing transformation processes (Schmelzer 2015:119). From my point of view, these suggestions are either inequitable (conservative approach) or not sufficient (approach based on social reform) with regards to the problems caused by continuous economic growth discussed above. The sufficiency based approach of degrowth provides some promising suggestions regarding the positive framing of a sufficient lifestyle and the development of regional and local economies. However, the issue of reproduction work is a blind spot not only of this approach but of the vast majority of the degrowth literature (see Bauhardt 2013b). I believe that the insights of feminist economy have been ignored too long already by the mainstream economists and proponents of degrowth economies should not repeat the same mistake. On the contrary, feminist approaches should be at the centre of any future economic order. Therefore, this research will be based on the degrowth approach critical of capitalism suggested by Schmelzer and Passadakis. It is (besides the feminist approach) the only approach which takes into consideration the issue of reproductive work. It further shares some basic concept with the feminist approach such the orientation towards what is necessary for a decent life as well as the focus on cooperation and care. Even though the approach already includes the basic concepts of the 'Network Caring Economy's care economy and shares other similar ideas, it will be complemented by other elements of feminist economies if necessary. Besides, I share the view of the supporters of the approach that the capitalistic economic order is irreconcilable with a strict social, ecological and democratic reorganization of the economy which targets the maximal satisfaction of the needs of all people while operating within ecological boundaries.

2.3 Need for change

From the previous sections which gave an overview about growth criticism and different degrowth approaches I conclude that a transformation towards a solidary degrowth economy is needed. At this point the question arises how such a transformation can be accomplished. Numerous academics from different disciplines are investigating the phenomena of (social) change and how it can be achieved. Discussing them and their different theories and approaches is not the purpose of this research and would go beyond its scope.¹⁰ However, several authors name innovation and in particular social innovation as possible drivers of such change. According to Schubert (2016: 407; 419), innovation has been and still is a driver for societal change which recently has become increasingly dominant. Likewise Howaldt and Schwarz (2010: 92) argue that innovations can be possible preconditions respectively, components of social change. For Howaldt and his co-authors (2014:57), in particular social innovation are crucial elements of social change. This view is also shared by Cajaiba-Santana (2014: 44) who suggests that social innovation actually is about social change. Therefore, the focus of this research will be on innovations as drivers of change. The concepts of innovation as well as social innovation will be introduced in the subsequent chapters.

2.3.1 Innovation

Innovation is not a recent phenomenon and some authors argue it is as old as mankind itself (Fagerberg 2011: 1). The creative capacity to innovate new things in order to satisfy human needs and improve living conditions contributed significantly to the development of human civilisations (Cajaiba-Santana 2014: 43). Or as Simms (2006: 391) puts it: “*Civilizations are the result of human innovations*”. According to Godin (2015: 281), nowadays, when referring to innovations most people intuitively think about economic innovation. Moreover, the term innovation is often used as a synonym for economic innovations such as technological innovations, product innovations or process innovations (Ibid.: 281). This economic interpretation of innovation is also reflected in the academic literature as the majority of studies on innovation undoubtedly refer to a technological and economic understanding of

¹⁰ For more an overview of theories and approaches of social change see Jäger and Weinzierl 2011

innovation (Ibid.: 281). Godin (2015: 281) further argues that many authors attribute the origin of the concept of innovation to the field of economics and in particular to the economist Joseph A. Schumpeter (see for example Staudenmaier 1985). He also assumes that this wrongfully attribution of the origin of innovation to the field of economics is due to the lack of literature regarding the history on the concept (Godin 2015: 281). That is why, he analysed the concept of innovation, its origins and its development over the past centuries (see Godin 2015). The following short overview about the historical context of the phenomenon is based on his analysis (Godin 2015:281-282: 287) and will show that only the economic perspective falls short of the concept of innovations. Godin argues that technically, innovation does introduce changes into an established order and was therefore for the most of its history a disputed and political concept (Ibid.: 281). Consequently, innovation was considered a deviant action or idea which has been prohibited and punished (Ibid.: 281). In the western world the concept of innovation first emerged in the field of religion during the reformation in the 16th and 17th century (Ibid.: 281; 287). The reformers were designated as innovators, at the time a derogatory label used by their opponents (Ibid.: 281; 287). Consequently, the explicit use of the term innovation by religious writers was a way to emphasize the polemic character of their content and to catch the attention of others (Ibid.: 281; 287). Later in the 18th century, the concept has also been applied to political revolutions and revolutionaries (Ibid.: 281). Here again the term innovation has been used in its at that time traditional pejorative sense. The next group of people accused of overthrowing the established (in particular) economic order were the social reformers of the 19th century (Ibid.: 282). Accordingly, they have also been accused of being innovators. During the course of the 19th century the representation of being revolutionary changed from being negative to being positive (Ibid.: 282). As a result, the concept of innovation developed a new and this time positive meaning (Ibid.: 282). Gradually the connotation of the term innovation became positive and gained political significance (Ibid.: 282). This was also due to the newly discovered instrumental function of innovation (Ibid.: 282). In other words, innovation was thought of as an instrument for satisfying human needs as well as accomplishing moral, political, social or material goals (Ibid.: 282). Furthermore, progress and utility the central values of modern times began to be linked with the concept of innovation (Ibid.:287).

Within the academic context, the concept of innovation has first been introduced in the field of sociology in order to explain social change by the French sociologist Gabriele Tarde who has put forward the idea of innovation in 1890 (Sundbo 2015: 169). According to Tarde, individuals who are behaving differently or who are making use of a new tool are at the origin of societal changes (Ibid.: 169-170). The change is spread in the society by other individuals who due to communication and social interaction are imitating this innovations (Ibid.: 169-170). Only later, in the 20th century the concept of innovation was used in the field of economics to explain economic growth (Godin 2015: 282). The economist Joseph A. Schumpeter is considered the originator of the theory of innovation within economics (Sundbo 2015: 169). In 1912 he published his 'Theory of Economic Development' in which he describes innovation as new combinations of means of production (Howaldt et al. 2014: 29). According to Schumpeter, such new combinations are introduced by individuals, characterised by a drive to create something new, which he called entrepreneurs (Sundbo 2015: 169). Some years later Schumpeter developed his theory further and introduced the idea of a process of creative destruction (*schöpferische Zerstörung*) (Schumpeter 1950: 137-138). This notion of creative destruction describes a process of new combinations of means of productions which entails an ongoing process of economic development (Ibid.: 137-138). With the introduction of the concept of innovation in the fields of economics, the interest in innovation soon became focused on technological changes as well as on the position of firms in competitive markets as Sundbo (2015: 171) argues. As a consequence, innovation theory turned into an discipline of economics and business (Ibid.: 171). Today, the economic representation is still the dominant representation of the concept of innovation (Godin 2015: 283). However, this representation started to shift again and the concept of innovation re-entered the social sphere and now also includes social innovation which will be discussed in the subsequent chapter (Ibid.: 283).

Based on the analysis of Godin (2015: 282-283) the following conclusions can be drawn. Over the past centuries innovation has developed from being subversive and private to being societal and progressive. Thereby, the development of innovation can be described as a process of enlargement which over time increased its scope from the religious to the political, to the social and finally the economic sphere of society (Ibid.: 282-283). In the 19th and 20th century, innovation developed into a concept used to refer to the future (Ibid.: 282-283).

Further it also took the form of a total (innovation) process which includes various activities and players (Ibid.: 282-283). Nevertheless, until today technological innovation remains the dominant representation of innovation (Ibid.: 282-283). A fact which contradicts the long term enlarging process of the concept and instead rather constitutes a reduction to a particular field (Ibid.: 282-283). This enlargement is however only one side of the story because by constantly using the term innovation, its significance does at the same time decrease and increase (Ibid.: 282-283). On the one hand, it increases in the sense that it expands its area of influence. But then on the other hand, such an enlargement renders a concept difficult to grasp and determine and therefore decreases its significance. Nevertheless, an attempt to define the concept of innovation is made in the following.

According to Jon Sundbo:

“An innovation is a renewal of behavioural or material structures or practices. More formally, innovation can be defined as the introduction of a new social, material, or economic phenomenon or a new combination of old ones” (Sundbo 2015: 169).

As examples Sundbo mentioned new technologies, new organisational forms or new social behaviours (Ibid.: 169). Thus, his understanding of innovation refers to both behavioural as well as material changes (Ibid.: 169). Further he argues that:

Innovation is about the process and the result, not the idea. An idea or an invention is necessary to create change, but it does not in itself create any change. Innovation as a concept has two meanings. One refers to the process of changing elements or structures, the other, to the result of the process (Sundbo 2015: 169).

I claim that this definition of innovation is pertinent because it allows to grasp the full scope of the concept. Many other definitions of innovations are more restrictive and are limited to a specific (typically the economic) sphere. Yet, I argue that one important element is missing in Sundbo's understanding of innovation. That is, the unpredictability of its outcome as suggested by Niko Paech. Paech (2012: 204) puts forward two elements which characterise innovations. Firstly, innovation is understood as a rupture with what exists and what we know

so far. Thus, its problem-solving potential lies in introducing new solutions to the pool of already existing solutions (Ibid.: 204). This idea of novelty can also be found in Sundbo's definition. Secondly, it is not possible to predict its outcome, nor to direct its development (Ibid.: 204). Therefore, innovations are a leap in the unknown associated with high risks but also promising chances (Ibid.: 204). This research will be based on Sundbo's conception of innovation complemented by the issues of unpredictability, risk and chances suggested by Peach.

2.2.1 Social innovation

Social innovations are in vogue, they figure in countless policy programmes and are considered to offer solutions to various current societal, environmental and demographic challenges. (see Mulgan 2006: 147; Schubert 2016: 407; 418; Jessop et al. 2013: 110; Caulier-Grice et al. 2012: 5) Likewise, several research centres on social innovation have been established in the past years by universities or private foundations (Rueede und Lurtz 2012:2). Social innovation also plays an important role in the policies and research programmes of the European Unions (Grimm et al. 2013). They are for example a key component of the strategy of the European Commission to develop a social market economy in Europe with high employment levels, and social and territorial cohesion¹¹ (European Commission 2010). Moreover, the European Union finances numerous research projects in the field of social innovation.¹² This increased focus on social innovations as possible solutions to urgent challenges, is explained by the failure of political or economic approaches to the problems (Caulier-Grice et al. 2012: 5). Neither the public nor the private sector succeeded with their attempts to tackle these problems and to initiate the necessary societal change (Schubert 2016: 407). In the context of such a loss of control of classic top-down intervention, social innovations are proposed as solutions based on the creative innovative capacity of local civil society actors (Ibid.: 407). In today's literature about social innovation

¹¹ This strategy is called Europe 2020 for more information: https://ec.europa.eu/info/business-economy-euro/economic-and-fiscal-policy-coordination/eu-economic-governance-monitoring-prevention-correction/european-semester/framework/europe-2020-strategy_en (visited 10.04.2018)

¹² For an overview of the different projects see: <http://www.siresearch.eu/social-innovation/research-projects?page=1> (visited 10.04.2018)

the concept is often presented as a novelty and it is implicitly assumed that social innovations appeared after technological innovations (Godin 2015: 285). However, according to Godin (2015: 282; 285) the opposite is true. As discussed above, the concept of social innovations dates back to the social reformers of the 19th century, a time when technological innovation was still absent in the discourse (Ibid.: 282; 285). The negative connotation of the concept of social innovation in those days strongly contrasts its current very positive connotation (Schubert 2016: 405). The recent boom of social innovation is therefore only a resurgence of an ancient concept (Godin 2015: 285). Many authors agree that this re-emergence of the concept of social innovation in the past 30 years is a reaction to the hegemonic position of technological innovations within the innovation discourse (Mai 2014: 15; Moulaert et al. 2005: 1969; Godin 2015: 285). They also argue that there has been and still is a general discontent with the technological bias in the innovation literature and innovation policy among many researches, especially in the field of social sciences.

The conducted literature revue for this research showed that despite – or maybe precisely because – of the current popularity of the concept of social innovation there is a lack of clarity of the concept. Or as Pol and Ville (2009: 10) put it: “‘*Social innovation*’ is a term that almost everybody likes but nobody is quite sure of what it means.” Moulaert and his co-authors (2013:13) attribute this lack of clarity to the over-simplistic use of the buzzword ‘social innovation’ in a multiplicity of policy practices. It has further been established that the concept of social innovation is often not adequately treated in detail in the contemporary social science literature (Moulaert et al. 2005: 1973). As a consequence, some academics even suggest abandoning the concept arguing that it does not provide any added value to the concept of innovation and is too imprecise to be useful (Pol & Ville 2009). Regardless of its vagueness, the concept of social innovation is used to describe a broad range of activities in a great variety of contexts (Rueede and Lurtz 2012: 5). Uses of the term can be found in the context of societal transformation, the reconfiguration of social relationships and power structures, empowerment and capacity building, models of governance, models of local development, social entrepreneurship, enterprise-led sustainable development, the development of new products, services and programmes, non-profit management and organisational management (Caulier-Grice et al. 2012:6; Tepsie 2014:10). Accordingly, as Rueede and Lurtz (2012: 2-3; 7; 29) claim the body of knowledge on social innovation is

incoherent and includes a plurality of understanding what social innovations are. They therefore, tried to address this conceptual ambiguity by analysing different understandings of social innovation which can be currently found in the literature (Ibid.: 2-3). In total they examined 318 articles, reports, books and book chapters (Ibid.: 3). As a result, they suggest a categorization of the different definitions, understandings and comprehensions of social innovation into seven distinct categories (Ibid.: 9). More than 77% of the analysed documents were attributed to the first 4 categories. Therefore, we will focus on these four and omit the other three categories¹³ which only include approximately 7% of the analysed documents.¹⁴

Name of category	To do something good in/for society	To change social practices and/or structure	To contribute to urban and community development	To reorganize work processes
Typical guiding question	Which innovations are needed for a better society?	What can we say about changes in how people interact among each other?	How can we approach development at a community level when we put human needs and not business needs first?	What else can we say about innovations within organizations if we leave out technological innovations?
Central literature	Mulgan et al. (2007) Phills et al. (2008) Dawson and Daniel (2010) Social Innovation eXchange (SIX) and Young Foundation (2010)	Howaldt and Schwartz (2010) Zapf (1991) Simms (2006)	Moulaert et al. (2005) Moulaert (2010)	Holt (1971) Pot and Vaas (2008)
Sample definition	Social innovation is “a novel solution to a social problem that is more effective, efficient, sustainable, or just than existing solutions and for which the value created accrues primarily to society as a whole rather than private individuals” (Phills et al., 2008: 36).	“A social innovation is new combination and/or new configuration of social practices in certain areas of action or social contexts prompted by certain actors or constellations of actors in an intentional targeted manner with the goal of better satisfying or answering needs and problems than is possible on the basis of established practices.” (Howaldt and Schwartz, 2010: 16)	“Social innovation is about the satisfaction of basic needs and changes in social relations within empowering social processes; it is about people and organisations who are affected by deprivation or lack of quality in daily life and services, who are disempowered by lack of rights or authoritative decision-making, and who are involved in agencies and movements favouring social innovation” (Moulaert, 2010: 10).	“Social Innovation in the Dutch definition is a broader concept than organisational innovation. It includes such things as dynamic management, flexible organisation, working smarter, development of skills and competences, networking between organisations. [...] it includes also the modernisation of industrial relations and human resource management” (Pot and Vaas, 2008: 468).
Example	microcredits	non-married living community	participatory budgeting	project organization
Major focus	human well-being in societies	social practices	human-centered community development	work organization
Practical relevance for	Actors interested in promoting social well-being	Sociologists	urban developer (public representative, local civil society)	Human Resource Management
Number of articles in this category*	127	53	39	28

Figure 1: Overview categories 1-4 (Rueede & Lurtz 2012:9)

¹³ For the sake of completeness, the other three categories are: 1. To imbue technological innovations with cultural meaning and relevance / 2. To make changes in the area of social work / 3. To innovate by means of digital connectivity

¹⁴ In total 50 papers out of the 318 (or approximately 15%) could neither explicitly nor implicitly be assigned to a single category (Rueede und Lurtz 2012: 9)

The vast majority of analysed documents could be attributed to the first category and therefore shares the assumption that social innovations address societal challenges, improve people's well-being and/or do something good in/for the society (Rueede und Lurtz 2012:10). Advocates of this understanding, see social innovation as a means for achieving a better life (Ibid.: 11). An exemplary definition for this category is put forward by Mulgan and his co-authors (2007: 7) which refer to social innovation as: "*new ideas that work to meet pressing unmet needs and improve peoples' lives.*" To contribute to a better human life is the general objective of social innovation within this category (Ibid.: 11). Therefore 'social' can be considered a normative term in this context (Howaldt et al. 2014: 42). At the same time several scholars emphasize that social innovation are social in both the process and the outcome dimension (Rueede & Lurtz 2012: 10-11). In other words, not only the outcomes but also the processes of social innovation matters and should be organized participatively and collaboratively (Ibid.: 10-11). With regards to the outcome dimension the analysed papers refer to three different intended results of social innovations (Ibid.: 11). Firstly, social innovations meet unmet demands of vulnerable groups. Secondly, they tackle challenges which the society as a whole faces. Thirdly, social innovations lead to an increase in overall well-being thanks to systemic reforms and societal configurations. As this understanding of social innovation does in a general manner refer to an increase of social well-being, its supporters can be found in diverse fields such as public policy, civil engagement, non-profit organisations or social entrepreneurship (Ibid.: 23).

Authors of the documents attributed to the second category, see social innovation as changes in social practices and/or social structure and they are guided by the questions about changes in the way people interact with each other (Rueede & Lurtz 2012: 13). An exemplary definition for this category is suggested by James Simms: "*Changes in [human] structure and organization are social innovations*" (Simms 2006: 388 cited in Rueede & Lurtz 2012: 14) The term 'social' in this case is primarily understood in a sociological perspective rather than in a normative perspective (Howaldt et al. 2014: 42). Therefore, this approach is prominent among social scientists and sociologists (Rueede & Lurtz 2012:14).

The third category emerged in the context of urban and community development and revolves around the question how to approach community development when human needs instead of

business needs are given priority (Rueede & Lurtz 2012:17). More precisely, social innovations are seen as changes in agendas, agency¹⁵ and institutions in favour of excluded or deprived individuals (Moulaert et al. 2005: 1978). Frank Moulaert one of the most known adherent of this category defines social innovation as follows.

“Social innovation is about the satisfaction of basic needs and changes in social relations within empowering social processes; it is about people and organisations who are affected by deprivation or lack of quality in daily life and services, who are disempowered by lack of rights or authoritative decision-making, and who are involved in agencies and movements favouring social innovation” (Moulaert 2010: 10).

As we can see in this definition, the understanding of this category strongly emphasizes the importance of process and the outcome of social innovations. Fundamentally it consists of three dimensions (Rueede & Lurtz 2012: 17):

1. The first dimension refers to the satisfaction of human needs which can be seen as the content dimension.
2. The second dimension envisage changes in social relations and constitutes the process dimension.
3. Finally, social innovation also has an empowerment dimension which envisages an increase in the socio-political capabilities of the concerned people.

Further, Moulaert and his co-authors (2005: 1978) point out the normativity of social innovation by explicitly referring to an ethical position of social justice. Bottom-up initiatives are preferred as protagonists of social innovations given the approach’s empowerment dimension and its focus on change of social relations (Rueede & Lurtz 2012: 18). As the approach is based on an alternative development paradigm based on values like solidarity and reciprocity, it constitutes an alternative to the predominant market-led development paradigm

¹⁵ In social science, agency is the capacity of individuals to act independently and to make their own free choices. By contrast, structure is those factors of influence that determine or limit an agent and his or her decisions (such as social class, religion, gender, ethnicity, ability, customs, etc.) (Barker 2005: 448)

(Ibid.: 17). Additionally, the growing importance of this approach can be interpreted as a reaction to the negative side effects of the neo-liberal politics of deregulation and privatization (Ibid.: 17). Looking at these three categories and how they relate to each other, Rueede and Lurtz (2012: 23) state that the third category can be seen as a combination of the first and the second category. That is, the third category includes the normative dimension of the ‘socially desired’ as well as changes in social practices.

The fourth category identified by Rueede and Lurtz (2012: 18) situates social innovation in the context of the organisation of work. Social innovations are defined as those innovations within organisations which are not technological innovation (Ibid.: 18). The terms workplace innovation and administrative innovation are often used as synonym terms for social innovation in this sense (Ibid.: 19). Authors belonging to this category argue that social innovations at the workplace also need to be considered as they do largely contribute to the overall innovation success of an organisation (Ibid.: 19). Mostly scholars engaged in organisational studies or business administration belong to this category (Ibid.: 23).

After having given a broad overview of the existing definitions and comprehensions of the concept of social innovation, the next step is to take a stand regarding the understanding of social innovations on which this research is based. I argue that the first categories’ broad understanding that social innovations are new and better solutions for social problems which do good for the society is way too comprehensive in order to be a useful concept. It means that basically every novel solution to a social problem which implies a benefit for society is a social innovation. The fourth category on the other hand is too reductionist from my point of view. It limits the scope of social innovation to the work environment. Further, social innovations are defined as the negation of technological innovation. Or to put it differently, social innovations are all innovation in the organisational context which are not technological. This understanding seems to be heavily influenced by a classical economic interpretation of innovation. That is why the concept of innovation put forward by the proponents of the first and the fourth category are not convincing from my point of view. The view of social innovation as changes in social practices and/or social structure of the second category seems more reasonable to me. It attributes a more tangible and analysable meaning to the term ‘social’ than the vague normative meaning of the first category. Still, I consider that the

scholars categorized in the third category present the most appropriate concept and definition of social innovations. Firstly, it combines the sociological and normative understanding of the first two categories and therefore takes account of both understandings of the term ‘social’. Secondly, by attributing three specific dimensions to the concept (satisfaction of human needs, changes in social relations and increasing the socio-political capability) it limits these wide ranges of the understanding of social innovations of the first two categories. Thirdly, it emphasizes the importance of the outcome as well as the process dimension.

Therefore, when speaking of social innovation, I refer to:

“...changes in agendas, agency and institutions...” (Moulaert et al. 2005:1978).

“...finding acceptable progressive solutions for a whole range of problems of exclusion, deprivation, alienation, lack of wellbeing and also to those actions that contribute positively to significant human progress and development. SI¹⁶ means fostering inclusion and wellbeing through improving social relations and empowerment processes: imagining and pursuing a world, a nation, a region, a locality, a community that would grant universal rights and be more socially inclusive” (Moulaert et al. 2013:16).

I furthermore, share the understanding that social innovation consists of three dimensions, namely:

1. *Satisfaction of human needs that are not currently satisfied, either because ‘not yet’ or because ‘no longer’ perceived as important by either the market or the state (content/product dimension). The stress will be on the satisfaction of alienated basic needs, although it is admitted that these may vary among societies and communities* (Moulaert et al. 2005:1978).

¹⁶ SI stands for social innovation

2. *Changes in social relations, especially with regard to governance, that enable the above satisfaction, but also increase the level of participation of all but especially deprived groups in society (process dimension) (Moulaert et al. 2005:1978).*

3. *Increasing the socio-political capability and access to resources needed to enhance rights to satisfaction of human needs and participation (empowerment dimension) (Moulaert et al. 2005:1978)*

With regards to this definition of social innovation it needs to be added that in this understanding social innovation is also a normative concept referring to an ethical position of human progress and social justice (Moulaert et al. 2013:17). However, these meanings of human progress and social justice are susceptible to different interpretations and need to be negotiated (Ibid.: 17).

