

# CULTIVATING INNER CAPACITIES FOR REGENERATIVE FOOD SYSTEMS

RATIONALE FOR ACTION REPORT

Convened by:



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DP

## **Acknowledgements**

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Parts of this section are based on the CoFSA Theoretical Foundations Report (Annex II)

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*“You cannot change a system unless you transform consciousness.”*

Otto Scharmer, (2018)

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*“Food and culture are the currency of life. And while we are overwhelmed by disease and death, a living food culture can show the light to the path of life”*

Vandana Shiva (2021)

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*“We cannot solve our biggest problems if we do not come together. It is not only about institutions or processes. It is in the first instance about our mindsets.”*

Antonio Guterres, UN Secretary General (2021)

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## Executive Summary

Food connects us with one another, our cultures and our planet. Rather than nourishing our collective health and well-being, however, food systems are at the heart of the social and environmental crises we face<sup>1</sup>. Despite significant investment and effort towards transforming food systems, the solutions emphasized so far are not delivering the necessary impact. This impasse **calls us to examine more deeply the root causes of our crises and the structural barriers to transformation.**

Progress is hindered by entrenched power structures that severely limit agency to create change at individual and collective levels. These structures maintain and are themselves maintained by a pervasive cultural **narrative of separation**. This narrative underpins a dominant paradigm of unfettered economic growth, deprioritizes care in policymaking, depresses stakeholder collaboration, and manifests in a widespread inability to think and act systemically.

**While these barriers are embedded in structural inequities and the lack of agency of the most marginalized stakeholders, they are also fundamentally rooted in our consciousness**, particularly in cultural patterns of disconnection from self, others, and nature (see Box 4). Consciousness refers to our awareness of inner and outer phenomena, which influences the lens through which we see and relate to ourselves, and the world around us: others, nature, and future generations. Cultivating consciousness leads to an increasing circle of identity, care and responsibility<sup>2</sup>.

**In the field of sustainability, the importance of deepening consciousness, and cultivating inner capacities** – individual and collective awareness, mindsets, beliefs, values, worldviews, and associated transformative cognitive, emotional and relational qualities and skills - **that support it, is increasingly recognized**<sup>3</sup>. Accordingly, the latest IPCC reports on climate change mitigation and adaptation highlight for instance the role of “inner transitions” and inner capacities of individuals, organizations, and societies as a lever for accelerating the transition in the context of sustainable development<sup>4,5</sup>.

**Overcoming structural barriers to food systems transformation requires investments in building and cultivating the inner capacities of individuals, groups, and institutions that comprise them.** This implies fostering reconnection with nature, others, and self (see Box 5) and cultivating specific transformative qualities and skills (see Figure 3). **Integrating the cultivation of inner capacities** with ongoing investment in existing external solutions represents an untapped opportunity to unlock food systems transformation. **The Conscious Food Systems Alliance (CoFSA)** was created in recognition of this urgent global need.

**The Conscious Food Systems Alliance (CoFSA) is a movement of food, agriculture, and consciousness practitioners, convened by UNDP, and united around a common goal: to support people from across food and agriculture systems to cultivate the inner capacities that activate systemic change and regeneration.**

CoFSA approaches food systems transformation by working with **all relevant stakeholder groups across food systems**, including consumers, companies, governments, development agencies, academia, global and local NGOs, local communities, and farmers and food producers, at three interconnected levels:

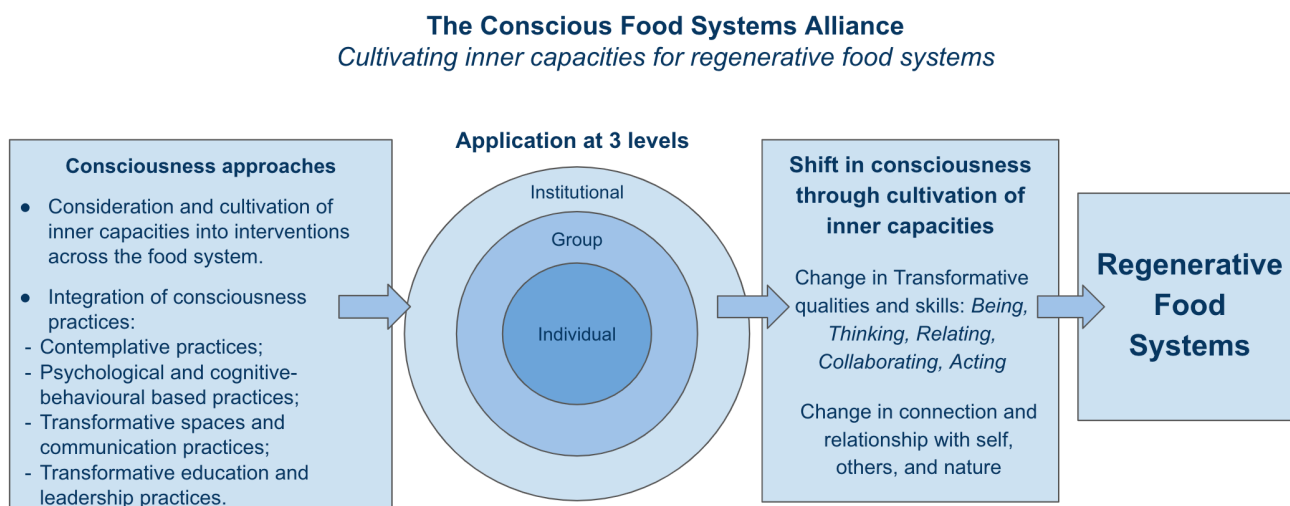
- **Individual:** through trainings, educational programmes, and retreats, as well as coaching activities,
- **Group (collective):** by building safe, connecting, and transformative spaces and networks for conscious multi-stakeholder dialogues and platforms,
- **Institutional:** by supporting the cultural transformation of organizations, as well as dedicated public and private policies.<sup>6</sup>



Evidence is growing that certain consciousness approaches and practices can help build these inner capacities. CoFSA applies consciousness approaches, which integrate the consideration and cultivation of inner capacities into interventions, across all levels. Consciousness approaches can leverage certain practices which actively support the cultivation of inner capacities. These consciousness practices include a vast range of contemplative mind-body practices, often rooted in a variety of wisdom-based traditions (e.g. nature connection and mindfulness – see Box 7), as well as psychological and cognitive-behavioural based practices (e.g. self-reflection and inquiry practices), transformative spaces and communication practices (e.g. deep listening and Non-violent Communication), and transformative education and leadership practices (e.g. experiential learning). CoFSA is committed to working with a diversity of consciousness approaches and practices that support the cultivation of inner capacities, according to their relevance in different cultural contexts, in particular local traditional wisdoms.

CoFSA’s principles to cultivating inner capacities emphasizes the need for context-specific and culturally relevant interventions, founded on respect and equity, as well as awareness of power dynamics. These interventions should be supported by a diversity of evidence and knowledge.

**Figure 1: The CoFSA Model of Transformation**



*Fig. 1: This linear model over-simplifies the process of change for the sake of clarity. In practice, systems change is a complex process characterized by multiple causations, interactions, feedback loops, and inevitable uncertainty and unpredictability<sup>7</sup>. CoFSA’s model draws on the Model of Inner-Outer Transformation<sup>8</sup> and the Inner Development Goals framework<sup>7</sup>.*

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## INTRODUCTION

Food connects us with each another, our cultures and our planet. But rather than nourishing our collective health and well-being, food systems are at the heart of the social and environmental crises we face<sup>8</sup>. Despite significant investment and effort towards transforming food systems, the solutions emphasized so far are not delivering the necessary impact. This impasse calls us to examine more deeply the root causes of our crises and the structural barriers to this transformation.

As such, sustainability experts have begun to question the dominant narrative that has located both problems and solutions wholly **outside** the people involved in them<sup>9</sup>. Certainly addressing systemic dysfunction requires external, structural approaches - but realizing these approaches calls us to address what is deeply human. Like our wider sustainability crises, our fragmented and dysfunctional food system has its roots in the human being and the way they see and relate to the world and each other: in consciousness itself. Accordingly, research now demonstrates the importance of **integrating 'external' solutions with internal approaches rooted in human consciousness to address inner barriers to change and unlock transformation**<sup>10</sup>. The Conscious Food Systems Alliance (CoFSA) was created in recognition of this urgent global need.

Based on the latest evidence, this report presents a rationale for the **cultivation of inner capacities** of food systems' stakeholders. Fostering these transformative cognitive, emotional, and relational qualities and skills, and the ability to address mindsets, beliefs, values, and worldviews, enables the necessary expansion and deepening of a conscious relationship with the world. As such it presents a crucial complementary approach to external solutions – such as farming inputs and agricultural technologies, economic incentives, laws and policies – toward achieving regenerative food systems. The report also proposes an agenda for action to achieve this through CoFSA.

Section I proposes that the time has come to address inner barriers **to food systems transformation**. I.A highlights the need for food systems transformation. I.B sets out a collective vision for regenerative food systems and I.C discusses the fundamental structural barriers to achieving this vision, and their relationship to inner capacities.

Section II presents the **evidence for the potential of consciousness approaches to unlock food systems transformation**. II.A presents the theoretical and conceptual foundations linking inner and outer transformation. II.B discusses how **reconnection with nature, with others and with self can serve as the foundation of a regenerative food system**, outlining the required transformative qualities and skills. II.C examines the consciousness approaches and practices that can cultivate these inner capacities and the evidence-base to support this.

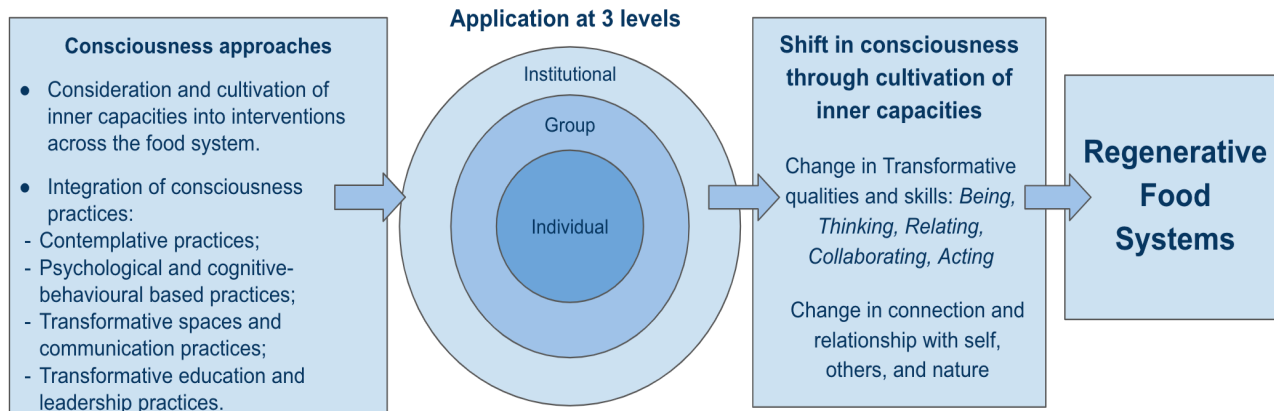
Section III presents the **Conscious Food Systems Alliance (CoFSA)**. III.A introduces the Alliance, III.B presents an **Agenda for Action** applying consciousness approaches in food systems at the individual, group, and institutional levels. III.C outlines CoFSA principles for cultivating inner capacities. Finally, an Annex provides links to a full set of case studies, the Theoretical Foundations report on which this document builds, and a bibliography.

Boxes throughout the report contain practical examples, including contributions from CoFSA partners, and provide key definitions (see Box 1).



**Figure 1: The CoFSA Model of Transformation**

**The Conscious Food Systems Alliance**  
*Cultivating inner capacities for regenerative food systems*



*Fig. 1: This linear model over-simplifies the process of change for the sake of clarity. In practice, systems change is a complex process characterized by multiple causations, interactions, feedback loops, and inevitable uncertainty and unpredictability<sup>7</sup>. CoFSA’s model draws on the Model of Inner-Outer Transformation<sup>8</sup> and the Inner Development Goals framework<sup>9</sup>.*

**Box 1: Definitions of Key Terms (in the context of CoFSA)**

- **Consciousness:** our awareness of inner and outer phenomena, which influences the way we see and relate to ourselves, and the world: others, nature, and future generations. Cultivating consciousness leads to an increasing circle of identity, care and responsibility.
- **Inner capacities:** individual and collective awareness, mindsets, beliefs, values, worldviews, and associated transformative cognitive, emotional and relational qualities and skills. The cultivation of inner capacities can enable a deepening or expansion of individual and collective consciousness that can support regenerative food systems.
- **Transformative qualities and skills:** cognitive, emotional and relational qualities and skills which have been shown to support the cultivation of individual and collective values, beliefs and worldviews regarding how people relate to themselves, others, work, the environment and future generations that can support regenerative food systems.
- **Consciousness approaches** integrate the consideration and cultivation of inner capacities into interventions across all levels: individual, group (collective), and institutional (system). These approaches often leverage certain consciousness practices.
- **Consciousness practices** actively cultivate inner capacities. They include a vast range of contemplative mind-body practices, often rooted in a variety of wisdom-based traditions, as well as psychological, cognitive-behavioral, educational, communication and leadership practices and processes.

Source: adapted from Wamsler et al. 2020, 2021, Wamsler 2020



# SECTION I

## Time for a Complementary Approach to Food Systems Transformation

*“I used to think that the top environmental problems were biodiversity loss, ecosystem collapse and climate change. I thought with 30 years of good science we could address those problems. But I was wrong. The top environmental problems are selfishness, greed and apathy... And to deal with these we need a spiritual and cultural transformation”.*

Gustave Speth, former Chair of the United Nations Development Group

Parts of this section are based on the CoFSA Theoretical Foundations Report (Annex II)

## I.A The Urgent Need for Transformation

“Our food systems are broken”. In recent years, this sentence has echoed throughout scientific articles, media headlines, advocacy campaigns, and policy discourse. While food systems have managed to feed the majority of a global population that has grown from 2 billion to 7.87 billion in the last century, consensus is growing that the means that have achieved this are unsustainable.

### Box 2: What is a Food System?

Food Systems embrace the entire range of actors and their interlinked value-adding activities involved in the production, aggregation, processing, distribution, consumption, and disposal (loss or waste) of food products that originate from agriculture (incl. livestock), forestry, fisheries, and food industries, and the broader economic, societal, and natural environments in which they are embedded.

Production includes, of course, farming communities but also pre-production actors, for example input industries producing fertilizers or seeds. The range of actors importantly includes science, technology, data and innovation actors. They are partly integral to the food systems, and partly outside but of great influence, for instance, embedded in life science and health systems research. In food industries’ processing, foods and non-foods result from interlinked value chains. Other relevant food systems actors include, for example, public and private quality and safety control organizations (Food Systems Summit, 2021).

Current **food systems fail to bring proper nutrition to many**. Up to 811 million people experienced hunger in 2020 (a 20 percent increase on 2019, due to the impacts of the COVID-19 pandemic) and 22 percent of children under 5 suffer from stunted growth<sup>11</sup>, while approximately 2 billion adults are overweight or obese and micronutrient deficiencies are widespread. Poor diets and malnutrition are a leading cause of mortality worldwide.

Alongside the global challenges of lack of food, hunger, and malnutrition, **dysfunctional food consumption and eating habits affect the health and well-being of all beings and the planet**<sup>12</sup>. Overconsumption and mindless eating are increasingly prevalent<sup>13</sup>. These have a significant negative impact on both mental health (e.g eating disorders, addictions, depression) and physical health (e.g the rising global burden of noncommunicable diseases like diabetes, heart disease and cancers). Unhealthy diets now present a greater risk of morbidity and mortality than alcohol, drug, and tobacco use combined<sup>14</sup>. Consumers’ food choices both influence, and are influenced by, the kind of food that is produced and how it is marketed<sup>15</sup>.

**A sustainable diet for human and planetary health is both possible and necessary**. This message is conveyed in the EAT-Lancet ‘Planetary Health Diet’ report which outlines how to feed a global population of nearly 10 billion people a healthy diet within safe planetary boundaries by 2050<sup>16</sup>. **However, this can only be achieved through substantial dietary shifts on a global scale**. With a recognition that food-secure populations must bear greater responsibility for shifting diet, consumption of plant-based foods such as fruits, vegetables, nuts, and legumes must double, and, overall, consumption of foods such as red meat and sugar must be significantly reduced<sup>17</sup>. However, for many low-income consumers, healthy diets remain unaffordable or inaccessible, while many consumers with the capacity to choose continue to buy and eat food that is unhealthy for themselves and the planet. These consumption patterns are influenced by complex interactions between a range of factors such

as income, prices, cultural traditions, social norms, marketing, and geographical and environmental constraints.

**The environmental impacts of food systems are of equal concern:** food systems generate up to 37 percent of global greenhouse gas emissions<sup>18</sup>, are responsible for up to 80 percent of biodiversity loss, and use up to 70 percent of freshwater<sup>19</sup>. Soil pollution and degradation due to pressures from the growing demands of agri-food and industrial systems are a major global challenge<sup>20</sup>. The loss of agrobiodiversity, with only three crops (maize, wheat and rice) providing 51 percent of the world's plant-based food, poses a severe threat to global food security and nutrition<sup>21</sup>.

**Food systems are fraught with inequities.** They provide livelihoods for up to 4.5 billion people through agriculture, value chains, and informal labour<sup>22</sup>, but these livelihoods are often precarious. About 80 percent of the extreme poor, and 75 percent of the moderate poor live in rural areas. Of these poor, 76 percent and 60 percent respectively work in agriculture<sup>23</sup>. **Many farmers are facing extreme stress and even in some cases trauma** stemming from high vulnerability to issues such as food insecurity, poverty, climate change, food prices instability, debt, and conflicts. These problems are most well documented in India and the US<sup>24</sup>. The agricultural and farming sector is identified as an industry with one of the highest rates of suicide<sup>25</sup>. Women, youth and Indigenous Peoples, and in general smallholders from the global south are amongst those most affected by inequities in food systems while being the least responsible for its dysfunction<sup>26</sup>. The call for urgent food systems transformation, as the single strongest lever to **optimize human and planetary health<sup>27</sup> and achieve the SDGs<sup>28</sup>**, has thus been growing louder across the globe and across stakeholder groups.

## I.B A Shared Vision for Regenerative Food Systems

2021 saw an unprecedented level of engagement and discussion on the state of food systems.

In 2021, spurred by **the UN Food Systems Summit**, thousands of organizations and hundreds of thousands of individuals debated how food systems should be transformed to achieve the 17 SDGs that compose Agenda 2030. Whether expressed through the Summit processes<sup>29</sup> - in particular the Member State Dialogues and Independent Dialogues - or the civil society-led counter-summit<sup>30</sup>, views on desirable outcomes and on the principles and values that should guide the transformation converge on several major points.

The **desired outcomes** for food systems, as summarized in the Secretary General's Statement of Action<sup>31</sup>, are aligned with the three pillars of Agenda 2030:

- People — “Nourishing Everyone for Health and Well-being.”
- Planet — “Producing in Harmony with Nature.”
- Prosperity — “Inclusive, transformative and equitable recovery for the 2030 Agenda.”

A number of **principles** also emerged through the multi-stakeholder consultations<sup>32</sup>, which included over a hundred thousand individuals from across sectors, stakeholder groups (governments, civil society, academia, private sector, indigenous peoples, etc.), and age groups<sup>33</sup>. The outcomes emphasize the importance of:

- Inclusivity, equity, and empowerment, especially of historically excluded people(s)
- Rights-based approaches, in particular, the fulfillment of the Right to Food
- Contextualized and locally-grounded approaches
- Food sovereignty and security
- Collaboration and partnerships

- Embracing complexity, recognizing inter-dependence, and applying systems-thinking, which entails learning, adaptation, and dealing with trade-offs
- Anchoring action and innovation in both science *and* traditional knowledge and wisdom
- Transparency, accountability, and trust

Many also affirmed **values** deemed fundamental to guide the transformation, such as respect, reverence, compassion, and solidarity, as exemplified by the [Interfaith statement](#) developed by the Faith and Food coalition after a series of multi-stakeholder dialogues and signed by nearly 100 organizations<sup>34</sup>.

