Tamas Veress

Community-Based Organizations and the Challenges of the Anthropocene
Business Ethics Center
Corvinus Institute for Advanced Studies

Supervisors:

Dr. Lászlo Zsolnai
Professor and Director

Dr. Alexandra Köves
Associate Professor

© Tamas Veress
Community-based Organizations and the Challenges of the
Anthropocene

Ph.D. Dissertation

Tamas Veress

Budapest, 2023
The present publication is the outcome of the project „From Talent to Young Researcher project aimed at activities supporting the research career model in higher education”, identifier EFOP-3.6.3-VEKOP-16-2017-00007 co-supported by the European Union, Hungary and the European Social Fund.
Contents

Introduction ........................................................................................................................................9

PART I .............................................................................................................................................14
  1. Research background and literature review .............................................................................14
     1.1 The Anthropocene ...........................................................................................................14
     1.2 Social metabolism exceeding ecological capacities .........................................................16
     1.3 Can the economy grow forever in the Anthropocene? ...................................................21
  2. Is there a growth imperative? .....................................................................................................32
  3. Theories and concepts prioritising material growth .................................................................42
     3.1. Methodological individualism .........................................................................................43
     3.2. Marginalism ....................................................................................................................43
     3.3. Discounting the future .....................................................................................................44
     3.4. Shareholder primacy ........................................................................................................44
     3.5. Substitutability ................................................................................................................46
     3.6. Externalities .....................................................................................................................47
  4. Growth versus successful nongrowing business organizations .................................................48
     4.1. What is business growth? ................................................................................................49
     4.2. How do businesses grow? ................................................................................................49
     4.3. Why do businesses grow? ................................................................................................52
     4.4. Reasons not to grow .........................................................................................................55
     4.5. Successful nongrowing firms ............................................................................................57
  5. Community-based organizations: prioritising socioecological concerns ...................................61
     5.1. Growth and power ..........................................................................................................62
     5.2. Conceptualising community-based organizations: prioritising socioecological concerns ........................................................................................................71

PART II ...........................................................................................................................................89
  6. Research design based on qualitative, multiple case studies ...................................................89
     6.1. Interpretative paradigms ...................................................................................................89
     6.2. Strategies of inquiry ..........................................................................................................91
     6.3. Sampling ..........................................................................................................................92
     6.4. Methods of collecting and analysing data ........................................................................99
     6.5. Data analysis ....................................................................................................................99
     6.6. Validity ............................................................................................................................100
  7. Short descriptions of the selected Community-Based Organizations ..........................................101
  8. RESULTS ...................................................................................................................................139
8.1. The Systems Map of Community-based Organizations ........................................ 140
8.2. Addressing the Research Questions ................................................................. 176
8.3. Implications of Results ....................................................................................... 180
9. Summary and Conclusions ................................................................................... 184
10. List of references ................................................................................................... 191
11. Annex .................................................................................................................... 219
11.1. Questions for the semi-structured interviews: .................................................. 219
11.2. Codes TITLE ....................................................................................................... 220
11.3. Systems Map Variables .................................................................................... 224

Tables
Table 1 - Main organizational characteristics named in the literature as elements and characteristics of community-based organizations and organizing ........................................ 92
Table 2 - The Selected Community-Based Organizations ............................................. 94
Table 3 – Case # 1 Cooperative for Ethical Financing (finance) ................................. 101
Table 4 – Case # 2 National Association of Small Farmers (agroecology, access to land) .................................................................................................................. 103
Table 5 – Case # 3 Buurtzorg India (healthcare) ......................................................... 105
Table 6 – Case # 4 Coopalim Strasbourg (food) .......................................................... 107
Table 7 – Case # 5 Deccan Development Society (agroecology, access to land) ........... 109
Table 8 – Case # 6 Farm City Detroit (urban garden, food) ......................................... 111
Table 9 – Case # 7 Distributed Cooperative Organizations (organizational model) ....... 112
Table 10 – Case # 8 Health in Harmony (healthcare, forest preservation) ..................... 114
Table 11 – Case # 9 Jelka House (housing) ................................................................. 116
Table 12 – Case # 10 Lumituuli (energy) ..................................................................... 118
Table 13 – Case # 11 Krishna Valley (intentional community) ..................................... 119
Table 14 – Case # 12 Cargonomia (mobility, food) ..................................................... 122
Table 15 – Case # 15 Ouishare (empowerment, network building) ............................. 124
Table 16 – Case # 14 Food Basket Pecs (food) .......................................................... 125
Table 17 – Case # 15 Alliance for Collaborative Real Estate Development (housing) ... 127
Table 18 – Case # 16 Campus de la Transition (education) ........................................... 129
Table 19 – Case # 17 Edith Maryon Foundation (housing, access to land) ..................... 130
Table 20 – Case # 18 Alsomocsolad (local currency, participative democracy) ............. 132
Table 21 – Case # 19 Communitarian-Cooperative Integral Health Center .................... 133
Table 22 – Case # 20 Auroville (intentional community) ............................................ 135
Figures

Figure 1 – Systems Map: Complete Picture................................................................. 140
Figure 2 – Systems Map: Unrepresentative Material Regime(s)................................. 141
Figure 3 – Systems Map: Community-Based Organizations' Characteristics............... 154
Figure 4 – Systems Map: Empowerment................................................................. 170
Figure 5 – Systems Map: Legal and Financial Dimensions...................................... 173
Acknowledgment

A doctoral dissertation reflects long years of work and interactions with many people, including professors, fellow doctoral students, and undergraduate as well as graduate students. I am thus aware of owing debts to many.

I am thankful for the guidance, inspiration and support of my supervisors Lászlo Zsolnai and Alexandra Köves; I hope to be able to rely on their mentorship in the future as well. Among the most rewarding aspects of scholarly life is to engage through meaningful and good work with colleagues and peers from whom I learn a great deal. Therefore, I am thankful to András Ócsai, Gábor Kovács, Zsolt Boda, László Fekete Gabriella Kiss, Orsolya Lazányi, Ágnes Neulinger, Réka Matolay, Judit Gáspár, Knut Ims, Gherardo Girardi, Mara Del Baldo, and Hayden Hubbard. For the administrative assistance that enabled me to secure funding for conferences and navigate bureaucratic challenges, I thank Mónika Herman, Rebeka Gazsi, and Nándor Petrovics.

I am grateful to the participants of Ethics Research Seminar organized by professor Zsolnai. Anne Tsui, Don Lange and Ibrat Djabbarov helped my work by allowing me participate in their Philosophy of Science course and to receive valuable feedback regarding my research project. Also, I am thankful to György Pataki who was open and ready to have long conversations about the topic of the dissertation. I am pleased to be in connection with the communities and networks of European Spirituality in Economics and Society, European Society for Ecological Economics, Degrowth, Fordulat, Corvinus Science Shop Economy of Francesco Academy and the Research Network for Social Enterprise.

I am thankful for the patience and encouragement of my parents Audra and József, and my partner Bea.

Lastly, I am indebted to all those fellow human beings who contribute on a daily basis to nurture communities of care and support, and also made time to answer my questions. I hope one day to be able to reciprocate their generosity and kindness.
Introduction

The Anthropocene is characterized by the dominance of social arrangements prioritizing material growth over other concerns, such as human and non-human well-being or the ecosystems’ capacity to sustain life. This raises at least two questions. The first one is how to change a system which incentivises and rewards extraction — but cannot recognize and reward the wealth created by generative activities — towards a system which is able to reward and incentivize generative practices (Bauwens and Pazaitis, 2019:8). The second question is about the ethical legitimacy and social contract of organizations. How to change the priority and fetishism of material considerations (such as private wealth, profit maximization, or maximizing economic growth), and to give greater importance to social and ecological concerns, values and goals (Banerjee, 2020). This dissertation is an attempt to – unavoidably to an incomplete degree – answer these questions.

While the majority of the indicators reflecting various socioeconomic and ecological trends signal the deepening of ills and degradation in the Human-Earth systems, there are high leverage potentials that could reduce the harms done on the global scale by a significant extent. Millward-Hopkins et al. (2020) created a model to determine the minimal energy needed to ensure a good quality of life for everyone globally. Their findings suggest that by 2050, despite a larger population, global energy consumption could return to 1960s levels. By prioritizing basic material needs and utilizing efficient technologies alongside significant demand-side changes, energy needs in 2050 could be over 60% lower than the current levels. In high consumption countries, reductions of up to 95% are feasible while maintaining decent living standards. Rao and colleagues (2019) found that countries like South Africa, Brazil, and India could offer decent living standards using about 90% less energy per person than affluent countries. This research bolsters the idea that increasing energy for poverty alleviation does not inherently conflict with global climate change mitigation. Low-cost actions like vegetarianism, avoiding flights, and car-sharing can reduce individual carbon footprints by around 25% in France (Dugast and Soyeux 2019). Relatively high-cost actions like enhancing the energy system, utilizing better technology, and modifying consumption habits, carbon footprints could decrease by 87% in Finland and 79% in Japan (IGES 2019). The 'négaWatt 2050 scenario' for France envisions a 65% energy consumption reduction by 2050, compared to 2010 levels, while ensuring quality energy services. This plan could halve final energy consumption by 2050, transition to 100% renewables, and phase out nuclear energy. The envisioned transition
highlights the importance of land use, agriculture, biomass inputs, and ecological health (Piques and Rizos 2017). Sydney suburb's hold potential for local self-sufficiency, as with significant restructuring, inhabitants could drastically reduce current costs, potentially by 90-95%, though such changes would need major economic and cultural shifts (Trainer, 2016). Lockyer (2017) analyzed an eco-village in Missouri, USA. The village significantly outperformed national averages in several sustainability metrics, including reduced car and electricity usage and waste generation. However, Lockyer argues that while rural eco-villages alone are not the answer to sustainable living, their innovations can be adapted to broader settings (Lockyer, 2017). Why such descaling potentials remain non-capitalised?

Part of the answer certainly has to do with the question of power and the ideology of growthism. In their review, Stoddard et al. (2019) highlight that despite three decades of political efforts and a wealth of research on the causes and catastrophic impacts of climate change, global carbon dioxide emissions have continued to rise and are 60% higher today than they were in 1990. Exploring this rise through nine thematic lenses—covering issues of climate governance, the fossil fuel industry, geopolitics, economics, mitigation modeling, energy systems, inequity, lifestyles, and social imaginaries—draws out multifaceted reasons for the failure to bend the global emissions curve; however, a common thread that emerges across the reviewed literature is the central role of power, manifest in many forms, from a dogmatic political-economic hegemony and influential vested interests to narrow techno-economic mindsets and ideologies of control (ibid.: 653). In economics and organizational management scholarship, a significant ratio of mainstream theories and concepts are blind to socioecological considerations. Even their benevolent application can easily lead to detrimental real world outcomes.

The aim, research questions and methodology of the current research are formulated against such background. Community economies (or ‘Diverse economies’ (Gibson-Graham and Dombroski, 2020)) is an analytical framework, which incorporates aims, objectives, questions and methodologies to understand prevailing economic activities, their ethics and practices, and opens up a space to influence them. Community economies research and practice is mainly built on J.K. Gibson-Graham’s (Julie Graham and Katherine Gibson) feminist critique of (the capitalist) political economy. The starting point of the community economies approach is that there is a fundamental issue of representativeness that allows for certain activities to be highlighted and thus valued (ones that generate monetary gains), and others to be made less visible (ones that don’t such as care or sharing). The aim of community economies research and practice is to disempower the currently dominant ‘capitalocentric’ framings and replace them
with new ones, which could serve as starting points to imagine and enact radically different, sustainable, postcapitalist futures enabling more-than-human flourishing. Within this framework ‘community’ stands for an active, ongoing negotiation of interdependence with all life forms, human and nonhuman alike. The Gibson-Graham’s approach adopts an anti-essentialist perspective, meaning that community is not an entity with fixed boundaries, but coexistence is constantly reproduced in complex relations of power through a multitude of interactions. The preferred ethics in this framework is one of explicit and open negotiations on the issues relevant for all stakeholders. In the framework of community economies, the term “economy” is used in a much broader sense than the system of formal commodity production and monetary exchange. As such, the economy refers to all the practices embedded in the web of life.

The aim of the dissertation is to explore how, in the context of the Anthropocene, community-based organizations (CBOs) arrange collective actions prioritising socioecological concerns. To support this aim, the two research questions were formulated:

- (RQ1) Which organizational characteristics support the community-based organizations to prioritise socioecological concerns?
- (RQ2) What helps and what hinders the spreading and/or the adaptation of the existing models of community-based organizations in today’s world?

The empirical part of the research is built on a qualitative multi case study design. The rationale behind it is to see the application of CBO’s models in diverse social realms, including housing, healthcare, energy, food, intentional communities, mobility, currency and education. Data were gathered through semi-structured interviews and through publicly available documents. The data were coded by the emerging themes, and these codes/themes were operationalised into variables of a systems map. The systems map illustrates the main factors affecting the workings of CBOs.

Results highlight that CBOs are structurally fit to host and nurture collective actions informed by socioecological concerns. A CBO’s ability to embrace ethical coordination—balancing socioecological concerns and fitting organizational settings—stands out as pivotal. These organizations focus on real social needs, foster empowerment, and prioritize socioecological considerations. CBOs support knowledge-sharing, resource and risk sharing, and the use/creation of nonviolent technologies. Furthermore, findings outline two primary methods that enhance CBOs' impacts. One is peer-to-peer knowledge sharing and technical extensionism.
The second is that - if the method fits the context and the purpose then - CBOs are cost efficient and relatively quick to spread socioecological and practices.

Several implications arise for economic activities, organizational management, and social change theories. The existence of CBOs prove that economic activities can fulfil human needs without jeopardizing the health and integrity of ecosystems and the interests of future generations. Fundamentally, CBOs’ activities center on sufficiency, nonviolent technologies, socioecological priorities, and respect for the dignity of all stakeholders. Insights from current research support the idea that (at least a majority of) mainstream theories should be reshaped to emphasize socioecological factors, integrating principles of dignity and nonviolence. Regarding theories of social change, current research suggests that social practice theory could be a good starting point, or part of the toolkit, when it comes to designing and evaluating efforts for socioecological aims.

The structure of the dissertation is as follows. Part I begins with the research background and literature review (Chapter 1), the examination of the causes of the Anthropocene, pinpointing the role of industrialization in destabilizing Earth's systems largely for affluent consumer desires. It then questions if material growth can solve the challenges of the Anthropocene, critiquing GDP as a well-being measure and examining the Easterlin Paradox, and the problems of materialism and dematerialization. It emphasizes the global interdependencies revealed by various empirical and theoretical concepts, showing a growing reliance of today’s economy on natural resources for wealth creation. Chapter 2 delves into the existence of the “growth imperative” by comparing money and barter systems, examining credit and technological impacts on economic growth, and questioning the inevitability of the "grow or die" notion, suggesting that it is not universally valid. Chapter 3 presents key theories in management and economics that prioritize material growth, pointing out their tendency to sideline ecological and ethical concerns. Chapter 4 critiques the prevailing emphasis on material expansion in business, advocating for a new focus on socioecological priorities. It highlights successful businesses that consciously choose not to grow, favouring objectives like employee well-being and environmental concerns. The relationship between growth and power is examined in Chapter 5, discussing the ideology of “growthism” and its socioecological implications. It centers on the "Imperial Mode of Living", which prioritizes material wealth at the expense of socioecological factors. Lastly, the chapter outlines the theoretical framework for Community-Based Organizations, emphasizing their role in prioritizing socioecological issues, rooted in the
principles of shared economic activities, common practices, and the socioecological outcomes of different ownership structures.

Part II presents the empirical research, including the methodology (Chapter 6), the short description of each sampled case (Chapter 7), and the results and their implications (Chapter 8). Chapter 9 contains the conclusions, and the limitations of the study, and suggests future research directions. Finally, Chapter 10 lists the references, and Chapter 11 is an Annex that contains the questions of the semi-structured interviews, describes the themes emerged from the coding process, and presents the variables used in construing the systems maps of CBOs.
PART I

1. Research background and literature review

1.1 The Anthropocene

Economic historian Karl Polanyi (1944) named the (on historical scale fast) development of industrialization the ‘Great Transformation’. Polanyi stressed the importance of the speed the transformation proceeded - and the underlying change in ideologies, social and economic policies – as individuals, communities attempted to adjust to the increasingly dominant and disruptive role of the market. Through the transformation the institutional bases of the multitudes’ largely self-sufficient livelihood shifted from mainly reciprocity and redistribution based social relationships towards market exchange-based relationships.

Environmental scientists Steffen et al. (2015), in echo with Polanyi (1944), introduce the term ‘Great Acceleration’ as an attempt to capture the changes - unprecedented in rate and magnitude - in the biophysical spheres of the Earth System. This period is characterized as the ‘speeding up of just about everything after the Second World War ... [h]uman population has tripled, but the global economy and material consumption have grown many times faster’ (Steffen et al., 2011:754). Population, real GDP, foreign direct investment, primary energy use, fertilizer consumption, water use, paper production, transportation, telecommunications, international tourism (to name a few socio-economic indicators) made Earth System trends such as carbon dioxide, nitrous oxide, methane, surface temperature, ocean acidification, marine fish capture, tropical forest loss, domesticated land and degradation of terrestrial biosphere deteriorating since the 1950s (IGBP, 2015 referred by Zsolnai et al., 2016:1-2).

The 2018 report issued by the Intergovernmental Panel on Climate Change (IPCC) states ‘[t]he abundant empirical evidence of the unprecedented rate and global scale of impact of human influence on the Earth System has led many scientists to call for an acknowledgement that the Earth has entered a new geological epoch: the Anthropocene’ (IPCC, 2018:8). Steffen et al. (2011:741) argue that ‘[h]umanity itself has become a global geophysical force, equal to some of the “great forces of Nature” in terms of Earth System functioning’. This implies that in the case of a business-as-usual scenario exit from the Holocene - a relatively stable environment within which human societies have developed and learned to produce food – is approaching (Brown, 2015; Steffen et al., 2011).
The Anthropocene is a geochronological category relating to a proposed new epoch in which the human impact upon the Earth System (possible markers include plastics, fixed nitrogen through industrial production for agriculture, heavy metals, radioactive nuclei left by tests from thermonuclear weapons) has brought environmental changes of a magnitude comparable to that of previous great geological transitions (Angus, 2016). A key contribution of the discourse on the Anthropocene is its ability to act as a boundary object, to bring natural scientists and social scientists into conversation with each other and with the wider public (Reichel and Perey, 2018). The Anthropocene as a term has its origins in natural sciences and therefore is framed as a biophysical phenomenon. To properly understand its implications on social life, argue Reichel and Perey (2018), one must consider it as a socioecological phenomenon as well, as a product of material growth oriented social metabolism.

The name “Anthropocene” has been criticised (for example by Heikkurinen, Ruuska, Wilen and Ulvila, 2019; Moore, 2015) for “homogenizing” humanity to a single actor and therefore (at least implicitly) assigning equal responsibility for each human being for the emergence of the phenomena. However, as Angus (2016:228) points out, the first paper on the subject published in a major journal was authored by Crutzen (2002:23), in which he writes ‘these effects have largely been caused by only 25% of the world population’. Also, papers following Crutzen’s in natural scientific journals tend to address the issue. For example, as Steffen and colleagues (2011:746) put it:

The post-2000 increase in growth rates of some non-OECD economies (e.g., China and India) is evident, but the OECD countries still accounted for about 75% of the world’s economic activity. On the other hand, the non-OECD countries continue to dominate the trend in population growth. Comparing these two trends demonstrates that consumption in the OECD countries, rather than population growth in the rest of the world, has been the more important driver of change during the Great Acceleration. The world’s wealthy countries account for 80% of the cumulative emissions of CO2 since 1751; cumulative emissions are important for climate given the long lifetime of CO2 in the atmosphere. The world’s poorest countries, with a combined population of about 800 million, have contributed less than 1% of the cumulative emissions.

In this light, the name “Anthropocene” proved to be unsatisfactory for many researchers and new suggestions have been introduced with the intention to better reflect and capture the social-
political dynamics driving the geological-scale changes. Among the terms are the ‘capitalocene’ (Moore, 2016), ‘plutocene’ (Ulvila and Wilén, 2017), ‘misanthropocene’ (Patel, 2013), ‘manthropocene’ (Raworth, 2014), ‘sociocene’ (Connell, 2017), ‘anthrobscene’ (Parikka, 2015), ‘econocene’ (Norgaard, 2019), ‘growthocene’ (Chertkovskaya and Paulsson, 2016), ‘necrocene’ (McBrien, 2016), ‘plantationcene’ (Haraway et al., 2016) and ‘technocene’ (Hornborg, 2015). But as Angus (2016) calls attention for, the suffix -cene has Greek origins, meaning ‘recent’, was introduced by the nineteenth-century geologist Charles Lyell, who distinguished between various layers of rock by determining the proportions of extinct and non-extinct fossils each contained. Therefore, Anthropocene stands for a time when geological strata are dominated by remains of recent human origin. From the perspective of historical and physical geology, argues Angus (2016), the name is appropriate. In any case, the various labels suggested to capture the essence of the Earth System-scale socioecological phenomena show that a range of multi-dimensional factors are involved.

1.2 Social metabolism exceeding ecological capacities

The Great Transformation - by taking a biophysical perspective - can be understood through the concept of “social metabolism” in the center, illustrating the depth and size of material transformation. The term ‘social metabolism’ (Ayres and Simonis, 1994; Weisz et al., 2001) allows looking at social organizing from a biophysical perspective since it ”encompasses the entire flow of materials and energy that are required to sustain all human economic activities. This is an attempt to understand the ways in which economic relations are embedded within the physical world and have real physical preconditions (Martinez-Alíer, 2012), and is not limited to the nourishment of the population within a society” (Haberl et al., 2011:2). The biophysical perspective induces a socioecological approach, which allows to recognize the inseparable and interlinked dynamics of the social (and therefore the economic) and the ecological dimensions of social organization.

According to Haberl et al. (2011) the agrarian regime requires the Neolithic revolution, which means the departure from the hunter-gatherer social order. The agrarian metabolic regime is a ‘controlled solar energy system’ (Sieferle, 1997 cited by Haberl et al. (2011:2) which is based on the reorganization of terrain and vegetation cover so that primarily plants that are considered useful for human society are cultivated through the application of human and animal labour. Also, “[r]aw materials for buildings and other infrastructures (roads, bridges, fences), tools, equipment, indeed all artefacts required by the economy as a whole, are equally relevant parts
of the metabolism, although they are of minor quantitative importance in the agrarian regime (ibid.:3). Agrarian societies meet their energy demands - the supply of people and livestock with the requisite food energy to sustain their survival and their capacity to work - almost entirely by relying on biomass from agricultural and forestry ecosystems. Getting resources from origin to production and on to consumption in agrarian societies are generally met through short and localised supply chains, which is made possible through self-sufficiency, kinship, cooperative and non-market exchange, which are the norm for most people in such societies (Krausmann, 2017). The Neolithic revolution was gradual, change took thousands of years, and the agrarian societies vary regarding their socioecological characteristics. But, according to Haberl and colleagues (2011:4), one common point characterizes the various agrarian societies, that is the constraint of an area-related energy system, which is a fundamental barrier to growth.

The limitation to growth in agrarian societies caused by the constraint of the area-related energy system gets surpassed by the industrial society. Similarly to the Neolithic revolution, the transformation from an agrarian to an industrial socio-metabolic regime requires a socioecological revolution. The industrial social metabolic regime is dependent on a ‘material-intensive, largely machine-operated and ecologically destructive foundation involving agriculture, mining and the raw materials industry’ (ibid.:4). The agrarian-industrial shift leads to absolute per capita growth of energy use ‘far beyond the limitations of the agrarian regime: the implementation of the fossil-fuel-powered energy system of modern industrial societies increased per capita use of materials and energy by factors of 3–5’ (Fischer-Kowalski, Haberl and Krausmann, 2007:232). Absolute material and energy use per unit of area increased much more, due to rapid population growth in industrial societies.

Elhacham et al. (2020) calculated that by 2020 the total mass of the socio-economic enterprise outgrew the mass of all non-human living organisms combined. Again, the rate of change is significant on a “geological timescale.” In 1900 human made objects’ mass represented 3% of the world’s total biomass, but in 2020, for the first time, the mass of human made objects is greater than the combined mass of all living organisms on Earth.

In 2019 the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES) reports that the health of ecosystems is deteriorating more rapidly than ever, accelerating the rate of species extinction, and eroding the foundations of livelihoods and life worldwide. The report identifies five direct drivers of change: land and sea use, direct exploitation of organisms, climate change, pollution, and invasive alien species. According to the platform’s authors (IPBES, 2019) human action have significantly altered three-quarters of
the land-based environment and about two-thirds of the marine environment, turning at least the third of world’s land surface and close to 75% of freshwater resources to crop or livestock production. Since 1980 the extraction of renewable and non-renewable resources have nearly doubled, and plastic pollution has increased tenfold while multiple-million tons of heavy metals, solvents, toxic sludge and other wastes turned coastal ecosystems on a combined area greater than the United Kingdom into ‘dead zones’; in 2015 third of marine stocks were harvested at unsustainable levels, 60% were fished at the peak of sustainable levels and only 7% were harvested lower than peak-sustainability levels; while urban areas have more than doubled since 1992 (UN Report 2019).

Rockstrom et al. (2009) identified and quantified a ”safe operating space for humanity”, that is a set of nine biophysical thresholds which display the limiting boundaries of the aggregate socio-economic enterprise. Rockstrom and his colleagues (2009) conclude that three Earth System processes having already transgressed the bounds of sustainability. As socio-economic processes assert increasing pressure on the various biophysical spheres of the Earth System, many natural scientists argue that the total human influence has reached planetary scale.

Recent climate research (Steffen et al., 2018) calls attention to strong nonlinearities in biogeophysical feedback processes within the Earth System. Steffen and colleagues (2018) argue that most analyses and models predicting Earth System trajectories are based on past and projected future greenhouse gas (GHG) emission rates - assuming quasilinear relationship between GHG levels in the atmosphere and global temperature rise. However, feedback mechanisms “could become an important or perhaps, even dominant factor in steering the trajectory that the Earth System actually follows over coming centuries” (Steffen et al., 2018:2). Similarly, Barnosky et al (2012:52) show that global ecosystems are prone to shift “abruptly and irreversibly from one state to another when they are forced across critical thresholds”. Critical transitions occur quickly, 5% of the time from the previous state is a duration enough for a transition into a new state. Such transitions in the past were characterized by “[p]reviously dominant species diminished or went extinct, new consumers became important both locally and globally, formerly rare organisms proliferated, food webs were modified, geographic ranges reconfigured and resulted in new biological communities, and evolution was initiated in new directions” (Barnosky et al 2012:53). The Earth System is constituted of subcontinental-scale subsystems which are crucial for climate mitigation and are suspected of being tipping elements (Lenton et al., 2008). For example, the Amazon rainforest is such subsystem, where crossing the tipping point would turn the rainforest locally into dry savannah, hence altering
global rain patterns, and possibly becoming a source of CO2, as opposed to functioning as a carbon sink (Lovejoy and Nobre, 2018; cited by Swingedouw et al. 2020:2). Growing evidence shows that tipping elements are not isolated, therefore one subsystem tipping over can have cascading effects on the others, carrying huge impacts on human societies as well (Cai et al., 2016; Lenton et al., 2019 cited by Swingedouw et al. 2020:3).

Crossing a planetary threshold the Earth System could get locked into a ”Hothouse Earth” pathway (Steffen et al., 2018). The Hothouse Earth pathway is characterized by “much higher global average temperature than any interglacial in the past 1.2 million years” and ”sea levels significantly higher than at any time in the Holocene” (ibid., 2018:1), likely to cause “massive, sometimes abrupt, and undoubtedly disruptive” (ibid., 2018:8) impacts on human societies and non-human life as well.

The calculations of Haberl and colleagues (2011:6-7) show, that if current population growth trends continue until 2050, then the global population will be counting roughly 8.5 billion people. Assuming that energy use would rise in accordance with the mean value of today’s industrial societies up to a rate of 250 GJ/cap/year, the absolute level of energy consumption would approximate the entire terrestrial net primary production, that is, the entire quantity of biomass that green plants produce each year on the earth’s surface through photosynthesis. Haberl et al. (2011) argue that it is hard to imagine which technologies could be capable of satisfying such global energy requirements, be it nuclear, fossil, water, solar, geothermal, wind or all of them combined without further destabilizing the Earth System.

Limiting global temperature rise within 2 degrees Celsius according to the Paris Accord temperature targets, the European Commission estimates that by 2050 industrialized countries need to reduce GHG emissions by 80 per cent. Reduction of this scale, according to Haberl et al. (2011:7) would require a transition to a qualitatively different metabolic regime, of which there is absolutely no sign becoming viable. In their review article Wiedmann et al. (2020:2) arrive to a similar conclusion: it is because, while rising energy demand and costs of resource extraction, technical limitations and rebound effects aggravate the problem.

Fischer-Kowalski, Haberl and Krausmann (2007:223) warn that the industrial socioecological revolution shifting metabolic regimes from land-based to fossil-fuel-based, that started approximately 300 years ago, is still very much under way. Roughly two-thirds of the people on Earth, mainly in the “Global South”, live on more than two-thirds of the world’s land area and are organizing their societal metabolic system still pretty close to the ideal-typical agrarian
regime profile. At the same time these parts of the world are the ones most rapidly transforming towards industrial type regimes. Due to global interdependencies, transformations are not simply repetitive across time and regions, meaning that contemporary transformations will most likely not simply mimic previous ones, but will have their own specific trajectories. It does not eliminate the existence of lock-in effects and path-dependencies, but nevertheless potentially provides space for developing less materially demanding social metabolic regimes.

Wiedman et al. (2020) show that the consumption of affluent households worldwide is by far the strongest determinant and accelerator of increases of global environmental and social impacts. Chancel and Piketty (2015:2) calculate that the top 10% individual emitters of greenhouse gases contribute to about 45% of global emissions, while bottom 50% emitters contribute to only 13%. Oxfam (2015) measures that around 50% of lifestyle consumption emissions can be attributed to the richest 10% of people around the world, who have average carbon footprints 11 times as high as the poorest half of the population, and 60 times as high as the poorest 10%. The average footprint of the richest 1% of people globally could be 175 times that of the poorest 10%.

According to Steffen et al. (2015), since 1950 the world’s production, consumption and hence pollution/waste generation is concentrated in affluent countries (OECD members), while most population growth has taken place in economically deprived countries. In 2010 the OECD countries accounted for 74% of global GDP but only 18% of the global population, pointing to the profound scale of global inequality, which distorts the distribution of the benefits of economic growth (ibid.:91). Accordingly, it is of crucial importance to avoid/shift from fossil-fuel-based configurations towards radically less energy and material demanding setups on both individual (household) and macro-levels.
1.3 Can the economy grow forever in the Anthropocene?

1.3.1. GDP and wellbeing

GDP is a flow index that measures the market value of all goods and services produced in an economy. GDP has multiple shortcomings. It does not reflect the household/individual level welfare properly and is even less useful to show the wellbeing and/or the health of ecosystems (which provide the basis of economic activity) (Kubiszewski et al., 2013). It is possible for most people to be worse off even when the average income increases. This is the case when inequality increases enough relative to the increase in average per capita GDP. Economic indicators might be relevant for assessing human wellbeing, but real household income may be more relevant than per capita GDP (Stiglitz, Sen and Fitoussi, 2008:8). Since GDP measures market value only, it treats objects of different nature and quality as commensurate. It measures throughput, so it does not provide information on stocks, which could be relevant for ecological sustainability and long-term human welfare (ibid.:22).

In the case of Britain, life expectancies did not rise until the mid-1800s, the introduction of sanitation measures. Until that point growth often led to the decline of ordinary people's wellbeing due to artificial scarcity created by enclosing commons. The preconditions for the progress towards public health were won only through commoners' rights and union movements that public goods such as sanitation, healthcare, and education were implemented. Economic growth itself does not automatically translate into positive outcomes for population health and education, housing, and so on; rather, it creates the potential for improvements, contingent on political forces that determine the direction of using social resources (Hickel, 2021 building on the work of Szreter (2002; 2003; 2005; and Szreter and Mooney, 1998).

Van Zanden et al. (2014) carried out a report focusing on long-term wellbeing trends on global scale from 1820 to 2010, for 25 major countries and 8 regions in the world. Their analysis covered real wages, educational attainment, life expectancy, body height, personal security, political institutions, environmental quality, income inequality and gender inequality. They find that some of the well-being indicators show strong statistical correlation with the evolution of GDP per capita, such as education (as measured by literacy and educational attainment) and health status (as measured by life expectancy and height), personal security (homicide rates) and gender inequality (life expectancy and birth rates, in average years of schooling, labour force participation, inheritance rights and marriage age and in parliamentary seats and suffrage). For political institutions and personal security statistical correlation was much weaker: occasionally ‘violent swings’ affected political rights, and ‘crime “hotspots” lowered personal
security in many parts of the world. A clear negative statistical correlation describes the relationship between environmental quality and GDP per capita. But the most significant findings of van Zanden et al.’s (2014) work is the indeterminacy of GDP per capita and well-being dimensions’ correlation: for example, life expectancy improved around the world even when GDP per capita stagnated (due to advances in knowledge and the diffusion of health care technologies); also, access to education outpaced GDP per capita increase (perhaps due to policies regulating the schooling system); or in other cases, during early industrialization improvements in the typical citizen’s well-being may have significantly lagged behind the rate of economic growth due to increasing inequalities, as nutrition stagnated or even declined and disease environment worsened.

Kubiszewski et al. (2013) synthesized estimates of the Genuine Progress Indicator (GPI) over the 1950–2003 time period for 17 countries (covering 53% of the global population and 59% of the global GDP), comparing it with Gross Domestic Product (GDP), Human Development Index (HDI), Ecological Footprint, Biocapacity, Gini coefficient, and Life Satisfaction scores.

GPI is designed to measure the economic welfare (separating activities that diminish welfare from the ones enhancing it) generated by economic activity, essentially counting the depreciation of community capital as an economic cost. Just like GDP, GPI relies on personal expenditures, ‘but adjusts them using 24 different components, including income distribution, environmental costs, and negative activities like crime and pollution, among others. GPI also adds positive components left out of GDP, including the benefits of volunteering and household work’ (ibid.:57-58).

Therefore, Kubiszewski and colleagues (2013) argue, GPI (unlike GDP) is a good tool to measure welfare. According to their calculations, around 1978 the GPI/capita (welfare) levels off and begins to decrease slightly, while GDP/capita continues to increase; implying that market value generation decoupled from welfare enhancing. Max-Neef (1995) names it the “threshold hypothesis” stating that ‘for every society there seems to be a period in which economic growth (as conventionally measured) brings about an improvement in the quality of life, but only up to a point - the threshold point - beyond which, if there is more economic growth, quality of life may begin to deteriorate’ (ibid.:117). Kubiszewski et al. (2013) argue that the threshold point is at 7000 USD GDP/capita (1990 prices) (ibid.:66).

O’Neill et al. (2018) report that out of 150 nations none can meet the basic needs of its citizens at a globally sustainable level of resource use. But according to their calculations:
physical needs such as nutrition, sanitation, access to electricity and the elimination of extreme poverty could likely be met for all people without transgressing planetary boundaries. However, the universal achievement of more qualitative goals (for example, high life satisfaction) would require a level of resource use that is 2–6 times the sustainable level, based on current relationships. Strategies to improve physical and social provisioning systems, with a focus on sufficiency and equity, have the potential to move nations towards sustainability, but the challenge remains substantial (ibid.:88).

Abdallah et al. (2009) designed the Happy Planet Index (HPI) to combine life expectancy, experienced (subjective) wellbeing, and ecological footprint into one measurement tool. They show that no country successfully achieves the three goals of high life satisfaction, high life expectancy, and functioning within the planetary boundaries. HPI shows that certain levels of life expectancy, experienced (subjective) wellbeing, and ecological footprint can be achieved through very different configurations. For example, the Netherlands and USA have similar levels of experienced wellbeing, but people in the Netherlands live on average a year longer, and yet the Dutch per capita ecological footprint is less than half (4.4 global hectares compared with 9.4) of the USA score, implying that the Netherlands is over twice as ecologically efficient at achieving good lives. Costa Ricans also live slightly longer than Americans, and report much higher levels of life satisfaction, and yet have a footprint which is less than a quarter the size. Also, Vietnam and Cameroon both have ecological footprint levels at 1.3 global hectares, but while people in Cameroon live on average 50 years and self-report their wellbeing (on a scale of 0 to 10) to be 3.9; life expectancy in Vietnam is 73.7 years, higher than in many European countries, and self-reported wellbeing scores are 6.5 (ibid.:5).

Neither GPI or HPI, nor any other index a are free of specific shortcomings. As Roman and Thiry (2017:386) write:

> [f]irst, most of the composite indices are considered as atheoretical or as relying upon doubtful conceptual foundations. Neoclassical economists often stress the unclear definition of sustainability. Second, the way dimensions are weighted and normalised is controversial. Who weights and according to what principles or methods? Third, normalisation and weighting imply commensurability and value monism.
It is not my intention here to go deep into the specific characteristics of the various alternative indicators. The main point is that social organizing focusing dominantly on economic growth (measured largely by GDP) has its strong limitations and flaws which produces disruptive and destructive socioecological outcomes.

1.3.2. Materialism and wellbeing
Easterlin (1974) examined the association between income and happiness by looking at individual subjective happiness surveys from 1946 to 1970, covering nineteen developed and developing countries. He shows that within countries those in the higher income status group, on average, are happier than those in the lowest group, but the same could not be demonstrated by comparing different countries (ibid.:118). By focusing on the United States, Easterlin compared identical happiness questions and showed that there was an increase in happiness from 1946 through 1956-1957 the proportion who self-assessed as ‘very happy’ grew; then there is a noticeable decline between 1957 and 1963, and a second one from 1966 to 1970; by 1970 the proportion of ‘very happy’ is just about the same as in 1947 (ibid.:110).

Economic growth in itself does not increase happiness of people in the long-term is the main message of the so-called “Easterlin (or happiness-income) Paradox”. This is because of the prevalence of social comparison in individual’s evaluations of their income; since individuals are more prone to evaluate their income in relative terms, one’s happiness generated through income increase can be undercut by the growth in the income of one’s comparison group (Easterlin and O’Connor, 2020). Easterlin and O’Connor (2020) show that even following unprecedented rates of growth taking place in poor countries for decades - China 1990-2015, Japan 1958-1987, and India 1995-2019 - happiness was found to be flat or even declining. These results – according to Easterlin and O’Connor (2020) – demonstrate that

the Paradox holds for both rich and poor, whether countries or groups of individuals within countries. Social comparison is at work everywhere. As incomes rise, even from very low levels, so too do people’s notions of what constitutes the good life. The result is no improvement in happiness, even though material conditions have noticeably improved (ibid.:17).

The results are relevant not only for poor countries but also for developed and transition countries (Easterlin, 2015). Easterlin and O’Connor (2020) explicitly state that these results demonstrate that economic growth in itself will not make people happier, but economic and
social policies can. For example, in the 1990s China’s GDP per capita grew dramatically, happiness declined; happiness turned upward when the government took policies to improve employment and the social safety net. In the 1980s the Japanese economy grew rapidly with happiness being relatively stable, while in the 1990s-2000s economic growth slowed but happiness began to improve; increase in happiness was due to an expansion of the social safety net (ibid.:17-8). This implies that it is important what specific processes constitute growth, and how are the benefits of growth distributed, socialized; how inclusive, egalitarian or exclusive, stratifying is growth.

Dittmar, Bond, Hurst and Kasser (2014:880) define materialism as people’s long-term endorsement of values, goals, and associated beliefs that center on the importance of acquiring money and possessions that convey status. It is empirically confirmed that any particular value or goal exists within a broader system of values and goals, so that optimal assessment involves measuring the importance of a particular goal, such as materialism, relative to other goals in that system (Dittmar, Bond, Hurst and Kasser, 2014). Materialism is an integral part of the human goal and value system, which in Burroughs and Rindfleisch’s (2002) study fell within the cluster of self-enhancement values for power and achievement. At the same time, materialism stood in relative conflict with collective self-transcendent values like religiosity, benevolence, family, community, universalism, and conformity (Kasser 2016). It implies that materialism and non-materialism as value and goal systems are in conflict with one another and the "crowding out" effect (Frey and Oberholzer-Gee, 1997) can be recognized in their relationship (Kasser 2016).

Dittmar, Bond, Hurst and Kasser (2014) examine the relationship between materialism and personal wellbeing through a meta-analysis. They included 259 independent samples in the systematic, empirical review of the literature and were able to include studies from every populated continent, although half of all studies were carried out in North America. Their results demonstrate a clear, consistent negative association between a broad array of types of personal wellbeing and people’s belief in and prioritization of materialistic pursuits in life. Results are robust over a number of demographic, participant, and cultural factors. Dittmar, Bond, Hurst and Kasser (2014) conclude, that there are inherent factors, characteristics in materialistic attitude and lifestyle, which interferes with the ability of people to live in ways that make them happy and healthy (ibid.:915). Accordingly, Kasser (2002:22) states:

[people] who are highly focused on materialistic values have lower personal well-being and psychological health than those who believe that materialistic
pursuits are relatively unimportant. These relationships have been
documented in samples of people ranging from the wealthy to the poor, from
teenagers to the elderly, and from Australians to South Koreans.

Wilkinson and Pickett (2009; 2017) examine the social costs of income inequality. Through
their empirical work they show that population health tends to be better in income wise more
egalitarian societies, while also many other social problems

including mental illness, violence, imprisonment, lack of trust, teenage births,
obesity, drug abuse, and poor educational performance of schoolchildren, are
also more common in more unequal societies. Differences in the prevalence
of ill health and social problems between more and less equal societies seem
to be large and to extend to the vast majority of the population (Wilkinson

It is because income inequality appears to trigger a number of psychoathologies by influencing
the quality of social relations; in more stratified societies status becomes more important thus
increasing status anxiety, self-serving individualism and self-aggrandisement; possibly fuelling
conspicuous consumption. At the same time community life, embedded in trust and reciprocity
decreases; bullying and violence increase. That is income inequality increases the importance of
status differences and of the social evaluative threat and therefore increases psychopathology
related ills, such as sense of defeat and depression (Wilkinson and Pickett, 2017). These
findings are in line with Kasser, Cohn, Kanner and Ryan’s (2007) work, who demonstrate by
examining “American corporate capitalism” that the more a nation organizes its economy
around corporate capitalism, the more its citizens will value materialistic aims such as money,
power, status, achievement, and the less its citizens will value aims such as egalitarianism,
harmony and community feeling.

According to Wilkinson and Pickett (2009:509) that standards of health and social wellbeing in
rich societies may depend more on reducing income differences than on economic growth
without redistribution.

Linking materialism, wellbeing and sustainability Kasser (2017) finds that frequent engagement
in pro-ecological behaviours is positively correlated with personal wellbeing. Kasser comes up
with three possible explanations for the compatibility of pro-ecological behaviours and
wellbeing:
(i) engaging in [pro-ecological behaviours] leads to psychological need satisfaction, which in turn causes [wellbeing]; (ii) being in a good mood causes people to engage in more prosocial behaviours, including [pro-ecological behaviours]; and (iii) personal characteristics and lifestyles such as intrinsic values, mindfulness and voluntary simplicity cause both [pro-ecological behaviours] and [wellbeing] (ibid.:1).