3. Attempt of a synthesis: (de)growth and (social) innovation

In the previous chapters an overview of the scientific context has been given. The emergence as well as current tendencies of growth criticism have been discussed. Further, historical background, the concept and the different approaches of degrowth were presented. As a consequence, the conclusion was drawn that a profound transformation towards a solidary degrowth economy is inevitable. As a consequence, the next question of how such a transformation could be brought about has emerged. Innovation or in particular social innovation and social innovation were introduced, discussed and defined. After having looked at the scientific contexts of the two concepts degrowth and innovation respectively social innovation, the question arises if innovation and in particular social innovation are appropriate drivers of change towards degrowth? This question seems to be particularly interesting because innovation is very often linked to economic growth. Yet, in the context of a transformation towards a solidary degrowth economy, economic growth is most commonly unwanted. Therefore, the question if innovation can lead to change towards degrowth seems to be an exciting question worth analysing. Even though a widespread literature research was conducted, no literature perceiving this particular question could be found. The analysis of the German economist Nico Paech (2012, 2015) treats a very similar question and will be explored in detail in the coming sections. Still, it seems to be unexplored if and in what way innovation and social innovation can contribute to a change towards degrowth. This research aims at addressing this gap in the literature. Accordingly, the first part of this research will be dedicated to the investigation of the following two theoretical research questions:

- 1. Can innovations and in particular social innovations contribute to a transformation towards degrowth?**
- 2. What kind of innovations are particularly suitable drivers for change towards degrowth?**

In order to answer these two research questions, an extensive literature research was conducted. The purpose of which was to bring together the two concepts of degrowth and innovation and identify possible relations and links. The academic literature regarding innovations as well as the degrowth literature has been taken into consideration.

3.1 Does innovation and degrowth go together?

There is a broad consensus in the economic literature regarding the link between innovation and economic growth. Schumpeter (1950; 1952) identified competition, through the mechanism of innovation, as a driving force of economic growth. Likewise Hilger (2014: 49), who analysed the relationship between innovation and growth from an economic history perspective, states that the two have been inseparably linked since the era of industrialisation. Also contemporary scholars such as Fagenbergs and his colleagues (2011: 14; 20) agree that innovation plays a crucial role for economic growth. Similarly, when looking at the business level, Ahlstrom (2010) equalized innovation with growth and identifies an ongoing process of innovations which entail growth, enables further innovation and so on. It can be noted, that earlier as well as contemporary scholars comprehend innovation as an important driver for economic growth. Today economic growth is still perceived as a desirable objective by almost all academics, policy makers as well as the general public. Consequently, innovation is also considered to be something positive and desirable. Consistently Mai (2014: 15) argues that looking at the vast literature about innovation one can hardly find critical voices and there seem to be no rational reasons opposing innovations in general. However, given the above described fact that innovation generates economic growth it seems fairly obvious that the degrowth research community takes a more critical stand towards innovation.

As argued above Paech offers one of the most comprehensive and profound analysis of innovation and its impacts and effects on growth (see Paech 2012). In particular, he analyses innovation and other modes of change and its effects with regards to sustainability. Thereby he takes the perspective of entrepreneurs and their resulting options for actions. The focus of the present research relies more on innovations in the context of degrowth. Further its approach is broader when it comes to the possible actors as it is not limited to entrepreneurs. Still, I claim the work of Nika Paech can be adapted to this analysis for two reasons. Firstly, the understanding of the concept of sustainability put forward by Peach is characterized by striking parallels with the concept of degrowth. It is for example, very critical of economic growth, contrary to most other understandings of sustainability. Furthermore, when looking at his more recent work one can assume that he further developed his understanding of sustainability into a concept of degrowth (see Paech 2015). Secondly, I argue that parts of Paech's work are not only valid in the sphere of enterprises but do also apply to a broader

societal context. For example, the three dimensions of change where he situates the different types of innovation (which will be introduced below) can also be used to describe innovations developed by public actors or civil-society actors. This is especially true when it comes to systemic and cultural changes. Therefore, in the following we will closely examine his perspective on the issue. In a second step his work will be adapted to the case of a solidary degrowth economy.

3.1.1 From innovation to exnovation, imitation and renovation

In a first step Paech (2012: 204-207) takes a critical stance on the importance which is attributed to innovation as a mode of change. According to him, innovation is only one among other principles of change and he criticizes the one-sided focus on innovation as a mode of change. Especially when talking about sustainable economic development, the call for innovation follows immediately. He identifies the cause of this focus on innovation in the existence of a culture of innovation which has emerged during the modern age and has influenced any kind of development ever since (Ibid.: 204-207). This culture of innovation manifests itself by the tendency to search for new, not yet existing solutions in order to solve problems whose causes are well known. He claims that instead of neutralising the causes of the problem, the focus is the search for new solutions (Ibid.: 204-207). Even if one can find such a new solution for an existing problem, they often come with negative unintended side-effects which create new problems for which other new solutions must be found (Ibid.: 204-207). Therefore, according to Paech (2010: 204-207), this approach is equivalent to a never-ending cycle of creating new problems by adding new solutions to existing problems instead of addressing the causes of these existing problems¹⁷. Consequently, Paech suggests rethinking the mechanism of coming up with new solutions instead of trying to tackle the existing causes of problems (Ibid.: 204-207). Accordingly, Paech (2012: 255-262) states that other modes of change should gain in importance and be applied more often. In this contexts he introduces renovation, imitation and exnovation as important modes of change which should be given greater consideration (2012: 256-258). These alternative modes of change

¹⁷ For further thoughts on this also see Nowotny 2005

will be introduced at this point because they are of particular relevance when it comes to degrowth. Renovation is based on the idea of upgrading und revaluating something with the intention of prolonging its useful life or making it more efficient (Ibid.: 258). A prominent example according to Paech is the renovation of buildings in order to make them more energy efficient or prolong their lifespan. Similarly, everyday items can be renovated with the purpose of expanding their useful life as well as their usage possibilities (Ibid.: 258). Imitation refers to falling back on already known solutions (as opposed to new solution in the case of innovation) (Ibid.: 257). These already existing solutions have usually been known and tested for some time. An illustrative example of imitation put forward by Paech (Ibid.: 257) could be the falling back on locally grown fruits as an alternative to imported tropical fruits. He suggest that if one day the environmental and social costs of the production and transport of tropical fruits will be fully internalised, tropical fruits would become much more expensive. An increase in the price would cause a decrease of demand of tropical fruits. Consequently, the need for fresh fruits rich in vitamins could be met by locally grown fruits. The procedures of growing, processing, storing and distributing locally grown fruits have been in place and tested for a long time. Exnovation means the abolishment of something and is the counterpart of innovation (Ibid.: 257-259). In the process of exnovation something can either be abolished without replacement or it can be replaced by applying another mode of change such as innovation, renovation or imitation (Ibid.: 257-259). The abandoning of nuclear energy can serve as an example of exnovation as Peach (2012: 257-259) claims. The resulting lack of energy could be saved through efficiency und sufficiency measures (Ibid.: 257-259). In this case nuclear energy is abolished without replacement. Alternatively, the missing energy could be replaced by already existing alternative energy sources (imitation) or by newly invented alternative energy sources (innovation) (Ibid.: 257-259). These different modes of change are particularly important when they are combined which each other as will be elaborated further below.

According to Paech (2012: 256), in the context of sustainability, change should be (at least) a zero-sum situation. Consequently, a first important step according to him is to reach an equilibrium of addition and removal (Ibid.: 256). This means the emphasis should be placed on identifying elements which need to be replaced or abolished without replacement instead of focussing on the search for new solutions (Ibid.: 256). There are two approaches in order to accomplish this material zero-sum situation (Ibid.: 256). Firstly, changes focus on the material

conversion, upgrading or recombination within the already occupied ecological sphere. Secondly, every material expansion or additional utilisation of ecological capacity needs to be compensated to the same extent through material contraction or liberation of already occupied ecological sphere. Peach (2012: 256) illustrates the zero-sum situation and the two approaches with the example of land sealing. The first approach would imply that construction activities are only allowed on already used land. Thus, they would only include rebuilding, renovating, increasing construction density of existing buildings or the replacement of an old building with a new building on the same piece of land. The second approach allows for construction activities on previously unused space on condition that elsewhere occupied land is liberated.

3.1.2 Different dimensions and types of innovations

In the previous section innovation has been looked at from a critical perspective and other modes of change have been introduced. Nevertheless, with regard to the research questions in the coming section the focus will be placed on innovations and the combination of innovation with other modes of change. In view of innovation, Peach (2012: 110-114; 181) distinguishes three dimensions at which innovations can take place. They correspond with different categories of innovations which he analyses with regards to their impacts on growth (Ibid.: 110-114). The first dimension is technology and refers to innovation of products, processes, or infrastructure (Ibid.: 110-114). Processes of change at this level refer to changes in products and processes and can be described as technological change (Ibid.: 110-114). Usage system is the second dimensions (Ibid.: 110-114). At this level service innovations or system innovations can be found and the resulting process of change is a systemic one (Ibid.: 110-114). The third dimension is the cultural dimension where organisational and institutional innovations take place (Ibid.: 110-114). The resulting process of change can be described as cultural change (Ibid.: 110-114). The following figure illustrates these different dimensions.

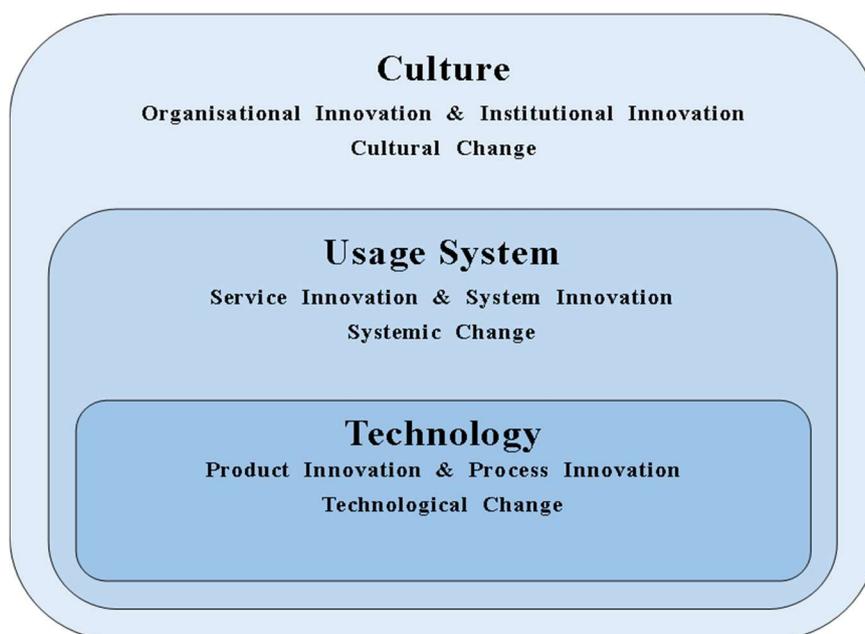


Figure 2: Dimensions & types of innovation, own figure based on Paech (2012: 110-114; 181)

3.1.2.1 Technology: growth driving effects & rebound effects

The dimension of technology is where technological change take place (Paech 2012: 113). This technological change is characterized by product and process innovations and mostly takes place in the sphere of firms (Ibid.: 113). It refers to the kind of innovations most people think about when talking or thinking about innovations. Regarding these product and process innovation Paech (2012: 204- 226) identifies three major problems, namely; the problem of generating demand, the problem of selection and the problem of subtraction. As a result, he concludes that a transformation process which is based on product and process innovation risks generating additional growth (Ibid.:192).

Firstly, Peach (2012: 210-211), argues, in line with Schumpeter (1952), that competition in innovation mainly characterises today's competitive relationship between firms. Schumpeter further explains that through the introduction of new combinations of means of production (=innovations) firms can differentiate from the competitors and avoid the usual price competition (Ibid.). Consequentially, given the fact that (at least in the beginning) innovations cannot be imitated, a firm is able to make above-average profits by exclusively satisfying the corresponding demand (Chamberlin 1962). Peach acknowledges these mechanisms described

by Schumpeter and Chamberlin as possible strategies of firms for making profits. However, looking at it from a sustainability perspective he adds a new aspect to the discussion. According to Peach (2012: 212-215), in the long term this strategy of increasing profits through innovation can only be successful if at the same time new demand is being generated. As Paech explains, if the competitive advantage of an innovative firm would only be to outperform its competitors in the context of a constant demand, the firm is unlikely to be able to draw below average profits in the long-term. Since, additional innovators which create new unique combinations of means of production would enter the market and therefore cause a part of the demand to switch to them (Ibid.: 212-215). This process increases the number of competitors in the market (Ibid.: 212-215). If the demand is constant, this would cause a crowding out effect and as a consequence some firms would be forced to leave the market (Ibid.: 212-215). In other terms, the use of innovation as a strategy of differentiation can only be successful in the long term if it generates additional demand. Furthermore, product innovation consists of a differentiation of the offer in order to be able to present a unique product (Ibid.: 212-215). The opening up of a new market segment is the logic consequence of such an innovation process (Ibid.: 212-215). Further, Peach (2012: 207) claims that not only more demand is generated by competition through innovation but firms also create new needs among consumers. Schumpeter (1952) also documented this phenomenon by saying that new needs do not emerge naturally among consumers. Instead consumers are instilled with new needs by producers (Ibid.). As a consequence, Schumpeters' innovation competition based on creative construction causes an overflowing and unpredictably augmentation of the production of goods (Paech 2012: 209).

The problem of selection is another issue indicated and elaborated by Paech (2012: 217-219). It consists of the fact that there is no effective mechanism of selection which can differentiate between innovations which are desirable and innovations which are not desirable for our society (Ibid.: 217-219). Paech claims that in order to make a selection some kind of constriction (for example ecological boundaries) is needed, from which a number of selection criteria can be deducted. However, as he further states, this would contradict the current omnipotent logic of growth which is based on the idea of a continuous expansion of possibilities and scope of action. Any selection would be perceived as an obstacle for further development (Ibid.: 217-219). Therefore, rather than being selected according to their

desirability, innovations function according to the principle of addition (Ibid.: 217-219). New innovations do not have to claim their own space by replacing something (Ibid.: 217-219). Instead the new will simply be added to the already in existence (Ibid.: 217-219). As a consequence, Peach (2012: 217-219) argues that not structural change, but structural enhancement is the result of innovation.

He further argues that even in case we can solve the problem of selection described above we still face the problem of subtraction (Ibid.: 220-226). Let's imagine we have an effective selection mechanism in place and new solutions will take the place of old solutions (Ibid.: 220-226). That is the principle of substitution is the prevailing over the principle of addition (Ibid.: 220-226). Still we would face the problem of subtraction (Ibid.: 220-226). Since all the existing solutions which are being replaced by the new solutions need to be decommissioned and disposed (Ibid.: 220-226). The process of replacing solutions entails an increase of waste which needs to be disposed (Ibid.: 220-226). Nowotny (2012) likewise claims, that continuously creating new solutions inevitably increases the amount of waste which need to be eliminated. Here lies the danger of devaluating intact materials through the process of premature scrapping (Peach 2012: 220). To avoid this problem it is important to replace existing solutions only at the end of their life-span (Ibid.: 226).

A majority of the authors from the degrowth community share Paech's scepticism regarding technological innovations and do not necessarily consider them to be a suitable solution with regards to a degrowth economy. The aim behind such technological innovation and progress is in the vast majority of cases an improvement of efficiency as Schmelzer and Passadakis argue (2011: 34). In other terms the logic behind technological innovation is often to produce more with less resources. By doing so, in the end a dematerialisation of the economy should be achieved (Ibid.: 34). However, this idea of decoupling technological progress and innovation from resource consumption turned out to be an illusion as several scholars argue. As main reason, they mention the so-called rebound-effects and differentiated between direct and indirect rebound effects. According to Seidl and Zahrnt (2010:30) we can speak of a direct rebound-effect if an increased resource efficiency of a service or a product causes an increase in the demand for this service or a product. Consequently, as they argue the potential savings cannot or only partially be realised. As examples they mention the fact that people tend to leave energy-saving bulbs switched on for a longer period than ordinary bulbs or the

fact that more fuel-efficient cars are used more often compared to less fuel-efficient cars. Indirect rebound effects refer to the circumstance that the money saved through efficiency enhancements is often spent for other goods and services which entail additional uses of resources (Schmelzer & Passadakis 2011: 35). In the worst case, technological innovation causes a 'backfire, that is the efficiency improvement leads to an increase of the overall resource consumption due to the rebound-effect (Ibid.: 36). A multitude of researches have shown that unfortunately, a more efficient use of resources very often result in an increase in resource use due to such rebound-effects (Ibid.: 36). That is one reason why, advocates for a change towards degrowth are rather critical of technological innovations. Another reason is that technological innovations are part of the business as usual of the current economic system and there is a risk of being content with them to easily and therefore prevent more fundamental discussion regarding the organisation of the economy and society (Schor 2016: 110).

There are two possibilities suggested by Paech (2012: 448) to mitigate the above described unwanted growth effect of material process and product innovations. According to him, they can either be combined with exnovation or with renovation (Ibid.: 448). A combination of innovation and exnovation would mean that the new product or process substitutes the existing one. This would be reasonable from a sustainability perspective if at least one of the following requirements is met (Ibid.: 448). Firstly, all options to extend the products life cycle are already exhausted. Secondly, the replacement of the old solution with the new one entails a reduction of the environmental impact even when taking into consideration the irreversible material, energetical and other factors which are bound to and internalised in the old solution. Thirdly, the old solution is ecologically reversible in the sense that its components are either biodegradable or can be integrated in other technological uses at little costs. The second possibility which Paech (2012: 448) proposes is to combine process and product innovation with renovation. This combination would make sense when the renovation of the existing object through the innovative product or process makes the object more sustainable.

3.1.2.2 Usage System: new ways of satisfying needs

According to Paech (2012:112) the dimension of the usage system functions as an intermediary between the cultural dimension where people's needs develop and the

technological dimension of physical production. He further explains that the usage system describes current practices of how people satisfy their needs and it relates to service and system innovations (Ibid.:112). These two types of innovations do not intervene at the material level like product and process innovation but aim at satisfying people's needs through various organisational measures as Paech (2012: 192) states. These kinds of innovation do also intend to change people's consumption behaviours (Ibid.: 113; 270). Instead of being based on the ownership of products, consumption activities focus on services to satisfy people's needs (Ibid.: 267). One example Paech (2012: 192) mentioned are system innovations which recombine existing products, technical equipment or infrastructure in order to generate new forms of usages. In this context the intensification and prolongment of the use of already existing products such as sharing systems, remanufacturing or second hand markets plays an important role (Ibid.: 192). Compared to technological innovations, service or system innovation are less susceptible to growth effects as Peach (2012: 448) explains. However, by indirectly combining such innovations with the modus of changes renovation and exnovation the risk of growth effects can be even further reduced as he suggests (Ibid.: 448-449). If service innovations are combined with renovation (repair work, maintenance, building refurbishment, conversion) the life span of products can be prolonged (Ibid.: 448-449). As a result, the already existing material products can be used longer and therefore satisfaction of needs can be ensured with less material expenses (Ibid.: 448-449). The combination of service and system innovation with exnovation refers to the circumstance when objects which so far have been private property have reached the end of their life span and are not replaced by a new acquisition but by an equivalent service which can also satisfy the person's need (Ibid.: 448-449).

3.1.2.3 Culture: changing patterns of demand

After Paech (2012: 110) the third and superordinate dimension is culture which incorporates the other two dimensions. At this dimension people's needs respectively demands concretise and develop (Ibid.: 114). Hence at this level, innovations' focus does not lie on products or usage systems but more generally on people's demands and the scope of production of goods and services (Ibid.: 114). Peach (2012: 114; 265) further suggests that through organisational and institutional innovations a process of cultural change can be initiated which questions the reasonableness and legitimacy of consumer demands. As examples he mentions regional

complementary currencies or a redistribution of the existing gainful employment (Paech 2012: 454). This cultural dimension plays insofar an important role because with regards to sustainability it is simply not possible to address all possible demands with the help of technology or usage systems due to ecological limits (Ibid.: 271; 194). In this case the needs themselves become subject matters of change (Ibid.: 271; 194). Since, no matter how efficient technological solutions or changes in the usage system might be, they cannot keep up with an unlimited expansion of demands (Ibid: 274). Therefore, in some cases a restraint of consumer demand at the cultural level is the only possible solution (Ibid: 276). However, Paech (2012: 287) suggests that such modifications in people’s pattern of demand can often be compensated with other non-material benefits. As examples he mentioned time prosperity, decrease in speed of life as well as better health due to a reduction of stress. He argues that partial material renunciation can also be seen as a pleasing liberation in complex times of material superabundance (Ibid.: 281; 289).

The following example illustrates the above described three dimensions, the corresponding innovations and its implications with regards to sustainability.

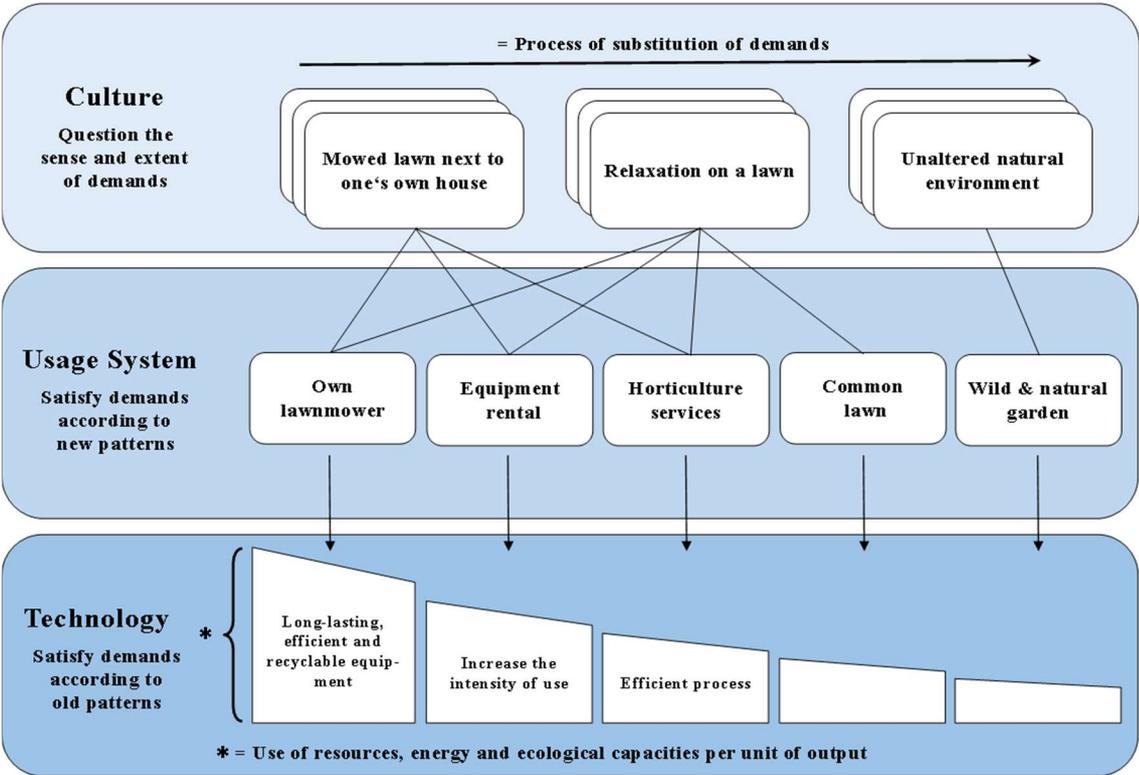


Figure 3: Example of the three different dimensions of change, own figure based on Paech (2007:88)

At the cultural level the different demands are shown. The first demand on the left to possess a mowed lawn next to one's own house can change to the need to relax on a lawn and finally to the demand for an unaltered natural environment. This process can be described as substitution of demands which corresponds with the above described cultural change. At the level of usage systems, the three demands from the cultural level can be satisfied in a number of different ways. Namely, through the possession of a personal lawnmower, by renting a lawnmower, by relying on the lawn mowing services of a horticultural business or by having access to a common lawn or to a wild and natural garden. At the level of technology, the impact innovations have, depend on the way the demand is satisfied. If the demand for a privately mowed lawn is satisfied by the possession of a private lawn mower, technological innovations can improve this individual equipment in terms of efficiency and recyclability. When the equipment for mowing either a private or collective lawn is rented, the intensity of the use of the equipment is increased. When the lawn mowing is done by a horticulture service the process is more efficient compared to everybody doing it individually. As the figure shows, the use of resources, energy and ecological capacities depends on the demands and how they are satisfied.

