

Interdisciplinary research on sustainability cooperation

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Introduction

Cooperation is seen as one of the three main pillars alongside mutation and natural selection explaining evolutionary processes in natural science. It allowed multicellular life to evolve and humans to create complex societies and economies as we know them today. Although the human development process has led to an increase in living standards all over the world, it also produced global scale second order problems like climate change threatening the future well-being of all living creatures on the planet (Pachauri et al. 2014, Shukla et al. 2019). Past and present human intervention such as excessive consumption and pollution question the sustainability of the way societies are structured today.

The resulting problems have in common to be complex, uncertain, ambiguous and existential at the same time. Solving those challenges means tackling them on multiple levels simultaneously: On a global scale, as well as on many different local scale levels. Therefore cooperation is seen as a key factor to advance societal sustainability. Cooperation allows to include a broad range of different interests and perspectives, plus it allows for specialisation of tasks and knowledge. As sustainability challenges concern the whole coupled human-nature system on multiple levels, the exchange of multidimensional perspectives is crucial. Although the knowledge about the potential of cooperation to solve sustainability issues is already given, there are still difficulties when it comes to establishing cooperations. How can forms of multidimensional cooperation between sustainability related actors be established? And how does this contribute to sustainable development in general? This paper wants to address the following research question for the case of the upper rhine area:

How can potential forms of multidimensional cooperation between sustainability-related actors contribute to sustainable development in the upper rhine area?

This question has been answered by gathering criteria for sustainable cooperations and developing exemplary lenses for the design of such cooperations. This is done based on already existing initiatives in the upper rhine area. For illustration purposes, the framework is then applied to different fictitious prototypes of multidimensional cooperation between the existing initiatives. The whole research process is oriented along the Design Thinking method.

Methodology

According to Brenner et al. (2016), Design Thinking can be described as a mindset, process and toolbox. The Stanford University definition (Kelley & Kelley 2013) understands Design Thinking as a tool to create solutions for human needs using the tools and mindsets of designers. On a broader scale, Design Thinking aims to analyse, understand and solve complex practical problems. (Brenner et al. 2016; Darbellay et al. 2017)

As a mindset, Design Thinking combines divergent and convergent thinking by allowing designers to think creatively and without barriers (divergent) and by trying to find pragmatic solutions (convergent) at the same time. It follows that not the first best solutions will be applied, but that a variety of different ideas have a chance to be addressed. As a process, Design Thinking provides a guide to structure solution-driven collaboration among interdisciplinary actors. The process is characterized by a five-step approach which will be presented below. As a toolbox, Design Thinking encompasses a range of tools and methods that can support designers when tackling real-world problems. (Brenner et al. 2016; Buhl et al. 2019; Fischer 2015)

The composition of Design Thinking teams is inherently interdisciplinary as actors of various disciplinary backgrounds can create a variety of different and creative (divergent) solutions. Design Thinking demands openness of the individual disciplinary team members, by deploying analytical skills and tools of their own discipline while being open to the methods of other disciplines.

(Brenner et al. 2016; Darbellay et al. 2017)

Design Thinking originated in a corporate context. Most existing publications on Design Thinking address practitioners rather than academics. In the context of sustainability sciences, however, Design Thinking has been discussed as a toolbox and process. In particular, Design Thinking in sustainability sciences refers to a set of attempts to do structured research about the satisfaction of current and future needs by focussing on complex real-world problems and by dealing with relevant stakeholders. (Buhl et al. 2019)

This section will deal with the five ideal-type steps “Empathize”, “Define”, “Ideate”, “Prototype” and “Testing” outlined by the Stanford University to structure a research project. The steps act as an orientation and have an iterative character, which can be seen in figure 1. Learning effects in later stages can potentially lead to changes in the initial steps and vice versa.

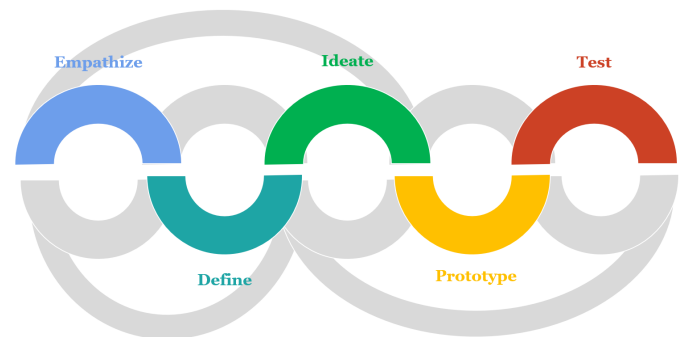


Figure 1. Scheme Design Thinking Method; source: own illustration (in accordance with Plattner 2018)

1. “Empathize”: First, the users’ needs are identified to better understand the problem at hand. This can be achieved through observations of and literature research on users and the context in which they act. (Plattner 2018; Brenner et al. 2016) To understand the present research problem, the identification of important actors and existing cooperation in the Upper Rhine Area has been a crucial step needed at the start. For this purpose, a Data

Management Table has been created to compile the findings. Regarding the interdisciplinary collaboration within the research group, a common work platform and the frequency of team meetings has been established.

2. “Define”: Second, the problem of interest is set to limit the scope of the project and to define core challenges. Here, findings from the “Empathize” step can help to frame the problem. Again, observations and literature reviews can work as methods. (Plattner 2018; Brenner et al. 2016) In this step of the research project, the findings of the literature review have been discussed and definitions for terms such as sustainable development and cooperation have been agreed on. Bringing together the individual disciplinary perspectives has been the main aspect in this step. The authors repeatedly returned to this step within the research process to ensure that there was a common understanding.

3. “Ideate”: Third, solutions can be found through interdisciplinary brainstorming, using the findings from the previous two steps. The focus should be on creative idea generation for building prototypes in the following steps. Here, unconventional rather than obvious solutions are encouraged to broaden the scope of potential prototypes (i.e. divergence). (Plattner 2018; Brenner et al. 2016) This step integrates the main findings to answer the research question, as it entails the development of a framework, lenses and prototypes. The interdisciplinary brainstorming demanded by Design Thinking was applied to the generation of multi-dimensional cooperations. In addition, three lenses of cooperation types were identified.

4. “Prototype”: Fourth, certain solution candidates from the “Ideate” step that seem promising to answer the research question are selected. Here, the focus is on synthesizing creative ideas with the goal to solve the initial problem and to satisfy user needs (i.e. convergence). (Plattner 2018; Brenner et al. 2016) As already mentioned, the identified lenses support the selection of three cooperations. The Prototype step included the detailed description and

the practical shaping of the cooperation ideas. Having developed concrete cooperation ideas helped to validate the developed framework.

5. “Testing”: Finally, the selected solutions are actually tested in the field. Here, feedback by end-users can help improve prototypes or come up with new ideas (Plattner 2018; Brenner et al. 2016). The step “Testing” was not part of the research process as it was beyond the scope of this research project. Nevertheless, testing the prototypes is part of the outlook chapter and could be carried out at a later date.