O’Neill, Fanning, Lam and Steinberger (2018) conclude that qualitative social goals, such as increase in life satisfaction could be pursued using non-material means.

1.3.3. Decoupling
In the previous sections I have built an argument that GDP alone fails to provide accurate information on social welfare, let alone wellbeing. More importantly, social organizations that prioritize economic growth disrupt/destruct socioecological entities and processes. In the following sections my intention is to demonstrate the flaws and limitations of the approaches/scenarios (often named as “sustainable development” or “green growth”) which keep economic growth in the center of social organization, while intend to pacify its disruptive/destructive effects.

Haberl et al. (2020) carry out a systematic review of the evidence on decoupling of GDP, resource use and GHG emissions. In their article they synthesize the evidence emerging from 835 peer-reviewed articles. The literature shows that GDP and GHG gases such as CO2 emissions are coupled:

- global GDP (constant $US2010) grew at 3.5%/year from 1960–2014, while CO2 emissions grew at 2.5%/year on average (World Bank 2019a); i.e. globally there is relative but no absolute decoupling. Between 2000 and 2014, the relationship was even tighter, as both CO2 emissions and GDP (constant $US2010) grew at 2.8%/year on average (Haberl et al., 2020:5).

Vaden et al. (2020a) reviewed 179 articles on decoupling and found, that none of those articles presents robust evidence of international and continuous absolute resource decoupling, not to speak of sufficiently fast global absolute resource decoupling. According to their interpretation of the selected literature:
our review tells of the historical situation up to date, and the evidence does not suggest that decoupling towards ecological sustainability is happening at a global (or even regional) scale. The literature finds evidence of impact decoupling, especially between GHG emissions (such as COX and SOX emissions) in wealthy countries for certain periods of time, but not of economy-wide resource decoupling, least of all on the international and global scale. Quite the opposite: there is evidence of increased material intensity and re-coupling (ibid.:243).

According to Haberl et al. (2020), currently decoupling appears to depend on prior use and accumulation of materials and on extractive expansion and rising material flows elsewhere. They conclude, that overall there is little evidence to be found in support of economic growth measured in GDP decoupling from CO2 emissions (ibid.:29). Similarly, Vaden et al (2020b) write that relative decoupling of energy and material use and CO2 emissions from GDP has been observed as a trend for decades, due to improved efficiency; but periods of absolute decoupling have been short and geographically and/or sectorally limited, observed in industrialized countries and connected to periods of recession or low growth (ibid.:6).

Le Quere et al. (2019) find 18 countries where both consumption and production based CO2 emissions fell by a median 2.4%/year over the period 2005–2015 (ibid.:2). Their analysis shows that nearly half of that reduction has been due to a decline in the share of fossil fuels in final energy use; somewhat one-third resulted from reductions of energy use. Le Quere and colleagues argue, that these reductions were a result of targeted policies to promote renewables and raise energy efficiency, but also profited from relatively low GDP growth rates between 1%–2%/year (Haberl et al., 2020:33). But, Le Quere et al. continue, absolute decoupling in the rate perceived by the 18 countries would have a chance meeting climate targets only if global emissions in 2030 will be about 25% below 2018 levels (ibid.:5).

In their article Vaden et al. (2020b:9) attempt to approximate what kind of decoupling would be needed; they define "successful decoupling" conservatively as one that could be sustainable in material terms and could be compatible with stopping temperature rise to 2°C. They claim, that in order for

‘absolute resource decoupling to make sense as a global goal, we would need a scenario where, in ca. 30 years, the economy produces 2.6. times more GDP out of every ton of material used, under conditions where material use
diminishes ca. 40% globally. Currently, no trends corresponding to this scenario are observable and, to our knowledge, no concrete proposals with such a level of decoupling have been presented’ (ibid.:11).

There can be multiple factors hindering the decoupling of economic growth (measured in GDP) and environmental impacts.

The rebound effect is a significant factor why the efficiency gains did not result in absolute reductions of energy and material use. First elaborated by Jevons (1865, chapter VII-XII) – according to Giampietro and Mayumi (1998:24-25 referred by Alcott (2008:773) –, the rebound effect occurs when the efficiency savings are not realized due to income and price effects, as higher incomes and/or lower prices lead to increased consumption. If for example ‘more efficient motors mean that a given number of driven kilometres is newly possible at less expense, this is the same as increased income or purchasing power — which can then be spent on further energy inputs even with no lowering of energy's relative price’ (Alcott, 2008:773).

In their review Wiedmann et al. (2020) state, that consumption is by far the strongest determinant of global impacts, dwarfing other socioeconomic–demographic factors such as age, household size, qualification or dwelling structure […] the impact intensity of consumption decreases, but absolute impacts increase towards higher consumption. Absolute decoupling, let alone an inverted-U-type Kuznets relationship, does not occur from a consumption-based accounting perspective (ibid.:2).

In their study Magee and Devezas (2017:202-3) examined the use of 69 materials from 1960 to 2010. They record 6 materials showing absolute decline in usage over the 50-year period potentially suggesting that some materials are now entering technologically-enabled absolute dematerialization. However, a closer look shows that four materials have been phased out due to their toxicity. The other two are wool, which has declined without decreasing the global populations of domestic sheep or other wool-producing animals, and tellurium, a byproduct of refining copper whose use in solar panel manufacturing means its overall consumption is likely to rise again (Parrique et al., 2019:39).

1.3.4. Dematerialization through recycling and circularity

Regarding recycling, Grosse (2010) indicates that in a growing consumption-driven economy, the potential of recycling to counter resource depletion is limited. This is exemplified through
steel, a globally prominent recycled material. Grosse deduces that to notably prolong the exhaustion of a natural resource, the growth rate must remain below 1% while recycling mechanisms are highly prevalent (Piques and Rizos, 2017:32). Conversely, when the growth rate surpasses 3%, akin to steel production over the past century, recycling's impact on resource conservation becomes minimal (ibid.:27).

As per the Circularity Gap Report (2020), the world economy's circularity stands at a mere 8.6%, a decrease from 9.1% in 2018. This regression is attributed to persistent trends: heightened extraction rates, continual stock accumulation, and modest advancements in end-of-use processing and cycling. These patterns are entrenched in the linear economy's "take-make-waste" tradition, constituting inherent challenges (ibid.:15).

Parrique et al. (2019) summarise their recycling appraisal by asserting that a perpetually expanding circular economy defies arithmetic, and recycling processes demand substantial energy and raw materials. In the context of escalating consumption, achieving recycling parity with replacement rates is mathematically implausible (ibid.:49).

1.3.5. Dematerialization through services

Fix (2019) tests the "dematerialization through services” hypothesis with a focus on fossil fuel consumption and carbon emissions, to learn whether societies with larger service sector actually dematerialize. He looks at 217 countries over the years 1991 to 2017. Fix (2019) finds no evidence that a service transition leads to absolute carbon dematerialization (ibid.:20). Instead, data shows that a large service sector is associated with the growth of per capita emissions (ibid.:23). Focusing on Denmark, Jespersen (1999) highlights a critical flaw in the proposal for dematerialization through services, as in the real economy, agriculture, manufacturing, and services are interdependent and cannot be treated separately. Goods production involves services such as business, finance, transport, trade, communication, and waste processing, and these activities complement rather than substitute each other, making it impossible to simply switch between manufacturing and service sectors.

Kovacic, Spano, Lo Piano and Sorman (2018) investigate the empirical and theoretical basis of the decoupling between energy throughput and economic growth. They analyse of the historical trends (1995 to 2013) of the metabolic pattern of fourteen European economies (EU15, Luxembourg excluded) over a period of 18 years focusing on the changes in energy throughput and financial assets. According to Kovacic, Spano, Lo Piano and Sorman (2018), during the
analysed period the energy intensity (energy throughput per unit of GDP) of examined economies fell by approximately 20%, an average annual pace of about 1.5% (ibid., 574), indicating decoupling; however, the financial intensity (measured as the volume of financial assets over GDP) of the economies rose by 65%, with an average of roughly 4% per year (ibid., 574). The authors divide the economies into three sectors: the (i) financial sector, (ii) government and (iii) domestic economy (comprising about 99% of total human activity, composed of sectors with the highest energy throughput, such as building and manufacturing, services excluding finance and government, and household activities) - to learn how the decrease in energy intensity took place. During the period analysed, the energy intensity (energy used divided by worked hours) of the domestic sectors has remained constant, no decrease in energy metabolic rates could be observed, therefore, the authors argue that only relative decoupling took place (ibid.:582). This implies, according to Kovacic, Spano, Lo Piano and Sorman (2018), that declining energy intensity is not the result of some increasing productivity or increasing efficiency in energy use, but the effect of the increasing share of the services sector in the GDP (ibid.:584). They emphasize that the decoupling between GDP and energy throughput in major industrialized economies, including the EU14, is not due to changes in metabolic patterns or production processes. Instead, it reflects a process of financialization, where financialization has played a key role in making outsourcing and tertiarization economically viable, thus contributing to the declining energy intensity observed in these economies.

1.3.6. Dematerialization through cost shifting
Parrique et al. (2019:53-5) argue that the absolute decoupling shown in early-industrialised nations is only apparent if those countries outsource, through trade and investment, the biophysically-intensive production somewhere else. Wimmer and Glick (2005:302) call it ”methodological nationalism”, an approach building on the assumption that the nation/state/society is the natural social and political form of the modern world. Wallerstein (1976:352) argues that a world-system perspective (avoiding the use of the politico-cultural entity the „state”) must be applied if one attempts to discuss large-scale historical processes. Hornborg (1998; 2019) argues – building on the work of Emmanuel (1972) - that the world-system is designed in a way that core entities are able to attract resources from peripheral entities through ’asymmetric global flows of resources’ driving ‘unequal exchange’. From the decoupling perspective - write Parrique et al. (2019) – core entities can capitalize their access
to cheaper materials, energy and loose environment protection laws, enabling ’the decoupling of certain regions at the expense of an intensification of environmental pressures elsewhere; or in other words, would allow high-consumption countries to externalise the environmental costs of production to low-consumption countries’ (ibid.:53).

Relying on material footprint, a consumption-based indicator of resource use, Wiedmann et al. (2015) carry out a time series analysis of the material flows associated with global production and consumption networks among 186 countries. Calculating the raw material equivalents of international trade, they demonstrate that countries’ use of nondomestic resources is, on average, about threefold larger than the physical quantity of traded goods. As wealth grows countries tend to reduce their domestic portion of materials extraction through international trade, whereas the overall mass of material consumption generally increases. With every 10% increase in gross domestic product, the average national material footprint increases by 6% (ibid.:6271).

Wiedmann et al. (2015) – and other material footprint based approaches – show that few countries would be able to satisfy their material needs with domestic resources as 41% of total global resource extraction was associated with international trade flows in 2008. The material footprint of nations reflects the increasing complexity and multicountry nature of global supply chains. Bithas and Kalimeris (2018) confirms this dependency of the global economy on natural resources, as they calculate that between 1900 and 2002 the mass inputs consumed to produce one unit of income increased by 45.5% (ibid.:8), meaning that a 4.8-fold increase in global income led to a 8.5-fold rise in mass flow (ibid.:1).

### 2. Is there a growth imperative?

Different researchers approach this question from different angles. Whether there is a growth imperative is of crucial importance, since if such a phenomenon exists, then there is not much room to decenter economic growth from social organizing as basic principle.

M. Binswanger (2009) and H. C. Binswanger (2013) claim, that the monetary system and credit creation produce an ‘immanent’ or ‘systemic’ growth imperative.

One important prerequisite for the ’growth spiral’ is the development of modern, money-based economies, surpassing the barter economies. Barter economies are fulfilling the conditions of
the Walrasian model of general equilibrium (same time multilateral barter with parties holding perfect information and all prices are equilibrium prices, which promotes the optimal use of the given resources) (H. C. Binswanger, 2013:153). In contrast, the interactions of the modern economies are money-based. M. Binswanger (2009:724) argues that looking beyond short-run business cycle fluctuations, capitalist economies are operating through continuous credit expansion which is necessary to finance the increasing levels of aggregate spending. Since the abandonment of the gold standard, in principle, there is no limit to the amount of money which can flow into the economy (H. C. Binswanger, 2013:156). Credit expansion is basically money creation done by banks. When the increased money supply generates increase in aggregate demand, therefore firms receive more income. M. Binswanger (2009) and H. C. Binswanger (2013) claim that firms are only able to make profits as long as credit expansion continues.

Since banks are required to increase their equity and reserves, parts of the banks’ profits are taken out of the economy and are held as the bank owners’ capital. But if firms are to make profits in the aggregate, then the economy requires a new flow of credit expansion, which compensates for the bank owners’ capital (M. Binswanger, 2009:725): looking at bank profitability statistics between 1979 and 2003, both in the United States and in Germany the average annual growth rate of banks’ capital was higher than the growth rate of loans injected into the economy. Therefore, a threshold level of growth rate can be set – M. Binswanger (2009:723) sets it at 0.45 per cent, while H. C. Binswanger (2013:155) at 1.8 per cent -, under which firms in the aggregate will suffer losses. This is the threshold level of the growth imperative, under this level the economy begins to shrink.

H. C. Binswanger (2013:155) differentiates growth imperative from growth impetus. Since the modern economy is dominated by joint-stock companies, there is a strong shareholder pressure to reinvest profits to increase production capacity, in order to increase the level of expected future profits. It means that the economy, due to the growth impetus driven by the expectation of increased profits, the growth rate can exceed the threshold level. Therefore, both M. Binswanger (2009) and H. C. Binswanger (2013) conclude, a zero-growth economy is not feasible in the long run. H. C. Binswanger (2013:156) calls it an ‘open question’ whether economic growth outweighs the ecological and social losses, especially, since, different agents’ personal experiences and perceptions can vary significantly.

Douthwaite proposes two main arguments regarding the existence of the growth imperative. One is the monetary-credit factor (2000a, chapter 1), that is in order for the firms to be able to repay their debts the amount of money circulating in the system has to grow; otherwise the
economy falls into recession. Since politicians and firms want to avoid contraction, they work together to keep up the inflation or expansion of the economic system, despite the known harms done in the social and ecological realms. Douthwaite’s (2000b: no page number) second argument for the existence of ‘expand or die’ growth imperative states, that the adoption of more appropriate technology is the key to commercial growth, allowing only the ‘fastest-growing businesses and nations [to] survive’. Profits can be realized through the application of new technology, which can lower the costs of per item produced, until the competitors adopt similarly efficient methods causing prices to fall. Douthwaite (2000b: no page number) states that technologically advanced firms always seek for new markets, or expand existing ones, since this is the way to increase chances for survival and making profits. No firm and no society, claims Douthwaite (2000b) is safe from the technological advancement induced growth imperative.

Similarly to M. Binswanger (2009), H. C. Binswanger (2013) and Douthwaite (2000a; 2000b), Lietaer et al (2012:104-106) come to the conclusion that there is a compulsory growth mechanism in place in part due to compounded interest within the credit-money system. Lietaer et al. (2012) write that since "bank-debt money in our current system is created with interest, it is subject to compounded interest or “interest on interest” which automatically implies exponential growth” (ibid:110). But debt and compound interest would not generate a growth imperative by itself, but rather coupled with four other factors, namely – (i) the pro-cyclical character of money created by banks looking for profit, (ii) the systematic preference by agents of short-term gains over potential long-term gains, (iii) the concentration of wealth, and (iv) the devaluation of social capital – they maintain a built-in systematic growth mechanism (ibid:104).

Jackson and Victor (2015) raise the question whether interest-bearing debt creates a growth imperative. In other words, they check whether a ‘growth imperative’ exists, which is determined by the need for the borrowers to pay back the interests due on the stock of outstanding debt. Through their model they show that a quasi-stationary economy with debt-based money and a long-term zero trend in the growth rate is formally possible. Contrary to claims in the literature, they find that neither credit creation nor the charging of interest on debt creates a ‘growth imperative’ in and of themselves (ibid.:44). This finding remains true even when capital adequacy and liquidity requirements are imposed on banks. Jackson and Victor (2015) also demonstrate that it is possible to move from a growth path towards a stationary state without either crashing the economy or dismantling the system (ibid.:40).
Similarly to Jackson and Victor (2015), Barret (2018) shows by designing a Minskyan Model (where fluctuations, business cycles occur) that a zero-growth economy with a positive interest rate for loans is theoretically possible. He confirms that with or without growth, there can be both stable and unstable scenarios (ibid.:234), and to maintain stability, firms must not change their debt levels or target debt levels too quickly (ibid.:228).

Strunz, Bartkowski and Schindler (2017) in their critical literature review also approach the question whether there is a monetary growth imperative. Their paper calls attention for the many ways the question can be approached (and therefore an answer provided). They argue that there is no consensus in social sciences whether monetary factors can trigger economic growth, and if so, in what way or extent (ibid.:326-7). There is not even consensus about what money is, what function it has in the economy (a neutral medium-of-exchange, or an institution sensitive to social context), what counts as 'monetary factors', or what is exactly meant by growth (in a rate sense, that is the speed at which the economy attains its full potential, or growth in a level sense, when the economy is at its fully exploited state) and what characterizes an imperative (ibid.:328-9). Strunz, Bartkowski and Schindler (2017) conclude that depending on the approaches toward the previously mentioned conceptual questions, one can arrive to contrasting conclusions regarding the (non-)existence of monetary growth imperatives. Yet a strong 'meta-result' can be derived the authors argue: namely, the simplest propositions on the link between monetary variables and growth are, at the same time, the least compelling (ibid.:327). Therefore, if there exists a monetary growth imperative, then it is 'only in so far as the cultural habit of linking monetary interest to growth persists and only as long as the features of our economy enable this cultural habit' (ibid.:347). Strunz, Bartkowski and Schindler (2017:350) argue that the growth imperative could and should be looked outside the monetary realm as well, for example examining the role of conspicuous consumption and positional competition (Veblen 1899; Hirsch 1976), institutional factors, such as growth-oriented social security systems (Feldstein and Liebman, 2002), and the possible political-economic factors, such as the tendency to solve distributional conflicts via growth instead of controversial redistribution, an approach sometimes called 'trickle down economics' (Stiglitz, 2007).

Richter and Siemoneit have published several important papers (2017a, 2017b, 2019) on the topic of growth imperative. In their review article (Richter and Siemoneit, 2017a) on economic theories of growth imperatives, first of all, they define the concept relying on Beltrani’s (1999:123) work: ’a growth imperative as a system immanent mechanism that the economy has to grow to maintain economic stability (“avoid economic crises”), independent of the will of
the economic agents’ (ibid.:2). This is the macro-level definition of growth imperatives. They conclude, that neither commercial competition, nor profit expectations, nor the monetary system are to be considered as stand-alone growth imperatives (Richter and Siemoneit, 2017a.) Since firms, in theory, could decide to distribute and consumer their (accounting) profits, it means that competition, building capital and maximizing profits do not create a growth imperative (Richter and Siemoneit, 2019:130-1). Regarding the question whether positive interest rates and the use of credit-money create a growth imperative Richter and Siemoneit (2017b) argue that growth is the function of the agents’ decisions over savings and investments. Therefore positive interest rates alone don’t lead to a grow imperative. But - describing the process similarly to Douthwaite (2000b) -, technological innovations drive the necessity to net invest, due to the interplay of creative destruction, profit maximization, and the need to limit losses. In parallel, productivity gains result in increased unemployment and due the socio-political pressure to help job creation, governments are expected to drive growth inducing policies. Therefore, according to Richter and Siemoneit (2017a:9) technological innovation driven market forces, and the political necessity of high employment combined are to be considered as growth imperative.

On the micro-scale Richter and Siemoneit (2017a) define the concept of growth imperative as ’exterior conditions that make it necessary for an agent such as an individual, firm, or state to increase her economic efforts to avoid existential consequences, i. e., unacceptable difficulties to achieve cost-covering revenues or the experience of social exclusion’ (ibid.:2). Siemoneit (2019:2) approaches the concept of growth imperative from the consumer’s/household’s perspective, since, he argues, if there is a growth imperative on the level of the firm, it would quickly die out without agents unwilling to consume. Siemoneit (2019:3) introduces the concept of ’efficiency consumption’, which he defines in a wide sense as ’consuming a good essentially for increasing personal time and cost efficiency’. This means that Siemoneit draws a parallel between the motives to invest and consume between firms and consumers which leads similar feedback loops pushing agents into a ’logic of increase.’ This also means, according to Siemoneit (2019), that consumers – like firms - are competing with each other to be more efficient. Mobility by car, or communication through expensive smart phones, for example, are not necessarily considered to be basic social or physiological needs. But these tools might help consumers to be more efficient, ’reducing efforts for planning and coordination, take advantage of favourable opportunities, react better to unplanned occurrences, avoid idle or transit times and can spontaneously squeeze tasks into their schedule’ (ibid.:3). Therefore, Richter and
Siemoneit (2019) argue, that technical innovation serves as a growth imperative for households as well, albeit with a ‘weaker manifestation’, making economic growth an attractive option.

In 1930 Keynes wrote that technological unemployment is only a temporary phase of maladjustment. All this means in the long run that mankind is solving its economic problem. I would predict that the standard of life in progressive countries one hundred years hence will be between four and eight times as high as it is to-day. There would be nothing surprising in this even in the light of our present knowledge. It would not be foolish to contemplate the possibility of a far greater progress still (Keynes, 1930:3).

Accordingly, today’s affluent economies should provide a relative high standard of living (compared to the 1930’s), while recommending only a 15-hour work week. But, between 1950 and 2000 economic productivity in the United States increased fivefold, yet employees on average worked more in 2000, then at the middle of the 20th century. Schor (1992) shows that if workers in the US would take the increased productivity as leisure, then their standard of living would be the same as in 1950, but maintaining this standard by one eight-hour work day. Hahnel (2012) argues that the problem is not the increase in economic productivity per se, but rather with the perverse incentives with anti-environmental biases which don’t allow societies to escape the unhealthy growth imperative they generate.

Hahnel (2012:40) explores how markets bias consumption choices in environmentally damaging ways, why privatization of natural resources fails to prevent their over-exploitation and why endogenous preference formation aggravates the destructive effects of these biases, and why, therefore, it is individually rational for people to dampen their preferences for leisure, collective consumption, and environmental preservation and enhance their preferences for natural resource and pollution intensive goods, even though this behaviour is socially irrational because it aggravates the biases and increases environmental destruction over time. Hahnel’s (2012) argument is threefold. Since the gap - due to the increase on the private rate of return on investment - between private and social discount rates has increased dramatically since the 1980’s, consequently, private owners of natural resources overly discount the benefits of leaving resources in the ground to be available for extraction in the future. Owners of natural resources have been over-discounting, and therefore overexploiting our natural resources, to a greater and greater extent ever since 1980 (ibid.:36).
Markets, according to Hahnel (2012:38), are biased in favour of pollution intensive goods, since they ignore negative external effects. Also, markets are biased in favour of private as opposed to collective consumption because they tend to minimize transaction costs for individual but not collective consumption. Markets also create free-rider incentives, therefore creating bias against environmental production and other public goods.

In private enterprise market economies it is rational for agents to dampen their preferences for less polluting leisure, since it often would mean the failure to maximize personal wellbeing. This market rationality enhances preferences for more pollution and resource intensive goods which markets tend to underprice (private goods versus public goods). These adjustments are called by Hahnel (ibid.:39) 'self-warping’, a concept similar to Siemoneit’s (2019) efficiency consumption. Here, the issue of consumer sovereignty comes up, and power relations with it, as Fuchs et al. (2016) argue: certain agents have the power to influence other agents’ (consumers’) preferences and therefore further strengthen the bias towards private goods. Hahnel’s (2012) argument is that the combination of institutional biases of the private enterprise market economies are creating and adding up to an ‘unhealthy’ growth imperative.

The debate on the characteristics and requirements of a steady state economy between Smith (2010) and Blauwhof (2012) on the one side, and Daly (1973; 1996) and Lawn (2011) on the other side could generate useful insights regarding the concept of growth imperative as well.

Smith (2010:31) claims that “the growth imperative is virtually a law of nature built-into in any conceivable capitalism. Corporations have no choice but to seek to grow. It is not “subjective.” It is not just an “obsession” or a “spell.” And it cannot be exorcised.”

Smith (2010:30-31) organizes his arguments into three separate theses which are according to him fundamental principles and rules for reproduction that define capitalism; and which show why ecologically suicidal growth is built into the nature of any conceivable capitalism. First, in a capitalist economy everybody is dependent upon the market, compelled to sell in order to buy. Capitalism is a mode of production in which specialized producers produce commodity for market, but do not produce their own means of subsistence. Second, due to competition producers are compelled to increase their production’s efficiency (for example by cutting the cost of input, rely on labour-saving technology, or take advantage of economies of scale). Third, the law of survival in the capitalist mode of production producers have no choice, they ’grow or die,’ since competition and increasing productivity compels the constant seek for expanded market share. Plus, the corporate form of ownership adds irresistible and unrelenting pressures
to grow from owners (shareholders), therefore corporate CEOs have no freedom to choose not to grow.

Smith (2010), who writes in the Marxian tradition, says a capitalist economy is characterized by private ownership over the means of production and markets are necessary to provide livelihoods. In his argument these properties are incompatible with any post-growth scenario. He states that relatively small enterprises who are not owned by absentee owners (for example family businesses) can choose to keep the level of output steadily as long as competition allows it, but corporations, due to shareholders’ pressure and competition don’t have a choice. To sum up, Smith claims that in a capitalist economy a steady state is not realistic due to the presence of corporations.

In response to Smith (2010), Lawn (2011) builds an argument that capitalist systems do not need to grow, therefore, a steady state economy with the means of production in private ownership and products and services being sold generating profits in markets are possible.

Lawn (2011:7-12) refutes Smith’s (2010:30-1) three theses to be fundamental principles of any capitalism. Lawn claims that the theses at best are the principles of a capitalist economy compelled to grow due to its specific institutional framework. Lawn’s counter-arguments for Smiths three theses are the following. First, Adam Smith’s growth theory describes the economic development process of 18th century Europe, a context where surplus labour was abundant, basic goods and services were in short supply and the ecosphere was not threatened to a scale comparable to today’s destruction. Therefore, goes Lawn’s analysis, Adam Smith could not envisage obstacles to growth other than the limits to the expansion of markets. Decreasing returns to scale due to growth beyond efficient size on the micro scale and constrains on resources and the ecosphere’s capability to absorb waste were not perceived as system-level problems in the 18th century by Adam Smith. Second, many times the peculiar institutional framework of a capitalist economy compels businesses to grow for reasons not related to efficiency enhancing, better quality products/services or economic development. According to Lawn, the expansion of firms many times purposefully undermine competition, often pushed by international economic institutions (such as the World Bank, WTO and IMF) to move capital to less regulated and/or lower wage markets, a shift known as ‘industrial flight’, leading to the ‘race to the bottom’. Third, exploiting economies of scale and investing in efficiency-increasing technological progress is desirable and would occur even in a steady-state economy. Since there are limits to economies of scale, the expansion of firms has limits. Also, the exploitation of
economies of scale and/or productivity improvements doesn’t necessarily comply growth of the given industry, nor the growth of the economy as a whole.

The essence of Lawn’s (2011:9) counter-argument is that the capitalist maxim is not ’grow or die’, but ’profit or die’, which does not require growth necessarily. Profits can be increased through (i) increased sales, (ii) better quality products (revenue rises while costs remain unchanged) and (iii) reducing the costs of production (revenue remains unchanged and costs decline). Of the three categories of profit making only the first involves growth, argues Lawn (2011:10). Even in this case it is not necessary to constitute growth on the macro level. Therefore, CEOs can increase profits while not growing the firm.

The concept of steady state economy proposed by Daly (2010) is deliberately not named ’steady state capitalism’. Daly proposes an economic system where the means of production are allowed to be in private ownership and the throughput of resources are limited (requiring centralized planning), therefore the scale of the economy relative to the biosphere is no longer determined by the market. Also, in Daly’s vision institutional configurations are in place limiting the range of income inequality, therefore lowering power and wealth inequalities.

Entering the discussion Blauwhof (2012) reads the debate as one generating questions about a fundamental concept, namely, how is capital defined. Blauwhof (2012:256) sees Daly’s (1972:13) concept of capital as ’physical wealth’, including the means of production. This differs from the Marxian political economies’ definition of capital, which is defined as ’value set in motion’, invested to make profit. According to Blauwhof (2012:257), the concept of steady state economy fails to capture this fundamental dynamic of capitalist economies, that value is created through motion: ”the use of the concept of capital as a static stock variable, implicit also in definitions of natural capital, obscures the ongoing process of capital accumulation”.

Blauwhof claims, using a Marxian framework to argue, that accumulation combined with a throughput limit would ultimately approximate profits to zero. Since the owners of capital would attempt to reduce costs, ”[a]ccumulation without GDP growth can only be sustained through crisis, which has the effect of transferring income and wealth from (the state and) workers to capital” (ibid:259). Referring to Li (2007:30), Blauwhof concludes that falling profit rates would steer away investors from any investments, therefore not only capital accumulation would cease to be, but basic reproduction of the system would not be maintained. Blauwhof sees no chance for steady state economical systems with markets and private ownership over
means of production, as he judges the state being too dependent on capital. The dependence, according to Blauwhof (2012:261), comes from the state’s need to appropriate surplus in order to be able to finance itself.\footnote{For a contrasting view on state finances see for example Kelton’s (2020) work on modern monetary theory (MMT). MMT’s implications regarding state finance are significant, as if not budget deficit but inflation is the limiting factor of state expenditures, then there is much more room to finance actions relevant for pressing socioecological issues.} Blauwhof considers Lawn’s argument that the profit motive of shareholders does not have to lead to a growing economy as wishful thinking.
3. Theories and concepts prioritising material growth

Banerjee et al. (2020:15) call for the effort to understand the taken-for-granted assumptions in organizational management theories that normalize and reinforce growth; to detect which theories of organization and organizing are complicit in at least tacitly endorsing growth at all costs while ignoring its negative outcomes.

I will use the term "growthism" (see section 1.11) as an umbrella term which provide the foundations of materialistic-mechanistic approaches to social organization. I argue that the materialistic-mechanistic approaches of economics and management theories and decision tools are at least tacitly endorsing growth at all costs while ignoring its negative outcomes.

The adjective “materialistic-mechanistic” implies an approach to social reality as a closed system, in order to design the conditions considered fit for objective and value-free inquiry, mimicking natural scientific methods. As Róna (2017:4, 6) writes, as an autonomous science, economics has helped create an unsatisfactory and unjust world despite its contribution to the dramatic betterment of the material existence of many. It has brought about an unwelcome change in the very nature of human existence as it has coerced us to change who we are and who we would like to be in order to conform to its ill-conceived ideals of economic rationality, built on a diminished, severely reductionist notion of our humanity. The scientism of modern economics, it is felt by many, rests on a mistaken conception of the subject matter of this discipline [...] Economics then is not a science dedicated to the study of a reality independent of it, but, rather, a scheme for crafting human behaviour to accord with a predetermined, axiomatic criterion.

These predetermined, axiomatic criteria are pre-analytical assumptions for the sake of satisfying natural scientific requirements for theory and model building. The ontological assumption that social phenomena hold object-like characteristics is needed to guarantee event regularities, that is properties of closed systems and isolated atoms (Lawson, 2015).

As Lawson (2015:15) explains, three conditions are needed for event regularity to be guaranteed: (i) intrinsically stable, (ii) isolatable, and (iii) actually acting in a condition of isolation. These are laboratory-like conditions, which are special boundary-requirements often overlooked by those building theories or models on them, as "social phenomena found to be
either intrinsically stable in the way that some natural mechanisms seem to be, or isolatable [but] [f]irms, money, markets, institutions, social relations, even individual identities, cannot be experimentally isolated from each other” (ibid.:15-6).

The materialistic-mechanistic approach to social sciences, specifically to economics is salient for example in Walras (1954) work and Mankiw and Taylor (2012) textbook:

“Pure economic theory is a science similar in every aspect to the physicomathematical sciences” (Walras, 1954:71 cited by Dolderer et al., 2021);

"Economics proceeds dispassionately like a natural science. By applying scientific methods to political questions, economics seeks to make progress on the fundamental issues” (Mankiw and Taylor, 2012:VIII cited by Dolderer et al., 2021).

3.1. Methodological individualism

In order to meet the requirements of intrinsical stability or isolatability, modern economic theories apply methodological individualism. Social norms, kinship, customs are missing from methodological individualism, and the basic unit of modelling is the individual (Ruiz-Villaverde, 2019:18). The individual is considered to be a utility maximizer. Zsolnai (2017:63) argues that such conception of “economic rationality understood as materialistic self-interest maximization inevitably leads to large-scale ecological destruction, human deprivation and disregard for the interest of future generations”.

3.2. Marginalism

Marginal productivity is the effect that an extra unit of produced goods would have on the costs of production. It is based on the notions of utility and scarcity. It is subjective: the value of things is measured by their usefulness to the consumer. Accordingly, prices reflect the utility that consumers get from consumption, this is the customers’ preference. Therefore, price becomes the direct measure of value; the more the consumer is willing to pay for something, the more valuable it is for her/him. The marginal productivity theory cannot distinguish good production from bad production, as the sole measure of value is whether the product can fetch a price in the market (Mazzucato, 2018:65-72). By eliminating fundamental questions as who produces value and how (for example considering working conditions and the way inputs are appropriated) and how is value distributed, the framework of neoclassical economics makes
productive activities and rent appropriation indistinguishable (Pogátsa, 2017:165-6). If the only value judgement of an activity is whether it leads to income through market sales, then issues of fairness and ecological consideration are not part of the decision. This way the mechanical approach to social phenomena sterilizes, de-politicizes and disembeds economics from ethical concerns. As Robbins (1936) writes on the nature and significance of economic science, “it does not seem logically possible to associate the two studies [economics and ethics] in any form but mere juxtaposition” (ibid.:14 cited by Sen, 1991).

3.3. Discounting the future
Discounted cash flow technique used for financial decision making; decisions regarding long-term investments depend to a significant extent on current and anticipated interest rates (Lietaer, Arnsperger, Goerner and Brunnhuber, 2012:81). The present value depends on the applied discount rate: the higher the discount rate, the smaller the present value (Zsolnai, 2015:4). Decision makers discounting the future, generally tend to “favour sure gains here and now and uncertain losses far and later, while they disfavour sure losses here and now and uncertain gains that are positioned further away and later in time” (ibid.:5). Building on the work of Kahneman and Tversky (1979) Zsolnai (2015:5) argues that the decision-making process of discounting is liable to have negative socioecological consequences. Decision makers who significantly discount things in space and time are not interested in solving long-range ecological and social problems, or consider in the global impacts of their activities the natural environment or human communities.

3.4. Shareholder primacy
According to Stout (2013) the concept of shareholder primacy - the idea that corporations exist only to maximize shareholder value – is relatively new. In the late eighteenth and early nineteenth centuries corporations were established to provide good service at a reasonable price – not to maximize investment returns. Shareholder primacy is a concept constructed and advanced by economists, such as Friedman (1970), Jensen and Meckling (1976), incorrectly assuming that shareholders own the corporation and are the corporation’s residual claimants. As Ireland (1999:32-3) puts it:

“[u]nderlying this consensus is a shared assumption: that the shareholders of large corporations ‘own’ the companies concerned; or in the ‘nexus of contracts’ or ‘agency’ theory of the company, in what amounts to the same thing, that the shareholders own not ‘the company’ but ‘the capital’, the
company itself having been spirited out of existence. It is a natural corollary of this assumption that the interests of shareholders should take priority, if not complete precedence, over all others; and that shareholders should, as of right, have a substantial, if not an exclusive, say in the running of companies”.

But as Stout (2013) shows corporations are legal entities that own themselves. Shareholders own shares, a type of contract between the shareholder and the legal entity that gives shareholders limited legal rights, making shareholders stand on equal footing with the corporation’s bondholders, suppliers, and employees, all of whom also enter contracts with the firm that give them limited legal rights. An equally mistaken claim is that shareholders are legally entitled to all corporate profits after the fixed contractual claims of creditors, employees, suppliers, etc., have been paid (residual claimants argument), which would make shareholder primacy and the maximizing of the value of the company the same thing. But shareholders are residual claimants only when failed companies are being liquidated in bankruptcy, not in the case of healthy companies. Shareholders lack the legal authority to control directors or executives, which debunks the shareholder value myth,

"managers of public companies have no enforceable legal duty to maximize shareholder value. Certainly they can choose to maximize profits; but they can also choose to pursue any other objective that is not unlawful, including taking care of employees and suppliers, pleasing customers, benefiting the community and the broader society, and preserving and protecting the corporate entity itself. Shareholder primacy is a managerial choice – not a legal requirement” (ibid.:4).

The application of the concept of shareholder primacy can lead to the destruction of company value and therefore shareholder wealth, as there can be various ways to raise the price of company stocks. But various shareholders can have different ideas regarding the shares owned by them, and what a value increasing strategy could be for one shareholder in one period of time can mean a bad strategy for other shareholders on a different time-scale. There is no single shareholder value - there are investors who save for retirement, and ones who seek buying low and selling dear quickly (Stout, 2013).
3.5. Substitutability

An important discussion labelled by Daly (1997) as the ‘Georgescu-Roegen versus Solow/Stiglitz’ illustrates the importance of the assumption whether in the framework of growth theory substitutability among factors of growth can be applied and if yes, to what degree.

Daly (1997:263) – building on Georgescu-Roegen’s work (1975; 1979) – criticises Stiglitz’s (1979) analysis and Solow’s (1974) growth theory for designing a production function where assumption is introduced about the near perfect substitution of capital for resources. As Solow puts it:

"[i]f it is very easy to substitute other factors for natural resources, then there is in principle no “problem.” The world can, in effect, get along without natural resources” (Solow, 1974:11 cited by Daly, 1997).

Near perfect substitutability is criticised by Daly (1997:263) for allowing the resource requirement to be very small, provided that capital is sufficiently large; but since capital to be made also requires resources, general scarcity is not removed because the potential for making such conversions is itself scarce. Georgescu-Roegen (1975) developed a fund-flow model in which production physically is a transformation of resources into products and waste; substitute of one efficient cause for another, or one material cause for another is possible, but the relation is fundamentally one of complementarity, not substitutability (Daly, 1997:265).

In his reply, Stiglitz (1997) argued that the type of analytical models proposed by him (Stiglitz, 1979), Solow (1974) and others are

"models intended to help us answer questions like, for the intermediate run— for the next 50-60 years, is it possible that growth can be sustained? [...] We write down models as if they extend out to infinity, but no one takes these limits seriously — for one thing, an exponential increase in the population presents almost unimaginable problems of congestion on our limited planet” (Stiglitz, 1979:269).

Stiglitz (1997:269) argues that technical change – a form of capital – can reduce the required physical inputs to produce one unit of output, where output is measured not in physical units, but in the value of the services associated with it. According to Stiglitz (1997) this leads to the conclusion that when markets function well, they reflect scarcity, but there can be important instances, especially where environmental and natural resources are concerned, where markets
do not work well. This is when the ‘classic problems posed by pollution externalities’ (ibid.:269) arise.

3.6. Externalities
Contrary to Stiglitz (1997), Spash (2019; 2020) argues – building his argument on Kapp’s (1978) work - that negative externalities are not external to the economic system, but rather part of the established economic process of cost-shifting. Externalities, for example pollution, are not a one-off minor aberration of the otherwise perfectly functioning price-making market system, but are rather a normal, indeed inevitable part of economic processes. Their significance increases as economic growth proceeds, while the ability of natural systems to assimilate them declines (Spash, 2020). As Kapp points out:

“For the fact that private entrepreneurs are able to shift part of the total costs of production to other persons or to the community as a whole, points to one of the most important limitations of the scope of neoclassical value theory. As long as it continues to confine itself to market value neoclassical economics will fail to assimilate to its reasoning and to its conceptual system many of the costs (and returns) which cannot be expressed in dollars and cent” (Kapp, 1971:11 cited by Spash, 2019).

According to the neoclassical theory, prices reflect objective resource scarcity, but in reality, argues Spash (2020:12), prices reflect power relationships. As Sraffa (1960) showed – contrasting the Marshallian theory (1890) of “factors of production” reviving “rewards” consonant with their productivities -, wages are dependent upon ’commercial, social and political influences and the fortunes of the class war’ (Bhaduri and Robinson 1980:111). It means that prices are determined through struggle and/or negotiation, where parties potentially bare dominant power over the other; therefore, prices are inadequate measures to reflect resource scarcity. Gaugler (2015) reviews studies which attempt to recognize factors driving finite resource prices. He states that

“[p]rice, and especially its changes over time, can be seen as an aggregated indicator for a raw materials availability. However, it must be pointed out that some factors are not considered in the pricing of a commodity. For example, negative environmental impacts related to the degradation of raw materials – as well as other external effects – are not taken into account in the price of commodities. Furthermore, market imperfections due to government
influence (taxes, subsidies, trade restrictions) might exist for specific raw materials. Nor can it be assumed that an efficient market exists solely for raw materials with low trading volumes. Thus, different distortions might exist, which would affect the “true” price of a raw material. However, since the price of a good is the only objective criterion in economics, it should play a center role” (Gaugler, 2015:37).

It follows that attempts to offset pollution or other socioecological harms through price setting, and applying those prices to cost-benefit analyses are set to fail. Pigou (1947) explicitly argues that quantifying social costs is impossible (Spash, 2019:6). The neoclassical framework by assigning prices to different, incommensurable entities (for example animals, land, fossils, labour, etc.) treats these entities as capital, considering them substitutable. This approach implies as if environmental destruction and/or social ills could be perfectly compensated by more human artefacts (Spash, 2019) through relying on cost-benefit analysis.

4. Growth versus successful nongrowing business organizations

According to Banerjee et al. (2020) organizational management studies have tended to equate effective management with growth of the enterprise; consequently there is ”no more dominant, taken-for-granted system of beliefs circulating among [organizational management studies] scholars than the one articulating (or quietly underpinning) the economic growth imperative” (ibid.:10). I propose that any attempt that intends de-centering of material growth from cooperations, institutions and organizations as a fundamental organizing principle, has to problematize growth on the theoretical and empirical level. In the following I will focus on the organizational management literature’s critique of growth.

In my view the central question is whether organizational growth is a matter of choice, or growth is an imperative. Following Cyron and Zoellick (2018) I review the literature around three questions:

1. What is business growth?
2. How do businesses grow?
3. Why do businesses grow?
4.1. What is business growth?
Davidsson, Steffens and Fitzsimmons (2009) raise the question whether a general, positive relationship between business growth and profitability can be detected. They collected data from two countries, Australia and Sweden, for four years over different periods. In the Australian sample from 1994 on, between 3,488 and 3,717 businesses employing fewer than 200 employees per year are included in any one analysis. The Swedish data originates from a longitudinal survey study undertaken in the years 1997-2000 - private limited liability companies with 10-250 employees, resulting in a sample of 1,470 firms. Interpreting the data Davidsson, Steffens and Fitzsimmons argue, that in a population of small and medium enterprises superior profitability is likely to be indicative of having built a resource-based competitive advantage. Building such a valuable and hard-to-copy advantage may at first constrain growth. However, the underlying advantage itself and the financial resources generated through high profitability make it possible for firms in this situation to now achieve sound and sustainable growth— which may require building a series of temporary advantages—without having to sacrifice profitability (ibid:2).

