INTRODUCTION

This handbook aims at bridging the theoretical and practical dimensions of innovation for sustainability.

Our focus is on the empowerment of individuals involved in initiating and sustaining local system change in partnership with a community. A part of the books' target audience can be found in the academic world and these are graduate students, researchers or educators. The important aspect here is that the profile of a community innovation promoter does not require a specific academic discipline as a prerequisite. In that sense, this book is addressed to any academic field because it primarily presents a method of how academic knowledge can be effectively activated for more local sustainability. Academic audiences will find the theoretical foundations of community-based changemaking plus a set of practical, widely tested methods and tools that can directly be applied in any local context. On the other hand, we believe that this handbook can also be useful for people who are deeply engaged in practice, for example those running local NGOs or anyone who already has a community-building function. For these audiences, the book will strengthen the theoretical understanding of their own practice and make room for a reflective dimension. The presentation and detailed explanation of the practical methods will help professionalize their work and strengthen their positions as democratic community leaders.

There are several possible pathways of how our target audiences might use the content of this handbook. Academics can integrate this approach into their own university curricula and design courses in the fields of social innovation and sustainable entrepreneurship. We may imagine these courses as being organized in a very contextualized way and in close cooperation with local communities, addressing their specific challenges and potentials. This way, students are introduced at a very early stage to community-based changemaking. You will find examples for these settings in this handbook.

Another goal from the academic perspective might be to support the qualification and empowerment of local community leaders as a dedicated Third Mission. Both might happen after all in the same educational context and process.

The concepts, methods and educational approaches presented in this book build on various years of curriculum development. The first impulse was given in the period 2015 - 2018 by the ERASMUS+ funded Cooperation Project 'Social Entrepreneurship for Local Change'. Five European universities and three NGOs from Estonia, Romania, The Netherlands and Germany were working together, led by Nürtingen-Geislingen University. The goal was to establish an interdisciplinary social entrepreneurship course in a transnational blended learning format. The partnership continued from 2018 - 2021 with a subsequent project titled 'Community Learning for Local Change' during which the concepts of community-based innovation and local living labs were introduced, leading to the establishment of living labs at each campus location. During this period, Nürtingen-Geislingen University expanded the partnership by means of DAAD-funding to the Middle East. This involved the German-Jordanian University in Amman, Birzeit University in Palestine, the American University of Beirut in Lebanon as well as the Jordanian NGO RSCN, the Royal Society for the Conservation of Nature. This partnership evolved in two subsequent projects until 2022 which provided the foundation for documenting a holistic perspective on the entire approach in this book. The authors would like to thank everyone who has been involved over this development period. It has been a unique educational journey that has substantially inspired many academics, students and local communities.

We hope that this handbook will also become meaningful and accessible for audiences from outside the academic world. There are many people already involved in community development on a daily basis and in a very practical sense. Our aim is to support all these local agents of sustainability by providing them a theoretical and practical framework for their valuable work. This leads to a constant give and take: communities are informed by science and technology, science is informed by local community knowledge. Together, innovation for sustainability can be envisioned.



SUSTAINABLE COMMUNITY DEVELOPMENT - A CONCEPTUAL FRAMEWORK

1.1 Sustainability competencies are key to achieving the global sustainability agenda

In 2015, all United Nations Member States adopted 17 Global Goals, officially known as the Sustainable Development Goals, SDGs, and when they set out a 15-year plan to achieve the Goals and their related targets (UN 2015). Education is the key transversal force for achieving the goals, which is why Education for Sustainable Development (ESD) gets particular attention worldwide, endorsed by UNESCO, the UN's Educational, Scientific and Cultural Organisation. In addition, Quality Education (SDG 4) represents a goal in its own right. Our handbook aims at contributing to these goals.

Education for Sustainable Development is a lifelong process aimed at ensuring that people of all ages acquire knowledge and skills in order to be able to live and act in the interests of sustainability. This includes understanding the consequences of one's own actions and for everyone making responsible decisions. It is also about actively shaping the future. ESD promotes the ability for dialogue and orientation, creative and critical thinking as well as holistic learning that considers religious and cultural values. It aims at the willingness to deal with uncertainties and contradictions, to solve problems and to participate in the creation of a democratic and culturally diverse society. We therefore believe that the target audiences of this handbook can be found in all contexts, disciplines and age groups.

In recent years, various educational scientists (Haan 2002; Wiek et al. 2011, 2016) have dealt with a definition of skills and competencies that could serve as a target framework for training in this context. Since the models do not substantially differ, as confirmed by a very recent Delphi Study (Brundiers et al. 2021), in the following we will focus on the key sustainability competences as presented by Wiek et al. (2016) (see Figure 1-1).

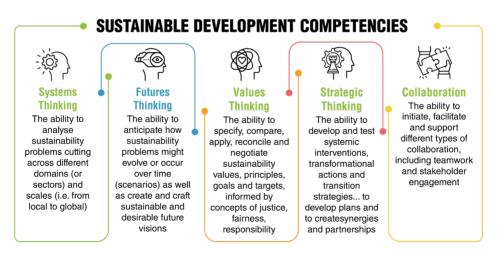


Figure 1-1: Sustainability Competencies According to Wiek et al. (2015)

- Systems thinking competence: The ability to analyze sustainability problems cutting across different domains (or sectors) and scales.
- Futures thinking (or anticipatory) competence: The ability to anticipate how sustainability problems might evolve or occur over time (scenarios) as well as create and craft sustainable and desirable future visions.
- Values thinking (or normative) competence: The ability to specify, compare, apply, reconcile and negotiate sustainability values, principles, goals and targets, informed by concepts of justice, fairness, responsibility, etc., including visioning, assessment and evaluation.
- Strategic thinking (or action-oriented) competence: The ability
 to develop and test systemic interventions, transformational
 actions and transition strategies toward sustainability. The ability
 to develop plans that leverage assets, mobilize resources, and
 coordinate stakeholders to overcome systemic inertia and other
 barriers.
- Collaboration (or interpersonal) competence: The ability to initiate, facilitate and support different types of collaboration, including teamwork and stakeholder engagement, in sustainability efforts
- Taking the interrelatedness and complexity of these competence goals into account, this handbook on Community Innovation aims to present a learning process in which all knowledge dimensions are integrated.