### Box 3: Regenerative Food Systems

**Regenerative Food Systems** go beyond sustainability to actively restore, revitalize and replenish the soil, the water, the flora, the fauna, livelihoods, cultures and planetary health (Regenerosity, 2022; Wahl, 2017). Rather than focusing on doing less harm, it works in alignment with living systems to create systems which are healthy, resilient and adaptable, to ensure we're able to feed many generations to come (TNC, 2022).

#### Regenerative Agriculture

While there is no single definition of regenerative agriculture, the set of practices commonly associated with regenerative agriculture includes:

- minimizing soil disturbance by abandoning tillage,
- maintaining living roots in the soil year-round by using cover crops and rotating different types of crops,
- encouraging plant diversity, through mixed cropping and intercropping,
- integrating trees, through agroforestry and other means,
- rotational grazing of livestock,
- using inputs made from organic matter, which can either dramatically reduce or entirely remove the need for synthetic agricultural inputs.

These positive characteristics are found in abundance in farming systems such as biodynamic, organic, permaculture, silvopasture, agroforestry and agroecology (Burgess et al., 2019; Ellen MacArthur Foundation, 2022; Marina O'Connell, 2022).

## I.C Inner Barriers to Transformation

**Despite significant investments and efforts toward transforming food systems, the solutions emphasized have not delivered the necessary impact. Widespread difficulty in implementing promising external solutions suggests that something more fundamental is missing from current approaches. This difficulty calls us to examine more deeply both the root causes of the crisis and unseen barriers to transformation.**

Voices in the fields of sustainability and international development have begun calling for greater consideration of the **inner human factors** driving the problems we face; questioning the dominant narrative that has framed solutions as somehow **external**, somewhere “out there,” disconnected from ourselves and from one another<sup>35</sup>.



Accordingly, research shows the important relationship between inner capacities (see Box 4) and particular elements of systemic dysfunction and barriers to change. Certainly, progress is hindered by entrenched power structures that severely limit agency to create change at individual and collective levels. Consciousness approaches can do little to help those most oppressed to transform an unjust system directly. However, as we will discuss, these structures maintain and are themselves maintained by a pervasive cultural **narrative of separation**. This narrative underpins a dominant paradigm of unfettered economic growth, deprioritizes care in policymaking, depresses stakeholder collaboration, and manifests in a widespread inability to think and act systemically. **While these barriers are embedded in structural inequities and the lack of agency of the most marginalized stakeholders, they are also fundamentally rooted in human consciousness.**

### **‘External’ Barriers: a Question of Power**

**Food systems are heavily dominated by an increasingly small number of global companies,** particularly retailers and agribusinesses with a large market share and substantial influence<sup>36</sup>. The operations of companies such as large-scale industrial farms, agrochemical companies, agro commodity traders, and companies working in the transport, processing, and distribution of food are too often shaped by **an extractive mindset** with an emphasis on industrial agriculture, short-term profits, competition and lack of responsibility and accountability to stakeholders. It should be acknowledged that some of these companies are making significant efforts to improve the environmental sustainability of their operations, increase access to healthy foods, and improve equity within their value chains.

These power structures often fuel corruption and the domination of vested interests<sup>37</sup>, the exclusion of marginalized populations<sup>38</sup> and dissident voices from policy-making, and a lack of trust<sup>39</sup> between stakeholders in food systems. This is pervasive also in international relations, where power asymmetries shape unjust trade agreements that affect farmer livelihoods and environmental impacts. People worst affected by these power asymmetries find their agency severely limited by the basic challenges of survival.

### **An Extractive Paradigm**

**These relationships of power shape and are reinforced by a dominant paradigm of unfettered economic growth, which is hindering transitions toward sustainable food systems**<sup>40</sup>. As Olivier de Schutter, Co-Chair of the International Panel of Experts on Sustainable Food Systems (IPES) and former United Nations Special Rapporteur on the right to food, observes: “In the mainstream concept of development, wealth creation is seen as paramount in pursuit of everything else; inequalities and environmental degradation are justified as a temporary price to be paid in this process of economic growth”<sup>41</sup>. In many parts of the world, especially in developing countries, consumption of diets high in animal products and processed foods associated with western culture and lifestyles<sup>42</sup> are considered desirable because they are associated with higher socioeconomic status while local and traditional foods are often devalued. De Schutter asserts that “a new paradigm focused on well-being, resilience and sustainability must be designed to replace the productivist paradigm and thus better support the full realization of the right to adequate food”<sup>43</sup>. Some governments have begun to adopt such alternative development paradigms, as in the case of Bhutan’s Gross National Happiness, or the philosophy of “Buen Vivir” (“Good Living” or “Living Well”), incorporated as a guiding principle into the Constitutions of Ecuador (2008) and Bolivia (2009), expressing a worldview based on cultural diversity, collective well-being and harmony with nature<sup>44</sup>. Yet these alternative paradigms are largely marginalized or excluded from current mainstream approaches.

## Cultural Narratives of Separation

At yet a deeper level, this economic paradigm and the behaviour and decision-making it gives rise to **originates in dominant cultural narratives and worldviews associated with modernity**, which have historically spread through colonization and are currently supported by existing power structures<sup>45</sup>. These narratives **not only emphasize materialism and consumerism but also a sense of separation from one another and the natural world (see Box 3), which underpins zero-sum, competitive mindsets, limiting the capacity to care for the common good and collaborate**. They also find expression in a deep-seated sense of superiority over nature (e.g. extractivism) and of some humans over others (e.g. race, class and gender inequities). In this view, the natural world is widely seen as a resource to be extracted and leveraged for profit maximization and the material benefit of (certain parts of) humankind, rather than a living ecosystem to be respected and nurtured<sup>46</sup>. This is in contrast with the worldviews and values of many Indigenous Peoples around the world, whose relation to nature is often based on belonging, harmony, respect, and interdependence<sup>47</sup>.

## Reductionism and Siloed Solutions

Importantly, the predominant Cartesian-Newtonian scientific paradigm, termed reductionism, has operated according to mechanical laws and explored the world by breaking it down into component parts<sup>48</sup>, inhibiting our capacity to approach complex food and agriculture-related challenges in a systemic manner. This problem can be seen, for example, in many of the practices implemented during the green revolution, such as monocropping and heavy application of inorganic pesticides and fertilizers, which led to an initial increase in the production of food but after several decades has, in many cases, resulted in decreased yields due to a decline in the fertility of the soil<sup>49</sup>. More generally, governance is inappropriately structured to deal with the complexity and multi-dimensional nature of food systems<sup>50</sup>. Landscapes management is typically approached in silos, according to separate elements – water, forests, agriculture, livestock, energy. Lack of inter-ministerial and inter-agency collaboration often results in competition and policy incoherence. As a result, food and agriculture policies have often failed to **integrate** environmental and public health objectives, resulting in suboptimal outcomes.

**Food systems transformation requires attention to the whole: embracing complexity, recognizing interdependence and applying systems-thinking.** To support greater integration and policy coherence, the development of specific inner capacities is needed and include openness, holistic awareness, curiosity, solidarity, and willingness to prioritize the common good over narrow agendas and interests.

#### **Box 4: Disconnection from Self, Others, and Nature**

A growing number of voices are pointing to **the patterns of separation and disconnection that underpin the brokenness of our food systems**, such as:

##### *Disconnection from self*

- Our relationship with food is an intimate part of our lives, directly impacting our well-being. However, this relationship is often characterized by a lack of conscious awareness around our own needs and habits. Diet is closely linked to both physical and mental health, with unhealthy habits, for example, forming a vicious cycle with aspects of depression and low self-esteem. The same lack of awareness can drive unsustainable consumption habits. Conversely, improving diet is easier as part of an intentional, holistic approach to self-care. Such an approach requires conscious connection with e.g., our own feelings, purpose and agency. Across food systems, change-makers' endemic stress, burnout and frustration undermines the capacity to connect with purpose and our own capacity for care and collaboration.

##### *Disconnection from others*

- While we are all connected through global food chains, the distance between each point of the chain has grown. It is more difficult for a consumer to show empathy for an unknown poorly paid daily laborer on a distant palm oil farm than it is for a neighboring farmer whose produce one buys on a local market. This disconnection also manifests in a lack of empathy or understanding for the conditions or constraints faced by others, leading to increased polarization between groups with different views or priorities, for example, between conservationists and farmers, or between environmental activists and companies. This results in a breakdown in communication and inability to find common ground or collaborate.

##### *Disconnection from nature*

- Urbanization and the growing reliance on industrial farmers and supermarkets to obtain - often highly processed - food, can render invisible the relationship between food on the one hand, and plants and animals which provide them, let alone the ecosystem they are a part. This disconnection is reflected in the widely held perception of nature as a resource to be extracted and leveraged for profit maximization and the material benefit of (certain parts of) humankind, rather than as a living ecosystem, which we are part of, to be respected and nurtured. It also leads to farming and production mechanisms that are highly disconnected from, and even work against, nature.

## **A Lack of Collaborative Capacities**

**The cultural narrative of separation and domination plays into a policy environment where stakeholders are too often pitched against one another, rather than supported to think and act towards mutual benefit.** To navigate the complexity of challenges faced, the transformation of food systems **requires certain emotional and relational qualities and skills to enable greater listening, trust, collaboration and partnerships** between stakeholders including governments, companies, farmers and food producers, and civil society organizations. Yet the quality of current multi-stakeholder collaboration in the sector is inadequate to meet the scale and nature of this challenge, as the **food sector is characterized by deep conflicts between stakeholders across the supply chains.** Traditional governance mechanisms, including inter-institutional and multi-stakeholder components, are often characterized by power asymmetries and exclusion of marginalized groups, and hindered by polarization between stakeholders and lack of trust, transparency and accountability<sup>51</sup>. Marginalized groups such as local communities, farmers and Indigenous Peoples are not sufficiently supported to meaningfully participate and be heard in global governance forums<sup>52</sup>.

## Care Deficit

Finally, a related factor inhibiting the necessary transformation of food systems is **lack of care for the public good within the values underpinning policy and decision making**. As American Economist Jeffrey Sachs put it, “poverty is caused by a failure of ethics, not economy”<sup>53</sup>. Human rights such as the right to food or the right to a clean, healthy, and sustainable environment are often downplayed in the face of economic interests, which are often shared by policy and decision-makers.

## Cultivating Inner Capacities as the Missing Complementary Approach

The western world has excelled in developing external solutions to transform food systems, but, in many cases, the relevant deep narratives and values are lacking – as are the abilities to collaborate well, respond to complexity, care for the whole. Further investments in external solutions are needed but they will not solve by themselves these relational crises rooted in our mental models<sup>54,55</sup>. As we will discuss in Chapter II, there is an **untapped opportunity to unlock food systems transformation through building the inner capacities** of all relevant stakeholders across the food system. By cultivating the awareness, mindsets, beliefs, values, worldviews, and associated cognitive, emotional and relational qualities and skills, we can overcome these inner barriers and **activate the adaptation, implementation, and sustained impact of transformative solutions**.



# SECTION II

## Unlocking Transformation Through Consciousness Approaches

“Creating regenerative systems is not simply a technical, economic, ecological or social shift: it has to go hand-in-hand with an underlying shift in the way we think about ourselves, our relationships with each other and with life as a whole”

Daniel Christian Wahl, Author of *Designing Regenerative Cultures* (2016)

...

This section is largely based on the CoFSA Theoretical Foundations Report (Annex II), which provides further details:

Wamsler C., Bristow J., Cooper K., Steidle G., Taggart S., Søvdal L., Bockler J., Oliver T.H., Legrand T. (2022). Theoretical Foundations Report: Research and evidence for the potential of consciousness approaches and practices to unlock sustainability and systems transformation. Report written for the UNDP Conscious Food Systems Alliance (CoFSA), UNDP.



## II.A. Inner Capacities as Deep Leverage Points

### In Search of New Approaches

In response to the insufficient impact of conventional solutions for sustainability and climate, including in food systems, **the importance of the inner dimensions of sustainability and our consciousness** has received increasing attention<sup>56</sup>. **Our consciousness influences the lens through which we see and relate to ourselves, and the world: others, nature, and future generations**<sup>57</sup>. The expansion and deepening of our consciousness translates into **an increasing circle of identity, care, and responsibility** and can unlock powerful inner potential to care for, commit to, and effect change for a better, more sustainable life<sup>58</sup>.

**The cultivation of inner capacities** - people's awareness, mindsets, their beliefs, values, worldviews, as well as associated (cognitive, emotional, and relational) transformative qualities and skills - **has been identified as an effective pathway to expand and deepen consciousness, in a way that supports sustainability**. Research shows that nurturing certain inner capacities can drive changes in our behavior to become more ethical, more prosocial, connected, and compassionate<sup>59</sup>. The latest IPCC reports on adaptation<sup>60</sup>, and mitigation of climate change, highlight the role of "inner transitions" and inner capacities of individuals, organizations, and societies as a lever for accelerating the transition in the context of sustainable development<sup>61</sup>. The Human Development Report (2020) likewise emphasizes that: *"Nothing short of a wholesale shift in mindsets, translated into reality by policy, is needed to navigate the brave new world of the Anthropocene, to ensure that all people flourish while easing planetary pressures"*<sup>62</sup>.

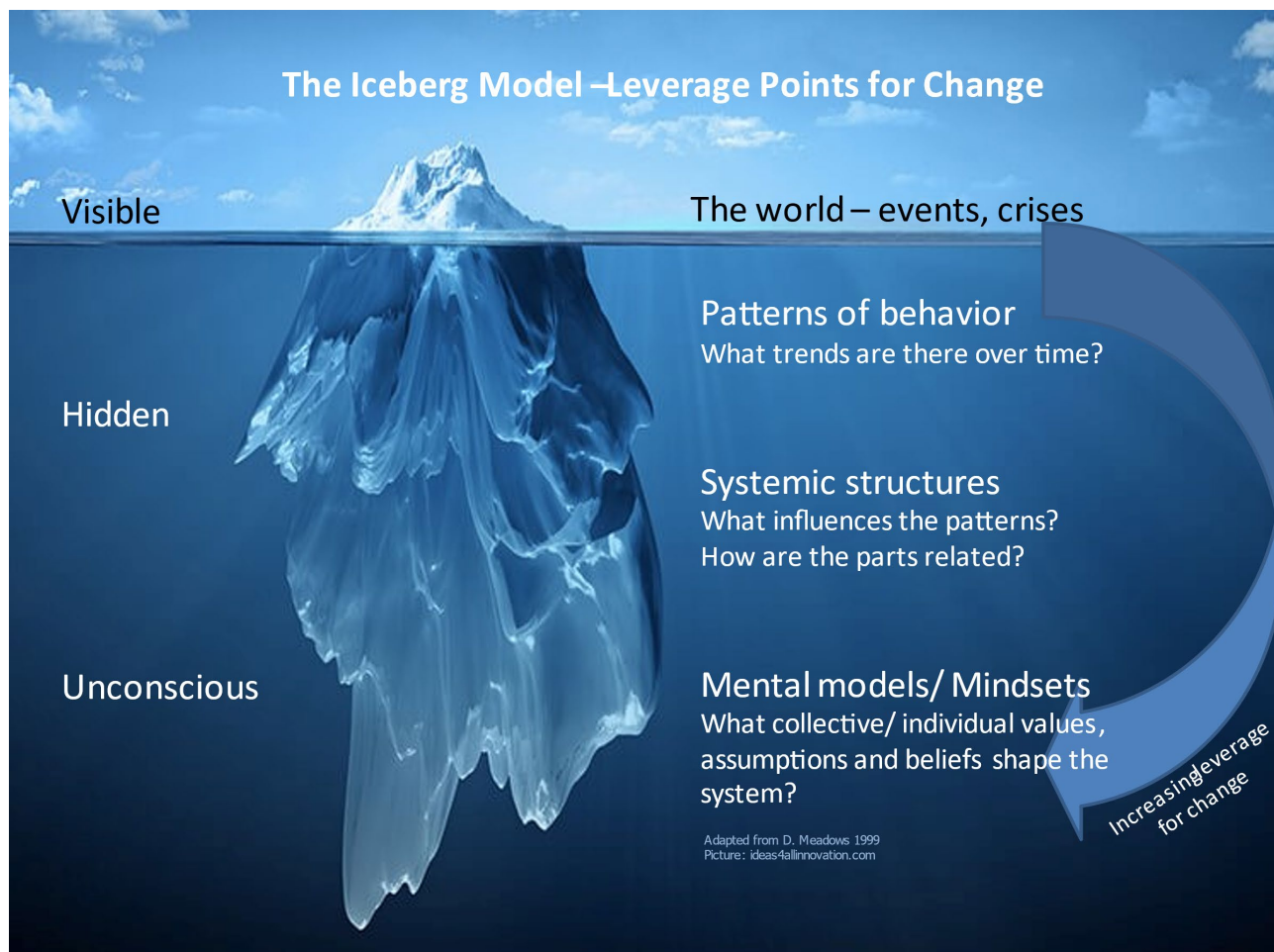
Hence, whilst most large-scale sustainability and climate action to date has focused upon political and practical solutions to physical problems, voices coming from diverse perspectives, traditions, disciplines and professions increasingly warn that the neglect of inner factors leaves current approaches and theories of change wanting.

### Theoretical and Conceptual Foundations for Addressing Inner Capacities

**A growing body of scientific evidence demonstrates the linkages between inner and outer transformation for sustainability and how to support related processes**<sup>63</sup>. In this context, a number of **theories** have been developed to bridge existing knowledge from different disciplines and fields, and highlight the role and value of inner capacities in the context of sustainability. What they have in common is that they all show that **systemic change and inner transformation are deeply interconnected – and that addressing inner capacities may have great potential for transforming systems and advancing sustainability**.

**Many of these theories are based on the Meadows' Iceberg Model which comes from systems thinking**<sup>64</sup> and is similar to related psychological models<sup>65</sup>. In simple terms, the Iceberg Model demonstrates that what we can see – the part of the iceberg that is visible above the surface of the sea – are the events or crises that define our world today. However, much more – around 90 percent – of the iceberg is invisible to us. In human terms, what is hidden beneath the surface are the underlying patterns, structures, and mindsets that ultimately define the visible manifestation of individual and collective actions, institutions, systems, events, and crises that characterize our world today (see Figure 2). Based on this model, we can see that **the capacity to address and reflect on our inner lives and mindsets and, potentially, adopt new paradigms can be a powerful way (theoretically, the most powerful lever) to significantly influence sustainability outcomes**. In scientific terms, this is called a deep leverage point for change<sup>66</sup>.

Figure 2: The Iceberg Model



Source: Adapted from Meadows (1999), presented in Wamsler (2021)

The *Iceberg Model* suggests that we may work at different levels to bring about change toward sustainability: 1) at the level of behavior, 2) at the level of systems or structures, 3) at the level of cultural change, and 4) how we as individuals make meaning regarding the world around us, our consciousness and mindsets (cf. figure 1). **Importantly, it also implies that all these levels are interrelated, therefore that emphasising one of area to the exclusion of the others, may not yield the kind of change we are hoping for.** These ideas are also centrally expressed in the Model of Inner-Outer Transformation, the Three Spheres of Transformation, Integral Theory, the Framework for Contemplative Scientific Inquiry, Practice and Education in Sustainability, and Theory U (see also II.C.)<sup>67</sup>. For more details regarding these frameworks see Annex II). This diversity of complementary frameworks is helpful for advancing diverse approaches and innovation to support inner, behavioral, cultural and systems change.

**Personal and adult development theory supports understanding of the relationship between inner transformation and systems change<sup>68</sup>.** According to this theory, mindsets change and develop throughout the life-course<sup>69</sup>, with every stage representing a significant shift in how we experience ourselves, others and the world. This shift in our self-and-other awareness, thought patterns, and our sense of inclusivity has clear implications for sustainability and climate change work, in that our greater sense of connection leads us to choices that are more prosocial, mindful of our impact, and more

proactive in working towards the good of others and the environment<sup>70</sup>. Adult development theory also suggests that we can develop certain inner capacities that help us to grow and engage with the world in more inclusive and equitable ways<sup>71</sup>. This idea also informs the concept of transformative qualities or skills<sup>72</sup> (see II.B).