Since there is little evidence of a general tendency for firms to become more profitable as a result of their growth, it implies that it is reasonable to question the uncritical growth ideology.

I have looked through the organizational management literature regarding business growth. The central question is whether growth is optional, is there an element of choice (which opens up the realm of decision making), or structural forces are unavoidably pushing business organizations to grow. The relevant literature implies that at many times growth is a deliberate decision of the owner/managers and strategies can be developed to avoid growth and its negative consequences (diseconomies of scale).

4.2. How do businesses grow?
Greiner (1972, 1998) theorizes that organizational growth can be categorized into stages through which organizations pass while evolving. Stages of evolution are generating the need for revolution, which if successfully passed, then a new evolution period begins to unfold, already containing the seeds of the next revolution. These stages are called by Greiner "The Five Phases of Growth" where each period is characterized by the dominant management problem as a barrier to further growth and a managerial style used to achieve growth.
Organizational evolution – according to Greiner - is not inevitable, nor indefinitely sustainable, it 'cannot be assumed that organizational growth is linear' (ibid., no page numbers). Whether an organization will be capable to transform into the next growth phase is 'not an automatic affair’ but depends largely on management decisions. This non-deterministic character of organizational growth through stages is captured empirically by Churchill and Lewis (1983). They tested their growth-through-stages model by a questionnaire sent out to small and medium size firm owners and managers and learned that their 'grow-or-fail hypothesis implicit in the model, and those of others, was invalid' (ibid.:12).

In Geiner’s (1972/1998) growth model the need for revolution is closely related to the market environment of the industry, for example:

> a company in a rapidly expanding market will have to add employees quickly; hence, the need for new organizational structures to accommodate large staff increases is accelerated. Whereas evolutionary periods tend to be relatively short in fast-growing industries, much longer evolutionary periods occur in mature or slow-growing industries (ibid., no page numbers).

Greiner also writes that managers may choose not to grow the organization, because, for instance they might prefer to retain the characteristics of a small company, avoiding complexity issues and losing informal practices, where they would possibly "grow themselves out of a job and a way of life they enjoy" (ibid., no page numbers).

According to Levie and Lichtenstein (2010) stages models of business growth, similar to Greiner’s (1972/1998) and Churchill’s and Lewis’ (1983), despite increasing criticism, have been added to the management organizational literature since the 1960’s. Levie and Lichtenstein (2010) hence set the question if these stages models of business growth are valid at all. To answer the question, they analysed 104 models on stages of business growth published between 1962 and 2006. They find that there is no consensus about model features, nor has any particular stages model become dominant in the field. Worse, two of the principal propositions shared by these models appear to have no empirical validity when tested with large samples. [...] We conclude that stages of growth modelling has hit a dead end and urge our colleagues to abandon efforts to either predict or test a specific set of stages that are meant to describe the growth of business firms. [...] the absence of a
consensus among them are astonishing given that 50 of them are presented as “universal” models (ibid.:318 and 329).

In their analysis Levie and Lichtenstein (2010) differentiated five type of stages models, and argue, that their conceptual origins ’exhibit a strong organismic view that businesses, similar to organisms, have a growth imperative, propelling them through distinct “growth stages.’” (ibid.:328).


The Growth as an Outcome stream consists of studies which view growth – either empirically or conceptually – as a dependent variable and used a set of independent variables to explain variance in this growth outcome. One way of firm growth is through establishing subsidiary organizations; these new firms might be excluded from the parent company’s financial record, therefore the unit of analysis when selecting variables is not straightforward (McKelvie and Wiklund, 2010).

Also, growth expectations can change over time, as for example new managers or acquisitions introduce new intentions. Firms undergoing initial public offerings also tend to have higher growth demands. Another potential problem with the growth as an outcome approach can be the oversimplification of the phenomena, as McKelvie and Wiklund (2010) distinguish three growth types: organic, acquisitive and hybrid. Small firms tend to grow organically accompanied with employment expansion, while large firms tend to grow through acquisitions.

Here, in growth as an outcome stream, research generally assumes linear relationships among variables, most often regression analysis; but in reality, firms rarely show linear growth over time, rather non-linear variations are to be found. Since there is no consensus on which variables to employ to capture the phenomena of growth, many firms classified as high-growth would be labelled as low-growth with different metrics in use. Also, a commonly held assumption in the literature is that growth is always a sign of success and that unprofitable growth may lead to future profits via increasing market share. Empirical work shows that many firms are not interested in growth (McKelvie and Wiklund, 2010:264-9).

The Outcome of Growth studies tend to treat growth as a variable that influences other variables and attempts to display what are the consequences of growth on the level of the firm. This stream of literature analysed by McKelvie and Wiklund (2010:269-70) falls into similar
category what Levie and Lichtenstein (2010) consider to be the set of stages theories; and come to very similar conclusions: these studies see firms as biological organizations passing through stages of their life cycle, assuming that for each stage of growth there is an optimal configuration (a pattern to be followed) for further growth. Stage theories fail to differentiate among various types of growth (organic, acquisitive and hybrid) and therefore strengthen their deterministic character (McKelvie and Wiklund, 2010).

Finally, McKelvie and Wiklund (2010:271-3) identified literature that treats growth neither as an independent variable, nor as a dependent variable, but instead was interested in the actual growth process. This stream of research speaks to the same problem as the previous two (growth as outcome and outcome of growth): not truly understanding the heterogeneous nature of growth. Researchers have introduced dependent variables to measure growth, but the multitude of variables does not necessarily correlate well, making it difficult to capture the different quality of growth among firms (organic, acquisitive, hybrid).

To sum up, I agree with McKelvie’s and Wiklund (2010:280) that growth is a multifaceted phenomenon and organizational management theory is shorthanded to explain how firms grow, and why.

4.3. Why do businesses grow?

Davidsson (1989) designed a study to identify and estimate the relative impact of some factors that enhance and reduce the willingness of small business managers to pursue growth. He uses a random sample of 400+ Swedish small business owners (2-20 employees) operating in four industries (manufacturing, high-tech, repair services, and retailing). One limiting factor affecting the generality of the study can be that Swedish laws are restrictive when it comes to the owner-manager’s right to lay off personnel. What Davidsson finds (ibid.:217) that significant relations exist between manager-owner’s expected outcomes regarding the growth process and their willingness to steer the organization towards growth. Among the factors investigated,

expectations of financial reward and increased independence (the prospect of reducing external dependencies) are the most important motivators. However, economic incentives toward growth appear not to be at work for 40% of the sample. Fear of reduced employee well-being and loss of supervisory control appear to be the most important growth deterrents (ibid.:211).
Owner-managers tend to avoid growth if they expect the growth process would result in loss of control, independence, and autonomy; the threshold level in Davidsson’s dataset seems to be at the size of 5-9 employees. It appears that when a firm is small, growth is expected to increase owner-managers’ autonomy as external dependence on a small number of customers, suppliers, and lenders decreases (ibid.:223).

Wiklund, Davidsson and Delmar (2003) come to similar results as Davidsson (1989) when collecting data over a ten-year period, conducting telephone interview studies. Respondents were managing directors (total of 1470) leading Swedish small and medium size companies operating in manufacturing, service, and retail industries. Wiklund, Davidsson and Delmar find that noneconomic concerns - the well-being of the employees, which probably encompasses concerns for the work atmosphere of the small firm in general - are more important than the possibility of personal economic gain or loss (ibid.:266).

Gebauer and Sagebiel (2015) carried out a non-representative survey regarding growth ambitions, receiving answers from 700 small and medium size companies operating in Germany, Austria, or Switzerland. Nearly half the respondents stated that they do not want to grow any further or only to a certain company size; a quarter of SMEs have not formulated any explicit growth targets; only two percent said to rely on strong growth, while a quarter of firms deliberately limit the growth rates and focus on other goals such as continuity. If economic pressure to grow gets into conflict with other organizational goals and values, then the SMEs in the dataset attempt to avoid growth. Gebauer and Sagebiel identified five variables as statistically significant for characterizing organizations as ’growth-neutral’: these firms tend to be smaller, older, active in local to national and at most only slowly growing markets and have currently not taken out any outside capital. Growth seems to be an issue for corporations, as the presence of external management (and larger management in general) tend to increase growth ambitions, as well as outside capital. Export orientation already presupposes a certain size, the large SMEs in the sample are therefore primarily export oriented. Similarly to Davidsson’s (1989) findings, Gebauer and Sagebiel (2015) read from the data that many small and medium size firms fear that growth might put them in situations and dependencies that could bring them into conflict with their qualities and interests. Not wanting to grow is not only to be seen as risk avoidance, but also as a decision for one’s own entrepreneurial autonomy.

Tarillon (2020) applies a quantitative methodology to analyse 253 French, new technology-based firm leaders’ attitudes towards growth. The term new technology-based firms refers to the ’innovative entrepreneurial firms less than 25 years, which market products and/or services
with high technological content and have a high potential for growth’ (ibid.:120). These organizations are expected to have a strong growth potential, this is one reason why the French government supports them. Tarillon finds among the entrepreneurs strong heterogeneity in the motivation to grow:

it is entrepreneurs who are most focused on their personal incomes and the working environment offered to their employees who are most motivated to make their business grow. On the contrary, the least motivated entrepreneurs seem to be those who are more focused on survival of their business, maintaining quality and their own control over what is happening in the company (ibid.:130).

Anderson and Ullah (2014) raised the question: “why most firms remain small?”, and used a dataset of 2521 respondents who are small firm informants operating in the United Kingdom. They analysed firms that were well established, almost half (45.3 per cent) were ten years or older, with a further 20.5 per cent over six years old. Only 13.4 per cent could be described as new firms, therefore the dataset seems fit to examine why some firms don’t grow. Through their analysis Anderson and Ullah create the concept of ‘the condition of smallness’, a structural quality of ”lack of expertise, lack of time and lack of resources [...] These meanings clearly shape attitudes and actions, a reluctance to grow from a comfort zone of control and sustainability. This circularity forges the condition of smallness” (ibid:341). Respondents have expressed their concern that if they pursued growth, they would face various risks and complexity issues (for example the administrative requirements of employing people). According to the Anderson and Ullah, smallness is not a static state, but an operating condition that seems to deter owners/managers from growth, making smallness a ”sticky condition from which it is difficult to break free” (ibid:342).

Bakker, Loske, and Scherhorn (1999) examined 52 German small and medium size companies and 51 large firms on their strategies for company growth. A large majority of the companies examined stated they were forced to grow; in personal interviews, several managers explained that to secure the survival of the company, investments in delivery capacities and/or product line extensions were required. Also, companies frequently mentioned the need to exploit economies of scale. These statements – in the interpretation of Liesen, Dietsche and Gebauer (2015:9) point to the necessity of a certain size albeit not the necessity to grow continuously.
Fleck (2019) designed a qualitative study focusing on firms where women fulfil positions of control to learn whether and how gender, as a variable, influences growth orientation. Therefore, the sampling strategy was to include organizations which were (i) (part-)founded by a woman, (ii) at least 50% owned by one or more women, (iii) the management and daily business operations are controlled by one or more women and (iv) had been operating at least for three years to exclude start-up behaviours. Sampling was restricted geographically as only Irish firms were included; from the initial sample of 224 organizations, 34 information rich cases were included.

Interpreting the data, Fleck (ibid.:467) describes the characteristics of the female entrepreneur owning/controlling a high growth venture:

- has a high level of general business experience before starting a business;
- is within the period of her lifecycle where children are not the main priority, or she has no children;
- is motivated by money, achievement and she has proactively chosen to start the business (pull factor);
- has a high level of self-efficacy and propensity for risk;
- has the ability to delegate responsibility;
- has the ability to implement and follow a business plan which priorities business growth.

Fleck writes (ibid.:469) that her findings are in line with Morris et al.’s (2006) results that venture growth may be influenced by gender, however, many of the factors which were considered important in the past, i.e., choice of business sector, educational background and barriers to growth, appear to be less important than entrepreneurial factors such as motives, confidence, family life cycle and individual decisions regarding growth propensity. Indeed, growth appears to be a deliberate choice where the entrepreneurs ‘have a clear sense of the costs and benefits […] and that they make careful trade-off decisions’ (Morris et al., 2006:240 cited by Fleck, 2019).

4.4. Reasons not to grow

Neoclassical theories tend to assume that production processes have a U-shaped long-run average cost curve, where per-unit costs decline as the share of fixed costs per unit decreases with increasing output until a certain turning point. Until reaching this point, incentives are strong to exploit economies of scale through increase in output, as fixed costs per unit, and often
variable costs decline (Juschten and Leonhardt, 2015:31). But Williamson (1975:126-130 referred by Canback et al., 2006:6-7) identified four main categories of diseconomies of scale: (i) atmospheric consequences due to specialisation, (ii) bureaucratic insularity, (iii) incentive limits of the employment relation and (iii) communication distortion due to bounded rationality.

- Atmospheric consequences can arise due to increased specialisation. In such specialised, segmented firms, employees might often have a hard time understanding the purpose of corporate activities and develop a sense that their contribution to the whole is small; thus alienation is more likely to occur in large organizations.

- As firms increase in size senior managers are less accountable to the lower ranks of the organization and to shareholders, thus become insulated from reality, and if opportunity comes might maximise their personal benefits rather than overall corporate performance.

- Large firms tend to base incentives on tenure and positions rather than on merit, putting large firms at a disadvantage compared to smaller enterprises in which employees are often incentivised, given a react stake in the success of the firm through bonuses, share participation, and stock options.

- Due to cognitive limits, a single manager cannot control and understand a complex organization, therefore it is impossible to expand a firm without adding hierarchical layers. Information passing between layers inevitably becomes distorted. This reduces the decision makers’ ability to strategize and respond directly to the market.

In their study Canback et al. (2006) tested empirically the existence of diseconomies of scale on a sample of 784 manufacturing firms with headquarters in the United States and with sales exceeding 500 million US dollars (data derived from statistics of year 1998). They found that the four main categories of diseconomies of scale (Williams, 1975) do increase per-unit costs; thus, diseconomies of scale influence the growth and profitability of firms negatively.

Canback et al. (2006:6, 34) also found empirical evidence that these diseconomies of scale can be moderated through two factors: first, firms can lessen the negative impact of diseconomies of scale by organising activities appropriately and by adopting good governance practices; and second, by increasing asset specificity (meaning that some firms are best off reducing their scope of activities). I interpret Canback et al.’s (2006) findings that there are multiple ways that growth can hurt a firm and therefore it should not be accepted that growth necessarily leads to better outcomes.
I now turn to organizational management literature which focuses on organizations that are consciously halting material growth in order to avoid expected diseconomies of scale.

4.5. Successful nongrowing firms

Liesen, Dietsche and Gebauer (2015) in their document analysis relying exclusively on publicly available material conceptualise ‘Successful Non-Growing Companies’ (SNC) as one possible form of post-growth companies. They examined ten existing SNCs with regard to their motivations, key performance indicators and management strategies. They argue that these organizations have the potential to support the cultural shift needed on the micro level for the transformation towards post-growth on the macro level. The selected companies – coming from a range of industries and include producing and service companies, companies selling business-to-business as well as business-to-consumer – self-declare to be pursuing non-growth strategies and have been able to stay on the market for a relatively long time. Ownership structure also varies, as one company is a joint-stock company and another one owned by the 650 members of the cooperative. The sampled firms don’t put effort into maximising traditional management indicators such as sales, market share, profit or employee numbers, but want to remain roughly constant in size.

Liesen, Dietsche and Gebauer (2015) learned that companies might follow a non-growth strategy for multiple reasons. Additional hierarchy resulting from growth is expected to transform the organizational structure of the company to an undesired form and raise costs. Growth could affect the work-life balance and environmental and social goals negatively. In general, successful non-growing companies tend to be risk averse (ibid.:15-19). Regarding financial indicators the strategy seems to be ‘right-sizing profits’, that is aligning profit goals with non-financial purposes. Non-financial purposes, such as quality of products (durability, reparability) and quality of work and life are at least as important as financial results (ibid.:19-21). These firms tend to design their market-related strategies to approach/create niche (local/regional) markets, balance their sales in order not to be too dependent (and therefore vulnerable) on a few customers (ibid.:21-22). Profits are often generated not through expansion (sales), but through cutting costs and increasing efficiency. In many cases wages are capped, and/or wage differences are limited (ibid.:23).

Liesen, Dietsche and Gebauer conclude, that homogenous interest among owners or shareholders regarding the company’s goal is more important than the organizational form, or industry sector. Their findings are far from evident, as for example a CEO a service-company
in the sample is convinced that a non-growth strategy cannot be pursued by producing companies, yet there are producing companies in the sample that successfully do so (ibid.:25).

In their study Juschten and Leonhardt (2015) aimed to identify mechanisms that may lead to firm growth, and to learn how ‘growth-neutral’ firms counteract these growth-pushing mechanisms. They have selected twenty medium-sized (20-300 employees), Austrian, material good producing firms, which are financially and legally independent, that is not owned by foreign stock-market or other corporations prescribing the corporate strategy. All companies in the sample self-claimed that they pursue a growth-neutral organizational strategy.

Juschten and Leonhardt (2015:108) argue that an organization’s orientation towards growth is primarily a deliberate choice of the owner/manager from his or her point of view, therefore, the entire mind-set and worldview of the owner/manager plays a crucial role in shaping overall organizational structures and strategies. Non-growing firms are not necessarily similar - just because they take similar decisions, they still have different motives and decision criteria (ethics), and experience different mechanisms to be important (ibid.:79). The most important reasons named to avoid or be agnostic about growth were the importance of control and freedom for the owner-managers of the non-growing firms; growth being perceived as a risk for firm stability, control, and personal freedom (ibid.:106). Employee wellbeing, general work environment and innovativeness proved to be also important factors as reasons for growth-neutral strategies, the analysed firms are successfully innovating without growth (ibid.:104). Only one representative in the sample stated that the firm – subject to fierce competition in a quickly changing market - had to grow in order to survive. Globalisation induced price competition pushes this firm to invest in ever-increasing technology and capacities, all the other nineteen firm representatives insisted on the choice element of their growth decision when asked about it directly (ibid.:107).

Through semi-structured interviews Souza and Seifert (2018) examined six small (0-24 employees), well established (operating for at least 30 years) businesses in the commerce and service sectors, in the city of Curitiba, Paraná, Brazil. They found that businesses choose not to grow to avoid loss of control perceived by owner-managers. Owners understand success beyond financial terms, such as ”being happy at work, doing what one likes, not having financial debts, and working in a good environment” (ibid.:341). While Souza and Seifert stress that it could be different in other sectors, nevertheless, the owners interviewed told that in their perception business growth is not necessary for survival (ibid.:342).
In his book on “Small Giants” Burlingham (2005) examined fourteen privately owned American companies representing a wide range of industries, varying in size (2-1900 employees). Burlingham’s findings can be structured into three qualities which he finds generalizable for successful ’Small Giants’: (i) owners/managers applied company-specific success indicators avoiding the maximization of indices (such as sales, profits, market share, and EBITDA) often demanded by creditors/investors; (ii) avoiding reliance on external financing to keep control over strategic decisions; pursuing business operation embedded into the local community, having close and long-term relationships with suppliers and customers; (iii) creating and nurturing an atmosphere and fitting organizational structure where employees and other stakeholders are engaged towards company goals (ibid.:26-7). Also, Burlingham concludes that managers/owners in the sample had and took a choice to steer their organization toward qualitative development, instead of material growth.

Deimling (2016) designed a qualitative, interview-based research targeting six growth neutral, German and Swiss enterprises aiming to learn common patterns in their operation and other characteristics. The six companies examined operate in four different legal forms, but none is listed as a joint-stock corporation. Deimling identified three strategies which were common regarding the examined firms’ strategies: (i) conscious limitation of company size, (ii) creation of durable, functional, repairable consumer goods, and (iii) the development of alternative systems of use, property-less services and business models that promote sufficiency (ibid.:149).

Also, the selected firms had leaders/founders with well communicated normative value-goals and visions regarding the role of the firm (ibid., chapter 6.2.2.). These goals were other than financial/material, but rather focusing on social problems and contributing to the common good while considering socioecological consequences (ibid., chapter 6.2.3.). Multiple companies in the sample invested heavily – even by taking profit losses - in designing the infrastructure which enables their operation in accordance with the set values (ibid., chapter 6.2.5.). These firms would turn down orders if they perceived that meeting these customer demands would cause too much social/ecological damage (ibid., chapter 6.2.6.). Self-sufficiency appears as an organizing principle (i) regarding material-energy consumption and (ii) the effort to avoid dependency on outside capital (ibid., chapter 6.2.7.). Also, business is perceived as the realm of cooperation rather than competition (ibid., chapter 6.2.8.).

Nesterova (2019) analysed six micro and small enterprises’ (1-8 employees) - operating in the United Kingdom in various industries - transformative potential to a degrowth society. She collects the characteristics of these ventures which are in line with the requirements set by the
degrowth literature. The examined enterprises display frugality through their operations, for example by repurposing materials or avoiding waste in production altogether. They are embedded in their localities – embeddedness can be manifested via cooperation with local stakeholders and avoiding competitive attitudes by sharing knowledge or other resources; due to open-source software use cooperation is not restricted to geographical locality (ibid.:157); and also, the principle of localization prevails in procurement and employment decisions (ibid.:159). Profits are seen as means subordinated to environmental and ethical goals. Being employee wellbeing-oriented can be detected from the careful consideration of dignity and mental health of employees. None of the organizations strived for productivity increase, methods in line with environmental considerations are prioritized (ibid.:158). Other-regarding values considering a wide range of stakeholders – regarding humans and non-humans – are present (ibid.:160).
5. Community-based organizations: prioritising socioecological concerns

The aim of the dissertation is to explore theoretically and empirically how, in the context of the Anthropocene, community-based organizations arrange collective actions prioritising socioecological concerns. Therefore, an important question arises:

how to change a system which incentivizes and rewards extraction — but cannot recognize and reward the wealth created by generative activities — towards a system which is able to reward and incentivize generative practices (Bauwens and Pazaitis, 2019:8).

The focus of the dissertation is on the organizational level, therefore the question can be reformulated (via Banerjee, 2020) in the following way:

what ethical theories of the [organization] are needed that can explain and justify an organizations existence based on its ability to societal wellbeing and ecological restoration rather than based on its ability to contribute to economic growth (ibid.:15-6).

In order to approach and problematize the above question, an appropriate theoretical and conceptual framework is needed. This chapter puts the relevant theories and concepts on table in the appropriate shape and form to help the analysis.

Most importantly I will rely on the work of Polanyi (1957; 1977) to describe the proper place of the economy within society. Also, I will use the analytical framework of Gibson-Graham and their fellow activists and colleagues (2006; Gibson-Graham and Dombroski, 2020) on Community Economies as a lens to look at the economy as a site of ethical action. The concept of the commons is gains importance as a set of organizing principles for collective actions aimed to provide livelihood for people. Finally, the I will adopt strategies intended to generate positive socioecological change through collective actions. I propose that these and related theoretical and conceptual tools can enable us to explore theoretically and empirically how community-based organizations are coordinating stakeholders to achieve positive socioecological change.
5.1. Growth and power

Efforts are continuously being made in various ways to adjust or reshape economic principles to improve sustainable lifestyles. These efforts vary according to the local circumstances and the specific problems they address. Despite coming from different intellectual traditions, operating through different epistemic and political practices, such movements often share closely connected imaginaries, goals and predicaments, chiefly, a radical questioning of the core assumption of growth and economism, a vision of alternative worlds based on ecological integrity and social justice, and the ever present risk of cooptation. Important tensions remain, for instance, around the critique of modernity and the scope for dematerialization. […] [Such movements] take as their point of departure the notion that the contemporary ecological and social crises are inseparable from the model of social life that has become dominant over the past few centuries. There are many ways to refer to this model: industrialism, capitalism, modernity, (neo)liberalism, anthropocentrism, rationalism, patriarchalism, secularism, or even Judeo-Christian civilization. Whatever concept is emphasized, [these] envision a radical transformation (Escobar, 2015:1, 2).

Whitaker (2009) historicizes the dynamics of the double movements generated between state-based elites and peasants/citizens, a pattern recognized to be reoccurring in the past 2500 years in China, Japan and Europe as well. State-based elites utilize economic, material, and ideological relations in a territory over time to consolidate power leading toward mounting externalities effecting in the other groups’ desires to escape. Such durable features of a degradation political economy have been present since early state formation and urbanization. It shows that instead of being a “natural” product of the human species, environmental degradation is the outcome of certain type of organizational dynamics of expansion and penetration of unrepresentative state elite politics that deny locally-enfranchised ways of livelihoods. Such processes target to delegitimate once deeply-held identities rooted in the local socioecological contexts and to disembed populations from the local web of life by altering/violating ways of everyday livelihood practices. The peasants/citizens groups often respond through developing movements combining health movements, peasant/citizen ecological (or local jurisdictional) protection movements, and local economic institutional movements toward peasant/citizen autonomy, rolled into one. These peasants/citizens
mobilizations can be termed, according to Whitaker (2009), religious or ecological revolutions countering the degradative pressures of elite politics. These "ecological revolutions," often framed within religious contexts, criticized the environmental harm and dominance structures. They advocated for human-centric values, including pacifism, local collective property control against state elites, simplicity in lifestyle, environmental stewardship, and comprehensive health care. Within these movements, economic matters intertwined with ecological issues, emphasizing local economic autonomy and sustainability over dependence on state elite systems.

Whitaker (2009) built his narrative – that ecological countermovements are endemic to a degradation based political economy - on historical records, while Motesharrei, Rivas and Kalnay (2014) designed a mathematical model to simulate the double movement dynamics of wealth distribution and resource use among ‘Elites’ and ‘Commoners’. The model shows that either one of the two features apparent in historical societal collapses – over-exploitation of natural resources and strong economic stratification – can independently result in a complete collapse. The model demonstrates that all class-based peer polities, which are locked in a competition with each other, routinely end up over-using their resource base (Bauwens, Ramos and Kranjc, 2021). Motesharrei, Rivas, and Kalnay (2014) assert that, with economic stratification, averting collapse necessitates significant policy shifts, including substantial reductions in inequality and population growth. Without stratification, high per capita depletion can still lead to collapse. Yet, if resources are equitably distributed and nature's depletion rate is sustainable, collapse can be prevented and an equilibrium achieved.

A major result of the newly arising religious frameworks, argues Whitaker (2009) was a denial of the legitimacy of the dominant group, its state religion or state ideology (attempting to normalize, legitimize the degradative political-economic system), and its state institutions’ extractions and impositions in their lives. In this sense they should be considered anti-systemic counter-movements against externalities increasing health, ecological and economic (in short, livelihood) difficulties.

Such deeply penetrating and overarching normalizing-legitimizing effect is exerted by the ideology of ‘growthism’. In the words of Daly (2019) growthism is the problem-formulation and solution process, a system of thought which claims universal relevance and applicability to socioecological problems:
We have many problems – poverty, unemployment, environmental destruction, climate change, financial instability, etc. – but only one solution for everything, namely economic growth. We believe that growth is the costless, win-win solution to all problems, or at least the necessary precondition for any solution. This is growthism. It now creates more problems than it solves’ (ibid.:9).

Similarly argues Gerber (2020), stating that growthism is sustained and legitimized-normalized politically because it allows avoiding issues of fairness and justice, for example concerning redistribution by constructing the narrative that everyone continually benefits from growth-oriented social organizing:

Growthism pacifies class struggle while justifying existing structures of inequality […] In the West, growth was instrumental to diffuse demands of the workers’ movement, in the East, to excuse the lack of democracy and worker control, and in the South, to justify dispossession and extractivism. Today, GDP growth remains the key stabilising mechanism of capitalist economies (ibid.:237 cited by Morgan, 2020).

Noorgard (2019), referring to Knight (1932), writes that economistic arguments are beliefs, religious in their nature and very much required to keep “the economy” running. Knight (1932) - in echo with Whitaker’s (2009) recognition that the dynamics of double movements often contain (de)-legitimizing struggles over the religious-spiritual dimensions of growthism - argued that economics must be included among the beliefs in people’s collective imagination:

The point is that the ‘principles’ by which a society or a group lives in tolerable harmony are essentially religious. The essential nature of a religious principle is that not merely is it immoral to oppose it, but to ask what it is, is morally identical with denial and attack. There must be ultimates, and they must be religious, in economics as anywhere else, if one has anything to say touching conduct or social policy in a practical way. Man is a believing animal and to few, if any, is it given to criticize the foundations of belief “intelligently”. To inquire into the ultimates behind accepted group values is obscene and sacrilegious: objective inquiry is an attempt to uncover the
nakedness of man, his soul as well as his body, his deeds, his culture, and his very gods (Knight, 1932:448–9 cited by Noorgard, 2019).

Accordingly, argues Noorgard (2019) ‘economism’ (his term for growthism) consists of the shared beliefs that support the market order and capitalist growth upon which most of humanity is currently dependent. Economism, or growthism resembles belief systems completely, in that it has an explanation of cosmos, one’s place in it and how to behave (“efficiently”, “rationally”, “making best of one’s means”). Shared economic beliefs are (ibid.:115):

a) explaining and rationalizing one’s place in the economic system (for example wages reflect the value done by the worker);

b) rationalizing the dominant way in which people interact with each other as a process of free choice;

c) rationalizing how “greed is good” in opposition to earlier religious/secularly-based moral teachings with respect to care for others;

d) dividing nature into property that can be owned and traded;

e) rationalizing growth of GDP as progress;

f) explaining the nature, including the emergence, of the economic system;

g) rationalizing transcendence through consumption, the meaning of life is to consume more and more, the mandate of nations is to grow.

Similarly, Zsolnai (2021) argues that the metaphysics of mainstream business necessarily lead to the violation of natural and human beings as it rests on the assumptions:

(i) “to be” is to be a marketable resource; (ii) “to be” involves being either an object available for productive activity on the market, or else a subject who makes use of such objects; and, (iii) the only mode of thinking is calculative thinking; the consideration and measurement of every being as a marketable resource (ibid.:133).

One important form in which growthism manifests is what Patel and Moore (2017) describe as a system of cheapness generation through frontier-making. They distinguish seven ‘cheaps’ in their narrative, namely cheap nature, food, care, money, energy, work and lives. They write the history of capitalism as a historical-ecological process, a specific way that humans and rest of nature are organized. In their framework cheapness generation are strategies, practices to mobilize new inputs of nature and labour through ever new frontiers:
it’s a set of strategies to manage relations between capitalism and the web of life by temporarily fixing capitalism's crises. Cheap is not the same as low cost - though that's part of it. Cheap is a strategy, a practice, a violence that mobilizes all kinds of work-human and animal, botanical and geological - with as little compensation as possible. We use cheap to talk about the process through which capitalism transmutes these undenominated relationships of life making into circuits of production and consumption, in which these relations come to have as low a price as possible. Cheapening marks the transition from uncounted relations of life making to the lowest possible dollar value. It's always a short-term strategy. And cheapness has always been a battleground (ibid., no page number, italics in original).

Frontier-making polities as states and corporations (possibly) use violence, culture, law and knowledge to generate cheapness at low cost, but as Patel and Moore (2017, no page number) phrase it, ‘keeping things cheap is expensive.’ It is a strategy described by Dunlap and Jakobsen (2020) as ‘Total Extractivism.’ Extractivism has ten defining features as Ye, van der Ploeg, Schneider Shanin, (2019:156-7) write:

by mobilizing (1) the close intertwinements between state and private capital groups gain access to or create (2) infrastructural elements (harbours, electricity, docile labour force, etc.) to secure (3) monopoly over resources (thus generating scarcity). An operational centre is usually in place that (4) manages the chain directing resources away from the local, and (5) appropriates the surplus generated, while (6) triggering, raising inequalities. In particular cases (7) part of the surplus is directed toward development-oriented investments deepening the extractivist cycle. Through the extractivist process not enough, if any, resources are directed towards socioecological reproduction, which on one side (8) generates profits, while on the other results (10) in the destruction of landscapes and biodiversity, widespread pollution, the depletion of important resources, unemployment, a degrading quality of work, displacement of indigenous peoples and ‘wasted lives’ (Bauman, 2004).

Moore (2017:600) writes that cheapening is twofold: one regards price, to reduce costs of capital. The other form is ethico-political, to cheapen in a sense of deeming unworthy of dignity
and respect; violating the integrity and diversity of natural ecosystems, the autonomy and culture of local communities and the chance that future generations will lead a decent life (Zsolnai, 2021:133). These practices of cheapening work together rendering care, work of many and the life sustaining qualities of animals, soils, forests invisible, or nearly so, as reproductive-regenerative activities are kept ‘off the books’ (Moore, 2017).

Subsidies are one method used to socialize costs: Coady, Parry, Le, and Shang (2019:2) estimate that in the 191 countries examined, fossil fuel subsidies - defined as fuel consumption times the gap between existing and efficient prices (i.e., prices warranted by supply costs, environmental costs, and revenue considerations) - were at 4.7 trillion USD (6.3 percent of global GDP) in 2015. Similarly, from the 700 billion USD directed towards farmers only 1 percent is used to benefit the environment (Growing Better Report, 2019), while much of the total promotes high-emission cattle production, forest destruction and pollution from the overuse of fertilizer. The Growing Better Report (2019) rejects the idea that subsidies are needed to supply cheap food; it found that the cost of the damage currently caused by agriculture is greater than the value of the food produced (Carrington, 2019).

Cheapness generating rent appropriating processes are embedded in unequal power relations, as an example from a contemporary context is illustrated by Fuchs et al. (2016). They focus on Denmark, a small country yet one of the world’s largest producers of pig meat, but the findings are pointing to more general conditions of a cheapness generating system. Specifically, Fuchs and colleagues (2016) examine how power is exercised at different stages of the supply chain, in order to keep meat prices low and thus maintain and expand meat consumption, as well as how the forms of power applied make the system resistant to political, societal and economic challenges – for example turning away meat production’s organizing principle from material economic growth towards aiming the absolute reduction of the material footprint, or focusing on minimizing the unnecessary suffering of the beings involved. They (ibid.:302-4) describe the process consisting of five steps:

1. The first step considers access, directly or indirectly, to cheap land, mainly for the production of feed. Actually, they argue, the first step could consider seed production and ownership and related environmental and labour laws/standards affecting costs.
2. The second step in the realm of processing the meat. Agricultural production has increased the capital-intensity of farming; today the global meat industry is highly consolidated and concentrates market power in the hands of few companies that gain
power to dictate the terms of trade. This way, through economies of scale low per unit production costs are achieved while social and environmental costs are externalized.

3. The third step regards the structural organization of slaughterhouses where a tendency to replace labour with machines and cheap energy is in place.

4. The fourth step takes place in retailing. In the advanced markets a small number of retail chains jointly control large market shares allowing them to exercise power in relation to producers and processors, opening the way to push prices downward.

5. The final stage in the industrialized meat supply chain considers consumption where power is exercised to keep meat eating’s status an essential part of the desired diet. In the first four steps the consumer is hardly present, the power applied in the previous steps is usually opaque, concealed to the consumer; what the consumer registers is cheap and abundant meat.

Fuchs et al. (2016:306) conclude that power is an essential factor in understanding what drives overconsumption and creates barriers against attempts to make it sustainable, and in identifying where potentially effective intervention points may exist; any analysis failing to consider power runs the risk of camouflaging power by implicitly employing “natural laws,” of making predictions that presume a dominant influence of technical rationality or enlightened individuals.

Brand and Wissen (2013) introduce imperial mode of living (IML), a concept capturing the relationship between “North” and “South” and the processes of (de)politicization (neglecting power issues and not challenging growthism) in the context of the deepening socioecological crisis, as it focuses on the interplay between the lived social practices of the micro level subjects and macro level of social structures. The mode of living of the global North is ‘imperial’ inasmuch as it is based on a principally unlimited appropriation to resources, space, territories, labour capacity and sinks elsewhere – secured politically, legally and/or by means of violence. The development of productivity and prosperity in the metropoles is based on a world resource system very favourable to the global North. The immense growth during the period of Fordism was dependent on the vast consumption of natural resources – particularly coal and, increasingly, oil – and of global pollutant sinks. The key factor was a permanent relative overabundance of cheap natural resources in the global
raw materials and agricultural markets. The military and political dominance of the United States ensured the relative stabilization of global political conditions, which was reflected by the secure access to cheap resources (such as oil) (ibid., no page number).

IML is not restricted to the global North-South coordinates, it is also relevant for the center-periphery or urban-countryside binaries which consider the asymmetric flow of resources due to asymmetric power relations. ‘Imperial,’ in Brand and Wissen’s (2018) [4] approach, captures a set of possible power-relationship arrangements, identities, orientations and everyday practices that are shaped by the disproportionate reliance of cheapness (in a sense used by Patel and Moore, 2017). Cheapness is generated “elsewhere,” and the availability, circulation of commodities is organized through global supply-chains, backed by different forms of violence, such as through military force or other asymmetric-power-based institutional arrangements. The violent nature of the goods that are put into circulation are more often than not invisible to the consumers.

The concept of IML shows that social domination is closely linked to the domination of nature; IML also shows that those having a “good living” (access to goods and services made “cheap”) are able to do it at the cost of others (humans and non-humans alike). In the system(s) operating the conditions for IML strong path dependencies and lock-in forces are in place: people in the North (or center) are not necessarily consciously welcome the subordination and exploitation of humans and non-humans living in the global South (or peripheries), but a vast majority has to sell her or his labour power in the market to secure their livelihood (market society in the Polanyian sense), therefore become involved in a way to reproducing the conditions for IML. This involvement, at the same time, might enable actors to benefit from the asymmetrical relationship. As Brand and Wissen (2018) puts it,

through cheap raw materials and pre-products from Southern countries that are transformed or refined in Northern factories, through communication and transport infrastructure that facilitates production and mobility in the global North which would not be possible without the resources of the global South and the cheap labour which extracts them and through commodities such as food and clothes whose low prices facilitate satisfaction of basic needs in the global North through overexploitation of nature and workers in the global South. In that sense, the imperial mode of living is for many individuals – and
also for collective actors – a potential enhancement of their reach of action and, at the same time, poses restrictions for alternative actions (ibid., no page number).

A crucial factor for the system(s) providing IML is their legitimization-normalization efforts, through which ‘technocratic, market appropriate and technology-based solution strategies ranging from emissions trading through the production of more energy-efficient automobiles all the way to geo-engineering (ibid., no page number)’ are presented as rational solutions to socioecological problems, therefore crowding-out alternative approaches, suggestions as unimaginable, possibly stigmatizing by calling them “inefficient” and/or “non-Pareto optimal.” Again, such efforts are de-politicizing related normative issues, for example issues concerning justice and dignity, keeping the discourse in the realm of technological solutions.

Much of the critical discussion concerning issues related to IML and socioecological justice centers around capitalism, aggregating into a phenomena called by Gibson-Graham (1996) ‘capitolocentrism.’ According to Gibson-Graham (1996) the critical discourses tend to position themselves in comparison to capitalism, and therefore keep capitalism as the main gravitational force that has to be overcome in order to achieve desired non-violent economic regimes. But what is of crucial importance for the context of community-based organizing, and therefore for this dissertation, is Mészáros’s (1995) theory of transition.

Mészáros (1995) distinguishes capital from capitalism. He argues that the reason why neither any of the three major forms of twentieth century development models – (i) monopolistic private capital accumulation and expansion, (iii) ‘Third World modernization’, and (iii) Soviet type ‘planned economy’ – achieved a sustainable socioecological regime is because neither of them could transform the ‘capital system.’ For Mészáros (1995) capital is above else a mode of control creating a controller/controlled relationship; the essence is the division of labour and hierarchical command structure (absentee ownership/influence included). This relationship makes possible to divert social cooperation from ‘use-value’ creation, that is production for genuine human needs, towards self-expansion and accumulation. This is a feature of the system Whitaker (2009) called degradative political economy, that is social organizational principles disembedded from the local socioecological structure. Such system was not always considered as natural or default, but had to be constructed:
According to the ideological confrontations of medieval times, capital was fateful for implicated in ‘mortal sin’ in more ways than one, and therefore had to be outlawed as “heretic” by the highest religious authorities: the Papacy and its Synods. It could not become the dominant force of the social metabolic process before sweeping out of the way the absolute - and religiously sanctified - prohibition on ‘usury’ (contested under the category of “profit upon alienation”, which really meant: retaining control over the monetary/financial capital of the age, in the interest of the accumulation process, and at the same time securing profit by lending money) and winning the battle over the “alienability of land” (again, the subject of absolute and religiously sanctified prohibition under the feudal system) without which the emergence of capitalist agriculture - a vital condition for the triumph of the capital system in general - would have been quite inconceivable (Mészáros, 1995, no page number).

Mészáros (1995) argues that the capital systems (their various forms) are what have to be transformed/surpassed in order to design and maintain socioecologically sustainable social metabolic systems. This means it is not sufficient to solely deal with ownership problems present in capitalism affecting who appropriates the surplus, but the fundamental process of how and what kind of surplus is generated and the way of distribution has to be transformed; in short, growthism is what has to be surpassed.

5.2. Conceptualising community-based organizations: prioritising socioecological concerns

This section outlines the a theoretical and conceptual framework of the research, focusing on CBOs and their context. A conceptual framework should be regarded as both the result and focus of a literature review (Van Der Waldt, 2020). It supports and informs the proceeding choices of the research, such as the formulation of the research questions, and methodological decisions regarding research design, sampling, data collection and interpretation (detailed in Chapter 6.).
CBOs gain importance due to their potential to host and nurture other-then-growthism goals and value systems, and to serve as spaces and vehicles for collective actions prioritising socioecological concerns.

In the context of this research, communities are perceived to possess shared interests as a vital component of their identity (Crowther and Cooper 2002). Such identities can be rooted in territorial foundations or be based on relational ties (Gusfield 1978). Peers in CBOs are self-organising around “substantive” (Polanyi, 1977), that is socioecological concerns and aims. This formulation of the concept of CBOs aligns closely with notions of community-driven initiatives and grassroots innovations (Middlemiss and Parrish, 2010). Within these structures, members pool their capabilities and assets to collaboratively establish and execute actions that deliver benefits to their community. Notably, the community members dictate the objectives, resources, and execution of their endeavors (Edelenbos et al., 2021).

CBOs, face constrains due to their limited power and resources, making capacity-building a pivotal concern (Middlemiss and Parrish 2010). Their success is intrinsically tied to their capability to attract and retain members or volunteers, a task rendered challenging in an age where individualism prevails and shapes the contours of everyday social interactions (Hoffman and High-Pippert 2010). As CBOs evolve, they might arrive to critical transitions, shifting from a community based on relatively close personal relationships to less personal organizational forms (Ornetzelder and Rohracher 2013). Such processes bear the risks of overburdening members and straining community ties (Galt et al. 2016). Furthermore, these CBOs are acts of place-making (Murphy et al. 2019). Their interactions and contributions are essentially localized cooperation and disputes, pivoting on transformations in material conditions, demographics, and place-related imaginaries. This localization can foster a milieu ripe for conflicts and challenges, potentially allowing space for opportunism, fragmentation, diversity and flexibility, confounding simple ‘good versus bad’ storylines (Hakansson 2018).