3.1.3 Prioritisation of the different types of innovations and modes of change

With regards to sustainability, Paech (2012: 447) argues that no additional ecological space should be occupied, no additional energy or other flow if resources should be caused. Therefore he states, the processes of change should not primarily focus on the creation of something new but rather focus on the preservation, reproduction and upgrading of the existing (Ibid.: 447). As we saw above, in this context the chosen modus of change as well as the type of innovation play a decisive role. In the previous sections we saw that product and process innovations come with inherent growth effects. Therefore, Paech (Ibid: 306) favours a stronger focus on the other types of innovations. Accordingly, he suggests a prioritisation of methods indicating how to satisfy existing needs (Ibid.: 449).

1.) Combination of service or system innovations with exnovation

The first and most preferred option would be to look for a way to satisfy a certain demand which is based on services rather than on material objects (Ibid.: 448). This can

be achieved if privately owned objects at the end of their life span are not replaced by new products but by a service which can also satisfy the corresponding need (Ibid.: 448-449).

2.) Combination of service or system innovations with renovation

This combination allows to prolong the life span of already existing products and a fulfilment of needs with less material expenses (Ibid.: 448-449) The corresponding services would maintain the existing stock of material goods and extend and intensify their use (Ibid.: 448-449).

Only if no suitable solution which involves service or system innovation could be found, one can consider turning to product and process innovations (Ibid.: 448-449).

3.) Combination of product and process innovations with renovation

This would make sense if an existing object can be made more sustainable by adding a specific product or process innovation (Ibid.: 448).

4.) Combination of product and process innovations with exnovation

This is the least preferable option from a sustainability perspective and refers to the introduction of a new product or process which is substituting the existing one (Ibid.: 448). In order to minimize the unwanted growth effects of product and process innovations one of the following three conditions need to be fulfilled (Ibid.: 448). Firstly, there are no possibilities to prolong the life cycle of the existing product. Secondly, the new solution is more sustainable than the old solution even when taking into consideration material and energy internalised in the old solution. Finally, the design of the old solution allows for the biodegradation or reuse of its components.

By only resorting to innovations with material consequences after having considered other non-material options it is possible to minimize the above elaborated negative consequences of product and process innovations (Ibid.: 449). Further Paech (2012: 449) argues, growth effects can further be minimized by combining innovation with other modes of change such as renovation or exnovation. As already mentioned above in addition to the solutions for the

currently existing needs, a cultural change targeting the needs themselves is indispensable (Ibid.: 449). In this context, organisational and institutional innovations play an important role (Ibid.: 449).

3.2 Implications with regards to a solidary degrowth economy

As stated above, Paech analyses the different modes of change and types of innovation in the context of sustainability. In this section we will apply his findings to the context of a solidary degrowth economy. As we already saw in the chapter about the different degrowth approaches, Schmelzer and Passadakis (2011:67) advocate for a social and ecological transformation which includes a reduction of economic growth respectively even a shrinking of the economy. Accordingly, I argue that the most suitable drivers of change towards a solidary degrowth economy are not growth stimulating. Therefore, based on Paech's analysis, I argue that service, system, organisational and institutional innovations targeting the usage system as well as the cultural dimension are more appropriate drivers of change towards degrowth compared to product and process innovations which risk to cause additional growth. In case product and process innovation are nevertheless applied, the above mentioned conditions need to be fulfilled in order to reduce growth-effects. Another element of a solidary degrowth economy is its orientation towards a maximal satisfaction of needs within the given ecological borders as Schmelzer and Passadakis (2011:71) put forward. Thus, an alignment of the current needs and demands to the given ecological borders seems unavoidable. With the purpose of doing so the cultural change facilitated through institutional and organisational innovations described by Paech seems to be a suitable driver of change at the cultural level. The collective use instead of private consumption is another important element of a solidary degrowth economy according to Schmelzer and Passadakis (2011:67). This goes well together with the service and system innovations at the usage level described by Paech. Changes at this dimension could entail a shift in consumption pattern away from private consumption towards more common or collective forms of consumption which are less resource-intensive. Besides the building up of a solidarity-based economy, complementary measures aiming at higher-level economic transformations are also necessary (Schmelzer and Passadakis 2011:75). In this regards institutional and organisational innovation at the cultural level could make a significant contribution in these transformation

processes. One example of such an organisational innovation could be the reorganisation of labour which is one of the guidelines put forward by Schmelzer and Passadakis (2011:80-82;89).

3.3 What about social innovation and degrowth?

On the previous pages a lot has been said about different types of innovations such as product and process innovations, services and system innovations or organisational and institutional innovation. However, social innovations as such have never been mentioned explicitly. Hence, the question arises what role do social innovations play in the context of degrowth and the three dimensions where innovations can take place suggested by Paech. With the aim of answering this question, I will first call to mind the features of social innovations as they have been described above. Broadly speaking, social innovations are changes in social practices and/or social structures which satisfy human needs, entail changes in social relationships, increase peoples' socio-political capabilities. Further they contribute positively to human progress and development. With regards to innovations for change towards degrowth, social innovation can play an important role in many respects. Firstly, social innovations are changes in social practices and social structure and therefore non-material. As we saw above non-material innovations should be given preference in the context of degrowth. Secondly, social innovations do satisfy people's needs without relying on material goods. Therefore, it can be assumed that they often have an effect on the level of the usage system. Innovations at this level play an important role regarding a transformation towards degrowth also because they are much less likely to entail unwanted growth effects. Thirdly, social innovations can also have an effect on the cultural level in the form of organisational or institutional innovations. Here again these kinds of innovations are favourable from the perspective of degrowth as they have an impact on people's needs. Fourthly, social innovation entail processes which are favourable with regards to degrowth. Namely, they imply changes in social relationships which for their part can favour changes in the usage system or the cultural dimension. For example, the change of social relationships within a neighbourhood could favour the sharing of goods and resources. Another important process concerns the increase in people's socio-political capabilities which social innovations imply. Such an increase can

facilitate the re-appropriation of certain branches of productions as provided for in a solidary degrowth economy. Moreover, the concept of social innovation as well as the concept of a solidary degrowth economy share some important characteristics. Firstly, both concepts place human needs at the centre. Secondly, both rely on the basic values of solidarity and reciprocity. Thirdly, the two concepts constitute alternatives to the predominant market-led development paradigm. These similarities and parallels constitute another reason to argue that social innovation is a suitable driver of change towards degrowth.

3.4 Conclusion: (de)-growth & (social) innovation

In this section we will return to the above elaborated research questions and try to answer them. The first research question asked whether innovations and in particular social innovations can contribute to a transformation towards degrowth. Regarding what has been discussed about the link between innovation and degrowth on the previous pages I conclude that innovation can contribute to a transformation towards degrowth by introducing new solutions suitable for the context of degrowth. Innovation is often a means of first resort due to the predominant culture of innovation. However, as argued earlier, it is not necessarily always the preferred mode of change. Exnovation, renovation and imitation are equivalent modes of change which also need to be taken into account as drivers of change. Which of the four modes of change is to be preferred highly depends on the situation and needs to be decided on a case-by-case basis. Moreover, it seems that not all types of innovation are equally suitable drivers of change towards degrowth which leads us to the second research question: What kind of innovations are particularly suitable drivers for change towards degrowth? As in the context of degrowth additional growth effects are generally speaking unwanted, the most suitable innovations do not entail any additional growth. That is the reason why product and process innovations are the least suitable types of innovation. On the other hand, innovation which have an effect on the level of usage system or the level of culture are much more unlikely to cause additional growth and are therefore more suitable. More concrete, services and system innovations can bring about new ways of satisfying needs with smaller material impacts at the level of the usage system. Further institutional and organisational innovations take effect at the cultural level and can change patterns of demand with the intention to adjust them to the given ecological limits. Therefore, these types of

innovation are particularly suitable drivers of change towards degrowth. The same is true with regards to social innovation for several reasons. Firstly, social innovations are highly unlikely to entail unwanted growth effects as they are non-material. Secondly, they often have an effect on the level of the usage system or at the cultural level which makes them suitable for a transformation towards degrowth. Finally, not only their outcome but also the processes they entail is favourable with regards to degrowth as it implies changes in social relationships as well as an increase in the capabilities of the concerned people.

4. Social innovation initiatives in Berne

Based on the analysis of the first two research questions I concluded that some types of innovations are more suitable drivers of change towards degrowth than others. Therefore, in a next step I will turn my attention to one of the suitable types of innovations, namely social innovation. As discussed above social innovations can make an important contribution to the needed transformation towards a solidary degrowth economy. This particular type of innovation has also been chosen because in the past years various social innovation initiatives aiming at creating a society devoid of economic growth have emerged. In the following, I would like to figure out what makes such social innovation initiatives successful? This question seems to be relevant because in order to contribute to change towards degrowth social innovation initiatives need to operate successfully. For answering this question, four successful social innovation initiatives in the field of degrowth have been selected and analysed. The theory of how to create successful change from Kora Kristof (2010a; 2010b) served as a theoretical framework of the empirical analysis. The city of Berne has been chosen as the study area due to practical reasons. Given limited time and resources, analysing social innovation initiatives active in the researcher's home town seemed to be most efficient. More concretely, the analysis is based on the following three empirical research questions:

- 1. What are factors of success of social innovation initiatives in Berne?**
- 2. What are the challenges social innovation initiatives in Berne face and what could be possible solutions for these challenges?**
- 3. In what framework conditions do social innovation initiatives in Bern operate?**

In summary, after having analysed which types of innovations are particularly relevant in the context of degrowth in the first part of this research, the second part is dedicated to the closer analysis of social innovations and how they successfully create change towards degrowth.

4.1 Selection process

The selection process of the social innovation initiatives to analyse has been carried out as follows. In a first step, an extensive list¹⁸ with 23 successful social innovation initiatives in the domain of degrowth in Berne has been generated through an extensive internet search (based on the understanding of degrowth according to the approach critical of capitalism of Schmelzer and Passadakis (2011)). The following three criteria have been applied for judging if a social innovation initiative can be considered successful. Firstly, the initiative has been existing for at least three years. Secondly, it is still active and some of its objectives have been fully or partially reached. Thirdly, the number of active people for the initiative has increased or the interest in the work of the initiative has been increasing. The initiatives on the list further had to be characterised by the three dimension of social innovations¹⁹; the satisfaction of human needs (content dimension); changes in social relationships (process dimension); and an increase in the socio-political capability and access to resources (empowerment dimension) (see Moulaert et al. 2005). Further their activities and/or formally declared objectives need to create change towards a solidary degrowth economy according to Schmelzer and Passadakis (see Schmelzer & Passadakis 2011). In a second step the selected initiatives have been categorized in the following five categories; food; local economy and currency; share and repair; energy and others. Finally, eight initiatives from different categories have been chosen. The final selection criteria were, their relevance in terms of degrowth, the size of the initiative and how active the initiative is at the moment. As a next step, the initiatives have been asked by email if they would be ready to participate in the research project. The following four out of the eight addressed initiatives were willing and interested to participate;

- *Radiesli* (community supported agriculture)
- *Wohnbaugenossenschaft Warmbächli* (housing cooperative)
- *Transition Town Bern* (environment and sustainability initiative)
- *Repair Café Bern* (repair initiative)

¹⁸ The list can be found in the annex 10.1.

¹⁹ See Chapter 2.1.1 p. 34-35

As the overall aim of this second part of this research is to obtain an in-depth insight into four different social innovation initiatives, choosing key players with different thematic focuses seems to be a reasonable selection procedure. However, as the sample of initiatives selected is not statistically representative, the research results will not lend themselves to easy generalisations. The four chosen social innovation initiatives will be presented and introduced on the following pages.

4.2 The community supported agriculture project Radiesli

The Radiesli initiative is a community-supported organic agriculture project in Berne. In community-supported agriculture (CSA) projects farmers or vegetable gardeners enter into a contract with their customers. The producer commits to produce and deliver a certain amount of food and the customers guarantee that they will purchase the products. The payment usually takes place in advance and enables the necessary investment and purchases to cultivate the food crops. Community-supported agriculture projects are characterized by a close relationship between producers and consumers.

The following overview of the history of Radiesli is based on statements of a member of the operational group (Member operational group, Radiesli 06.09.2017, p.2 L9-L13; p.2 L21 - p.3 L11). Radiesli was founded in 2011 by a group of people who have been inspired by the community-supported agriculture project 'Ortoloco' in Zurich. Since then it has been growing steadily. Today, Radiesli has approximately 250 members. They started cultivating vegetables and fruits on an area of 0.6 hectare. In 2016 the Radiesli initiative had the chance to enlarge their project by leasing more land. They decided to do so and to extend the concept of community-supported agriculture from vegetable and fruit production to the production of other products such as eggs and meat. The objective of Radiesli is to enable people to unite in order to cultivate some land together and to grow vegetables and other food products with the guidance of experienced professionals (Radiesli 2011: 1). Efforts, costs and yields are shared among all the members (Ibid.: 1). By doing so, the Radiesli initiative wants to weaken the strict separation between production and consumption and by actively participating in the production process the members of Radiesli are simultaneously producers and consumers of their vegetables and fruits (Ibid.: 1). The cultivation, harvest and distribution of the grown organic vegetables and fruits is carried out by two employed vegetable gardeners and the

members of the Radiesli initiative (Radiesli: 1-2). The project is based on the participation of its members and the amount of work members are supposed to perform each year depends on the quantity of vegetables and fruits or other products they receive and varies between 2 to 8 half-days (Radiesli 2017: 2). In total the annual hours worked by the members of Radiesli equal 1-2 full-time employments (Ibid.: 2). The members of Radiesli do not pay a fix price for a certain amount of certain products (Radiesli 2011: 2-3). Instead they pay an annual subscription fee depending on what products they want to receive (Ibid.: 2-3). This payment is made in advance and whatever can be cultivated with the total amount of money will be distributed among the members (Ibid.: 2-3). Radiesli is organized by three bodies such as; the general assembly, the operational group; and working groups (Ibid.: 2-3). The general assembly meets at least once a year. According to a member of the operational group, in practice the operational group calls extraordinary meetings of the general assembly whenever, important decisions need to be made and before taking a decision the plenum holds an intense debate and tries to find a consensus (Member operational group, Radiesli 06.09.2017, p.6 L26 - p.7 L4). The operational group which is elected by the general assembly is responsible for organizing the day-to-day operations (Radiesli 2011: 2-3). The currently 13 members of the operational group are responsible for different tasks and meet every 2 to 3 weeks. Within the operational group decisions are always taken on a consensual basis (Member operational group, Radiesli 06.09.2017, p.6 L26 - p.7 L4). Finally, the working groups focus on particular tasks, issues or ideas and occur either by the initiative of the operational group or by the initiative of a group of Radiesli members (Ibid.: p.6 L26 - p.7 L4).

Officially, Radiesli does not define degrowth as one of its objectives. Consequently, the question arises does Radiesli create change towards degrowth? Radiesli can be considered to initiate change towards degrowth for various reasons. Firstly, it withdraws the process of food production from the market. Instead the production process and the necessary resources are managed collectively. These two elements are important in the concept of degrowth of Schmelzer and Passadakis (2011: 74-75). Additionally, projects like Radiesli favour the regionalisation of agricultural production which constitutes another key element of degrowth according to Schmelzer and Passadakis (2011: 86- 88). Finally, the member of the operational group which has been interviewed for this research stated that several members of Radiesli consider degrowth to be an objective of Radiesli even though it is not officially written down

(Member operational group, Radiesli 06.09.2017, p.3 L10-L11). Therefore, I argue that the community supported agriculture project Radiesli is active in the context of degrowth. I also argue that Radiesli qualifies as social innovation in the sense in which we defined the term above. With regard to the three dimension of social innovations, Radiesli meets the need for food, one of the most basic human needs by producing fresh and healthy food products. In addition, Radiesli also causes changes in social relations as its members are no longer just consumers of food products but also producers. Finally, people who are participating in Radiesli gain more competences in decision making and governance regarding the production of their food. Being part of the Radiesli project does therefore, increase the socio-political capability and the access to resources. Moreover, they can improve their skills in participating in collective decision making and management processes. Thus, Radiesli does also have an empowerment dimension.

4.3 The housing cooperative Warmbächli

In the end of 2012 a new modern waste incineration plant had been put into operation in the city of Berne.²⁰ As a consequence, the area where the old waste incineration plant was situated was available for a new usage. It has been decided that the area should be used for a new residential district.²¹ Hence, the *AG Wohnen*, a loose coalition of small, independent and self-governed housing cooperatives in Bern, invited people interested in realizing a housing project in the Warmbächli area. Then in spring 2013 the housing cooperative Warmbächli was founded by 50 of these initially interested people (Member of a working group, Wohnbaugenossenschaft Warmbächli 07.09.2017, p.2 L6-L20). Today the housing project is already well advanced and has been approved by the authorities (Ibid.: p.7 L3-L5). The cooperative currently counts around 250 members (Wohnbaugenossenschaft Warmbächli 2017b). One of the cooperative's objectives is to provide its members with living space and commercial space to enable self-determined, collective and cost-effective living and working arrangements (Wohnbaugenossenschaft Warmbächli 2013b: 1). Moreover they aim at

²⁰ See: <https://www.derbund.ch/bern/nachrichten/Energiezentrale-Forsthaus-festlich-eingeweiht/story/12807822> (visited 19.09.2017)

²¹ <http://www.bern.ch/themen/wohnen/aktuelle-wohnbauprojekte/warmbaechliweg> (visited 19.09.2017)

promoting the living together and solidarity of people with different backgrounds, of different ages, of different needs and of different economic possibilities (Ibid.: 1). Finally these living and commercial spaces need to be environmentally friendly and resource-saving with regard to the goal of a 2000-watt-society²² (Ibid.: 1). For the housing project a substantial part of the fabric of the already existing building will be preserved and the new living and commercial space will be incorporated (Wohnbaugenossenschaft Warmbächli 2012: 7-8). Two thirds of the available space will be used to create living space for 100 to 150 people and one third of the space will be used as commercial space (Ibid.: 8; Wohnbaugenossenschaft Warmbächli: 3). The housing community shall be characterised by different ways of life as well as different generations. Diversity is considered to be an enrichment (Wohnbaugenossenschaft Warmbächli 2013a: 1). In order to address a heterogeneous group of residents a great variety of types of housing such as for example, small apartments, multi-family apartments, large shared-apartments or cluster apartments²³ will be provided (Wohnbaugenossenschaft Warmbächli 2012: 11). The cooperative is convinced that quality of life is independent of material luxury, therefore, the apartments have a low fit-out standard (Ibid.: 7-8). Additionally, living arrangements such as generous and attractive common spaces and infrastructure are supposed to enable a good life even with a modest living space per person (Ibid.: 7-8). These common spaces could include a community garden, a library, a cinema or a common workshop (Ibid.: 8;11). Such meeting places should facilitate the exchange among the residents as well as the exchange with other people from the neighbourhood (Ibid.: 8; 11). Another important feature of the housing project which contributes to the conservation of resources is the practice of sharing everyday items (Wohnbaugenossenschaft Warmbächli 2013a: 2). Instead of possessing all household appliances and tools individually, these items can be shared among all residents (Ibid.: 2). The cooperative is not profit-oriented and the rental fees do only include the effective construction costs, the maintenance costs as well as amortisation and reserves (Wohnbaugenossenschaft Warmbächli 2012: 7-8). The

²² For more Information see: <http://www.2000watt.ch/die-2000-watt-gesellschaft/> (visited 04.04.2018)

²³ Cluster apartments are apartments with several small private and individual areas which include a bedroom a bathroom and possible a small kitchenette and generous common spaces such as a living room and common kitchen. It is a particular type of apartment which combines private and common spaces (Member operational group 06.09.2017).

organisational structure of the cooperative is based on democratic principles as well as an open communication policy as everybody who is participating in the project as well as the residents are involved (Wohnbaugenossenschaft Warmbächli 2013a: 2). The housing project is self-governed and the pending tasks are planned to be executed with consideration to the people's different skills and needs (Ibid.: 2). The housing cooperative is subdivided into various organisational bodies. The uppermost entity is the general assembly which makes decisions about important issues and consists of all members of the cooperative (Wohnbaugenossenschaft Warmbächli 2014: 2). The administration of the cooperative takes over the strategic leadership, is coordinating the working group and appoints the executive board as well as the committees (Wohnbaugenossenschaft Warmbächli 2017a). The members of the administration are elected by the general assembly (Ibid.). The daily operational tasks are accomplished by the executive board (Ibid.). Additionally, there is a building committee and a finance committee who give instructions to the executive board (Ibid.). Another crucial organisational body are the working groups. Currently there are seven different working groups which address issues like for example sustainability, neighbourhood, discussion and decision making or public relations (Wohnbaugenossenschaft Warmbächli: 5). The working groups acquire knowledge, develop concepts and elaborate guidelines (Wohnbaugenossenschaft Warmbächli 2017a). In particular they enable opinion-forming processes prior to the general assemblies and inform the administration and the plenary about their activities and present their ideas and outcomes (Wohnbaugenossenschaft Warmbächli 2017a; Wohnbaugenossenschaft Warmbächli 2014: 1;3). The plenary assembly is conceived as a platform for exchange between all the different bodies and takes place once a month (Wohnbaugenossenschaft Warmbächli 2014: 3). It also has the task of giving feedback to the inputs of the different bodies (Wohnbaugenossenschaft Warmbächli 2017a).

The housing cooperative Warmbächli can be assigned to the field of degrowth for several reasons. Firstly, their housing project is oriented towards an alternative way of life which consumes much less resources due to the common use of space, alternative forms of mobility, as well as the principle of sharing. Therefore, it heavily relies on collective use instead of private consumption alike the 'solidary degrowth economy' suggested by Schmelzer and Passadakis (2011: 67). Moreover, the cooperative can be seen as a pioneer project for the collective and solidary planning and administration of living space (see Ibid: 2011: 74-75). Finally, the members of the housing cooperative consider the project to be more than just a

housing project. According to the interviewee of the housing cooperative, they see themselves rather as part of a movement in the field of neighbourhood and commons where degrowth plays a crucial role (Member of a working group, Wohnbaugenossenschaft Warmbächli 07.09.2017, p.9 L14-L22). Moreover, from my point of view, the housing cooperative Warmbächli can be considered a social innovation as by offering new forms of living together it entails changes in social practices. What is more, it also complies with the three dimensions of social innovations discussed above. Firstly, living certainly is a basic human need which is met by the cooperative by providing living space. Secondly, thanks to its democratic organisation and the collective self-administration structure, the housing project does cause changes in social relations. The members of the cooperation are more than just residents as they actively co-administer their own living space. Thirdly, this active participation in the negotiation and decision making processes as well as in the self-administration does enhance people's socio-political capabilities and their collaborative skills. Therefore, it can be concluded that the participation in the initiative does have an empowering effect on people.

4.4 The Transition Town Initiative Bern

The following section does refer to Maschkowski and her co-authors (2017: 369-372) who present a good overview of the transition town movement. The first transition town was founded in Totnes a small town in south-west England in 2005 (Maschkowski et al. 2017: 369). Today the transition town movement is a global movement with approximately 4000 transition town initiatives in 50 countries (Ibid.: 371).

According to Rob Hopkins, the founder of the first transition town in Totnes:

“If we wait for the government, it'll be too little, too late.

If we act as individuals, it'll be too little.

But if we act as communities, it might just be enough, just in time”

(Hopkins 2011: 17).