**The theories outlined above imply strongly that food systems transformation requires not only political, economic and technological shifts but also the development and cultivation of inner capacities at the individual, collective and institutional levels.** The lack of consideration for stakeholders' intrinsic motivations leads to an overemphasis on extrinsic motivation (e.g. through economic incentives, etc.) as drivers of transformation of food systems. **Failure to address these inner capacities risks perpetuating the current system.**

## II.B The Inner Capacities for Regenerative Food Systems

Section II.A outlined the need to consider and address the inner capacities to transform food systems. Section II.B introduces particular inner capacities that can support transformation towards regenerative food systems. These are identified as 1) the capacity for conscious reconnection with self, others and nature, and 2) a particular group of inner, transformational qualities and skills.

### Re-establishing or Deepening Conscious Connection with Self, Others, and Nature

As demonstrated in I.C, there is mounting evidence that a deep cultural narrative of disconnection is the underlying common thread of our interlinked socio-economic and environmental crises<sup>73</sup>. Our 'external' crises and the structures and behaviours that produce them are rooted in an internal, human crisis of relationship<sup>74</sup>. Thus, **conscious reconnection with self, others, and nature can serve as a foundation of regenerative food systems (see Box 5)**. This inter-being-relationality paradigm is foundational to many traditional wisdoms and spiritual traditions<sup>75</sup>.

#### Box 5: Reconnection with Self, Others, and Nature

Where disconnection contribute to dysfunction (see Box 4), conscious reconnection can help foster regenerative food systems.

##### *Reconnection with Self*

Reconnection with oneself can be a critical enabler for **adopting healthy and sustainable diet based on local traditional food and culture, as well as fostering prosocial and pro-environmental attitudes and behaviours, and increased resilience and well-being:**

- From dietary choices that are harmful for oneself and the planet with overconsumption of red meat, dairy and sugar to ones that cultivate our collective health with a substantial increase in plant-based foods such as fruits, vegetables, nuts and legumes, as well as in unprocessed, unpackaged food.
- From consuming imported food as a way to reflect certain social status to consuming local food and valuing one's own culinary cultural heritage.
- From overwhelm and burnout to increased resilience and well-being of farmers, food activists and local leaders.
- From a materialistic and individualistic to a relational understanding of well-being and human flourishing, leading to pro-social and pro-environmental attitudes and behaviors.

### *Reconnection with Others*

Reconnection with others can foster pro-social attitudes and behaviours, as well as greater empathy and compassion between stakeholders, leading to **more collaborative, just and local food systems**:

- From marginalization to inclusion, decent incomes and working conditions, as well as the right to food of small farmers, indigenous people, women and poor land workers.
- From polarization between stakeholders in the food system, for example between conservationists and farmers, or between governments and indigenous peoples, to greater openness, listening and understanding of each other's point of view and respect for different perspectives and opinions.
- From globalized value chains to local food systems that hinges upon strong community bonds and organizations.

### *Reconnection with Nature*

Reconnection with nature can foster pro-environmental attitudes, behaviours, and **transform our relationship with nature** from one based on domination and extraction, to a relationship **based on appreciation, respect, harmony, and reciprocity**:

- From public and private policies supporting industrial agricultural practices, such as mono-cultures and agro-chemical subsidies, to policies supporting the transition to more regenerative and agroecological farming.
- From a focus on extraction and increasing agricultural production, driving deforestation and land degradation, to sustainable land management and nature-based solutions.
- From food seen as a commodity to be traded for profit to the recognition of the sacredness of food, a gift from the Earth that cannot be wasted.

## Transformative Qualities and Skills

In recent decades, various competency frameworks have emerged, which present the required human skills and qualities needed for sustainable development. Only recently however have such frameworks also recognised the importance of inner capacities and what have been called “transformative qualities and skills”. These transformative qualities and skills have been shown to support the cultivation of values, beliefs, and worldviews regarding how people relate to themselves, others, work, the environment, and future generations<sup>76</sup> in ways that can support sustainable development.

On the basis of systematic theoretical and empirical analyses of current knowledge and associated gaps, five clusters of transformative qualities and skills have been identified in this context: awareness, insight, connection, purpose, and agency<sup>77</sup>. The Inner Development Goals (IDGs)<sup>78</sup>, a framework of transformative skills for sustainable development, follows the same rationale by clustering related qualities and skills under the headings of being, thinking, relating, collaborating, and acting<sup>79</sup>. Cultivating these transformative qualities and skills is thus proposed to help unlock food systems transformation and support the effectiveness of external interventions.

**Figure 3: The Inner Development Goals framework: an example of Transformative qualities and skills**

<b>Being - Relationship to Self</b>	<b>Thinking - Cognitive Skills</b>	<b>Relating - Caring for others and the world</b>	<b>Collaborating - Social Skills</b>	<b>Acting - Driving Change</b>
Inner compass	Critical thinking	Appreciation	Communication Skills	Courage
Integrity and Authenticity	Complexity awareness	Connectedness	Co-creation Skills	Creativity
Openness and Learning mindset	Perspective Skills	Humility	Inclusive mindset and intercultural competence	Optimism
Self-awareness	Sense-making	Empathy and compassion	Trust	Perseverance
Presence	Long-term orientation and visioning		Mobilization Skills	

Source: *Inner Development Goals Initiative (2021)*<sup>80</sup>

The importance of inner capacities is reflected in the core principles and practices of existing regenerative food movements, which often build on distinctive individual and collective beliefs, values, and worldviews (see Box 6 below).



### Box 6: Regenerative Food Movements Building on Distinctive Inner Capacities

Local agro-ecological movements are often “*marked by a framing discourse, based upon culturally, spiritually, and contextually appropriate principles and values*” that helps mobilize farmers (Hernández-Castillo and Nigh, 1998). For instance, **the organic coffee boom in Chiapas** has been “*influenced, driven, and supported by Liberation Theology and the Indigenous Theology of the Catholic Church, with their fundamental tenet of a preferential option for the poor. The recovery of ancestral and popular knowledge associated with Maya cosmovision has been central elements of the boom*” (ibid).

**Permaculture**, a widely popular form of agroecology inspired by indigenous worldviews, is based on a particular philosophy and ethics emphasizing care for the Earth, care for the people, and fair share, with design principles that can be applied beyond agriculture.

Similarly, **Shumei Natural Agriculture**, a global movement of farmers, scientists, chefs, creative individuals and consumers, promotes ecologically friendly and sustainable farming practices in local communities around the world based on a philosophy of reverence and understanding of the natural world. They work towards building better communities, relationships and global awareness based upon harmony and respect.

Another example is **SEKEM**, a thriving community and a leading social business with the vision of unfolding human potential, human dignity, and living in accordance with ecological and ethical principles. Established in the Egyptian desert in 1977 by Dr. Ibrahim Abouleish, SEKEM revitalizes desert land using biodynamic agricultural methods and supports human flourishing through a holistic development approach which integrates ecology, economy, societal and cultural life.

Finally, the rise in ‘**value-’ or ‘purpose-driven’ business models**, such as cooperatives or B Corps, are a crucial force towards a more regenerative food system. B Corps aim to benefit a wider range of stakeholders, including nature, beyond the traditional focus on shareholder value and redefine the measures of success in business. There are many examples of B Corps in the food sector, including Divine Chocolate, Danone, Brewdog, CafeDirect, Innocent Drinks, and Riverford Organics.

## II.C Consciousness Approaches and Practices

**Consciousness approaches integrate the consideration and cultivation of the inner capacities relevant for regenerative food systems** (outlined in Section II.B) **into external interventions**. The approaches can be integrated into interventions with relevant stakeholders across three levels of food systems:

- **Individual:** through trainings, educational programs, and retreats, as well as coaching activities;
- **Group (collective):** by building safe, connecting, and transformative spaces and networks for conscious multi-stakeholder dialogues and platforms;
- **Institutional:** by supporting the cultural transformation of organizations, dedicated public and private policies.

**Consciousness approaches can leverage certain practices which actively support the cultivation of inner capacities**. They include a vast range of:

- **Contemplative practices**, often rooted in a variety of wisdom-based traditions, such as mindfulness or nature connection (see Box 7);
- **Psychological and cognitive-behavioural based practices**, such as self-reflection;
- **Transformative spaces and communication practices** through dialogues, group discussions and facilitation practices, such as deep listening and Non-violent Communication; and **communities of practice** to deepen understanding and application of the learning<sup>81</sup>.

- **Transformative educational and leadership practices**, such as experiential learning, and arts-based learning;

CoFSA is committed to working with a diversity of consciousness practices that support the cultivation of inner capacities, according to their **relevance in different cultural contexts, in particular local traditional wisdoms.**

## Contemplative Practices

This category of consciousness practices encompasses a broad array of mind-body practices coming from a variety of scientific disciplines, professional fields and/or wisdom. In modern secular contexts, these are often termed 'contemplative mind-body approaches'. Recent decades have seen a resurgence in the application of such practices and evidence is growing for their potential to build the inner capacities necessary for regeneration, including in the food system.

### Box 7: Examples of consciousness practices

**Mindfulness:** Mindfulness is an inherent human capacity that can be developed through practice. It can be understood as the practice of being aware of what is happening here and now, in our mind, body, and external environment. This open, non-judgmental presence can be cultivated through meditation, in particular the attention to our breathing while sitting, walking, or doing our daily activities, without being caught in thoughts, feelings, or sensations. Scientific evidence shows a wide range of potential benefits associated with the practice of mindfulness including improved well-being and resilience, empathy, pro-social and pro-environmental attitudes and behaviours, as well as cognitive flexibility and performance (Baer, 2015; Bristow et al., 2020).

**Compassion:** is a motivational capacity which combines a will to turn towards distress with a drive to help (Bristow et al, 2022). While inherent to human nature, the drive to alleviate others' pains can be cultivated through meditation practices, visualizations, self-reflections, deep listening and group discussions. Compassion cultivation practices have been shown to increase happiness, calmness, self-awareness, empathy, and compassion for self and others; while decreasing worry, anxiety, anger, mind wandering, emotional suppression, and chronic pain severity (Compassion Institute, 2022).

**Nature connection:** Nature connection practices focus on immersing ourselves in natural surroundings to engage with nature through our senses and learning to appreciate it. Examples include nature-based mindfulness (Djernis et al., 2019), activities to enhance nature experience such as painting, bird-watching and unstructured play in nature (Richardson et al., 2020), outdoor learning (Prince, 2017), forest bathing (Hansen et al., 2017), and green-social prescribing schemes (NHS England, 2022). A large body of evidence links the increased sense of nature connectedness that such approaches provide with pro-environmental attitudes and behaviour, such as sustainable purchasing of food (Arnocky et al., 2007; Hurst et al., 2013; Martin et al., 2020; Richardson et al., 2020; Rosa et al., 2018; Udall et al., 2021) This has been shown in the case of farmers in Australia (Gosling E., Kathryn J.H.W., 2010).

**Somatic bodywork:** somatics focus on transforming our physical awareness, habits and reactions for greater freedom and self-actualization, through practices such as body awareness, breathing, touch, movement, as well as readings, conversations and reflections. Somatics is based on the understanding that the mind, the body, the self and our rationality are inextricably linked; to develop one, you must cultivate the others (Strozzi-Heckler, 2014).

**Non-violent Communication (NVC):** is an approach to communication based on principles of nonviolence. The basics of NVC involve expressing ourselves with clarity, compassion, self-responsibility, empathy, and the common good in mind. NVC teaches people to express themselves with honesty and clarity, while simultaneously paying others a respectful and empathic attention, and as such can enable greater and deeper collaboration and conflict solving (Rosenberg, 1999).

**Self-reflection:** Self-reflection is the habit of deliberately paying attention to your own thoughts, emotions, decisions, and behaviours (Wigal in Awan, 2021). Self-reflection practices, such as journaling, can cultivate openness to become aware of why you think, act and feel the way you do; the ability to observe one's thoughts, beliefs, and emotions; and the intentionality to act with purpose in alignment with your values and goals (Gouwy, 2014).

**Ample scientific evidence demonstrates the benefits of such practices at an individual level (e.g., in terms of health, well-being, and performance).** Currently, most evidence relates to mindfulness, compassion, and nature connection practices (see Box 7) and interventions (see example in Box 8), coming from health, educational, spiritual, business, and professional settings<sup>82</sup>. Research about the benefits of other consciousness practices is also rapidly growing.

#### **Box 8: Mindful Eating and Mindful Consumption Practices**

**Mindfulness-based interventions, like mindful consumption and mindful eating, can be key practices in changing both *what* people eat and *how* they eat to bring positive results at both an individual and collective levels.**

- Mindfulness has been shown to positively relate to green purchase intention, social conscious purchasing and frugal purchasing behaviour; to support the development of key competencies for sustainable consumption, and to be an efficient means for improving healthy nutrition (Dhandra, 2019; Frank, Sundermann & Fischer, 2019 ; Stanzus, Frank & Geiger, 2019).
- Mindful eating is also being incorporated into psychotherapy and behavioral change programs to help people, especially those living with eating disorders and noncommunicable diseases like diabetes, **create more mindful and healthy eating habits** (Nelson, 2017; Warren, Smith & Ashwell, 2017). In such practices, the individuals focus on appreciating the experience of food. The results of such practices are often that the person chooses to eat less, enjoys and appreciates eating more, and selects foods consistent with desirable health benefits. This often includes eating less processed and more organic and whole-foods (Nelson, 2017; Fung et al., 2016).

## **Psychological and Cognitive-Behavioural Based Practices**

**A range of well-established and evidence-based psychological practices such as Cognitive-behavioural therapy (CBT) and coaching<sup>83</sup>, as well as different self-reflection and -inquiry practices (such as contemplation, journaling and storytelling) have also been proven to support people's personal development and change processes.**

These practices can cultivate openness to become aware of why you think, act and feel the way you do; the ability to observe one's thoughts, beliefs, and emotions; and the intentionality to act with purpose in alignment with your values and goals<sup>84</sup>. Evidence for their applications and impact on wider societal and systems change is still nascent, but related practices show encouraging results<sup>85</sup>. Tools related to personal and adult development theory, such as the immunity to change (ITC) process, the integral process for working on complex issues (TIP) and related worldview approaches, also fall within this category of psychological and cognitive-behavioural interventions. Empirical work shows for instance how perspective-taking capacities arrive at different meanings about climate change, which in turn helps to understand and address climate change in a more integrative way.

Indeed, behavioural research exploring the link between cognition and emotion, shows that multiple, diverse and counter-intuitive factors influence how people see and act in the world and our actions are often not rational, but are contextual and relational<sup>86</sup>. Developing **emotional awareness and greater understanding of our own embodied minds, including our own biases and assumptions can support better decision-making**. This can be applied, for example, with civil servants and politicians to develop the inner capacities which are needed to navigate the complexity of challenges they deal with in their work (see Box 18). **Emotional awareness or intelligence is also an important enabler of our capacity to care for the common good, to communicate and collaborate with others**<sup>87</sup>. This can be cultivated by bringing our attention to our emotions, and those of others, and learning to recognise, embrace, make sense and transform them.

## Transformative Spaces and Communication Practices

This category covers practices that support an enabling environment for **introspection, dialogue and collaboration** that can support cultivation of inner capacities and more integrative action-taking. Creating such transformative spaces involves the consideration of their physical settings, non-hierarchical communication setups, and different coaching and facilitation practices (such as **Non-violent Communication, deep listening, circles and councils**), which can be used in combination with, for instance, contemplative practices<sup>88</sup>. Increasingly, even at the most important international climate conferences, such as COP, related consciousness practices have been explored with positive results (see Box 9). Research also suggests that **transformative spaces and communication methods are powerful ways to support change if they are used in the context of creating networks of practice and new cultures of collaboration to support sustainability**<sup>89</sup>.

### Box 9: Case Study: Fostering Collaboration at COP26 through consciousness approaches

During the United Nations Climate Change Conference (COP26), a number of the Conscious Food Systems Alliance Partners offered conscious support to policy makers:

- **Plum Village Monastics at UN Climate Change Conference (COP26)**  
International Plum Village monastics have joined the TED Countdown Summit in Edinburgh and the COP26 in Glasgow to offer workshops, guided meditations, Q&As, and a TED talk. They have taught about the importance of integrating compassion, mindfulness, joy, and community into the art of saving the planet.
- **Inner Green Deal moderates panel-discussion to explore the role of sustainable and compassionate leadership at official side event hosted by EU**  
In an EU-hosted official side event, the Inner Green Deal Initiative moderated a session on "What leadership qualities are needed now?" exploring the role of sustainable and compassionate leadership in achieving climate neutrality.

- **Institute for Advanced Sustainability Studies (IASS) hosts Co-Creative Reflection & Dialogue Space at COP26**

The IASS offered a space where negotiators and stakeholders of observer organisations can meet in formats that are typically not used in side events, but are more structured than informal dialogues in breaks or over meals. The space was designed to deepen meaningful interaction, build trust and engage openly in honest dialogue and reflection.

- **One Resilient Earth & Green Releaf Initiative collaborate on deep listening event 'Climate emotions, feelings and breakthroughs,' as part of IASS Space**

One Resilient Earth led an open-sharing and deep-listening circle on climate emotions, feelings and breakthroughs. The event, held on-site in the 'Blue Zone' and accessible online, offered the opportunity for COP participants to come together and share the full spectrum of emotions they are experiencing at the start of the international climate negotiation process. Following an open-sharing and deep-listening session, the event provided an open space to explore the role of emotions in the international climate change negotiation process.

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## Transformative Education and Leadership Practices

Over the past years, a range of different practices have also been combined and adapted to the context of sustainability, leading to **transformative education and leadership approaches**. These experiential learning approaches link complexity, systems and/or design thinking with some of the previously listed practices. Examples include: i) Tools of **'The Work That Reconnects'** that are aimed at helping people discover and experience their innate connections with each other and transform despair and overwhelm into inspired, collaborative action<sup>90</sup>; ii) methods that are associated with the **Theory U process**<sup>91</sup> (see III.B, e.g. the **'UN Action Learning Lab - Transforming Systems in the Decade of Action'**) and iii) other transformational learning approaches that come with a certain pedagogy and associated tools and exercises for linking inner and outer change, such as **sustainability-related education and leadership training** offered by Universities (e.g. 'Sustainability and Inner Transformation' at LUCSUS) or private organizations (e.g. 'Transformative Climate Advocacy' by Pacific Integral; Ecojustice Course by Courage of Care; Transformational Leadership Course by M. Sharma<sup>92</sup>; 'BEYOND' a Climate & Environmental Leadership Programme by the Inner Green Deal<sup>93</sup> - see Box 10). Transformative education and leadership approaches can also be leveraged to support **sustainable consumption education**<sup>94</sup> (e.g. the Tapiokit by Brazilian NGO Instituto Maniva -see Box 15).

More generally, the inner dimension of leadership is increasingly emphasised as in the case of awareness-based leadership, inclusive leadership, collaborative leadership, system leadership, etc

## Combination of Consciousness Practices

**A comprehensive review of related evidence indicates that sustainable inner-outer transformation is best supported by a combination of consciousness approaches and practices**, and depends upon the diversity of tools offered, and how they are combined and adapted to specific contexts and participants' interests and needs<sup>95</sup>.

### Box 10: Case Study: BEYOND, a Climate & Environmental Leadership Programme by the Inner Green Deal

#### *European leaders exploring how to tackle the climate crisis inside out*

In March 2021, the Inner Green Deal (IGD), an independent non-profit organization launched BEYOND a Climate & Environmental Leadership Programme, which aims to drive sustainability from within by supporting decision makers to cultivate mindfulness and compassion, develop new habits and collaborate with a common purpose.

100 leaders from the European Union (EU) - including 40 from the European Parliament, Council and Commission - took part in a pilot programme, exploring both the inner dimension of sustainability in terms of mindfulness, compassion, nature connection, systems thinking, values and beliefs, and outer aspects such as behaviour change, collaboration and workplace initiatives.