Working through the above-mentioned challenges, limitations, and success factors, CBOs are capable to induce positive socioecological outcomes. Landholm et al. (2019) examined 38 initiatives across six EU nations, encompassing renewable energy, organic food cooperatives, and behavioral change promoters. Their findings indicate that renewable energy, personal transport alterations, and dietary shifts could mitigate GHG emissions by 24%, 11%, and 7% respectively. Kropp et al. (2016) suggest that community initiatives could reduce GHG emissions by 20% in most EU nations. They emphasize that beyond carbon reduction, these
organizations foster awareness, social unity, local economic support, and empowerment, implying change can be achieved collectively. Celata and Sanna (2019) studied 37 community initiatives in various domains. Their results indicate that increased action diversity and broader community networks can enhance socioeconomic outcomes.

Daly (2017) analyzed the ecological footprints of 23 ecovillages and co-housing initiatives. Most of them had an average ecological footprint significantly lower than comparable mainstream settlements in the same areas (Penha-Lopes and Henfrey 2019). An in-depth study at Ireland's Cloughjordan Ecovillage using participatory methods revealed their ecological footprint was significantly lower than other Irish villages (Penha-Lopes and Henfrey 2019). Hidayat and Stoecker (2018) showcased a Monona-based organization's influence on sustainability behaviors in Wisconsin, USA. Members of this organization displayed higher engagement in sustainability practices and events compared to non-members. Lastly, Petrescu et al. (2020) assessed R-Urban's (a commoning educational hub in Paris, France, a bottom-up strategy based on networks of urban commons and collective hubs supporting civic resilience practices) Community Economy Return on Investment. Their analysis revealed vast social and ecological advantages, underscoring the significant value of unpaid and shared community activities, which surpass revenue-driven activities by a notable margin.

Regarding the factors predicting successful workings of CBOs, a study based on an online survey collecting data from the various nodes of the Transition Movement (23 countries, N = 276) shows that success is defined by CBOs in terms of social connectivity (the ability to attract and retain sufficient active volunteers and members), empowerment (to realize concrete practical outcomes in the community, and ability to generate a positive and ambitious outlook), and environmental impact (to reduce/avoid doing harm) (Feola and Nunes 2014). Relying on 17 cases from nine different countries, Edelenbos et al. (2021) argue that those community-based initiatives perform well that are based in a heterogenic community, have strong organizational capacity, strong charismatic leaders, and a sound democratic structure supported by a government with conductive governmental frameworks.

Carried out on a large sample (N=871) in the Netherlands, Igalla et al. (2020) recognize three leadership-related factors which can potentially enhance the performance of community-based organizing, which are (1) transformational leadership, (2) leadership that can mobilize bridging (communal) ties increasing organizational capacity in terms of human resources, and (3) leadership that can link communities with institutional partners, helping in gaining support of government. In their review study Igalla et al. (2019) map the factors influencing the outcomes
of citizen initiatives and find that the three most mentioned ones are: to have a diverse network; to possess organizational capacity referring to matters of the internal infrastructure and financial health of citizen initiatives; and the support of the government.

5.2.1. The concept of socioecological concern

The concept of socioecological concern is derived from the work of Stephan et al. (2016:1252) on positive social change (PSC). PSC is a process of transforming patterns of thought, behaviour, social relationships, institutions, and social structure to generate beneficial outcomes for individuals, communities, organizations, society, and/or the environment beyond the benefits for the instigators of such transformations. Stephan et al.’s (2016) concept sidesteps the market/state dichotomy and opens up space for problem-centric inquiries, as the perspective of PSC allows to assess

(1) PSC across organizational and legal forms, which includes organizational activities and PSC initiated by nonprofit as well as for-profit organizations;
(2) multiple and different PSC projects initiated by one organization; and (3) PSC projects initiated by alliances of several organizations (ibid.:1252).

The need for a problem-centric approach in organizational management literature – according to Mair and Rathert (2019) - comes from the constrains of analysis which do not move beyond the singular focus on and clear separation of organizational, field and societal levels. Stephan et al.’s (2016:1268) diagnosis regarding current macromanagement research is that it is largely dominated by theories that conceive of organizations as “closed” and guarded, top-down controlled places of rational transactions and competition that are focused on shareholders but disconnected from local communities and most stakeholders. Conversely analytical tools are needed to recognize and conceptualize organizations capable to be

“open” to stakeholder influences, “embedded” in communities, “relational” in that they create social connections, “purposeful” as they are infused with meaning, as well as “strengths based,” that is, leveraging existing or building new strengths and capabilities (in targets and within the organization) (ibid.:1268).

Therefore, inspired by the concept of PSC, but embedding it into the context of the Anthropocene, I have modified PSC to socioecological concern. The socioecological approach
is inspired by the work of Naess (1987) and his work on self-realization, rationalization of self-interest.

Naess (1987) through the concept of Deep Ecology argues, that in order to avoid destruction the re-conceptualization of self-realization is needed, namely to direct it towards non-material means and ends. He claims "we find that the destruction of Nature (and our place) threatens us in our innermost self. If so, we are more convincingly defending our vital interests, not merely something “out there.“ We are engaged in self-defense” (ibid:522). The concept of PSC was including environmental issues (Stephan et al., 2016:1252), but by making the ecological dimension explicit (marked in the name of the term) it is more suited for the purposes of current study.

5.2.2. Two meanings of the term ‘economic’

Polanyi (1977) suggests that material livelihood of human societies should be completely reconsidered. He approaches this task, clarifying the place of the economy in society, by distinguishing two meanings – the formal and the substantive - of the term “economic” (Zsolnai, 2018). The two approaches are holding different perspectives and having nothing in common. The formal meaning

springs from the logical character of the means-ends relationship, as in economizing or economical; from this meaning springs the scarcity definition of economic. The second, the substantive meaning, points to the elemental fact that human beings, like all other living things, cannot exist for any length of time without a physical environment that sustains them; this is the origin of the substantive definition economic (Polanyi, 1977:19, italics in original).

The formal meaning has logical-mathematical origins, making the utilitarian rationality in scarcity situations the essential feature of economizing:

an actor – single man, a family, a whole society – is seen facing a natural environment that is slow to yield its life-giving elements. Economic action – or, more precisely, economizing action, the essence of rationality – is, then, regarded as a manner of disposing of time and energy so that a maximum of goals are achieved out of this man-nature relationship (Polanyi, 1957:239-40).
Economical or economizing refers to choice between the alternative uses of insufficient means; this way formal economics claims historically universal applicability by suggesting that virtually any social dilemma can be approached through the economistic postulate (Polanyi, 1957). According to Polanyi (1977:20) this is the ‘economistic fallacy’, a tendency to equate the human economy with its market form.

In contrast, the substantive view considers the economy as the processes of interactions between humans and the surroundings for their livelihood. According to Polanyi (1977), to study human livelihood is to study the economy in the substantive sense of the term. The substantive meaning does not imply neither choice nor insufficiency, the problem formulation does not revolve around situations perceived and/or formulated as scarcity-centred decisions. Zsolnai (2018:15) argues that the substantive view of the economy has huge implications for social organizing, as it follows that ‘cost-benefit calculations should not be used to decide the rightness of human activities—only by using substantive criteria (namely, sustainability, and pro-socialness) can one apply the right tools to decide whether a human activity is “right”.

5.2.3. Embeddedness

Polanyi (1957:250) argues that the economy is embedded and enmeshed in institutions, economic and noneconomic. The inclusion of the noneconomic is vital. For religion or government may be as important for the structure and functioning of the economy as monetary institutions or the availability of tools and machines themselves that lighten the toil of labour. The study of the shifting place occupied by the economy in society is therefore no other than the study of the manner in which the economic process is instituted in different times and places.

But the emergence and institutionalization of the market economy comes with the expansion of the logic and ethics of formal economizing being applied to constantly new domains of social and ecological life; in parallel crowding-out and incorporating/co-opting noneconomic dimensions. This requires the process of ”fictitious commodification” (Polanyi, 1944: 72) of essential elements, entities as land, labour and money into tradable goods for markets. Since the logic and ethics of formal economizing rewards, incentivizes and instructs actors to shift costs onto others this process ”forced the development of the market system into a definite groove and finally disrupted the social organization based upon it” (ibid.:4).
But the process of marketization, commodification is often resisted by counter-movements; and – in Stiglitz’s (2001:xxv-xxvii) reading of Polanyi (1944) - also cannot be totally complete, since the market in order to operate needs society and ecological systems to reproduce, to regenerate which task is left mainly to non-market actors (for example the state, unpaid care, ecological sinks, etc).

Contrary to the perspective of formal economizing, argues Granovetter (1985), that even market activities are embedded in structures of social relations. In his analysis of the extent to which in modern industrial societies economic action is embedded in noneconomic structures, Granovetter (1985) criticizes Williamson’s (1975) neglect of social structure. In Williamson’s (1975) neoclassical, new institutional economist viewpoint social institutions and arrangements previously thought to be the adventitious result of legal, historical, social, or political forces are better viewed as the efficient solution to certain economic problems – where actors follow the rules dictated by scarcity situations. But Granovetter (1985) argues, that

[a]ctors do not behave or decide as atoms outside a social context, nor do they adhere slavishly to a script written for them by the particular intersection of social categories that they happen to occupy. Their attempts at purposive action are instead embedded in concrete, ongoing systems of social relations (ibid.:487).

Granovetter (1985) concludes, that “nonrational” behaviour may be quite sensible when local, actor-specific-situational constraints, especially those of embeddedness, are fully appreciated.

Similarly, Jack and Anderson (2002) argue that in order to understand entrepreneurship, one needs to move away from considering the entrepreneur in isolation and look at the entrepreneurial process; entrepreneurship is not merely an economic process but draws from the social context which shapes and forms entrepreneurial outcomes.

Marquis and Battilana (2009) articulate how and why place-bound features of local communities such as market structures, types of public policies, relational systems and networks, history, tradition, and even physical geographic factors - despite the powerful effects of globalization - maintain a significant influence on organizations. For example, they reference Lounsbury (2007) showing how the strategies of mutual funds differed depending on the perceived legitimate model of investing in two cities. Mutual funds in Boston focused on conservative, long-term investing, while New York funds pushed aggressive growth money management strategies. So, despite the process of commodification and globalization the social
lives and contexts of individuals and organizations are frequently still rooted in one primary locality while being exposed to global trends.

But mainstream approaches of entrepreneurship and entrepreneurial opportunities are typically built on the assumption of the rent-seeking or profit-maximizing entrepreneur. The formal logic of economizing can be seen for example in Shane and Venkataraman’s (2000) conceptual framework of entrepreneurship and Alvarez and Barney’s (2004) theory of the entrepreneurial firm. Shane and Venkataraman (2000) define entrepreneurial opportunities as ones that can potentially be exploited for profits; situations in which new goods, services, raw materials, and organizing methods - the discovery or optimization of new means-ends relationships - can be introduced and sold at greater price than their cost of production.

Alvarez and Barney (2004) describe the entrepreneurial process as one organizing for rent generation and appropriation, the exploitation of arbitrage situations; accordingly, entrepreneurial firms exist in order to generate and appropriate the economic rents associated with market opportunities. The question in this perspective is ‘how to efficiently organize the rent-generation and appropriation process’ (Alvarez and Barney, 2004:629). In this framework choice is dependent on two factors: the knowledge about a market opportunity and how can one effectively apply ‘isolating mechanisms’ preventing others from competing for a given opportunity.

Building on the work of Shrivastava and Kennelly (2013) Zsolnai (2018:35-6) argues that for an economic activity being embedded would entail employing a place-based approach to organizing:

> [f]unctioning according to a place-based approach can bring the following benefits to organizations: (i) managers who are dedicated to respecting and nurturing place may be strongly supported by local communities, (ii) employees may be morally satisfied and thus better motivated by serving the place in which they live and with which they identify, (iii) more high quality, environmentally minded employees can be recruited, (iv) customer loyalty can be strengthened and (v) trust-based relationships with local subcontractors and partners can be established (Zsolnai, 2018:36).

Accordingly, embeddedness means sensitivity to local reproductive and regenerative capabilities. It means that not price signals and profit expectations are the primary, dominant principles of social organizing. The concept of the commons opens up space for theorizing
collective action as social organizing principle embedded into localities; commons organizing can be important to develop context-sensitive solutions, arrangements.

5.2.4. Commons

The concept of the commons has gained a surge of interest in social sciences by the work of political economist Elinor Ostrom. Ostrom (1990) has studied what she called “common-pool resources” and their governance mechanisms. Common-pool resources are types of goods which are characterized by high subtractability and high difficulty of exclusion (such as groundwater basins, lakes, irrigation systems, fisheries, forests). Building on classical economic foundations Ostrom developed a new theory to explain phenomena on social organizing that do not fit in the dichotomous world of the market and the state (Ostrom 2010).

The perspective of the dichotomous world consisting of the market and the state rests on three closely related models: the ‘Tragedy of the commons’, the ‘Prisoner's dilemma game’ and the ‘Logic of collective action’. These models are aiming to formulate the problem-situations individuals face when attempting to achieve collective benefits. According to Ostrom (1990) at the heart of each of these models is the free-rider problem:

[w]henever one person cannot be excluded from the benefits that others provide, each person is motivated not to contribute to the joint effort, but to free-ride on the efforts of others. If all participants choose to free-ride, the collective benefit will not be produced. The temptation to free-ride, however, may dominate the decision process, and thus all will end up where no one wanted to be. […] These models are thus extremely useful for explaining how perfectly rational individuals can produce, under some circumstances, outcomes that are not "rational" when viewed from the perspective of all those involved. (ibid.:6).

If strictly applied, these models depict individual actions predicting that rational individuals are incapable to arrive at collectively rational outcomes. This raises "fundamental issues in ethics and political philosophy and threaten the foundations of the social sciences” (Campbell, 1985:3 cited by Ostrom, 1990). Ostrom (1990:7-15) argues that these three models have been used as metaphors to instruct policy design, arriving to prescriptions as ‘Leviathan as the “only” way’ and ‘Privatization as the “only” way’. For example, the tragedy of the commons is described by Hardin (1968) as follows:
Adding together the component partial utilities, the rational herdsman concludes that the only sensible course for him to pursue is to add another animal to his herd. And another; and another... But this is the conclusion reached by each and every rational herdsman sharing a commons. Therein is the tragedy. Each man is locked into a system that compels him to increase his herd without limit - in a world that is limited. Ruin is the destination toward which all men rush, each pursuing his own best interest in a society that believes in the freedom of the commons. Freedom in a commons brings ruin to all (ibid., 1244).

Hardin (1968:1245) comes to the conclusion that there are two options, either sell the commons off as private property, or keep the commons in public ownership and manage the rights to enter/use them. In the model of Ostrom (1990) individuals also face social dilemmas (whether to cooperate or default, that is to free ride) when they have access to common-pool resources. But Ostrom (1990) grounded her work on empirical observations, contrary to the logical-mathematical origin of the previously mentioned three models. The empirics collected by Ostrom (1990) and her colleagues (for example National Research Council, 2002) demonstrate that individuals are capable to self-organize with their peers to overcome social dilemmas and avoid the overuse of common-pool resources. These findings violate the narrowly defined self-interest models of human nature; and also make evident that neither private nor public ownership are guarantees to preserve the common-pool resources.

Ostrom (1990) recognized institutional patterns in the successful cases of common-pool resource governance. The critical factor whether a community can avoid the pitfalls of social dilemmas is the social element. When communities of individuals are capable to communicate, cooperate, that is self-organize, the groups open possibilities to diminishing the constrains of the models predicting failure. Ostrom (1990:90) recognized eight design principles which were present at the long-sustained resources; when ‘appropriators’ set the rules and implement them, are able to monitor and sanction at a low cost, that is have influence, common-pool resources were used and not destroyed by humans.

Cox, Arnold, and Villamayor-Tomás (2009) analysed over 100 studies to assess the relevance of the principles as an explanation of the success or failure of diverse common-pool resources. They found that two-thirds of these studies confirm that robust resource systems are characterised by most of the design principles and that failures are not.
Ostrom (1990) has replaced Hardin’s (1968) conceptualisation, shared widely by mainstream economists, of the individual as an agent motivated (solely) by economic incentives, with that of the individual constrained by social norms and rules. Hardin (1998) thirty years later revisiting the critiques of his original model concludes: "the weightiest mistake in my synthesising paper was the omission of the modifying adjective “unmanaged”" (ibid.:682).

Ostrom’s major accomplishment was to introduce values, concerns, incentives and preferences, implying that mutual trust, altruism, reciprocity and cooperation should become key elements in any debate on the commons (Akbulut, 2017:397-8). Also, Ostrom (1990) shows that institutionalization does not necessarily mean privatization or collectivization. Historical and contemporary examples illustrate that self-governing (neither private nor public), bottom-up institutions can lead to efficient resource management; in many cases such institutions are more cost-effective and efficient than the private or public alternatives (De Moor, 2011).

But, as for example Akbulut (2017:398) and Obeng-Odoom (2020:6) point to, Ostrom’s and Harding’s work share two limitations. One is methodological individualism implying a notion of community that is the sum of strategically interacting individuals primarily relating in economic terms to a resource. The second limitation is the omission of different dimensions of inequality and relations of power in the use of the commons, ignoring the political-economic context within which the commons are embedded.

Samuelson (1954) classified goods into two types: pure private goods which are both excludable and rivalrous. Public goods, on the other hand, are both non-excludable (those who have not paid for a good cannot be kept from consuming it) and non-subtractable (the individual consumption of a good does not limit its consumption by others), such as public lighting or a lighthouse. Buchanan (1965) introduced a third type of goods, the so called “club or toll goods” which are excludable and non-rivalrous. A theatre play is an example of a club good, as people can be easily excluded (those without tickets) and one’s enjoyment of the play does not reduce the consumption (enjoyment) of the other members of the group. Vincent Ostrom and Elinor Ostrom (1977) added a fourth type of good, the “common pool resources” (CPRs), where it is difficult to exclude someone from consumption and one’s consumption is rivalrous with others’ consumption. Typical CPRs are fisheries or forests (Perilleux and Nissens, 2017:157-8).

According to De Angelis (2019) the concept of CPR implies that only the resource system (fishing pond) can be considered as commons, but not the resource unit derived (fish). But the excludability and subtractability features of a given good do not predetermine neither the social
organizational form to access and consume the good, nor the sustainability of the resource. Helfrich and Bollier (2015) argue that a source of freshwater can be stewarded as a commons— with non-discriminatory but limited use by all—or it can be fenced, converted into a commodity and sold as bottled water; it shows that both, rivalrous (water, land, fish, etc.) and non-rivalrous resources (knowledge, code, etc.) can be pooled—or not. Relative excludability and subtractability can change, for example due to technological reasons, as when new fishing techniques reduce the abundance of the catch in the ocean (Peredo, Haugh, Hudon and Meyer, 2020). A fundamental ethical issue regarding the organization of the commons is to understand the way that the excludability and subtractability characteristics of goods can be modified (De Moor, 2011), therefore influencing issues of production, access and sustainability.

Beyond the access and appropriation of environmental resources, other type of resources can be created or used through the social organizational logic of the commons. Based on the collection of Hess (2008) Peredo, Haugh, Hudon and Meyer (2020:663) list:

- religion and spirituality or creativity and arts related activities organized as cultural commons;
- public spaces, public housing and car parks organized as neighbourhood commons;
- transportation, communication infrastructure and services, public services and facilities and seaports organized as infrastructure commons;
- peer-to-peer production, open-source software development, genetic material organized as knowledge commons;
- health care system, hospitals and other medical facilities organized as medical commons;
- contribution and reputation managing systems organized as reputational commons;
- and Ramos (2020) conceptualizes the public sphere and shared reality as a commons.

This list (which is not complete) shows that despite the current (perceived as inherent) characteristics (related to for example ownership and excludability/subtractability) of a given good, through the social organizing of access, production, maintenance, and provision can be organized as commons. This is exactly the crust of Cowen’s (1985) critique regarding Samuelson’s (1954) typology of goods, that institutional context matters— “Publicness” and “privateness” should not be considered as “per se” attributes of economic goods. Nearly every good can be classified as either public or private depending upon the institutional framework surrounding the good and the conditions of the good’s production. Important institutional features can be:
(a) what technology is used to produce the good, (b) how much of the good is produced, (c) the distribution mechanism for the good, (d) how intense the demand is for the good, (e) how we define the marginal unit of the good, (f) what sort of activities we are willing to define as "consumption," and (g) the different meanings we are willing to attach to the notion of exclusion (Cowen, 1985:53).

5.2.5. Ownership regimes

Property regimes represent complex and variable bundles of rights held by some persons or groups in relation to an asset. Any particular bundle of rights is made up of some combination of the rights to (i) access, (ii) withdraw units, (iii) regulate and improve, (iv) determine who else may have rights of access and withdrawal, and (v) sell or lease the asset (Ostrom, 2000 referred by Peredo, Haugh, Hudon and Meyer, 2020:661). Accordingly, specific property rights have crucial implications on social and human-nature relationships, since through them are many interactions controlled and organized.

Kelly (2012) states that

\[ \text{[m]ost of the great political struggles of the past 5,000 years can be reduced to a simple question: who will own land, water, and the other essentials of living—and to what end? In the earliest human societies, ownership of the essentials of living was held in common by members of a tribe and included responsibilities of sacred stewardship. We might describe this as a form of shared ownership that confers shared responsibility (ibid., no page number).} \]

Korten (1995) describes that what is called “development” is the process of transferring control over the basic resources essential to daily life from the people who depend on them to foreign corporations, whose primary interest is financial gain. Ownership of the global means of production is concentrated, as for example the analysis on the power of economic actors within the global transnational corporate field is shown by Vitali et al. (2011). They look at the level of control each shareholder has over its whole portfolio of directly and indirectly owned firms [... as] a result, the shareholders with a high level of control are those potentially able to impose their decision on many high-value firms. The
higher a shareholder’s control is, the higher her power to influence the final decision. In this sense, our notion of control can be related to Weber’s definition of “power”, i.e. the probability of an individual to be able to impose their will despite the opposition of the others (ibid: appendix page 16).

The sample consisted 43,000 transnational corporations. The researchers identified a core of 1,318 business organizations with interlocking ownership structure. Furthermore, a ‘super-entity’ of 147 corporations had control (power to leverage), through intertwined ownership over 40% of the total wealth of the complete network. Within the top 50 of the super-entities are ‘the largest global financial institutions and insurance companies, among them Goldman Sachs, Citigroup, JP Morgan Chase, AIG, Barclay’s Bank, Bank of America, and Deutsche Bank’ (ibid: appendix page 17; Heikkurinen et al. 2017:11).

This is in line with Kelly’s (2012) description of the modern economy being built largely on the framework of a single kind of ownership, the publicly held company, with ownership shares trading in stock markets. Following the shareholder value fallacy, corporations are manufacturing wealth in endlessly growing quantity; but, since this type of growth does not consider the reproductive capabilities of society and nature Kelly (2012) calls it extractive. Extractive ownership design rests on absentee membership and is built to maximize financial gains and minimize financial risks – that is for the purpose of allowing cost shifting and rent generation-appropriation. Absentee membership is one tool for disembedding:

ownership is the gravitational field that holds our economy in its orbit, locking us all into behaviours that lead to financial excess and ecological overshoot (Kelly, 2012, no page number).

In contrast to extractive design Kelly (2012) constructs a “generative ownership design” for organizations. In a generative ownership design ownership has a ‘living purpose’ creating the conditions for life, focusing on providing livelihood. Instead of absentee membership where owners are disconnected from the life of enterprise, and the enterprise is not embedded into the locality, ‘rooted membership’ gives control over the major decisions to ones who are contributing to value generation. Extractive ownership involves governance by markets (price signals and profit expectations as organizing principles), ‘mission-controlled governance’ allows organizations to have multidimensional goal and success criteria to pursue. Instead of ‘casino finance’ a generative design relies on ‘stakeholder finance’ where capital is subordinated for socioecological purposes. And finally, instead of commodity networks where
production is organized according to price signals, generative economic relations are supported by ‘ethical networks’, which offer collective support for social and ecological norms.

But property regimes can be also tools for prosocial organizing, and not the means of extraction, as Peredo, Haugh and McLean (2020) argue. For example, as early as the case of The Rochdale Society of Equitable Pioneers founded in 1844 shows that common property could be harnessed to prosocial purposes in the face of the Industrial Revolution’s social disruptions (as displacement by enclosures, inadequate housing, long working hours, low pay and unsafe working conditions). The common property regime was a principle element (reflecting prosocial intentions) of the Society’s cooperative social organizing, as each member having a role in decision making at weekly meetings (one member one vote); members received a limited amount of interest on their membership investment (thus providing a form of savings for the poor), but they benefited from any surplus the Society made only to the extent they had used its services. Rochdale begun as a consumer cooperative, and this arm remained the most visible and successful enterprise, but the Society also established (with varying degrees of success) cooperative housing, cooperative manufacturing to provide employment, and the purchase of land for cooperative cultivation (Fairbairn, 1994 referred by Peredo, Haugh and McLean, 2020).

These are the efforts what Polanyi (1944) called as ‘countermovements’, where social organization aims to decommodify important spheres and factors of livelihood. Polanyi (1944) criticized the process of commodification on the terms that through the arrangement of commodification misrepresents real-world entities in ways that are damaging to the realities from which the fictitious commodities are abstracted. In the case of labour, one’s wage earning activity affects other aspects of her or his life: ‘family and domestic concerns, friendships, health, and all the psychological and material considerations that compose a human life’ (Peredo, Haugh and McLean, 2020:22).

Similarly with land, the price is not determined principally by the capacity of land to provide habitat and/or other services but by the expectation of gain to be realized in further exchanges; therefore price (value in the marginalist approach) may be entirely independent of use value and purchasers of land may have little or no interest in its capacity to supply human needs (Peredo and McLean, 2019). Also, treating money as a commodity strips away this embeddedness in exchange between persons and misrepresents it as a depersonalized instrument for profit-making; with other forms of commodification, the market exchange of money substitutes exchange value for use value, and in so doing, misrepresents in a destructive way the reality from which it is abstracted (Peredo, Haugh and McLean, 2020:23).
Decommodification therefore is one type of countermovement reducing the exposure to the market forces of price, supply, and demand without necessarily removing the matters/processes entirely from markets. From the prosocial organizing perspective, the most important feature of the common property is its potential for decommodifying ‘fictitious commodities’, and therefore restoring them to their place as contributors to human well-being.

In the formal logic of economics – following the implications of the ‘Tragedy of the commons’, the ‘Prisoner's dilemma game’ and the ‘Logic of collective action’ - common property regimes are assumed to be inefficient because they entail three forms of wastage: (i) common owners expend resources competing for the productive outcomes that are not distributed until realized; (ii) the high costs anticipated for reducing the externalities of mutual overuse; and (iii) the lack of individual incentives to work hard, since increases in productivity are shared by the common owners and do not accrue to the individual (Peredo, Haugh and McLean, 2020:9). But these assumptions are ‘historically, socially and legally myopic’, as Peredo, Haugh and McLean (2020:6) argue, since empirical data show (for example Ostrom, 1990) that neither market nor state logics as organizing principles are necessarily superior when it comes to efficient and sustainable use of resources.

Ostrom (2010) writes summarizing the findings of Chhatre and Agrawal (2008; 2009) on collective forest use and management, that "forests with a higher probability of regeneration are likely to be small to medium in size with low levels of subsistence dependence, low commercial value, high levels of local enforcement, and strong collective action for improving the quality of the forest” (Chhatre and Agrawal, 2008:1327). Also, larger forests tend to be more effective in enhancing both carbon and livelihoods outcomes, particularly when local communities also have high levels of rule-making autonomy (Chhatre and Agrawal, 2009). Again, the local-specific details of social organization are key, as research on different property regimes (government, private, communal) show sometimes positive results regarding biodiversity protection, carbon storage, or improved livelihood, but other times these property regimes fail to provide such goals. Ostrom (2010) concludes,

it is not the general type of forest governance that is crucial in explaining forest conditions; rather, it is how a particular governance arrangement fits the local ecology, how specific rules are developed and adapted over time, and whether users consider the system to be legitimate and equitable (ibid.:658).
To summarize, neither the excludability/subtractability characteristics of goods, nor the type of property regime is by itself a decisive factor whether given organization can serve as a vehicle for positive social change, embedded in the local, being responsive to reproductive needs; more important is how stakeholders manage to self-organize, to govern their collective actions. As Gibson-Graham, Cameron and Healy (2016) argue, when the commons are framed as a process, a practice or an activity, rather than as an economic good, it shows that commoning can take place with any form of property, from privately owned property to open access property. Enclosed and unmanaged resources can be commoned not by changing ownership but by changing how access, use, benefit, care and responsibility occur; in other words, ownership of property is largely a legal matter and need not deter resources from being commoned (ibid.:6).

5.2.6. Commoning

The process of organizing commons is termed "commoning". Fournier (2013) argues that the commons are best understood not as a resource but as a social process of organization and production through which communities of users and producers share resources and define the modes of use, production and circulation of these resources. The social process perspective shows that in the commons what is being reproduced is not just the resource system but the community as well; patterns of social relations that afford participants some degree of autonomy from the market (ibid.:449).

Accordingly, Helfrich and Bollier (2014) define the commons as the connection of (i) the resource(s) which is used and/or created by the community or network, (ii) the self-organized community, where the members/contributors are designing the (iii) the rules for cooperation (for example issues of access, monitoring, sanctions, etc.). Similarly, Euler (2018:15) defines commoning as "voluntary and inclusively self-organized activities and mediation of peers who aim at satisfying needs".

Euler (2018) theorizes that the social organizational practice of commoning (like other social practices) is context dependent – for example cultures, societal structures, time, space, physical attributes and learned behaviours as well as ‘thinkable narratives’, therefore consisting different types of activities and relationships depending on the predominant social networks. For example, according to Euler (2018:15) in a capitalist society Community Supported Agriculture (CSA) organizations/networks can be considered as commons. Even if they are mostly organized with the help of money and involve wage labour, a significant amount of work
is done voluntarily. CSAs run on a self-organized basis, production, use and reproduction are not strictly separated, people consider each other as peers, needs satisfaction is the aim and relations to other CSA projects is rather supportive. Logics of money and wage labour do not dominate the social relations inside the CSAs, people even try to overcome those logics.

Summing up, I conceptualize community-based organizations as social entities embedded in their local socioecological context, organizing their activities around satisfying local, socioecological needs.
PART II

6. Research design based on qualitative, multiple case studies

The aim of the dissertation is to explore how, in the context of the Anthropocene, community-based organizations (CBOs) arrange collective actions prioritising socioecological concerns. Building on the work of (Banerjee, 2020:15-6) my research questions, are formulated in the following way:

(RQ1) Which organizational characteristics support the community-based organizations to prioritise socioecological concerns?

(RQ2) What helps and what hinders the spreading and/or the adaptation of the existing models of community-based organizations in today’s world?

In order to answer the research questions, I have constructed a qualitative, multiple-case study-based research design (see below). Since my pre-analytical assumption is that the subject matter of the research is located in complex interactions, processes, and causal mechanisms, and therefore - according to Eisenhardt (1989) and Tsoukas (1989) - the application of qualitative research methodologies is reasonable.

Denzin and Lincoln (2018) claim that three interconnected, generic activities define the qualitative research process. These are theory, method, and analysis (or ontology, epistemology, and methodology). Behind these terms stands the personal biography of the researcher, who speaks from a particular class, gendered, racial, cultural, and ethnic community perspective. Following Denzin and Lincoln (2018:53-60) I will group the description of the research process into the following phases.

6.1. Interpretative paradigms

Regarding ontological and epistemological decisions, Ergene et al. (2020:5) call for applying relational ontologies and critical epistemologies when focusing the research process on socioecological issues from management and organizational studies perspectives. For the purpose of the dissertation I think elements of the critical realist and relational paradigm would serve as a proper ontological position. Maxwell (2013:53) allows for the combination of different paradigms and traditions.
Ontologies describe the "assumptions (which may be implicit or explicit) about what kinds of things do or can exist in [reality], and what might be their conditions of existence, relations of dependency, and so on" (Scott and Marshall, 2009:531 cited by Walsh et al., 2020). Walsh et al. (2020:7) argue that relational ontologies aim to address the division between nature and culture, as well as other dualities such as mind and matter, subjectivity, and objectivity inherent in the modern perspective, the need arises for differentiated relational ontologies. These ontologies acknowledge the distinctness of individuals while recognizing their intrinsic connection to a multitude of relationships. Philosophical frameworks like speculative realism, process philosophy, new materialism, and insights from indigenous and religious traditions offer comprehensive insights into relational ontology, aligning with the concerns of sustainability. Such holistic sensitivity to the interconnected nature of reality is useful for current purposes, as for example the reliance on socioecological approach, that is the inseparability and interdependence of the social and ecological realms.

Also, Roy Bhaskar’s (1975; 2016) critical realism is relevant here, as philosophy of sciences for conducting responsible research formulates that

science is about cause and possible worlds, not the passive observation and correlation of variables; that the human sciences necessarily have an emancipatory aim; and that ethics and values are implicit in social scientific practice (so are not solely exogenous considerations). Indeed, the human sciences are in the business of producing values (Rogers and Teehankee 2020:19).

Bhaskar argues that human agency cannot satisfy the positivist scientific pre-analytic conditions, as in the social realm variables are not constant across contexts, that is humans are not usually driven to perform an action in the same way that an acid corrodes (ibid.:24). That is, as Róna (2018) puts it, the subject matter of social sciences is ontologically different from the ones in natural sciences, since in the social realm human intention is a critical factor.

According to Bhaskar, two possible roles can be described for human sciences. First, to identify false beliefs through criticism. Second, to uncover the causes of false beliefs, which is the function of an explanatory critique. Explanation is thus a precondition for emancipation (Rogers and Teehankee, 2020:29). But just as ‘diagnosis is not therapy’ (Bhaskar, 1982:299 cited in Rogers and Teehankee, 2020) research can and should study what could and should exist.
Bennett and Elman (2006:457) argue that qualitative methodologists working in critical realist approaches “tend to believe that the social world is complex, characterized by path dependence, tipping points, interaction effects, strategic interaction, two directional causality or feedback loops, and equifinality (many different paths to the same outcome) or multifinality (many different outcomes from the same value of an independent variable, depending on context)” (Schwandt and Gates, 2018:606). This is certainly the case with the present dissertation.

Epistemology describes how one comes to know the world. It defines the criteria, standards, and methods for understanding reality (Steup, 2018; cited by Walsh et al., 2020). As Walsh et al. (2020:2) say, relational epistemologies recognize the observer’s influence on knowledge formation, distribute agency across networks, perceive objects as compositions of humans and nonhumans, emphasize transdisciplinary techniques for crossing disciplinary borders, and apply diffractive approaches to incorporate diverse modes of understanding.

Within the critical realist paradigm, the scientific inquiry shifts from prediction to explanation, which legitimizes the study of non-events and non-experiences (Bhaskar, 1998). According to Rogers and Teehankee (2020), in the human sciences it legitimates causal inquiries into the failure of a given society to eliminate or surpass destructive socioecological systems and therefore opens the way for new socioecological configurations.

6.2. Strategies of inquiry

My research is a qualitative multi case study. Thomas (2011) writes that case study should not be seen as a method in and of itself, but rather as a design frame that may incorporate a number of methods. Simons (2009:21) tells that a case study is “an in-depth exploration from multiple perspectives of the complexity and uniqueness of a particular project, policy, institution, program, or system in a “real life” context” (Thomas, 2011). The aim of this dissertation is to study how successful CBOs operating in diverse fields can serve as vehicles for positive socioecological change in their local context. This is the reason to design a multiple case study design framework.

Within the family of case study methodology, I argue that for current purposes the application of normative theory (framework) is appropriate. According to Schwandt and Gates (2018) the normative approach focuses on what should be (norms, values, or ideals) valued rather than solely dealing with what is. Normative theory is concerned with justifying ends or outcomes, specifically what is right or wrong, desirable or undesirable, just or unjust (ibid.:615). As
Thacher (2006) explains, normative case studies assume that by examining real cases, ethical judgement can be enhanced, and ethical development fostered.

6.3. Sampling
This section describes the sampling strategy regarding the empirical inquiry of my research. Table 1 presents the main organizational characteristics as factors relevant for community-based organizations and organizing.

Table 2 - Main organizational characteristics named in the literature as elements and characteristics of community-based organizations and organizing

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Clear focus on wellbeing creation</td>
<td>Non-profit-motivated design logic of commons-oriented technologies: removes the incentive for planned/perceived obsolescence</td>
<td>Practice self-reliance and the premise of sufficiency</td>
<td>Other-than-profit goals</td>
<td>Living Purpose: creating the conditions for life over the long term</td>
<td>Policies: how the organization chooses to operate, the actions taken across all operations, involving internal and external stakeholders</td>
</tr>
<tr>
<td>Committed leadership</td>
<td>Use of local manufacturing technologies to create an on-demand production system, instead of a supply-driven one</td>
<td>Long-term view, systems should be sustainable in the next 100 years</td>
<td>Using profits to replenish Nature and community</td>
<td>Rooted Membership: ownership in human hands</td>
<td>Assets: what resources the enterprise will choose to own and operate</td>
</tr>
<tr>
<td>Purpose driven strategy</td>
<td>Mutualization of products and instruments of production, genuine sharing economy</td>
<td>The size of the community should be stabilized at an appropriate level</td>
<td>Democratic and localised ownership and governance patterns</td>
<td>Mission-Controlled Governance: control by those dedicated to social mission</td>
<td>Governance: how power and decision-making are exercised</td>
</tr>
<tr>
<td>Non-violent technologies</td>
<td>The community must produce at least enough food and raw materials to enable its members to live simple, comfortable lives while staying within the limits of their environment and not exploiting their parts of the world</td>
<td>Rootedness in place and time</td>
<td>Stakeholder Finance: capital as friend</td>
<td></td>
<td></td>
</tr>
<tr>
<td>--------------------------</td>
<td>---------------------------------------------------------------------------------</td>
<td>-----------------------------</td>
<td>----------------------------------</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sustainable products/services</td>
<td>All energy used in the community should come from renewable resources</td>
<td>Non-market production, exchange or provisioning patterns</td>
<td>Ethical Networks: collective support for ecological and social norms</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Relative independence from financial markets</td>
<td>Capital should not allow flowing in or out, and interest rate, if any, should be determined internally</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Strong community support</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Multidimensional measure of success</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

In order to research how community-based organizations in various fields are actually working, two sampling strategies have been applied. One is purposive sampling, while the other one is maximum variation sampling (Miles, Huberman and Sdana, 2014; Ashby, 1963). The two sampling strategies support the aim to illustrate how in a given field, area of activity can
collective action be organized in a community-oriented way. Accordingly, the selected CBOs represent a high degree of diversity regarding their size (number of members and outreach), ownership structure (for-profit, non-profit, foundations, non-formal, etc.) and fields of activity (as energy, housing, food, etc.). A short description of the main problem and the given CBO’s community-oriented approach towards this central issue can be found below in Table 2.