Theoretical Background

Literature research around „cooperation” in general showed that different disciplines have different definitions and theories for cooperation. In economics, cooperation is a process that allows various people, groups or organizations to act on the same project for mutual benefit instead of competing with each other. According to economic theory it is the result of interdependent choices out of self-interest. In “Wealth of Nations” (1776), Adam Smith called it the invisible hand. Cooperation is also a cornerstone of trade, which itself is the basis of the market system. This emerged from ancient humans living in small groups who realised that on their own it is impossible to supply all the goods and services for their needs (Cordes et al. 2008).

In social sciences, cooperation explains the process of different actors negotiating to reach agreements to solve a problem (Bodin 2017). Different factors influence cooperation depending on form and complexity. Cooperation is mainly based on reciprocity and trust. Reciprocity requires to repay in kind what another has done for you (Whatley et al. 1999). Trust is the basis for reciprocity. Reasons for more complex forms of cooperation are mechanisms of social order, like common values, shared expectations and beliefs (Parson 1937).

In natural science, cooperation is defined as any adaptation that has evolved, at least in part, to in-

crease the reproductive success of the actor's social partners (Gardner et al. 2016). Cooperation has shown to be evolutionary favourable alongside mutation and natural selection (Pennisi 2009). This is due to different factors: First, there is the idea of "inclusive fitness". If you cooperate, you increase the overall reproductive output of your group to make up for direct losses in individual offspring (Gardner et al. 2016). Second, reciprocity and reputation also play an important role. Reciprocity refers to the situation of "you scratch my back, I scratch yours" (Trivers 1971). Reputation is a more indirect form of reciprocity. Helping someone establishes a good reputation, which helps to increase the chance of getting help in future (Nowak 2006). Thirdly, the emergence of structures like companies can be explained by the concept of competition among groups, stating that the individual has a higher rate of survival by joining and cooperating with members of a group (Pennisi 2009).

Further insights on cooperation, collaboration, partnerships or alliances especially among societal actors could be found in a large diversity of disciplines ranging from Business Ethics over Production Economics all the way to Industrial Ecology.

The diversity of cooperative arrangements described can be classified in many ways. One of the most important distinctions for the present research is about the purpose of the cooperation which can range from pure self-interest, where the ultimate objective is only to increase a company's competitive advantage, to the aim to foster common interest (e.g. Doz & Hamel 1998; Selsky & Parker 2005). Drawing from this insight, a closer look was given at the relation between cooperation and sustainability.

Whereas some of the literature finds that „the widespread assumption that partnerships contribute positively to sustainable development lacks evidence" (Van Huijstee et al. 2007), other used economic tools "to clarify that collaboration is a needed key element for sustainability" (Lozano 2007).

Often, both concepts are related in two ways: First, the need for cooperation in the realm of sustainable development is mainly argued for by the complexity of sustainability problems exceeding the capabilities of an individual actor (e.g. Fobbe 2020; Camarinha-Matos et al. 2010). Secondly, the concept of sustainable development itself, with its three dimensions, requires a holistic approach including actors from different societal fields active in those different dimensions (e.g. Van Huijstee et al. 2007; Posch 2004).

These linkages have been stated societally as well: partnerships were already a topic at the 1992 UN Earth Summit in Rio de Janeiro (Stott & Murphy 2020) and were again declared an important tool for implementing sustainable development at the World Summit on Sustainable Development in Johannesburg in 2002 (Van Huijstee et al. 2007). The Agenda 2030 now also explicitly addresses global partnerships for sustainable development in its goal Nr. 17. This has led to a broad practical literature on sustainability cooperation, which was also partly considered in this work.

Besides looking at types of cooperations and motivations to cooperate, the focus of this work is on how cooperations can best foster sustainable development.

Whereas a shared vision is recommended (e.g. Posch 2004; Hartman et al. 1999), several indications could also be found that cooperations should be inclusive, for example even including conflicting stakeholders to overcome trade-offs and facilitate transformation (e.g. Horan 2019; Chen et al. 2017). Also, cooperation needs enough resources to enable the generation of added value and mutual benefits (e.g. Stibbe et al. 2019; Glasbergen 2011). Finally, several authors also highlighted the special potential of cooperations to achieve transformation and lead to system-wide changes (e.g. Clarke & Crane 2018; Gray & Stites 2013).

Drawing from this interdisciplinary literature research, several key-words have been defined:

Cooperation

Based on the different understandings of „cooperation“ in economics, social science and natural science found in the literature, a common interdisciplinary understanding was created. In this paper, cooperation is defined as „a natural result of individuals trying to maximize their utility and thereby increasing their success working on the same overarching goal while maintaining individual interests“. This especially differs from “collaboration”, which the literature describes as an even tighter relationship, where individual interests are neglected in order to follow an overarching aim (Castañer & Oliveira 2020; Arcidiacono 2007; Polenske 2004). Cooperations thus are easier to implement, allowing the actors to follow their individual interests while simultaneously sharing a common goal.

Sustainable Development

The World Commission on Environment and Development introduced and explained the term sustainable development in the Brundtland Report in 1987 for the first time. This definition was framed as “development that meets the needs of the present without compromising the ability of future generations to meet their own needs”. Johnston et al. (2007) state that the Brundtland Report definition interlinks the aspects of economy, environment and social well-being. As in most of the literature on cooperation and sustainability, sustainable development is for this research purpose also defined according to the Brundtland definition.

Upper rhine area

Usually the upper rhine is the part of the rhine between Basel and Bingen in Germany. This research project focused on the section of the upper rhine between Mulhouse, Freiburg im Breisgau and Basel. This constraint kept the search for sustainable multi-dimensional actors manageable.

Results

This section now presents the results which all contribute to the research question. Firstly, the developed framework with its criteria for cooperation

contributing to sustainable development will be introduced, secondly, concrete cooperation examples will be shown and lastly, three lenses of cooperation types will be briefly presented.

Framework

Based on the literature-findings about why cooperation is important for sustainability, a framework has been developed, defining six criteria which cooperations need to fulfill to ideally contribute to sustainable development. The criteria have been developed by translating arguments from the literature into the following criteria:

Criterion 1: The cooperation needs to be between actors who are sustainability-related

Besides being the requirement of this research project, bringing sustainability-related actors together makes a shared vision more probable. Therefore, 45 initiatives from Germany, Switzerland and France, located in the upper rhine area, have been selected based on the given information in their online presence. „Sustainability related“ has been defined as the actors explicitly stating a goal in their mission or vision to foster sustainability. The list of 45 actors was then clustered with regards to the Sustainable Development Goals to make them comparable. Their main activity has to contribute to sustainable development in at least one dimension of economic, social and environmental issues. A list with a short description of all the chosen actors can be found in the appendix 1.