This quotation clearly summarizes the idea behind the transition town movement. The term transition stands for crossing, change or modification. The movement aims at maintaining and

caring for the world, distributing the available resources fairly among people, sharing with each other and treating each other with care (Maschkowski et al. 2017: 368). Thereby, the key question is what do our streets, our neighbourhoods, our cities look like in the context of regional economies which are mostly independent of fossil fuels (Ibid.: 369). Transition towns should become less dependent on non-renewable resources and more resilient and adaptable (Ibid.: 371). One important element is to inspire, encourage and support people in developing their own positive vision of the future and to be able to actively shape such processes of change (Ibid.: 371). There is no ready-made transition town model and the projects and approaches within the various transition town initiatives are as diverse as the people who are active. What they all share is a positive vision of how the future could look like (Ibid.: 369-370). What concrete projects and actions take place in the particular case depends on the skills of the local people, their interests and the most urgent needs on site (Ibid.: 374). Projects aimed at ameliorating local food sovereignty, sharing initiatives, repairing initiatives, alternative mobility projects, collective housing projects, renewable energy projects, education projects or projects about the culture of change are some examples of projects of transition town initiatives (Ibid.: 374).

The Transition Town Initiative Berne was founded in 2013. Subsequent to a public screening of a documentary about transition towns a group of people took the initiative for the foundation of a local Transition Town group (Member of the core group, Transition Town Bern, 14.09.2017, p.1 L6-L8). Today approximately 25 people are active in the movement (Ibid.: p.3 L19-L27). In the core group which counts about eight people the different activities are discussed and coordinated at monthly meetings (Ibid.: p.3 L19-L27). Additionally to the core group there is a local group for the neighbourhood “Länggasse” which organises specific activities in this area (Ibid.: p.1 L8-L12). Further there are different so called creative groups which deal with different issues and carry out different activities (Ibid.: p.4 L6-L12). One of the group organises public events and film screenings to inform people about their work and other topics related to the transition town movement. Other groups are responsible for the newsletter or for the networking with other organisations. Another group which is called SoLaVelo²⁴ promotes the transport of goods within the city with the help of cargo bicycles.

²⁴ SoLaVelo stands for ‘solidarisches Lasten velo’ which means solidary cargo bike

Currently, they regularly transport the vegetables from the farm of the community-based agriculture project Radiesli, to the different distribution sites. Finally, the transition streets group deals with adapting and implementing the transition street project to the local context. The transition street project was initiated in Totnes and is about gathering groups of friends and neighbours who meet up regularly and with the help of a practical workbook aim at making small changes in their use of energy, water, food, mobility or consumer habits.²⁵ According to the interviewed member of Transition Town Bern, the current activities of the Transition Town Initiative are very diverse (Ibid.: p.2 L6-L13, p.3, L19-L27). They range from organising information events, sending a comprehensive newsletter about all activities in the field of sustainability and degrowth in Berne, co-organising an annual food-saving event to initiating a yearly apple harvest on a field where nobody had harvested the fruits before. The Transition Town Initiative in Berne also actively participates in many other organisations or initiatives in Berne and has a great network (Ibid.: p.2 L19-L23).

According to Maschkowski and her co-authors (2017:375), the transition movement sees itself as one possible tool for initiating change towards degrowth. Therefore, it is reasonable to assign the Transition Town Initiative Berne to the field of degrowth. Also, I argue that the Transition Town Initiative Berne can be characterized as a social innovation initiative. Firstly, it deals with the question how to satisfy people's needs while using less resources and causing less pollution. By this means changes in social practices play an important role. Further thanks to its participatory and inclusive approach it has an empowering effect on the people concerned and can lead to changes in social relations.

4.5 The Repair Café Bern

The Repair Café Bern is an association which organises the so-called Repair Cafés, at which everyday broken objects are being repaired by members of Repair Café Bern. A member of the board explains the history of the Repair Café as follows (Member of the board, Repair Café Bern, 22.09.2017, p.1 L16 - L20; p.2 L2 - L10). The idea of Repair Cafés itself is not

²⁵ For more Information see: <https://www.transitionstreets.org.uk/> (visited 03.05.2018)

new and originally comes from the Netherlands. It was the Swiss Foundation for Consumer Protection (*Stiftung für Konsumentenschutz*) who brought the project to Switzerland and made a call for people interested in setting up Repair Cafés in 2014. A group of people were willing to do so in Berne and so the first Repair Café in Berne took place in April 2014. The response was very positive, and the event also achieved wide press coverage. In addition, the initial organisations received several requests to organise more such events. Subsequently a core group of about 15 people decided to found the association Repair Café Bern and to continue with their activities. The objectives of Repair Café Bern are threefold according to a member of its board (Ibid.: p.3 L25 - p.4 L6). Firstly, by prolonging the life span of a wide range of everyday items they aim at saving resources and avoiding waste. Secondly, they would like to arouse people's curiosity in how things work as well as enable and empower people to develop some repairing skills themselves. Thirdly, the members of the Repair Café Bern give advice and recommendations on the do's and don'ts regarding the purchase of new items. In total the association organises ten to twelve Repair Cafés a year (Ibid.: p.8 L9 - L10). Six of which regularly occur at the same central location in Bern. The rest of the events take place in different places in and around Bern. According to one of the founders the range of repair services offered at a Repair Café in Bern is relatively broad and includes electronic devices such as stereo systems, household appliances or garden appliances, mobile phones and computers, textiles and leather products, books, small furniture, toys, watches, etc. (Ibid.: p.7 L15 - L22). As the name already implies, at the Repair Café events people cannot only benefit from repair services but also have a drink and a piece of cake (Ibid.: p.1 L20 - L30). On average between 80 and 140 people visit the Repair Cafés in Bern (Ibid.: p.1 L30 - L34). The offered repair services are free of charge, however the costs of required spare parts need to be covered by the visitors (Ibid.: p.2 L20 - L24; p.3 L5 - L12). Additionally the visitors have the possibility to make a voluntary contribution at their discretion towards the expenses (Ibid.: p.2 L20 - L24; p.3 L5 - L12). The average success rate of the repair services offered at the Repair Café Bern is 70% (Ibid.: p.1 L30 - L34). Usually the people repairing spend at most 30 minutes for one item (Ibid.: p.3 L17 - L20). If they are not able to repair it within this period of time, they often take the item home where they have more time to closely examine the defect (Ibid.: p.3 L17 - L20). The Repair Café Bern is led by a board which is composed of four members, carries out the operational tasks and is responsible for the strategic planning (Repair Café Bern). The association counts currently approximately 30 active or passive

members (Ibid.). The active members offer repair services, help with organisational tasks or contribute to the cake buffet (Ibid.)

I argue that the Repair Café Bern can be assigned to the domain of degrowth as they are offering a service which extends the life span of a great variety of everyday objects. Repair services have been mentioned as a possible important pillar of a degrowth economy by several authors (see for example Paech 2015: 113-141). Further I suggest that the Repair Café Bern can also be considered a social innovation initiative as it deals with everyday items which are used by people to satisfy human needs. Additionally, it clearly empowers people and increases its capabilities while at the same time changing social practices such as for example consumption habits change.

5. Theoretical perspective

5.1 Transformation processes

In order to reach a solidary degrowth economy, processes of change are needed. However, changes in society are often very complex and cannot be described by simple causal relationships as Kristof (2010b: 11) points out. Further she argues that transformation processes are very challenging to assess as many actors are involved. Therefore, the question arises if societal transformation processes can even be shaped and controlled. As Kristof (2010b: 11) sums up, there are various answers to this question. Some argue that transformation processes can be planned in detail. Others state that such processes cannot be directed at all. Still, people aim to understand how processes of change function and would like to be able to influence and shape these transformation processes (Ibid: 11). In order to do so models of change have been developed to help us identify certain reoccurring patterns in order to adapt our behaviour accordingly with the aim of actually influencing transformation processes (Ibid: 11). I argue that transformation processes can be shaped and influenced to a certain degree even if they cannot be planned in detail and some uncertainties remain. This view is also reflected in our empiric research questions which implicitly presume that social innovation initiatives are able to create change towards degrowth. Moreover, I demonstrated above that social innovation are suitable drivers for such processes of change. Consequently, the question arises how can social innovation make the processes of change which they initiate successful. That is where the model of successful change developed by Kora Kristof (2010a; 2010b) plays an important role. It has been chosen to serve as the theoretical framework in order to assess the activities of the above described social innovation initiatives, with regards to its success. The model will be introduced in the next sections.

5.2 Model of successful change

Kora Kristof has been studying transformation processes and models of change intensively (see Kristof 2010a; Kristof 2010b). She analysed the findings of research about transformation processes and corresponding success factors from different scientific disciplines. Concretely, she looked at the conceptions and theories of change put forward by

academics of the fields of business management, economics, psychology, sociology and political science. As she did not want to limit her research to only theoretical concept she further conducted several interviews with experts on change. These practitioners worked in the fields of politics, economy or civil society. She came to the conclusion that the various models of change actually share some similarities and that patterns of transformation processes in different fields hardly differ (Kristof 2010b:11). Taking these as a basis she developed her own model of successful change which constitutes the synthesis of her research. This model will serve as a theoretical framework for the empirical analysis of social innovation initiatives. I have chosen Kora Kristof's model of change because of its transdisciplinary and interdisciplinary characteristic. It takes into account the not only insights from various scientific disciplines but also practical experiences. Further, Kristof explicitly refers to social innovations as possible drivers for change processes (Ibid.: 97; Kristof 2010a: 529).

According to Kristof, the process of shaping change processes can be compared with art (Kristof 2010a: 515-516). There are no simple recipes for shaping transformation processes since these processes are too complex for simple answers (Ibid.: 515-516). However, Kristof (2010a: 515-516) argues nevertheless that it is possible to identify success factors, favourable behavioural patterns as well as supporting framework conditions. Kristof's model of successful change concentrates on the most important conditions for success and its interdependencies (Kristof 2010b: 107). According to her, this enables achieving the greatest possible impact with as little effort as possible. From her point of view, this is essential because in most cases not enough resources are available for transformation processes (Ibid.: 107).

5.2.1 Change as multi-level process

People who promote and actively push ahead changes, the so called 'change agents' play a very important role in Kristof's model (Kristof 2010b:30). Change agents can be active individuals who are small groups of people (Ibid.: 30). They need to be able to orientate themselves in a complex multi-level process in order to be successful at shaping transformation processes (Ibid.:30). Kristof (2010b: 106-107) identifies in her model different levels with different players which interact with each other. Concretely, she mentions the

following levels of action; the transformation process itself, aspects of time, different players, as well as the proposed solutions and ideas (Ibid.: 106-107). All these levels of actions are embedded in certain framework conditions (Ibid.: 106-107). The challenge for change agents is to keep an eye on the different action levels while adapting the transformation process to the framework conditions (Ibid.: 2010b: 106-107). Figure four illustrates these different levels of actions.

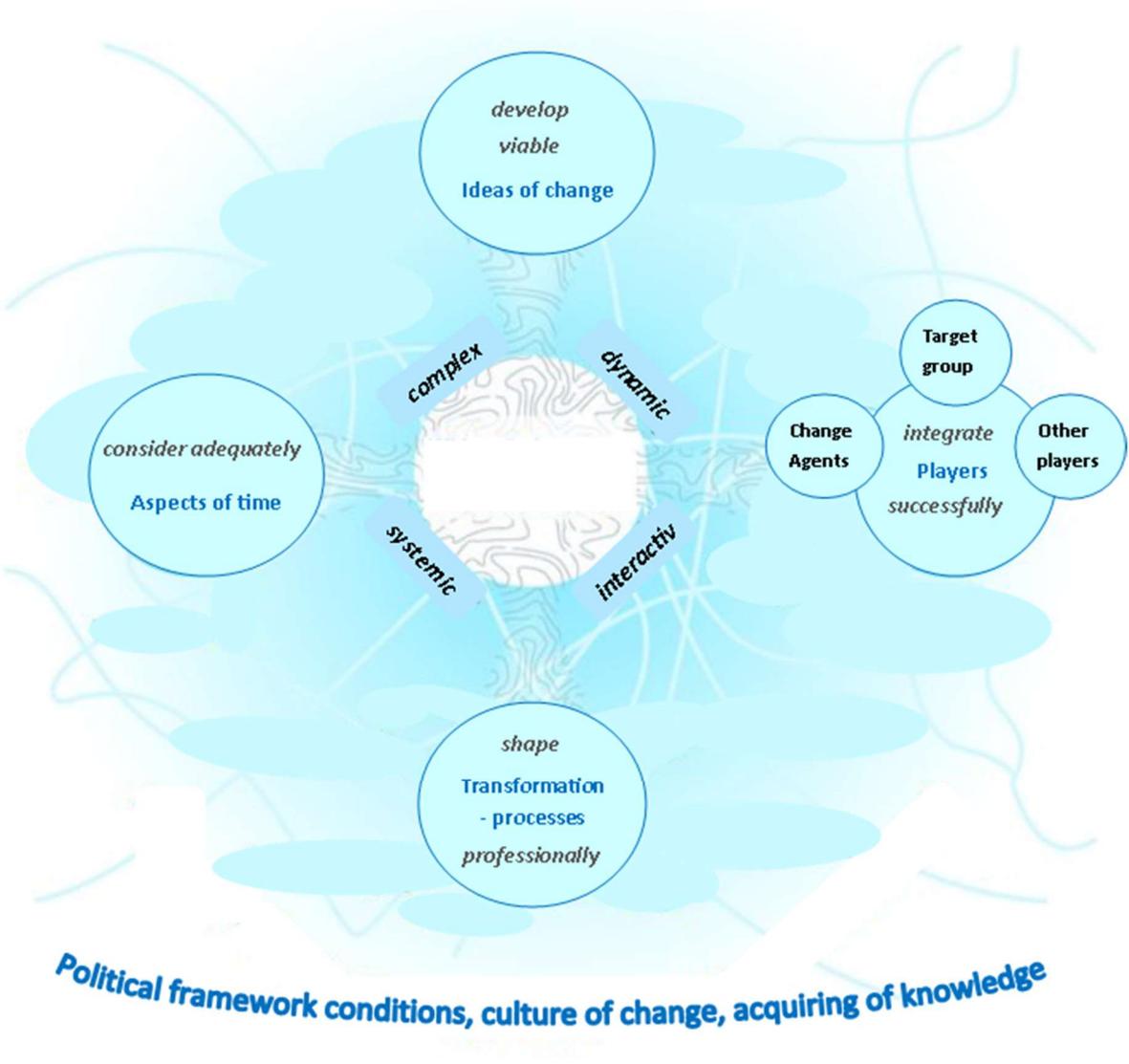


Figure 4: Level of actions for successfully shaping transformation processes, own translation (Kristof 2010b:106)

As a next step we will have a closer look at the concrete conditions of success suggested by Kristof.

5.2.1 Opposition

When it comes to opposition against processes of change Kristof (2010b: 22; 108) emphasizes the importance of recognizing that people are not necessarily rationally acting individuals. They have different roles and their actions are rather based on different goals, ideas and previous experiences (Ibid.: 108). Opposition is often perceived to be something negative, but successful change agents are aware that opposition will help them to find even better and more inclusive solutions (Ibid.: 108). In short, according to Kristof, opposition is important for successful change. She further argues that mostly, not the entire target group needs to be in favour of the envisaged change in order to implement it successfully (Ibid.: 110). What exact proportion has to support the transformation depends on the proposed solution and the framework condition (Ibid.: 110). Kristof (2010b:110) adds that it is important that change agents restrict the possible actions against the transformation process of the people which cannot be included in the transformation process or which cannot be convinced of the suggested solution.

5.2.3 Change agents

As already mentioned above change agents play a key role in the model of successful change. Kristof (2010b:110-111) argues that there are four different kind of roles as promoters (*Rollen des Promotorenmodells*) which change agents need to fulfil.²⁶

1. Promoters of specialised knowledge (*Fachpromotoren*) bring along their expertise and are involved in initiating transformation processes, in developing concrete ideas of change and in pushing ahead its implementation (Ibid.: 110-111).
2. Process-promoters (*Prozesspromotoren*) are characterized by a combination of specialized knowledge and leadership skills (Ibid.: 110-111). They are the ones defining the problems, shaping the transformation process and communicating with the people involved (Ibid.: 110-111).

²⁶ For more information about the roles as promoters also see Reiß 1997; Hauschildt 1997; Bach 2000

3. Promoters of power (*Machtpromotoren*) have not only leadership skills but also potential possibilities of influence (Ibid.: 110-111). Additionally, their human and financial resource can support the transformation process (Ibid.: 110-111) Usually they are the ones which initiate processes of change. (Ibid.: 110-111).
4. The last category of promoters refers to promoters of relationships (*Beziehungspromotoren*) (Ibid.: 110-111). They have a lot of competences when it comes to maintaining relationships (Ibid.: 110-111). Moreover, they have access to the relevant networks and are good at conflict resolution (Ibid.: 110-111).

These roles need neither to be fulfilled by a single change agent within an organisation nor need they be formalized (Ibid.: 111). Further successful change agents are required to have the following qualifications; they are aware of their objectives, they enjoy the process of changing things and they are good at and enjoy dealing with other people (Ibid.: 111-112). Kristof (2010b:111-113) argues that in order to fulfil all four promotor roles and to bring together all other required qualifications, it is crucial that enough change agents are actively involved in the process of change at the same time. In case some important competences are missing, they need to be actively searched for which often means to recruit new change makers (Ibid.: 111-113). It can be concluded that one crucial factor of success are the qualifications and competences of the change markers involved.

5.2.4 Time aspects

In the view of Kristof (2010b:115), time aspects are another action level of transformation processes which change agents need to keep in mind. If there is insufficient time for the transformation process they usually fail (Ibid.: 115). Firstly, time is needed to shape and implement such processes and secondly, it is time consuming to accompany the affected people by adapting to the changes (Ibid.: 115). At the same time people who are concerned by the changes need time to get used to the new situation and to change their behavioural habits or to acquire new required skills (Ibid.: 115). However, too much time can negatively influence the transformation process because it tires out the involved persons (Ibid.: 115). In

summary it can be said that the intended process of change needs to match with the available time resources.

The past and the future are two additional dimensions of time which should not be ignored as Kristof points out (Ibid.: 116). Change agents need to take into consideration the past (Ibid.: 116). This can include positive elements like for example building on already existing experiences or networks (Ibid.: 116). On the other hand, they need to be aware of opposition which may have its origins in the past and which could reoccur during the transformation process (Ibid.: 116). Also, the future plays an important role because today's decision lays the foundations for future processes of change (Ibid.: 116). This can lead to undesired path dependencies (Ibid.: 116). Therefore, change agents should prefer reversible, flexible and dynamic solutions

5.2.5 Ideas of change

The ideas of change and the proposed implementation process need to match with the framework conditions as well as with all involved players (Kristof 2010b: 117). According to Kristof (2010b: 117), it is common that the idea of change and the proposed solutions will alter over the course of the transformation process and all the players involved need to be aware of it. Consequently, due to the various interests involved compromises often need to be found (Ibid.: 117). Kristof (2010b:117-118) explains the process of developing ideas of change as follows. A captivating idea of change with first propositions for concrete solutions proposed by change agents mostly stand at the beginning (Ibid.: 117-118). It follows an agreement procedure where the affected people also propose possible solutions and ideas of change (Ibid.: 117-118). The final solution is then developed collectively (Ibid.: 117-118). Change agents should be open for other suggestions from the outside and not hang on to their own ideas.

5.2.6 Transformation process

Kristof (2010b:118-119) describes the effective transformation process as mostly tedious, complex and facing multifarious opposition. Therefore she argues, change agents must have

the competences to accompany these processes professionally (Ibid.: 118-119). With the intention of doing so, they need to analyse the point of departure as well as the different options for change in the context of the multiple and interacting levels of action (Ibid.: 118-119). Special attention should be paid to the different players and how they are linked up, the available resources, the predominant culture of change as well as other framework conditions (Ibid.: 118-119). Kristof (2010b: 120) further names several factors which make successful transformation processes more probable. Firstly, the members of the target group and other players should be actively involved. Secondly, it is helpful to create scenarios of possible outcomes and consequences. Thirdly, it might help to define intermediate objectives or to carry out a pilot project as it enables achieving some initial successes. Fourthly, if the transformation processes are monitored and evaluated, one can initiate some modification of the processes if necessary. Fifthly, change agents should accompany the transformation process until daily behavioural habits have been adapted and/or legal frameworks have been adjusted. Finally, the transformation process is more likely to be successful if sufficient financial, and time resources as well as enough qualified change agents are available.

5.2.7 Framework conditions

In addition to the above mentioned conditions and factors of success, political framework conditions do also play an important role when it comes to transformation processes, as Kristof (2010b: 122-123) suggests. Often, they are themselves the target of requests for change (Ibid.: 122-123). Change agents should be aware of this and call for and encourage change friendly political framework conditions (Ibid.: 122-123). Further, changes are easier to accomplish in a culture where change is positively connotated (Ibid.: 123). Another important task for change agents is to encourage the acquiring of knowledge for shaping transformation processes as well as learning skills for changing behavioural habits (Ibid.: 122).

The following figure shows possible starting points for change agents to shape complex, multi-level and dynamic transformation processes with several players involved. It also illustrates the fact that all levels of action are interconnected. Even if change agents make use of the success factors mentioned above, they need to take into account that actions at one level can influence the other levels (Ibid.: 123).

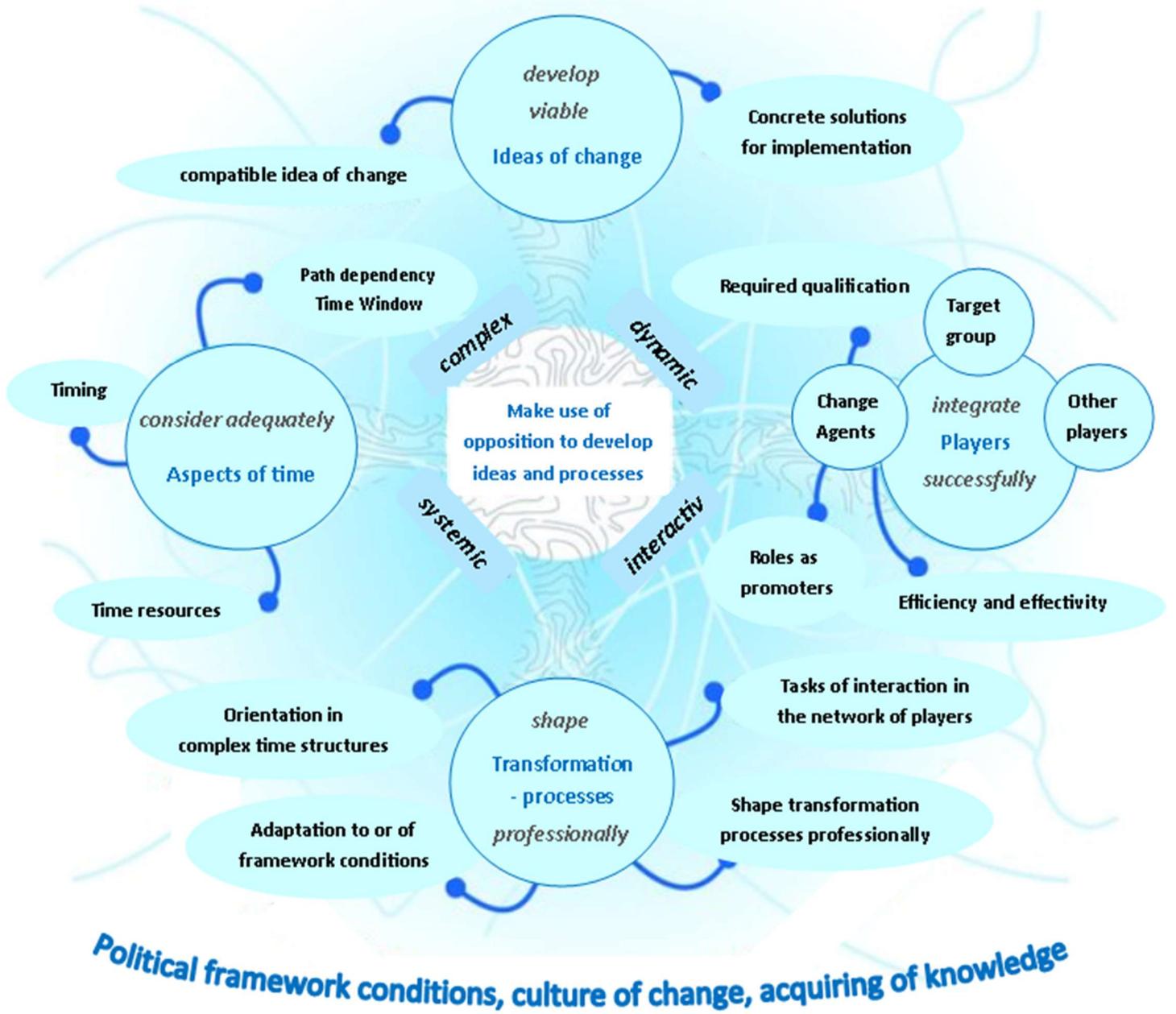


Figure 5: Starting points of successfully shaping transformation processes, own translation (Kristof 2010b: 124)

6. Methodology

Qualitative research methods have been chosen for the empirical part of this research for three main reasons. First of all, qualitative research methods are considered more appropriate for studying complex social phenomena such as transformation processes or social innovations compared to quantitative methods (Denscombe 2010: 304). Secondly, they generate rich and detailed data which allow an in-depth exploration of the object of study (Ibid.: 304). Finally, some authors explicitly suggest using qualitative methods for the study of the features and possibilities of socially innovative initiatives (Konstantatos et al. 2013: 274). They argue that social innovation initiatives often develop novel solutions which call for particular qualitative methodologies to approach them and to analyse the actors, aims and practices involved (Ibid.: 274). On the other hand, qualitative research methods entail some disadvantages which need to be taken into account. To begin with, it is difficult to say how far results from few qualitative in-depth studies can be generalized to other similar instances (Denscombe 2010: 304-305). Further, in the process of identifying themes and patterns in the data and developing explanations there is a risk of oversimplifying and disregarding data that does not fit (Ibid.: 305). One needs to be aware of these issues when analysing qualitative data.