Table 3 - The Selected Community-Based Organizations

<table>
<thead>
<tr>
<th>Organization</th>
<th>Problem, central issue</th>
<th>Community-based approach to central issue</th>
<th>Established</th>
<th>Outreach</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1) ZEF Ethical Bank - a network of a nonprofit and a cooperative</td>
<td>Mainstream finance and banking is (often) incapable to incorporate social and ecological considerations, turning into a vehicle fuelling destructive activities.</td>
<td>Pool and make available financial resources for socioecologically-concerned (often small-scale) projects. Member-owners have direct control over their money, and access to ethical crowd funding arrangements.</td>
<td>2014, Croatia</td>
<td>1200 members, organizations and individuals</td>
</tr>
<tr>
<td>(2) ANAP Cuba – cooperative federation</td>
<td>Low-input food production has to be organized as access to fossil-based products is severely limited.</td>
<td>The adaptation of agroecological methods spreads through farmer-to-farmer interactions. Family farming is helped by state action through access to key resources.</td>
<td>1961, Cuba</td>
<td>In total there are 4,331 cooperatives that bring together 331,874 members</td>
</tr>
<tr>
<td>(3) Buurtzorg India – a cooperation of a for and nonprofit</td>
<td>In rural India access to healthcare is limited. Also, there is a large deficit in the number of trained healthcare personnel.</td>
<td>Providing low-cost access to healthcare, and organising healthcare personnel training. Personnel is organised into small units, which practise high-level of autonomy. Healthcare is personalised and protocolised.</td>
<td>2017 in India, 2006 in Netherlands</td>
<td>Presence in 5 Indian cities</td>
</tr>
<tr>
<td>(4) Coopalim – cooperative</td>
<td>Access to affordable and high quality food is limited. Small-scale local farmers face increasing difficulties. Long supply chain food systems work with significant externalities.</td>
<td>Through a labour cooperative arrangement radically lower fixed costs. Non-transferable obligatory contributions to run the food store. Serves as a hub in the local short supply chain food system.</td>
<td>2017</td>
<td>300 member owners, 3 employees</td>
</tr>
<tr>
<td>---------------------------</td>
<td>-------------------------------------------------------------------------------------------------</td>
<td>-------------------------------------------------------------------------------------------------</td>
<td>-------</td>
<td>----------------------</td>
</tr>
<tr>
<td>(5) Deccan Development Society – village network</td>
<td>Large numbers of groups and individuals don’t have access to the means to meet basic necessities (especially Dalit women). The locally fit and nutritionally superior millet-based food system is being violated by export-oriented cash crop (mainly rice) food systems.</td>
<td>Voluntary village level associations of the poor, helping in livelihood creation and land regeneration. Doing educational work and political consciousness raising. Operating own media channels and millet-diet urban restaurant.</td>
<td>1983, India</td>
<td>Presence in about 75 villages</td>
</tr>
<tr>
<td>(6) Farm City Detroit – non-profit</td>
<td>Access to affordable and high quality food is limited. Due to the livelihood crisis a hundred thousand vacant lots provide space for urban farming/gardening.</td>
<td>The urban farm serves as an educational hub where produce is grown on common parcels. The farm helps to regenerate the local community by providing space and knowledge to turn vacant land into community urban farms.</td>
<td>2017, USA</td>
<td>Several hundred</td>
</tr>
<tr>
<td>(7) Disco, Distributed Cooperative Organizations – cooperative model</td>
<td>Mainstream organizational models struggle to meaningfully include socioecological concerns into their core activities. Non-monetary and other qualitative factors are hard to track, therefore incentives/rewards skew action towards monetized/quantifiable contributions.</td>
<td>This adaptable cooperative model helps to account and incorporate non-monetized and qualitative contributions. Helps keep accounting of care work and contributions towards the (knowledge and physical) commons.</td>
<td>2014, Spain, international</td>
<td>Multiple organizations are using the model</td>
</tr>
<tr>
<td>(8) Health in Harmony, Indonesia – non-profit</td>
<td>Locally, forest destruction is significantly driven by illegal logging.</td>
<td>The organization provides access to healthcare and helps create livelihoods which are non-reliant on forest destruction.</td>
<td>2007, Indonesia, international</td>
<td>approx. 73 villages in 23 districts near Gunung Palung National Park; since start over 75,000 patients have been treated</td>
</tr>
<tr>
<td>(9) Jelka house, Habitat Austria – housing association</td>
<td>Often exploitative, speculative housing markets are limiting access to affordable and decent standard housing. Proprietary ownership models are skewing housing towards rent-generation (commodification) rather than towards access.</td>
<td>Access-based ownership models and practices are designed and adopted. Low-interest financial models are being designed and adopted. Housing is being decommodified.</td>
<td>2018 the house and 2014 the association (the original model in Germany in the 70s)</td>
<td>approx. 30 people in the national umbrella organization and 8 people living in Jelka House</td>
</tr>
<tr>
<td>(10) Lumituuli - customer owned wind power producer</td>
<td>Dominant energy systems are fossil-based, highly centralised, where users are not involved in governance issues.</td>
<td>It is the first nationwide, customer-owned wind power producer in Finland. Customer-owners are allowed to take part in governance.</td>
<td>1998, Finland</td>
<td>approx. 1200 shareholders</td>
</tr>
<tr>
<td>(11) Krisna Valley – network of organizations</td>
<td>It is a spiritually-oriented intentional community, ecovillage. Mainstream production and consumption patterns are (mostly) violent and destructive.</td>
<td>The community is close to self-sufficiency in (organic) food, in fresh water, wastewater management, wood heating and meets a significant part of its electricity demand by PVs.</td>
<td>1993, Hungary</td>
<td>approx. 300 people</td>
</tr>
<tr>
<td>Number</td>
<td>Organisation</td>
<td>Description</td>
<td>Objectives</td>
<td>Year</td>
</tr>
<tr>
<td>--------</td>
<td>--------------</td>
<td>-------------</td>
<td>------------</td>
<td>------</td>
</tr>
<tr>
<td>(12)</td>
<td>Cargonomia – informal organization</td>
<td>Serves as an educational hub for nonviolent lifestyle.</td>
<td>High material and energy demanding food and mobility systems are locking-in individuals and communities into unsustainable patterns.</td>
<td>Organises the connection between an organic farm and its urbanite customers. Spreads knowledge and practices about non-fossil mobility and access to healthy, local food. Whenever possible attempts to build relationships on reciprocity, self-sufficiency or barter, rather than on money.</td>
</tr>
<tr>
<td>(13)</td>
<td>Ouishare – non-profit</td>
<td>Ecologically and socially important problems often have no problem owners locally and those most affected by the negative consequences are not heard.</td>
<td>Connecting actors for socioecological goals. Helps to improve both public and business services.</td>
<td></td>
</tr>
<tr>
<td>(14)</td>
<td>Pecs Food Association – association</td>
<td>Access to affordable and high quality food is limited. Small-scale local farmers face increasing difficulties. Long supply chain food systems work with significant externalities.</td>
<td>Largely through voluntary contributions provides access to local and healthy food, while helping to establish a short chain food system.</td>
<td></td>
</tr>
<tr>
<td>(15)</td>
<td>SZAKI – housing association</td>
<td>Often exploitative, speculative housing markets are limiting access to affordable and decent standard housing. Proprietary ownership models are skewing housing towards rent-generation (commodification) rather than towards access.</td>
<td>Access-based ownership models and practices are designed and adopted. Low-interest financial models are being designed and adopted. Housing is being decommodified.</td>
<td></td>
</tr>
<tr>
<td>(16)</td>
<td>Transition Campus – nonprofit</td>
<td>Tertiary education largely ignores the meaningful and genuine incorporation of ethics</td>
<td>Designs higher education curriculum with ethics and sustainability at the core.</td>
<td></td>
</tr>
<tr>
<td>(17) Edith Maryon Foundation</td>
<td>The commodification of land draws speculative and exploitative use of land.</td>
<td>Remove land from speculation and provide access for housing and regenerative land use. The organization collects donations and/or designs financial arrangements to put land into socially useful use. The Solidarity Fund helps people to finance rent deposits.</td>
<td>1990, Switzerland</td>
<td>At least hundreds of people affected</td>
</tr>
<tr>
<td>-----------------------------</td>
<td>-----------------------------------------------------------------</td>
<td>------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
<td>--------------</td>
<td>---------------------------------</td>
</tr>
<tr>
<td>(18) Rigac – Alsomocsalad village’s own currency</td>
<td>Municipality’s political leadership is looking for inclusive methods to involve residents into the design phase of welfare and wellbeing programs.</td>
<td>Open meetings are organised to allow involvement. Own currency has been issued to keep financial resource in the local loop.</td>
<td>2013, SW Hungary</td>
<td>300+ people,</td>
</tr>
<tr>
<td>(19) Health Center Cecosesola - cooperative</td>
<td>Access to healthcare services is limited.</td>
<td>Beyond solidarity pricing the organization offers the combination of conventional medicine and alternative therapies. Organises communitarian healthcare where all stakeholders are allowed to practise care and/or healing actively, placing humanistic-ethical concerns over profitability.</td>
<td>The roots go back to the 1967, the health center opened in 2009</td>
<td>Prior to the COVID pandemic, an annual average of 200,000 people</td>
</tr>
<tr>
<td>(20) Auroville - foundation</td>
<td>High material and energy demanding food and mobility systems are locking-in individuals and communities</td>
<td>Residents are expected to contribute towards</td>
<td>1968, India</td>
<td>3,300 residents and about 5,000</td>
</tr>
</tbody>
</table>
into unsustainable and violent patterns of production and consumption. The purpose of Auroville is to realise human unity. Collective welfare by practising Karma Yoga (the practice and spirituality of unselfish action). A safety net meets everyone’s basic needs. Appropriate technology is being innovated and adopted.

6.4. Methods of collecting and analysing data

Primary data were collected through semi-structured interviews (see Section 11.1). The length of the interviews ranged from 45 minutes to 90 minutes, most of the interviews took approximately 60 minutes. Five of the interviews were in Hungarian, while fifteen in English (due to language difficulties one interview was a written interview where the questions were sent and received in a written form). Except one, all interviews were online. The interview questions were constructed based on the literature, and with the aim that by receiving answers to those questions, following the analysis of the data, a relatively rich picture would emerge regarding how CBOs organize prioritizing socioecological concerns. In the case of each interview, I took into consideration that the selected CBOs vary significantly regarding the amount of publicly available information, therefore before each interview I prepared which questions could be at least partially answered through secondary data collection, and which questions should be raised during the interview. Webpages, archives, social media, and published studies served as secondary data sources.

6.5. Data analysis

Data analysis followed an abductive process (Van Maanen et al., 2007; Dubois and Gadde, 2002) of data collection and data interpretation, a continuous interplay between theory and empirics. The interviews were recorded and transcribed with the permission of the interviewees. After each interview a memo was created where case-specific and synthesizing notes were taken, building on the previous notes. Transcribed interviews were coded using the Nvivo software. Codes were assigned to each factor or theme (Miles et al., 2014) that was deemed as an important element to understand the context and the inner/outer dynamics of the respective CBO. The combination of both deductive and inductive coding was applied (Strumińska-Kutra
and Koładkiewicz, 2018), as data collection and analysis should go on simultaneously (Coffey and Atkinson, 1996). After the first three interviews, a coding scheme was designed. Using the data of the three interviews, two coders discussed each code; where coding differed, the coders agreed how to treat (code) similar occurrences, themes in the future. Finally, the 20 interviews were coded into 57 different codes; at one point of the data collection period there were 80+ codes, but as the research proceeded many codes were merged together.

Following the coding process, when all the input data had been organized/structured, in order to make it easier to work with this large dataset, and also for the purpose of illustration, the coded data was organized into a systems map (see description in Chapter 8.) Denzin and Lincoln (2018) highlight that qualitative research/inquiry is endlessly creative and interpretive, which are constructed as there is no single interpretative truth. The results presented reflect my interpretation of the data that is guided by the research aim.

6.6. Validity
Tsoukas (1989) raises the question whether idiographic research can generate valid explanations. According to Tsoukas (1989:558), within a realist conception organizations are the loci in which causal powers interact and produce indeterminate outcomes, therefore, paradoxical phenomena are not mere exceptions in stochastic conjunctions of events, or simple refutations of law-like generalizations, but rather the contingent link of a set of causal powers. The idiographic nature of the current research does not mean that this research has not produced potentially useful insights for non-CBOs; on the contrary, I will argue, that many organizations could and should adopt some elements of CBOs to shift priorities towards socioecological concerns.

The scarcity of the available resources and also the social effects of the COVID-19 pandemic could not allow conducting on-site observations nor further interviews with other stakeholders of the sampled organizations. Therefore, acknowledging these limitations, the inter-coder agreements and the method of triangulation served as tools enhancing the validity of the findings.
7. Short descriptions of the selected Community-Based Organizations

Table 3 – Case # 1 Cooperative for Ethical Financing (finance)

<table>
<thead>
<tr>
<th>(Case number 1) Name:</th>
<th>Cooperative for Ethical Financing</th>
<th>Replicated:</th>
<th>Banca Ética Latinoamericana</th>
</tr>
</thead>
<tbody>
<tr>
<td>Established:</td>
<td>2014, Croatia</td>
<td>People reached:</td>
<td>1200 members (persons and organizations)</td>
</tr>
<tr>
<td>Institutional form:</td>
<td>Non-profit organization</td>
<td>Field of operation:</td>
<td>Banking, ethical finance</td>
</tr>
</tbody>
</table>

Cooperative for Ethical Financing (CEF) is a non-profit organization with over 1200 members, organizations and individuals, working together to develop a democratic, transparent, just and socially and environmentally responsible economy. Members are co-owners (one member one vote) of the assets, and they decide on all key issues, such as the terms and conditions of financing, and also have rights to elect the members of the governing body (ZEF, n.d.). CEF is in the process to receive a banking license, but currently it is formally a non-profit organization.

At the core of the investment policy of CEF is that all projects are evaluated according to criteria of financial sustainability, ecology and social impact – following the Economy for the Common Good matrix (Interviewee 1). Accordingly, financial resources are directed towards organic agriculture, renewable energy, SMEs, social entrepreneurship, digitalization and new technologies. In the case of individuals, CEF offers credit to meet basic needs such as housing, education, healthcare, and mobility, but does not offer non-purpose consumer loans nor allows members run minus accounts. Interest rates are maximized at 4%. There are no fees charged for keeping an account (ZEF, n.d.).

CEF runs an internal crowd investment platform which allows members to present their projects and other members to invest in those projects. A working group has a mandate of the assembly
of all members to carrying out the assessments of the financial requests – whether they meet the ethical standards of the organization. Members are allowed to intervene and influence the membership and the workings of the working group doing the assessments. Accepted requests have to design a development plan regarding how they will improve their social-ecological-economic score through the financing period. All decisions taken are transparent and accessible for the members, open for comments and critique (Interviewee 1).

CEF would prefer not to issue debt instruments, because those introduce highly asymmetrical risks which they would prefer not to have in their relationships. But due to European banking legislation they see the complete avoidance of debt currently unfeasible. Inspired by Islamic bank model CEF designed a system where basically all investments are joint ventures, equity type of investments, where the risks are shared between the bank and the beneficiary. CEF functions as an aggregator of socioecologically-oriented projects – as financing requests are arriving, the organization uses its capability to assess the projects whether it meets the commonly set standards. If so, before CEF would provide the debt instrument the project is introduced to the crowd investment platform allowing all depositors to become micro equity investors into a project. CEF issues debt only if the members do not cover the complete sum granted. This way risk is distributed in a transparent way. Members – if the project proceeds well – get a higher return than they would through rates on deposits. CEF will have more capacity to lend because the exposure on the organization is minimized (Interviewee 1).

CEF is designed to function as a public institution, therefore part of the balance sheet is reserved for projects which are financially not sustainable but provide value in other dimensions. In parallel with the crowd investment platform there is a crowd donation platform; also, all profits of CEF are reinvested into those channels. No dividends are paid out (Interviewee 1).

A central element of CEF is its close relationship with the membership – all members know personally someone who is employed by the organization. Covid hindered these ties, but a guiding principle remains that the size and reach of CEF cannot outgrow its embeddedness into the local social tissue. Applying the viable system model (cybernetics), CEF has learned that they cannot expand to be bigger than 40-60 thousand members because over that size too much information and control is lost. Therefore, if the organization would reach such membership it will need to split to keep its personal ties with the membership (Interviewee 1).

When it comes to politics, CEF is consciously inclusive, it is among the most diversified organizations in Croatia. Membership consists of individuals, labour unions, NGOs,
enterprises, municipalities and church-based organizations. The general assembly is therefore diverse. Political parties are not allowed to become members, but CEF did produce educational and strategy-building material for political parties in the fields of ecological agriculture and community owned and managed renewable energy systems (Interviewee 1).

One liability at CEF is whether it can gain a banking licence.

Table 4 – Case # 2 National Association of Small Farmers (agroecology, access to land)

<table>
<thead>
<tr>
<th>Name:</th>
<th>National Association of Small Farmers (ANAP)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Case number 2.</td>
<td></td>
</tr>
<tr>
<td>Established:</td>
<td>1961, Cuba</td>
</tr>
<tr>
<td>People reached:</td>
<td>Approx. 400 thousand</td>
</tr>
<tr>
<td>Institutional form:</td>
<td>Cooperative federation</td>
</tr>
<tr>
<td>Field of operation:</td>
<td>Food, ecological regeneration, livelihood</td>
</tr>
<tr>
<td>Replicated:</td>
<td>Through Via Campesina replicated in many parts of the world</td>
</tr>
</tbody>
</table>

The National Association of Small Farmers (ANAP) is a nation-wide CBO successfully transforming a significant amount of land for agroecology-based small-scale farming. With the dissolution of the Soviet Union, Cuba faced a crisis in the food and agriculture sector due to the loss of 85% of its export markets and an end to its supply of oil, machinery, agricultural inputs, and foodstuffs at subsidized prices (Val et al., 2019). Another crucial contextual factor is the set of sanctions upheld by the US against Cuba which add to the importance of self-sufficiency measures. In the last 30 years the agroecology movement has extended to a level where 75% of the food produced in Cuba is grown by ANAP farmers, using non-destructive methods (Sosa et al. 2013). The number of family farms (and therefore ANAP membership) in Cuba is growing and family farmers are among the financially most well-off class in the Cuban society.

Education is at the center of the ANAP model. Teaching-learning occurs ‘in the furrow’ and on the farm. Innovations are collected and are openly shared, promoted to motivate others to
strengthen and expand agroecological production (Val et al. 2019). A participatory methodology (farmer-to-farmer) was developed to integrate and transmit both social and technological methodological elements. The basic principles are that those involved in the teaching-learning process are peers, they know each other’s’ social realities and are able to talk and relate to each other easily. Through the years a slow, gradual process has been designed to help farmers/families who are new to agroecological methods to adapt such measures – by learning the details from their peers and working examples a high level of trust is developed among the parties (Sosa et al. 2013). Due to ANAP the education of agroecology has penetrated the Cuban credit and banking sector as well. Bank technocrats receive basic level knowledge on agroecology – therefore banks in Cuba do not require the use of destructive substances and methods in order to grant credit but understand that food can be efficiently grown without such measures (Interviewee 2).

ANAP promotes a mix of low-tech methods as animal traction and worm composting and high-tech solutions as the decentralized design of solar panels and biogas digesters (Interviewee 2). The downward trend in the use of chemicals continues even as their availability occasionally (due to international agreements) increases. The agroecological approach reduces the drudgery of farm work, it tends to require creativity from the farmers. Thus farming became an interesting vocation. In this system all family members (men, women, youth and the elderly) have important roles to fulfil (in comparison to the men favouring setup of monoculture-based arrangements). In Cuba farmers have access to various markets and also obligations to produce and sell food at a set price, which combination provides a high level of income stability (Interviewee 2).

Among the enabling conditions is that due to ANAP’s importance in the domestic food production it has been able to force favourable policies into existence. Today (2022) if one wants to become a farmer, there is a waiting list to get access to land up to 50 hectares plus state-loan to build a house on it. Newcomers are immediately incorporated into ANAP’s farmer-to-farmer system. ANAP is mostly self-financed; a 3% self-tax applies on all sales of the cooperatives – providing additional political power to the movement (Interviewee 2).

ANAP plays a key role in Via Campesina to spread agroecological knowledge and the Cuban model around the world. For example, there are peasant-led agroecology schools in Quebec, Canada and in Mozambique (Interviewee 2).
A liability for the ANAP model is that if Cuba’s isolation would end, then the powers of Big Agro possibly could not be stopped – as cheap imports could freely enter while the US market could buy up the good quality agroecologically produced food. Also, if a capitalist credit system would enter Cuba, land would be required as collateral possibly leading to massive land losses on the part of family farmers (Interviewee 2) and land would have to be used to provide food for the American markets.

Table 5 – Case # 3 Buurtzorg India (healthcare)

<table>
<thead>
<tr>
<th>Name: Case number 3.</th>
<th>Buurtzorg India</th>
<th>Replicated:</th>
<th>The original model has been replicated in many countries (US, China, Japan, Germany)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Established:</td>
<td>2017 in India, 2006 in Netherlands</td>
<td>People reached:</td>
<td>Presence in 5 Indian states</td>
</tr>
<tr>
<td>Institutional form:</td>
<td>For profit Llc.</td>
<td>Field of operation:</td>
<td>Healthcare</td>
</tr>
</tbody>
</table>

The elderly care model of Buurtzorg originates from the Netherlands and it has been applied in India and other countries. In India elderly care is the domain of the family. Therefore, the model was adjusted to delivering health care services at the patient’s home. Accordingly, the receivers of care are different in India, not the elderly, but anyone who needs professional healthcare at home (Interviewee 3).

Healthcare in India is largely a private system, which is mainly concentrated in the cities. In large areas of the country access to healthcare is a serious problem for millions of people. Even if accessible, often healthcare-related expenses can drive families into debt. Another important contextual issue is the shortage of trained nurses in India. This is the space where Buurtzorg India (BI) operates. With EduGreen, a partner organization, BI trains mainly women to become
caregivers and brings affordable healthcare services in rural India. Caregivers are trained to do non-invasive tasks, such as cold and medicine management, the body fluid management, of helping to eat, wellness upkeep, personal grooming and psychological support – 80% of nursing is non-invasive.

BI builds teams of 12, where usually 3 nurses and 9 caregivers organize their work. The nurses are usually employed from the market while caregivers are trained “inside” by EduGreen. This way BI has positive impact in two key areas: through employment and training empowers (mainly) rural women and through the healthcare teams provides accessible healthcare. Prices are set to a level where those in most need can afford the services of BI. By granting a high level of autonomy for the teams, BI can minimize management expenses (8% overhead costs vs. 25% industry standard). BI care is focused on the wellbeing of the patient (not on profit) therefore educates patients and their supportive group (family) to learn self-care. BI helps to communicate and translate between physicians and the patient. Patients are being treated at home at one tenth of the cost of hospital-based treatment (Interviewee 3; Buurtzorg India, 2020).

IT plays a crucial role in BI as online education significantly reduces training time and costs. BI developed its own IT system which helps the self-coordination and knowledge sharing of the teams. By relying on the knowledge and experience of EduGreen, BI is working on an emergency protocol (which is a highly unregulated space in India) by developing curriculum for emergency medical technicians (Interviewee 3).

There is a high level of trust between Buurtzorg Netherlands, the originator of the model, and BI. In only a 3-page contract where the two organizations set the terms of the standards BI has to meet when delivering healthcare services. This trust then spills-over toward the teams of 12, who have a high level of autonomy in organizing their healthcare responsibilities. Similarly, trust is granted towards the patients and their family as they are considered active agents of the healing process. This model which allows to nurture genuine human relationships reflects its value in the low levels of abuses and low levels of nurse and caregiver fluctuation (10% compared to industry’s 40%). Nurses and caregivers are full-time employees with stable and relatively high salary, and sick leave. Nurses and caregivers can experience dignity through
their work, as the BI model allows them to become respected members of the patient’s family and community structure (Interviewee 3).

A liability of this model could be seen during the Covid pandemic, as many families in need of healthcare lost their income. Even though BI reduced its prices it can be seen that the low purchasing power and the absence of a widespread insurance scheme in India is a serious issue (Interviewee 3).

**Table 6 – Case # 4 Coopalim Strasbourg (food)**

<table>
<thead>
<tr>
<th>Name: Case number 4.</th>
<th>Coopalim Strasbourg</th>
<th>Replicated: Model originates from the USA and has been adopted in many countries and cities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Established:</td>
<td>2017, France</td>
<td>People reached: 300 member owners, 3 employees</td>
</tr>
<tr>
<td>Institutional form:</td>
<td>Association</td>
<td>Field of operation: member-owned and operated food store</td>
</tr>
</tbody>
</table>

Food stores are often organized to maximize profits. It manifests in the pricing strategy of the various items, in the marketing strategy (the placement of items and the visuals), in the choice of suppliers (providing big quantities, standardized products), in the employment circumstances (controlled, non-autonomous working environment) and so on. The model of the member-owned and operated food store became known through the Park Slope Food Coop from the US; it is designed to create a system where healthy and local food is accessible while no one’s labour gets exploited (Interviewee 4).

Coopalim is an adaptation of the model. Members are formally co-owners of the food store, contributing three hours monthly to run the store (cleaning, moving products, working on procurement or at the cashier, etc.). Working together builds trust through cooperation and teamwork and enables to keep prices as low as possible while creating access to food produced locally and by non-destructive methods. Only members are allowed to shop, and members also
share responsibilities. Members form working groups which make their decisions in a transparent manner; all members are allowed to join any working group and therefore influence core dimensions, such as pricing, procurement, and rules of working together. One person has one vote (Interviewee 4).

The biggest expense in a case of a food store is labour, and by minimizing it, food prices can be kept low. But a few employees can greatly help the running of the store. Coopalim currently has three full-time employees and 300 member-owners. Employees spend the most time in the shop and they are familiar with every dimension required to operate the shop. Employees train the member-owners to be able to fulfil the various tasks in the shop. Therefore, high member fluctuation can be a drag on employees as they have to explain the same tasks over and over again. Also, to run smoothly the shop currently relies on a few highly dedicated members who spend 10 hours a week in Coopalim. If membership were bigger and more stable, the workload could be spread out more evenly and possibly prices further lowered. No statistics are available from Coopalim, but in the Park Slope Food Coop members can reduce their food expenses by 40% (Bollier and Helfrich, 2019).

Work is organized in a way to be as interesting as possible, and members are allowed to choose tasks that they feel comfortable doing. The one member one vote rule allows everyone to have a say regarding how things are run in the shop. Voting is done on sector specific issues within working groups, but members are allowed to see the workings of the groups and either join those or tell their opinions (Interviewee 4).

Coopalim provides space for educational workshops and debates on topics related to ethical food and social justice. An association is being established with Coopalim, a bicycle delivery cooperative and an organization helping refugees running a small restaurant (Interviewee 4).

One liability of the model is that if not enough members can be drawn-in, then labour expenses will be relatively high making food costs higher. Also, if workload is disproportionally put on a few members and employees, then the danger of burnout is present and also the community character which could emerge through shared work is less likely to develop (Interviewee 4).
### Table 7 – Case # 5 Deccan Development Society (agroecology, access to land)

<table>
<thead>
<tr>
<th>Name: Case number 5.</th>
<th><strong>Deccan Development Society</strong></th>
<th>Replicated: In multiple areas of India (reaching 14 000 women) and South Asia</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Established:</strong></td>
<td>1983, India</td>
<td>People reached: Presence in about 75 villages</td>
</tr>
<tr>
<td><strong>Institutional form:</strong></td>
<td>Voluntary village level association (Sangham)</td>
<td>Field of operation: Creating livelihoods and regenerating land</td>
</tr>
</tbody>
</table>

The Deccan Development Society (DDS) started off as a village level association for the poor, including dalit women to ensure sustenance needs. Government programs in India for rural development often do not reach the most vulnerable, misdirect resources and favour high capital and high energy-input demanding structures (Interviewee 5.; Sathees 2004). DDS has become a vehicle for empowerment addressing issues of autonomy over food production, seeds, natural resource, market, education, and media.

The organizational structure delegates decision-making power to the grassroots level – the general body, including 3,500 women in sanghams, 19 women and 12 men on staff, and nine board members, meets annually to review policies, finances, and other matters. A fundamental approach underlying DDS’s structure is meaningful involvement of the community concerned. Communities are using Participatory Rural Appraisal as a method to give voice and understand individual and structural concerns and provide a platform to design solutions. Recruited and trained from the local dalit farmers, field officers are employed by DDS to help build communities and teach people how to farm in a non-destructive and locally fit way. Since 1985, DDS’s Eco-Employment Programme has supported more than 2,700 women farmers working to restore and reclaim more than 4,000 hectares of fallow, unutilized, and degraded agricultural lands across 50 villages (UNDP, 2021).

In 1996, DDS organized an alternative to India’s Public Distribution System to serve the critically food insecure. Through the community-owned Alternative Public Distribution
System, sanghams designate excess millets from the Eco-Employment Programme for community grain funds in 50 villages. It is the first millet-based program in the country, feeding nearly 50,000 families annually (UNDP, 2021). An important advantage of the DDS’s model over the public system is that the rules regarding beneficiaries of the program were designed and monitored by shangham members – this way reaching the most vulnerable while producing the locally fit millets over rice (not demanding irrigation systems and chemical inputs) (Sathees 2004). Through the Community Gene Bank Programme crop varieties under cultivation have doubled from 30 to 60, increasing biodiversity and soil fertility increasing households’ cash flow and food security. In 1999, DDS sanghams set up a food market, focused on healthy, local foods. More than 2,000 members buy from and sell at the market. DDS also established Café Ethnic, a full-service millet-based restaurant in the city of Zaheerabad with the aim to help urban consumers reconnect with millets and traditional agrobiodiversity - providing income from the market (Interviewee 5).

In the field of education DDS Mothers’ Committees lead and manage 25 balwadies, which are learning and nutrition centers for preschool-aged children. Also, established with the Indian government, the Pachasaale School provides out-of-school working children between the ages of 10 and 16 with education and life skills in ecological agriculture, carpentry, herbal medicines, and other subjects (UNDP, 2021). The Krishi Vigyana Kendra, or Farm Science Center, conducts independent participatory research with local farmers directed towards methods and knowledge relevant for the locally fit millet-based farming.

Managed by dalit women DDS operates a community FM radio station, the Sangham Radio, sharing local knowledge about culture, food, and agricultural practices. Also, 10 dalit women were trained in video camera skills, scripting, editing, and dubbing films, forming the Community Media Trust, which produces films for DDS and the public. The Trust provides a platform for women to speak publicly about their challenges, provides content for agriculture-related programs, and shares materials about gender and agroecology grassroots movements (Interviewee 5).

DDS sanghams have been replicated across 50 villages, and membership has grown to include 14,000 women.

A liability of the DDS model is its reliance on government funding and also the high level of vulnerability to climate change.
Table 8 – Case # 6 Farm City Detroit (urban garden, food)

<table>
<thead>
<tr>
<th>Name:</th>
<th>Farm City Detroit</th>
<th>Replicated:</th>
<th>Urban gardens are found in many cities around the world</th>
</tr>
</thead>
<tbody>
<tr>
<td>Case number 6.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Established:</td>
<td>2017, USA</td>
<td>People reached:</td>
<td>Several hundred</td>
</tr>
<tr>
<td>Institutional form:</td>
<td>Non-profit organization</td>
<td>Field of operation:</td>
<td>Food and urban gardening</td>
</tr>
</tbody>
</table>

The subprime mortgage crisis in Detroit still affects the livelihoods of many families living in the area. Access to healthy food is a big issue – food stores with fresh produce are either far away or sell very expensive products; turning Detroit into a ‘food desert’. As a foreclosure wave spread through the city, the number of vacant lands and blighted homes increased. With more than 100 thousand vacant lots, an area of approximately 23 miles (the size of Manhattan), Detroit’s potential for urban gardening/farming is high (FCD website, n.d.). On these lands Detroit sees an urban gardening movement spring up, where Farm City Detroit (FCD) is one among many.

In the urban gardening movement Michigan State University serves an important role by offering low-cost education programs. Part of the program is a 40 hour-volunteer work where the university connects the newcomers with the burgeoning gardening movement. FCD was created through this program by connecting fresh alumni with vacant land fit for urban gardening. FCD is a relatively small garden, it mainly serves as an educational and community meeting space. The people who come to the garden arrive driven by various motivations. There are those who want to serve their 40 hours volunteering time, others come to spend time outside while working together in community. Many high school students come to learn gardening. Also, people can serve their obligations at FCD towards the community due to violating the law. Often corporate employees come to the garden to do community work. FCD draws a
diverse crowd and provides space to meet and a common goal to work for together (Interviewee 6).

At FCD there are many volunteers who come regularly, every Saturday from March until November, three hours at a time. They are the core members of the garden; they are allowed to take produce from the garden. Surplus produce is regularly donated for those in need. FCD uses only organic insecticides and organic fertilizers (like chicken manure). The whole garden is nurtured collectively, so no individual plots are allowed. FCD serves as a community organizing space where food and health related practices are learned and shared (Interviewee 6).

One liability of FCD and other urban gardens is that their space is safe until land prices remain low. As soon as market prices begin to go up, it can become much more difficult to save these gardens.

Table 9 – Case # 7 Distributed Cooperative Organizations (organizational model)

<table>
<thead>
<tr>
<th>Name:</th>
<th>Distributed Cooperative Organizations</th>
<th>Replicated:</th>
<th>The model is adopted by many organisations: Cooperation Jackson, Guerrilla Translation, Laneras</th>
</tr>
</thead>
<tbody>
<tr>
<td>Case number 7</td>
<td>2013, Spain</td>
<td>People reached:</td>
<td>At least several hundred.</td>
</tr>
<tr>
<td>Institutional form:</td>
<td>Cooperative</td>
<td>Field of operation:</td>
<td>Governance and accounting models</td>
</tr>
</tbody>
</table>

Distributed Cooperative Organization (DisCO) is a model for collective action designed to help people create social and ecological value through commons-oriented cooperation. The DisCO model originates from the accumulated experience of Guerrilla Translation (GT): an organization established in 2013 by activist translators inspired and moved by the Occupy and
15-M; movements calling for radical system(s) change. The members of GT wanted to do work that helps these and other radical social movements. Therefore, they were seeking for an organizational model that would allow to translate and disseminate material relevant for the social movements while providing livelihood for the translators (DisCO.coop, Transnational Institute, & Guerrilla Media Collective, 2019).

GT translators perform three types of work: pro-bono, paid, and care work. Pro-bono translations are the ones that are the essence of the organization, these are the selected media materials which support the cause of the radical movements. Pro-bono work is made materially possible by paid work. Paid work comes from the market. GT uses a sliding price scale: translation work coming from organizations whose mission aligns with GT’s and have limited financial means will receive translation for lower price, while those with higher purchasing power pay more. GT does not do translation for organizations which are against the values of the cooperative. Paid work and pro-bono work are essentially identical processes performed by the same members, using the same methods. These tasks are mostly word-based; easy to quantify. The third type of work, care work covers the tasks of searching for paid work, project management, quality control, building trustful relationships, etc. – the “invisible” work that keeps the organization afloat. Care work is not assigned to set roles; those can be performed by any member. All members are required to do a minimum amount of care work. In the GT model all three types of works recognized and rewarded. The innovation is in the value and accounting system that has a protocol on care (or “invisible”) work (Guerilla Translation, n.d.).

DisCO is the structured and adaptable form of the value and accounting system of GT. Many organizations begun the adaptation process of the DisCO system. Among them is Cooperation Jackson, a Black solidarity network of cooperatives and worker-owned, democratically self-managed enterprises based in Jackson Mississippi, US; Laneras, a cooperative open-sourcing endangered knowledge and educating commoners on the machinery, tools and special aspects of truly sustainable fiber and clothing; or Multi-Talented Makerspace the first Zimbabwean makerspace. Feminist and commons-oriented values are coded into the protocols and algorithms of the DisCO system, but these organizations do not rely solely on technology and automation – they use DisCO in their governance model to facilitate and strengthen their collaborative culture. Autonomy is central to the DisCO model as it allows the minimization of control and command roles and members can self-organize and recognize and reward a diversity of values (Gerilla Translation, n.d.).
One liability or challenge when adopting a DisCO model is whether the adapting organization has the financial and other means. Also, despite the want to overcome exploitative relationships there is the risk to fall back into the social and cultural norms of the mainstream. The GT experience shows that it takes time and individual and group reflection to overcome such norms.

Table 10 – Case # 8 Health in Harmony (healthcare, forest preservation)

<table>
<thead>
<tr>
<th>Name: Case number 8.</th>
<th>Health in Harmony</th>
<th>Replicated:</th>
<th>Brazil, Madagascar</th>
</tr>
</thead>
<tbody>
<tr>
<td>Established:</td>
<td>2007, Gunung Palung National Park, Indonesia</td>
<td>People reached:</td>
<td>120,000 people</td>
</tr>
<tr>
<td>Institutional form:</td>
<td>International non-profit organization</td>
<td>Field of operation:</td>
<td>Healthcare, livelihood and ecological regeneration</td>
</tr>
</tbody>
</table>

Health in Harmony (HH) is an international non-profit organization operating health clinics in Indonesia, Brazil and Madagascar. The aim of the organization is to save rainforests. To understand the driving forces behind illegal logging HH organizes village meetings. Through the practice of Radical Listening HH learned that locals engage with illegal logging because they need cash for healthcare and other livelihood related expenses and no other sources of monetary income are available in the area. Locals were aware that the destruction of the forest affects their health negatively, but they did not know any other surviving strategies when cash was needed. When asked, three critical needs emerged that would help locals become ‘mandiri’, that is self-reliant, independent: 1) more education for the existing health care providers; 2) fish-farming training; and 3) water filters (Webb 2021).

To help households stop logging, HH operates health clinics where healthcare services can be accessed either through low prices or through various non-monetary contributions (for example planting seedlings, doing odd jobs around the clinic, providing manure, providing food, etc.). The organization established a system where individuals from villages where logging was
significantly down, received a higher discount to healthcare services (the lowest price was about the cost of a bowl of soup). Overall, the cost of care was about a third to the options available prior the establishment of HH. The monitoring of the system was done by locals with field knowledge and personal ties in the local social tissue. The whole system was designed by locals through the practice of Radical Listening. To help locals stop illegal logging HH introduced the Chainsaw Buyback program, where the organization purchases chainsaws from loggers and helps them to establish micro enterprises. It works as an angel investor scheme, but without interest charged. Also, by the request of the village communities HH organizes organic farming training where people are taught to grow food without (or with minimal) use of (relatively expensive) chemicals and to create the needed organic manure. The training is educated by locals. Through the Goats for Widows program a mated pair of goats are given to disadvantaged women. Each woman pays forward one baby goat to another widow, and also gives a few bags of goat manure to the farmers they had trained. It provides a steady income that allows them to afford important “extras,” such as sending children or grandchildren to school. The basis of the working model of HH is that the details of the conditions to access healthcare, the monitoring system and the various programs helping livelihoods to stop logging are designed by locals. For this reason, weekly open meetings are held. Also, HH employs and trains locals in order to be embedded into the reality of the place (Webb 2021).

When designing and constructing the clinic’s building, a guiding principle was to highlight the interconnectedness of nature and health (the meeting area and each room has views onto the national park). When possible, ecologically friendly, and locally sourced materials were used; local labor was hired, especially loggers to earn money and learn new, marketable construction skills.

In Indonesia, the joint efforts of HH and the local communities have reduced the number of households reliant on logging for their livelihood by 90%. Simultaneously, they produced 67 percent decrease in infant mortality in the population of 120,000 people serviced by the program’s medical center (Jones et al., 2017). HH is a women-led organization and helps to empower local women – one community health worker became the first village chief after saving so many lives in her village.

A liability of the model is that local tribe leaders can still significantly halt the adaptation of non-logging livelihoods; and also if loggers are not willing to quit logging, HH has its hands tied. Also, HH is financially dependent on donors – it is in the current model a significant
vulnerability. HH has started out in Indonesia, but its model is being adapted now in Madagascar and in Brazil.

Table 11 – Case # 9 Jelka House (housing)

<table>
<thead>
<tr>
<th>Name:</th>
<th>Jelka House, Habitat Austria</th>
<th>Replicated:</th>
<th>In many parts of the world: Germany, Uruguay, Netherlands, Austria, Hungary.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Established:</td>
<td>2018 (the model originates from 90’s)</td>
<td>People reached:</td>
<td>Tens of thousands live in similar housing arrangements worldwide.</td>
</tr>
<tr>
<td>Institutional form:</td>
<td>Housing association</td>
<td>Field of operation:</td>
<td>Housing</td>
</tr>
</tbody>
</table>

Jelka House (JH) is a housing project in Linz, Austria. The original model was conceived in 1992 Freiburg, Germany by the name Mietshäuser Syndikat (MHS). MHS is a federation of housing commons; a residential real estate self-managed by residents. The goal is to decommodify housing – through the years MHS has removed 177 house projects from the market. Each apartment building is owned by an association whose owners are the people living in the apartment. People living in the apartment pay „rent” for the association they own. This structure has made it possible for renters to escape the often exploitative, speculative housing market, and to acquire nice places to live with reasonable “rents” and stable futures. Each real estate property is owned by the residents’ association and a limited liability company (LLC). The LLC has two owners: the residents’ association for each housing complex and MHS. This legal structure gives MHS limited voting rights over the fundamental issue of selling the property or convert it into condominiums, and to changes in a housing association’s governance rules – it can act as a watchdog body. Otherwise, the residents’ association retains full powers of self-determination (Bollier and Helfrich, 2019:253-4). This power arrangement allows to keep the apartments off the market for perpetuity. Habitat Austria (HA) applies this model in Austria, where JH is one of the projects.
JH has currently eight residents and it is still owned by a landlord collecting rent. The tenants are in the process to purchase the building. There is an already established model for the finances, applied successfully four times in Austria that JH follows. Financial resources will be collected through a campaign where the JH community and HA will contact people (and possibly ethical banks) for long-term low interest rate loans. Interest rates are on a scale of 0.5 and 1.5 percent – those who can afford to support the project on a higher degree opt for a lower interest rate. Due to MHS and HA this model is already somewhat familiar to people in Austria which helps to establish trust in potential private/institutional lenders (Interviewee 9).

Solidarity is an important principle practiced at JH. Within membership a strong form of solidarity when one resident has temporary difficulties to pay rent, then others pool the amount needed. Outside membership one form of solidarity is the public living room accessible for everyone who needs space for community events, workshops and/or political organizing (Interviewee 9). The essence of JH is highly political in itself, as the idea that housing should be accessible is becoming in many parts of the world an ever more radical idea.

Decision making in JH is consensual, the process follows the structure of sociocracy. Consensus building is often a time-demanding activity, but decisions built on consensus tend to increase the level of accepting the discussed rules and generate proactivity regarding the commonly set goals. Being a member of a self-organized housing project like JH requires members to take responsibility for certain tasks which need to be done (for example learning about legal options, collect information on the available municipality-level funding options, repairing broken things and so on); tasks that often require a lot of effort to get them done properly. When considering the acceptance of a new resident the members of JH do multiple rounds of interviews to learn whether the potential newcomer is a person who seems fit for the cooperation required to build consensus and if needed to carry out tasks which might demand a lot of learning and effort (Interviewee 9).

The liabilities attached to this model are on the one hand financial – can the community gather enough money to purchase/build a house? The fact that in Germany MHS operates for decades makes it a lot easier for newcomers, as the existence of multiple successful projects builds trust in all parties involved. On the other hand, this model requires involvement, participation – if members are not active, then many processes can become difficult, costs might rise as things getting done around the house might require more money than if members of the community would do it themselves.
HA has a core group of approx. 30 people, none of them are employed by the association. One limiting factor is the size of the housing community and the size of the umbrella association HA – the system runs best if personal ties are relatively strong.

Table 12 – Case # 10 Lumituuli (energy)

<table>
<thead>
<tr>
<th>Name:</th>
<th>Lumituuli</th>
<th>Replicated:</th>
<th>Multiple thousand costumers are organized into user-owned organizations around the world.</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Case number 10)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Established:</td>
<td>1998, Finland</td>
<td>People reached:</td>
<td>1200+ shareholders</td>
</tr>
<tr>
<td>Institutional form:</td>
<td>Ltd.</td>
<td>Field of operation:</td>
<td>Energy</td>
</tr>
</tbody>
</table>

As a joint effort by local people at the Lumijoki municipality and Finnish environmental association, Dodo, Lumituuli Ltd. was established as the first nationwide, customer-owned wind power producer in Finland. The 1200 shareholders are mostly private citizens, but also firms, associations and municipalities (Jalas and Makinen 2018).

Lumituuli is one of the most successful crowd funding projects in Finland. The organization managed to pay the promised dividends and still attracts shareholders and bondholders - newly issued bonds are issued at a 5-6% annual interest rate. The existence of Lumituuli was made possible due to the liberalization of the Finnish energy market and infrastructure, which provided a choice for the consumers to choose among electricity suppliers (Interviewee 10). This made possible to challenge centralized electricity generation, and Lumituuli represents a way of broadening the constituency of energy systems (Jalas and Makinen 2018).

The core and founding members of Lumituuli had a vision of an organization where local citizens get actively involved in governance issues. But after 20 years it seems that Lumituuli
has engaged those who are already well positioned for participating in energy debates. Despite some level of sympathy by local residents and the open design of the organization, activity from non-core members remains low. Lumituuli is still mainly volunteer-operated, but these active members are from the small core group who have been working for the cause without any monetary compensation. Currently one part-time employed manager is the only paid person. Lumituuli core members still manage to be a political factor, as the company has been filing complaints against utilities for setting unfair prices for grid connection and by lobbying against the administrative practices related to the feed-in tariff which disfavors small companies (Jalas and Makinen 2018).

A challenge for the future is that if energy prices will go down and the feeding tariff for wind power will seize (as is planned for 2026), then small-scale operators as Lumituuli will find it very difficult to compete with large-scale operators. So, a recent board meeting concluded that Lumituuli will try to find ways to cooperate with other small-scale operators (Interviewee 10). Another key challenge will be to safeguard Lumituuli’s original mission, that is its existence as a producer of low-carbon electricity and avoid the dominance of profit-seeking logic, despite its financial success (Jalas and Makinen 2018).

Table 13 – Case # 11 Krishna Valley (intentional community)

<table>
<thead>
<tr>
<th>Name: (Case number 11)</th>
<th>Krishna Valley</th>
<th>Replicated:</th>
<th>There are multiple Krishna communities around the world</th>
</tr>
</thead>
<tbody>
<tr>
<td>Established:</td>
<td>1993, Hungary</td>
<td>People reached:</td>
<td>Multiple hundred people</td>
</tr>
<tr>
<td>Institutional form:</td>
<td>Network of organizations</td>
<td>Field of operation:</td>
<td>Intentional community</td>
</tr>
</tbody>
</table>
Krishna Valley (KV) is an Indian cultural center and eco-farm in rural Hungary. It is one of the largest and the oldest ecovillage in Europe. The 280-hectare farm was established in 1993, with the purpose of educating people about the values of ancient Vaishnava culture, self-sufficiency, organic farming, cow-protection, vegetarianism, and natural, God-centered lifestyle. The center of the community consisting of 150 monks and families is the temple, surrounded by agricultural lands, a cow sanctuary with sixty cows and oxen, a botanic garden, homes, a school, a guesthouse, a vegetarian restaurant, and other guest facilities (Krishna Valley, n.d.). KV residents follow a religion-centered lifestyle of their spiritual tradition with strict rules guiding everyday behavior (Interviewee 11).