Criterion 2: The cooperation needs to address a complex issue

Not only does cooperation help address complex issues, but addressing complex issues is also a key driver of cooperation. Complexity is a key element of sustainability challenges and thus, cooperation needs to address complexity in one way or another in order to contribute to sustainable development. “Complex issue” can be defined as an issue that has the multifaceted character of sustainability problems and that deal with interconnected problems

which are too large or intractable for one actor to tackle alone. (Kauffman & Arico 2014; Van Huijstee et al. 2007; Clarke & Crane 2018)

Criterion 3: The cooperation needs to consist of multidimensional actors with different perspectives

Integrating knowledge from different disciplines to face those interconnected problems is essential to contribute to sustainable development, which is about the mutual attainment of social equity, environmental health and economic wealth. “Multidimensional actors” therefore can be defined as actors issued from different sustainability-dimensions, i.e. social, natural and economic dimension. (Kauffman & Arico 2014; Van Huijstee et al. 2007)

Criterion 4: The cooperation needs to “leave no one behind”

The objective of sustainable development is a normative one since caring for the well-being of future generations is an ethical obligation for the whole society. Cooperations between various stakeholders are needed to attain sustainability and to overcome transformations towards a more sustainable future. Hereby it is necessary that the goals are achieved through a societal deliberation process instead of top-down governance instruments. Thus, leaving no one behind is crucial. “Leave no one behind” can be defined as that the cooperation should be open for other stakeholders and actors (Stott & Murph 2020; Posch 2004).

Criterion 5: The cooperation needs to be based on sufficient resources to be able to solve upcoming issues, conflicting interests and other challenges

The ambiguity of sustainability problems brings up the challenge of different problem perceptions and multiple perspectives of relevance. Sufficient resources, e.g. time, money, energy and know-how are needed to enable a deliberation process. “Sufficient resources” can be defined as the resources the actors bring together that generate added value, this of course highly depends on the nature of the

cooperation at hand. (Stibbe et al. 2019)

Criterion 6: The cooperation needs to have a transformational character, based on the dynamic characteristics of sustainability challenges

Complex sustainability issues are based within dynamic systems, multiple effects and impacts that are characterized by constant change. Cooperations have the potential to generate transformations. “Transformational character” can be defined as the potential to induce “welfare-enhancing systemic changes in institutional arrangements, sectoral relationships, societal values [...] and product innovations” (Austin & Seitanidi 2012 as cited in Clarke & Crane 2018). Through cooperation, something entirely new in the sense of a new field of activity, project, task or contribution to sustainable development can be created (Kauffman & Arico 2014).

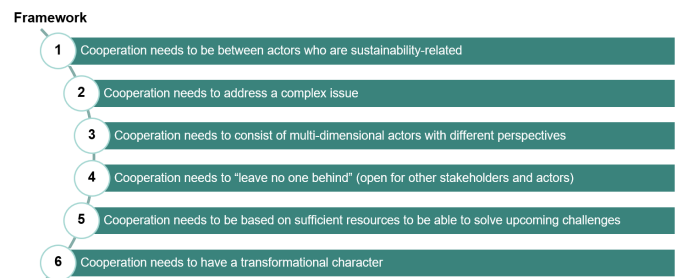


Figure 2. Sustainability cooperation framework; source: own illustration

Criteria one to three are criteria that need to be fulfilled by the choice of actors cooperating with each other. Criteria four to six are criteria that are considered when artificially constructing cooperation prototypes. Here, the focus lies within creating the details of the cooperation in such a way that the criteria are fulfilled. Furthermore, criteria six can be seen as a criterion which is not mandatory for the cooperation development itself. To give an outlook beyond the scope of this paper: If criteria six is fulfilled, it can deliver great benefits towards sustainability transformation, therefore it can be considered a “nice-to-have” instead of a “must-have” criterion and is a starting point for reaching the state of collaboration instead of cooperation.

To test whether the framework can withstand real-life challenges, it was applied to the actors which have been collected in an earlier stage (see appendix 1). For that purpose, artificial cooperation possibilities between two or more actors have been drafted. The result were 12 cooperation ideas with different actors working together on specific purposes. The framework criteria were then applied to the 12 ideas ensuring that those criteria can actually work in the real world. Out of the 12 examples, three prototypes will shortly be presented in the following, while all of them can be found in the appendix 2.

Cooperation-prototypes

The first cooperation was created between the actors Umweltplattform Basel and Velotaxi. In this cooperation, city tours would be offered in Basel where stops at local sustainability projects such as urban gardening projects or waste-free stores would be made. The target group of this cooperation would be either tourists who are interested in learning more about Basel and different sustainability projects or generally sustainability-driven people who would like to explore what Basel has to offer sustainability-wise. The following figure shows how the defined criteria are covered by this cooperation.

Framework criterion	Covered by cooperation prototype
1. Cooperation needs to be between who are sustainability-related	Fulfilled in this cooperation, as both actors explicitly state a goal in their mission to foster sustainability.
2. Cooperation needs to address a complex issue	Given, since the cooperation deals with raising awareness and shows best-practices to tackle complex sustainability problems.
3. Cooperation needs to consist of multidimensional actors with different perspectives	Fulfilled, as the Umweltplattform Basel is an educational organisation and Velotaxi is a mobility initiative. Furthermore, various actors in the region of Basel would be involved when they are part of the sustainability-city-tours and show their sustainability efforts.
4. Cooperation needs to "leave no one behind"	Fulfilled, as potentially an unlimited number of actors could become part of the city-tours.
5. Cooperation needs to be based on sufficient resources to be able to solve upcoming issues, conflicting interests and other challenges	Can be ensured by setting aside a responsible person and frequent meetings for the coordination between the cooperating partners. As the city tours would be paid for by the participants, financial funds are sufficiently available.
6. Cooperation needs to have a transformational character, based on the dynamic characteristics of sustainability challenges	As mentioned before not a necessary criterion but will be given to some parts in this cooperation prototype as the services offered by Velotaxi would certainly change and even be expanded. Even though this cooperation would not per se transform societal practices associated with sustainability, transformation would be given in the way that a new form of city-tour with a focus on sustainability would be created.

Figure 3. Framework criteria fulfilled by cooperation prototype, source: own illustration

The second cooperation the research team came up with is between the social initiative Solidarité femme 68 and Foodsharing Basel, as well as Foody Blutt. A short description of each actor can be found in the appendix 1. Women from Solidarité femme 68 would receive surplus-food from food-sharing and create different dishes which then get sold by Foody Blutt. This way, the food from food-sharing will be used and the women can leverage their resources, workforce, creativity and interest in cooking to contribute to this cooperation. They would also be paid for their effort by foody blutt which is selling the products in the end. The framework criteria one to five apply to this cooperation which can be seen in the appendix 2. The third cooperation would be between Zündstoff and fesa e.V.. Fesa would conduct workshops in the venue of Zündstoff and visitors of the fair fashion shop can thus learn about energy consumption and climate change related energy issues. This way, the target group of fair fashion interested people and energy interested people would be brought together and can get inspired to behave environmentally friendly in new areas. This cooperation fulfills criteria one to five as well, which can be seen in the appendix 2.