In order to answer the second research questions regarding success factors, obstacles and framework conditions as well as resulting recommendations for action, detailed in-depth information about the social innovation initiatives are required. This information has been gathered by conducting four semi-structured, face-to-face interviews as well as a focus group with key persons of the social innovation initiatives. The chosen methods, why they have been selected and how they have been applied will be discussed in the next two sections.

6.1 Interviews

Various considerations have led to the choice of semi-structured face-to-face interviews with key persons to collect information about the social innovation initiatives. Firstly, interviews are an effective tool for investigating issues in-depth and in detail (Denscombe 2010: 193-192). Secondly, interviewed key informants can provide valuable inside information which cannot be found elsewhere (Ibid.: 193-192). Further, interviews can be used not only for

collecting simple factual information but are also suitable for capturing more complex and multifaceted information (Ibid.: 173-174) For this research both of these types of information are relevant and need to be gathered during the interviews. Finally, interviews can create room for the informants to expand their ideas and views and emphasise what they believe to be important (Ibid.: 173-175). This was also facilitated by the semi-structured character of the interviews. Even though a list of key questions to be discussed constituted the basis for the interviews, the course of the interviews was flexible. Consequently, the interviewees could speak more widely on the issues and points of interests which they considered important or could add other views or ideas. Like all other research methods, interviews have also disadvantages. Semi-structured or unstructured interviews produce open format data (Denscombe 2010: 193-194). The analysis of this kind of data can be challenging and time-consuming (Ibid.: 193-194). Moreover, the characteristics and background of the interviewer and the context in which the interview takes place always have an impact on the collected data (Ibid.: 193-194). Yet because the advantages outweigh the disadvantages, semi-structured, face-to-face interviews have been chosen as one of three methods for collecting data. However, the shortcomings and disadvantages will be kept in mind when analysing the data.

For the purpose of exploring the presence of success factors, challenges and framework conditions for transformation processes, the model of successful change proposed by Kora Kristof has been operationalised. The resulting dimensions and sub-dimensions served as point of reference for the key questions of the interviews. The levels of action suggested by her served as a starting point for the definition of the different dimensions in the operationalisation process. However, the following modifications have been made. Firstly, the issue of opposition was not reflected in a level of action of Kristof because it is considered to be an encompassing phenomenon which is present at different levels of action. Nevertheless, as opposition to transformation processes plays an important role it has been operationalized as a proper dimension. Further the two levels of action 'transformation process and idea of change' have been combined into one dimension as they share many similarities. This step has been necessary because only a certain number of dimensions could be treated during the limited duration of the interview. Figure six illustrates how the concept of models of successful change has been operationalised.

Research Questions	Concept	Dimensions / Levels of action	Sub-levels
<p>What are factors of success of social innovation initiatives in Berne?</p> <p>What are the challenges social innovation initiatives in Berne face and what could be possible solutions for these challenges?</p> <p>In what framework conditions do social innovation initiatives in Bern operate?</p>	Model of successful change	Players	Change Agents Target Group Other players (Network of players)
		Transformation process Idea of change	
		Opposition	
		Time aspects	Timing Path-dependency Time Resources
		Framework conditions	Political & Economic Framework conditions Culture of change Acquiring of knowledge

Figure 6: Operationalisation of the concept of models of successful change

As a next step, interview questions corresponding to the dimensions and sub-dimensions have been formulated. In total, eight guiding key questions have been prepared. Every dimension or sub-dimension has been represented in one or two questions. An easy introductory question about the interviewee's role in the organisation was used to start off by covering familiar territory. Further, for every question, secondary questions and key terms for digging deeper into the issue have been listed. Depending on the views and emphasis of the interviewee, it has been decided in the course of the interviews which issues and topics should be discussed in more detail. The final question opened up the space and asked the respondents what they believe are factors of success and challenges for their initiatives independently from the operationalised model of Kristof. Finally, the interviewees had the opportunity to raise any points that had not been covered so far. The complete list of the guiding key questions and secondary questions can be found in the annex²⁷.

The interview partners were all active participants of the four social innovation initiatives. The representative from the Repair Café Bern is a member of the board. From the community-supported organic agriculture project Radiesli a member of the operational group

²⁷ See Annex 10.2

participated in the interview. A member of the core group represented the Transition Town Initiative Bern. For the housing cooperative Warmbächli a member of one of the working groups partook in this research. The face-to-face interviews took place at a venue chosen by the interviewees which was either their home or their office. They were conducted between 9th of September and 22nd of September 2017 and lasted from one to one and a half hours. Two of the interviews have been conducted in German and two interviews have been conducted in Swiss-German. For one interviewee, German was not the first language but the person had very good German language skills. The interviews have all been recorded and interview notes were taken. The identity of the interviewed persons will be kept anonymous. In general, all interviews took place in a good and cooperative climate without any major disturbances. Furthermore, all key topics could be addressed and discussed. Summing up, it can be said that the interviews were fruitful and produced valuable data. Nevertheless, scientific evidence shows that interview data are always affected by the interviewer-interviewee relationship (Denscombe 2010: 178-179). That is why, in the following some thoughts will be dedicated to this so-called interviewer-effect. All interviewees have an academic background and have a high educational level. Three out of the four interviewees are male. Only one interviewee is not in the same age category as the interviewer. As this is a small-scale research project, not much can be done about the interviewer-effect as the personal attributes of the interviewer cannot be changed. However, given the above mentioned characteristics of the interviews and the fact that the topic of interviews did not include any personal or especially sensitive topics, it is assumed that the impact on the data is modest. After the interviews have been conducted, the audio recording has been transcribed. The Swiss German interviews have been transcribed in German²⁸. When necessary a sentence structure has been added so that the talk also makes sense in a written form. This has been done with caution in order not to change the meaning of the interviewees' statements. As a next step, the transcripts have been given to the interviewees for counter-checking. Two interviewees requested some minor adjustments to the wording. For the proper analysis of the interview data, content analysis has been considered the most suitable approach. According to

²⁸ Direct quotations of the interviewees used in the chapter of the empirical results have been translated into English from the author of this study. Afterwards the translated quotations have been sent to the interviewees for counter-checking and authorising the quotations. No adjustments have been required by the interviewees.

Mayring (2015: 13), the content analysis is a systematic, theory-driven approach for examining communications. Denscombe (2010: 281-283) adds that content analysis reveals the relevant content of a text by measuring relevant words and ideas. It further brings to light positive or negative views on things and is an appropriate method for analysing uncomplicated texts (Ibid.: 281-283). The interview transcripts can be considered straightforward. Therefore, I argue the use of content analysis is an appropriate method to apply in this case. The aim of this analysis is to discover success factors, challenges and framework conditions which social innovation initiatives in Berne in the field of degrowth face. This will be done by identifying and highlighting them in the data collected during the interviews. Content analysis is guided by a logical process (Denscombe 2010: 281-282). First of all, relevant categories for the data analysis are developed (Ibid.: 281-281). For this purpose, a codebook was developed. The operationalisation of the model of successful change constitutes the bases of the developed codebook. It has been structured in six main categories namely: players, transformation process and idea of change, opposition, time aspects, framework conditions as well as additional elements mentioned by the social innovation initiatives. Other success factors, challenges or framework conditions mentioned from the interviewees which did not correspond to the theoretical model have also been integrated inductively in the codebook in the first round of coding. In total, the final codebook included 204 codes, sub-codes and manifestations. It can be found in the annex.²⁹ In a second round of coding all relevant text passages were coded according to the developed codebook by using the software MAXQDA. Finally, the occurrence and the frequency of occurrence of the codes has been analysed by using different tools provided by the MAXQDA software. The above described data collection and data analysis served to answer the research questions regarding success factors, challenges and framework conditions.

6.2 Focus Group

Scholars such as Konstantatos and his co-authors (2013: 274) suggest focus groups as interactive and transdisciplinary research methods for research on social innovation. They

²⁹ See Annex 10.3

argue that the potential and diversity of this research source lies in the (partially) guided interaction and exchange among the participants (Ibid: 276). Denscombe (2010 :352-354) adds that, focus groups unite participants who discuss an issue on which all have similar knowledge. He continues that the group-dynamics and the interaction within the group can bring to light additional findings which have not been discovered in the one-to-one interviews (Ibid.: 352-354). However, focus groups also have their shortcomings which need to be kept in mind. There is some residual uncertainty about the authenticity of the participant's statements due to the guidance and direction of the focus group by the researcher (Morgan 1997: 14). Or to put it differently, there is a danger that the researcher influences the focus group's interaction while moderating (Ibid.: 14). Additionally, scientific evidence shows there is a concern about how the presence of a group influences the individual statements (Ibid.: 14). Compared to individual interviews a tendency towards conformity and absence of contrary statements as well as a tendency towards polarization and the presence of more extreme views could be observed in focus groups. After considering the above mentioned assets and drawbacks, it has been decided to rely on focus groups as a research method with regards to possible solutions for the challenges the social innovation initiatives face. Therefore, as an additional research method, a focus group was organized. The objective of the focus group was to gather ideas on how to meet a common challenge of the initiatives identified in the analysis of the one-to-one interviews. In order to make the discussion and the idea-finding process more fruitful, the classical method of focus groups has been enriched by some methods from the field of social work. As the researcher lacks the expertise on this matter, the socio-cultural facilitator Ursina Anesini provided the necessary know-how. She holds a degree in Social Work with specialisation in Community Development (*Soziokultur*) and is familiar with idea-finding and group moderation methods. Based on the analysis of the individual interviews, one main challenge has been selected to discuss possible solutions during the focus group. One representative of each of the four social innovation initiatives participated in the focus group. With one exception they were the same persons who had been interviewed before. The interviewed person from Radiesli who could not participate in the focus group for reasons of scheduling has been replaced by another activist who holds an equal position within the organisation. The focus group lasted for two hours and took place on a Friday evening at 18:00 in a seminar room of the University of Bern. In the beginning some snacks and refreshments were offered to the participants as they came directly from work with

an empty stomach. Before the actual discussion started some time was dedicated to a round of introduction as well as to a short presentation of the intermediate results of the individual interviews. Approximately one hour was dedicated to the group discussion. The focus group ended with a short evaluation and feedback session. For the moderation of the focus group the researcher was supported by the sociocultural facilitator Ursina Anesini. The focus group has been recorded and notes have been taken during the focus group. The recordings have not been transcribed but listened to afterwards, in order to complete the taken notes. The results of the focus group which will be presented in the next chapter are based on these supplemented notes of the researcher.

7. Empirical results

In this section we will look at the results from the empirical analysis. More concretely, the factors of success, the challenges as well as the framework conditions found in the data will be presented and discussed. At the end of each section, the key points will be summarized.

7.1 Factors of success

In general, it can be said that many different factors of success have been identified in the four social innovation initiatives. In the analysis aspects of transformation processes suggested by Kora Kristof as well as further aspects added by the interviewees have been taken into consideration. In total 66 different factors of success were identified. These were mentioned 202 times in the data analysed. Out of these 66 identified factors, 44 can be attributed to the model of change from Kora Kristof and 22 are additional factors mentioned by the representatives of the social innovation initiatives. With regards to the research question: what are the factors of success for social innovation initiatives in Berne, the focus of the analysis will, in a first step be on recurring factors of success which occur in the data of all analysed social innovation initiatives. Success factors which are shared by several social innovation initiatives which are active in diverse fields are more likely to be generalizable and therefore, more likely to be relevant for other social innovation initiatives than factors which were only found in one or two of the studied initiatives. The following figure shows the success factors which could be identified in all four analysed organisations (marked in red). The coloured spots show the importance³⁰ of the success factor for the social innovation initiative compared to the other factors of success.

³⁰ In this figure the importance of the factor of success is measured by the frequency of occurrence in the data.

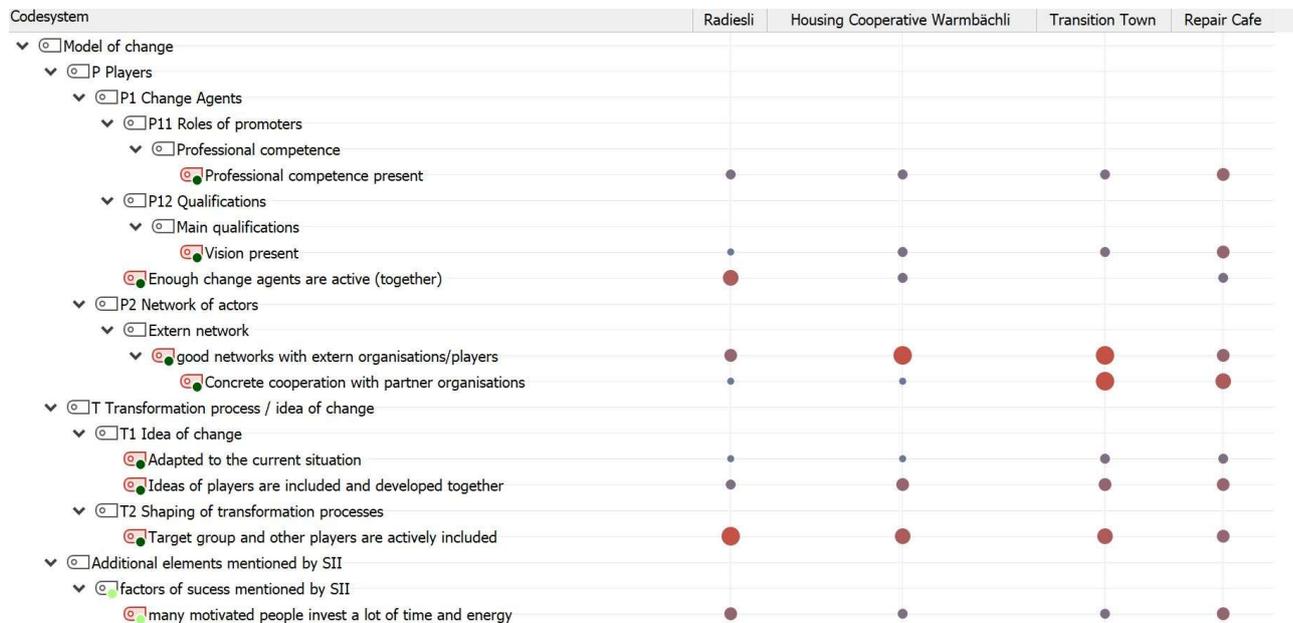


Figure 7: Summary of success factors present in all four organisations

To a greater extent, it can be concluded that even though the activities of the four analysed social innovation initiatives are different, they share several factors of success. At the action level of the players respectively at the sublevel of change agents, three common factors of success were found. In all four organisations the change agents have the necessary professional competences at their disposal and have a vision about the change they would like to initiate and implement. Three out of the four studied organisations have enough change agents which are active together. Transition Town Bern is the organisation which is lacking in sufficient change agents. However, in this matter, the interviewee from Transition Town Bern, stated explicitly and repeatedly that these missing active change agents represents a challenge for them and would constitute another potential factor of success for them (Member of the core group, Transition Town Bern, 14.09.2017, p.1 L31 - p.2 L4; p.5 L7-L12; p.6 L1-L4). That is why, this factor has also been taken into account. Therefore, it can be concluded that having sufficient active change agents which do not only possess the necessary professional competences but also have a vision about the change they initiate, can be considered as three success factors for social innovation initiatives in Berne. Regarding the network of actors, the analysis showed that being well-connected with other players is an important key factor of success found in all organisations. Further all four initiatives do in one way or another cooperate with external partner organisations. Consequently, having good networks with extern organisations as well as having concrete cooperation's with partner

organisations can be seen as two additional factors of success. Turning to the two levels of actions of developing viable ideas of change and shaping the transformation process, three common factors of success resulted from our analysis. Firstly, the idea of change of all four examined social innovation initiatives is well adapted to the current situation they are facing. Secondly, the ideas of other players were well received and included in order to collectively develop the idea of change. Thirdly, the target group as well as other players are actively included in the transformation process. To sum up, taking into consideration the current situation when it comes to idea of change, staying open for inputs from other players as well as creating opportunities for the target group and also for other players to actively participate in the transformation process, turned out to be three other factors of success. In addition to the factors of success proposed by Kristof, the interviewees from the four social innovation initiatives mentioned some other factors which from their point of view contributed to their success. One of the factors was mentioned by all four interviewees. That is, the participation in the organisation of many motivated people willing to invest their time and energy. This factor is similar to the above mentioned presence of enough active change agents. However, here the interviewees refer not necessarily to change agents but also to ordinary members or activists who are active in their organisation.

After having looked at the identified factors of success, from a general and accumulated point of view, in the following section the key success factors, which are specific to the four analysed initiatives are presented. Given the fact that the four organisations are working in very different areas and are organised in different manners, I believe it is interesting, in a second step, to also look at every initiative individually. Various success factors have been discovered in the collected data. However, not all discovered aspects can be discussed in detail given the limited scale of this research. Instead, the focus will be on key factors which either appeared in the data repeatedly or were elaborated particularly extensively by the interviewee. A listing of all identified factors of success of all four social innovation initiatives can be found in the annex.³¹

³¹ See Annex 10.4

7.1.1 Radiesli's factors of success

One of the community based agricultural project Radiesli's key factor of success, which has been mentioned several times is the active involvement of the target group and other players in the processes of change. The interview partner elaborated that the project, is organised in a highly participatory way:

“Yes, we are very participatory. Participation is the basis for everything we do. Even though there is an operational group which is particularly involved in our daily activities, strategical decisions are discussed and taken in the general assembly” (Member operational group, Radiesli 06.09.2017, p.6 L26-30, own translation).

“Further the production process itself is organised in a participatory manner as all members need to make their contribution” (Member operational group, Radiesli 06.09.2017, p.6 L32-33, own translation).

The members of the Radiesli are actively involved in the project and have lots of opportunities to participate and to contribute their own ideas, irrespective of any formal positions or roles (Member operational group, Radiesli 06.09.2017, p.7 L2-12). Further the fact that enough change agents are present and active together plays another important role. There are 13 change agents who are active in the operational group of Radiesli. Moreover, other members of Radiesli who do not necessarily hold a formal position in the organisation are also active as change agents (Ibid.: p.5 L15-16 & p.7 L3-8). Furthermore the change agents possess the necessary professional competence for example in agriculture or have the opportunity to acquire them during their activity in the organisation (Ibid.: p 3. L32 - p.4 L3). Finally, another key factor refers to Radiesli's good internal and external networks. Radiesli has well established partnerships and/or regular exchange with other organisations from various background (Ibid.: p 7. L22 - L33). On the other hand, Radiesli also has a very well established internal network (Ibid.: p 11. L14 - L17 & p.7 L2-L12). People are well connected, and well informed about what is going on. At the same time, there are many opportunities for discussion, dialogue and exchange within the organisation. In addition to the

success factors proposed by Kora Kristof the interviewee suggested few other factors considered crucial for Radiesli’s success (Ibid.: p.10 L20-L22 & p. 11-12 , L 33- L1). First, the fact that the change agents as well as the members of Radiesli have confidence in the project and believe in its success has been mentioned. Consequently, many people are willing to invest a lot of time and energy in the project and take on responsibility. This seemed to be especially crucial at the initial stages of the project. A community based agriculture project involves very concrete and tangible activities and products. This is seen as another element contributing to Radiesli’s accomplishments (Ibid.: p.10 L22-L31 & p.5 L2-L3). The following figures summarizes the above discussed factors of success.

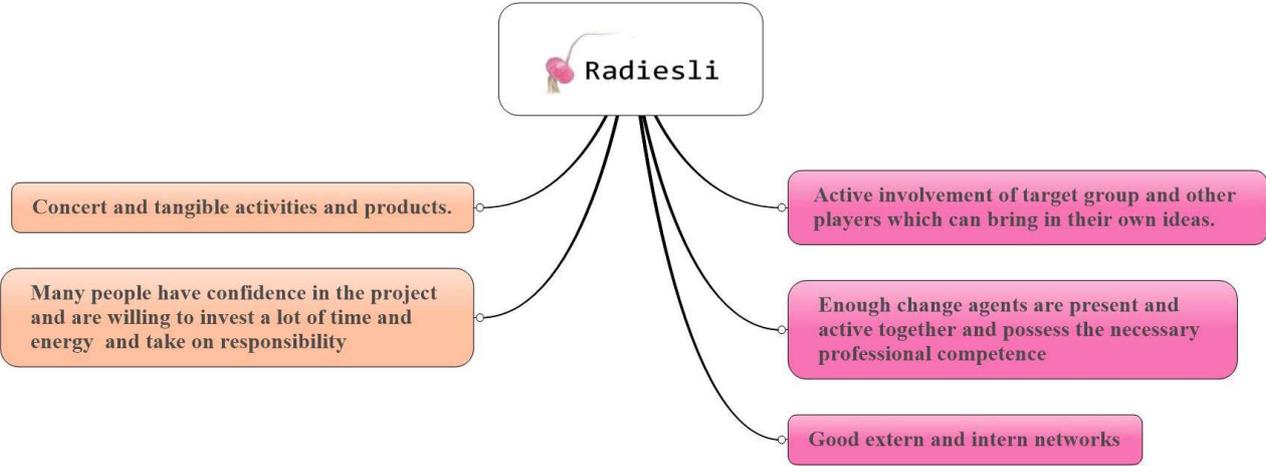


Figure 8: Identified key factors of success of Radiesli, theory-based factors of success in red, additional factors mentioned by Radiesli in orange

7.1.2 Warmbächli’s factors of success

One of the main success factors of the housing cooperative Warmbächli which occurs repeatedly in the data is their good network and cooperation with other external organisations and players. There is an intense exchanges of experiences with other similar housing projects in other cities with regard to various domains such as financing, organisation of common spaces or rental criteria (Member of a working group, Warmbächli 07.09.2017, p.5 L31 - p.6 L7). In addition, the Warmbächli cooperative is also connected with some of these projects through personal ties. Moreover, the housing cooperative Warmbächli also benefits from the

collaboration and the exchange with other housing cooperatives which are active in the same plot (Ibid.: p.8 L20-L26). Another important aspect of networking are the linkages to the regional cooperative union and other loose networks of housing cooperatives where a lot of know-how is available (Ibid.: p.8 L3-L11). Furthermore, there is a specific working group (*AG Quartier*) which secures good networks with the quarter and the neighbourhood where the housing project will be realized (Ibid.: p.1 L23-L29). The cooperative also works closely together with the association *Neustart Schweiz* which puts forward a new vision of cohabitation in newly organized neighbourhoods³² (Ibid.: p.8 L2-L3). Thanks to this widespread networking, the Warmbächli cooperative is well informed about what is going on in the network, which is also a factor of success suggested by Kristof. How fast transformation process takes place is another important factor according to Kristof and it is essential that the pace of the transformation is appropriate for the target group and other players (Kristof 2010b: 115). The housing cooperative Warmbächli succeeds in choosing such an appropriate pace.