Economic activities are organized in KV with the purpose to allow a Krishna religion-centred lifestyle. This requires the highest degree of material self-sufficiency possible. KV is near completely self-sufficient in food, as it is able to produce all vegetables, fruits, honey, grain, and milk products necessary. They produce all their food without using chemicals or other destructive methods. The community has its own fresh water source and treats its wastewater in a root zone system. KV is self-sufficient in wood which is the main source of heat energy. They are not completely independent regarding electricity, but they do produce a significant part of the required amount by solar panels (Interviewee 11).

KV is financed through two main channels: tourism and donations. Multiple thousand visitors come every year to learn about KV. Donations come through the Hungarian tax system, where everyone can select an organization which will receive an amount equal to 1% of the donor’s yearly personal income. A portion of the income is distributed among the residents of KV as a basic livelihood transfer; residents with special needs (for example medicine) can apply for additional funds (Interviewee 11).

KV produces a large amount of surplus in grains. Surplus is sold at a low price to Krishna believers who are living outside the Valley to help them with their material needs. There is a strict accounting method applied among the various divisions operating in KV. For this, they use an inside currency in which products and services are denominated (Interviewee 11). KV has a franchise system with a couple of vegetarian restaurants operating outside the valley; these are trust-based agreements where only the basic principles are put into contract (such as the use of only vegetarian ingredients or the abandonment of alcohol and coffee).
Regarding the relationship towards technology, the main guiding principle is to use only those technologies which do not hinder the individual’s and the community’s ability to live a god-centred life. This allows a mix of high and low technologies. For example, animal traction (ox) is used in food production and manufacturing, but modern artificial insemination methods are applied in the case of the cows kept in the Valley. There is some electricity in the residential houses, enough to have light to read in the evenings, but not enough to run a washing machine (Interviewee 11).

KV connected on multiple grounds to the nearby village through the previous decades. It is the biggest employer through agricultural jobs (these employees are usually not Krishna followers, but they must apply non-destructive agricultural methods); also in the municipality’s governing body there are a number of people who consider themselves Krishna believers (Interviewee 11).

Cow protection has an important status in the life of KV. Milk is needed for many religious rituals and the concept of good life practiced according Krishna values is one where cows are treated well. Therefore, cows are kept on the pasture, they are not fed with chemical substances to enhance milk production. After cows stop giving milk, they are still kept and being nurtured until the end of their life. Calves are not separated from their mothers. One of the most important self-imposed limits on the size of a Krishna community is the ability to feed cows without bringing in feed from the outside (Interviewee 11).

Leadership positions within the community are earned through appointments by the leaders. Decisions among the leaders responsible for the given task are taken through consent. Therefore, decisions can take a long time, multiple rounds of discussions going on for months; its benefit being that no one can feel they are pushed against their own will (Interviewee 11).

In KV there is a state accredited middle and high school and a tertiary educational institution. Education is not classroom-heavy, but rather students spend a lot of time outside learning sustainable agricultural methods and other skills required for self-sufficiency (for example to weave textiles). An important guiding approach towards life educated to students is that it is possible to live well with simple, frugal means if one possesses a high degree of spirituality and consciousness (Interviewee 11).

Obstacles in the replicability of the model are twofold. One is in the spiritual dimension, as it demands to follow a strict religious lifestyle; the other is in the material dimension as access to land can prove to be difficult in many countries.
Table 14 – Case # 12 Cargonomia (mobility, food)

<table>
<thead>
<tr>
<th>Name: (Case number 12)</th>
<th>Cargonomia</th>
<th>Replicated:</th>
<th>No exact data, there are many cargobike promoting/utilizing organisations.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Established:</td>
<td>2015, Hungary</td>
<td>People reached:</td>
<td></td>
</tr>
<tr>
<td>Institutional form:</td>
<td>informal group</td>
<td>Field of operation:</td>
<td>Mobility and food</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Cargonomia was founded by members of three organizations: a bike messenger company, a do it yourself bicycle workshop, and an organic farm situated in a village within 50 kms from Budapest. This fusion manifests as Cargonomia, which operates as a redistribution point of organic food for urban consumers; as a cargobike center providing access to sustainable mobility; and as an educational hub promoting the ideas of degrowth, social and solidarity economy and ecofeminism. The mission of Cargonomia is to contribute as an agent of transformation towards ecologically sustainable and socially just futures (Interviewee 12).

The name of the collective was inspired by the Latin version of autonomy (‘autonomia’) to express the sustainable dimensions of mobility by cargobikes. Autonomy and self-sufficiency are present in the main activities of Cargonomia. The organic farm does not use chemicals or heavy machinery when growing food, therefore keeping its autonomy against high capital requiring input dependency. Cargobikes are very effective vehicles of mobility (able to transport goods up to 60-120 kg) which can be repaired and maintained by relatively low capital dependent tools and parts. The educational activities can be practical (e.g., a bike repairing workshop) or theoretical (e.g., a debate on degrowth) – but all are intended to help individuals and communities be less dependent on the fossil-based infrastructures. The collective is deliberately organized to serve as an open public space where people can meet and share their
opinion and values, discuss and debate about what is important for them without the need of consuming anything (as it would be required in a bar or restaurant) (Lazányi 2022).

Cargonomia is an informal collective of five core members, who are active in the Hungarian and international degrowth and social movement being members in organizations/networks with similar value-orientation. Through this network Cargonomia was a key actor in launching the first agroforestry project in Budapest and has supported the operation of several community gardens. Cargonomia is occasionally helped by allies, such as a Danish cargobike building company which donated a cargobike for the collective; or been provided space to operate there for a lower price of rent (Lazányi 2022).

The collective itself is informal, but through its network it has access to the state and municipality grant-tender system. Members of the collective do not earn money through the activities of Cargonomia, and often transfer their incomes generated in their wage-earning employment to finance expenses related to the collective. Although Cargonomia members do receive material gains through the collective, but these manifest as recognition in the sustainability movement and therefore leading to a paying job, or as access to a network where members receive services in kind. It means that by being active in the collective, members spend a significant amount of their non-wage-earning time and energy to further the social and ecological mission of Cargonomia. Members are deliberately forming their life in order to be able to spend a lot of time and energy in the collective. It is a personal decision which rests on ethical considerations and on the members’ vision regarding good life. Such dedication is possible because all members have wage earning jobs and/or a family-community provided safety net (Interviewee 12).

Cargonomia attempts to have relationships based mainly on other-than monetary transactions, such as on reciprocity, in-kind engagements, gifts, and self-sufficiency. Therefore, cargobike renting does not have a fix price, but those can be rented in exchange of a donation or contribution by the renter and not necessarily directed towards Cargonomia, but possibly to others as well. The collective’s experience is that such type of engagement is often difficult especially with new partners, as generally at the beginning people see the relationship as a market exchange, as a purchasable service, and not as a long-term relationship based not on money (Interviewee 12).
Table 15 – Case # 15 Ouishare (empowerment, network building)

<table>
<thead>
<tr>
<th>Name: Ouishare</th>
<th>Replicated: Network spans from Europe to Latin and North America, to the Middle-East</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Case number 13)</td>
<td>People reached: People reached:</td>
</tr>
<tr>
<td></td>
<td>Multiple thousands</td>
</tr>
<tr>
<td>Established:</td>
<td>Field of operation:</td>
</tr>
<tr>
<td>2012, France</td>
<td>Connecting stakeholders to make problems visible, solvable</td>
</tr>
<tr>
<td>Institutional form: Association</td>
<td></td>
</tr>
</tbody>
</table>

Ouishare is a platform and a network which aims to contribute to the transformations required for ecological sustainability and social justice. It gets involved in issues that are ecologically and/or socially important but have no problem owners or the voices of the most affected by the negative consequences are not heard. Ouishare aims to create a collaboration among the stakeholders where everyone’s dignity and freedom is respected (Interviewee 13).

Ouishare therefore aims to build trustful relationship with the local stakeholders and using its embeddedness attempts to bring to the table all relevant parties to improve a given situation. In one of their recent projects Ouishare contributed to set up a system (together with local businesses and NGOs) in the French settlement of Roubaix where people in energy poverty could get help. In another project Ouishare works together with pension agencies to improve the quality of caregiving public service by connecting the agencies with stakeholders. One could argue that Ouishare fulfills a public function and public agencies should be doing such tasks – but often public institutions lack the financial and other resources, and this is where Ouishare steps in (Ouishare, n. d.).
Ouishare organizes debates on how to politicize social issues by connecting people who likely would not meet otherwise and could not learn each other’s point of views. These events are often sponsored and this provides income for Ouishare. Other streams of income come from public grants and subsidies, and donations from supportive organizations and individuals. Income allows Ouishare to employ Connectors, they are the social and institutional innovators who recognize the problem or listen to locals telling about their problems and connect them with powerful stakeholders, giving them a voice (Interviewee 13).

All the work done by Ouishare is open source. The organization publishes its projects and the learning points gained through the cooperation, therefore allowing others to learn from these efforts. The knowledge commons consist of methodologies on participative and community building methods. Also, through its media partners/allies Ouishare engaging with the public in order to politicize the issues (Interviewee 13).

One of the main liabilities of Ouishare is its financial dependence on outside sources. Also, the organization can pay a relatively low salary to the connectors which puts their livelihoods in a precarious situation.

Table 16 – Case # 14 Food Basket Pecs (food)

<table>
<thead>
<tr>
<th>Name: (Case number 14)</th>
<th>Pecsi Kosar (Food Basket Pecs)</th>
<th>Replicated:</th>
<th>Pecsi Kosar is itself a spinoff of the model, which has reached tens of thousands of people at least.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Established:</td>
<td>2020, Hungary</td>
<td>People reached:</td>
<td>200 families</td>
</tr>
<tr>
<td>Institutional form:</td>
<td>Association</td>
<td>Field of operation:</td>
<td>Food</td>
</tr>
</tbody>
</table>
Food Basket Pecs (FBP) is an association organizing a short food supply chain in the Hungarian city of Pecs (145,000 residents). Weekly approx. 200 families buy a significant amount of their food products through FBP. FBP connects consumers with local (preferable within 40 km radius) producers (Interviewee 14).

The association was established on a voluntary basis by a group of local residents who during the Covid pandemic begun to organize the food system. Due to its quick growth, FBP employs one person responsible for coordinating the activities among producers, consumers and the volunteers. About 15 volunteers help on a weekly basis to arrange the delivery point on every Friday to prepare for the logistical challenges (some of them work 10+ hours on Fridays). These volunteers are respected members of the community and can buy certain products with a discount (Interviewee 14).

The core of FBP consists of a group of 35 people, and they are present at the open meetings where decisions are taken for example regarding procurement, liaison with farmers, rules of cooperating, etc. One of main challenges appears to be to find farmers/producers who are open for cooperation; that is open for the questions and needs of the community. Another challenge is to activate group members, make them genuinely participate in the decisions, and proactively tell their opinions on matters. The role of the meeting facilitator rotates and this intends to involve members by giving them an active role (Interviewee 14).

Educational events are organized to teach members about various food related issues – about seasonality, about the working of the Big Agro system, about gardening and cooking. FBP functions as a network organizer to establish a short supply chain food system. Currently not all producers are following ecological methods, but members are pushing farmers to eliminate or minimize the use of chemicals (Interviewee 14).

FBP coordinates the joint purchase of compost among the farmers to reduce the cost of fertilizers. It also coordinates the market, for example keeps track what is produced by current farmer-members and avoids too much of the same product be grown. Farmers sell to other markets as well, but FBP provides a stable source of income. Also, FBP has helped multiple young farmers to connect with local restaurants (Interviewee 14).

The liability of the model is that if food products are considered basic on the market, members often turn to other sources. FBP seems to be growing which means that more and more producers can join. Also, the association has one employee, but it still depends a lot on certain
volunteers who work a disproportionate amount. Place can be a crucial issue as often rents are too high – municipalities here can help a lot. Farmers associated with FBP still often leave good produce on the fields go to waste, as they find no market for their products. Therefore, FBP plans to establish a cooperative which could operate a food manufacture (Interviewee 14).

Table 17 – Case # 15 Alliance for Collaborative Real Estate Development (housing)

<table>
<thead>
<tr>
<th>Name: (Case number 15)</th>
<th>Alliance for Collaborative Real Estate Development</th>
<th>Replicated: In many parts of the world: Germany, Uruguay, Netherlands, Austria, Hungary.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Established:</td>
<td>2010, Hungary</td>
<td>People reached: Tens of thousands of people live in similar housing arrangements around the world.</td>
</tr>
<tr>
<td>Institutional form:</td>
<td>Non-profit organization</td>
<td>Field of operation: Housing</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

In Hungary, as in many other countries, access to adequate housing is decreasing. One important driver pushing housing into a scarce good is the abandonment of the issue as a public policy task (Czifrusz and Jelinek, 2021). The Alliance for Collaborative Real Estate Development (ACRED) is a non-profit, democratically managed real estate developer. The organization helps to pool resources for communities and individuals to gain access to adequate housing. The model is inspired by Mietshäuser Syndikat (see its description at case number 8, Jelka House).

ACRED has two flagship projects. In the first one it helped to implement the first residential building in post-1989 Hungary to implement the principles of rental-based cooperative housing. The property is collectively owned and operated by an association, allowing seven people to live there with monthly contributions set at roughly 60% of market rents. Before the residents moved in the apartments, the house had been renovated. The plans to transform the building...
according to the needs of its future residents was drawn up by an association, and the renovation works by a cooperative. Financing came partly (55%) from future residents’ savings, partly from direct loans (or “friendly investments”). The second project involves a Community House. This Community House was established after the 2008 crisis and became one of the first collectively owned, grassroots community space in the country, a community property for its users and particularly neighbourhood residents. It currently houses ten non-profit organizations and cooperatives (among them a construction cooperative, a community online radio, a day care, a community energy provider, and ACRED). ACRED fulfills an operational and facilitating role; also the organization aims to help the growth of a solidarity economy and makes accumulated expertise available to other communities (SZAKI, n. d.) In their vision, a solidarity economy rests on similar non-profit and community-operated models not solely in housing, but in food, energy, mobility, healthcare – where these initiatives are connected into a network, a system.

ACRED is working to raise the non-profit community-operated housing model’s recognition and popularity especially in Hungary, but also on the international level. Therefore, it advocates for a supportive legal environment where such housing arrangements would receive financial assistance both from the public and from the private sector. By being involved at this early stage of popularizing the model in Hungary, ACRED gains valuable knowledge regarding the legal, financial, and community-building dimensions and helps newcomers to gain access to affordable and adequate housing (Interviewee 15).

ACRED is a member of an international network, the MOBA Housing European Cooperative Society which aims to spread the approach of non-profit cooperative housing. Through the network, member organizations share technical (legal, financial, community-building) details. Knowing about international examples put in practices helps to build legitimacy and trust towards the model by being able to point at them. This can be very important when talking to a municipality or a potential private financier. MOBA has begun to develop a revolving fund which could help financing such housing projects in South-Eastern and Central-Eastern Europe (Interviewee 15).

The liability of the model in the peripheral countries of Europe is the lack of capital, in parallel with the lack of knowledge about the model making it more difficult to draw financial resources in. Also, due to the negative connotation of cooperatives in Eastern and Southern Europe, and
policy making shifting towards the (inadequate) support of private housing, the model faces multiple barriers in its operations.

Table 18 – Case # 16 Campus de la Transition (education)

<table>
<thead>
<tr>
<th>Name: (Case number 16)</th>
<th>Campus de la Transition</th>
<th>Replicated:</th>
<th>Spinoffs have been established in France.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Established:</td>
<td>2017, France</td>
<td>People reached:</td>
<td>At least hundreds of students.</td>
</tr>
<tr>
<td>Institutional form:</td>
<td>Association</td>
<td>Field of operation:</td>
<td>Education</td>
</tr>
</tbody>
</table>

Campus de la Transition (CT) is an educational organization with sustainability and ethics at its core. It is located in the Forges, approx. 40 km southeast of Paris. The aim of CT is twofold: to serve as a hub for individual, community and society level transformation towards sustainable practices and system designs; and to inspire and facilitate other tertiary educational institutions to take a similar path. It offers various training courses on ecological and social transition for students in higher education as well as for professionals working at universities, civil organizations, public institutions and in businesses (Interviewee 16).

Both the content of the curriculum (systemic, trans- and inter-disciplinary approach to knowledge) and format (action research based, mind-body-heart pedagogy). One of the action research projects is organized around the issue of mobility. The research group consists of local collectives and municipality authorities as well as of students and faculty members exploring the possibilities of sustainable mobility, in order to reduce the relative isolation of CT’s site. CT’s building is an old chateau with land around it. Therefore, CT members nurture several gardens where they produce food using sustainable methods – the gardens serve as sources of food and also as educational sites. Education at CT is focused on the emotional and practical dimensions related to individual and social transformation (Interviewee 16).
Regarding its organizational structure, CT has a board and a general assembly. The board is made of 12 persons, of whom 2 are local residents embedded into the civil sphere of Forges; while the general assembly has 80 members, mainly the faculty, administrators and long-term students. Income is generated through tuition fees. CT often hosts students from other universities, in this case the sending university covers the tuition (Interviewee 16).

CT begun to establish long-term relationships as consultants with major French universities of various disciplines (such as Ecole Centrale Supelec, Ecole des Mines ParisTech, ESSEC Business School, SciencesPo Paris). CT gives assistance in developing a sustainability and ethics focused curriculum and teaching practices (Interviewee 16).

Table 19 – Case # 17 Edith Maryon Foundation (housing, access to land)

<table>
<thead>
<tr>
<th>Name: (Case number 17)</th>
<th>Edith Maryon Foundation</th>
<th>Replicated:</th>
<th>The model is present in many Western European countries.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Established:</td>
<td>1990, Switzerland</td>
<td>People reached:</td>
<td>No data</td>
</tr>
<tr>
<td>Institutional form:</td>
<td>Foundation</td>
<td>Field of operation:</td>
<td>Land and housing</td>
</tr>
</tbody>
</table>

The primary goal of the Edith Maryon Foundation (EMF) is to permanently remove land or real estate from speculation, and to make it available to be used by others in a socially responsible manner. Projects concern affordable housing, social and cultural initiatives, and also farmlands (EMF, n. d.).

A typical housing project at EMF usually begins by residents of an apartment building contacting the foundation, because their housing arrangement is threatened due to the owner’s motivation to sell the building. Selling the apartment would often mean higher rent prices which in many cases could not be covered by the current tenants. EMF usually offers to buy the land
the building is located on, while the tenants have to purchase the building. This requires the landlord to agree to sell either the land or the building for a below-market price (for example through sales price reduction, partial purchase price transfer, donation, interest-free loan or endowment). EMF supports the arrangement of residential collectives, because the more self-organized the community of the tenants the easier the work for the foundation. In some instances, families/individuals are contacting EMF for an arrangement where the family wants to take their land out of private ownership and trust EMF to use the land for socially beneficial purposes. In these cases, the foundation acquires the property for below-market price, commits to keep the land and the house available for the family for 99 years – after this period EMF becomes the owner of the land and the property. In large-scale urban projects EMF becomes the owner of industrial buildings and leases the space to social projects, art and cultural projects and local small-scale tradepersons (Interviewee 17).

In the case of a farmland, often elderly farm owners are looking for a retirement/pension arrangement or young farmers are looking for land. EMF works out arrangements where the elderly farm owners receive financial transfers (pension) and can often stay on the land, and the foundation finds the new owners or usufruct users. Also, EMS helps farmers to access land by putting land for long-term in the service of sustainable methods of farming (Interviewee 17). The foundation owns about 800 hectares of farmland in Switzerland, Germany and Austria (Access to Land, n. d.).

EMF has a Solidarity Fund where people who face difficulties to finance rent deposits can receive help. This way tenants have to cover only part of the deposit, while the bigger part is financed through the Solidarity Fund (EMF2, n. d.).

The liability of the model is its donation-dependency (otherwise market prices would bring market level rents). This model could work much better if EMF-like organizations had easier access to land (in Germany organizations face difficulties buying farmland), and/or received tax reductions (Interviewee 17).
Table 20 – Case #18 Alsomocsolad (local currency, participative democracy)

<table>
<thead>
<tr>
<th>Name: (Case number 18)</th>
<th>Alsomocsolad, Hungary</th>
<th>Replicated:</th>
<th>Local currencies can be found around the world.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Established:</td>
<td>People reached:</td>
<td>320</td>
<td></td>
</tr>
<tr>
<td>Institutional form:</td>
<td>Municipality</td>
<td>Field of operation:</td>
<td>Local currency</td>
</tr>
</tbody>
</table>

Alsómocsolád is a village with 320 residents in south-west Hungary. Alsómocsolád municipality has had progressive leadership in the past 30 years, which together with community members has resulted in various welfare and wellbeing programs.

In 2013 a development program through a series of discussions was co-shaped by the residents (30% were present), by municipality administrators and by invited specialists. The program was designed to expand the locals’ capabilities towards self-sufficiency and to have access to necessary goods and services. Central element of the program is the municipality’s own currency, the Rigac. Rigac is tied 1:1 to the official national currency, but the conversion has a 20% premium to discourage users from leaving the municipality currency. Significant transfers have been offered by the municipality to residents in Rigac in the fields of energy (installing insulation and/or solar panels) and food (to purchase tools for gardening, fodder, and, animals for animal husbandry). Residents who apply for the financial support need to partially self-finance the energy and/or food projects, but significant parts are paid out as non-interest bearing loans partially in national currency and partially in Rigac. Rigac than can be used by residents to hire local builders or purchase tools for agriculture; keeping parts of the financial resources in the local loop (Interviewee 18). 81% of the recipients reported that their level of self-sufficiency (when it comes to food) has been expanded. Many of non-recipients reported that only by knowing of the food program and by having increased access to local suppliers, they consume more locally produced food (Szemerédi 2019).
The municipality offers mobility, home caregiving, elderly care services which can be paid in Rigac. Also, local tax can be paid by the local currency. Those who use the Rigac regularly, 65% reported an increase in the betterment of their families’ welfare. An important learning point is that the villagers only very rarely use the local currency among themselves (only 4%) (Szemerédi 2019) – which means that the Rigac moves mainly between the municipality or the local shop and the residents. Another experience with the Rigac is that since the local shop has a limited range of products, many residents (especially those who have access to mobility) are buying in the not-too-far international supermarkets (which are significantly cheaper). This is recognized by the municipality, and this is why it attempts to help residents to produce food at the local level and possibly sell the surplus to the local shop (Interviewee 18).

A liability of the local currency-based capability enhancing system is that many residents face short-term cost pressures and therefore convert the Rigac received into the national currency (even at a 20% loss). For example, radically increased energy expenses push those who do not have savings into this direction, because for many of these households to partially wait and self-finance energy projects is not an option. Also, another factor limiting the flow and use of Rigac is that most of the residents are in a reciprocal relationship with each other where the quantification of food or help (services) is something alien to them, therefore being avoided in peer-to-peer interactions (Interviewee 18).

Table 21 – Case # 19 Communitarian-Cooperative Integral Health Center

<table>
<thead>
<tr>
<th>Name: (Case number 19)</th>
<th>Centro Integral de Salud (CICS) (Communitarian-Cooperative Integral Health Center)</th>
<th>Replicated:</th>
<th>People reached:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Established:</td>
<td>2009, Venezuela</td>
<td></td>
<td>Annual average of 200 000 patients</td>
</tr>
<tr>
<td>Institutional form:</td>
<td>Cooperative</td>
<td>Field of operation:</td>
<td>Healthcare</td>
</tr>
</tbody>
</table>
Health Center Cecosesola (HCC) is a communitarian-cooperative health center. HCC is part of Cecosesola, a cooperative established in 1967, Barquisimeto, Venezuela; growing into a network of 40 cooperatives operating in agricultural and agro-industrial production, funeral services, savings and loans, mutual aid funds, food distribution and healthcare. Cecosesola has 1300 worker-owners, who organize markets where an average of 100 000 customers purchase products weekly. These markets provide funding for new projects such as HCC, which cost approx. 7 million USD (Rath 2022).

HCC is communitarian in its non-profit approach and by strengthening the vision of a person-to-person encounter, the co-responsibility of each person with his or her healing process, replacing "medical orders" with invitations to reflect and learn about how the patient can become an active actor in healing and in following a healthy lifestyle. Allopathic methods are complimented with acupuncture, hydrotherapy, music therapy, yoga, and respectful natural childbirth. The communitarian approach manifests not so much in the therapeutic practices, but in the relationships HCC nurtures as a meeting and organizing community space - through respectful treatment, invitation to participate, the ability to listen to each other, access for people with low incomes, and in need of searching for economic solutions together. Also, the building of HCC is designed to be in harmony with nature, by relying on natural light and natural ventilation in the rooms and hallways. HCC has open spaces and open occasions where individuals can not only receive care, but also participate in the collective management if they wish to. HCC’s embeddedness into the local community was shown for example during the 2019 general power outages coupled with hyperinflation. HCC member-owners made a decision to continue providing health services without charging immediate payment. After the crisis, patients who received help paid for the health services (Interviewee 19).

HCC wants to drive a cultural transformation which would place humanistic-ethical concerns over profitability. Time, dialogue and "hierarchy of knowledge” are key aspects of this transformation. HCC invites health care workers and patients to be in dialogue, to empower people by talking with them in a language understandable to them. Therefore, self-management, self-financing and the educational processes are at the heart of the system. In the HCC - as in the Cecosesola network – autonomy and flat hierarchy is a design principle, as many members do not have a fixed labour positions/roles, nor are there protocols for the chains of command and for supervisory controls. There are no operating theatre coordinators, nor heads of nursing.
The plenary meetings held every two weeks are the only formal protocol; specializations arrange their own ways of working. Everyone can contribute their opinion at any time. The quality of self-organization improves with collective experience. Members are connected through a call to serve the community (Interviewee 19).

The “Medical Director” position only formally appears when required by the state. Authority at HCC therefore emerges from contributions and not from labels. A culture of conversation guides the process of (lean) self-organization. What distinguishes doctors from non-doctors is the payment system. The former's income is based on the number of activities carried out (for example, how many people visited the dentist's surgery in a given period of time). The rest of the members have a fixed income, which is practically the same for everyone not only at HCC, but at Cecosesola. This autonomy- and community-centred organizational design sometimes lacks the ability to respond quickly, but it also enables an approach to health that is open to a wide array of needs and expectations (Interviewee 19).

HCC is inherently a political organization as it is openly and proactively works for change (as part of the larger Cecosesola) by putting dignity and communitarian approach at its core. Among the main obstacles is the elitist self-conception of many doctors, who perceive themselves as superior based on their expertise, thereby not contributing to the dialogue-based approach of HCC. In many other dimensions of everyday life domination-based relationships are present, as patriarchy, racism, and hierarchical arrangements – this creates constant difficulties within Cecosesola and in its outside relations. Also, a tax regulation introduced in 2018 pushes Cecosesola into significant financial insecurity, which needed to be dealt with through actions of civil disobedience (Interviewee 19).

Table 22 – Case # 20 Auroville (intentional community)

<table>
<thead>
<tr>
<th>Name: (Case number 20)</th>
<th>Auroville</th>
<th>Replicated: There are intentional communities established around the world, however the size and legal status is unique.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Established:</td>
<td>1968, India</td>
<td>People reached: 3,300 residents and about 5,000 villagers working in Auroville</td>
</tr>
</tbody>
</table>
Auroville was established in 1968 in Tamil Nadu, India, on a plateau ecologically restored and reforested in the community’s pioneering years. With a current international membership of almost 3000 people from over 50 different nationalities, Auroville is the largest, most culturally diverse intentional community in the world, and one of the longest standing (Clarence-Smith and Monticelli, 2022). The purpose of Auroville is to realise human unity.

Aurovilians are expected to dedicate their time and energy towards collective welfare by practicing Karma Yoga (the practice and spirituality of unselfish action). There are members who might work in one or more of the enterprises or they may fulfil public service roles. All income generating services are object to a 33% transfer after net profits to finance welfare expenditures (Interviewee 20).

The 170 businesses established in Auroville are social enterprises. Many of them innovate and install appropriate technology solutions within and outside Auroville. Auroville produces a world-class wind pumping system, the need for which arose in the 1970s to pump water to nurture the nearby afforestation. Similarly, solutions are offered in organic food production, renewable energy, natural dyeing, nonviolent building technologies – many of these services and products are brought through commerce or by gift to other parts of India as well (Auroville, 2020). People who work do receive cash, Indian Rupees (as not all necessities are available in Auroville), and also an internal currency, which works as a credit. The internal currency can be used to purchase all products and services inside Auroville.

A provisioning cooperative operates to cover basic needs. Aurovilians who choose to be members can select from three standard packages. Healthy, good quality and eco-friendly products are prioritized. Following the spirit of service several businesses offer their products at a cost-price or on a discounted price. Coop members are expected to contribute according to their consumption, which is tracked by the cooperative. There are members on both spectrum; those who for a longer period of time run a deficit account, and those who intentionally make surplus contributions to help those in need (Clarence-Smith, 2019).
The everyday life for most Aurovilians is diverse, as people can meet frugal needs by working approx. five hours per day. Few people feel that they must take exploitative jobs to survive, but at the same time no one can accumulate a significant amount of wealth. Most people have time and energy to be involved in multiple business and/or public projects while also doing sports and have time for non-work-related activities (Interviewee 20).

Education in Auroville is not separated from life. Students have a lot of non-academic (for example artistic) courses and do some sports every day. A unique aspect of the system is the “Awareness Through the Body” program that helps children develop their capacity for attention, concentration and relaxation, while enhancing their ability for self-awareness and self-regulation. It is an accompaniment to the Karma Yoga spiritual tradition. Aurovilians asked in a survey (Clarence-Smith et al., 2021) report that there is a feeling of learning from the community as a whole; not only doing classes in the school, but also going and exploring different aspects of the community and activities in the community and interacting and learning there. It is a model of a learning society as a whole (Interviewee 20).

The main financial resources come from the Government of India, from NGOs and other organizations in India and abroad, from the profits of commercial units within Auroville, from a number of Auroville International centers around the world, from tourism, from cash donations made by visitors and outside supporters, and from the Aurovilians themselves (Auroville, 2020).

Auroville is in constant experimentation with forms of peaceful co-existence. Its political and governance model is also subject to modifications and development. All major decisions must be ratified in community-wide general meetings, the ultimate decision-making forum of the community. Out of the approx. 2 500 adults, about 600 are present at such meetings (Interviewee 20).

There are working groups responsible for specific areas, and they must publish transparent reports on their proceedings. In Auroville, anyone can design and propose a policy, or the amendment to a policy, and bring it to the community at large (Clarence-Smith, 2019). New methods - for example citizen assemblies and participatory budgeting - of involvement and participation are experimented with, as lack of engagement from the majority of the population, lack of diversity in those who choose to participate, lack of understanding of or education regarding the challenges the community faces, and lack of constructive communication skills.
leading to often hostile and polarized dynamics in deliberations hinders collective decision-making. Meetings are held in English which makes comprehension and participation for many Aurovillians difficult; furthermore, race, nationality, gender, age, class and caste influences members’ sense of entitlement to participate even in horizontally-designed assemblies (Clarence-Smith et al., 2021).

Auroville is 50+ years old which shows resilience, but there is a danger towards its future. Recently bulldozers arrived at Auroville accompanied by police, destructing trees and a youth center, signs of the accumulation of power struggles with outside political forces and of inner divisions (Ellis-Petersen 2022).
8. RESULTS

The purpose of this chapter is to present, analyze and interpret the data gathered on the selected CBOs in relation to the research questions. In order to address the research questions the method of systems mapping (Barbrook-Johnson and Penn, 2022) is used as a tool to handle and to illustrate the large amounts of qualitative data in a comprehensive way. The presented map visualizes the variables, links, and feedback loops of the various concepts and factors which emerge from the data. The map could be structured and drawn in multiple ways. The presented layouts reflect my interpretation of the data (supported by intercoder reliability discussions), where the concepts and variables of autonomy, access to needs satisfiers, and empowerment take the central positions (green nodes in the middle of the map).

All nodes are to be understood as variables which can have a higher/lower amount/degree of the given factor. Those concepts and factors emerging from the data were formulated into variables (nodes) which can exert change in the whole system. The nodes connect with each other through arrows; the positive, reinforcing relationships are presented by a solid line and a (+) sign, indicating that change in the initial node causes a similar (co-movement, increase or reduction) type of change in the receiving node. Dashed lines and (-) signs indicate that the two nodes change in opposite directions, if one goes up, the other goes down (and vice versa). When hash marks are seen over the arrows it signals a delay in time. In this chapter where a node/variable in the systems map is being discussed, that is being treated as an operationalized factor, then in the text these variables are in square brackets.

This chapter proceeds by illustrating and describing the systems map of the community-based organizations, then to address the research questions, and finally to discuss the implications of the results. The description of the themes emerged from coding and the description of the systems map variables can be found in the Annex (Section 11.2., 11.3.).
8.1. The Systems Map of Community-based Organizations

Figure 1 - Systems Map: Complete Picture

8.1.1. The Context: Unrepresentative Material Regime(s)

The fundamental factors which affect the context of CBOs are the nodes populating the [Unrepresentative Material Regime(s)] (UMRs) set (Figure 2). This set consists of the variables named [Unfavourable External Conditions], [Unequal Social/Ecological Exchange], [Overhead Costs of Everyday Livelihood], [Debt Bondage], and [Aggressive Coordination]. The concept of UMRs (Whitaker 2009) describes the arrangements driven by the gatekeeping elites who have power to influence/structure local production and consumption patterns. A re-occurring dynamic of these arrangements are materially-oriented and short-term-focused that are driving systemic difficulties of consumptive consolidation, environmental degradation, and widening experienced externalities. Social order is influenced by these elites to generate appropriable material gains with little or no regard to well-being and ecological concerns; in these
arrangements access to needs satisfiers are reduced or removed in the given locality, and/or maintain environments that do not support individual/organizational autonomy.

*Figure 2 - Systems Map: Unrepresentative Material Regime(s)*

![Systems Map](https://kumu.io/tamasveress/cbos-processes-flows-c3a5-9fcf-aba5-cb54-8b89#untitled-map)

Link to the digital view of the map: [https://kumu.io/tamasveress/cbos-processes-flows-c3a5-9fcf-aba5-cb54-8b89#untitled-map](https://kumu.io/tamasveress/cbos-processes-flows-c3a5-9fcf-aba5-cb54-8b89#untitled-map)

[Unequal Social/Ecological Exchange] stands for socially and/or ecologically exploitative arrangements. Unequal social exchange can mean an unfairly low salary or price paid for a given service or product, while unequal ecological exchange occurs when the given action violates the stability and integrity (the regenerative capacity) of the ecosystem(s) affected. Multiple interviewees described such arrangements being present in their respective localities. For example, Interviewee 5 described how state-promoted rice farming requires relatively
expensive irrigation systems draining local water resources, while at the same time taking away land from the locally fit millet farming. This arrangement is financially beneficial for a few landowners holding (relatively) large estates, while small-scale and landless farmers are put in a precarious position. Beyond the issues of access to land, (state protected and promoted) cash-crop-oriented arrangements leave many with worse dietary options, as locally fit millet varieties are significantly more nutritious than rice or wheat, which plants have been distributed in various welfare schemes (such as public distribution systems and school meals). Here the concept of UMR captures the different spheres of commodification in the given locality, pointing to the wide array of social, ecological, political, economic, and cultural arrangements which drive-out locally adapted, low-input requiring farming (and therefore livelihood) practices leaving many worse off, while causing ecological harm. Similar dynamics are present in the environments of the other sampled CBOs, such as the housing sector (Interviewees 6, 9, 15, 17), where arrangements are supporting rent/profit generation for the owners rather than access for those in need, also in finance (Interviewee 1), in food (Interviewees 2, 4, 14), in health care (Interviewees 3, 19), in energy (Interviewee 10, 11), in mobility (Interviewee 12) and in other fields.

[Unfavourable External Conditions] stands for the external factors which (in)directly hinder or deplete [Access to Needs Satisfiers] in the given locality. These can be, for example, state subsidies directed towards destructive industries, such as the fossil fuel industry or the industrial agricultural sector; as these industries drive ecological destruction through the respective supply chains, while often engaging with unethical social practices, therefore causing [Unequal Social/Ecological Exchange]. External factors could be natural events as well, which cause damage to the local ecosystems and/or infrastructures, therefore reducing [Access to Needs Satisfiers].

[Unequal Social/Ecological Exchange] can cause an increase in the [Overhead Costs of Everyday Livelihood] in various ways. Barriers to access to provisioning systems (or their absence) raise the overhead costs of everyday livelihood (for example, without public or communitarian transportation individuals have to pay from their own pocket for mobility; similarly for healthcare, education, energy, etc). Also, the cost of basic consumption goods (food, clothing, etc.) is included. Cost should be understood not only in monetary terms, but broadly, including time, effort, and other expenses. When the [Overhead Costs of Everyday Livelihood] variable increases, it means that individuals and households face growing
difficulties to meet basic needs, for example when due to industrial activities the locals have to walk far to access clean water. [Debt Bondage] can be driven either through [Unequal Social/Ecological Exchange], and/or through increasing [Overhead Costs of Everyday Livelihood]:

“I think the big problem in a capitalist country with credit for small farmers is a double-edged sword because on the one hand that allows you to scale up your production. But on the other hand, if you have any kind of problem and you can't pay, then you lose your land. So it is one of the main reasons for peasant land loss around the world is debt.” (Interviewee 2)

“... possibly there will be a family, who says they can't pay their bills, so what can we do in order to avoid them getting into a debt-spiral, to avoid them turning for a loan to a usurer, to avoid having to heat [their homes] by burning garbage... ” (Interviewee 18)

[Aggressive Coordination] stands for the level of aggression that is present in the various socioecological arrangements affecting the localities of the CBOs. Kornai (1984, 307-310) distinguishes four coordination mechanisms: market, bureaucratic, ethical, and aggressive. These coordination or control mechanisms describe the relationship of two or several mutually interacting individuals or organizations. The coordination mechanisms are present in a mixed form in a given society/locality. The different forms operate side by side; their scope is partly disjunct, but partly they assert themselves intertwined.

Kornai’s (1986) classification describes relationships in the social realm, but in the framework of current analysis, these mechanisms are extended to the relationships between human and non-human entities. [Aggressive Coordination], in its ideal-typical form, describes a relationship between a superordinated and one or several subordinated individuals or organizations, where willful force, not acknowledged by law or morality, is applied. Transformations can take place, as for example openly willful force can be institutionalized through time, turning relationships into legally sanctioned bureaucratic coercion. The combination of market and aggressive coordination mechanisms can be seen for example when a corporation relies on its power to increase profits/rents with no regard to social or ecological
concerns (such as failing to provide dignified working conditions, and/or violating ecological systems’ integrity and regenerative capacities). [Aggressive Coordination] drives [Unequal Social/Ecological Exchange] contributing to higher [Overhead Costs of Everyday Livelihood], and possibly pushes individuals/households into [Debt Bondage]. Multiple interviewees described relationships where aggressive coordination was present:

“We are living in an economy that just does not fulfil the results and the goals of improvement of human lives. And at the same time is fully unsustainable for the planet, for the environment.” (Interviewee 1)

“... It's basically a bottom-up redistribution. So like many people have a need [for housing] that is satisfied by a few people who are having the money or the wealth to get into the real estate market. And so it has a very high level of [entry barrier] you need to fulfil to [become an owner,] in terms of money. ... And because all the people have a need for living, and so it's not like there's going to be a big crash and nobody will need a house anymore, nobody will want a house anymore. And that's like a basic problem...” (Interviewee 9)

To sum up, in UMRs workers’, consumers’ and multiple other stakeholders’ autonomy is restricted to options which mainly serve profit and/or power purposes against other considerations, such as social needs and ecological concerns. It is true even if employment contracts are signed ‘voluntarily’, as often taking part in UMRs is still a favourable coping mechanism, then being outside the locally available set of UMR arrangements. In some instances, UMR describes how social arrangements lock-in individuals and communities into the iron cages of high energy and material dependent livelihoods and everyday practices; in other cases, UMR stands for the lack of or absence of organized provisioning systems which could provide access to basic needs in a given locality. The presence of UMRs could be detected in all sampled CBOs. Since a precondition for the existence of UMRs is the lack of choice, and/or lack of capability of a significant number of stakeholders to exit such harmful arrangements (or avoid the negative consequences), the central, reoccurring themes in the interviews were autonomy, access to needs satisfiers, empowerment and their in/direct relationships.
8.1.2. Access to Needs Satisfiers and Autonomy

Throughout the interviews, autonomy, access to needs satisfiers and their relationship was a reoccurring theme of central importance (see Figure 1).

Needs are limited and unsubstitutable and meeting them is a necessary condition for human flourishing; whereas desires are potentially endless and substitutable, and meeting them is not necessary for human flourishing (Fuchs et al., 2021 in Kanerva 2022). The concept of satisfiers (Max-Neef et al., 1991) helps to distinguish between necessities (satisfying needs) and luxuries (satisfying either needs or desires). This distinction shows that one particular need—say, the need to make one’s own life choices—can be satisfied by many different satisfiers, some of which are healthier and less harmful than others (Fuchs et al., 2021); while a particular satisfier can satisfy several different needs (Sahakian et al., 2020 in Kanerva 2022).

Also, needs satisfaction can be arranged in multiple ways; for example, on the macro level, people in the Netherlands live on average over a year longer than people in the USA, and have similar levels of life satisfaction – and yet their per capita ecological footprint is less than half the size (4.4 global hectares compared with 9.4 global hectares) (Abdallah et al., 2009); while on the micro level, the same amount of nutrition could be produced through ecologically degrading methods, and also through non- or less-degrading methods. Accordingly, societies and communities can organize themselves differently, to satisfy needs with smaller resource throughputs and negative impacts (Fuchs et al., 2021).

The importance of autonomy comes up in relation to the access- and opportunity-restrictive operation of given UMRs. In the sampled CBOs, autonomy appears in various forms - both as an end-state that an individual or organization strives for; and as a precondition to reach something. The two forms of autonomy are not exclusive. Also, based on the interviews, autonomy can be distinguished regarding its level of appearance whether it is individual and/or organizational autonomy. For example, Krishna Valley strives for autonomy from the centralized and fossil-based provisioning systems, which would allow them to practice nonviolent ways of living:

“in the current moment, if all the outside-world provisioning systems collapse, there would be no input, [Krisna Valley would still] function. This is very very important.”
(Interviewee 11)
Similarly, the aim to be non-reliant on the destructive systems is expressed by Cargonomia:

“... [the way we organize ourselves is an experiment], thus we don’t need to invest financially, therefore being able to keep our freedom against the system of the market economy.” (Interviewee 12)

The Cooperative for Ethical Financing aims to help individuals and organizations gain autonomy from the dominant financial system:

“... [we are] trying to engage with as many as possible of those community-based organizations and communities and people who wanted to do some kind of change but don’t have a structured way where they can fulfil their needs. And then to try to consolidate it through a decentralised but connected network and work together, then by enlarging our ecosystems around those decentralised nodes.” (Interviewee 1)

Following a similar pattern, Health in Harmony helps individuals to gain autonomy from the destructive livelihood based on illegal logging. As a local villager and ex-manager for a palm-oil plantation explained, he quit:

“... because you either yelled at people or you were yelled at. No amount of money was worth that kind of life. Instead, he became an organic farmer, using the skills he learned at [Health in Harmony]. This was also the hope of these communities in Central Kalimantan: that with new skills, they might create independent livelihoods. With more economic freedom, they would have the choice to keep their forest.” (Webb 2022, no page number)

The above quotes highlight the link between [Autonomy] and [Access to Needs Satisfiers]; all interviewees explained how their respective organizations want to gain and/or support autonomy in order to meet basic needs. The crucial importance of autonomy - both on the individual and organizational levels - is supported by psychological research.