Lenses

When looking at the paired cooperation possibilities, underlying patterns emerged which allowed the research group to cluster the collected cooperations into certain types. By that, the concrete prototypes could be translated into abstract types which makes the concept adaptable to a more general context. The types can be seen as lenses, as they make it easier to find new cooperation possibilities for sustainability purposes. Three different cooperation lenses could be found based on the collected cooperation examples: The education lense, the resource use lense, and the spillover lense, which can be seen in figure 4 and are explained in more detail in the following.

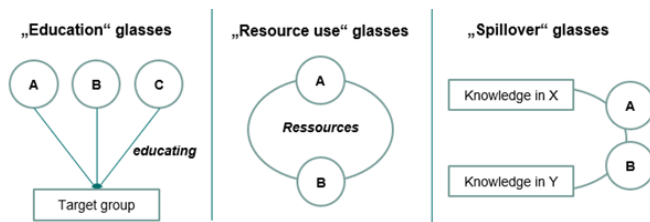


Figure 4. Prototype lenses; source: own illustration

With the **education lense**, cooperations can be found which raise awareness for a specific topic or educate a chosen target group – the cooperation aims at educating people. The first cooperation between Umweltplattform Basel and Velotaxi can be clustered under this lense. The second lense is the **resource use lense**. Here, actors which require the same, similar or complementary resources work together to better leverage their resources. Resources can be understood as material resources, but also a location or even workforce can be an offered resource. This lense corresponds to the second cooperation between Solidarité femme 68, foodsharing and foody blutt.

The third lense is the **spillover lense** which ensures that a new target group is reached through cooperation. Spillover cooperations might inspire people who act sustainability friendly in one area to also act sustainability friendly in another area. Thus, there is a spillover-effect from one sustainability field to another sustainability field and from one target group to a different one. The third cooperation between Zündstoff and fesa e.V. can be seen as a cooperation which serves a spillover-purpose.

Those three lenses do not form a complete list of possibilities to look at initiatives for cooperation ideas. There might be many more lenses or types which can be identified. Based on the real-life examples which were collected, those three specific types emerged. It is also worth mentioning that some of the cooperation prototypes can be looked at through multiple lenses. As mentioned already, these lenses can help with the search for new cooperation prototypes as they might offer some inspira-

tion when analysing single actors and seeing how different actors could benefit from cooperating with each other.

Interdisciplinarity

Challenges

The aim of this research project was to find sustainability potentials through cooperation between sustainability initiatives, social work institutions and sustainability-oriented companies. Due to the nature of the research project it was difficult to identify discipline-specific tasks and the disciplines were weighted differently. The natural sciences contributed to the foundations of important terms of the research. Economics and social sciences help additionally to identify possible forms of cooperation that foster sustainability.

The task of the social science group is embedded in an existing project “Trinational cooperation platform for sustainability initiatives, social work institutions and sustainability-oriented companies”. It aims at the regional networking of sustainability-related actors. Therefore, potential cooperations in the upper rhine area were expected from this project as a result. The focus of the course “Training for Sustainability Research” on the contrary is the interdisciplinary methodology of the research project. Through the dialogue with the mentors of the social science group, the different viewpoints were clarified and the research question, which takes into account the different expectations, was reformulated. Thus, the focus on the results was in a first step secondary and the theoretical and methodological background of the research were developed.

To keep the hierarchy flat, common group learning functioned as a mode of collaboration. In every weekly meeting, another group member was the leading moderator and responsible for the protocol. To ensure an efficient work flow of the group, a roadmap with milestones of the whole project and tasks of the different group members was developed. This clear structure prevented conflicts and misunderstandings in the group.

To keep track of the findings of the literature research a folder structure regarding the different topics and an essay outline where all group members could summarize their findings were introduced.

In the literature a lot of different definitions of key terms for the research exist across and between disciplines. A table with important terms and the according definitions helped to avoid misunderstandings.

Added Value

One argument for interdisciplinarity is the problem-orientation of research projects. Researchers are “students of problems”. Karl Popper (1963) stated that “problems may cut right across the boundaries of disciplines”. This is the main benefit of interdisciplinarity in this research project. As it was searched for multidimensional cooperations that contribute to sustainable development in the upper rhine area, the research deals with different forms of organisations that are active in different spheres of the society. Through the different perspectives of the disciplines we could develop a broad understanding of advantages and disadvantages of cooperation and build a comprehensive framework for sustainable cooperation.

Conclusion

Research Question

Cooperation, albeit a contested term in the literature, is a potential way to tackle complex sustainability problems. Given this assumption, there seems to be unused potential for cooperation among sustainability-related actors in the upper rhine area. This paper addressed the question how potential forms of multidimensional cooperations between sustainability-related actors in the upper rhine area can contribute to sustainable development. It has answered this question by developing (i) a framework defining six criteria that a cooperation needs to fulfill in order to contribute to sustainable development, (ii) three lenses through which potential forms of cooperations can be found, designed and described and (iii) concrete ideas for coopera-

tion among sustainability-related actors in the upper rhine area. Hence, potential forms of multidimensional cooperations can contribute to sustainable development if they fulfill the first three and the optional fourth to sixth criteria in the framework sufficiently. The derived lenses from the proposed cooperations serve as a helping tool to create new sustainable cooperations. The concrete examples for potential cooperations derived in this paper can work as prototypes for sustainability cooperations in the upper rhine area. The interdisciplinary research process was structured along the Design Thinking method in order to systematically integrate interdisciplinary knowledge and backgrounds as well as creative solutions in an iterative five-step process.

Outlook & Limitations

This research project is subject to various limitations. Some of the most crucial ones include the contested assumption that cooperation is a way to foster sustainability, the mere theoretical scope of the solutions derived and the challenges encountered during the interdisciplinary collaboration. Other limitations like interdisciplinary challenges or the limitations of the developed framework have been already mentioned in the text above. This paper has provided an answer to the research question on a theoretical level, based on literature research and creative brainstorming. A next step, which is also outlined by the last step in the Design Thinking method (“Testing”), could involve testing the prototypes developed in the field with practitioners and applying the framework and the lenses to a broader scale.