The Leadership Programme has led to a number of results among participants, including: a significant increase in connection with nature and; a clear link between compassion and pro-environmental behaviour - indicating that people with higher levels of compassion are more likely to act for the environment; a notable integration of climate and environmental issues into work and a clear intention to do so further in the near future (Awaris, 2022).

## Consciousness Approaches: Integrating Internal and External Solutions

As the Model of Inner-Outer Transformation shows (see Annex II), consciousness approaches involve the cultivation and consideration of inner capacities at individual, group/collective and institutional/system levels<sup>96</sup>, to enable their integration with external solutions. This means that **CoFSA interventions can support certain practices or learning environments that support individuals and/or groups to tap into their inner potential and nourish transformative inner capacities**. In addition, CoFSA interventions can leverage the current political and institutional landscapes by **systematically mainstreaming the consideration of inner capacities into existing institutions, structures and systems**. The aim of the latter is to support the structural and political conditions required for the emergence of a more regenerative food system from the inside-out.

In sum, **evidence indicates that investment into cultivating inner capacities has the potential to unlock the transition towards regenerative food systems**.



# SECTION III

## The Conscious Food Systems Alliance

*“There are many changes to make over the next 10 years, and each of us will take different steps along the way, but all of us start the transformation in one place: our mindset.”*

Christiana Figueres

...

Sections I and II have outlined the case for cultivating inner capacities as a key leverage point of systemic change to support regenerative food systems. Section III presents the Conscious Food Systems Alliance (CoFSA) as a vehicle for this work; introducing an agenda for action, and principles for cultivating inner capacities.



## III.A Introducing the Conscious Food Systems Alliance (CoFSA)

The **Conscious Food Systems Alliance (CoFSA)**, is a movement of food, agriculture, and consciousness practitioners, convened by UNDP, and united around a common goal: to support people from across food and agriculture systems to cultivate the **inner capacities that activate systemic change and regeneration**.

The Alliance aims to establish the cultivation of inner capacities as a **key evidence-based approach** to envision and create regenerative food systems, and to build **legitimacy** for this agenda by:

- Establishing a **Community of Practice and Learning**, within which individuals and organizations to connect, learn and exchange knowledge, support and inspire each other, and collaborate to build conscious food systems;
- **Pioneering the application of consciousness approaches and practices** across food systems, through a global portfolio of interventions, including the delivery of trainings, coaching and facilitation services, supported by research and learning frameworks.

CoFSA approaches food systems transformation by working with all relevant stakeholder groups across food systems, including consumers, companies, governments, development agencies, academia, global and local NGOs, local communities, and farmers and food producers.

The Alliance offers a **bold vision** on the role of consciousness for food systems transformation, around which a diverse set of stakeholders, committed to adapting it to their particular contexts, can unite.

Further information about the Alliance can be found on the CoFSA website.

## III.B An Agenda for Action

As noted in Section II.B, consciousness approaches can be integrated into interventions at three interconnected levels of the food system: individual, group (collective), and institutional (system). This section outlines how consciousness approaches can be applied and integrated at each level.

### 1. Application at the Individual Level

**CoFSA supports the application of consciousness approaches and practices at the individual level through training, educational programmes, and retreats, as well as coaching activities.** These can be directed to farmers, consumers, and other stakeholders along the value chains to support their well-being and resilience, as well as the transition to regenerative practices.

#### Promoting the Adoption of Regenerative Practices

**CoFSA is committed to building the inner capacities of food stakeholders as a way to support their adoption and promotion of regenerative practices.** Several existing initiatives exemplify this approach. One such example is SEKEM, a leading sustainable farming initiative in Egypt which offers its employees and partners numerous trainings to help them integrate the values and principles associated with their specific approach to sustainable farming. These are based on the Economy of Love (EoL), a holistic educational concept that fosters the **four dimensions of sustainability: ecology, economy, society, and culture**.

SEKEM's comprehensive education program is designed to introduce both employees and managers to the four dimensions of sustainability underlying the Economy of Love standard to support its implementation (see Box 11).

#### **Box 11: Case Study: Economy of Love Education Programme in Egypt**

##### *Creating a conscious corporate culture based on the Economy of Love principles*

Economy of Love (EoL) Educational Programme (EDU) is an educational curriculum that accompanies the EoL Certification Standard for sustainable and ethical producers, farms, and processors, implemented by SEKEM. The EoL EDU Program is applied to all the organizations and companies that wish to be certified to adhere to the principles of holistic and sustainable development.

The EoL EDU curriculum is tailored to empower producers and processors to initiate the transformation of corporate culture and its current state of operation toward a working culture that supports the EoL principles and fosters the **four dimensions of sustainability: ecology, economy, society, culture**.

Joining the Program for companies means taking care of their employees' personal development through various cultural activities offered to their staff in different forms, ranging from the arts to Islamic spiritual practices. Companies commit to ensuring that 10% of employees' working time is devoted to their individual and personal development.

##### **EoL EDU Curriculum: 4 Modules and 7 Sessions**

So far, around 1300 employees have been trained through the EoL EDU curriculum. The course is structured in 4 modules that aim to shift the paradigm both at individual and collective level. The introductory part (first and second sessions) of the course aims at getting to know each other in the group through the narration of personal stories, then the modules begin:

- **[Module 1] ECOLOGY:** The module begins with observation and immersion in nature to foster interconnectedness with the whole system. Later sessions cover learning about our current food production systems and observing their influence on climate change, while also reflecting on traditional and indigenous ways of farming and exploring how these alternative practices might inspire us to transform our food production methods.
- **[Module 2] ECONOMY:** The module aims to explore an economic system based on collaboration, solidarity and care for people and nature.
- **[Module 3] CULTURE:** This module seeks to balance the emphasis on productivity and efficiency, while also nurturing employees' individual development through the arts, creativity, spiritual practices and well-being. In this way, EoL EDU focuses on providing space for individual empowerment and cultural diversity, in order to foster a healthy, respectful work environment and hence lead to a sustainable and balanced society.
- **[Module 4] SOCIETY:** The module aims to create a community of trust and mutual understanding where the well-being of all people is considered. Communication skills, conflict resolution skills, self-awareness, and emotional intelligence are all essential for building a strong community and will be practiced throughout this module.

By exploring the four dimensions of the economy of love criteria in-depth, EoL EDU program will support companies to become part of a movement built on the principles of sustainability, solidarity, and respect towards each other and nature. Additionally, the curriculum focusing on adult education, drives them to reflect on life's goals and purposes, raising working-class consciousness. (SEKEM, 2021)

## **Fostering Conscious and Regenerative Leadership**

**Conscious leadership can make a huge difference to support the adoption and promotion of regenerative practices.** For example, Yvon Chouinard, the founder of the outdoor clothing company and B Corp, Patagonia, cites deep nature connection through climbing practice and a spiritual practice in mindfulness and zen meditation, as central in informing his business decisions. The retailer is now

recognised as a leader in sustainable business through policies such as the use of regenerative organic cotton, 'free repairs for life' on all products, and brand campaigns that actively discourage overconsumption.

**Consciousness approaches can support regenerative leadership at the local level.** For example, in Bafut, Cameroon, an indigenous initiation ritual supports young leaders in developing their leadership for regenerating their communities, including through the promotion of permaculture (see Box 12).

**Box 12: Case Study: An Indigenous Youth Leadership Initiation Ritual to support Regeneration in Cameroon**

***Reviving the spirit of Ndanifor in young leaders of permaculture ecovillages***

Since 2013, a rehabilitation programme designed by Better World Cameroon has been implemented in the Bafut area of Cameroon to transform around 54 traditional villages into resilient ecovillages, where connection with nature is restored, high value agricultural products (HVAP) are grown, sustainable food forests are preserved, and biodiversity is protected.

Ndanifor Permaculture Ecovillage is the first demonstration site in Bafut that has been converted into a resilient ecovillage, through a combination of indigenous initiation rituals for leaders and permaculture training for the community; a combination that has supported the village's systemic transformation towards sustainability at both the individual and community levels.

The indigenous Ndanifor ritual is a leadership initiation practice for a group of local young people that enables them to flourish as leaders of the Ecovillage. During a seven-day spiritual retreat in the forest, young people are guided by an elder on mindful breathing, deep listening and prayer; the ritual involves a strict discipline of fasting and mindful eating, along with community healing activities such as bathing and water soaking together. On the journey, participants are encouraged to connect their souls to Mother Earth and dive deeply into themselves. The ritual evokes, through sacred chanting and the pouring of libations, the presence of the ancestors to spiritually instruct those undertaking the transformation.

The Ndanifor ritual is linked to the belief that if young people are constantly connected to Mother Earth for seven days, they develop their consciousness by receiving the wisdom and knowledge of their ancestors. At the end of the journey, a celebration of leadership initiation is held for those who have participated in the retreat and who aspire to become the new village leaders of the Bafut communities.

This initiation supports young leaders' involvement in outer ecovillage activities such as regenerative agriculture, medicinal gardens, from a mindset grounded in interconnection with nature.

**Consciousness approaches can support individual and women's leadership, trauma healing, and entrepreneurship** within rural communities. For example, Global Grassroots is an initiative in Rwanda that empowers women as mindful leaders of sustainable change from within their own communities (see Box 13). Global Grassroots promotes a mindfulness-based social enterprise incubator where participants learn a holistic set of personal transformation and social entrepreneurship skills. Throughout an 18-month course, inner work activities are introduced alongside technical skills like project management and budgeting to prepare women for enterprise leadership in the water management sector. Participants have reported results including a significant increase in mindfulness



and self-management; confidence and agency; well-being and resilience; as well as venture leadership skills and a sense of belonging.

### Box 13: Case Study: Catalyzing Female Social Entrepreneurs in rural Rwanda to Lead from Within

Global Grassroots is a mindfulness-based social venture incubator for women in East Africa, which believes that for sustainable development to occur, transformation is most effectively driven from within. To achieve its mission, Global Grassroots utilizes a methodology called Conscious Social Change. This approach uses inner work (e.g., mindfulness, social emotional learning, trauma healing, resilience, and agency-building) as a vehicle and design tool for sustainably solving complex social issues.

Global Grassroots works **in post-conflict East Africa (Rwanda), where water access is limited**, they invest in local women-led teams who have ideas for improving their communities, by equipping them with a holistic array of personal transformation and social entrepreneurship skills. **Over the course of 18 months**, they put these skills to work in designing, constructing, and implementing social-purpose water enterprises for the benefit of their communities. Each non-profit venture brings clean water access to thousands of community members each year.

- **Curriculum:**

- In Phase One: women-led teams participate in an intensive, experiential 40-hour training that focuses on the principles of Conscious Social Change, including core skills of mindfulness-based leadership, and mind-body trauma healing. Inner work activities are introduced alongside project management, budgeting, and creative resourcing to prepare teams for venture leadership.
  - In Phase Two: teams enter 3-6 months of hands-on coaching as they design comprehensive plans for their ventures.
  - In Phase Three: they receive seed funding and 1-4 months of implementation support during the construction of their water access point.
  - In Phase Four: water ventures are operational and begin reinvesting profits into community projects.
- **Impact:** Between 2008 and 2021, 26 women's water ventures have reached more than 82,000 individuals in underserved communities in Rwanda and Uganda. Among those ventures, 96% are still operational. **The course has shown personal transformation of team members** in mindfulness and self-management, confidence and agency, wellbeing and resilience.
  - **Approach:** When problems arise, rather than solving for the women, staff leverage their own mindful leadership skills to facilitate discussion. This includes honoring women's wisdom and leadership instincts, and using **"inquiry without imposition"** to help teams generate solutions of their own.

## Supporting Well-Being and Resilience

**Consciousness approaches can support the resilience and well-being of farmers** who, in many cases, face extreme stress which is linked to high rates of depression and suicide among this group. Whilst acknowledging that structural challenges such as debt and the impacts of climate change are ultimately responsible for these difficulties, consciousness approaches and practices can be effectively integrated into farming communities to support their well-being. The case of Sustainable Yogic Agriculture in India demonstrates the benefits of this approach (see Box 14).

**Food activists and change-makers** are also particularly prone to mental health issues, including burn-out, depression and suicide. The well-being and resilience of these groups can likewise be supported through consciousness approaches and practices. For example, the UNDP offers a "mindful self-compassion"<sup>97</sup> course to its employees. Elsewhere in the international development sector the global environmental NGO The Nature Conservancy (TNC) has developed a mindfulness program to support staff well-being and to deepen their compassion and capacity to engage in environmental work<sup>98</sup>. The



UN Foundation project ‘Peace on Purpose’ equips UN development and humanitarian workers who work in some of the most stressful and hostile conditions in the world responding to global conflicts, extreme poverty, and the climate crisis with tools to care for their own mental and physical well-being so that they can continue to care effectively for others<sup>99</sup>.

#### **Box 14: Case Study: Sustainable Yogic Agriculture and the Cultivation of Farmers’ Wellbeing**

In the system of ‘**Sustainable Yogic Agriculture**’ (SYA) led by the **Brahma Kumaris movement**, the practice of organic agriculture is combined with thought-based meditative practices to support farmers well-being, and their adoption of sustainable farming practices. According to staff at the SYA Demonstration Farm in India, the aim of teaching the meditation is to cultivate in farmers a feeling of connection to God, Self, the Motherland and cows, with this inner transformation of the farmer in turn transforming the farm through right thinking and action (Bojesen Jensen, J., 2021, In: Wright, J. (ed) *Subtle Agroecologies*).

The meditation taught is an open-eyed practice, and farmers are encouraged to do this on a daily basis between 4 and 5 am, either remotely or in the field. They may also transmit positive intentions outside this time period during specific farming practices, and affirmations are taught to support each phase of the cropping cycle (Ramsay, T., 2012).

Research has highlighted benefits in terms of **farmer wellbeing**, including:

- improved family relations;
- increased feeling of connection with livelihood;
- increased sense of wellbeing and purpose;
- increased sense of pride as a farmer;
- improved relationships among farming communities;
- reduction in emotions such as anger and frustration among farmers;
- increase in emotions such as patience and forgiveness among farmers;
- incorporates cultural and spiritual meaning into work life;

**The farm environment was also reported to be more pleasant, joyful, and refreshing.** Farmers felt their villages had become cleaner, more peaceful, and unified politically, especially during elections. They perceived their families as happier because the heads of the household (themselves) were more peaceful. They also noted fewer problems associated with addictions to smoking, alcohol, opium and other substances, since they had abandoned these practices. Fewer doctors’ visits were reported, as was improved inner strength and higher self-esteem.

## **Nurturing Healthy and Sustainable Food Cultures**

**Finally, consciousness approaches are often implicit in social and educational interventions that support the adoption of more healthy, sustainable and local diets.** As well as mindful eating and mindful consumption practices (see Box 8) CoFSA can work with consumers to reconnect with local food cultures through education programs aimed at promoting traditional foods. Brazilian NGO Instituto Maniva exemplified this approach with the Tapiokit project (see Box 15).

### Box 15: Case Study: Tapiokit, a Conscious Food Education Program

#### *Enhancing cultural identity to promote sustainable and healthy eating habits in the schools of Rio de Janeiro*

The Tapioca Workshops, later called Tapiokit, is a workshop run by Brazilian NGO, Instituto Maniva, for thousands of kids in public schools across Rio de Janeiro, aiming at promoting sustainable eating habits through revival of the rich native gastronomy. The workshop focused on reviving the Amazonian cultural identity through the use of Cassava, or Manioc, a root vegetable formerly a staple food of the country, now widely replaced by wheat and viewed as a “food for the poor”. The objective is to raise awareness and decolonise eating habits, reclaiming one's culinary and cultural identity, and promoting a healthy and sustainable diet through the use of cassava as a native and locally grown food.

- **Programme structure:** The workshop involved extracurricular activities for children aged 7 to 12, such as: lessons on the history of cassava and the influence of Portuguese colonization; cooking classes to learn cassava recipes; storytelling activities on indigenous tales about the origin of cassava; and finally, learning Brazilian folk songs and dances celebrating cassava.
- **Impact:** During 10 years of implementation, more than 3,000 kids had been trained in Rio. The Tapioka Workshop offered a new perspective on native food by stimulating children's creativity and autonomy through easy cooking techniques; it changed eating habits by valuing the origins of socio-biodiversity products; it provided cultural and historical knowledge of Brazilian culture and established a connection with ancestries; finally, it reinforced the Brazilian cultural identity.
- **Scale-up:** By replacing the 'identity food' with other basic products, the “kit” has been used in several states in Brazil and also in Uruguay.

## 2. Application at the Group Level

**At a group level, CoFSA integrates the application of consciousness approaches into the creation of safe, connecting, and transformative spaces for conscious multi-stakeholder dialogues in food systems contexts.**

Collaboration in multi-stakeholder dialogues and platforms is a critical part of building regenerative food and agricultural systems. As noted in section I.C, collaboration in multi-stakeholder forums is often hindered by communication challenges, diverse and often competing priorities and interests, complex power dynamics, and a lack of trust between stakeholders. Acknowledging these barriers, the “Food Systems Summit Dialogues” in 2021 paid special attention to the question of how to create an environment conducive to respect, trust, open and sincere exchange of views, and openness to diverse points of view.

Communication and facilitation spaces and tools include certain practices that support **an enabling environment for introspection, communication, and collaboration and in turn supporting improved and more integrative action-taking for sustainability**. A recent study indicates that the design of such transformative spaces should combine consideration of the physical settings, non-hierarchical communication setups, and coaching and/or facilitation practices (such as deep listening or councils), which can be used in combination with certain consciousness practices and approaches<sup>100</sup>. Research further suggests that these spaces can be powerful enablers of change if they are linked to networks of practice and new cultures of collaboration<sup>101</sup>.

**A variety of methods harness the potential of consciousness approaches and practices to foster conscious group dialogues.** These include, for example, the use of non-violent communication and deep listening practices, compassion, mindfulness, and creative practices to support increased connection among participants, trust-building, and access to the deeper collective wisdom of the group.

**For instance, the Theory U process** - developed by Otto Scharmer from the Massachusetts Institute of Technology (MIT), involving methods for sensing, presencing and enacting - **is among the most widely used approaches to support conscious group dialogues and collective action from a place of shared awareness, including within the international development and food and agriculture sectors**<sup>102</sup>. Through a partnership with the MIT Presencing Institute (PI), UNDP hosted a series of global dialogues in 2021 applying the Theory U process to the complex challenges faced in practitioners' work and developed a 4-month action-learning journey for UN practitioners to apply awareness-based systems change approaches to their work. The same Theory U-based approach has been applied in the food sector by global NGO Commonland. For example, the process was applied in the Netherlands to support collaboration and partnership towards sustainability between a network of change agents in the Dutch food and farming system (see Box 16 below).

Theory U processes often involve **creative practices such as social theater**, as ways to inquire into deeper aspects of the problems at stake. Among similar practices is **Systemic Constellations**, which was originally developed by Bert Hellinger in the 1990s to address the impacts of intergenerational trauma on individuals, drawing on the field of family systems therapy as well as insights from Zulu culture. It has since been adapted for use in organizations and, increasingly, to provide insights into how to address wider social change issues<sup>103</sup>. In particular, Constellations work indicates that in order to shift patterns of behaviour in systems, it is critical to address historic trauma and to ensure that all stakeholders have a place and a voice. This insight is particularly relevant to food and agriculture, where the legacy and current realities of colonialism, exploitation and extraction are still highly influential.

**Conscious multi-stakeholder dialogue approaches can be used in a variety of Food Systems contexts, whether as part of sustainable commodity platforms, or in facilitating processes such as policy reform.** The latter might, for example, can take the form of a retreat initiating such processes, as well as field visits and immersion in nature, which can create a space for all participants to connect with themselves (higher purpose and values for more ambitious outcomes), the stakeholders potentially most affected (e.g. farmers), the food system they are part of (develop a more systemic perspective), and nature (including through featuring nature as a formal participant in a dialogue, represented, for example, by Indigenous Peoples and/or scientists).