“There is enough time to clear issues up and to discuss them. Negotiation processes do take place and are properly communicated” (Member of a working group, Warmbächli, 07.09.2017, p.7 L23-L26, own translation).

“Our schedule is well organised and we always try to take into consideration the various aspects of the issues we are working on, as well as to provide adequate time for the formation of opinions” (Member of a working group, Warmbächli, 07.09.2017, p.7 L28-L30, own translation).

The interviewee specifies that, there is enough time to negotiate controversial issues such as for example the concept of mobility or to the cooperation with possible tenants of the commercial premises (Ibid.: p.1 L4-L10; p.7 L11-L26). In the case of the Warmbächli housing cooperative the pace of transformation processes is only partially determined by their change agents. The related administrative processes also influence how fast the transformation process can take place. However, the fact that the change agents consciously

³² For more information about *Neustart Schweiz*: <https://neustartschweiz.ch/> (visited 28.03.2018)

use the available time for negotiation processes and conflict resolution demonstrates their ability to deal with conflicts which is considered to be a further success factor. One more success factor which is closely linked to an appropriate pace of transformation is the possibility for participation of the target group as well as the inclusion and development of their ideas. Finally, the courage to follow new paths is another key factor of success of the housing cooperative Warmbächli. To try out and to experiment with new forms of cohabitation and new living arrangements plays an important role and gives the housing cooperative a laboratory character (Ibid.: p.9 L29 - p.10 L4). The interviewee from the working group also put forward some factors of success which are not represented in Kristof's model of successful change. The presence of many motivated people who identify themselves with the project and invest their time and energy, have been mentioned (Ibid.: p.11 L11-L14). Further the fact that housing is a very concrete and tangible topic is believed to contribute to the projects' success (Ibid.: p.10 L30 - p.11 L1). The above discussed factors of success are summarized in the following figure.

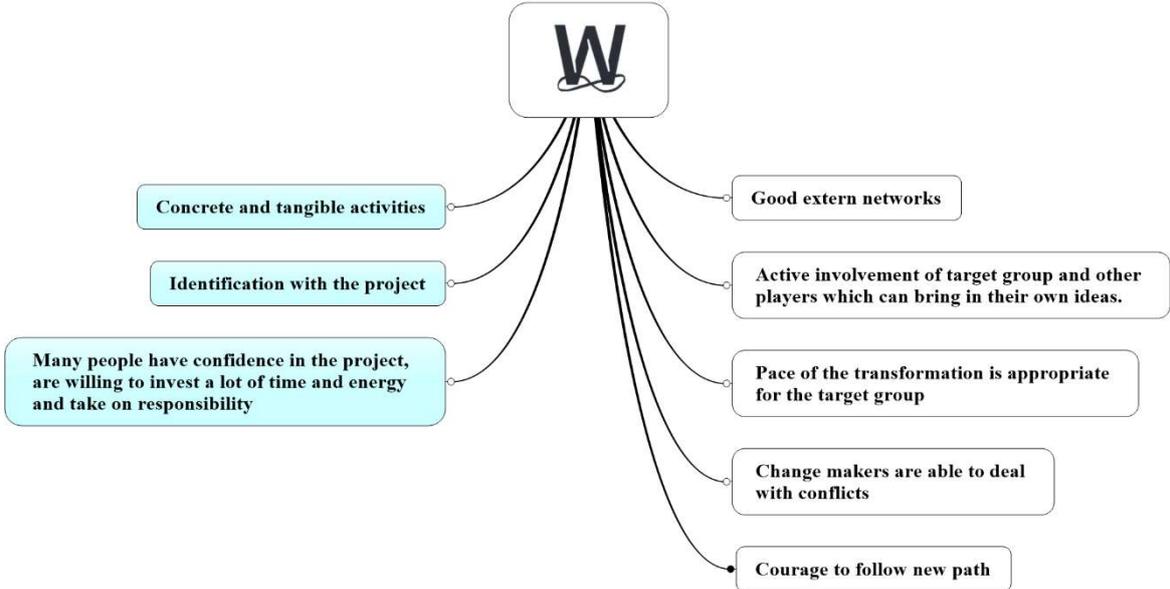


Figure 9: Identified key factors of success of the housing cooperative Warmbächli, theory-based factors of success in white, additional factors mentioned by Warmbächli in blue.

7.1.3 Transition Town Bern's factors of success

Similarly to the housing cooperative Warmbächli, one of Transition Town Bern's key factor of success is its network with external organisations and players. They cultivate a lively exchange with other organisations which are active in similar domains (Member of the core group, Transition Town Bern, 14.09.2017, p.5 L16-L20). Also concrete cooperation's with other organisations in specific projects or events are common (Ibid.: p.4 L26-L27; p.5 L16-L20). As Transition Town Bern is a well-known initiative in Berne, sometimes other organisations approach them to ask if they would like to participate in some activities or even to permanently participate and become active in their organisation (Ibid.: p.5 L20-L30; p.2 L19-L22). Another key factor of success which could be identified is the adaptation of the idea of change to the target group and to the current situation. Transition Town Bern questioned the people living in the different neighbourhoods about their situation and their demands. By doing so they have also actively involved their target group as well as their ideas and views, which are two further factor of success (Ibid.: p.10 L12-L18).

"I believe it is important to develop a project on-site together with the concerned people. What are they willing to do? What do they want? What are the context-specific conditions? What is important?" (Member of the core group, Transition Town Bern, 14.09.2017, p.10 L16-L18, own translation).

Besides the factors of success suggested by Kristof there are other factors of success pointed out by the interviewee of Transition Town Bern. First of all, the interviewed person mentioned the presence of many motivated people who are ready to invest their time and energy and do not participate with an attitude of passive consumerism (Ibid.: p.10 L23-L27). Another factor which was brought up is the background of the people active in the organisation. A heterogeneous composition of people with different backgrounds is considered to be a factor which can possibly contribute to the success of the organisation (Ibid.: p.12 L13-L20). Finally having fun, being passionate and enthusiastic about being active for Transition Town Bern has been cited as a factor of success (Ibid.: p.7 L9-L19). At this point it is important to clarify that, contrary to the other social innovation initiatives, these additional factors of success suggested by the interviewed person are not necessarily present

in Transition Town Bern. They were mentioned rather in the context of a hypothetical question, what factors could also be possible factors of success for the organisation.

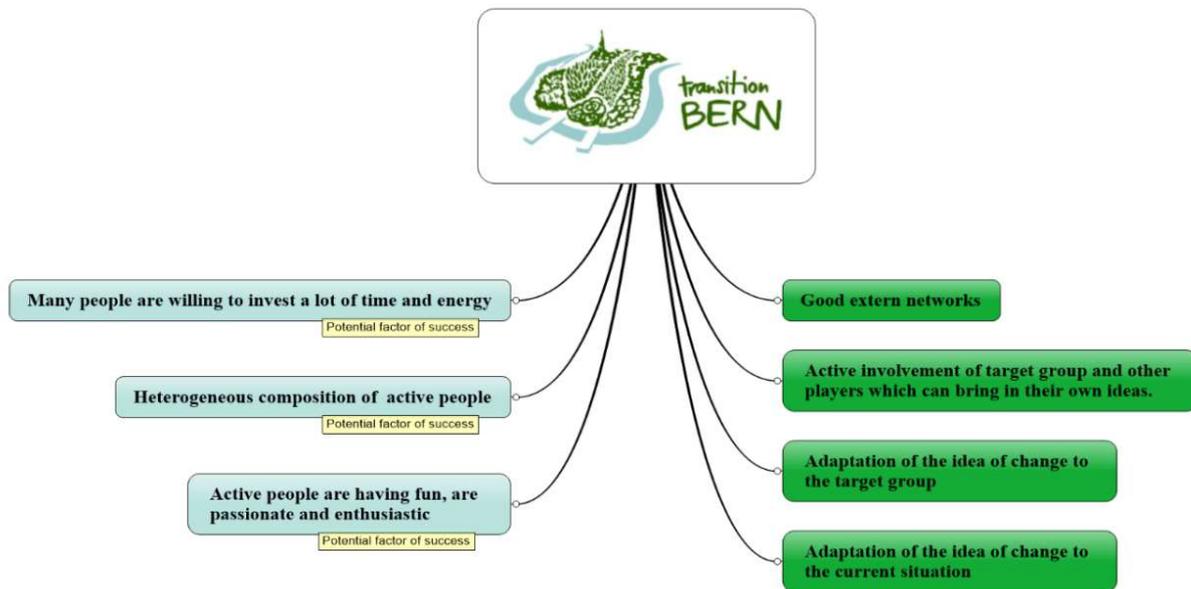


Figure 10: Identified or potential key factors of success of Transition Town Bern, theory-based factors of success in green, additional factors mentioned by Transition Town Bern in blue.

7.1.4 Repair Café Bern’s factors of success

Good networks with external organisations and players also appeared to be a key factor of success for the Repair Café Bern. Networking with other repair-initiatives seems to be particularly important for the Repair Café Bern. The exchange with other such initiatives takes place within the framework of official networking meetings or through social media channels like Twitter or Facebook. Besides the exchange of experiences regarding organisational and administrative issue the exchange of repairing know-how plays an important role. Hints for troubleshooting, knowledge about repairing particular devices, as well as repair manuals can be found in these social media communities. (Member of the board, Repair Café Bern, 22.09.2017, p.5 L33 - p.6 L9) The Swiss Foundation for Consumer Protection (*Stiftung für Konsumentenschutz*) is also a central partner organisation of the Repair Café Bern. Thanks to their connections the Repair Cafés found a suitable, well-located

venue free of charge (Ibid.: p.1 L20-L24). Further the Foundation for Consumer Protection has a strong position and visibility within the industrial sector and on the political stage and is able to approach important players and call their attention to possible flaws in their devices which have been identified by the members of Repair Café Bern. In several cases such interventions led to actions on the part of the manufacturers such as the producer of coffee machines *Jura* which as a consequence improved their devices (Ibid.: p.4 L18-L29). In order to offer people a broader spectrum of repair services, the Repair Café Bern is open for collaboration with other organisations. For example they work together with the group of Linux users Berne (*Linux User Gruppe Bern*) which offers hardware and software repairs for computers (Ibid.: p.7 L8-L14). Also in the case of the Repair Café Bern, enough change agents are participating and are active together which also contributes to their success (Ibid.: p.12 L4-L8). The necessary professional competences are also available. This is particularly important because there are important safety issues when it comes to repairing electrical devices (Ibid.: p.6 L29- p.7 L8). Another factor of success which could be identified is the fact that the ideas of the target group are included in the transformation process. The visitors of the Repair Café have the possibility to write down a criticism or new ideas during their visits (Ibid.: p.8 L22- p.7 L25). Finally, a further key factor of success concerns the attempt of the Repair Café Bern's to accompany the transformation processes until the behavioural habits of the people change. One of its objectives is to awaken people's curiosity and empower them to repair their broken everyday objects themselves:

“We want to empower people to have the courage to try to repair their broken everyday objectives themselves. Therefore, we always try, as far as possible, to include people in the repair work and encourage them to solder some components, unscrew the case or help with the reassembling of the device”
(Member of the board, Repair Café Bern, 22.09.2017, p.3 L31-p.4 L4, own translation).

Two other key factors of success mentioned by the interviewee of the Repair Café Bern, do not fit within Kristof's theoretical model. One factor is considered very essential and reoccurred several times in the data. That is that the people involved have fun and are passionate and enthusiastic about their activities (Ibid.: p.14 L4-L6; p.12 L4-L8; p.12 L25-L29). The second cited factor refers to the fact that the Repair Café Bern offers a unique

service which cannot be found elsewhere in Bern (Ibid.: p.14 L1-L4). The discussed factors of success are also shown in the following figure.

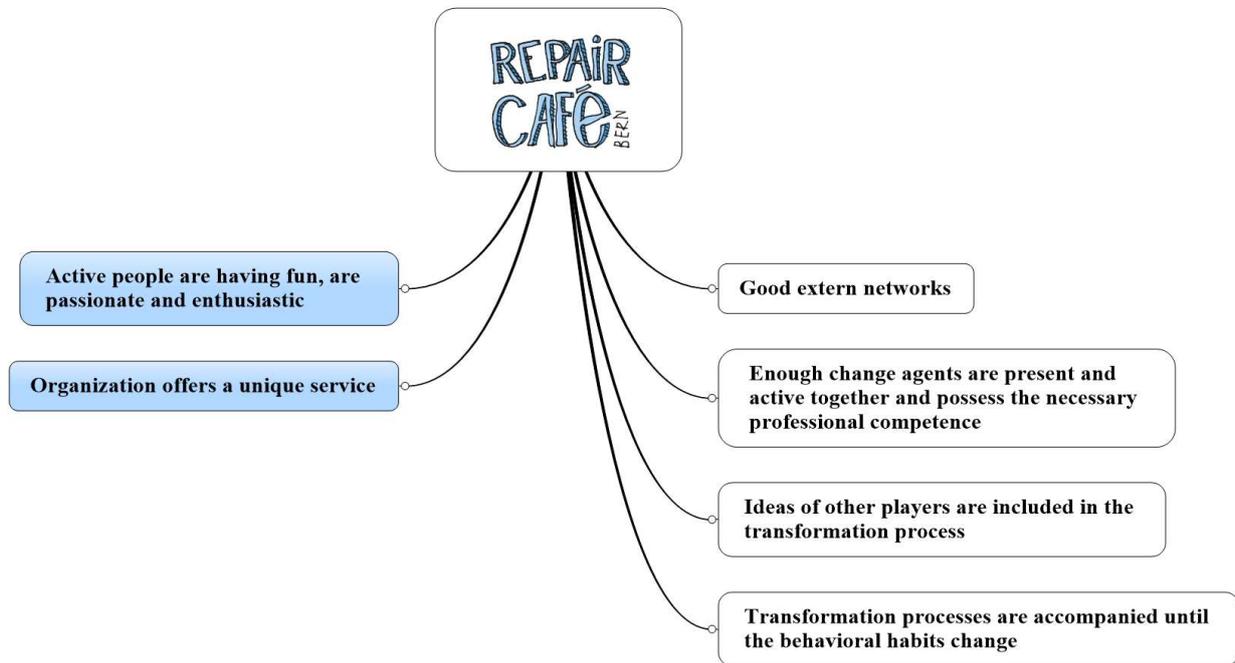


Figure 11: Identified key factors of success of Repair Café Bern, theory-based factors of success in white, additional factors mentioned by Repair Café Bern in blue.

7.1.5 Overview: Success factors of social innovation initiatives in Bern

With regard to the research question concerning the success factor of social innovation initiatives in Bern the following can be concluded. Various factors of success could be identified in the four studied organisations. Further, almost ten of the identified factors are shared by all of the four organisations even though they vary widely regarding the field in which they are active as well as regarding the way they are organised. Among the common factors of success two seem to be of particular relevance. Firstly, the presence of good external networks to other players in the transformation process. These networks seem to highly facilitate the access to additional knowledge as well as the exchange of experiences from which social innovation initiatives can benefit. What is more, the organisations gain access to additional resources through concrete partnerships and cooperation. Therefore,

networking plays an important role in social innovation initiatives in Bern. Secondly, the active inclusion of the target group in the transformation process also seems to be crucial. This factor is also closely connected with taking into consideration the ideas of change of other players. Letting the target group as well as other players have an active part and giving them some room to participate and develop their own ideas appears to be a crucial common factor of success. The availability of sufficient active and competent change agents as well as other active people is another vital factor for the analysed initiatives. Finally, the attempts to attract active people willing to invest their time and energy in the project seem to be more fruitful for social innovation initiatives pursuing concrete and tangible projects.

At this point, the decisive question arise as to what extent these findings about success factors can be generalized and applied to other social innovation initiatives in Bern. On the one hand, only four initiatives have been analysed and this sample can under no circumstances be considered statistically representative. On the other hand, the chosen initiatives are active in four very different fields and differ widely in their form of organisation. Accordingly, they do in some way typify the different social innovation initiatives which can be found in Bern. Also, the majority of the above mentioned factors of success do additionally rest on the interdisciplinary and transdisciplinary model of successful change by Kora Kristof. Therefore, we would argue that the above mentioned common factors of success do describe some tendencies which can to a certain extent also be applied to other social innovation initiatives.

7.2 Challenges

Besides the factors of success, the challenges which the four social innovation initiatives face have also been analysed. Again, aspects mentioned by Kora Kristof as well as factors mentioned by the organisations themselves have been taken into consideration. Fewer challenges could be found in the data, compared to the numerous factors of success. In total, 26 different challenges could be identified, of which 11 have been suggested by Kora Kristof and 15 are additional challenges mentioned by the interviewees. These 26 challenges occurred 50 times in the data.

In order to answer the research question regarding the challenges which social innovation initiatives in Bern face, possible shared challenges present in all four social innovation initiatives need to be looked at. However, no common challenge could be identified. Nevertheless, two challenges are shared by three out of four organisations. They will be looked at and discussed at the end of this chapter. As in contrast to the factors of success, the challenges seem to be more specific to the particular organisation and the field of activity, we will first look at the specific challenges of the four studied organisations. Here again the focus will be on key challenges which either reoccur several times in the data or have been particularly emphasized by the interviewees.

7.2.1 Radiesli's challenges

One challenge which Radiesli faces is linked to the recent enlargement of the Radiesli farm. As a consequence, they currently produce more than their members need and have to think of new ways of marketing this surplus. The search for buyers however turned out to be quite difficult as for example restaurants prefer buying uniform and homogenous vegetables which are identical in size and appearance from large conventional suppliers. In other words, the change agents have difficulties in finding independent business partners within the current network of current economic players (Member operational group, Radiesli 06.09.2017, p.12 L3-L9). Another obstacle emphasized by the interviewee refers to external economic constraints which could hinder certain people becoming a part of Radiesli (Ibid.: p.4 L21-L28). Some people might not have the necessary time resources to participate in the project because they need to invest their time and energy in wage labour in order to survive economically. In particular, they might not be able to afford the higher prices for food from Radiesli. Besides, there is the challenge of how to upscale the project and accordingly, the question how to address people who are not already receptive to the issues Radiesli is tackling (Ibid.: p.12 L10-L26). The obstacles and challenges of Radiesli are summarized in figure 12.

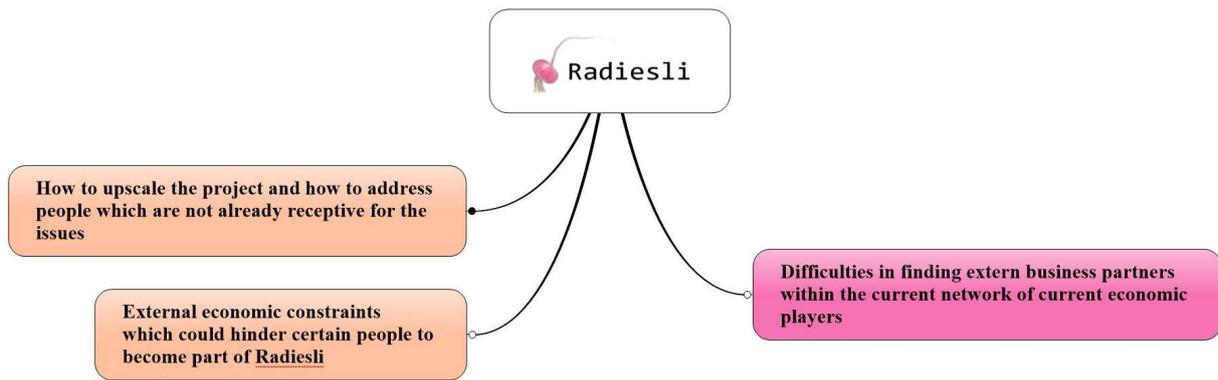


Figure 12: Identified challenges of Radiesli, theory-based challenges in red, additional challenges mentioned by Radiesli in orange.

7.2.2 Warmbächli's challenges

Only one possible challenge according to the model of successful change could be identified. It refers to the issue of the pace of transformation processes which has also been identified as a success factor above. According to the interviewee the relatively slow pace of transformation, which on the one hand enables profound consultation and negotiation processes, did also exhaust some people who expected the project to advance faster (Member of a working group, Warmbächli, 07.09.2017, p.11 L1-L4). This clearly illustrates the difficulties of shaping transformation processes and that there is only a fine line between factors of success and obstacles to transformation processes. The interviewee mentioned some additional obstacles they had faced. One challenge is to achieve a good social mix of people living in the housing cooperative (Ibid.: p.4 L12-L30). The social class and especially the age structure of the currently involved peoples is relatively homogeneous. Most of them are between 30 and 40 or between 50 and 60 years old and have a high level of education. Therefore, there is a need to approach people with different social backgrounds and from different age classes who might not yet be receptive to the ideas and topics of the organisation. Another challenge concerns the sustainability of the project (Ibid.: p.12 L14-L28). Currently, there are many open questions with regards to the period of time after the construction project is completed and the residents have moved in. How will living together be solidly organized? Will it be possible to put into practice the envisaged ideas and concepts? How will the

administration of the project be organised? Will the different working groups remain active? Especially in the long term as the residents change, housing cooperatives often experience difficulties regarding their social infrastructure. For example common rooms are no longer used and principles (for example the principle of communality) which were essential in the beginning lose their importance. These challenges also possibly affect the housing cooperative Warmbächli (Ibid.: p.12 L14-L28).

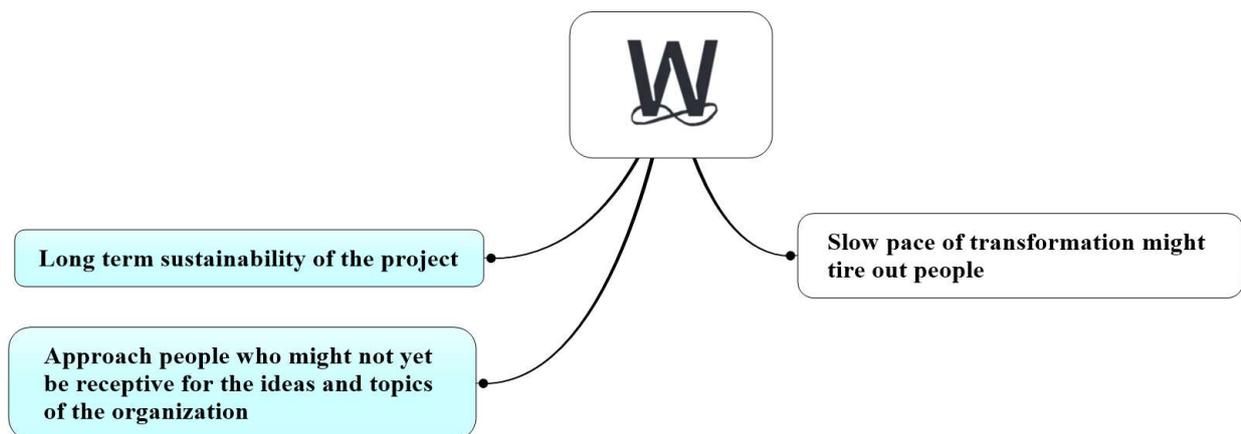


Figure 13: Identified challenges of the housing cooperative Warmbächli, theory-based challenges in white, additional challenges mentioned by Warmbächli in blue.