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Appendix 1: Sustainability-related actors in the Upper Rhine Area

Structuring criteria: 1: Egalitarian society; 2: Health; 3: Education / Learning; 4: Economy / Employment; 5: Energy supply / Efficiency; 6: Poverty / Hunger; 7: Climate; 8: Terrestrial Ecosystems; 9: Aquatic Ecosystems

Country	City	Name of company / institution / initiative	Type	Sustainability Field	1	2	3	4	5	6	7	8	9	Sustainability Governance	Sector / Field of activity	Comment	Website
Germany	Freiburg	fairfood Freiburg	Company	Econ, Social, Natural	x			x					x	Nachhaltigkeitsbericht 2020	Food	With a transparent value chain, Fairfood aims to generate sustainability in both the social and environmental spheres. Fairfood achieves this with a deposit system, fair remuneration of small farmers and ecological certifications (organic, fairfood, world store).	https://www.fairfood.bio/nachhaltigkeit
Germany	Freiburg	Öko-Institut e.V.	Institution	Natural			x						x x		Education/Consulting	The company wants to help protect nature and the environment in the long term and safeguard the livelihoods of all people, including future generations. With scientific expertise and consulting competence, Ökostation tries to initiate the necessary changes in politics and society and to shape them in a solution-oriented way.	https://www.oeko.de/das-institut/leitbild
Germany	Freiburg	Ernährungsrat Freiburg & Region e. V.	Initiative	Social, Natural	x		x	x	x						Food	Advocating for improved political framework conditions for sustainable and regenerative food systems and promoting regional collective and smallholder producer structures, processing, logistics and direct relationships with consumers. With many projects they want to create awareness and demand for regional, healthy and sustainable food.	https://ernaehrungsrat-freiburg.de/ueber-uns/leitbild/
Germany	Eichstetten am Kaiserstuhl	Regionalwert AG	Company	Econ, Social	x			x					x		Local economy	The Regionalwert AG wants to stimulate entrepreneurial ecological action with regional reference, to a plural economic understanding in local manageability. The target is the economically profitable food sovereignty of the population in manageable regional economic areas. As a citizens' joint stock company, the company offers citizens the practical opportunity to take responsibility for a sustainable and resilient agricultural and food economy.	https://www.regionalwert-ag.de/detail/unsere-ziele/
Germany	Freiburg, Karlsruhe, Ortenau	Bio-Musterregion Freiburg, Mittelbaden+	Initiative	Social				x		x			x		Food	The focus of the Freiburg Organic Model Region is on promoting organic agriculture and regional marketing channels, as well as increasing value creation from production to processing and marketing. The appreciation of agricultural activities and the awareness of organic farming methods are also to be promoted in the region.	https://www.biomusterregione-n-bw.de/Lde/Startseite/Bio-Musterregion+Freiburg
Germany	Freiburg	Nachhaltigkeitsmanagement der Stadt Freiburg	Institution	Social										Nachhaltigkeitsbericht 2020		The central coordination and steering function of the City of Freiburg for sustainability networks and activates various actors in order to anchor sustainable action in Freiburg as broadly and effectively as possible. The goal is both to increase the quality of life locally in Freiburg and to assume global responsibility and make it visible. In order to come closer to this goal, the sustainability management works to ensure that sustainability aspects are taken into account in the long term in more and more decision-making processes and routines of action.	https://www.freiburg.de/pb/1597150.html
Germany	Freiburg	Zündstoff	Company	Econ, Social, Natural	x			x					x	Gemeinwohlbilanz	Fashion	The company sells sustainable clothing, shoes and accessories made ethically and sees itself as an alternative to low wages, lack of worker protection, cheap disposable fashion and the exploitation of the environment.	https://www.zuendstoff-clothing.de/About/Ueber-uns/Philosophie/
Germany	Freiburg	Kleiderei	Company	Econ, Social, Natural				x					x		Fashion	The Kleiderei sees itself as a counter design to the fast fashion industry. With the concept they want to raise awareness for all the resources used in clothing and promote the thoughtful use of garments. With their alternative, they offer a concept that focuses on sharing and extending the life of garments.	https://kleiderei.com/philosophie/
Germany	Freiburg	fesa e.V.	Institution	Natural			x		x				x		Education/Consulting	The purpose of the association is to promote energy saving, the use of environmentally friendly energy technologies, climate protection and climate adaptation. This is achieved by fesa e.V. with events, publications, the implementation of seminars and educational events and the cooperation with organizations that pursue the same goals.	https://www.fesa.de/wp-content/uploads/2019/06/Satzung-fesa_19_06_11.pdf

Germany	Freiburg	Social Innovation Lab	Company	Econ, Social	x		x											Education/Consulting	The Social Innovation Lab supports social entrepreneurs in developing meaningful services and products to close gaps in the social system. This is done through creative and innovative thinking, entrepreneurial professionalism and a large network from a wide range of industries. The approach is based on the joint development of projects by welfare organizations and social startups.	https://social-innovation-lab.org/unsere-vision/
Germany	Freiburg	Waldhaus Freiburg	Institution	Natural		x			x	x								Education/Consulting	The WaldHaus offers environmental education on the topics of forests and sustainability. With its offerings, it aims to raise awareness of the forest ecosystem and promote sustainable forestry.	https://www.waldhaus-freiburg.de/waldhaus
Germany	Freiburg	Innovation Academy e.V.	Institution	Social		x	x		x									Education/Consulting	The Innovation Academy would like to contribute to the transformation of our societies through education for sustainable development. The cornerstones of our educational work are awareness-raising, knowledge acquisition, activation, exchange of experience and the realization that positive, practical example convinces us all. Topics are mobility, energy, architecture, landscape and water management.	https://www.innovation-academy.de/philosophie/
Germany	Freiburg	Weingut Andreas Dilger	Company	Econ, Social, Natural			x			x								Food	The winery was founded with the aim of making viticulture an experience within the city and creating an atmospheric place of cultural exchange for all generations. The winery's guiding principles are the ecological cultivation of resistant grape varieties and regional marketing to ensure sustainable viticulture in harmony with nature.	https://www.weingut-andreas-dilger.de/
Germany	Freiburg	Klimabündnis Freiburg	Initiative	Natural				x	x										The alliance is an association of committed citizens. They are primarily committed to the expansion of renewable energies and the reduction of CO2 emissions.	https://klimabuendnis-freiburg.de/ueber-uns/
Germany	Eichstetten am Kaiserstuhl	Samengarten Kaiserstuhl	Initiative	Natural		x		x	x									Food	The Kaiserstühler Garten Foundation would like to contribute to the preservation of biological diversity by maintaining and promoting the wealth of cultivated plants in the Kaiserstuhl and Upper Rhine region. Old, rare and partly almost forgotten cultivated plants are cultivated, which are adapted to regional conditions. With our work we want to contribute to the collection, preservation, further development and use of these plants and to document, expand and pass on the knowledge about their cultivation and use.	https://www.kaiserstuehlergarten.de/Stiftung/19-21-1---.html
France	Mulhouse	La bourse Initiative de jeunes	Initiative	Social	x			x										Social Work	The initiative "bourse initiative de jeunes" is a financial aid for young people (13-25 years old) to start their own individual or collective project. The fields can be diverse: culture, leisure, art, sport, humanitarian,....)	https://www.mulhouse.fr/mon-quotidien/jeunesse/initiative-de-jeunes/
France	Mulhouse	repaircafé Brunstatt Didenheim	Association	Econ, Social, Natural			x											Waste	The cooperative wants to reduce waste. Therefore different experts offer their repair skills for free or a voluntary amount	https://repaircafe-brunstatt-didenheim.blog4ever.com/
France	Mulhouse	Eco Vrac	Company	Econ, Natural			x			x	x							Waste	The company (grocery store) sells unpackaged (mostly) organic and local food. It's aim is to offer products high quality (organic, unpackaged, local) with affordable prices.	https://eco-vrac.fr/
France	Mulhouse	Les Sheds	Company	Econ, Social, Natural		x	x		x	x								Food	The cooperatvet aims to develop economic activities related to food and culture with values that promote respect for humans and nature. The SHED project consists of educational vegetable garden, restaurant, grocery store, organic and ecological market, as well as a café and theatre.	http://www.les-sheds.com/restaurant/
France	Mulhouse	L'Atelier Ecobolète de Mulhouse	Company	Econ, Natural			x											Waste	The company (one-man atelier) offers an alternative to the modern throw-away society. He wants to make things last as long as possible. His service is the repair of objects of daily use.	https://mag.mulhouse-alsace.fr/lobsolescence-deprogramme-mulhouse/
Switzerland	Basel	Natürlich Unverpackt	Company	Econ, Social		(x)	x		x	x								Waste	The company aims to sell sustainable, fair and high quality food online by offering plastic-free and re-usable packaging. They want to keep close contact to local, mostly small-scale producers without using intermediaries and inform customers on the whole supply chain.	https://www.natuerlich-unverpackt.ch/pages/uber-uns
Switzerland	Basel	Greenshop	Company	Econ, Social, Natural	x		x			x								Shop	The warehouse sells a wide variety of fashion, cosmetic or interior products, all of which are of ecological and organic origin. Suppliers are claro, Helvetas or Bio-Partner and other social institutions in Switzerland.	https://www.sahara-basel.ch/nachhaltig-einkaufen/greenshop/