Self-determination theory posits that experiences of autonomy lead people to be more prosocial, whereas experiences of control lead to antisocial actions (Donald et al., 2021); controlling environments, whether they are familial, institutional, cultural, economic, or political, interfere with wellness and happiness by undermining autonomous functioning, while in contrast, support for autonomy is associated with individual thriving, and national quality of life (Ryan
and Deci, 2011:46). Within modern organizations, almost everyone is controlled by someone, leaving very few people who are not exposed to controlling environments (Lammers et al., 2016).

Because most workers do not feel much autonomy in their jobs or connection to their work groups, they experience some lack of autonomy (Ryan et al. 2010). These results are supported by Gallup’s (2022) large-scale global survey, telling that 60% of people are emotionally detached at work, and 19% are “miserable.” Emotionally detached people, because their engagement needs are not being fully met, they’re putting time — but not energy or passion — into their work. Miserable, or actively disengaged employees are resentful that their needs are not being met and are acting out their unhappiness; every day, these workers potentially undermine what their engaged coworkers accomplish (Gallup, 2022).

So context, or (organizational) environment can be distinguished as supporting the experience of autonomy, and those which are not supportive, but restrictive. Environments that support the experience of autonomy facilitate humans’ innate inclinations to be prosocial, whereas controlling environments reduce individuals’ prosocial tendencies, and often catalyze antisocial behaviours (Donald et al., 2021). This is invariant across cultures, as Yu et al. (2018) find that comparing the United States (a typical individualist culture) and East Asian countries (typical collectivist cultures), the difference between correlations was not significant. However, there are cultural differences regarding the means by which members of diverse cultures will feel self-determined as a reflection of the important values and goals of the specific culture (Downie et al. 2007). In the sampled CBOs, the organizational environment allowed for a relatively high degree of autonomy both on the individual and on (sub)organizational level, as it can be seen in the case of Auroville:

“... [compared to the typical workplace] the culture of work here is much more accessible and much more fluid. And people can just show up and either volunteer somewhere or work a quarter time or half time. It's very much based on some kind of consensual agreement between, it's not so formal ... it's more fluid ... people are usually involved in more than one thing. They might be involved, let's say, working in school and I'm thinking of people that I know. And at the same time, volunteer somewhere else, or I'm involved in some kind of art or culture, or are involved in the governance of
Auroville. It's also not uncommon for people to do rather than just being in one full-time job to do two half times because they like that diversity. So there's a lot of different, like I say, the flexibility of work is there.” (Interviewee 20)

Similar approaches can be seen in the case of Maryon Stiftung and Pecsi Kosar:

“we like the idea of self-administration. So those who live in the house and use the house should also be able to decide what needs to be done with the house and should not always need to come to us asking ... [the community of residents] can decide themselves when and how much and how and where to invest and change the house for their purpose, for their needs.” (Interviewee 17)

“... we are arriving to decisions in a way that everyone has the right to influence financial issues. Deciding on what should be financed is not the responsibility of finance/accounting people. So yes, [we do it in order] to dare people to express their opinions, to have a say, and to make them exercise it.” (Interviewee 14)

There are two other important factors - besides autonomy, when an action is characterized by feeling volitional or self-endorsed (Ryan and Deci, 2011) - that may also be associated with prosociality and antisociality. One is relatedness, which has a clear theoretical link to prosociality, given it centers on care for and from others. The other is competence, which may also link to prosociality if, prosociality provides an opportunity to feel effective and have a positive impact (Weinstein & Ryan, 2010 in Donald et al. 2021:51).

Relatedness and care are present strongly at Health Center Cecosesola (HCC), where healthcare is practised through a communitarian approach. They perform modern allopathic methods, but

“[taking] a cooperative-community process, from the moment the person enters our Center until the moment he/she leaves, it is part of our process of cultural transformation which aims at the possibility of relationships of responsibility instead of
exploitation, relationships of trust instead of mistrust, relationships of mutual support, relationships of dignity instead of indifference, relationships where the humanistic-ethical aspect is by far above profitability.” (Interviewee 19)

At Jelka House, relatedness is practised both within the small community of the residents and also directed towards the ‘outside’:

“... we try to share all the things evenly, we try to share workloads, we try to share financial burdens. And so what we do on a regular basis, if somebody's income situation changes where somebody says: “I don't know where to get the money from for the next half year or something.” Then we try to [figure out] how can we, as a group, as a solidarity collective make up for that. ... That is solidarity on a day to day level, on a very direct level. And then also we try [practice] solidarity with other projects that try to transform the world in some kind of way that fits our ideas of where the world should be going.” (Interviewee 9)

At Health in Harmony care between humans and care for the forest is institutionalized through reciprocity agreements. As one of the co-founders and leader of the organization expresses:

“... like most humans on the planet, they [local villagers] didn’t want to be destroying their home and future but simply didn’t have a choice. Most people globally are in this same situation. But with the right knowledge and resources, most of us might be able to make different choices. In the framing of our question, we [Health in Harmony] wanted to make sure it was clear we recognized [the locals] as equal partners: they had a gift to give the world as guardians of this precious rainforest, and they might receive gifts in return.” (Kinari 2022: no page number)

Arrangements, where all involved stakeholders have the option to reciprocate, are among the crucial factors that make the sampled organizations community-based, and it is a major factor that separates CBOs from philanthropy-based exchange systems. As Zamagni (2022) explains, philanthropic action is often unidirectional, generating dependence and igniting shame,
humiliation towards the (recipient) self, and negative feelings towards the donor. CBOs are arrangements where peers can contribute meaningfully to the common lot, and they can reciprocate - and this makes these organizations community-based.

Care is also at the heart of the Deccan Development Society, where Dalit (lowest cast) women organize themselves to regenerate land through farming local varieties. To be able to participate, to contribute, many women needed help in caring for their children when they are farming:

“So women when they were participating in all these farming activities, they realised that it was getting very difficult to take care of children while working in the field. They had to tie them to their bags [hanging on them], they had to leave them on the ground [unattended] and they would start eating mud. So they were complaining that it was becoming a problem. And they needed some kind of space where they could leave their children and they can go to work. So they started the Balwadies system, essentially a daycare system.” (Interviewee 5)

Care can be extended and practiced towards non-human beings as well as can be seen in the case of Krishna-Valley:

“... we call it cow protection. So, in contrast to the exploitative quality of capitalist arrangements, we are taking care of the animals throughout their whole lives, and are using them in a very friendly manner. Cows are milked by hand, and even when they stop producing milk, they are still being taken care of. ... [Old cows which stopped giving milk] go to the pasture kept for retired cows. ... [A]nd what is very interesting, a regular cow farmer doesn’t even believe it, but heifers begin giving milk prior to having any offspring. Simply by love, so by reciprocity. It is something that those who build their dairy farm on bloody exploitation, don’t understand how it is possible, because they don’t love the cows but exploit them, and then kill them.” (Interviewee 11)

Regarding competence - as the third psychological factor associated with pro/antisociality, next to experiencing autonomy and relatedness (Weinstein & Ryan, 2010 in Donald et al. 2021:51)
CBOs are spaces where peers can gain and practice competence to genuinely contribute to the betterment of both the individual and the community. CBOs are organized in a way to allow people to contribute, where besides meeting individual/household needs, peers have the opportunity to demonstrate and practice their commitment to the betterment of the community’s capability to support access to needs satisfiers. It is an important feature as it makes reciprocity (the avoidance of unidirectional relationships) possible, providing dignity for those involved. For example, at Deccan Development Society (DDS) a group of women learned the use of cameras, scripting, editing, and dubbing films, claiming for the first time in India ownership over this powerful tool of communication, practiced by women. The media material produced by women at DDS were of a unique, community-based perspective that was not existent until that point. These materials were the manifestation of the ‘core philosophy of that media [should be] by the people, of the people, and for the people’ (Interviewee 5). The movies produced became

“important rallying points for many civil societies in lobbying efforts or advocacy efforts. It helped to get the millets into the National Food Security Act. It helped to get the national community radio licensing. [Prior] there was no community radio.”
(Interviewee 5)

The importance of competence is present at the housing CBOs, as these housing arrangements require a relatively high degree of commitment and competence in issues that in private property arrangements are not so relevant:

“right now [we are] in the middle of the process of establishing a company. So it has all the different aspects of laws and how it's actually going to work. That's a lot of research and also a lot of getting information from people that are doing this professionally because it's so much responsibility. We don't want to have it on our shoulders based on just [our own] research, so we need some professional input as well. And then the next thing that will be very time consuming is having a campaign ... to raise enough ... person to person loans, private loans to actually buy the house. So it's going to be a lot about being present on social media, being in the media, ... promoting
our ideas and getting people to invest in our project and give us loans.” (Interviewee 9)

In CBOs competence is usually sided with autonomy and relatedness, as is the case at Detroit City Farm where one goal is:

“... to put the idea that you can do it in your house or you can come and learn with us and we’ll do it all together and all that we grow is for the neighbourhood for this around the community. So what we provide is not only food, but also the experience to grow your food. And also a place where they can come, engage in the community, hang out, know who [you] live around with, and connect...” (Interviewee 6)

Well-functioning CBOs are spaces where people - while satisfying needs - can practice and experience autonomy, relatedness, and competence; and where individuals can achieve things in groups that individually they could not.

8.1.3. Community-based Organizational Characteristics
Community-based Organizations (CBOs) can be understood and analyzed in relation to the respective, locally-relevant Unrepresentative Material Regimes. The most important characteristic of CBOs is their focus on local needs, in a way that respects the dignity of people involved. The needs-orientation (and not the exploitation of desires) is clearly articulated in the case of all studied CBOs:

“... the wider vision is to have housing decommodified to a certain extent, for which [our model] stands somewhere in middle, ... between state and market ... on a small community level, this could be a method supporting the bigger goal ... to make housing affordable for as many social groups as possible.” (Interviewee 15)

“the idea of the foundation to take land out of speculation, the more [decommodified] the better.” (Interviewee 17)
“... how starting with finance, we can start developing an economy that would be trying to be sustainable, which is a huge, huge task. And I think that nobody can actually imagine how the economy would look like because it has so many repercussions on areas that we cannot foresee right now, for example, the future of work. So going towards the reduction of the consumption of resources and higher equality, etc., totally changes the perspective of work. ... [Our aim is to] see how society could develop if you try to follow investments that are sustainable from all those aspects.” (Interviewee 1)

“You want to make a social impact with the minimum profits.” (Interviewee 3)

“... [our organization helps to build] something that combines a social relation with internal workplace democracy of a cooperative is something that this legal model offers in this particular [legal jurisdiction].” (Interviewee 7)
CBOs are designed to respect the dignity of those involved and also acknowledge their embeddedness into the local. Being community-based is at the same time an ethical and a practical issue. CBOs are designed to be open and capable of reacting to local needs. Accordingly, the fundamental feature of CBOs is [Ethical Coordination].

Ethical coordination, is a concept of Kornai (1984; 1990), that in its ideal-typical form, covers horizontal relationships, where actors are neither motivated by administrative coercion nor by the intention of making profit including various patterns of coordination based on self-governance, free association, reciprocity, altruism, and mutual voluntary adjustment. [Ethical Coordination] and [Aggressive Coordination] are in contrast with one another as aggressive coordination is the logic supporting extraction and violent control, a set of arrangement that is structurally agnostic or opposed to wellbeing of those affected; while ethical coordination

Link to the digital view of the map: [https://kumu.io/tamasveress/cbos-processes-flows-c3a5-9fcf-aba5-cb54-8b89#untitled-map](https://kumu.io/tamasveress/cbos-processes-flows-c3a5-9fcf-aba5-cb54-8b89#untitled-map)
stands for logics open, supportive to concerns and wellbeing of those affected. Therefore, the variable [Ethical Coordination] stands at the same time for the motivation, intention of collective action (to meet basic needs), and the process of collective action (respecting the dignity of those affected):

“We feel united by the mystique of wanting to serve. For many observers it is surprising to note that it is possible for this to work out. ... Patients are at the center of our approach and relationships with everyone are carefully nourished. Appreciation, support, and respect are key terms forming the relationship between therapists and patients. Thereby, those terms themselves (therapist/patient) and the type of relationships they stand for tend to be replaced while creating a [horizontal] relationships” (Interviewee 19)

“We see that banking [the core activity of the CBO] needs to be kind of the public infrastructure where the motivation of shareholders is not to get money out of the bank but to get a financial instrument to support them in their cause, in their goal, being that development of their personal business ... in a sustainable way, or being that some mission-based organization which is actually getting extra capacity for that. Or being just an individual who wants to know that he or she keeps funds somewhere where it will be contributing to the positive impact in the community. ... We wanted originally to try to find some kind of the Islamic bank model because this debt we really see is something which is inherently unethical to do. So as an ethical bank, just having the debt instrument with interest rates, it's just such an asymmetry in risks that we don't want to pursue it.” (Interviewee 1)

“There's a strong focus on something called Karma yoga, so the yoga of work and the yoga of action. So this is also how people kind of approach their work they do [in our community]. And a lot of people might do a lot of work in [the] spirit of service. So service to a higher cause. So, it doesn't mean that they might be doing some kind of spiritual work specifically, but, [through] the work that they do, there is this practice of doing it as an offering [to the community].” (Interviewee 20)
[Ethical Coordination] is directly linked to [Control over Activities], [Organizational Openness], [Diversity of Recognised Values], [Non-Monetary Transactions], and [Access to Knowledge]; while is indirectly related to [Unequal Social/Ecological Exchange], [Aggressive Coordination] and [Overhead Costs of Everyday Livelihood].

The variable [Control over Activities] stands for that in CBOs people have a relatively high degree of autonomy to influence collective and individual practices. For example, CBOs can often serve as platforms for mutual help, where members can decide which local social issue they are capable to work on:

“We never had one main goal. And actually, it's very difficult for us to define what Ouishare is because it is all about its members. And [our system works] as long as you have members willing to spend time to be entrepreneurs and to dedicate time for [given projects]. [A] few years ago, we would have never said we will work on energy precariousness, and now we are [about] to release the [know-how commons on helping people in this situation].” (Interviewee 13)

Often CBOs are places where voluntary contributions are important dimensions of the core activity:

“... so the situation is, that it really depends on the engagement of the person ... there are volunteers who are super enthusiastic and [are spending here] 11 hours [on one occasion].” (Interviewee 14)

At Health Center Cecosesola cooperative, worker-owners could make the decision to keep providing health services for the week-long period of power outage when most services were down, in a time of hyperinflation, in order to fulfil their mission towards the community.

Also, in the food cooperative of Coopalim, worker-owners can organize themselves in a way to make work enjoyable:
“[Worker-owners] must have pleasure doing it, they must be happy to do it, otherwise it’s not interesting for them because it's volunteering.” (Interviewee 4)

[Control over Activities] directly enhances [Autonomy]:

“… we reinterpret the concept of work, so we attempt to follow a mission, and to experiment through our lives, where it’s not only about how much money we make, but if we about to do something at Cargonomia, then obviously we discuss whether that something is worth to do so, which depends on the impact. Are we showing how to cargobike to one person, to five, or fifty? [It also depends who those five or fifty people are.] Are we in the mood, do we like to do it, so are we going to be doing it in an environment which we like, are we going to enjoy it? This is the process.” (Interviewee 12)

[Organizational Openness] stands for the organizational feature to allow local stakeholders to participate, contribute, and also to be able to influence how things are done in the organization. It is the characteristic that makes the given CBO embedded into the local. In the case of the Deccan Development Society, learning from the various top-down induced unrepresentative arrangements,

“... conducted a participatory exercise, asking what [stakeholder, mainly Dalit women] want, what they have, and how they can use the access sharing benefits of it. All of them were decided in a very participatory way to design the program itself. And this is the key difference that DDS had that allowed it to operate for such a long run. ... So instead of formulating a [top-down] solution and testing it on the field, the solutions themselves are coming from the field.” (Interviewee 5)

A similar approach is present at Health and Harmony called radical listening, where locals are invited to express their needs and ideas about how those could be met without destroying the forest:
“... [for us] it's a learning process and there's a lot we can still learn about colonisation and how we can be an anticolonial organization, recognizing that we all need to do a lot of learning, [practice] self-awareness and also getting input from the community, ... and be very open to always learn and gather feedback from communities to see how how we can be as good as possible. ... [W]e believe that [radical listening as an] approach is one way of breaking with traditional ideas, [with] pre-designed projects and thinking, that you know what's best for these communities, we're trying to break that down. So by flipping it around, by saying communities are the experts and not us. So we’re going to listen to them instead of the [other way] around.” (Interviewee 8)

Openness is present in the working of Health Center Cecosesola as well:

“We are a non-profit service where the community can not only receive care, but also participate in the collective management, if it wishes so. We are an open process for anyone who would like to be part of it.” (Interviewee 19).

Listening and providing the option to voice concerns and problems is a common organizational feature of CBOs, which in cases is at least as important in arriving to problem-solving arrangements as being in possession of specific technical knowledge or means:

“[Our organization, Ouishare] is about focusing on people, working with them, trying to give them a voice, as we were not experts on this topic. But we are experts at bringing those people together, having those discussions, creating a safe space and making sure that there is a process and methodology associated with that, and then creating such documents so that it can benefit others and influence the political sphere.” (Interviewee 13)

“... again and again we are rediscovering that we can discuss this and that particular issue, ‘Oh, really, why haven't we done it this way so far?’ [We realize topic after topic]
that all these [various issues] could be put on the community agenda. So, it is a continuous learning process. I wanted to emphasize it because [learning on group and community-level to discuss issues together] is a must practice, which has to be dealt with [together].” (Interviewee 14)

In the case of Cooperative for Ethical Financing, following the principles of cybernetics, they have calculated

“how large should be the system of a bank in order to fulfil all the functions to be optimal, not to lose information. And we found out that if you look at all the values to be able to individually approach each project, to have personal connections with our clients [in order] to properly manage the assets, the reports, etc... we cannot have a bank with more than 40 to 60,000 customers because otherwise it will become so big that just the management of information flows won’t be possible to keep the model that we have. And that's why we also decided to [apply a decentralised design when structuring our organization].” (Interviewee 1)

Accordingly, [Organizational Openness] stands for the set of organizational features that are reducing, or minimising information loss regarding the relevant social and ecological issues.

[Ethical Coordination] and [Organizational Openness] allow for a [Diversity of Recognized Values]. CBOs have multidimensional value and goal systems; these are not restricted to narrow monetary considerations. This has widespread implications, a major one is that social and ecological considerations do not get rooted out easily due to the prioritization of monetary-value factors. The multidimensionality of the value and goal systems is especially visible in the long-time operating CBOs, which through the years often have developed different branches and/or programs. The whole portfolio serves to meet basic needs; parts of it might be generating a financial surplus, while other parts might run deficits. For example, Health Center Cecosesola is part of a 40+ cooperatives network, where other organizations' ability to produce financial surpluses allows for the existence of the multi-million US dollar health center. Similarly at Deccan Development Society, market activities are complemented by caring activities,
allowing people to participate, to earn a living, who otherwise would not be able to do so in purely market, or purely caring arrangements to take part.

The [Diversity of Recognized Values] is strongly linked to [Self-Monitoring], [Organizational Openness] and [Ethical Coordination]. In many instances, CBOs formalize their values and goals through accounting systems. For example, the Distributed Cooperative Organization tailors accounting systems where not-only-monetary work, but care contributions are tracked:

“emergent values of this system are encoded in the governance model and embodied by the collective’s practices and legal-technical structures … It’s literally invisible work to those who don’t acknowledge it, and work that many feel unjustifiably obligated to take on …, [which allows] all "caring for the health of the collective", [also known as] care work items [to be] modular, easily visualised, and can be picked up by any collective member.” (Guerilla Translation, n.d.)

This allows it to recognize and reward a wide range of activities, therefore exceeding the often debilitating effects of the narrow monetary-focused approaches. Importantly, such systems can be used not only within organizations, but also between organizations, therefore allowing to organize ecosystems of needs-oriented networks. Due to organizational openness, CBO peers can meaningfully influence the value and goal systems, together with the rules applicable and methods to monitor, to enforce those regarding collective action. Such accounting, monitoring, and enforcing institutions are important parts of the stability of given CBOs:

“Krishna Valley has its own very strict accounting system … which traces costs and account settlements. It is very important … we have strict scorekeeping… so, when one department interacts with another, they keep a score of that. … We have our own currency [for inside accounting].” (Interviewee 11)

In the case of Cooperative for Ethical Financing, the loan application process is embedded into a multidimensional (social, ecological, economic) criteria system, which is transparent for all cooperative owner-members:
"... what is approved by the members is the criteria and the framework for how we make decisions. And our criteria, since we want to be sustainable also includes measurement, assessment of the environmental and social impact of the business, which is quite comprehensive. We use a little bit of modification of ... the Economy for the Common Good [matrix]. So we use their framework as a kind of assessment tool. We have a threshold, so if you are below a certain score, we just don't finance you. And we ask that you also have a plan ... for how you improve your score over the period of financing. ... It was accepted by all members that we use the tool and it was accepted by all the board institutions of the bank.” (Interviewee 1)

The importance of involving, or at least making the system of rules and rewards accessible for CBO members cannot be overstated (variable [Organizational Openness]). This is a crucial factor that on the one side raises engagement, builds trust, and also enhances a given CBO’s responsiveness to local needs. An example of Deccan Development Society (DDS) serves as an illustration. The Indian Government introduced a top-down, large-scale public distribution system, which drove out local millet farming in favour of cash crops, and also proved to be a poor allocation mechanism, often failing to find those who would most need it. In reaction to the growing concerns, DDS - through a participatory method - designed a new, Alternative Public Distribution System. By involving the communities, DDS created the Participatory Wealth Ranking system, which relies on local knowledge and customs and proved to be a superior mechanism to allocate resources for those in need (significantly increasing the household income of the poorest). Also, through the consultation, the terms and conditions of the alternative system took into consideration ecological issues (avoid the use of chemical fertilisers and pesticides), and also social issues by providing access to land and work for those most in need. The success of DDS and its community-based approach was recognized by state officials and replicated in many other locations as well (Interviewee 5; Sathees 2004). DDS’s example shows how Unrepresentative Material Regimes, through genuine involvement of local communities can be transformed into arrangements which are more considerate regarding socioecological issues. A similarly strong case is made by Health and Harmony’s monitoring system, which was also designed and enforced by the locals: Forest Guardians, a group of local villagers, who speak the local language and understand local everyday realities, keep track of whether a given village stops illegal logging, and therefore qualifies for lower-cost healthcare
services. This system proved to be effective in putting pressure on logging villages to reduce illegal logging (Interviewee 8; Kinari 2022).

In the case of the Cuban agroecology movement, the ANAP, in 2008 an innovation in the form of a classification system was added that measures farms according to the degree of agroecological advance and integration that they exhibit. A scale from 1 (low integration) to 3 (high) based on 31 criteria was co-developed by the promoters, facilitators, and coordinators of the network. The families that receive the highest score gain the respect of the community and cooperative and feel a sense of satisfaction and pride (Rosset et al. 2011).

Accordingly, in CBOs [Self-Monitoring] is linked to [Participation in Governance / Daily Operations], as the examples above show. But even if there are genuine community-oriented mechanisms in place in a given CBO, it is not straightforward, or automatic, that peers will be (pro)actively participating, and be mobilized in all instances. For example, at Lumituuli (a user-owned wind energy system) it appears that only those members are actively engaged who were already from the start well positioned for participating in energy debates. Some of the local residents sympathized with the mission of the organization, but nevertheless - despite the efforts of the vanguards who founded Lumituuli - have only in rare cases opted to become part of such political activity (Jalas and Makinen 2018). Among the reasons could be the preference for avoiding failure or avoiding potentially conflict-ridden situations:

“But we just haven't gotten local investors. So of course you can say that loose money is typically within cities so that people in the countryside may not have money to invest. But it also, I think, relates to the fear of getting involved in something that might ruin your reputation. Of course it is easier for outsiders to come and invest. If you live there and invest in something you know [could go wrong] or there’s going to be like a major conflict in the permitting [process] or something like that [makes you] involved in a conflict that is right where you live; and people might just be careful in not getting involved in those kinds of things.” (Interviewee 10)
Also, a barrier to the development of engaged community involvement could be that the topic of energy is a highly technical one, requiring special knowledge (making it difficult to experience competence), while also it could be difficult to have collective action where the experience and feeling of relatedness and contribution can be experienced for a larger number of people. Despite these problems/challenges, it should be emphasised that Lumituuli does have those community mechanisms in place where people who would like to be heard (and possess the apparently high-level capabilities), could be heard. For example, positions on the board of management are open to interested shareholders, regardless of the share of ownership, and enabled individuals can develop their own capabilities in terms of wind power (Jalas and Makinen 2018).

Similarly at Auroville, multiple challenges are posed towards a well-functioning collective decision-making culture; such as lack of engagement from the majority of the population, lack of diversity in those who choose to participate, lack of understanding of/education regarding the challenges the community faces, and lack of constructive communication skills leading to often hostile and polarized dynamics in deliberations (Clarence-Smith 2021). Nevertheless, here too are honest efforts to create and maintain genuinely participatory community mechanisms, such as the citizens’ jury and the participatory budgeting process (Interviewee 20). Similar problems are recognized in the settlement of Alsómoscolád:

“So there is no such thing as involving everybody, but I think it would be very important to learn the opinions of those who are not talking during the forums. And also [to learn] why they are not telling [their opinions], why they feel that [the municipality’s administration] wouldn’t understand them.” (Interviewee 18)

This is why the capability and willingness to participate, to articulate one’s needs and opinions is of crucial importance for well-functioning CBOs:

“The most important [factor when looking for new partners at a food CBO], everyone would think is the avoidance of chemicals; but it's not. [The most important factor is] the willingness to cooperate. So, to be open. ... This year we began our Farmer
Program, so [it is needed by farmers] to take part in such training, to come to the meetings, where we could discuss [important issues], to be willing to talk about [farming methods]. ... In the first place there is the willingness to cooperate in the community, and only then comes farming without chemicals...” (Interviewee 14)

An important dimension of the relationship between [Ethical Coordination] and [Access to Needs Satisfiers] is their indirect connectedness through [Non-Monetary Transactions] and [Overhead Costs of Everyday Livelihood]. These two streams represent that access to needs in community-based organizing is provided either through affordable prices and/or through the option of various non-monetary transactions.

Health in Harmony allows for a significant discount through various non-monetary contributions (for example planting seedlings, doing odd jobs around the clinic, providing manure, providing food, etc.) in order to make healthcare services affordable, and accessible for those in need. Another healthcare-providing CBO, Buurtzorg India, offers services only for money, but local social realities are constantly monitored, and if needed prices are reduced:

“... we try to establish an alternative economic approach... so to access resources not only through money, but through cooperation, through barter, personal relationships, and so on, [therefore] the most important resource is the relationship with communities. ... With the [cargobike rental] we had the same aim, to make it donation-based, so that everyone can contribute according to their capacities, so someone gives more, someone less... so we try to exit the logic of the market economy. But what is interesting, is that
it doesn’t work that way, everyone keeps asking: how much is the cargobike? People feel much more comfortable knowing a fixed price. So what we see is that people feel as customers in all aspects of life, rather than cooperating partners.” (Interviewee 12)

At the food store cooperative Coopalim the aim is to provide accessible and good quality products that are reflected in procurement and pricing, which are discussed by the owner-members. Coopalim didn’t do a study on how much cheaper their products are compared to similar quality non-CBO prices, but an approximate measure could be served by Park Slope Food Coop (New York), a CBO running on an identical organizational model; where coop members saw a 20-40% reduction in their food expenses (Bollier and Helfrich, 2019). When it comes to pricing, in contrast to profit maximising approaches, Coopalim applies the same level of price margin to all of the products (Interviewee 4), supporting its goal to provide access rather than maximise profits. Similar concerns are present at Deccan Development Society’s millet diet restaurant Cafe Ethnic. The aim is to provide a market for the produce of millet farming, provide a livelihood for community members, and to educate consumers on the local-specific ecological and nutritional advantages. Their pricing reflects these goals, making the restaurant cover its costs, but not generating monetary surpluses (Interviewee 5).

[Pooling Resources] stands for the various collecting, sharing, safety-net and risk-sharing arrangements, which are provided to individuals/households through community-based organizing to meet basic needs. [Pooling Resources] directly affects [Access to Needs Satisfiers], and indirectly through the link with [Unequal Social/Ecological Exchange] and [Overhead Costs of Everyday Livelihood]. Intentional communities such as Khrisna Valley and Auroville provide a substantial amount of needs to members through a basic basket of consumer goods combined with a modest allowance for purchasing goods/services which are not produced within the community. Deccan Development Society, as described above, has reorganized a state-initiated distribution system, thereby providing a significant safety net for community members; but also the various schools and nurseries have a similar effect. In Cuba, domestic food production is supported by the state through policies that require farmers to sell a large portion of their produce to state enterprises, some for prices set by the bureaucracy, providing a stable safety net:
“[N]ow when I talk to the peasant cooperatives, I say, so how do you feel about it? Do you resent that you still have to sell like 80% of your production to state enterprises? And they say ‘actually, no because that's a guaranteed market and we don't have the logistical capacity to sell 100% of our products in [all of Cuba]. So we appreciate that the state will buy a good volume, even though not at a good price. But still, that gives us a baseline. And then we go for our real profit, and up to our ability logistically to market in all of these different spaces.’ So they actually say they’re quite happy with the current situation, which is a mixed situation.” (Interviewee 2)

Without the framework of supportive policies, a similar safety-net is provided by Food Basket Pécs, as the association proactively coordinates which farmers should grow which produce in order to avoid over- or undersupply in the community (which situations do occur despite the efforts):

“... at the beginning of the year we have a yearly kickoff discussion with the farmers, who will grow what, to try to avoid - that is actually occurring very-very often - to have the same produce in dumping-like amounts, so we put together a growing calendar, to coordinate who will grow what. And we try to encourage them to ask, but they do ask from us what to grow.” (Interviewee 14)

Also, Food Basket Pecs association became an information hub in the local food system, therefore learning that all farmers face increasing difficulties purchasing chemical fertilizers, therefore the community began to organize the common purchase of cheaper, non-chemical fertilizers (Interviewee 14).

Part of [Pooling Resources] are also various forms of risk-sharing mechanisms. In the field of finance, the Cooperative for Ethical Financing tries to minimize risk not only on the lender’s side but also on the borrower’s and on the community’s level. Through a bank-managed crowd investment platform depositors are given the opportunity to become micro equity investors in a given project (without ever encouraging over exposure). If the project is fully funded through the platform, no debt is provided by the cooperative, leaving more space on its books for other
projects. If there is a shortfall, the remaining amount is compensated with the debt instrument. This approach aims to share the risk more transparently and fairly with depositors, allowing them to assess and invest in the project directly. By investing in sustainable projects, depositors can potentially earn higher returns than traditional savings deposits, while the bank benefits from increased capacity without being directly exposed to the risk (Interviewee 1).

This approach applied by the Cooperative for Ethical Financing is not geared toward profit maximizing, but rather to find and finance prosocial projects, and spread the risk of financing such projects. A similar approach is used in Health in Harmony, where if someone sells her/his chainsaw, therefore showing commitment to stop illegal logging, the organization

“buy[s] the chain saws and also provide[s] additional start-up capital for these families to start their own businesses. It was basically angel investing without interest. We required both the husband and the wife to start a business—or they could go into business together. We provided business training for them both. The businesses were jointly owned with [Health in Harmony] until they paid off what we had invested.” (Webb 2022)

The level of [Trust] is crucial for the sufficient working of CBOs. [Trust] in the sampled CBOs emerges through the interplay of various factors: [Organizational Openness] allows peers to influence the everyday workings of the CBO, the presence of personal relationships, the transparency of community matters, the monitoring arrangements ([Self-Monitoring]), the ability to have control over the activities carried out together ([Control over Activities]), the [Access to Knowledge] provided through open access arrangements - all are potentially trust building and enhancing arrangements.

One of the essential features of CBOs is the organizational design supportive of crowding-in ethical and other-regarding motivations and practices. Crowding-in prosocial motivations, and practices are more than the careful configuration of incentives and rewards (although these are part of it). The concept also contains the community-oriented (ethical and other-regarding) ethos which can be an emerging property of prosocial goals and values, well-applied rules, and other contextual factors supporting prosociality. Within the framework of current research, it is
an emerging property of positive, reinforcing feedback mechanisms consisting of [Ethical Coordination], [Control over Activities], [Diversity of Recognized Values], [Organizational Openness], [Self-Monitoring], and [Trust]. Crowding-in consists of attaching moral messages to formal enforcement and material incentives as well as enforceable informal peer pressure (Bowles, 2016). Being able to do something not just for oneself but also for other members of society is one of the elementary freedoms, dimensions of autonomy, people have reason to value (Sen, 2009). Such setting can be seen for example in the case of Health Center Cecosesola, and Jelka House:

“all people who educate themselves – regardless of whether they work as doctors, nurses, dentists, cleaners, or technicians – work as equals. They do so in a team with collective discipline in a self-governed manner, which supports creativity, the creation of holistic wellbeing, solidarity, and a feeling of identity and belonging. A rather practical consequence of this structure is that in Cecosesola – except for a few doctors and technicians – all receive the same remuneration for our communitarian-cooperative commitment. The exceptions mentioned are the subject of collective discussions to gradually create a balance of remuneration in the future” (Interviewee 19).

“It feels very rewarding that there is a project [decommodifying housing] that will be bigger than myself and bigger than any of those people who I'm now trying to put this house under collective management, ... owned by a collective for 150 years maybe, maybe forever. And that's definitely good, that's nice to think about. It's like leaving some footsteps behind or something like that, like making an actual and contributing to some kind of change in the world, even if it's like a very, very small thing. It is the first step” (Interviewee 9).

However, it should be noted that being involved in a CBO requires a certain level of collaborative competence. Collaborative competence stands for a set of abilities and propensities necessary for the formation of interpersonal relationships that can forge group membership and solidarity; the ability to act as a part of a group exercising collective agency in the sociopolitical domain (Christens, 2012). People for various reasons can lack such competence as a member of the Coopalim consumer cooperative explains:
“It's a self-centered society, everyone is out for himself. [Collaborating to create ethical food systems] is not the way of thinking that most [people follow]. ... I think that maybe all shops should be like this [following ethical principles], but I don't think that it's possible in the world that we are living in” (Interviewee 4).

8. 1.4. Empowerment

Next to access to needs satisfiers and autonomy, the third factor that functions as a gravitational force in the core functioning of CBOs is empowerment. Empowerment is a multilevel construct that may be applied to individuals, organizations, communities and policies Zimmerman and Rappaport, 1988); and also a multidimensional one, able to fulfil the function of a process, a means, an approach, or a method (Tengland, 2008). Empowerment is

[a]n intentional ongoing process centered in the local community, involving mutual respect, critical reflection, caring, and group participation, through which people lacking an equal share of valued resources gain greater access to and control over those resources (Cornell Empowerment Group, 1989) or simply a process by which people gain control over their lives, democratic participation in the life of their community (Rappaport, 1987), and a critical understanding of their environment (Zimmerman et al., 1992:570).

At the individual level empowerment is the ability of individuals to gain control over their own lives through access to information, knowledge, and skills, decision making, individual self-efficacy, community participation and perceived control (Zimmerman and Rappaport, 1998). CBOs serve as vehicles and spaces where empowerment takes place as a relational process (Christens, 2012), maintaining empowering community settings (Meton, 2008) and empowered learning systems (Frediani et al. 2019). In relational and empowering settings empowerment is closely related to the concept of “capabilities” (Sen, 1999).
In the framework of the system map [Empowerment] is directly linked to [Organizational Openness], [Availability of Space], [Use of Nonviolent Technologies], [Legal Protection], [Access to Knowledge] and [Autonomy], while its most important indirect link is with [Ethical Coordination] through the [Control over Activities].

For example, in the case of the Cuban agroecological movement’s institution, the ANAP, empowerment is based on a Freirian (Freire, 1997) horizontal community methodology ([Ethical Coordination]). This methodology is centered around the farmer-to-farmer relationships, it is a “pedagogy of experience” and a “pedagogy of the example” (Barbosa and Rosset 2017) in which a peasant family visits another family that has found an adequate agroecological solution to a common problem ([Organizational Openness]). Farmers are free to decide on the scale and speed they are willing to apply the newly learned methods ([Control over Activities]). All knowledge regarding the agroecological methods ([Use of Nonviolent Technologies]) is freely available ([Access to Knowledge]).
A similar empowering setting is institutionalised in the Deccan Development Society: the organization established the Pachasaale School providing out-of-school working children between the ages of 10 and 16 with education and life skills in ecological agriculture, carpentry, herbal medicines, and other subjects. DDS also established the Farm Science Center, which conducts independent participatory research with local farmers (UNDP, 2021). Other empowering community settings of the sampled CBOs include Health in Harmony’s regenerative agriculture educational program, following Java’s many-thousand-year tradition, which empowers participants with the capability to produce their own organic fertilizer and therefore significantly reduce, or completely eliminate their expenditures on fertilizer (Interviewee 8). Auroville’s Awareness Through the Body program

“for developing self-awareness, self-knowledge, meditation, introspection, learning about different parts of the self, learning about interacting with others, and this starts from a really young age. So it’s kind of an accompaniment to spiritual development. It's a very embodied, very practical, very dynamic [exercise]. It includes individual kinds of meditation and cooperative games” (Interviewee 20).

Transition Campus aims to integrate sustainability and ethics into the core curriculum of all tertiary education, and it does so by organizing participatory action research groups around a given local problem involving a wide range of non-academic stakeholders as well (Interviewee 16).

The [Availability of Space] is a fundamental factor of CBOs’ empowering settings. Space can have a physical dimension as in the case of Jelka House, where the community of residents acknowledges the scarcity of space in their urban environment and therefore provides access to a room for different political groups, assemblies, or educational workshops (Interviewee 9); or, as in the case of Ouishare, being a platform where people ‘want to understand what's going on with the sharing economy, with the platforms, with the peer to peer movement, trying to understand how to share the values in the organization … a place like a laboratory to actually experience things’ (Interviewee 13). Accordingly, in the case of CBOs spaces are opportunities, moments and channels where peers can act to potentially affect policies, discourses, decisions and relationships that affect their lives (Gaventa 2006). These spaces are not neutral but are
themselves shaped by power relations and (perceived) opportunities, which both surround and enter them (Cornwall, 2002).

CBOs can contribute to socially fair and ecologically non-destructive arrangements through the [Empowerment] of peers supporting the [Use of Nonviolent Technologies], therefore lowering the degree of [Unequal Social/Ecological Exchange]. For example, Lumituuli enhances the spread of wind energy. Through the decades Auroville has developed into a low/appropriate technology innovation hub also actively disseminating these technologies to those most in need in rural India, and other parts of the world. Similarly to Auroville has Krishna-Valley, Deccan Development Society, ANAP and Detroit City Farm become centers of knowledge-making and dissemination on their respective scale in the fields of non-destructive agriculture and/or renewable energy systems. Cargonomia contributes to the advancement of non-fossil-based urban mobility.

CBOs are spaces where autonomy is gained through empowerment, through genuine involvement and participation. An important factor of maintaining such autonomy-supportive arrangements is the one of leadership. In the sampled CBOs leadership is practiced close to the concept of “servant leadership” (Greenleaf, 1977). Such leaders are sensitive to the needs of others, this way earning the trust of CBO members, allow the co-creation and enforcement of a monitoring system, the creation of multidimensional goal and value systems, and stays away from violating the control of members over the CBO’s processes. An illustrative example is the case of ANAP, the Cuban agroecology movement, where observation tells that the adaptation of agroecological methods is the deepest and fastest when leaders are privileging the protagonism of peasants (rather than technicians, bureaucrats, etc.). When the central role of farmers is pushed aside, the process slows to a crawl; for example, if knowledge promoters develop a „know-it-all” superior attitude reminiscent of technicians and extension agents (Rosset et al., 2011). The concept of servant leadership is displayed in the case of Food Basket Pecs as well; one of the founding members is a well-known figure locally for his agricultural knowledge and efforts through the years in organizing farmers’ markets:
“[one of the authority figures in our group] prepared a set of suggestions, and during our group debate the collective decided about a prioritizing protocol ... which helped to decide among two potential suppliers” (Interviewee 14).

The data suggest that autonomy settings tend to support the competence and relatedness needs, as authority figures consider the individual’s internal frame of reference, often also provide active support for competence and relatedness or will at least allow the target individuals to pursue their own competence and relatedness satisfaction (Ryan and Deci, 2011:58).

8.1.5. Legal and Financial Dimensions
In the framework of the systems map the variables populating the legal and financial dimensions of the CBOs are [Legal Protection], [Need for Donations/Grants], [Access to Slow/Ethical Finance], and [Capability to Self-Finance] (see in Figure 5).

Figure 5 – Systems Map: Legal and Financial Dimensions

The variable [Legal Protection] stands for the level/extent that a given CBO mobilizes legal tools to avoid mission drift. It can concern the ownership type of a given organization. For
example, all economic activities in Auroville are legally under the umbrella of a trust, which is
governed and owned by the community as a whole, supporting the community-based
organization of their society. In the case of Jelka House and SZAKI Housing Association a
legal structure is maintained that is capable to generate a significant amount of financial
resources over a long period of time, but due to organizational bylaws these resources cannot
be privatised, and are reinvested in order to further the decommodification of the housing sector.
Many of the sampled CBOs - for example Cecosecola and Coopalim - chose to become
cooperatives due to this legal form’s horizontal ownership structure and the limitations on
private-wealth-orientation. Cargonomia is the only non-formal CBO in the sample; they
deliberately are refusing to form an institution recognized by the local authorities. It is because
the members want to avoid the legal-bureaucratic burden of forming an organization, and also
because through their personal network they can still access those resources which require a
legal entity.

The connection between [Legal Protection] and [Trust] manifests itself in the forms of legal
arrangements that are short, covering only the very basic framework of the cooperation, as it is
the case at Krishna-Valley:

“... [this franchise agreement of ours], it should not be imagined as one at McDonald’s
or Pizza Hut, having a 300-page American legal contract behind it ... it is very little
documentation, these [restaurants] are operated by Krishna followers, who follow the
same principles and rules, which determine what is allowed to do, and what is not. So
it is deeper, it is defined on a deeper level [of trust].” (Interviewee 11)

Similar dynamics are present between Buurtzorg India and the Buurtzorg Netherlands, when
the Indian party, after a year of successful piloting was drafting a legal document for the formal
cooperation with the Dutch organization, the creator of the original model:

“... so I think one of the biggest [way] Buurtzorg has an impact is that concept of trust.
... After one year, [Buurtzorg Netherlands] was very happy with [our adaptation of
their model]. And then they give us a green signal to sign a joint venture. ... We
consulted our lawyer, everything in India is lawyer-driven with corporate affairs. So
the lawyers went through all the things and did some research, charged us a hefty sum of money and provided us with a 72-page document, which is the agreement. ... We sent it to [Buurtzorg Netherlands], ‘This is what our lawyer developed, look through and sign them.’ ... In less than six hours we had the answer, that 72-page document was converted into a three-page document. And they said that if we trust each other, then this relationship is that, if we don't trust each other, then we will simply just say goodbye. ... We are still operating with a three-page document. [Buurtzorg Netherlands] has never interfered in [our] operations, ... we keep updating each other. But there has never been an issue when they have questioned our thought process and [our] views.” (Interviewee 3)

When it comes to financing, the two variables [Need for Donations/Grants] and [Access to Slow/Ethical Finance] refer to outside financing, as monetary income generated through market activities - in the framework of the system map - happens between [Ethical Coordination] and [Overhead Costs of Everyday Livelihood] through fair pricing (see above). Some of the sampled CBOs are financially independent in a sense that they don’t need non-market monetary transfers to keep their operations running; while in some CBOs a significant share of their budget requires either donations, grants and/or loans. Accordingly, financing (and its terms) significantly influences the autonomy of the given CBO. A key variable to secure financing from outside is [Access to Knowledge], as both donors, grant providers and ethical banks are more prone to provide resources if they understand the workings of the organization they are supporting. For example, in the housing sector Jelka House operates in Austria where both personal microcredit lending schemes and ethical banks are more familiar with the institution of housing associations/cooperatives and therefore it is relatively easier to secure outside funding, then compared to SZAKI’s situation in Hungary, where most of the stakeholders are not familiar with such arrangements therefore are less prone to take part in such projects.