7.2.3 Transition Town Bern’s challenges

With regards to the challenges, the lack of sufficient active change agents is one of the main issues for Transition Town Bern. There are currently not enough change agents and other active people involved in their activities (Member of the core group, Transition Town Bern, 14.09.2017, p.1 L31 - p.2 L4; p.5 L7-L12; p.6 L1-L4). This results in another challenge that the organisation does not have enough time resources available for the aimed transformation process (Ibid.: p.7 L13-14; p.1 L12-L16). In addition to these theory-based main challenges identified in the data, the interviewee proposed the following other challenges which Transition Town Bern faces. Like the fact that the topics of the organisation are quite complex and multi-layered and can be intangible for the target group (Ibid.: p.11 L21-L27). Additional

a too narrow focus on people who are already receptive for the activities and topics of the organisation is also a key challenge according to the interviewee:

“I believe that it is also an obstacle that we sometimes forget to take a look over the fence. From my point of view we should invest more time in addressing people who are not already receptive to our activities and topics even though this is much more challenging” (Member of the core group, Transition Town Bern, 14.09.2017, p.12 L9-L12, own translation).

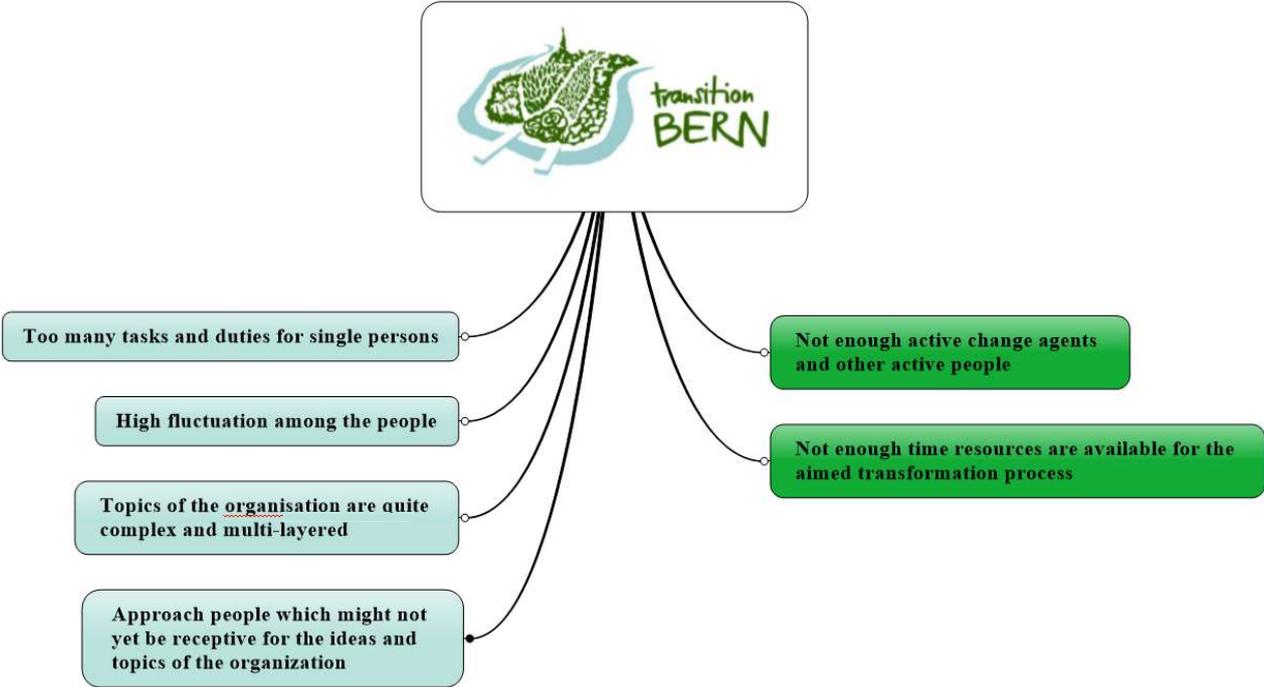


Figure 14: Identified challenges of Transition Town Bern, theory-based challenges in green, additional challenges mentioned by Transition Town Bern in blue.

7.2.4 Repair Café Bern’s challenges

In the collected data only one challenge could be identified for the Repair Café Bern. Even though for the moment the Repair Café Bern is in a comfortable situation regarding premises, the interviewee mentioned some difficulties in finding new affordable premises for the envisaged future expansion of the offers of the repair café (Ibid.: p.9 L1-L2). Further it was

also mentioned as a challenge which other repair initiatives might face, especially in the beginning (Ibid.: p.6 L25-L29).

After having discussed challenges specific to each organisation, in the next section the focus will be turned to the few common challenges which the four organisations face.

7.2.5 Common challenges

This chapter as well as the next chapter will serve to answer the research question about the challenges of social innovation initiatives in Bern and possible solutions to it. In general, fewer challenges have been identified, compared to the factors of success. As one of the selection criteria for the social innovation initiatives was their success, it was expected that the factors of success prevail over the challenges. Those challenges which could be found seem to be much more individual and specific to a particular organisation. As already mentioned above, none of the identified challenges concerns all four social innovation initiatives. However, three of the four organisations share two common challenges as the following figure shows.

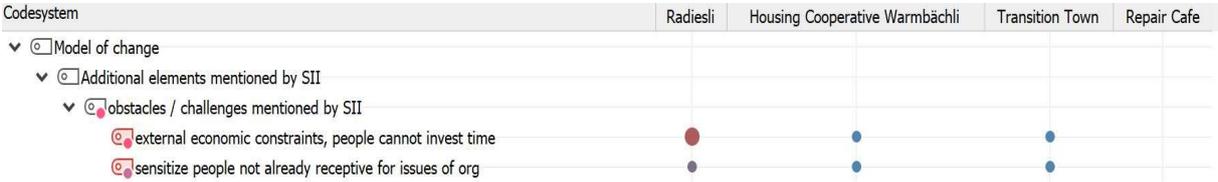


Figure 15: Summary of challenges present in three out of four organisations

Radiesli, the housing cooperative Warmbächli as well as the Transition Town Bern initiative mentioned the challenge of external economic constraints which could hinder people from participating and becoming active. In other words, the current economic framework might prevent several people from getting involved in social innovation initiatives. People who need to invest all their time and energy in gainful employment in order to survive economically do not dispose of the necessary resources to participate and become active. Or to put it differently, people need to have the necessary time resources in order to engage in such voluntary work. This can be seen as a general problem for social innovation initiatives which

strongly rely on voluntary commitment and therefore are hardly accessible for some people. One possible solution to this problem could be the public support (for example financial support) for voluntary commitment in order to make it accessible for everybody. Another approach could be an overall reduction in gainful employment in order to allow free time for other activities such as voluntary engagement. As we saw above, many degrowth approaches do in some way or another suggest such a reduction in gainful working time with the intention to allow free time for other forms of (re)production and consumption. Addressing and sensitizing people who are not yet receptive to the issues and topics of the organisation is another challenge faced by the same three organisations. This second common challenge of three out of four organisations, has been elaborated and discussed in detail in the organized focus group. The following section will give some insights into the concrete challenges of each of the organisations and the possible solutions which have been developed during the focus group.

7.3 Addressing people not already receptive for issues

In one way or another, three above mentioned organisations all share the challenge of addressing or gaining people to participate in their initiatives. This is a challenge which the three organisations are more likely to overcome by themselves compared with the shared challenge of people facing outside economic constraints. That is why, this challenge has been chosen as a topic of the focus group. In every organisation this challenge expresses itself differently. During the focus group the very specific challenges of the organisations have been presented by their representatives and possible solutions were discussed.

The housing cooperative Warmbächli faces the challenge that the group of people who are presently participating and interested in living in the cooperative are relatively homogeneous. The majority of the people are between 30 and 40 or between 50 and 60 years old and either plan to soon start a family or their children have just left the parental home. In addition, most of the people have a high educational level. Achieving a good social mix is one of the housing cooperative Warmbächli's objectives. Therefore, they would like to bring on board more people which are younger than 30, between 40 and 50 or older than 60. Subsequently, they are looking for more people without academic backgrounds or people with migrant

background. During the group discussion the following possible solutions for this challenge have been proposed by the other participants:

- * The housing cooperative could offer shared flats for students in order to address younger people. Students usually do not want to commit themselves to long term projects. However, if the cooperative would organise the shared flat and just offer the students some rooms, it might be attractive for them.
- * Instead of addressing people in the current members personal networks which probably have a similar background, one could think about where to find people with different backgrounds. Examples could be vocational schools or specific bars. That is where information brochures could be distributed or people could be directly addressed.
- * The interim usage of the already existing infrastructure (meeting rooms / *Brache Warmbächli*³³) could be used to organise events appealing to the group of people whom the cooperative want to find. Some possibilities to create publicity for the housing cooperative could also be searching for new members when renting out existing infrastructures to other organisations.
- * It is important to address people at an emotional and rational level. At the rational level the housing cooperative can offer prospective residents life in a community characterised by solidarity, sense of neighbourliness and sharing. Many people are looking for another life like this. However, at the rational level other factors such as the rent or other hard facts need to be considered.
- * People active in or participating at events of other social innovation initiatives, could be informed about the housing cooperative. This could be accomplished by providing information material at public events, distributing an informative newsletter about the housing cooperative, or by actively representing the cooperative at certain events. As in other social initiatives people with other backgrounds might participate, such closer collaboration might be a possible way of addressing new people with different backgrounds.

³³ The 'Brache Warmbächli' is a project of interim use of the area on which the housing projects will be realised in the future. More information about the project are available at: <http://brache.ch/> (visited 09.05.2018)

- * Once people have joined the organisation it is important to enable them some free space to realize their ideas, in order to ensure that they remain active in the organisation.
- * Another way to address people who are not yet receptive to the ideas, and topics of the housing cooperative is to make an attractive offer for example in terms of rents. The price could be a good mechanism for attracting new people.

According to the point of view of the Radiesli representatives, they do not face the challenge of addressing people who are not already sensitive for issues like sustainable agriculture or food waste, etc. Currently, Radiesli also has enough people who are active in the project. Therefore, the person suggested skipping Radiesli and to spend more time discussing the challenges of the other initiatives. In this context it is important to clarify that the representative of Radiesli who participated in the focus group was not the same person who participated in the interview. As the interviewee was not able to attend the focus group due to scheduling reasons another person from the operational group attended instead. At this point it became clear that the two persons do not share the same view about this challenge. For the interviewee the question of how to upscale the project and therefore address people which are not already receptive to such issues is important and does represent a challenge for Radiesli. However, the person participating in the focus group does not share this point of view.

The main challenge of the Transition Town Bern initiative is their current lack of active members. Presently, there are only a few people who are actively involved and they all have limited time resources due to work and family commitments. Moreover, there has been a high fluctuation rate within the organisation during the past years. Therefore, they are looking for new people who are willing to actively participate and remain active in the long term. In addition, these people should be proactive and initiate their own project according to their interests and capabilities. This challenge should be met in the context of limited time resources of the current active members as well as their disinterest in digital media. The participants of the focus group suggested the following possible solutions for this challenge:

- * There are already numerous neighbourhood-initiatives in Bern. Transition Town Bern could approach them and ask them if and how they could give support using their

know-how. As a consequence more people would know about the Transition Town Initiative. Once the other neighbourhood-initiatives are terminated, motivated people could join Transition Town Bern.

- * There is a Neighbourhood Day in Bern which could be used as a platform to make Transition Town more known.
- * The Transition Town initiative is active at a theoretical discursive level as well as with some few projects at the concrete practical level. At the same time the initiative is very open and has a broad spectrum of possible activities, which also makes it elusive. This makes it difficult for people to grasp what Transition Town Bern is. Therefore, it is suggested initiating more solidly based, low-threshold and practical projects to facilitate the approach to Transition Town Bern for new people.
- * In order to counter the high fluctuation rate, it was proposed to consciously accompany the inclusion of new active members within the existing group. It is important to be aware that they face an already established group and that efforts should be made to make them feel comfortable and to initiate some group formation process.
- * There are already some well-established and successful activities of Transition Town Bern such as the apple harvest project in the *Länggasse* neighbourhood as well as the Foodsave-bankett which reached 1400 people in 2017. The idea to actively approach people who have repeatedly participated in one of these projects and ask them if they would accept some responsibility and help organise the event next year, has been put forward by some focus group participants. As a consequence, already existing projects could be delegated to new active people and the initial organisers were able to free some time resources towards starting new projects. In this context it is important not to discourage people by asking them to accept numerous tasks, but to begin with small assignments which are easy and quick to organise.

As shown in figure 15 above, the Repair Café Bern does not face the challenge of addressing people who are not already sensitised to their issues. There are many active people who are participating and contributing to the Repair Café Bern initiative. The representative argued that they do not face this challenge because they offer very solid and tangible services which

are unique in the city of Bern. Therefore, they are in a special situation as they occupy a niche. Even though this particular case of the Repair Café Bern has not been discussed in the focus group as they do not share this challenge with the other organisations, the presence of its representative was valuable in the process of finding possible solutions to the challenges of the others.

The four social innovation initiatives seized the opportunity at the focus group to network with the other present organisations. Respectively a solid and closer contact between the housing cooperative Warmbächli and the Repair Café Bern has been established. They will remain in contact and consider possible future cooperations. In addition, the participants appreciated the external perspective regarding their challenges and will take back to their organisations some of the suggested possible solutions. Moreover, they appreciated the possibility to exchange and network among each other and some possibilities on how to support each other and how to offer each other platforms for presentation have been discussed.

The second shared challenge of addressing people who are not already receptive to the ideas and topics of the initiatives expresses itself differently for every organisation. Accordingly, the proposed solutions were also very individual and specific. Nevertheless, some of the solutions are similar and some tendencies can be identified. Firstly, it might help to think outside the box and go to places or organize events which reach out to people with very different backgrounds. Secondly, it might be a possible solution to enhance the concrete cooperation with other social innovation initiatives and to help each other addressing new people. A third important factor which was mentioned is to make it attractive for people to participate and to become active. This can be done by offering enough free space for people to bring in their own ideas, by creating a convivial atmosphere within the organisation, to ensure that people are having fun while being active. Finally, it was emphasized that working on a more specific and tangible project makes it easier to address people who are not already receptive for the organisations issues.

7.4 Framework conditions

Similar to the challenges, also the framework conditions which the social innovation initiatives face vary among the different organisations. The only common framework condition which all the four initiatives mentioned referred to a favourable culture of change in Bern. It has been stated that people in Bern are in general open for change and welcome new ideas and projects. Additionally, the political authorities are as well relatively open for such initiatives and support them to a certain extent. Apart from that, all four organisations divulged some unfavourable economic or political framework conditions. For more details the social innovation initiative will be looked at separately.

The political and economic framework condition in which Radiesli is operating is described as rather unfavourable. The agricultural policy is not designed to support community supported agriculture projects like Radiesli. Rather it causes small farms to disappear or to merge with other farms in order to achieve a particular size (Member operational group, Radiesli 06.09.2017, p.9 L14-L18). The negative economic framework conditions are linked with a challenge already mentioned above. In the current economic order people are highly dependent on income from wage labour in order to survive. Consequently this economic framework condition only allows people with a certain income and a certain flexibility in working hours to get involved in projects like Radiesli (Ibid.: 2017, p.9 L23-L28).

The representative from the housing cooperative Warmbächli described the political framework conditions as rather favourable (Member of a working group, Warmbächli 07.09.2017, p. 8 L14-L30). Even though the housing policies are far from being designed for creating and promoting housing cooperatives, the current political climate in the city of Bern is rather conducive to housing cooperatives. The prerequisites for the project are relatively good and the cooperation with the authorities is going well. With regard to the economic framework conditions, the cooperative benefits from the current low interest rate environment. Obtaining loans (partially even interest free) from private persons is currently easy. However, this is only a temporary situation which could change rapidly. The cooperative Warmbächli also aims at changing the current framework conditions through their activities. They would like to influence the standards of how new housing is constructed as well as how cohabitation is organized. One particular example refers to the directive which

regulates how many parking spaces need to be planned in the context of a housing project. Until recently, it was mandatory to have one parking space for every planned apartment. The housing cooperative successfully negotiated that they can submit a concept of mobility and remain a car-free residential area (Ibid.: p.8 L31 - p.9 L5). Furthermore, they want to set an example that alternative living arrangements are possible and by doing so, possibly be an inspiration to others (Ibid.: p.9 L7-L11).

According to the representative of the Transition Town Bern, Berne is considered a supportive environment due to its red-green government. In contrast, the political framework conditions are considered less favourable in the sense that political decision-makers are not susceptible to inputs or recommendations from social innovation initiatives (Ibid.: p.9 L11-L23). This view results from an experience at a workshop about food where Transition Town Bern was invited and participated. The proposals developed by the workshop participants have been presented to political decision-makers. The decision-makers however, all seemed to have preconceived precise ideas about the issue of food and were not receptive to the suggestions from the different grassroots movements

Regarding the framework conditions which the Repair Café Berne faces, the interviewee emphasized some unfavourable economic framework conditions (Member of the board, Repair Café Bern, 22.09.2017, p.13 L3-L5; p.15 L13-L32). The everyday items which the industry produces are far from being repair-friendly. The way the products are designed and constructed make repair works very difficult. Standardisation of certain component parts, within the industry would already be a big improvement.

In view of the research question concerning the framework conditions of social innovation initiatives in Berne, it can be said that depending on their field of activity, social innovation initiatives in Bern need to be prepared to not necessarily encounter very favourable framework conditions for their activities. However, these unfavourable conditions mostly refer to national framework conditions (such as for example agricultural or housing policies) or even global framework conditions (such as the growth-driven capitalistic economic system). On the other hand, social innovation initiatives in Bern encounter open-minded people and a favourable culture of change. The local authorities could for their part try to offer some space for such social innovation initiatives and demonstrate flexibility and

willingness to compromise when it comes to rules and regulations, as is in the case of the mobility concept of the housing cooperative Warmbächli.

7.5 Critical appraisal of the research design and its application

The research design and its application have been well considered and chosen with care. Nevertheless, this small-scale research risks encountering limitations and shortcomings in this regard. In this section the chosen research methods and their application will be critically reflected on with the aim of bringing attention to some potential biases in the obtained results. The theoretical model of Kora Kirstof on which this empirical analysis was based turned out to be more suitable to identify factors of success than challenges. Mainly, because the model's main focus is on factors of success and only some challenges are explicitly mentioned. Yet, the absence of a factor of success cannot automatically be considered a challenge. However, the challenges could nevertheless be considered, thanks to the openness regarding the challenges mentioned by the social innovation initiatives and the inductive enhancement of the codebook. With regards to the factors of success, it is noteworthy that all identified factors can be allocated to five particular levels of action (players, idea of change, aspects of time, transformation process and framework conditions). In the dimensions of opposition, no factors of success were found. This does not mean that none such factors of success of these dimensions are present in the four studied initiatives. Rather, due to the limited length of the interview time not all levels of action could be discussed in the same detail and the level of opposition was generally just treated superficially. Another challenge which the theoretical model posed, is its lack of clarity in defining the concept of change agents. According to Kristof (2010b: 30) change agents are active individuals or a small group of people, who promote and actively push ahead changes. Even with this definition it remains unclear who exactly can be considered a change agent and who is just a member or an activist of the organisation. For this analysis, the concept of change agents has been applied relatively restrictively and only leading key persons within the organisation have been considered to be change agents. The results also show that the organisations mentioned several factors of success which were not included in the theoretical model. At this point the question arises if the model should be complemented by these commonly identified factors. With regards to the data collection, it is important to keep in mind that only a single key person has been

interviewed and only his*her view has been captured. Ideally, several people from the same organisation would be interviewed and/or the data collection would be completed with some participatory observation in order to obtain a more complete picture. However, this would have gone beyond the limited scope of this small-scale research. These difficulties have been manifested in the fact that the two different representatives from Radiesli did not share the same view about the organisations challenges. As a result, only the challenges of two instead of three initiatives have been discussed during the focus group. Another issue that needs to be mentioned is the opposition of the participants to the chosen methods for structuring the discussion in the focus group. The intention of the method was to give the discussion some structure, to ensure that all participants receive equal chances to speak and to make sure that people could freely express new ideas and possible solutions without being interrupted. However, it turned out that the participants were rather sceptical about the benefits of these methods and preferred to conduct the discussion more freely. This opposition has been taken seriously by the moderator and the intended methods have been adapted. In spite of the above mentioned criticism, at the end of the focus group during the evaluation all participants drew a positive conclusion and stated that they have benefited from the discussions and exchange. Therefore, I assume that this issue has not significantly influenced the collected data. For conducting the content analysis, the data from the interviews and the focus group has been transcribed and coded with the help of a codebook. Ideally, such data is coded by two different researchers who have a high intercoder-reliability in order to prevent any biases. Unfortunately, this was not feasible in the context of this research. Additionally, social innovation is a concept which is far from being understood or defined consistently. Therefore, the findings and conclusions of this research do only apply to social innovations as they have been defined above. Consequently, they can only be applied with caution and after verification to other phenomenon designated as social innovations. It can be concluded that the chosen research design as well as its implementation do exhibit some limitations. These are mostly linked to the limited scope of this research project. Nonetheless, this does not in principle question the validity of the collected data and the conducted analysis.

8. Conclusion

In this thesis different types of innovations have been examined for their potential as drivers of change towards a solidary degrowth economy. With the help of literature research, the concepts of innovation and degrowth were brought together. Further four social innovation initiatives active in the field of degrowth in Berne have been analysed. The data collected through semi-structured interviews with key persons of the organisations were analysed using the method of qualitative content analysis. As a result, diverse factors of success as well as challenges which the four organisations face could be identified. In addition, some knowledge about framework conditions was acquired. Finally, the conducted focus group with the key persons of the organisations served as a method to jointly develop possible solutions to one of the identified challenges.

With regards to the theoretical research question of this thesis the following conclusions can be made. Innovations can contribute to a transformation towards degrowth and can therefore be considered as suitable drivers of change for that matter. By introducing new solutions, innovation can play an important role in the shift in paradigm from growth to degrowth and the resulting social and economic reorganisation. Still, it has also been shown that other modes of change such as exnovation, renovation and imitation are at least equivalent to innovation. Depending on the specific problem and situation, it needs to be decided on a case-by-case basis what mode of change is to be preferred. I further illustrated that the different types of innovation are not equally suitable when it comes to processes of change towards degrowth. The synthesis showed that non-material innovations are much more desirable than material innovations. This is due to the unwanted growth- and rebound- effects of material innovations in the context of a transformation towards a degrowth economy. In other terms, product and process innovations are the least suitable types of innovation and should only be applied as a last resort and under clearly defined conditions. Non-material innovations on the other hand often have an impact on how certain demands are satisfied and on the demands itself and seem to be more suitable. They are much more unlikely to generate unwanted growth effect and are much less resource intensive than material innovations. Examples for non-material innovations are services and system innovations, institutional and organisational innovations as well as social innovations. Social innovations for their part turned out to be

particularly suitable drivers of change towards a solidary degrowth economy. They are not only non-material as social innovations refer to changes in social practices, but they also place human basic needs at their core like the concept of a solidary degrowth economy. Additionally, to their outcome, also the processes of social innovations are favourable in view of a solidary degrowth economy. For the reason that they imply changes in social relationships as well as an increase in the capabilities of the people concerned. This facilitates for example the collective use of resources as it is suggested by the concept of a solidary degrowth economy. As a consequence, social innovations have been looked in more detail in the second part of this research. The results of this empirical analysis show that the four analysed social innovation initiatives in Berne share several factors of success. Namely, the presence of competent external networks and the cooperation with other players, the active inclusion of the target group in the transformation process, the availability of sufficient, active and competent change agents and activists, a common vision to pursue as well specific and tangible projects. Even though the analysed organisations are active in diverse fields and are organised differently, common success factors could be identified. Therefore, I suggest that even though the analysed sample is not statistically representative, the common factors of success do describe some tendencies which can to a certain extent also be applied to other social innovation initiatives. As for the challenges they turned out to be more specific to the particular organisations and only few are common. No challenge common to all four organisations was found. Two challenges shared by three out of four organisations could be identified. The first challenge refers to the fact that external economic constraints hinders people from participating because in order to make a living they have to invest all their time and energy in gainful work. Possible solutions for this challenge could be making voluntary commitment more accessible for everybody by reducing and reorganising gainful employment in order to enable free time for other activities. The second challenge concerns addressing and sensitizing people who are not yet receptive for the issues and topics of the organisation. Possible solutions to this challenge were developed during the focus group. Thinking outside the box and making use of places or events outside the ordinary sphere of activity is one proposition. Other ideas were to conduct more explicit and tangible projects or to cooperate more closely with other organisations in order to reach another audience. Finally, the last research question which remains unanswered concerns the framework conditions which social innovation initiatives in Berne are working in. The framework conditions are

also very specific to the different organisations because they work in different fields. One exception is the favourable culture of change in Berne. All analysed organisations described the people in Berne as relatively open for new ideas. Besides that unfavourable economic and/or political framework conditions specific to a single initiative were found. They were mostly national or even global framework conditions such as agricultural or housing policies. In summary, depending on the field of their activity social innovation initiatives do not necessarily encounter favourable framework conditions but can count on a change friendly culture in Berne.