Switzerland	Basel	Foody Blutt	Company	Econ, Social, Natural	x		x													Waste	The cooperative aims to build an environment for exchange and encounter, including organic and waste-free products. They explicitly state their desire to COOPERATE with other institutions (like Basel Unverpackt).	https://www.foody-blutt.ch/ueber-uns	
Switzerland	Basel	Basel Unverpackt	Company	Econ, Social, Natural			x	x												Waste	The cooperative aims to sell unpacked, plastic-free, waste-free, local, organic products. It also organizes workshops, presentations or projects to promote education for waste-free lifestyles.	https://baselunverpackt.ch/de/statuten/	
Switzerland	Basel	upvolt	Company	Econ, Natural				x	x											Repair	The company aims to upcycle used Li-Ion Batteries to encounter the problem of old batteries produced by the electro-mobility sector. They also repair E-bike batteries.	https://upvolt.ch/	
Switzerland	Basel	Velotaxi Basel	Company	Econ, Social				x	x											Mobility	The company offers Velotaxis to move tourists and locals through the inner city of Basel, also to encounter the heavy traffic in the city and to make a statement regarding green mobility and energy efficiency.	https://www.velotaxi-basel.ch/infos	
Switzerland	Basel	Äss-Bar	Company	Econ, Social			x	x		x										Waste	The initiative wants to fight food waste and sells bread from yesterday of bakeries in multiple cities in Switzerland (also Basel) for low prices. In addition, they offer workshops including foodsave-cooking courses using saved food (not only bread). They already COOPERATE with Crowd Container, laflor and various bakeries.	https://aess-bar.ch/	
Switzerland	Basel	Chemiserie	Company	Econ, Social				x					x							Fashion	The shop buys and sells second-hand clothing, offering good quality, used clothing for lower prices. Customers can buy, sell or trade clothing.	https://www.chemiserieplus.ch/tablet/so-funktioniert-s.html	
Switzerland	Basel	foodsharing	Initiative	Social, Natural			x						x	x						Waste	The initiative combats food waste by saving food that would otherwise end up as waste in Germany, Austria and Switzerland. They also engage politically to educate and raise awareness on food waste.	https://foodsharing.de/	
Switzerland	Basel	Bio-Klappe (by the Canton)	Institution	Natural									x	x	x					Waste	The initiative aims to separate organic waste by offering Bio-Klappen, where members can dump their organic waste for a small sum of money. The waste is transported to a Biogas facility, where the waste is transformed into compost and biogas. Biogas can be used as a fuel or burned CO2-neutrally to produce electricity or heat.	http://www.bio-klappe.ch/PDF/Bio-Klappe%20von%20uw-tech_2008.pdf	
Switzerland	Basel	UP (Umweltplattform)	Initiative	Social, Natural			x		x				x	x						Education/Consulting	The initiative organizes events and workshops in Switzerland to educate on topics like zero-waste, energy efficiency or sustainability. They collaborate with several sustainability initiatives, who share their knowledge.	https://umweltplattform.ch/de/ueber-uns/	
Germany	Freiburg	Waschbär	Company	Natural, Social			x		x											Shop	The company aims to sell ecological and sustainable products for everyday usage and to educate customers on how to improve a sustainable lifestyle.	https://www.waschbaer.ch/shop/ueber-uns/unternehmen/unsere-werte#das-leitbild	
Germany	Freiburg	Taifun Tofu	Company	Natural, Economic	x				x											Food	The company wants to offer high quality, organic and fairly produced Tofu products. They are also engaging in the "Gemeinwohlökonomie" idea and they regularly publish a report.	https://www.taifun-tofu.de/de/wir-tun-was	
France	Mulhouse	La Cigogne	Association	Econ					x											Local economy	The cooperative aims to tackle the challenges of our time by strengthen the local economy. Therefore the cooperative implemented a local currency which can be bought in Sud Alsace	https://lacigogne-alsace.fr/	
France	Mulhouse	Transition Initiative	Initiative	Econ, Social, Natural	x		x	x	x				x	x	x							The initiative aims to find better ways of living and to build a healthy economy, especially on the local level. They strive for a society that respects its ecological limits and strives for inclusivity and justice.	https://www.facebook.com/SudAlsaceTransition/
France	Mulhouse	Association TerrESStre	Association	Econ, Social	x		x	x												Education/Consulting	The association has the goal to promote a "social and solidarity-based economy". It was founded by some students of the master "Ingénierie de Projets en Economie Sociale et Solidaire à Mulhouse". It tries to realize research projects and organizes activities for the students	https://terresstre.wordpress.com/2016/11/26/premier-article-de-blog/	
France	Saint-Louis	Solidarité Femmes 68	Association	Social	x	x	x													Social Work	The association's aim is to reduce violence against women. They provide victims professional support, encourage mutual aid and exchange and propose accompaniment.	https://www.solidaritefemm68.fr/	
France	Mulhouse	L'association chrétienne de coordination, d'entraide et de solidarité (ACCES)	Association	Social	x	x	x						x							Social Work	The association aims to help disadvantaged people. Some activities: The association helps to find homeless people accommodation, assists people during difficult phases in their life (related to poverty), provides access to health, education,....	https://www.acces68.fr/	
France	Schlierbach	Ecotoit - Ökodach	Company	Natural									x	x						Energy	The company builds low energy houses or renovates buildings to remove the energy efficiency. The goal is to reduce the energy consumption/greenhouse gas emissions.	http://www.ecotoit-okodach.eu/	