Consciousness practices and approaches can also be leveraged to **revive traditional cultural practices for conscious dialogues and conflict-solving**, as in the case of Peace Huts in Liberia for instance<sup>104</sup>. Here, traditional Peace Huts have been re-established to support reconciliation, healing and peacebuilding efforts in particular with former combatants and child soldiers, to empower women and to consciously discuss issues relevant for the communities such as the Ebola crisis. Peace Huts activists cite mindfulness meditation as a powerful peacemaking tool 'to refuel their passion, connect with a source of peace within, and become more effective in their work'<sup>105</sup>.

### **Box 16: Case Study: For Tomorrow's Harvest, an Awareness-based Journey for Change Agents in the Dutch Food Systems**

#### ***A Theory U Leadership Programme to support the Transition towards sustainability***

In 2018, Commonland, together with the OFL, an independent platform funded by the Dutch government, launched “For Tomorrow's Harvest”: an awareness-based journey for change agents supporting the transition of the Dutch food and agricultural system towards sustainability. The network represented largely the agri/food system, having members from business community, governments, banks, farms, and social organizations.

In a proven leadership trajectory, based on Theory U, eighty participants immersed themselves over 1,5 years course.

- **The journey:** “For Tomorrow’s Harvest” followed the U curve and started with a three-day immersive process in which participants began building relationships with each other and started sensing into the agricultural and food system in the Netherlands and its challenges. This three-day co-initiation workshop was followed by a full day of further ‘co-sensing’ of the agricultural system through dialogue interviews, and learning more about Theory U. Afterwards, participants went on six different ‘learning journeys’ to visit various places that hold potential for change. They witnessed, observed, and engaged with the people from those initiatives. The Lab finished with a two-day workshop on crystallizing visions for the future and developing system prototypes.
- **Impact:** A total of eight concrete initiatives were born out of For Tomorrow’s Harvest. One of these examples is ‘**Aardpeer**’, a collaboration between a bank, a farming community, and a foundation of regenerative agriculture. They established a foundation that allows citizens and investors to purchase bonds for land for regenerative farmers. In 2021, they were able to realize the purchase of land for five farmers through the sale of a total of 7.2 million euros in bonds. In a total of 3 weeks, they received 74 applications from farmers with a total volume of approximately 100 million euros, demonstrating the high need for access to land by regenerative farmers.

### **3. Application at the Institutional Level**

**At the institutional level, CoFSA supports application of consciousness approaches to catalyze the cultural transformation of organizations, and supports the development of dedicated public and private policy.** Such approaches often combine applications at individual, group and institutional levels.

**New organizational cultures, in both companies and governments, are essential to support the transition of food systems toward regeneration.** Relevant initiatives are emerging across different types of organization and within governments. For example, the Government of Wales has engaged in cultural transformation of its civil service in order to better serve sustainable development and the well-being of future generations (see Box 17); and a number of national parliaments have initiated mindfulness programmes in order to build more conscious and collaborative political cultures (see Box 18).

Many Value- and Purpose-driven organizations such as B-Corps have also built specific organizational cultures to help meet their sustainability objectives through investing in employee development. CoFSA can support the cultural transformation of organizations for example through training, peer-learning circles, coaching, development of specific practices for meetings and team works, as well as the review of other management and human resources processes and tools (such as competency frameworks highlighting inner capacities)<sup>106</sup>.

### Box 17: Case study: Civil Service Cultural Transformation in Wales

In 2015, the Government of Wales enacted the 'Wellbeing of Future Generations Act' to encourage public bodies think more about the long-term, work better with people and communities and each other, look to prevent problems and take a more systemic approach. In conjunction, The Welsh Government Sustainable Development Behaviour Change Programme was launched to support behavioural and cultural change of civil servants (approx. 5000) in the Welsh Government. It is a programme based on supporting those who wish to understand or explore the implications of behavioural science and sustainable development for their work in government, in policy, process and personal terms.

- **Competency Framework:** The programme is based on a competency framework for leadership which includes four key transformation skills for development: **Pause** (long, short, with others, alone, meditative, in movement, outdoors, just waiting for things to emerge...); **Listen** (to myself, to others, to nature, to understand, to help someone else understand, in generative conversations...); **Ask** a good question; and **Learn** to act collectively.
- **Approach:** The approach has been developed through a collaborative programme of action research based on **repeated application of Theory U** and on-demand service. By supplying advice, conversations, coaching, appreciative enquiries, and space to think, the programme encourages civil servants to work with others to find creative solutions to policy and delivery challenges. The programme is on a voluntary basis: staff ask for coaching sessions initially held by the programme manager, then a network of coaches was developed. The trainings are tailored per person and their main focus is on how to apply behavior science in practice during the meetings. Over nine years of implementation, around 2000 people have been trained and coached.
- **Impact:** The impact of the program has been extensively researched. Evidence highlights an improvement in relationships with managers, quality of information and communication, empathy, openness to change, increased understanding of work processes and the links between well-being and successful delivery.

### Box 18: Case Study: Building More Collaborative Political Cultures in the U.K. and Beyond through Mindfulness

#### *The success of mindfulness trainings in the British Parliament*

- **Training for political Leaders**

Since 2013, over 300 politicians from both the UK House of Commons and House of Lords have taken part in mindfulness training adapted from **Mindfulness-Based Cognitive Therapy (MBCT)**. Many participants have spoken out publicly about the profound effects that their training has had, both personally and professionally, and have reported benefits such as **increased capacities of trust, openness, clarity, respect, willingness to listen amongst policymakers**. Politicians have emphasized the potential of mindfulness training to improve the quality of discourse and debate, reduce polarization, and ultimately help politicians to “disagree better.”
- **Formation of the UK Mindfulness All-Party Parliamentary Group**

Shortly after, the Mindfulness Initiative policy institute was formed to begin presenting the research evidence on mindfulness to ministers, MPs and senior policy advisors. In early 2014, The Mindfulness Initiative supported parliamentarians to set up a Mindfulness All-Party Parliamentary Group (MAPPG) and helped them to carry out a 12-month inquiry into how mindfulness could be incorporated into UK services and institutions.
- **A policy report on the potential of Mindfulness for the country**

The work of the MAPPG led to the publication of the Mindful Nation UK report, the first policy document offering **evidence-based policy recommendations** in the areas of education, health, criminal justice and the workplace.
- **Spreading to other Parliaments**

Following the success of the UK programme, British politicians have been invited to parliaments around the world to discuss mindfulness training. This has influenced a further **ten national legislatures to introduce mindfulness courses**. The Mindfulness Initiative now supports politicians and advocates across the world and supports an ‘International Mindfulness in Politics Network’.



**CoFSA also advocates the development of public and private policies that can help build at scale the inner capacities needed for regenerative food systems.**

Public policies can support for example:

- Harnessing the potential of nature connection practices to support environmental goals and well-being. Examples of such policies include parts of the UK Government’s 25 Year Environment plan<sup>107</sup>.
- Food education programmes aimed at promoting traditional food cultures (see Box 14) and regenerative food systems.
- Integrate the inner capacities development into agronomic curricula.
- Mindful eating programmes to promote healthy eating, address dysfunctional or addictive food habits and support the treatment of less severe eating disorders<sup>108</sup>.
- Specific conscious food movements such as Sustainable Yogic Agriculture (see Box 14).
- Preservation and strengthening of the traditional wisdom and practices associated with local and indigenous food systems, and community well-being (e.g. Peace huts in Liberia, see III.B.2).

Private policies can support for example:

- The development of **conscious organizational cultures** (see above). Examples of such policies include Unilever’s leadership model structured around “inner game” and “outer game” and the use of mindfulness practices, and SEKEM allowing all employees to use ten percent of their working time for personal development.
- Applying a conscious lens to all corporate policies, such as:
  - **Marketing and consumption:** for example SEKEM’s Economy of Love (see Box 11)<sup>109</sup> certification standard helps to inform consumers of the social and environmental impact of purchasing decisions to promote conscious consumption. Likewise, Mondelez International helps consumers to develop mindful snacking habits through information on pack and brand activation<sup>110</sup>.
  - **Sourcing:** CoFSA can offer Immersion Journeys and conscious dialogues with local communities and farmers, to enable corporate sourcing teams to deepen their connection and understanding of the farmers from whom they source, as a basis for improving sourcing policies and ensuring living incomes for farmers.
  - **Environmental impact and food waste.**

**Finally, CoFSA supports a critical understanding and awareness of how our mind works - attention, emotions, mindsets, decision-making and behaviours – and how this may affect the design (e.g. how problems are framed, biases, etc.) and effectiveness of interventions and policies.** This may take the form of specific workshops for policy-makers aiming at generating a better understanding of the problem at stake through increased self-awareness, or the inclusion of psychosocial and behavioural experts into the policy design process.

### **III.C CoFSA Principles for Cultivating Inner Capacities**

CoFSA’s principles for cultivating inner capacities were developed through a series of co-creative workshops in 2021-2022. We recognize the need to keep this approach alive, constantly evolving and maturing.

- **Context-specificity**
  - CoFSA interventions, whether at global, national or local levels, must be **tailored to specific challenges** at hand and the needs and wants of change agents.
- **Respect and Equity**

- The application of consciousness practices and approaches must respect everyone's own path of evolution, and not treat people as objects to be changed. Rather, CoFSA offers the **tools to support greater individual and collective awareness and flourishing**, trusting, based on the emerging science, that these interventions will ultimately support systemic transformation towards regenerative food systems.
- **Power dynamics**
  - CoFSA aims to create safe, connecting and transformative spaces and conditions for systemic change and regeneration. If these spaces and conditions don't include explorations of power and bias, they may not lead to the deeper mindset shifts needed, furthermore they may reinforce a dominant group's' values<sup>11</sup>.
- **Cultural relevance**
  - CoFSA interventions must be locally relevant in terms of language, techniques, frameworks, religions, philosophies, and other cultural considerations. **Supporting locally-led initiatives which harness local resources**, and traditional wisdom, is crucial to enacting this principle.
- **Working with a variety of consciousness practices and approaches**
  - CoFSA is committed to working with a diversity of consciousness approaches and practices that can support the cultivation of inner capacities, according to their relevance in different cultural contexts, in particular local traditional wisdoms. CoFSA acknowledges both the spiritual origin of many consciousness practices and approaches, and welcomes the role that faith and religious organizations and perspectives can have in supporting development of inner capacities for the transformation of food systems. At the same time, it recognizes the opportunity in many contexts to promote secular practices to respect the beliefs and values of stakeholders across food systems.
- **Evidence-based approaches and plurality of knowledge**

CoFSA is informed by and integrates both evidence-based consciousness practices and approaches, and the lived experience, knowledge, and wisdom of food practitioners, particularly of local and Indigenous communities. CoFSA recognizes the critical contribution of Indigenous Peoples as wisdom-keepers and land- and biodiversity-protectors, and the role of Indigenous ways of knowing and being in maintaining harmonious local food systems.

We hope that this report will stimulate critical engagement and collective reflection among stakeholders across the food systems. To join the conversation, discover CoFSA's activities, and explore ways to bring these approaches into your work, you can find more information at [www.consciousfoodsystems.org](http://www.consciousfoodsystems.org)

**Join the Conscious Food Systems Alliance!**

## Annex I

### Case Studies

The full set of case studies referenced in this report, and additional ones, can be accessed [here](#).

## Annex II

### Theoretical Foundations Report

This report provides the theoretical foundation on the potential of consciousness approaches and practices to unlock sustainability and systems transformation. Its content has been simplified and adapted to fit the audience of the present report and its focus on food systems. It can be accessed [here](#).

Wamsler C., Bristow J., Cooper K., Steidle G., Taggart S., Søvold L., Bockler J., Oliver T.H., Legrand T. (2022). *Theoretical Foundations Report: Research and evidence for the potential of consciousness approaches and practices to unlock sustainability and systems transformation*. Report written for the UNDP Conscious Food Systems Alliance (CoFSA), United Nations Development Programme UNDP.

## Bibliography

- Abson, D. J., Fischer, J., Leventon, J., Newig, J., Schomerus, T., Vilsmaier, U., von Wehrden, H., Abernethy, P., Ives, C. D., Jager, N. W., & Lang, D. J. (2017). Leverage points for sustainability transformation. *Ambio*, 46(1), 30–39. <https://doi.org/10.1007/s13280-016-0800-y>
- Acosta A., Martínez M. A., (2018). Buen Vivir, Chapter VI: *An Alternative Perspective from the Peoples of the Global South to the Crisis of Capitalist Modernity*, (pp. 131-147). <https://doi.org/10.18772/22018020541.11>
- Afsana K. ,Fresco L.O., Hassan M., Torero M., von Braun J. (2021). FOOD SYSTEMS, Definition, Concept and Application for the UN Food Systems Summit. A paper from the Scientific Group of the UN Food Systems Summit. March 5, 2021.
- A Food Systems Summit Dialogue convened by Reboot the Future and Listening Inspires, 21May 2021. [Applying the Golden Rule to Food Systems transformation; from listening to action.](#)
- A Green Future: Our 25 Year Plan to Improve the Environment, Chapter 3 “Connecting people with the environment to improve health and wellbeing”:  
[https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/693158/25-year-environment-plan.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/693158/25-year-environment-plan.pdf)
- Ahenakew, C. (2016). Grafting indigenous ways of knowing onto non-Indigenous ways of being: The (underestimated) challenges of a decolonial imagination. *International Review of Qualitative Research*, 9(3), 323–340.
- Ahenakew, C. (2019). Towards Scarring Our Collective Soul Wound. *Musagetes*. [https://decolonialfuturesnet.files.wordpress.com/2019/11/scarring\\_web1.pdf](https://decolonialfuturesnet.files.wordpress.com/2019/11/scarring_web1.pdf)
- Amundson, R., Berhe, A. A., Hopmans, J. W., Olson, C., Sztein, A. E., & Sparks, D. L. (2015). Soil science. Soil and human security in the 21st century. *Science (New York, N.Y.)*, 348(6235), 1261071. <https://doi.org/10.1126/science.1261071>
- Andreotti, V., Ahenakew, C., & Cooper, G. (2011). Epistemological Pluralism: Ethical and pedagogical challenges in higher education. *AlterNative: An International Journal of Indigenous Peoples*. <https://doi.org/10.1177/117718011100700104>
- Ardila Sánchez, J. G., Cihon, T. M., Malott, M. E., Mattaini, M. A., Rakos, R. F., Rehfeldt, R. A., Richling, S. M., Roose, K. M., Seniuk, H. A., & Watson-Thompson, J. (2020). Collective Editorial: Ten Guidelines for Strategic Social Action. *Behavior and Social Issues*, 29(1), 15–30. <https://doi.org/10.1007/s42822-020-00038-8>
- Arnocky, S., Stroink, M., & DeCicco, T. (2007). Self-construal predicts environmental concern, cooperation, and conservation. *Journal of Environmental Psychology*, 27(4), 255–264. <https://doi.org/10.1016/j.jenvp.2007.06.005>
- Awaris (2022). <https://awaris.com/offers/inner-green-deal/>

- Awan, O.A., 2021. The art of self-reflection in teaching. *Academic Radiology*, 28(6), pp.885-886.
- Baer, R. (2015). Ethics, values, virtues, and character strengths in mindfulness-based interventions: A psychological science perspective. *Mindfulness*, 6(4), 956–969. <https://doi.org/10.1007/s12671-015-0419-2>
- Baumann, F. (2021). The Next Frontier—Human Development and the Anthropocene: UNDP Human Development Report 2020. *Environment: Science and Policy for Sustainable Development*, 63(3), 34-40.
- Beck, J. (1964). *Cognitive Therapy: Basics and Beyond*. Guildford Press.
- Beck, J. (1995). *Cognitive Therapy: Basics and Beyond*. Guildford Press.
- Behere, P. B., & Bhise, M. C. (2009). Farmers' suicide: Across culture. *Indian journal of psychiatry*, 51(4), 242–243. <https://doi.org/10.4103/0019-5545.58286>
- Berman, J. D., Ramirez, M. R., Bell, J. E., Bilotta, R., Gerr, F., & Fethke, N. B. (2021). The association between drought conditions and increased occupational psychosocial stress among U.S. farmers: An occupational cohort study. *Science of The Total Environment*, 798, 149245. <https://doi.org/10.1016/j.scitotenv.2021.149245>
- Bernal, E., Edgar, D., & Burnes, B. (2018). Building Sustainability on Deep Values Through Mindfulness Nurturing. *Ecological Economics*, 146, 645–657. <https://doi.org/10.1016/j.ecolecon.2017.12.003>
- Berry, D. r., Cairo, A. h., Goodman, R. j., Quaglia, J. t., Green, J. d., & Brown, K. w. (2018). Mindfulness Increases Prosocial Responses Toward Ostracized Strangers Through Empathic Concern. *Journal of Experimental Psychology: General*, 147(1), 93–112. <https://doi.org/10.1037/xge0000392>
- Biglan, A., Johansson, M., Van Ryzin, M., & Embry, D. (2020). Scaling up and scaling out: Consilience and the evolution of more nurturing societies. *Clinical Psychology Review*, 81, 101893. <https://doi.org/10.1016/j.cpr.2020.101893>
- Bjornestad, A.; Cuthbertson, C.; Hendricks, J. (2021). An Analysis of Suicide Risk Factors among Farmers in the Midwestern United States. *Int. J. Environ. Res. Public Health* 2021, 18, 3563. <https://doi.org/10.3390/ijerph18073563>
- BLab (2022), B Corporation certification overview, <https://bcorporation.uk/certification-overview/>
- BLab (2022), B Corporation certification, *Measuring a company's entire social and environmental impact*. <https://www.bcorporation.net/en-us/certification/>
- Bonnedahl, K. J., Heikkurinen, P., & Paavola, J. (2022). Strongly sustainable development goals: Overcoming distances constraining responsible action. *Environmental Science & Policy*, 129, 150–158. <https://doi.org/10.1016/j.envsci.2022.01.004>



- Bradley, K., & Herrera, H. (2016). Decolonizing Food Justice: Naming, Resisting, and Researching Colonizing Forces in the Movement. *Antipode*, 48(1), 97–114. <https://doi.org/10.1111/anti.12165>
- Bradshaw, C. J. A., Ehrlich, P. R., Beattie, A., Ceballos, G., Crist, E., Diamond, J., Dirzo, R., Ehrlich, A. H., Harte, J., Harte, M. E., Pyke, G., Raven, P. H., Ripple, W. J., Saltré, F., Turnbull, C., Wackernagel, M., & Blumstein, D. T. (2021). Underestimating the Challenges of Avoiding a Ghastly Future. *Frontiers in Conservation Science*, 1. <https://www.frontiersin.org/article/10.3389/fcsc.2020.615419>
- Bristow, J., Bell, R., Nixon, D. (2020). Mindfulness: developing agency in urgent times. The Mindfulness Initiative. <https://www.themindfulnessinitiative.org/agency-in-urgent-times/>
- Bristow, J. (Ed.). (2021). Responding to Mindfulness: Developing Agency in Urgent Times - A compilation of essays. The Mindfulness Initiative.
- Bristow, J., Bell, R., & Wamsler, C. (2022). *Reconnection: Meeting the Climate Crisis Inside Out*. The Mindfulness Initiative and LUCSUS. <https://www.themindfulnessinitiative.org/reconnection>
- Brundtland Commission. (1987). From One Earth to One World. In *Our Common Future* (pp. 1–23). Oxford University Press.
- Burgess PJ, Harris J, Graves AR, Deeks LK (2019) Regenerative Agriculture: Identifying the Impact; Enabling the Potential. Report for SYSTEMIQ. 17 May 2019. Bedfordshire, UK: Cranfield University.
- Callicott, J. B., & Mumford, K. (1998). Ecological Sustainability as a Conservation Concept. In J. Lemons, L. Westra, & R. Goodland (Eds.), *Ecological Sustainability and Integrity: Concepts and Approaches* (pp. 31–45). Springer Netherlands. [https://doi.org/10.1007/978-94-017-1337-5\\_3](https://doi.org/10.1007/978-94-017-1337-5_3)
- Camerer, C. (1999). Behavioral Economics: Reunifying Psychology and Economics. *Proceedings of the National Academy of Sciences of the United States of America*, 96(19), 10575–10577.
- Cameron, C. D., & Fredrickson, B. L. (2015). Mindfulness Facets Predict Helping Behavior and Distinct Helping-Related Emotions. *Mindfulness*, 6(5), 1211–1218. <https://doi.org/10.1007/s12671-014-0383-2>
- Castañeda A. et al, (2018). A New Profile of the Global Poor, in World Bank Data for Goals Group, 250–267. <https://doi.org/10.1016/j.worlddev.2017.08.002>
- Castro Romero, M., & Capella Palacios, M. (2020). Co-constructing a decolonising praxis in academia through dialogues and pedagogical experiences between the UK and Ecuador. *International Review of Psychiatry*, 32(4), 365–373. <https://doi.org/10.1080/09540261.2020.1762548>
- Chan, K. M. A., Boyd, D. R., Gould, R. K., Jetzkowitz, J., Liu, J., Muraca, B., Naidoo, R., Olmsted, P., Satterfield, T., Selomane, O., Singh, G. G., Sumaila, R., Ngo, H. T., Boedihartono, A. K., Agard, J., de Aguiar, A. P. D., Armenteras, D., Balint, L., Barrington-Leigh, C., ... Brondízio, E. S. (2020). Levers and leverage points for pathways to sustainability. *People and Nature*, 2(3), 693–717.
- <https://doi.org/10.1002/pan3.10124>