In the first part of this thesis the relationship between innovation and degrowth is explored at the theoretical level. In the second part the conditions and circumstances of social innovations initiatives in Berne are empirically analysed at a practical level. In bringing these two parts together it can be concluded that with regard to degrowth social innovation are particularly suitable drivers of change and the above mentioned factors and possible solutions for challenges can be considered relevant for its success. Or to put it differently, social innovations which unite the above mentioned factors, are likely to be able to successfully initiate desirable transformation processes towards a solidary degrowth economy. In this sense social innovations might contribute to overthrowing the current economic and social order and by doing so might come close to the original meaning which the concept had in the 19th century.

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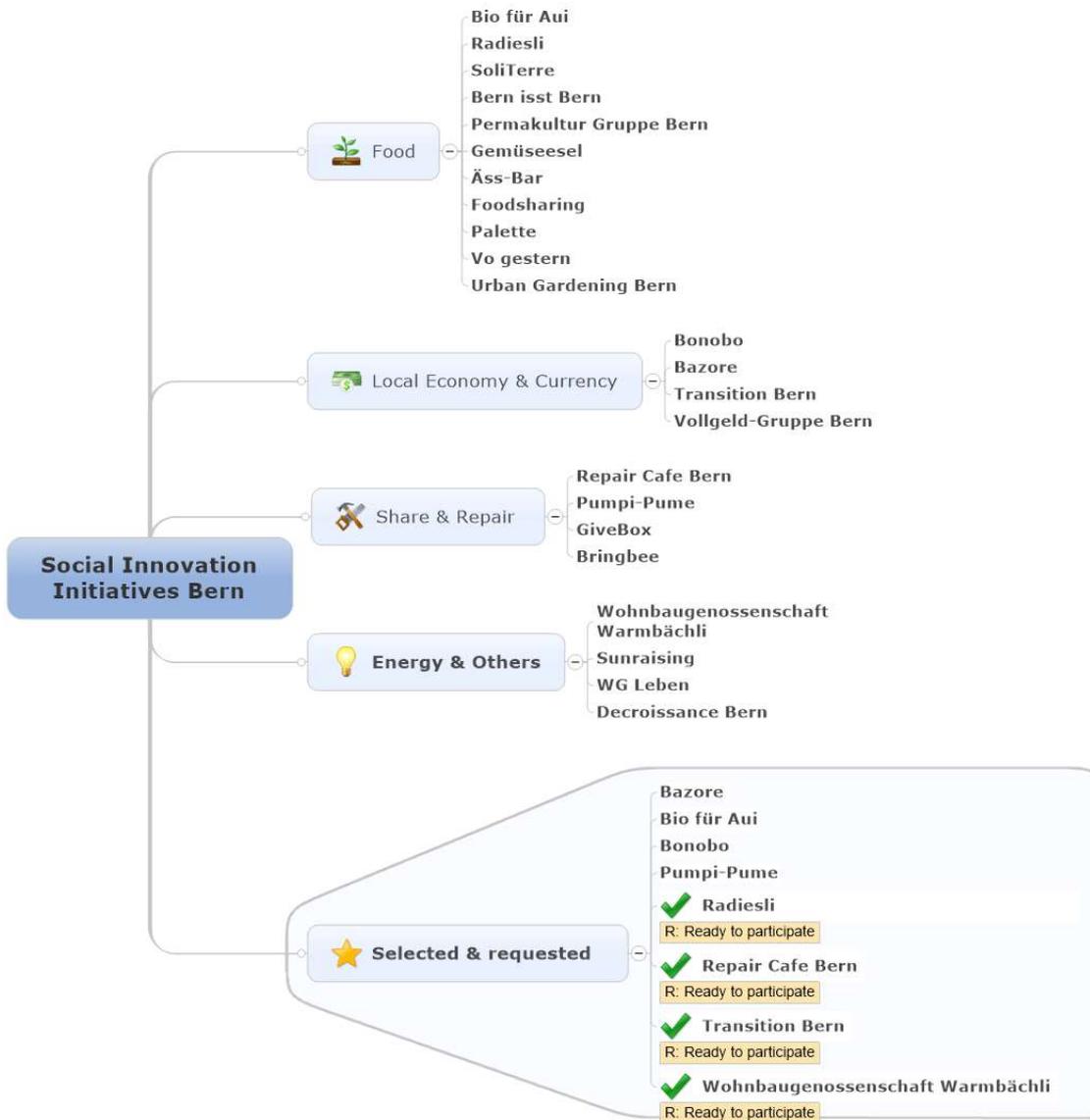
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10 Annex

10.1 List of identified social innovation initiative in Bern



10.2 List of the key questions and secondary questions

Research Question	Concept	Dimensions	Sub-levels	Key Questions	Secondary Questions
<p>What are factors of success of social innovation initiatives in Berne?</p> <p>What are the challenges social innovation initiatives in Berne face?</p> <p>In what framework conditions do social innovation initiatives in Bern operate?</p>	<p>Model of successful change</p>	Introductory Question		1. Erzähl mir doch etwas über deine Arbeit bei Radiesli...	Wie bist du zu Radiesli gekommen? Wie lange bist du schon dabei? Welche Funktion übst du heute bei Radiesli aus?
		Players	Change Agents Target Group Other players (Network of players)	2. Wie ist Radiesli entstanden, wer hat Radiesli initiiert?	Was ist die Vision von Radiesli für die Zukunft?
		Transformation process Idea of change		3. Welche Kompetenzen sind wichtig für die erfolgreiche Arbeit von Radiesli und inwiefern sind diese bei Radiesli vorhanden?	Fachkompetenz / Führungskompetenz / Beziehungskompetenz Welche Kompetenzen sind wichtig für die Weiterentwicklung von Radiesli? Gibt es Kompetenzen welche innerhalb von Radiesli noch fehlen?
		Opposition		4. Was möchte Radiesli verändern?	Wem möchten ihr erreichen? (Zielgruppe?) Partizipation von Zielgruppe? Passt die Idee zur aktuellen Situation & Rahmenbedingungen? Welche Ressourcen könnt ihr dazu nutzen? Welche Netzwerke sind euch hilfreich dabei?
		Times aspects	Timing Path-dependency Time resources	5. Wie geht ihr mit Widerständen (von Menschen die ihr ansprechen möchten oder innerhalb der Projektgruppe) um?	Inwiefern erachtet ihr Widerstände auch als Chancen, die dem Wandel nützen könnten?
		Framework conditions	Political & economic framework conditions Culture of change Acquiring of knowledge	6. Radiesli schlägt Lösungen für aktuelle Probleme vor. Inwiefern sind die von euch vorgeschlagenen Lösungen umkehrbar und lassen sich falls notwendig an neuen Umständen / Problemstellungen anpassen?	Vorhandenen Zeitressourcen bei Radiesli im Verhältnis zum angestrebten Veränderungsprozess ein? Veränderungstempo für Zielgruppe: zu langsam / geeignetes Tempo / zu schnell?
		Conclusion Question		7. Beschreibe und beurteile die aktuellen politischen / gesellschaftlichen / ökonomischen Rahmenbedingungen in welchen Radiesli arbeitet	Zielen eure Aktivitäten auch auf die Veränderung der Rahmenbedingungen ab? Wie veränderungsfreundlich schätzt ihr die Kultur ein in welcher ihr arbeitet? Fördert ihr eine veränderungsfreundliche Kultur? Falls, ja wie? Trägt eure Arbeit auch dazu bei, dass Menschen neue Kompetenzen zur Gestaltung von Veränderungsprozessen erlangen?
				8. Was sind aus deiner Sicht Erfolgsfaktoren / gute Rahmenbedingungen für Radiesli um einen Beitrag zu leisten für einen Wandel in Richtung Postwachstum?	

10.3 Codebook

1 Model of change
1.1 P Players
1.1.1 P1 Change Agents
1.1.1.1 P11 Roles of promoters
1.1.1.1.1 Potential influence
1.1.1.1.1.1 potential influence present
1.1.1.1.1.2 potential influence absent
1.1.1.1.2 Competence in maintaining relationships
1.1.1.1.2.1 Competence in maintaining relationships present
1.1.1.1.2.2 Competence in maintaining relationships absent
1.1.1.1.3 Leadership competence
1.1.1.1.3.1 Leadership competence present
1.1.1.1.3.2 Leadership competence absent
1.1.1.1.4 Professional competence
1.1.1.1.4.1 Professional competence present
1.1.1.1.4.2 Professional competence absent
1.1.1.1.5 Missing competence can be acquired while working in org.
1.1.1.1.5.1 but not everybody has the necessary time resources
1.1.1.1.6 Access to missing competences cooperation with external experts
1.1.1.2 P12 Qualifications
1.1.1.2.1 Main qualifications
1.1.1.2.1.1 Vision present
1.1.1.2.1.2 Vision not present
1.1.1.2.1.3 Enjoy changing things
1.1.1.2.1.4 Does not enjoy changing things
1.1.1.2.1.5 Enjoy interacting with others
1.1.1.2.1.6 Does not enjoy interacting with others
1.1.1.2.1.7 Effectiveness present
1.1.1.2.1.8 Effectiveness not present
1.1.1.2.1.9 Necessary professional knowhow and process competence is present
1.1.1.2.1.10 Necessary professional knowhow & process competence not present
1.1.1.2.2 Other qualifications
1.1.1.2.2.1 Creativity present

1.1.1.2.2.2 Creativity not present
1.1.1.2.2.3 Anticipatory action regarding emergent societal issues
1.1.1.2.2.4 No anticipatory action regarding emergent societal issues
1.1.1.2.2.5 Risk tolerance
1.1.1.2.2.6 Risk intolerance
1.1.1.2.2.7 Courage to ask inconvenient questions and follow new paths
1.1.1.2.2.8 Inconvenient questions not asked and new paths not followed
1.1.1.2.2.9 Good in communicating
1.1.1.2.2.10 Not good in communicating
1.1.1.2.2.11 Empathy present
1.1.1.2.2.12 Empathy not present
1.1.1.2.2.13 Conflict ability present
1.1.1.2.2.14 Conflict ability not present
1.1.1.2.2.15 Ability to assert oneself present
1.1.1.2.2.16 Ability to assert oneself not present
1.1.1.2.2.17 Serve as role model
1.1.1.2.2.18 Don't serve as role model
1.1.1.3 Enough change agents are active (together)
1.1.1.4 Not enough change agents are active (together)
1.1.2 P2 Network of actors
1.1.2.1 Extern network
1.1.2.1.1 good networks with extern organisations/players
1.1.2.1.1.1 Concrete cooperation with partner organisations
1.1.2.1.1.2 access to missing knowhow through network to other organisation
1.1.2.1.1.3 Active search for partner organisations
1.1.2.1.1.4 Organisation is well informed what is going on in the network
1.1.2.1.1.5 Change agents have good overview of relevant actors
1.1.2.1.1.6 Single members / persons are well linked
1.1.2.1.1.7 Partner organisation is well linked to the politics
1.1.2.1.1.8 Give other organisations the possibility to present themselves
1.1.2.1.1.9 Supports other organisations financially
1.1.2.1.2 weak networks with extern organisations/players
1.1.2.1.2.1 difficulties to find extern business partners
1.1.2.2 Intern network
1.1.2.2.1 Good intern network

1.1.2.2.2 Weak intern network
1.1.2.3 Importance of network for organisation
1.1.2.3.1 low importance
1.1.2.3.2 high importance
1.1.3 P3 Target group
1.1.3.1 Definition
1.1.3.1.1 Target group defined
1.1.3.1.2 Target group not defined
1.1.3.1.3 Organisation targets those possibly open for the issue
1.1.3.1.3.1 Different offer for different group of people
1.1.3.1.4 Organisation targets everybody
1.1.3.2 Target group is accompanied in transformation process
1.2 T Transformation process / idea of change
1.2.1 T1 Idea of change
1.2.1.1 captivate idea of change
1.2.1.2 not captive idea of change
1.2.1.3 adapted to the problems which need to be solved
1.2.1.4 not adapted to the problems which need to be solved
1.2.1.5 adapted to target group
1.2.1.6 not adapted to target group
1.2.1.7 Adapted to the current situation
1.2.1.8 not adapted to the current situation
1.2.1.9 adapted to the framework conditions
1.2.1.10 not adapted to the framework conditions
1.2.1.11 Ideas of players are included and developed together
1.2.1.12 Ideas of players are not included and not developed together
1.2.1.13 Dynamic solution
1.2.1.14 No dynamic solutions
1.2.2 T2 Shaping of transformation processes
1.2.2.1 current processes of change are taken into account
1.2.2.2 current processes of change are not take into account
1.2.2.3 Interests of players are taken into account
1.2.2.4 Interests of players are not taken into account
1.2.2.5 usable resources are taken into account
1.2.2.6 usable resources are not taken into account

1.2.2.7 Networks of relevant players are taken into account
1.2.2.8 Networks of relevant players are not taken into account
1.2.2.9 activities are adapted if necessary for achieving goals
1.2.2.10 activities are not adapted if necessary for achieving goals
1.2.2.11 monitoring processes for evaluating present success
1.2.2.12 no monitoring processes for evaluating present success
1.2.2.13 conditions defined when the process is considered as failed
1.2.2.14 No conditions defined when the process is considered as failed
1.2.2.15 good handling of unpredictability and uncertainty
1.2.2.16 insufficient handling of unpredictability and uncertainty
1.2.2.17 Efficiency, max. outcome with available resources
1.2.2.18 No Efficiency, not max. outcome with available resources
1.2.2.19 accompany of process until behavioural habits changed
1.2.2.20 no accompany of process until behavioural habits changed
1.2.2.21 Target group and other players are actively included
1.2.2.22 Target group and other players are not actively included
1.2.2.23 Sufficient financial resources available
1.2.2.24 Not enough financial resources available
1.3 O Opposition
1.3.1 O1 Dealing with internal opposition
1.3.1.1 internal opposition is taken seriously, try to find consensus
1.3.1.2 internal opposition is ignored, no approach to find consensus
1.3.2 O2 dealing with external opposition
1.3.2.1 external opposition is taken seriously, try to find consensus
1.3.2.2 external opposition is ignored, no approach to find consensus
1.4 T times aspects
1.4.1 T1 speed of transformation process
1.4.1.1 to fast for target group
1.4.1.2 to slow for target group
1.4.1.3 appropriate for target group
1.4.2 T2 Path dependency & time window
1.4.2.1 Proposed solutions are reversible and flexible
1.4.2.2 Proposed solutions are not reversible and flexible
1.4.2.3 Being aware of the past and future of change processes
1.4.2.4 Not being aware of the past and future of change processes

1.4.3 T3 Time resources
1.4.3.1 Sufficient time resources for the aimed transformation process
1.4.3.2 Not sufficient time resources for the aimed transformation process
1.5 F Framework conditions, culture of change, acquiring new skills
1.5.1 F1 Framework conditions
1.5.1.1 political framework conditions
1.5.1.1.1 Favourable political framework conditions
1.5.1.1.2 Unfavourable political framework conditions
1.5.1.2 economic framework conditions
1.5.1.2.1 Favourable economic framework conditions
1.5.1.2.2 Unfavourable economic framework conditions
1.5.1.2.2.1 difficulties in accessing necessary resources
1.5.1.3 societal framework conditions
1.5.1.3.1 Favourable societal framework conditions
1.5.1.4 activities for changing framework conditions
1.5.1.4.1 being an example of how to make it differently
1.5.2 F2 Culture of change
1.5.2.1 Favourable culture of change, culture open/welcoming for change
1.5.2.1.1 People in Bern open for new ideas
1.5.2.2 Unfavourable culture of change, culture not open for change
1.5.3 F3 Acquiring new skills
1.5.3.1 Promoting acquisition skills in shaping transformation process
1.6 Additional elements mentioned by SII
1.6.1 factors of success mentioned by SII
1.6.1.1 many motivated people invest a lot of time and energy
1.6.1.2 Enthusiasm / Passion / Fun
1.6.1.3 Well informed and curious people
1.6.1.4 Situation of (economic) crisis
1.6.1.5 many people believe in project, have confidence that it works
1.6.1.6 identification with the project
1.6.1.7 experiences team / friendships within team
1.6.1.8 keep the target group up-to-date and meet them regularly
1.6.1.9 project is about something concrete ex: housing, food
1.6.1.10 willingness to assume responsibility
1.6.1.11 approach of small steps which do not produce opposition

1.6.1.12 use and maintain acquired internal knowledge
1.6.1.13 offer an unique service
1.6.1.14 availability of well-located infrastructure free of charge
1.6.1.15 heterogenous structure in org., people with different background
1.6.1.16 Willingness to contribute to the org. not only to "consume"
1.6.1.17 Having good luck and chance
1.6.1.18 Enough time for dealing with conflicts and for opinion formation
1.6.1.19 also engage in social and sociable activities
1.6.1.20 being able to change people's priorities
1.6.1.21 having a certain amount of people involved in the beginning
1.6.1.22 Being open, not too restrictive with organisations principles
1.6.2 obstacles / challenges mentioned by SII
1.6.2.1 not enough people who invest time, big burden for few people
1.6.2.2 external economic constraints, people cannot invest time
1.6.2.3 Difficulties to find a suitable place for activities
1.6.2.4 how to deal with growth of the organisation
1.6.2.5 High infrastructure costs (rent for room)
1.6.2.6 Topic of organisation is complex and complicated
1.6.2.7 process of individualisation in society
1.6.2.8 no local persons in Org. /lacking knowledge / language barrier
1.6.2.9 high fluctuation among members
1.6.2.10 Future changes in economic situation (ex. economic crisis)
1.6.2.11 Insecurity about future cooperation with extern partners
1.6.2.12 Finding a consensus in questions of detail
1.6.2.13 open question how to upscale the project
1.6.2.14 How to ensure the sustainability of the project?
1.6.2.15 sensitize people not already receptive for issues of org
1.6.2.15.1 How to initiate transformation processes within people?
1.6.3 Possible solutions
1.6.3.1 Consider the project as a never ending process
1.6.3.2 promote voluntary work with state funding
1.6.3.3 Establish connections between urban and rural projects

10.4 All identified success factors by organisation

10.4.1 All identified success factors for Radiesli

Radiesli: Factors of success
Activities for changing framework conditions - being an example of how to make it differently
Change agents: conflict ability present
Change Agents enjoy interacting with others
Change agents enjoy changing things
Change agents good in communicating
Internal opposition is taken seriously, try to find consensus
Enough change agents are active (together)
Offer a unique service
Favourable culture of change, culture open, welcoming for change
Favourable societal framework conditions
Good handling of unpredictability and uncertainty
Good intern network
Good networks with extern organisations/players
Having a certain amount of people involved in the beginning
Having good luck and chance
Idea of change adapted to the current situation
Idea of change adapted to the problems which need to be solved
Ideas of players are included and developed together
Importance of network for organisation\high importance
Keep the target group up-to-date and meet them regularly
Many motivated people invest a lot of time and energy
Many people believe in project, have confidence that it works
Missing competence can be acquired while working in org.
Monitoring processes for evaluating present success
Organisation targets those possibly open for the issue
Professional competence present
Project is about something concrete ex: housing, food
Promoting acquisition skills in shaping transformation process
Target group and other players are actively included
Use and maintain acquired internal knowledge
Vision present
Willingness to assume responsibility

10.4.2 All identified success factors for Warmbächli

Warmbächli: Factors of success
Access to missing competences through cooperation with external experts
Access to missing knowhow through network to other organisations
Accompany of process until behavioural habits changed
Anticipatory action regarding emergent societal issues
Change agents enjoy changing things
Change agents have good overview over relevant actors
Change agents have risk tolerance
Change agents: conflict ability present
Competence in maintaining relationships present
Concrete cooperation with partner organisations
Courage to ask inconvenient questions and follow new paths
Engage in social and sociable activities
Enough change agents are active (together)
Enough time for dealing with conflicts and for opinion formation
Enthusiasm / Passion / Fun
External opposition is taken seriously - try to find consensus
Good intern network
Good networks with extern organisations
Good networks with extern organisations/players
Having good luck and chance
Idea of change is adapted to target group
Idea of change is adapted to the current situation
Idea of change is adapted to the framework conditions
Ideas of players are included and developed together
Identification with the project
Importance of network for organisation - high importance
Interests of players are taken into account
Internal opposition is taken seriously - try to find consensus
Keep the target group up-to-date and meet them regularly
Many motivated people invest a lot of time and energy
Many people believe in project, have confidence that it works
Missing competence can be acquired while working in org.
Networks of relevant players are taken into account
Organisation is well informed what is going on in the network
Organisation targets those possibly open for the issue - differentiated offer
Professional competence present
Project is about something concrete ex: housing, food
Single persons are well linked with influential people
Speed of transformation process is appropriate for target group
Sufficient time resources for the aimed transformation process
Target group and other players are actively included
Target group is defined
Usable resources are taken into account
Vision present

10.4.3 All identified success factors for Transition Town Bern

Transition Town Bern: Factors of success
Activities are adapted if necessary for achieving goals
Approach of small steps which do not produce opposition
Concrete cooperation with partner organisations
Courage to ask inconvenient questions and follow new paths
Enthusiasm / Passion / Fun
Good intern network
Good networks with extern organisations/players
Heterogenous structure in org people with different background
Idea of change is adapted to the current situation
Idea of change is adapted to the framework conditions
Idea of change is adapted to the problems which need to be solved
Idea of change is adapted to target group
Ideas of players are included and developed together
Many motivated people invest a lot of time and energy
Professional competence present
Situation of (economic) crisis
Target group and other players are actively included
Vision present
Well informed and curious people
Willingness to contribute to the org. not only to "consume"

10.4.4 All identified success factors for Repair Café Bern

Repair Café Bern: Factors of success
Accompany of process until behavioural habits changed
Availability of well-located infrastructure free of charge
Change Agents enjoy changing things
Competence in maintaining relationships present
Concrete cooperation with partner organisations
Enough change agents are active (together)
Enthusiasm / Passion / Fun
Experienced team / friendships within team
Give other organisations the possibility to present themselves
Good networks with extern organisations/players
Idea of change is adapted to target group
Idea of change is adapted to the current situation
Idea of change is adapted to the problems which need to be solved
Ideas of players are included and developed together
Interests of players are taken into account
Main qualifications \Vision present
Many motivated people invest a lot of time and energy
Offer a unique service
Partner organisation is well linked to the politics
Professional competence present
Proposed solutions are reversible and flexible
Sufficient time resources for the aimed transformation process
Sufficient financial resources available
Target group and other players are actively included
Target group defined