The connection between the variables [Unfavourable External Conditions] and [Legal Protection] can be a decisive one, as the case of Lumituuli illustrates it:

“Lumituuli was only [made] possible because of the [newly introduced] regulation of the energy market ... where [consumers were] given the choice of where to buy their
electricity. Previously you would not even have that choice. And these changes gave room for small players to come and produce or provide [energy] from alternative sources.” (Interviewee 10)

Here the domestic energy market was closed for community/user-owned energy systems, until a favourable law created access to the market. However, the proposed feed-in tariffs that will be introduced in the upcoming years are less favourable than the current ones, which again, can affect the feasibility of Lumituuli-like projects. Similarly in the case of ANAP, the agroecology movement is supported by favourable policies which significantly lowers the barriers to start a farm: individuals or families are provided access to land, to markets and to practical knowledge regarding agroecological practices through peer learning. As Interviewee 2 describes, such favourable conditions are constantly attacked by various state bureaucrats and big-agro supporting technocrats, which keeps the organization in constant need to defend itself in the policy realm.

8.2. Addressing the Research Questions

(RQ1) Which organizational characteristics support community-based organizations to prioritize socioecological concerns?

This section summarizes what has been described in more detail above by walking through the variables and relationships of the systems map. CBOs operate in their respective context dominantly structured by Unrepresentative Material Regime(s) (UMRs), that is through a set of arrangements prioritize concerns regarding material growth and/or of ownership/top management’s wealth and control concerns. UMRs are driven largely by aggressive coordination, that is based on unequal social and ecological exchange, which drives debt bondage, and raises the overhead costs of everyday livelihoods.

In such contexts, well-functioning CBOs steer collective actions through ethical coordination mechanisms informed and influenced by a wide range of stakeholders’ socioecological concerns. On their own terms, this, the prioritisation of socioecological concerns, is what makes them successful. Accordingly, when successful, CBOs are vehicles and spaces of collective action, where collective action is organized through peer empowerment, in autonomy supportive settings, prioritizing access to basic needs. CBOs are community-oriented in as
much as peers have genuine control/influence over the way collective actions are organized: what kind of surplus is generated, how it is distributed, what are the rules guiding community efforts.

Due to the open organizational design, peers can influence the goal and value systems of the given CBO. Decisions are often slow to emerge due to consent-oriented approaches. Besides rules making, peers can participate in the establishing and overviewing the rules of monitoring, take part in the monitoring efforts and enforce the rules when deemed necessary. The fruits of collective action can be accessed through relatively low barriers, either through fair prices and/or through various non-monetary transactions. The open organizational setting that allows involvement and participation in governance supports the emergence of trust. The autonomy-supportive characteristics of CBOs are maintained through peer empowerment, which are driven by open access to knowledge. CBOs prioritize nonviolent technologies that support the community-oriented goals and are in line with their values. Often CBOs can be spaces of appropriate technology innovation, prioritizing access, long-term usability (opposed to planned obsolescence), repairability and customization. Well-functioning CBOs are driven by leadership that allows and prioritizes such empowerment-led and autonomy-supportive settings. At the core of the sampled CBOs are autonomy, access to needs satisfiers and empowerment; this set of interlinked organizational characteristics is what makes CBOs - in contrast to UMRs - representative material regimes.

(RQ2) What helps and what hinders the spreading and/or the adaptation of the operational models of community-based organizations?

All the interviewees named things that help the workings of their respective CBO (also factors which endanger their existence), which points to a general approach, namely that any efforts that are intended to support the existence of CBOs or assist to create new ones should be founded on asking and listening to the voices of those most concerned.

Depending on their context specific circumstances, such as core activities and the contextual factors influencing them, the respective CBOs named the following factors/dimensions as the ones with the biggest leverage when it comes to spreading their activities.
Material conditions, such as access to land, access to space. Legal conditions, such as favourable tax options, low administrative burdens; the availability of legal organizational forms supporting the open, community-oriented efforts, and helps to safeguard its mission, its community-oriented purpose of existence. Financing, such as access to purpose and autonomy-supportive slow/ethical finance (for example through flexible grant systems or ethical banks), and/or helping with marketing efforts to generate monetary incomes. The access to knowledge is another key factor, which is often restricted through proprietary arrangements. A cornerstone of successful, well-functioning CBOs is whether a significant size of the stakeholders (both on individual and organizational levels) possess collaborative competences and capabilities to allow them to get involved, to take part.

CBOs also could be helped both on organizational and on policy level by reducing or eliminating the drivers which are leading to socioecological degradation, indebtedness, loss of capabilities, reduction of autonomy and hindering access to needs satisfiers.

Many of the studied CBOs represent a successful replication and/or adaptation of a previously established CBO, therefore standing as evidence of the respective model to be fit for spreading and/or scaling. For example, the health services provider social enterprise Buurtzorg India has been successful to adopt the autonomy-supportive team-based model of the original idea coming from the Netherlands, from a significantly different policy (insurance systems, health and emergency protocols, nurse and doctor training, etc.) and social environment (the social status of elderly care, social stratification, etc.); the member-owned and operated food store Coopalim is one of the dozens of locally adopted replicas inspired by Park Slope Food Coop’s model, originating from the United States; the non-profit, democratically managed real estate developer SZAKI is the Hungarian spin-off of Mietshäuser Syndikat originating from Germany; and so on.

In the literature the various processes intended to amplify the impacts of socioecologically-informed initiatives and efforts can be clustered into three groups (Lam et al., 2020:16-7). First, amplify within consists of processes which generally seek to increase the impact of one specific initiative by, for instance, stabilizing its existence or speeding up the way it impacts. Second, amplifying out consists of processes, which generally seek to increase the impact of initiatives by involving more people and places through a greater impact range and a higher number of initiatives. Third, amplifying beyond consists of processes that generally seek to increase their impact by scaling up to reach higher institutional levels or by scaling deep to change values. A
fourth set of processes could be added, namely cross-cutting (Moore et al., 2015), which seek to direct/broaden the problem frame, build networks and partnerships, and gather alternative resources. Such typology could be useful to select processes fitting to the given purposes, taking into consideration whether an initiative targets systemic changes or one-off events (Islam, 2020), whether the given CBO is newly established (probably prioritizing stabilization), or whether the given models/processes are being adopted to a new context (Lam et al., 2020).

The most successful CBOs (from the perspective of the number of stakeholders impacted, the positive influence on socioecological issues, the longevity of their existence, their capacity to inspire others, their autonomy-supportive workings, etc.) from the sample have rather different stories of origin (whether top-down or bottom-up initiated), rely to a different extent on market and non-market interactions, have their relationships with the local/state authorities range from being allies to cases of hostility, have peculiar relationship with the „outside” world – which factors all should be taken into consideration when it comes to the creation and amplification of CBOs. There could be unique pre-requirements that are rather difficult to meet, for example Auroville, the longest standing and mostly populated intentional community of the world is made possible due to its special legal status granted by the Indian State. The Cuban agroecological movement, the ANAP, is a strong case for very successful amplification (in total there are 4,331 cooperatives that bring together 331,874 members (Ecured, 2022)) of the innovative and non-destructive agricultural methods. At the core of the spreading and scaling of ANAP are the promoters, those farmers who teach other farmers and from whom they learn solutions. They are those who successfully carry out an agroecological practice that solves a specific problem; they receive visits from cooperativists who have the same problem; they share their experience with other peasants in workshops organized on their own plots of land (Bernal et al., 2023:12), and ANAP is the vehicle that makes this peer-to-peer knowledge and practice amplification possible. It is a rather crucial learning point, as many CBOs build their amplification efforts around technical extensionism, which consists of hiring technicians for a public sector institution, an international organization, or a Non-Governmental Organization to “transfer” agroecological practices to their clients or beneficiaries. However, when the pedagogical process can be organized on a peer-to-peer arrangement it can allow ‘the number of facilitators to grow with the population, autonomously and without the need for external resources’, while not increasing the burden of any one facilitator (Bernal et al., 2023:23). When establishing ANAP, the network received significant help from the state by providing access to land for small scale farmers through usufruct arrangements, and the state continues to help by
regulating markets to provide income stability for small scale farming. In contrast to ANAP, the health services provider social enterprise Buurtzorg India begun as a bottom-up initiative, which only recently is being recognized and acknowledged by local and state authorities. Buurtzorg India created the market it operates in without state assistance and regulates the prices according to the principles of need and access. In response to the chronic shortage, Buurtzorg India is training nurses through its educational chapter, which is a form of technical extensionism. The various health services, educational practices and emergency protocols are examples of amplifying beyond, affecting the institutional context of the organization. These two contrasting cases of ANAP and Buurtzorg India illustrate that a rather wide range of organizational patterns can support various forms of socioecologically-concerned efforts.

Therefore, the access to the accumulated experiences of the various CBOs, to their socioecologically-concerned arrangements are all major potential supportive elements of any amplification efforts. However, access to knowledge in itself is no guarantee that a new initiative will be successful, as no CBO can be decontextualized (copy-pasted from one locality to another), and no community-based arrangement can do without genuine and meaningful institutions of listening and involvement. Which in turn require time and space for the community to form, to work out rules, habits, and conflict resolution arrangements, to have the possibility to re-arrange after failures, to have the opportunity to customize the models and other sources of inspirations for their own locality.

8.3. Implications of Results

8.3.1. Implications for Organising Economic Activities

Collective actions deemed ‘economic’ is too often and on too large a scale prove to disregard or neglect socioecological concerns (Sections 1.1., 1.2., 1.3. 5.1.) CBOs, in many instances, can be spaces and vehicles providing access to real needs of people in a socioecologically concerned way. Therefore, I argue, there are organizational principles and patterns of CBOs that have important implications for organizing economic activities that could be adopted by economic organizations and other agents.

First, priority should be given to meet needs (over generating and fulfilling desires) in a socioecologically concerned way. This contains that the various arrangements should be
developed to avoid or minimize the generation of negative externalities, shifting costs, and should not prioritize profit or rent seeking over the provision of access to basic needs. Second, listening to and providing voice for those concerned should be a core attribute of economic organizations and practices. Economic actors have a one-way, non-reciprocal duty caring for the beings (humans and non-humans alike) which are under the impacts of their functioning (Zsolnai, 2006). Economic organizations could be autonomy supportive spaces that promote a prosocial ethos. Third, define success on a broad sense, exceeding the narrow prioritization of monetary value. Fourth, introduce enforceable limits to individual opportunism and private wealth accumulation. Fifth, use non-violent (appropriate) technologies. These organizational principles and patterns can be supported by creating appropriate ownership and governance models.

8.3.2. Implications for the Organizational Management

Mainstream management theories and concepts, even if led by benevolent motivations, are ill-suited to guide and support the efforts to overcome the social and ecological problems of the Anthropocene. One reason is that organizational management scholarship operates from a position of epistemic blindness, obscuring its socioecologically violent origins. This builds and maintains a purified, dehistoricized and depoliticized canon, that rationalizes and supports socioecologically violent practices, while inhibits the production of knowledge that would have emancipatory potentials; making it invisible and difficult to imagine alternative ways of knowing and being (Banerjee, 2022).

As the postcolonial literature highlights (Prasad, 2003), modern managerial practices – such as the principles of ‘scientific management’ that regulate productivity of today’s workers - have evolved out of the slave plantations in southern USA, and the British rule in India and other colonies (Cooke, 2003). Plantations were regarded as contemporary industrial endeavours, wherein proprietors and overseers pioneered various “modern” industrial management and labour control methods well in advance of their widespread application in factories (Rosenthal, 2018). Plantation management manuals were regularly distributed among British capitalists, and a range of pre-designed accounting books, templates, and guides were readily accessible in Britain throughout the 18th and 19th centuries, often intertwined with materials related to industrial management. Centralised surveillance, regimentation, division of labour, strictly controlled work pace, written rules and regulations were all standards pursued by every planter (Whittaker, 2023).
In the era of neocolonialism, control over the colonised was transferred from military commanders and state bureaucrats to the hands of the managers of multinational corporations (Frenkel and Shenhav, 2006). As Marglin’s (1974) work on the evolution division and control of work processes shows, the social function of hierarchical work is not technical efficiency, but accumulation; discipline and supervision could and did reduce costs without being technologically superior. The origins of management sciences are important since its cognitive frameworks and the tools derived from them were created in the first place to control and to exploit, without socioecological concerns.

In contrast, the studied CBOs are operating on qualitatively different grounds, mainly, by prioritizing access, dignity, care, empowerment, sharing through mutualization and socioecological concerns – factors that are potentially fit to avoid or overcome a significant proportion of the negative arrangements driving the Imperial Mode of Living and Unrepresentative Material Regimes.

Rowlands (1997) differentiates four diverse sources and expressions of power: power over, power with, power to, and power within. “Power over” stands for repression, force, coercion, discrimination, corruption, and abuse; power is seen as a win-lose kind of relationship. “Power with” stands for relationships based on mutual support, solidarity, and collaboration, multiplying individual talents and knowledge. “Power to” refers to the unique potential of every person to shape his or her life and world. Finally, “Power within” has to do with a person’s sense of self-worth and self-knowledge, it includes an ability to recognize individual differences while respecting others. It would be naïve not to recognize that control is a normative and integrative aspect of any organization (Mir et al.), the studied CBOs included. However, in contrast to the mainstream approaches, in the case of CBOs, power and control is rather exercised in its empowering, nonviolent forms.

Buber (1923/1958) differentiates two mutually exclusive existential models: “I-It” and “I-Thou”. In the I-It mode, one sees the other person as a discrete object, a composition of objective and measurable properties to be judged by his/her potential value or usefulness. In the I-Thou mode, one beholds the other person in the fullness of his/her being and with regard for his/her inalienable human dignity. Organizational management scholarship is predicated around the I-It mode of relations and focuses entirely upon the objective, instrumental, and impersonal (Leicht-Deobald et al., 2021). Buber claimed that he does not have a ‘prescription’, a ‘formula’ regarding what is to be done (Biemann, 2002:254 cited in Leicht-Deobald et al.,
However, the results of the current research imply that CBOs are fit to provide space for relationships of I-Thou mode.

CBOs could serve as a source of inspiration to adopt and create socioecologically concerned organizational models and relationships. When alternative models and relationships are lacking, individuals tend to replicate the pattern of power dynamics in their personal relationships, communities, and institutions. This tendency is also observed in individuals and groups who have been exploited through “Power over” arrangements, who may adopt behaviours resembling to those of the oppressors when they attain leadership roles. Hence, the experience of exclusion does not necessarily equip individuals to become socioecologically concerned leaders. To encourage the spread and amplification of socioecologically concerned arrangements, it is crucial to show examples and practice those (Rowlands, 1999; Freire, 1970).

8.3.3. Implications for Social Change

The concepts of Imperial Mode of Living and Unrepresentative Material Regimes are containing the arrangements structured by dominant entities, such as governments and corporations, that sustain unsustainable institutions and ways of life (see Section 5.1.) Therefore, radical changes spreading, amplifying socioecologically concerned practices of production and consumption should certainly be introduced. However, the popularity of the Attitude-Behaviour-Choice (ABC) framework is an indication of the extent to which responsibility for responding to the Anthropocene is thought to lie with individuals whose behavioural choices will make the difference. In the framework of the ABC model, social change is thought to depend upon values and attitudes (the A), which are believed to drive the kinds of behaviour (the B) that individuals choose (the C) to adopt. It follows from the ABC model, that interventions should concern persuasion, pricing, and advice, that is to provide better information or more appropriate incentives damaging individuals could choose to act more responsibly.

Here appears the issue of the value-action gap (Blake, 1999), or behaviour-impact gap (Csutora, 2012), where despite the presence of socioecological concerns, individuals often fail to act impactfully according to their values (Shove, 2010). Such externalization of context and
overemphasis on individual agency is what amounts to individual or ‘consumer scapegoatism’ (Akenji, 2014), as it fails to consider the systemic drivers.

A reframing, or even a resolution is offered by Social Practice Theory (SPT). The reason why I think SPT and CBO literature could have a fruitful synergy is that SPT theorizes social change not only considering the individual but also the meso (community, organization) and macro (policies, infrastructure) levels. In the framework of SPT social practices are made of three types of elements: (1) materials as objects, tools, infrastructures, (2) competence as knowledge and embodied skills, and (3) meanings as cultural conventions, expectations and socially shared norms (Shove et al. 2012). In SPT, to change social life neither technological innovations nor the persuasion of individuals to choose different, ‘better’ behaviours will catalyze sufficient change; but the settings, environments have to be structured appropriately to support the socioecological concerns (Keller et al. 2016).

In SPT literature the area of social interaction and communication is insufficiently theorized (Keller et al. 2016). This research at least partially lessens this theoretical gap, by highlighting that the cases where CBOs prove to be spaces and vehicles of innovation, spreading and amplifying socioecologically concerned arrangements and practices. These processes are based on empowerment that are either peer-to-peer, or technological extensionism based. Either way, due to the prioritization of access proved to be effective (regarding reach and speed) to spread meanings and competences required for socioecologically concerned practices, and in cases to create the appropriate infrastructure. Current research shows that certain organizational features are supportive of the crowding-in of socioecologically concerned practices (see Sections 8.1., 8.2.) Community-based approaches to social change are promising as - given the supportive setting -, in many instances the personal relationships can provide relatively low-cost and self-organizing medium for amplifying socioecologically concerned practices.

9. Summary and Conclusions

This chapter briefly recaps the main findings and outcomes of the research.

The aim of the dissertation was to explore theoretically and empirically how, in the context of the Anthropocene, community-based organizations (CBOs) arrange collective actions that prioritize socioecological concerns. In order to do so, I discussed the main driving forces of the
Anthropocene (Section 1.1.), describing how industrialization and related socioeconomic trends are destabilizing the Earth System. These processes are arranged to a large extent to capitalize on the desires of affluent consumers and therefore maintain the currently dominant and destructive supply chains. As critical tipping points loom, the need emerges to address global inequalities, rearrange social metabolic regimes to avoid crossing planetary thresholds into irrecoverable harm (Section 1.2.).

The research proceeded by asking whether the economy can grow out its way to exit the ills of the Anthropocene, and describes why and how material growth oriented efforts are inadequate to meet socioecological needs (Section 1.3.). GDP as a measure for wellbeing is criticized, and it is shown that the direction and quality of growth have crucial implications on socioecological issues. The Easterlin Paradox explores the relationship between income and subjective wellbeing. Studies on materialism show its negative association with wellbeing, linked to wide-ranging social costs of income inequality.

The dissertation examined the idea of dematerialization through various mechanisms, and finds that those do not lead to reduced energy and material flows on the absolute, systems level. The concepts of methodological nationalism, world-system perspective, unequal exchange, and material footprint are key to understand the complex global interdependencies that underlie such processes. Empirical studies show that as wealth grows, the consumption of non-domestic resources increases, and the global economy becomes more interdependent and reliant on natural resources.

Chapter 2 raised the question whether there is such phenomena as a growth imperative. It compared money-based economies to barter systems and investigated the role of credit expansion and money creation. The analysis also explored threshold levels of growth, technological advancement, compounded interest, ecological and social considerations, and debates over growth in capitalism. The influence of interest-bearing debt, the theoretical possibility of a zero-growth economy, the role of technology, and the complexities of consumer behaviour and market dynamics are also scrutinized. This reading of the literature implies that the „grow or die” premise is not a natural iron law, at least far from being universally valid, and therefore leaves room to manoeuvre; that is to open space for ethical considerations.

Chapter 3 introduced the main theories and concepts of management and economics which, at least implicitly, are endorsing material growth and largely neglect socioecological concerns. Growthism, methodological individualism, and marginalism are prone to overlook complexities
and often disregard ethical and ecological issues. Methods and theories like discounting the future or shareholder primacy are leading to long-term socioecological problems. Similarly, even if benevolently applied, the concepts of near-perfect substitutability and externalities can create detrimental outcomes.

Moving towards the organizational level, Chapter 4 focused on the literature related to business organization growth and showed a considerable variety of descriptions regarding what is considered as business growth, how it is happening, and why. The chapter aimed to decenter material growth as the primary goal of the economy, advocating for a critical re-evaluation of growth in organizational management, by focusing on socioecological concerns. Successful non-growing companies choose not to grow to avoid diseconomies of scale, prioritizing non-financial goals, such as autonomy over the main factors of production processes, employee wellbeing, and pro-environmental aims.

In Chapter 5., Section 5.1. discussed the issue of growthism as a materialistically-oriented goal and value system that provides the ideological background and legitimization to material growth. It is closely related to the question regarding who has power to establish and maintain the socioecological arrangements serving growthism. Such arrangements are captured by the concept of Imperial Mode of Living, where relationships are structured to serve the function of material wealth creation and appropriation, largely neglecting or disregarding socioecological concerns.

Building on the research background and literature review, Section 5.2. reconstructed the theoretical and conceptual framework of CBOs. The core concepts are the substantivist approach towards economic activities, the organizational system of the commons, the practices and relationships of commoning, and the link between various ownership regimes and their socioecological implications.

Up until this point the research had built an argument, that to overcome, or at least significantly reduce the ills of the Anthropocene, it is needed to decenter the priority of material growth when it comes to organizing economic practices and arrangements. This conclusion points to the need to look for organizational patterns and principles that are structurally not inhibiting the prioritization of socioecological concerns. One such arrangement is represented by community-based organizations. The reason to select a sample of CBOs from a diverse range of fields (such as housing, food, energy, mobility, intentional communities, healthcare) was to learn how the organizational model of CBOs can be applied in various realms of social life. Data were
gathered through semi-structured interviews (see questions in the Annex, Section 11.1) and through publicly available documents. The data were coded by themes emerging, and these codes/themes were operationalized into variables of a systems map.

A systems map was created to illustrate the main factors that affect the workings of CBOs.

The two research questions were:

- (RQ1) Which organizational characteristics support the community-based organizations to prioritize socioecological concerns?
- (RQ2) What helps and what hinders the spreading and/or the adaptation of the models of community-based organizations?

Results addressing RQ1, at their core, show that CBOs are spaces and vehicles structurally fit to direct collective actions informed by socioecological concerns. The organizational feature with probably the highest leverage influencing all other factors is the degree a given CBO is capable to incorporate mechanisms of ethical coordination. Ethical coordination concerns both the ethically-driven concern to socioecological issues, and also the organizational structures fit to host and nurture such concerns. CBOs are prioritizing meeting genuine needs, through empowering relationships in autonomy-supportive spaces and arrangements. CBOs are community-oriented in as much as there are genuine options for peers to influence core activities and to participate in them; therefore, organizational arrangements for listening (drawing in information and experiences) are of fundamental importance. Since CBOs are not geared towards material wealth creation and appropriation, at least certainly not without effective restrictions on individual opportunism, space is opened up to crowd-in socioecological concerns, to recognize and reward such contributions. This is at the core of the CBO model, to allow to contribute to the betterment of the community and the individual without systematically generating and shifting costs on third parties. It is made possible through broad value and goal systems which recognize and reward many types of activities, not exclusively the ones resulting in material gains. In CBOs there are no artificially (proprietary or other) raised barriers towards the socioecologically concerned efforts, that is access to knowledge and the sharing of resources and risks is a common feature. In many instances CBOs proved to be spaces of innovation for appropriate technology, that is technological arrangements prioritizing socioecological concerns (such as the avoidance of planned obsolescence, planning and creating for long-term, incorporating features of reparability, customization, and reusability).
Results addressing RQ2 show that there are two basic approaches to the amplification of the impacts CBOs. One is peer to peer knowledge sharing, and the other is technical extensionism. Which methodology to select should be considered regarding the specific knowledge-type to be shared and learned, to fit the context specific purposes. Other impactful amplification methods could be the replication/adaption, or the partial-adaptation of a given CBO model, and the support to network and capability-building. These adaptation efforts could be taken also by business and public institutions, the core could be applied in various contexts and realms of life. The ultimate aim of economic activities should be to provide decent livelihood for those affected while not violating the dignity of the stakeholders and respecting the integrity and regenerative capacity of the natural ecosystems. Therefore, the aim should not be in itself to maximize the numbers of CBOs, as for its own sake, but to apply their socioecologically concerned features where those are fitting and capable to generate beneficial outcomes. It also follows, that if such a policy choice emerges, then it can be more beneficial to stop the (hidden or open) (in)direct support of destructive arrangements, than it is to support the spread of the non-destructive ones.

While addressing the research questions, multiple implications emerged which are relevant for organizing economic activities, organizational management, and social change. Regarding organizing economic activities, the main point of this research is that basic needs could be met for all human beings without destroying the life supportive ecosystems and the prospects of future generations. At the most fundamental level, economic activities should be organized around the principles of meeting basic human needs, the logic of sufficiency, the use of nonviolent technologies, the prioritization of socioecological concerns, and the respect for the dignity of those involved.

Regarding organizational management, mainstream theories, concepts, even if benevolently applied, lead to destructive practices. One reason, I argue, is the scholarship’s origins coming from organizing coerced labour for the sake of material growth and appropriation, without concern to socioecological issues. This makes mainstream theories and concepts blind to their own existential preconditions and to the socioecological outcomes of their application. What this research on CBOs implies, is that management theories and concepts should be constructing with the purpose to support socioecological considerations, for example, by incorporating dignity and nonviolence.
As of theories of social change, this research points to the potentially fruitful use and combination of social practice theory when it comes to amplifying socioecologically driven efforts. Social practice theory can be helpful when designing settings supportive of socioecological concerns, by acknowledging that practices are construed of material/infrastructural, competence/knowledge, and meaning/norms factors.

The most instructive and potentially fruitful learning point from this research is that collective actions can be organized around the principles of dignity and nonviolence. It circles back to the issue of control over activities, power over others and processes, and the arrangements supporting these command structures. As in societies and communities where the institution of the job is a major structuring relationships, everyday life, windows of opportunities and imaginations, the fundamental questions regarding what type of surplus is generated, who gets a say, how it is appropriated, distributed and consumed come to the front ever more pressing. What this research supports is that - if the institutional setting is appropriate - many people are keen to contribute positively and benevolently to the common good.

One of the limitations of this research is that only one interviewee was interviewed from each studied organization and only one occasion in each case. It is most likely that if more stakeholder views could have been collected, and/or interviews could be repeated over time, then additional data could be gathered, suggesting new insights.

Further, data could have been generated through personal involvement, for example through field visits and other types of involvement. This was restricted partly due to the globally dispersed organizations in the sample, and also due to the Covid-19 pandemic. The limited availability to contact the stakeholders of the studied CBOs may also affect the validity of the results, as their feedback regarding the researcher’s interpretation could be discussed and - if necessary - revised.

Further limitation is that the systems map constructed builds on the data of all 20 CBOs, which carries the risk that such map has factors that are not relevant for any given CBO. This limitation was addressed by drawing a map close to an irreducible one as it was possible without losing important information or factors affecting the system.

When it comes to future research directions, my impression is that CBOs could be meaningfully supported through participatory action research processes, where research has a co-determined aim that is formulated with the community concerned, and the generated knowledge serves those purposes. Networking and capability-enhancing efforts seem to be especially fit areas for
participatory action research design, as CBOs generally lack capacities to engage with such activities. On similar lines, businesses and public institutions could be involved in such research projects, either to support their efforts adopting CBO-like organizational features, or to find ways how they could support CBOs.
10. List of references

Abdallah, S; Thompson, S; Michaelson, J; Marks, N; Steuer, N. (2009) The Happy Planet Index 2.0: Why good lives don’t have to cost the Earth, London: nef (the new economics foundation).


Buurtzorg India. (2020). Better care at lower cost: Investing in the India roll-out of the most successful European home nursing model.

https://www.edugreen.in/images/Investment%20Teaser%20-%20BZ%20India%20April%202020.pptx.pdf


Circularity Gap Report (2020) The Platform for Accelerating the Circular Economy


DOI:10.1080/00346768500000020


Daly, H. (2019) Growthism: its ecological, economic and ethical limits. real-world economics review, issue no. 87


Douthwaite, R. (2000b) The growth illusion. How the economy has enriched the few, impoverished the many, and endangered the planet. The Lilliput Press


Easterlin, R.A. And O’Connor, K., J. (2020) The Easterlin Paradox. IZA DP No. 13923


FCD (n.d.) Farm City Detroit. https://www.facebook.com/farmcitydetroit/


Fournier, V. (2013) Commoning: on the social organization of the commons M@n@gement, 16(4), 433-453.


https://doi.org/10.1016/S0921- 8009(97)00100-6


IGBP 2015: The Great Acceleration.

Intergovernmental Panel on Climate Change (IPCC) (2018): Special Report Global Warming of 1.5 °C


http://dx.doi.org/10.1016/j.ecolecon.2015.09.009


https://doi.org/10.1002/(SICI)1099- 0976(19990102)9:1<17::AID-EET180>3.0.CO;2-J

https://doi.org/10.1002/(SICI)1099-0976(19990102)9:1<17::AID-EET180>3.0.CO;2-J


MASTER’S THESIS


Krishna Valley (n. d.) https://krisnavolgy.hu/english/


https://doi.org/10.1016/j.jbusvent.2020.106034


négaWatt scenario (2017) 2017-2050 A blueprint for a successful energy transition in France. négaWatt Institute


Ouishare (n. d.) Our Mission https://www.ouishare.net/mission


Principles for Community-Based Natural Resource Management.’ Unpublished.


DOI: 10.1111/ajes.12265


Sraffa, P. (1960) Production of Commodities by Means of Commodities, Cambridge, CUP.


SZAKI (n., d.) Mission https://szakiszovetseg.hu/en/


214


ZEF (n.d.) Who we are. https://zef.hr/en/o-nama/o-zef-u


11. Annex

11.1. Questions for the semi-structured interviews:

1. What is the reason/situation that called for the formation of the organization/cooperation? (raison d'être, problem formulation – who, how?)
2. How is the organization governed?
   1. Task division, task allocation, reward distribution, information flow?
3. Who are the stakeholders? What is the relationship among the various stakeholders? (hierarchy, level of embeddedness into the community)
   1. What public debate mechanisms are in place, how to screen what are the problems/issues/ideas in the community?
   2. Who can be excluded and on what basis?
4. How do you stay embedded, how do you keep your community character?
   1. How do you resolve, manage tensions regarding access, use, benefit, care and responsibility in relation to key resources?
   2. Methods of public debate, how to screen what are the problems/issues/ideas in the community?
5. What assets chooses the organization to own (what type of ownership), and what assets are operated?
   1. What is the infrastructure/resource-base you depend on and it is out of your control? (for example electricity from the grid)
   2. What materials and energy is used up in the process? (physical dimensions, metabolism)
6. Who/what helps and who/what hinders you the spread/application of similar organizational models?
7. What is considered to be value, how is it generated, how is it divided, who gets a say?
   1. What is success, growth, development and who gets to define these terms? (Is material growth accepted, if so how is it legitimized?)
8. What has a price and are there other-then-price tools to measure contribution? (limits of commodification)
9. What are your future plans? What are the long-term investments? How do you pool capital?
   1. How do you perceive, what stage are you now – seed, diffusing, consolidating?
   2. What helps you in the process of institutionalisation?
   2. What are the limits of the organization, who gets to decide about them? (scalability)
10. Why did you choose the specific organizational form (nonprofit, ltd, foundation, etc)?
### 11.2. Codes TITLE

<table>
<thead>
<tr>
<th>Code Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accounting</td>
<td>Themes that describe what values/transactions are registered by the given CBO, and/or how are those factors accounted for.</td>
</tr>
<tr>
<td>Aim</td>
<td>The aim(s) of the CBOs.</td>
</tr>
<tr>
<td>Autonomy, center, decenter</td>
<td>Describes relationships of hierarchy and/or autonomy. Can be understood on personal, organizational, and policy level.</td>
</tr>
<tr>
<td>Avoiding mission drift</td>
<td>The organizational characteristics that support the CBO to keep prioritising collective action around socioecological concerns.</td>
</tr>
<tr>
<td>Care</td>
<td>Activities and/or relationships of care.</td>
</tr>
<tr>
<td>Challenge</td>
<td>The challenges that the given CBO and/or its stakeholders face, or might face.</td>
</tr>
<tr>
<td>Checks and Balances</td>
<td>The organizational characteristics that intend to avoid the abuse of power.</td>
</tr>
<tr>
<td>Commons orientedness</td>
<td>The organizational characteristics which support the prioritisation of access and peer influence.</td>
</tr>
<tr>
<td>Community mechanisms</td>
<td>The organizational features that allow CBO members and/or outside stakeholders to voice their concerns; and/or to get involved, to participate meaningfully in the workings of the organization.</td>
</tr>
<tr>
<td>Compromise</td>
<td>When compromises had to be made, for example in the case of conflicting issues of providing access while selling products/services on the market.</td>
</tr>
<tr>
<td>Conflicts</td>
<td>The conflicts that have been named by the interviewees.</td>
</tr>
<tr>
<td>Context</td>
<td>CBO-specific factors that are important to understand the workings of that given CBO.</td>
</tr>
<tr>
<td>Category</td>
<td>Description</td>
</tr>
<tr>
<td>--------------------------------</td>
<td>----------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Dead ends, Wrong turns, Learning experiences</td>
<td>The mistakes, learning points recognised by the interviewees.</td>
</tr>
<tr>
<td>Dignity</td>
<td>Factors which affect the dignity of CBOs’ stakeholders.</td>
</tr>
<tr>
<td>Dilemma</td>
<td>Dilemmas named by the interviewees.</td>
</tr>
<tr>
<td>Education</td>
<td>Educational activities of the CBOs.</td>
</tr>
<tr>
<td>Embedded into local</td>
<td>The connection of the given CBO with its locality.</td>
</tr>
<tr>
<td>Enabling condition</td>
<td>Those conditions which enable the existence and/or functioning of the given CBO.</td>
</tr>
<tr>
<td>Engagement-Commitment</td>
<td>Factors which influence the engagement of the stakeholders of the given CBO.</td>
</tr>
<tr>
<td>Ethics</td>
<td>Ethical issues named by the interviewees.</td>
</tr>
<tr>
<td>Evolution, Succession</td>
<td>The description of the processes and/or factors of change in a given CBO.</td>
</tr>
<tr>
<td>Finance</td>
<td>The description of financial issues.</td>
</tr>
<tr>
<td>Gender</td>
<td>Gender related topics.</td>
</tr>
<tr>
<td>Governance</td>
<td>Describes the governance-related mechanisms of the given CBO.</td>
</tr>
<tr>
<td>Income</td>
<td>Issues related to personal or organizational monetary income through market transactions.</td>
</tr>
<tr>
<td>Influence</td>
<td>The influence, outcome a given CBO has exerted, both on the individual and higher levels; for example, change of habits, change of capabilities, etc.</td>
</tr>
<tr>
<td>Inspiration from, adaptation from</td>
<td>Source of inspiration, outside knowledge that was utilised.</td>
</tr>
<tr>
<td>----------------------------------</td>
<td>----------------------------------------------------------</td>
</tr>
<tr>
<td>Knowledge</td>
<td>The description of knowledge elements that are connected to the workings of the CBO, including for example, methods of nondestructive agriculture.</td>
</tr>
<tr>
<td>Language</td>
<td>The way how peers communicate with each other and/or outside world.</td>
</tr>
<tr>
<td>Learning</td>
<td>Personal and/or organizational level learning points derived through peer-to-peer interactions.</td>
</tr>
<tr>
<td>Legal</td>
<td>Legal issues, topics of legality.</td>
</tr>
<tr>
<td>Limit(s)</td>
<td>The description of limits concerning the given CBO (for example the maximum number of people who can be members without endangering the workings of the CBO).</td>
</tr>
<tr>
<td>Livelihood</td>
<td>The description of livelihood issues.</td>
</tr>
<tr>
<td>Long-term</td>
<td>The mention of long-term goals, and/or long-term processes affecting the given CBO.</td>
</tr>
<tr>
<td>Market tactics, strategy</td>
<td>Tactics and or strategies of marketing the products/services of a given CBO.</td>
</tr>
<tr>
<td>Media</td>
<td>The description of the use of media channels, platforms - consists both the “inside” communication of a CBO, the communication with the “outside world.”</td>
</tr>
<tr>
<td>Members</td>
<td>The description of membership and/or their roles connecting to the given CBO - on both personal and organizational levels.</td>
</tr>
<tr>
<td>Networking, Pooling</td>
<td>The description of the connections and efforts to connect with other organizations; also this code covers the pooling/mutualising efforts (when resources are being pooled for the sake of providing access to many) of a given CBO.</td>
</tr>
<tr>
<td>Category</td>
<td>Description</td>
</tr>
<tr>
<td>-------------------</td>
<td>-----------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Personal</td>
<td>The personal stories of an interviewee.</td>
</tr>
<tr>
<td>Politics</td>
<td>Issues concerning inner or outer politics, issues of power and influence.</td>
</tr>
<tr>
<td>Pricing</td>
<td>The description of pricing strategy.</td>
</tr>
<tr>
<td>Problem description</td>
<td>The description of a problem influencing a given CBO.</td>
</tr>
<tr>
<td>Property tools-mechanisms</td>
<td>The description of ownership arrangements relevant for a given CBO.</td>
</tr>
<tr>
<td>Proposal, Demand</td>
<td>The description of what the given CBOs would do if the necessary resources or conditions were accessible.</td>
</tr>
<tr>
<td>Quote</td>
<td>Quotes that capture the essence of community-orientedness.</td>
</tr>
<tr>
<td>Replicate</td>
<td>Descriptions of how a given CBO, or elements of it, can be or have been replicated/adopted elsewhere.</td>
</tr>
<tr>
<td>Risk sharing</td>
<td>Practices, forms of sharing risks related to a given CBO’s activity, and/or the peers’ activities</td>
</tr>
<tr>
<td>Slow</td>
<td>Descriptions of long-term, slow practices and ways of thinking.</td>
</tr>
<tr>
<td>Specialisation</td>
<td>Description of specialisation regarding knowledge or tasks.</td>
</tr>
<tr>
<td>Success</td>
<td>The description/definition of success.</td>
</tr>
<tr>
<td>Technology innovation</td>
<td>Description of the issues related to, approach towards technology and/or innovation.</td>
</tr>
<tr>
<td>Trust and Transparency</td>
<td>Factors, processes that are related to transparency of the given CBO’s workings; the topic of trust.</td>
</tr>
</tbody>
</table>
Open source, Sharing

Description of open sourcing knowledge and/or processes, also the processes of sharing are included.

Value

The description of value, topics related to value.

Vision

The description of the vision of a given CBO.

Working model

The topics/issues related to the functioning of the CBO.

11.3. Systems Map Variables

<table>
<thead>
<tr>
<th>Name of Variable</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aggressive Coordination</td>
<td>A type of coordination mechanism. It structures collective action with disregard to social needs and/or the regenerative capacity and integrity of the ecosystems affected. The higher the level of this variable the more aggressive is the given coordination mechanism.</td>
</tr>
<tr>
<td>Access to Slow/Ethical Finance</td>
<td>The level of access to long-term, social purpose driven finance.</td>
</tr>
<tr>
<td>Unequal Social/Ecological Exchange</td>
<td>The level of disproportionate, unequal exchange among people or in the human-nonhuman nexus.</td>
</tr>
<tr>
<td>Access to Knowledge</td>
<td>The level of access to knowledge relevant for peers in the context of a given CBO.</td>
</tr>
<tr>
<td>Debt Bondage</td>
<td>The level/extent of indebtedness.</td>
</tr>
<tr>
<td>Need for Donations/Grants</td>
<td>The level of need for donations/grants in order to keep the given CBO working.</td>
</tr>
<tr>
<td><strong>Empowerment</strong></td>
<td>The level of empowerment.</td>
</tr>
<tr>
<td><strong>Use of Nonviolent Technologies</strong></td>
<td>The extent nonviolent technologies are applied.</td>
</tr>
<tr>
<td><strong>Non-Monetary Transactions</strong></td>
<td>The range/extent of the option to contribute by non-monetary means.</td>
</tr>
<tr>
<td><strong>Unfavourable External Conditions</strong></td>
<td>The level/extent of unfavourable external conditions affecting a given CBO.</td>
</tr>
<tr>
<td><strong>Ethical Coordination</strong></td>
<td>A type of coordination mechanism. It structures collective action with concern to social needs and/or the regenerative capacity and integrity of the ecosystems affected. The higher the level of this variable the extent can ethical considerations enter collective action of a given CBO.</td>
</tr>
<tr>
<td><strong>Availability of Space</strong></td>
<td>The level/extent space is available for given CBO to allow peer interaction.</td>
</tr>
<tr>
<td><strong>Autonomy</strong></td>
<td>The level/extent of autonomy. The higher this variable the more autonomy supportive is the given CBO.</td>
</tr>
<tr>
<td><strong>Pooling Resources</strong></td>
<td>The extent peers are pooling their resources.</td>
</tr>
<tr>
<td><strong>Diversity of Recognized Values</strong></td>
<td>The level of diversity regarding values recognised. The higher the value of this variable the broader the scope of factors valued.</td>
</tr>
<tr>
<td><strong>Access to Basic Needs</strong></td>
<td>The level/extent of access to basic needs.</td>
</tr>
<tr>
<td>Trust</td>
<td>The level of trust.</td>
</tr>
<tr>
<td>----------------------------------</td>
<td>---------------------</td>
</tr>
<tr>
<td>Control over Activities</td>
<td>The level/extent peers are allowed and capable to exert control over the activities of the CBO.</td>
</tr>
<tr>
<td>Participation in Governance</td>
<td>The extent peers are involved in issues of governance.</td>
</tr>
<tr>
<td>Organizational Openness</td>
<td>The level/extent of openness to allow influencing rules, how things are done in a given CBO.</td>
</tr>
<tr>
<td>Self-Monitoring</td>
<td>The level/extent peers are involved in the design and enforcing of rules.</td>
</tr>
<tr>
<td>Overhead Costs of Everyday Livelihood</td>
<td>The higher this variable the higher are the costs of everyday livelihood. Cost here is applied broadly including time, energy, money, etc.</td>
</tr>
<tr>
<td>Legal Protection</td>
<td>The extent legal arrangements are protecting the CBO’s capability to pursue socioecological issues and avoid mission drift.</td>
</tr>
</tbody>
</table>