- Chandrasekaran K., Guttal S., Kumar M., Langner L., and Manahan M.A. (2021). Exposing corporate capture of the UNFSS through multistakeholderism. September 23, 2021. <https://www.foodsystems4people.org/wp-content/uploads/2021/11/UNFSSreport2021-pdf.pdf>
- Chouinard, Y. (2019). *Some Stories: Lessons from the Edge of Business and Sport*. Patagonia Books.
- Cihon, T. M., Borba, A., Benvenuti, M., & Sandaker, I. (2021). Research and Training in Culturo-Behavior Science. *Behavior and Social Issues*, 30(1), 237–275. <https://doi.org/10.1007/s42822-021-00076-w>
- Collins English Dictionary, (2022) - mindsets definition
- Commonland, 4 Returns, <https://www.commonland.com/4-returns/>
- Compassion Institute, 2022, <https://www.compassioninstitute.com/>
- Compton, T., & Kasser, T. (2009). *Meeting Environmental Challenges: The Role of Human Identity*. WWF-UK.
- Cook-Greuter, S. R. (2004). Making the case for a developmental perspective. *Industrial and Commercial Training*, 36(7), 275–281. <https://doi.org/10.1108/00197850410563902>
- Cusco Declaration, 2014,  
- [https://www.ipcinfo.org/fileadmin/user\\_upload/rlc/eventos/243308/CUSCO\\_DECLARATION.pdf](https://www.ipcinfo.org/fileadmin/user_upload/rlc/eventos/243308/CUSCO_DECLARATION.pdf)
- Dahl, C. J., Lutz, A., & Davidson, R. J. (2015). Reconstructing and deconstructing the self: Cognitive mechanisms in meditation practice. *Trends in Cognitive Sciences*, 19(9), 515–523.  
- <https://doi.org/10.1016/j.tics.2015.07.001>
- Daisy A. J., Giridhara R. B. (2022). Lessons From the Aftermaths of Green Revolution on Food System and Health. *Front. Sustain. Food Syst.*, 22 February 2021 | <https://doi.org/10.3389/fsufs.2021.644559>
- Darnton, A., & Horne, J. (2013). *Influencing behaviours—Moving beyond the individual: ISM user guide*. Scottish Government.
- David, O. A., Matu, S. A., Pintea, S., Cotet, C. D., & Nagy, D. (2014). Cognitive-Behavioral Processes Based on Using the ABC Analysis by Trainees' for Their Personal Development. *Journal of Rational-Emotive & Cognitive-Behavior Therapy*, 32(3), 198–215. <https://doi.org/10.1007/s10942-014-0189-0>
- Davis, B., Lipper, L. & Winters, P. Do not transform food systems on the backs of the rural poor. *Food Sec.* (2022). <https://doi.org/10.1007/s12571-021-01214-3>
- Davis, D. M., & Hayes, J. A. (2011). What are the benefits of mindfulness? A practice review of psychotherapy-related research. *Psychotherapy*, 48(2), 198–208. <https://doi.org/10.1037/a0022062>

- De Schutter O., (2014). Report of the Special Rapporteur on the right to food, *The transformative potential of the right to food*.
- De Schutter O.,(2018). International Panel of Experts on Sustainable Food Systems (IPES - Food), Virtual Climate Summit of the Climate Vulnerable Forum: *Urgent Call For A New Development Paradigm That Works For People And Planet*. <https://www.youtube.com/watch?v=lqglQj1kXEc>
- Dhandra, T. K. (2019). Achieving triple dividend through mindfulness: More sustainable consumption, less unsustainable consumption and more life satisfaction. *Ecological Economics*, 161, 83–90. <https://doi.org/10.1016/j.ecolecon.2019.03.021>
- Dixon, J., Omwega, A.M., Friel, S. et al. (2007). The Health Equity capacities of Urban Food Systems. *J Urban Health* 84, 118–129. <https://doi.org/10.1007/s11524-007-9176-4>
- Djernis, D., Lerstrup, I., Poulsen, D., Stigsdotter, U., Dahlgaard, J., & O’Toole, M. (2019). A Systematic Review and Meta-Analysis of Nature-Based Mindfulness: Effects of Moving Mindfulness Training into an Outdoor Natural Setting. *International Journal of Environmental Research and Public Health*, 16(17), 3202. <https://doi.org/10.3390/ijerph16173202>
- Dorninger, C., Abson, D. J., Apetrei, C. I., Derwort, P., Ives, C. D., Klaniacki, K., Lam, D. P. M., Langsenlehner, M., Riechers, M., Spittler, N., & von Wehrden, H. (2020). Leverage points for sustainability transformation: A review on interventions in food and energy systems. *Ecological Economics*, 171, 106570. <https://doi.org/10.1016/j.ecolecon.2019.106570>
- EAT-Lancet Commission Summary Report - [Report](#)
- Edwards, A. R. (2015). *The Heart of Sustainability*. New Society Publishers.
- EEA (2017). Food in a green light, A systems approach to sustainable food. European Environment Agency. Report: TH-AL-17-010-EN-C. <https://www.eea.europa.eu/publications/food-in-a-green-light>
- Eisenstein, C. (2013). *The More Beautiful World Our Hearts Know is Possible*. North Atlantic Books.
- Ellen MacArthur Foundation,(2022). [Regenerative food production](#).
- Ellis, A. (1991). The revised ABC’s of rational-emotive therapy (RET). *Journal of Rational-Emotive and Cognitive-Behavior Therapy*, 9(3), 139–172. <https://doi.org/10.1007/BF01061227>
- Ericson, T., Kjønstad, B. G., & Barstad, A. (2014). Mindfulness and sustainability. *Ecological Economics*, 104, 73–79. <https://doi.org/10.1016/j.ecolecon.2014.04.007>
- FAO, (2012),The development of global diets since ICN 1992: Influences of Agri-Food sector trends and policies; <https://www.fao.org/3/ap625e/ap625e.pdf>
- FAO, (2018). Transforming food and agriculture to achieve the SDGs. 20 interconnected actions to guide decision-makers. <https://www.fao.org/3/I9900EN/i9900en.pdf>

- FAO, (2018). The 10 elements of agroecology: guiding the transition to sustainable food and agricultural systems. <https://www.fao.org/3/i9037en/i9037en.pdf>
- FAO, (2019). *Voluntary Guidelines for the Conservation and Sustainable Use of Farmers' Varieties/Landraces*. Rome.
- FAO (2021). *The State of Food and Agriculture 2021. Making agrifood systems more resilient to shocks and stresses*. Rome, FAO.
- FAO, UNDP and UNEP (2021). A multi-billion-dollar opportunity – Repurposing agricultural support to transform food systems. Rome, FAO. <https://doi.org/10.4060/cb6562en>
- FAO and UNEP. (2021). *Global Assessment of Soil Pollution: Report*. Rome. <https://doi.org/10.4060/cb4894en>
- FAO, IFAD, UNICEF, WFP and WHO (2021). *The State of Food Security and Nutrition in the World 2021. Transforming food systems for food security, improved nutrition and affordable healthy diets for all*. Rome, FAO.
- Food Systems 4 People (FS4P), *No to corporate food systems, Yes to Food Sovereignty!* <https://www.foodsystems4people.org>
- Food Systems Summit Compendium (2021), Levers of Change, [Equity in Food Systems](#)
- [Food Systems Summit Independent and Member State Dialogues](#) (2021), [Action Tracks](#), [Levers of Change](#), and [Scientific Group](#)
- Frank, P., Sundermann, A., & Fischer, D. (2019). How mindfulness training cultivates introspection and competence development for sustainable consumption. *International Journal of Sustainability in Higher Education*, 20(6), 1002–1021.
- Fung, T. T., Long, M. W., Hung, P., & Cheung, L. W. Y. (2016). An Expanded Model for Mindful Eating for Health Promotion and Sustainability: Issues and Challenges for Dietetics Practice. *Journal of the Academy of Nutrition and Dietetics*, 116(7), 1081–1086.
- Farrow, K., Grolleau, G., & Ibanez, L. (2017). Social Norms and Pro-environmental Behavior: A Review of the Evidence. *Ecological Economics*, 140, 1–13. <https://doi.org/10.1016/j.ecolecon.2017.04.017>
- Fischer D., Stanzus L., Geiger S., Grossman P., Schrader U., (2017). Mindfulness and sustainable consumption: A systematic literature review of research approaches and findings. In *Journal of Cleaner Production*, Volume 162, 2017, Pages 544-558. <https://doi.org/10.1016/j.jclepro.2017.06.007>.
- Fischer, J., & Riechers, M. (2019). A leverage points perspective on sustainability. *People and Nature*, 1(1), 115–120. <https://doi.org/10.1002/pan3.13>

- Frank, P., Fischer, D., & Wamsler, C. (2019). Mindfulness, Education, and the Sustainable Development Goals. In W. Leal Filho, L. Azul, L. Azul, P. Brandil, G. Özüygar, & T. Wall (Eds.), *Encyclopedia of the UN Sustainable Development Goals, Quality Education*. Springer.
- Frank, P., Sundermann, A., & Fischer, D. (2019). How mindfulness training cultivates introspection and competence development for sustainable consumption. *International Journal of Sustainability in Higher Education*, 20(6), 1002–1021. <https://doi.org/10.1108/IJSHE-12-2018-0239>
- Fraude, C., Bruhn, T., Stasiak, D., Wamsler, C., Mar, K., Schöpke, N., Schroeder, H., & Lawrence, M. (2021). Creating space for reflection and dialogue: Examples of new modes of communication for empowering climate action. *GAIA - Ecological Perspectives for Science and Society*, 30(3), 174–180. <https://doi.org/10.14512/gaia.30.3.9>
- Freud, S. (1955). *The Unconscious XIV*. Hogarth Press.
- Global Alliance for the Future of Food, *The Politics of Knowledge: Understanding the Evidence for Agroecology, Regenerative Approaches, and Indigenous Foodways*. n.p.: Global Alliance for the Future of Food, 2021. <https://futureoffood.org/wp-content/uploads/2021/12/GA-Politics-of-Knowledge.pdf>
- Gaudet, J. C. (2018). Keeoukaywin: The Visiting Way - Fostering an Indigenous Research Methodology. *Aboriginal Policy Studies*, 7(2). <https://doi.org/10.5663/aps.v7i2.29336>
- Geiger, S. M., Fischer, D., & Schrader, U. (2018). Measuring What Matters in Sustainable Consumption: An Integrative Framework for the Selection of Relevant Behaviors. *Sustainable Development*, 26(1), 18-33.
- <https://doi.org/10.1002/sd.1688>
- Geiger, S. M., Otto S., *Mindfully Green and Healthy: An Indirect Path from Mindfulness to Ecological Behavior*. *Front. Psychol.*, 18 January 2018. <https://doi.org/10.3389/fpsyg.2017.02306>
- Gibson, R. (2016). Opportunities: Finding best openings for influential applications. In *Sustainability Assessment*. Routledge.
- Girgis, F., Lee, D. J., Goodarzi, A., & Ditterich, J. (2018). Toward a Neuroscience of Adult Cognitive Developmental Theory. *Frontiers in Neuroscience*, 12. <https://www.frontiersin.org/article/10.3389/fnins.2018.00004>
- Gladek, E., Fraser, M., Roemers, G., Sabag Muñoz, O., Kennedy, E., & Hirsch, P. (2016). The global food system: An analysis. Report commissioned by WWF Netherlands, p. 180. Retrieved online: <https://www.metabolic.nl/publications/global-food-system-an-analysis-pdf/>
- Global Grassroots. (n.d.). *Conscious Change Study*. Conscious Change Study. Retrieved March 1, 2022, from <https://www.consciouschangestudy.org>
- Goodchild, M. (2021). Relational Systems Thinking: That’s How Change is Going to Come, From Our Earth Mother. *Journal of Awareness-Based Systems Change*, 1(1), 75–103. <https://doi.org/10.47061/jabsc.v1i1.577>



- Gouwy, V. (2014) 'Self-reflection and personal evolution as keystone of sustainability', *World Review of Entrepreneurship, Management and Sustainable Development*, Vol. 10, No. 1, pp.80–87.
- Gosling, Elizabeth & Williams, Kathryn. (2010). Connectedness to nature, place attachment and conservation behavior: Testing connectedness theory among farmers. *Journal of Environmental Psychology - J ENVIRON PSYCHOL.* 30. 298-304. <https://doi.org/10.1016/j.jenvp.2010.01.005>
- Grabow, M., Bryan, T., Checovich, M. M., Converse, A. K., Middlecamp, C., Mooney, M., Torres, E. R., Younkin, S. G., & Barrett, B. (2018). Mindfulness and Climate Change Action: A Feasibility Study. *Sustainability*, 10(5), 1508. <https://doi.org/10.3390/su10051508>
- Guckian, M., De Young, R., & Harbo, S. (2017). *Beyond Green Consumerism: Uncovering the Motivations of Green Citizenship.* <https://doi.org/10.3998/mjs.12333712.0005.105>
- Guterres A. (2021), UN Vision Statement.
- Hansen, M. M., Jones, R., & Tocchini, K. (2017). Shinrin-Yoku (Forest Bathing) and Nature Therapy: A State-of-the-Art Review. *International Journal of Environmental Research and Public Health*, 14(8), 851. <https://doi.org/10.3390/ijerph14080851>
- Harvard Business Review (2015). The Business Case for Purpose. EY. [https://assets.ey.com/content/dam/ey-sites/ey-com/en\\_gl/topics/digital/ey-the-business-case-for-purpose.pdf](https://assets.ey.com/content/dam/ey-sites/ey-com/en_gl/topics/digital/ey-the-business-case-for-purpose.pdf)
- Hayes, S., Strosahl, K., & Wilson, K. (2009). *Acceptance and commitment therapy.* American Psychological Association.
- Hayes, S., Strosahl, K., & Wilson, K. (2011). *Acceptance and commitment therapy: The process and practice of mindful change.* Guildford Press.
- Haverkort, B. (2021) From the Mainstreaming of Western Science to the Co-Evolution of Different Sciences. In Wright J. (ed) *Subtle Agroecologies, Farming with the Hidden Half of Nature.* CRC Press – Taylor and Francis. Pp21-38.
- Hendersson, H., & Wamsler, C. (2020). New stories for a more conscious, sustainable society: Claiming authorship of the climate story. *Climatic Change*, 158(3), 345–359. <https://doi.org/10.1007/s10584-019-02599-z>
- Hensley, N. (2018). Transforming higher education through trickster-style teaching. *Journal of Cleaner Production*, 194, 607–612. <https://doi.org/10.1016/j.jclepro.2018.05.116>
- Hick, S. F., & Furlotte, C. (2010). An Exploratory Study of Radical Mindfulness Training with Severely Economically Disadvantaged People: Findings of a Canadian Study. *Australian Social Work*, 63(3), 281–298. <https://doi.org/10.1080/0312407X.2010.496865>
- Hick, S. F., & Furlotte, C. R. (2009). Mindfulness and Social Justice Approaches: Bridging the Mind and Society in Social Work Practice. *Canadian Social Work Review / Revue Canadienne de Service Social*, 26(1), 5–24.

- Hochachka, G. (2019). On matryoshkas and meaning-making: Understanding the plasticity of climate change. *Global Environmental Change*, 57, 101917. <https://doi.org/10.1016/j.gloenvcha.2019.05.001>
- Hochachka, G. (2021). Integrating the four faces of climate change adaptation: Towards transformative change in Guatemalan coffee communities. *World Development*, 140, 105361. <https://doi.org/10.1016/j.worlddev.2020.105361>
- Hoek, A. C., Malekpour, S., Raven, R., Court, E., & Byrne, E. (2021). Towards environmentally sustainable food systems: Decision-making factors in sustainable food production and consumption. *Sustainable Production and Consumption*, 26, 610–626. <https://doi.org/10.1016/j.spc.2020.12.009>
- Holtz, J.(2017). “Poverty Is Caused By A Failure Of Ethics, Not Economy,Sachs Says.” The Heights, March 26, 2017. Updated June 3, 2020.
- Hölzel, B. K., Lazar, S. W., Gard, T., Schuman-Olivier, Z., Vago, D. R., & Ott, U. (2011). How Does Mindfulness Meditation Work? Proposing Mechanisms of Action From a Conceptual and Neural Perspective. *Perspectives on Psychological Science*, 6(6), 537–559. <https://doi.org/10.1177/1745691611419671>
- Hugh A. (2021). [What is Nature Connectedness? \(And Why Does It Matter\)](#).13 January 2021.
- Hurst, M., Dittmar, H., Bond, R., & Kasser, T. (2013). The relationship between materialistic values and environmental attitudes and behaviors: A meta-analysis. *Journal of Environmental Psychology*, 36, 257–269. <https://doi.org/10.1016/j.jenvp.2013.09.003>
- IDGs (2021), Inner Development Goals: Background, method and the IDG framework [Report](#).
- IFPRI, International Food Policy Research Institute (2022). <https://www.ifpri.org/topic/food-systems>
- IPCC. (2018). *2018: Global warming of 1.5°C. An IPCC Special Report on the impacts of global warming of 1.5°C above pre-industrial levels and related global greenhouse gas emission pathways, in the context of strengthening the global response to the threat of climate change, sustainable development, and efforts to eradicate poverty.* <https://www.ipcc.ch/sr15/>
- IPCC. (2021). *2021: Climate Change 2021: The Physical Science Basis. Contribution of Working Group I to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change.*  
- <https://www.ipcc.ch/report/sixth-assessment-report-working-group-i/>
- IPCC. (2022a). *2022: Climate Change 2022: Mitigation of Climate Change. Contribution of Working Group III contribution to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change.* [https://report.ipcc.ch/ar6wg3/pdf/IPCC\\_AR6\\_WGIII\\_FinalDraft\\_FullReport.pdf](https://report.ipcc.ch/ar6wg3/pdf/IPCC_AR6_WGIII_FinalDraft_FullReport.pdf)
- IPCC. (2022b). *2022: Climate Change 2022: Impacts, Adaptation, and Vulnerability. Contribution of Working Group II to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change.* [https://report.ipcc.ch/ar6wg2/pdf/IPCC\\_AR6\\_WGII\\_FinalDraft\\_FullReport.pdf](https://report.ipcc.ch/ar6wg2/pdf/IPCC_AR6_WGII_FinalDraft_FullReport.pdf)