France	Lutterbach	Alter Alsace Energie	Association	Natural		x	x	x							Education/Consulting	The association helps firms/households/... to reduce the energy consumption of buildings. The association does this by consulting how to raise the efficiency of existing installations and to build new fossil-free installations.	http://alteralsace.org/
France	Mulhouse	Les Poto'Cyclettes	Association	Econ, Social, Natural		x	x								Repair	The association aims to repair broken bikes and to enable people to fix their bike by themselves.	http://potocyclettes.e-monsite.com/
France	Colmar / Mulhouse	DAL 68 (Association de défense des personnes mal logées et sans logis)	Association	Social				x							Social Work	The associations helps homeless people or people with an inhumane housing mainly through political activism.	https://www.facebook.com/dal.haut.rhin/?ref=page_internal
France	Mulhouse	Le Rezo!	Association	Social		x									Education/Consulting	The association aims to offer an alternative to traditional education formats. They try to develop a network of reciprocal knowledge exchanges in Mulhouse.	https://lerezo-mulhouse.blogspot.com/
France	Guebwiller	Terre des Hommes 68	Association	Social	x	x	x		x						Social Work	The association aims to enhance the living conditions of vulnerable people in the global south. In the Alsace the associations tries to make people aware of the difficult situation of people in the global south and organizes different events like collecting old clothes.	http://www.tdhf68.org/
France	Mulhouse	Maison de la citoyenneté mondiale	Association	Social, Econ	x	x			x						Social Work	The projects of the association are an aid group for homeless people, free access to the internet and aid group for young unemployed people. The idea is that citizens help other citizens. Solidarity is a very important value.	https://www.mncp.fr/maison-de-la-citoyennete-mondiale-mulhouse/

Appendix 2: Cooperation prototypes

Criterion 1: Cooperation needs to be between actors who are sustainability-related; Criterion 2: Cooperation needs to address a complex issue; Criterion 3: Cooperation needs to consist of multi-dimensional actors; Criterion 4: Cooperation needs to leave “no one behind”; Criterion 5: Cooperation needs to be based on sufficient resources; Criterion 6: Cooperation needs to have a transformational character

Partner A	Partner B	Partner C	Possible additional partners	Purpose	Criterion 1	Criterion 2	Criterion 3	Criterion 4	Criterion 5	Criterion 6	Type 1: Information and education	Type 2: Resource exchange	Type 3: Spill-over effects
Samengarten Kaiserstuhl	Ernährungsrat Freiburg & Region e. V.	fairfood Freiburg		The three partners together offer a training with three stations in the field of agriculture/nutrition from natural, social and economic perspectives (can be extended in principle to no matter which partners on different topics or even German-French or trinational).	Sustainability-related actor: given	Complex issue: nutrition / agriculture with inclusion of multiple perspectives of topic	Multidimensional actors are given	Leave no one behind: everybody can participate in apprenticeship and join cooperation (different companies being part of apprenticeship as well)	Sufficient resources: financial resources could be secured through fundraising / financial support from institutions	Transformative character: creating a new job / position which can interdisciplinarity tackle problems	x		
Solidarité femmes 68 (or another social association in the region of Basel)	foodsharing Basel	Foody Blutt	(Velo Taxi)	Thanks to Foodsharing Basel and Foody Blutt, the women from Solidarité femmes 68 can become active meaningfully. They receive surplus-food from foosharing (or are also themselves active there) to cook something out of it, which in turn gets sold by Foody Blutt. The women get a fair share from the sold food.	Sustainability-related actor: given	Complex issue: food system (food waste, food poverty)	Multidimensional actors given: Social and ecological focus	Leave no one behind: food sharing ensures access to food to many people, cooperation is open to inclusion of more groups in need / sustainability-related actors. Cooperation addresses food poverty (here inclusion of high importance)	Sufficient resources: mostly already available, time / organisational management needs to be ensured	Transformative character: not given so far, as it would only combine existing resources and needs and not create something entirely new		x	
Innovation Academy	Social Innovation Lab		Zündstoff, Kleiderei, upvolt, Chemiserie, fairfood (versch. Unternehmen aus untersch. Bereiche in der Upper Rhine Area)	Together with various social entrepreneurs, an educational/inspirational cooperation is established. The Innovation Academy conducts guided tours or workshops at the companies (ring event), while the Social Innovation Lab develops creative business ideas together with the participants based on the experiences in the guided tours. This can lead to the development of new social start-ups/ideas.	Sustainability-related actor: given	Complex issue: change of economic system towards supporting public welfare and environmental issues	Multidimensional actors given: social project with economic and/or ecological focus (depends on partner)	Leave no one behind: the workshop series can be enlarged depending on the companies which are interested in the cooperation. The cooperation sensitizes the public as well as interested people who wants to do an own effort towards a more sustainable economy.	Sufficient resources: the development of the cooperation can be find through subsidy, the cooperation itself can ask for some participation fee,	Transformative character: given, as the cooperation can create something completely new in form of new social entrepreneurships	x		
Waschbär	Kleiderei, Chemiserie, Zündstoff	Innovation Academy		"Experience the life cycle of clothes once". This fashion cooperation develops a concept from the purchase to the resale to the right washing. The consumer can get in touch with sustainable fashion consumption.	Sustainability-related actor: given	Complex issue: change of consumer behaviour towards a circular economy	Multidimensional actors given: educational project with ecological background	Leave no one behind: cooperation can be open up for more actors that are interested in changing consumer behaviour	Sufficient resources: less resources are needed	Transformative character: not given so far, as it would only combine existing resources and needs and not create something entirely new	x		
fesa e.V.	Zündstoff / Kleiderei			Development of a workshop concept to educate about private energy consumption. fesa e.V. conducts workshops in terms of	Sustainability-related actor: given	Complex issue: energy system / energy	Multidimensional actors given: educational project	Leave no one behind: cooperation is based on providing	Sufficient resources: the need of resources lies	Transformative character: only given in the way, that both actors			x