1.2 Landscape as a framework for sustainable and community-based development

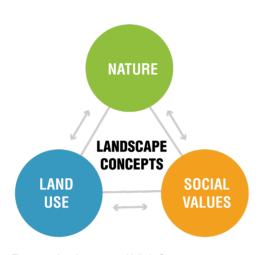


Figure 1-2: Landscape as a Holistic System

In the context of the approach presented in this handbook, landscape is understood as the local system context at the interface of nature, society and culture. It is important not to reduce 'landscape' to merely a beautiful scenery or an aesthetic category. This definition exists of course and shapes common understanding, but for our

context, a holistic and system-oriented landscape concept is key. Therefore, community innovation builds on a conceptual definition of landscape that is constantly reflected upon and refined by our activities. This definition is informed by the European Landscape Convention which defined landscape as "an area as perceived by people (Council of Europe, 2000). Thus the individual human factor regarding the definition of landscape values is really relevant. Furthermore, the ELC avoids a polarization of the landscape concept between urban and rural. According to this document, landscape includes urban, peri-urban and rural areas, both outstanding and degraded ones. The convention is a clear pledge for the everyday environment that starts in front of our doors. It calls on everyone to take action and responsibility.

Taking the local landscape context as a shared starting point, many knowledge domains that are relevant for sustainability can be analyzed, ideally by bringing academic and local knowledge together. This

includes amongst others: the natural systems (water, spoil, flora, fauna), the cultural system (natural and built heritage), the social system (use patterns, public space, patterns of living, social infrastructure) and the economic system (land use, local economy). In that sense, we may rather speak here about a landscape approach, or landscape approaches, as our methodical framework. "A landscape approach is known for its holistic way of looking at areas or landscapes and the people within. It builds on the notion that people depend on their landscapes for their food, livelihood, income, culture and identity, and that these need to be handled with care (Global Landscapes Forum)". Building on this understanding, it makes sense to follow the way how the Stockholm Resilience Centre has changed the order of the 17 UN Sustainable Development Goals. Rather than showing them as a board with every goal having the same relevance, the so-called "Wedding Cake Model" suggests that the natural resources need to be protected and regenerated with priority and this become the basis for all other social and economic goals:



Figure 1-3: The wedding cake model of the UN Sustainable Development Goals shows the relevance of natural resources as the foundation for achieving all other goals (Azote for Stockholm Resilience Centre 2016)

A relevant task of the Community Innovation Promoter is therefore to guide a complex knowledge building process that helps local communities to understand the systemic interconnections of their local landscape system, the capacity limits of this system, the risks it is exposed to and the possible alternative futures.

1.3 Social Innovation and Social Entrepreneurship

Social innovation refers to the process of development and implementation of new services, products, processes, and business models which address social and environmental problems. It aims to improve the well-being of communities and leads to positive social change (Ramus et al., 2018).

Social entrepreneurship is one of the approaches for social innovation and can be defined as the process of creating and growing a venture, either for-profit or non-profit, where the motivation of the entrepreneur is to address a particular social challenge or set of challenges (Tracey and Stott, 2017). A social enterprise can be a social innovation if its strategy, organizational model, and operations are new and original in solving a social problem. On the other hand, a social innovation, as a product or a service, can be completely unlike a social enterprise and it can take the form of any entity: for example governmental initiatives to use renewable energy sources, such as wind and solar power, to reduce reliance on fossil fuels and mitigate climate change or market-based solutions to reduce water consumptions by large multinational companies (Vaccaro and Ramus, 2022).

Social enterprises are founded with a social mission – they combine social and commercial agendas to generate revenue to support their social and environmental goals. They may focus on areas such as social inequality, poverty reduction, education, clean energy, or environmental sustainability. As presented in figure 1-4 they are placed

between philanthropy and traditional charity (focus on social value) and traditional business (focus on financial value) and they seek to achieve a measurable social and environmental impact alongside financial return (Ryder and Vogeley, 2018; Kingston and Bolton, 2004; Maretich and Bolton, 2010).

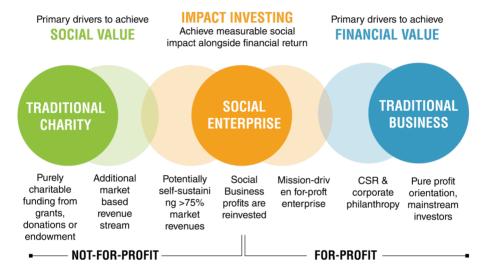


Figure 1-4: Social Enterprises: A Hybrid Spectrum (Ryder and Vogeley, 2017, p. 2)

Social enterprises need profits to serve their social agenda, providing more benefits to the environment and society. It can happen in many different ways. Some examples of social enterprises are:

- Flowercycling and women employment HelpUsGreen (2023), India, recycles flowers discarded for rituals into biodegradable products such as organic fertilizer and incense.
- Rural community empowerment CocoAsenso (2023), Philippines, processes coconut directly from local farmers through a network of medium-scale processing plants built in remote areas. The business sourced coconuts directly from the farmers and allowed them to work part-time in the mill, as well as to provide training and financing