- IPES-Food (2017). Too big to feed: Exploring the impacts of mega-mergers, concentration, concentration of power in the agri-food sector. [www.ipes-food.org](http://www.ipes-food.org)
- IPES-Food, (2018). Breaking away from industrial food and farming systems: Seven case studies of agroecological transition [https://www.ipes-food.org/\\_img/upload/files/CS2\\_web.pdf](https://www.ipes-food.org/_img/upload/files/CS2_web.pdf)
- Issah M., (2018). Change Leadership: The Role of Emotional Intelligence. September 14, 2018. <https://doi.org/10.1177/2158244018800910>
- Ivanova, E., & Rimanoczy, I. (2021). *Revolutionizing Sustainability Education: Stories and Tools of Mindset Transformation*. Routledge. <https://doi.org/10.4324/9781003229735>
- Ives, C. D., Freeth, R., & Fischer, J. (2020). Inside-out sustainability: The neglect of inner worlds. *Ambio*, 49(1), 208–217. <https://doi.org/10.1007/s13280-019-01187-w>
- Jackson, T. (2005). In: Motivating sustainable consumption: A review of evidence on consumer behaviour and behavioural change, 29. Sustainable Development Research Network, p. 30 .
- Jensen, B. B., & Schnack, K. (2006). The Action Competence Approach in Environmental Education. *Environmental Education Research*, 3(2), 163–178. <https://doi.org/10.1080/1350462970030205>
- Jerneck, A., Olsson, L., Ness, B., Anderberg, S., Baier, M., Clark, E., Hickler, T., Hornborg, A., Kronsell, A., Lövbrand, E., & Persson, J. (2011). Structuring sustainability science. *Sustainability Science*, 6(1), 69–82. <https://doi.org/10.1007/s11625-010-0117-x>
- Jimmy, E., Andreotti, V., & Stein, S. (2019). Towards Braiding. Musagetes. [https://musagetes.ca/wp-content/uploads/2019/07/Braiding\\_ReaderWeb.pdf](https://musagetes.ca/wp-content/uploads/2019/07/Braiding_ReaderWeb.pdf)
- Jones, S. M., Bodie, G. D., & Hughes, S. D. (2019). The Impact of Mindfulness on Empathy, Active Listening, and Perceived Provisions of Emotional Support. *Communication Research*, 46(6), 838–865. <https://doi.org/10.1177/0093650215626983>
- Jordan, T. (2021). *Inner Development Goals (IDG): Background, method and the IDG framework*. [https://static1.squarespace.com/static/600d80b3387b98582a60354a/t/616eb1adbee9380a25085e35/1634644401138/211019\\_IDG\\_Report.pdf](https://static1.squarespace.com/static/600d80b3387b98582a60354a/t/616eb1adbee9380a25085e35/1634644401138/211019_IDG_Report.pdf)
- Kamil, M. J. M., & Abidin, S. Z. (2013). Unconscious Human Behavior at Visceral Level of Emotional Design. *Procedia - Social and Behavioral Sciences*, 105, 149–161. <https://doi.org/10.1016/j.sbspro.2013.11.016>
- Kang, Y. ( 1), Dovidio, J. f. ( 1), & Gray, J. r. ( 2 ). (2014). The nondiscriminating heart: Lovingkindness meditation training decreases implicit intergroup bias. *Journal of Experimental Psychology: General*, 143(3), 1306–1313. <https://doi.org/10.1037/a0034150>
- Kapoor, R. (2007). Transforming self and society: Plural paths to human emancipation. *Futures*, 39(5), 475–486. <https://doi.org/10.1016/j.futures.2006.10.001>
- Kates, R. W., Clark, W. C., Corell, R., Hall, J. M., Jaeger, C. C., Lowe, I., McCarthy, J. J., Schellnhuber, H. J., Bolin, B., Dickson, N. M., Faucheux, S., Gallopin, G. C., Grübler, A., Huntley, B., Jäger, J., Jodha,

- N. S., Kasperson, R. E., Mabogunje, A., Matson, P., ... Svedin, U. (2001). Sustainability Science. *Science*, 292(5517), 641–642. <https://doi.org/10.1126/science.1059386>
- Kegan, R., & Lahey, L. (2009). *Immunity to Change: How to overcome it and unlock potential in yourself and your organization*. Harvard Business Press.
  - Kjellström, S., & Andersson, A.-C. (2017). Applying adult development theories to improvement science. *International Journal of Health Care Quality Assurance*, 30(7), 617–627. <https://doi.org/10.1108/IJHCQA-09-2016-0124>
  - Klingelschmidt J, Milner A, Khireddine-Medouni I, Witt K, Alexopoulos EC, Toivanen S, LaMontagne AD, Chastang JF, Niedhammer I. Suicide among agricultural, forestry, and fishery workers: a systematic literature review and meta-analysis. *Scand J Work Environ Health*. 2018 Jan 1;44(1):3-15. doi: 10.5271/sjweh.3682. Epub 2017 Oct 31. PMID: 29085951.
  - Farmer Suicide in Wisconsin: A Qualitative Analysis
  - Kohlbeck S., Schramm A., de Roon-Cassini T., Hargarten S., Quinn K. (2021). Farmer Suicide in Wisconsin: A Qualitative Analysis. In *The Journal of Rural Health*, 10 September 2021. <https://doi.org/10.1111/jrh.12622>
  - Keniger, L.E., Gaston, K.J., Irvine, K.N. and Fuller, R.A., 2013. What are the benefits of interacting with nature?. *International journal of environmental research and public health*, 10(3), pp.913-935. <https://doi.org/10.3390/ijerph10030913>
  - Köhler, J., Geels, F. W., Kern, F., Markard, J., Onsongo, E., Wieczorek, A., Alkemade, F., Avelino, F., Bergek, A., Boons, F., Fünfschilling, L., Hess, D., Holtz, G., Hyysalo, S., Jenkins, K., Kivimaa, P., Martiskainen, M., McMeekin, A., Mühlemeier, M. S., ... Wells, P. (2019). An agenda for sustainability transitions research: State of the art and future directions. *Environmental Innovation and Societal Transitions*, 31, 1–32. <https://doi.org/10.1016/j.eist.2019.01.004>
  - Kopittke P. M., Menzies N. W., Wang P., McKenna B. A., Lombi E., (2019). Soil and the intensification of agriculture for global food security. In *Environment International*, Volume 132, 2019. <https://doi.org/10.1016/j.envint.2019.105078>
  - Kretschmer S. & Kahl J., (2021). Sustainable Development Goal Drivers in Food Systems. In *Frontiers in Sustainable Food Systems*. Volume 5, 2021. <https://doi.org/10.3389/fsufs.2021.536620>
  - Laloux, F. (2014). *Reinventing Organizations: A Guide to Creating Organizations Inspired by the Next Stage of Human Consciousness*. Brussels: Nelson Parker.
  - Lang, D. J., Wiek, A., Bergmann, M., Stauffacher, M., Martens, P., Moll, P., Swilling, M., & Thomas, C. J. (2012). Transdisciplinary research in sustainability science: Practice, principles, and challenges. *Sustainability Science*, 7(1), 25–43. <https://doi.org/10.1007/s11625-011-0149-x>
  - Lang, D. J., Wiek, A., Bergmann, M., Stauffacher, M., Martens, P., Moll, P., Swilling, M., & Thomas, C. J. (2012). Transdisciplinary research in sustainability science: Practice, principles, and challenges. *Sustainability Science*, 7(1), 25–43. <https://doi.org/10.1007/s11625-011-0149-x>

- Larson A. M., Sarmiento Barletti J. P., Vigil N. H., (2022). A place at the table is not enough: Accountability for Indigenous Peoples and local communities in multi-stakeholder platforms.  
- <https://doi.org/10.1016/j.worlddev.2022.105907>
- Leiberg, S., Klimecki, O., & Singer, T. (2011). Short-Term Compassion Training Increases Prosocial Behavior in a Newly Developed Prosocial Game. *PLOS ONE*, 6(3), e17798. <https://doi.org/10.1371/journal.pone.0017798>
- Leichenko, R., & O'Brien, K. (2020). *Climate and Society: Transforming the Future*. John Wiley & Sons.
- Luberto, C. M., Shinday, N., Song, R., Philpotts, L. L., Park, E. R., Fricchione, G. L., & Yeh, G. Y. (2018). A Systematic Review and Meta-analysis of the Effects of Meditation on Empathy, Compassion, and Prosocial Behaviors. *Mindfulness*, 9(3), 708–724. <https://doi.org/10.1007/s12671-017-0841-8>
- Lutz, A., Slagter, H. A., Dunne, J. D., & Davidson, R. J. (2008). Attention regulation and monitoring in meditation. *Trends in Cognitive Sciences*, 12(4), 163–169. <https://doi.org/10.1016/j.tics.2008.01.005>
- Lynam, A. (2019). How Worldview Development Influences Knowledge and Beliefs About Sustainability. In W. Leal Filho (Ed.), *Encyclopedia of Sustainability in Higher Education* (pp. 899–909). Springer International Publishing. [https://doi.org/10.1007/978-3-030-11352-0\\_22](https://doi.org/10.1007/978-3-030-11352-0_22)
- Machado de Oliveria, V. (2021). *Hospicing Modernity*. North Atlantic Books.
- Macy, J., & Brown, M. (2014). *Coming Back to Life: The updated guide to the work that reconnects*. New Society Publishers.
- Magnuson, J. (2008). Pathways to a mindful economy. *Society and Economy*, 29(2), 253–284. <https://doi.org/10.1556/socec.29.2007.2.8>
- Mar, K., Fraude, C., Bruhn, T., Schöpke, N., Stasiak, D., Schröder, H., Wamsler, C., & Lawrence, M. (2021). *Fostering Reflection, Dialogue and Collaboration among Actors at the UN Climate Change Conferences* [IASS Policy Brief]. [https://www.iass-potsdam.de/sites/default/files/2021-10/Online\\_policy\\_brief\\_5\\_EN\\_211004.pdf](https://www.iass-potsdam.de/sites/default/files/2021-10/Online_policy_brief_5_EN_211004.pdf)
- Martin, L., White, M. P., Hunt, A., Richardson, M., Pahl, S., & Burt, J. (2020). Nature contact, nature connectedness and associations with health, wellbeing and pro-environmental behaviours. *Journal of Environmental Psychology*, 68, 101389. <https://doi.org/10.1016/j.jenvp.2020.101389>
- Meadows, D. (1999). *Leverage points: Places to intervene in a system*. The Sustainability Institute.
- Meadows, D. (2009). *Thinking in systems: A primer* (D. Wright, Ed.). Earthscan.
- Meadows, D., Randers, J., & Behrens III, W. (1972). *The Limits to Growth: A Report for the Club of Rome's Project on the Predicament of Mankind*. Potomac Associates – Universe Books.



- Merriott, D. (2016), Factors associated with the farmer suicide crisis in India. In *Journal of Epidemiology and Global Health* Volume 6, Issue 4, December 2016, Pages 217-227. <https://doi.org/10.1016/j.jegh.2016.03.003>
- Mier y Teran G.C., Mateo & Giraldo, Omar & Maya, Elda Miriam & Morales, Helda & Ferguson, Bruce & Rosset, Peter & Khadse, Ashlesha & Campos-Peregrina, María. (2018). Bringing agroecology to scale: key drivers and emblematic cases. *Agroecology and Sustainable Food Systems*. 42. 1-29. 10.1080/21683565.2018.1443313. [https://www.researchgate.net/publication/323674686\\_Bringing\\_agroecology\\_to\\_scale\\_key\\_drivers\\_and\\_emblematic\\_cases](https://www.researchgate.net/publication/323674686_Bringing_agroecology_to_scale_key_drivers_and_emblematic_cases)
- Molinaro, E., Lorenzi, C., Bartoccioni, F., Perucchini, P., Bobeth, S., Colléony, A., Diniz, R., Eklund, A., Jaeger, C., Kibbe, A., Richter, I., Ruedert, A., Sloop, D., Udall, A. M., & Bonaiuto, M. (2020). From childhood nature experiences to adult pro-environmental behaviors: An explanatory model of sustainable food consumption. *Environmental Education Research*, 26(8), 1137–1163.
- Moyer, J. M., & Sinclair, A. J. (2020). Learning for Sustainability: Considering Pathways to Transformation. *Adult Education Quarterly*, 70(4), 340–359. <https://doi.org/10.1177/0741713620912219>
- Mukherjee, S., Mandal, S., Haldar, S., Mandal, P., Bhattacharya, S., & Paul, S. (2022). Chapter 5—Assessing and quantifying livelihood vulnerability of tribal farmers in water-stressed region of rural West Bengal, India. In U. Chatterjee, A. Kashyap, M. Everard, G. K. Panda, & D. Mahata (Eds.), *Indigenous People and Nature* (pp. 105–132). Elsevier. <https://doi.org/10.1016/B978-0-323-91603-5.00001-4>
- Mundaca, L., Sonnenschein, J., Steg, L., Höhne, N., & Ürge-Vorsatz, D. (2019). The global expansion of climate mitigation policy interventions, the Talanoa Dialogue and the role of behavioural insights. *Environmental Research Communications*, 1(6), 061001. <https://doi.org/10.1088/2515-7620/ab26d6>
- Mueller, M. P., & Greenwood, D. A. (2015). Ecological mindfulness and cross-hybrid learning: A special issue. *Cultural Studies of Science Education*, 10(1), 1–4. <https://doi.org/10.1007/s11422-014-9653-5>
- Neff, K. D., & Pommier, E. (2013). The Relationship between Self-compassion and Other-focused Concern among College Undergraduates, Community Adults, and Practicing Meditators. *Self and Identity*, 12(2), 160–176. <https://doi.org/10.1080/15298868.2011.649546>
- Nelson, J.B. (2017). Mindful Eating: The Art of Presence While You Eat. *Diabetes Spectr* 1; 30 (3): 171–174. <https://doi.org/10.2337/ds17-0015>.
- Nestle, M. (2000). Ethical dilemmas in choosing a healthful diet: vote with your fork!. *Proceedings of the Nutrition Society* 59 (4), 619–629.
- NHS England. (n.d.). *Green social prescribing*. Retrieved March 4, 2022, from <https://www.england.nhs.uk/personalisedcare/social-prescribing/green-social-prescribing/>

- O'Brien, K. (2013). Responding to climate change: The three spheres of transformation. *Proceedings of Transformation in a Changing Climate*, 16(23).
- O'Brien, K. (2018). Is the 1.5°C target possible? Exploring the three spheres of transformation. *Current Opinion in Environmental Sustainability*, 31, 153–160. <https://doi.org/10.1016/j.cosust.2018.04.010>
- O'Connell M.,(2022). Designing Regenerative Food Systems. And why we need them now. Paperback – 21 Feb. 2022.
- Ogbuoji O., Yamey G., (2019). Aid Effectiveness in the Sustainable Development Goals Era. *It's About the Idea Hitting the Bull's Eye:How Aid Effectiveness can catalyze the scale-up of health innovations*". Int J Health Policy Manag. 2019 Mar; 8(3): 184–186. Published online 2018 Dec 25. doi: 10.15171/ijhpm.2018.130. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6462193/>
- Oliver, T. (2021). *The Self Delusion: The Surprising Science of Our Connection to Each Other and the Natural World*. Weidenfeld & Nicolson.
- Oliver, T. H., Boyd, E., Balcombe, K., Benton, T. G., Bullock, J. M., Donovan, D., Feola, G., Heard, M., Mace, G. M., Mortimer, S. R., Nunes, R. J., Pywell, R. F., & Zaum, D. (2018). Overcoming undesirable resilience in the global food system. *Global Sustainability*, 1. <https://doi.org/10.1017/sus.2018.9>
- Oliver, T.H., Benini, L., Borja, A., Dupont, C., Doherty, B., Grodzińska-Jurczak, M. et al. (2021). Knowledge architecture for the wise governance of sustainability transitions. *Environmental Science & Policy*, 126, 152-163.
- Önder, H. (2021). The Impact Of Corruption On Food Security From A Macro Perspective. *Future of Food: Journal on Food, Agriculture and Society*, 9(1). <https://www.thefutureoffoodjournal.com/index.php/FOFJ/article/view/256>
- Park, H. J., & Dhandra, T. K. (2017). Relation between dispositional mindfulness and impulsive buying tendency: Role of trait emotional intelligence. *Personality and Individual Differences*, 105, 208–212. <https://doi.org/10.1016/j.paid.2016.09.061>
- Parodi, O., & Tamm, K. (Eds.). (2018). *Personal Sustainability: Exploring the Far Side of Sustainable Development*. Routledge. <https://doi.org/10.4324/9781315159997>
- Peace of Purpose, UN Foundation, <https://unfoundation.org/peace-on-purpose/>
- Peace Hut Alliance for Conflict Transformation in Liberia, <https://earthtreasurevase.org/liberia-peacebuilding-project/#mindfulness-in-peacebuilding>
- Peterson, C., Sussell, A., Li, J., Schumacher, P. K., Yeoman, K., & Stone, D. M. (2020). Suicide rates by industry and occupation – National Violent Death Reporting System, 32 states, 2016. *Morbidity and Mortality Weekly Report*, 69(3), 57–62. <https://www.sprc.org/news/suicide-rates-industry-occupation-0>

- Power, C. (2016). The Integrity of Process: Is Inner Transition Sufficient? *Journal of Social and Political Psychology*, 4(1), 347–363. <https://doi.org/10.5964/jspp.v4i1.538>
- Prince, H. E. (2017). Outdoor experiences and sustainability. *Journal of Adventure Education and Outdoor Learning*, 17(2), 161–171. <https://doi.org/10.1080/14729679.2016.1244645>
- Prochaska, J. O., & DiClemente, C. C. (1983). Stages and processes of self-change of smoking: Toward an integrative model of change. *Journal of Consulting and Clinical Psychology*, 51(3), 390–395. <https://doi.org/10.1037/0022-006X.51.3.390>
- Purvis, B., Mao, Y., & Robinson, D. (2019). Three pillars of sustainability: In search of conceptual origins. *Sustainability Science*, 14(3), 681–695. <https://doi.org/10.1007/s11625-018-0627-5>
- Ramstetter, L., Rupprecht, S., Mundaca, L., Klackl, J., Osika, W., Stenfors, C., & Wamsler, C. (2022). Fostering (collective) climate action and leadership: Insights from a pilot experiment with a 10-week behavioral intervention involving mindfulness and compassion. *Forthcoming*.
- Regenerosity (2020), What is regeneration? <https://www.regenerosity.world/what-is-regeneration>
- Richardson, M., Passmore, H.-A., Barbett, L., Lumber, R., Thomas, R., & Hunt, A. (2020). The green care code: How nature connectedness and simple activities help explain pro-nature conservation behaviours. *People and Nature*, 2(3), 821–839. <https://doi.org/10.1002/pan3.10117>
- Ritter L., and Zamierovski N., (2021). System Sensing and Systemic Constellations for Organizational Transformation: Building Collective Capacity for Navigating Complexity, *JASC Journal of Awareness-Based Systems Change*, Volume 1, Issue 2, pp 101-115. <https://doi.org/10.47061/jabsc.v1i2.1181>
- Rogissart, Lucile, Claudine Foucherot, and Valentin Bellassen. 2019. “Food policies and climate: a literature review.” Institute For Climate Economics.
- Rosa, C. D., Profice, C. C., & Collado, S. (2018). Nature Experiences and Adults’ Self-Reported Pro-environmental Behaviors: The Role of Connectedness to Nature and Childhood Nature Experiences. *Frontiers in Psychology*, 9. <https://www.frontiersin.org/article/10.3389/fpsyg.2018.01055>
- Rosenberg M., (1999). *Nonviolent Communication: A Language of Compassion*. [http://www.mywellnesstest.com/CertResFile/Nonviolent\\_Communication.pdf](http://www.mywellnesstest.com/CertResFile/Nonviolent_Communication.pdf)
- Ross, S. (2006). *The integral process for working on complex issues*. OH: Arina.
- Rowley, J., 2006. Where is the wisdom that we have lost in knowledge? *Journal of Documentation* 62, 251-270. [10.1108/0022041061065332](https://doi.org/10.1108/0022041061065332)
- Ruedy, N. E., & Schweitzer, M. E. (2010). In the Moment: The Effect of Mindfulness on Ethical Decision Making. *Journal of Business Ethics*, 95(1), 73–87. <https://doi.org/10.1007/s10551-011-0796-y>

- Ruijs A.& van Egmond P., (2017), Natural capital in practice: How to include its value in Dutch decision-making processes”. In *Ecosystem Services*, Volume 25, 2017, Pages 106-116, ISSN 2212-0416. <https://doi.org/10.1016/j.ecoser.2017.03.025>
- Runhaar, H., Wilk, B., Persson, Å., Uittenbroek, C., & Wamsler, C. (2018). Mainstreaming climate adaptation: Taking stock about “what works” from empirical research worldwide. *Regional Environmental Change*, 18(4), 1201–1210. <https://doi.org/10.1007/s10113-017-1259-5>
- Ryder, C., Mackean, T., Coombs, J., Williams, H., Hunter, K., Holland, A. J. A., & Ivers, R. Q. (2020). Indigenous research methodology – weaving a research interface. *International Journal of Social Research Methodology*, 23(3), 255–267. <https://doi.org/10.1080/13645579.2019.1669923>
- Sajjad, A., & Shahbaz, W. (2020). Mindfulness and Social Sustainability: An Integrative Review. *Social Indicators Research*, 150(1), 73–94. <https://doi.org/10.1007/s11205-020-02297-9>
- Scott K., Schaninger B., (2019). Getting Personal about Change. McKinsey Quarterly, April 21, 2019.
- Scharmer, O., & Senge, P. (2016). *Theory U: Leading from the future as it emerges*. Berrett-Koehler Publishers, Inc.
- Schlitz, M., Vieten, C., & Amorok, T. (2007). *Living deeply: The art and science of transformation in everyday life*. New Harbinger Publications.
- Schwerena L. J. S., Larsson H., Vinke P. C., Lin Li, Grimstvedt Kvalvik L., Arias-Vasquez A., Haavik J., Hartman C. A., (2021). Diet quality, stress and common mental health problems: A cohort study of 121,008 adults <https://doi.org/10.1016/j.clnu.2020.06.016>
- SEKEM, 2021, <https://www.sekem.com/en/economy/economy-of-love-fairtrade/>
- Senge, P. (2006). *The Fifth Discipline The Art & Practice of the Learning Organization*. Crown Business.
- Sharma, M. (2017). *Radical transformational leadership: Strategic action for change agents*. North Atlantic Books.
- Shukla J., et al, (2019). IPCC, 2019: Summary for Policymakers. In: *Climate Change and Land: an IPCC special report on climate change, desertification, land degradation, sustainable land management, food security, and greenhouse gas fluxes in terrestrial ecosystems*.
- Shiva, V., (2021). “Vandana Shiva on why the food we eat matters”, BBC Travel, 28 January. [online]. Available from: <https://www.bbc.com/travel/article/20210127-vandana-shiva-on-why-the-food-we-eat-matters>
- Small, M.W., (2004). Wisdom and now managerial wisdom: do they have a place in management development programs? *Journal of Management Development* 23, 751-764. [10.1108/02621710410549602](https://doi.org/10.1108/02621710410549602)
- Smith, L. T. (2021). *Decolonizing Methodologies Research and Indigenous Peoples*. Zed Books Ltd.