				content, venue will be Zündstoff or Kleiderei. Visitors of the workshop can learn about green energy and energy saving measures while buying fair produced clothes. In doing so, new target groups will be opened up by both sides.		consumption / climate change	with ecological background	workshops, therefore open for broad target group and a multitude of people	mostly with with fesa e.V., as Zündstoff only needs to provide a room. Resources will be covered as totally new project / workshop sequence will be started (financial support can be received via fundraising, etc.)	would reach a totally new target group and that two very different fields are combined. Project itself is not transformative at all			
La bourse Initiative de jeunes	Social Innovation Lab	ImpactHub Basel?		Young people receive seed capital from La bourse Initiative de jeunes for their innovative idea, which is then further developed with the help of Social Innovation Lab and the ImpactHub, where they are also directly connected to a network of social innovators and receive assistance, as well as inspiration.	Sustainability-related actor: given	Complex issue: rather abstract one in this project, as topic is not given yet, but idea to find solutions which can both transform society (with innovations, sustainable ideas) and transform young people's life is complex as well	Multidimensional actors: not sure whether multidimensional actors are given (all social discipline)	Leave no one behind: open for young people mostly, one could offer workshops or information campaigns on social entrepreneurship. Also the networking perspective of the project involves a lot of people as well	Sufficient resources: need of resources is limited, but can be provided as the project idea is at the heart of each actors mission / business and they all have some financial resources as well	Transformative character: given is only given in the way, that both actors have at their business core to create transformative projects / solutions. the cooperation itself is not transformative as its only making better use of the already existing resources.			
Bio-Klappe	foodsharing			Bio-Klappe and foodsharing can mutual exchange food that can better be used by the other one	Sustainability-related actor: given	Complex issue: food system and food waste	Multidimensional actors given: ecological and economic	Leave no one behind: foodsharing options open for everyone, expandable with other organizations like e.g. social or mobility projects	Sufficient resources: time, space, capacity to separate food from waste, human resources	Transformative character: low		x	

Natürlich Unverpackt	Ässbar Basel			Both companies aim to sell plastic-free products to a broad audience of customers, but so far both remain a niche supplier. They could join forces, since "Unverpackt Basel" sells its products in a brick-and-mortar location, while "Natürlich Unverpackt" sells its products exclusively online. Customers of the latter company have the possibility to return reusable packaging via the Post, but with a cooperation with "Unverpackt Basel", customers could also return their packaging in the store. Plastic-free products could thus be bought physically or online, broadening the range of potential customers. Left-over bread (which both companies sell) could be transferred to the "Ässbar", thereby reducing food waste.	Sustainability-related actor: given	Complex issue: reducing plastic waste is a complex issue involving different actors (producers, consumers) and new ways of thinking about packaging, waste disposal and infrastructure to move from a linear product lifecycle to a closed one	Multidimensional actors: not a very diverse set of actors, as it involves existing stores/companies focusing on plastic-free products. All actors involved would use their existing strengths to make plastic-free shopping easier.	Leave no one behind: the idea for cooperation could be potentially expanded to many shops/companies who want to be part of the "return the reusable packaging" cooperation. Stores could have an incentive to participate since customers would visit their stores when they return packaging. Also, an increasing number of customers could be introduced to try plastic-free shopping.	Sufficient resources: resources seem to be already existing, the brick-and-mortar locations and the online shop already exist, but there would be need for coordination resources.	Transformational character: although the actors themselves would not change much, the increased possibility for customers to have access to and return reusable packaging at various locations in Basel might offer a viable alternative to conventional stores, thereby making plastic-free shopping more accessible to a broader audience.								X
Umweltplattform (UP)	Velotaxi Basel	Sustainability Map der Nachhaltigkeits AG Uni Basel		The UP is interested in educating a broad audience in sustainability topics by offering workshops and events. They could cooperate with Velotaxi, by offering city tours through Basel and show local sustainability projects, such as urban gardening, green roofs, waste-free stores and cafés (like Unverpackt or Foody Blutt) or public projects like waste management etc. This could be combined with a regular tour through the city where tourist attractions are shown.	Sustainability-related actor: given	Complex issue: the cooperation deals with raising awareness and show best-practice examples to a broad audience who are interested in sustainability. This might inspire guests and show them what is already being done to tackle complex sustainability problems.	Multidimensional actors given: the UP as an educational organisation would work together with Velotaxi, a mobility initiative. Various actors in the region of Basel would be involved when they are part of the sustainability-city-tours and show their sustainability efforts.	Leave no one behind: potentially an unlimited amount of actors could become part of the city-tours and all interested tourists could take part in the tours.	Sufficient resources: UP and Velotaxi already exist and could join forces. Resources for coordination between sustainability projects that could become part of the city tours and UP/Velotaxi would be needed.	Transformative character: the services offered by Velotaxi would certainly change/be expanded, but also the traditional character of "sight-seeing-tours" might be changed. Also, the integration of sight-seeing and sustainability projects is transformative and might inspire other actors to follow. But this cooperation would not per se transform societal practices associated with sustainability. Transformation would be given in the way that a "new" sustainable city-tour would be created								X

upvolt	Velotaxi Basel			The two organizations could link their areas of activity. Old, used or broken batteries from Velotaxi could be upcycled or repaired by upvolt and then be reused or resold.	Sustainability-related actor: given	Complex issue: the mobility sector is a major driver of greenhouse gas emissions. At the same time "being mobile" is important for the well-being of individuals in modern societies. For a sustainable transformation of the mobility sector a set of different instruments are needed. Broad cycling-opportunities is one part of it.	Multidimensional actors given: economy and environment (climate)	Leave no one behind: bike stores could upcycle their e-bikes by upvolt as well. Individuals in vulnerable living conditions could work for Velotaxi or upvolt. Possible cooperation with state actors: special parking spots for the velotaxis.	Sufficient resources: the cooperation needs to consider the demand for upcycled batteries	Transformative character: so far low, actors stay in their field of activity. Could be changed with the inclusion of a social project in the cooperation.		x	
Les sheds	Samengarten Kaiserstuhl	Weingut Andreas Dilger		The Samengarten Kaiserstuhl cultivates a broad variety of old and rare native plant species which could be planted in the gardens or fields of Les Sheds and organic farms like the Weingut Andreas Dilger. This cooperation strengthens the genetic diversity of cultivated plants. Further the restaurant of Les sheds could cooperate with local organic farms to offer menus with regional ingredients. This strengthens the local economy.	Sustainability-related actor: given	Complex issue: food system - growing demand on food vs. environmental impact of the agriculture	Multidimensional actors given: education, local economy and organic agriculture	Leave no one behind: the restaurant could purchase all food from regional agricultures. To make sure the prices are not too high the restaurant buys whole animals and processes all of it. Further the majority of the menus are vegetarian. Other farms and actors could cultivate rare plant species as well.	Sufficient resources: Price-level. Due to the seasonality of the products a flexible menu plan is needed. Clear communication with the customers regarding the changing menus and relatively high prices. Exchange of expertise regarding the right treatment of the rare plant species.	Transformative character: low, no additional field of activity for the actors		x	
Les PotoCyclettes	Maison de la citoyenneté mondiale			Homeless and unemployed people get the chance to dive (back) into work by being involved in the repair service of bikes. The cooperation strengthens the social position of unemployed people and give them a task. As supervisors they can be point of contact for people who want to fix their bikes and learn to have responsibility for working material.	Sustainability-related actor: given	Complex issue: (re-)socialization, poverty and unemployment and mobility	Multidimensional actors given: social project with impact on natural issues (strengthens bike-community) and economic issues (economic position of unemployed people)	Leave no one behind: bike repair shop open for all. Expandable with other organizations like velotaxi.	Sufficient resources: Time and skills to train unemployed people in their new tasks. Shops where they can practice.	Transformative character: low		x	