- Sol, J., & Wals, A. E. J. (2015). Strengthening ecological mindfulness through hybrid learning in vital coalitions. *Cultural Studies of Science Education*, 10(1), 203–214. <https://doi.org/10.1007/s11422-014-9586-z>
- Stanszus, L. S., Frank, P., & Geiger, S. M. (2019). Healthy eating and sustainable nutrition through mindfulness? Mixed method results of a controlled intervention study. *Appetite*, 141, 104325.
- Stein, S. (2019). Beyond Higher Education as We Know it: Gesturing Towards Decolonial Horizons of Possibility. *Studies in Philosophy and Education*, 38(2), 143–161. <https://doi.org/10.1007/s11217-018-9622-7>
- Steiner A.,(2021), Humanity's planet-shaping powers, and what they mean for the future. TED, January 2021.
- Stell, A. J., & Farsides, T. (2016). Brief loving-kindness meditation reduces racial bias, mediated by positive other-regarding emotions. *Motivation and Emotion*, 40(1), 140–147. <https://doi.org/10.1007/s11031-015-9514-x>
- Strozzi-Heckler (2014). The Art of Somatic Coaching. <https://www.thrivestreetadvisors.com/leadership-library/the-art-of-somatic-coaching>
- The Nature Conservancy (2022). Regenerative Food Systems. <https://www.nature.org/en-us/what-we-do/our-priorities/provide-food-and-water-sustainably/food-and-water-stories/regenerative-food-systems/>
- The Peace Hut Alliance for Conflict Transformation in Liberia, <https://earthtreasurevase.org/liberia-peacebuilding-project/#mindfulness-in-peacebuilding>
- Thiermann, U. B., & Sheate, W. R. (2020). Motivating individuals for social transition: The 2-pathway model and experiential strategies for pro-environmental behaviour. *Ecological Economics*, 174, 106668. <https://doi.org/10.1016/j.ecolecon.2020.106668>
- Thiermann, U. B., & Sheate, W. R. (2021). The Way Forward in Mindfulness and Sustainability: A Critical Review and Research Agenda. *Journal of Cognitive Enhancement*, 5(1), 118–139. <https://doi.org/10.1007/s41465-020-00180-6>
- Udall, A. M., de Groot, J. I. M., De Jong, S. B., & Shankar, A. (2021). How I See Me—A Meta-Analysis Investigating the Association Between Identities and Pro-environmental Behaviour. *Frontiers in Psychology*, 12. <https://www.frontiersin.org/article/10.3389/fpsyg.2021.582421>
- United Nations, (2020). Secretary-General’s Policy Brief on The Impact of COVID-19 on Food Security and Nutrition (9 June 2020). <https://unsdg.un.org/sites/default/files/2020-06/SG-Policy-Brief-on-COVID-Impact-on-Food-Security.pdf>
- UNDP, (2020). *Human Development Report 2020: The next frontier: Human development and the Anthropocene*. <https://www.hdr.undp.org/en/2020-report>



- UNDP, Green Commodities Programme (GCP), (2021), A Guide to Effective Collaborative Action: Deep collaboration for systemic change in food and agricultural commodity systems
- UN Food Systems Summit, Synthesis of Independent Dialogues, *The Role of Government in Food Systems Transformation* Donna Podems Blue Marble Evaluator December (2021). [https://www.un.org/sites/un2.un.org/files/unfss\\_independent\\_dialogue\\_synthesis\\_report\\_3\\_0.pdf](https://www.un.org/sites/un2.un.org/files/unfss_independent_dialogue_synthesis_report_3_0.pdf)
- UN-H.Q., The Meditation Room, "A Room of Quiet" [https://www.un.org/depts/dhl/dag/meditationroom.htmt-2020\\_ENG.pdf](https://www.un.org/depts/dhl/dag/meditationroom.htmt-2020_ENG.pdf)
- UN, Secretary-General's Chair Summary and Statement of Action on the UN Food Systems Summit, 23 September 2021. <https://www.un.org/en/food-systems-summit/news/making-food-systems-work-people-planet-and-prosperity>
- Unilever, Employee wellbeing, <https://www.unilever.com/planet-and-society/responsible-business/employee-wellbeing/>
- Valley L., (2020). How the B Corp movement is putting down roots in food and drink. The Grocer. <https://www.thegrocer.co.uk/community/how-the-b-corp-movement-is-putting-down-roots-in-food-and-drink/602388.article>
- Vásquez-Fernández A.M., Ahenakew pii tai poo taa, (2020). Resurgence of relationality: reflections on decolonizing and indigenizing 'sustainable development'. *Current Opinion in Environmental Sustainability* Volume 43, April 2020, Pages 65-70. <https://doi.org/10.1016/j.cosust.2020.03.005>
- Wahl D.C., (2017). Sustainability is not enough: we need regenerative cultures. <https://designforsustainability.medium.com/sustainability-is-not-enough-we-need-regenerative-cultures-4abb3c78e68b>
- Wahl, D.C., (2016). *Designing regenerative cultures*. Triarchy Press.
- Wals, A., & Corcoran, P. (Eds.). (2012). *Learning for sustainability in times of accelerating change*. Wageningen Academic Publishers.
- Walsh, Z., Böhme, J., Lavelle, B. D., & Wamsler, C. (2020). Transformative education: Towards a relational, justice-oriented approach to sustainability. *International Journal of Sustainability in Higher Education*, 21(7), 1587–1606. <https://doi.org/10.1108/IJSHE-05-2020-0176>
- Wamsler, C. (2015). Mainstreaming ecosystem-based adaptation: Transformation toward sustainability in urban governance and planning. *Ecology and Society*, 20(2). <https://www.jstor.org/stable/26270196>
- Wamsler, C. (2018). Mind the gap: The role of mindfulness in adapting to increasing risk and climate change. *Sustainability Science*, 13(4), 1121–1135. <https://doi.org/10.1007/s11625-017-0524-3>
- Wamsler, C. (2019). Contemplative Sustainable Futures: The Role of Individual Inner capacities and Transformation in Sustainability Research and Education. In W. Leal Filho & A. Consorte McCrea

(Eds.), *Sustainability and the Humanities* (pp. 359–373). Springer International Publishing. [https://doi.org/10.1007/978-3-319-95336-6\\_20](https://doi.org/10.1007/978-3-319-95336-6_20)

- Wamsler, C. (2020). Education for sustainability: Fostering a more conscious society and transformation towards sustainability. *International Journal of Sustainability in Higher Education*, 21(1), 112–130. <https://doi.org/10.1108/IJSHE-04-2019-0152>
- Wamsler, C. (2021, June 10). *Inner transformation and sustainability*. Presentation held for Mind&Life, the IDG Initiative, and Stanford University
- Wamsler, C., & Brink, E. (2018). Mindsets for Sustainability: Exploring the Link Between Mindfulness and Sustainable Climate Adaptation. *Ecological Economics*, 151, 55–61. <https://doi.org/10.1016/j.ecolecon.2018.04.029>
- Wamsler, C., & Bristow, J. (2022). At the intersection of mind and climate: Integrating inner capacities of climate change into policymaking. *Forthcoming*.
- Wamsler, C., Brossmann, J., Hendersson, H., Kristjansdottir, R., McDonald, C., & Scarampi, P. (2018). Mindfulness in sustainability science, practice, and teaching. *Sustainability Science*, 13(1), 143–162. <https://doi.org/10.1007/s11625-017-0428-2>
- Wamsler, C., Hertog, I., & Di Paola, L. (2022). Education for sustainability: Sourcing inner qualities and capacities for transformation. In E. Ivanova & I. Rimanoczy (Eds.), *Revolutionizing sustainability education: Stories and tools of mindset transformation*. Routledge.
- Wamsler, C., Osberg, G., Osika, W., Herndersson, H., & Mundaca, L. (2021). Linking internal and external transformation for sustainability and climate action: Towards a new research and policy agenda. *Global Environmental Change*, 71, 102373. <https://doi.org/10.1016/j.gloenvcha.2021.102373>
- Wamsler, C., & Restoy, F. (2020). Emotional Intelligence and the Sustainable Development Goals: Supporting Peaceful, Just, and Inclusive Societies. In W. Leal Filho, A. M. Azul, L. Brandli, A. Lange Salvia, P. G. Özuyar, & T. Wall (Eds.), *Peace, Justice and Strong Institutions* (pp. 1–11). Springer International Publishing. [https://doi.org/10.1007/978-3-319-71066-2\\_123-1](https://doi.org/10.1007/978-3-319-71066-2_123-1)
- Wamsler, C., Schöpke, N., Fraude, C., Stasiak, D., Bruhn, T., Lawrence, M., Schroeder, H., & Mundaca, L. (2020). Enabling new mindsets and transformative skills for negotiating and activating climate action: Lessons from UNFCCC conferences of the parties. *Environmental Science & Policy*, 112, 227–235. <https://doi.org/10.1016/j.envsci.2020.06.005>
- Warren, J. M., Smith, N., & Ashwell, M. (2017). A structured literature review on the role of mindfulness, mindful eating and intuitive eating in changing eating behaviours: effectiveness and associated potential mechanisms. *Nutrition research reviews*, 30(2), 272–283. <https://doi.org/10.1017/S0954422417000154>
- Watkins, A., & Wilber, K. (2015). *Wicked and wise: How to solve the world's toughest problems*. Urbane Publishing.

- Well-being of Future Generations Act, Wales, (2015) <https://gov.wales/sites/default/files/publications/2021-10/well-being-future-generations-wales-act-2015-the-essentials-2021.pdf>
- White Jr., L. (1967). The Historical Roots of Our Ecologic Crisis. *Science*. <https://doi.org/10.1126/science.155.3767.1203>
- Wilber, K. (1999). *Collected Works of Ken Wilber, Vol. 4: Integral Psychology, Transformations of Consciousness, Selected Essays*. Shambhala.
- Willett, W., Rockström, J., Loken, B., Springmann, M., Lang, T., Vermeulen, S., ... & Jonell, M. (2019). Food in the Anthropocene: the EAT–Lancet Commission on healthy diets from sustainable food systems. *The Lancet*, 393(10170), 447-492.
- Wilson, T., & Shukla, S. (2020). Pathways to Revitalization of Indigenous Food Systems: Decolonizing Diets through Indigenous-focused Food Guides. *Journal of Agriculture, Food Systems, and Community Development*, 9(4), 201–208. <https://doi.org/10.5304/jafscd.2020.094.003>
- Woiwode, C., Schöpke, N., Bina, O., Veciana, S., Kunze, I., Parodi, O., Schweizer-Ries, P., & Wamsler, C. (2021). Inner transformation to sustainability as a deep leverage point: Fostering new avenues for change through dialogue and reflection. *Sustainability Science*, 16(3), 841–858. <https://doi.org/10.1007/s11625-020-00882-y>
- Wright, J. (ed) (2021) *Subtle Agroecologies: Farming With the Hidden Half of Nature*. CRC Press - Taylor & Francis. 384pp. [www.routledge.com/9781138339811](http://www.routledge.com/9781138339811)
- Open Access PDF: <https://www.taylorfrancis.com/books/oa-edit/10.1201/9780429440939/subtle-agroecologies-julia-wright-nicholas-parrott>
- WWF, Beliefs and Values Programme <https://swedishwaterhouse.se/wp-content/uploads/WWF-Beliefs-and-Values-Programme-Briefing-Sep>
- Yazdanpanah, M., Zobeidi, T., Tajeri Moghadam, M., Komendantova, N., Löhr, K., & Sieber, S. (2021). Cognitive theory of stress and farmers’ responses to the COVID 19 shock; a model to assess coping behaviors with stress among farmers in southern Iran. *International Journal of Disaster Risk Reduction*, 64, 102513. <https://doi.org/10.1016/j.ijdrr.2021.102513>

## Endnotes

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- <sup>1</sup> Shukla J., et al., (2019); FAO and UNEP, (2021); Kopittke P. M. et al., (2019)
- <sup>2</sup> Wamsler et al., (2021)
- <sup>3</sup> Edwards, (2015); Ericson et al., (2014); Parodi & Tamm, (2018); Wamsler et al., (2021); Woiwode et al., (2021)
- <sup>4</sup> IPCC Report, Mitigation of Climate Change (2022a). Section 17.2.3
- <sup>5</sup> IPCC Report, Impacts, Adaptation and Vulnerability, (2022b)
- <sup>6</sup> Wamsler et al. (2021)
- <sup>7</sup> Inner Development Goals Initiative (2021)
- <sup>8</sup> Shukla J., et al., (2019); FAO and UNEP, (2021); Kopittke P. M. et al., (2019)
- <sup>9</sup> UNDP, (2020)
- <sup>10</sup> Wamsler et al., (2021)
- <sup>11</sup> FAO State of Food and Agriculture Report, (2021)
- <sup>12</sup> FAO et al., (2021); Dixon et al., (2007)
- <sup>13</sup> Dixon et al., (2007); FAO et al., (2021)
- <sup>14</sup> Willet et al., (2019)
- <sup>15</sup> Hoek, (2021); Nestle, (2000)
- <sup>16</sup> Willet et al., (2019)
- <sup>17</sup> Willet et al., (2019)
- <sup>18</sup> Shukla et al., (2019)
- <sup>19</sup> UN, Secretary-General's Chair Summary and Statement of Action on the UN Food Systems Summit, (2021)
- <sup>20</sup> FAO and UNEP, (2021); Kopittke P. M. et al., (2019)
- <sup>21</sup> FAO, (2019)
- <sup>22</sup> Davis B. et al., (2022)
- <sup>23</sup> Castaneda et al., (2018)
- <sup>24</sup> Behere, P. B., & Bhise, M. C. (2009); Merriott D., (2016); Kohlbeck S., et al.,(2021); Bjornestad, A. et al., (2021); Berman, J. D., et al., (2021), Mukherjee, S.et al.,(2022), Yazdanpanah, M., et al., (2021)
- <sup>25</sup> Klingelschmidt, J.et al., (2018)
- <sup>26</sup> Food Systems Summit Compendium (2021)
- <sup>27</sup> EAT Lancet, (2020)
- <sup>28</sup> FAO, (2018)
- <sup>29</sup> Namely the 1655 + [Food Systems Summit Independent and Member State Dialogues, Action Tracks, Levers of Change, and Scientific Group](#).
- <sup>30</sup> Food Systems 4 People, (2021)
- <sup>31</sup> UN, Secretary-General's Chair Summary and Statement of Action on the UN Food Systems Summit, (2021)
- <sup>32</sup> As presented in the 3rd syntheses of the [Member State](#) and [Independent Food Systems Summit Dialogues](#) and the “Food Systems 4 people” manifesto.
- <sup>33</sup> The Summit Dialogues website indicates 109,000 people have participated in dialogues, though this figure is well below actual participation since not all dialogues are registered and many did not detail participation. For a detailed description of the dialogue participants by August 2021, see p.21-30 of the [Member State Dialogue synthesis](#) and p.3-8 of the [Independent Dialogue synthesis](#). See also the [list of signatories](#) of the Food systems 4 people manifesto.
- <sup>34</sup> Such values were also affirmed in other dialogues, such as one held by Listening Inspires and Reboot the Future on [Applying the Golden Rule to Food Systems transformation; from listening to action](#).
- <sup>35</sup> UNDP, (2020)
- <sup>36</sup> EEA, (2017); IPES-Food, (2017); A significant horizontal and vertical restructuring is underway across food systems. A spate of mega-mergers is sparking unprecedented consolidation in the seed, agri-chemical, fertilizer, animal genetics and farm machinery industries, while creating ever-bigger players in the processing and retail sectors.
- <sup>37</sup> FAO, (2021)
- <sup>38</sup> Chandrasekaran et al., (2021)
- <sup>39</sup> Yates et al., (2021)

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- <sup>40</sup> Kretschmer S. & Kahl J., (2021)
- <sup>41</sup> de Schutter, (2018)
- <sup>42</sup> FAO, (2012), p. 8-10
- <sup>43</sup> De Schutter, (2014)
- <sup>44</sup> Acosta and Abarca, (2018)
- <sup>45</sup> Eisenstein, (2013); Hendersson & Wamsler, (2020)
- <sup>46</sup> UNDP, (2020)
- <sup>47</sup> Cusco Declaration, (2014)
- <sup>48</sup> UNDP, (2020)
- <sup>49</sup> John and Babu, (2021)
- <sup>50</sup> Larson A. M., et al., (2022)
- <sup>51</sup> UNDP, Green Commodities Programme, ECA Report, (2021)
- <sup>52</sup> Larson A. M., et al., (2022)
- <sup>53</sup> Holtz J., (2017)
- <sup>54</sup> Bristow, J., Bell, R., & Wamsler, C., (2022)
- <sup>55</sup> Oliver et al., (2018)
- <sup>56</sup> Edwards, (2015); Ericson et al., (2014); Parodi & Tamm, (2018); Wamsler et al., (2021); Woiwode et al., (2021)
- <sup>57</sup> Wamsler et al., (2021)
- <sup>58</sup> Magnuson, (2008); Schlitz et al., (2007); Sharma, (2017); Wamsler, (2018)
- <sup>59</sup> Berry et al., (2018); Cameron & Fredrickson, (2015); Hick & Furlotte, (2010), (2009); Leiberg et al., 2011; Luberto et al., (2018); Lutz et al., (2008); Ruedy & Schweitzer, 2010; Wamsler, (2018); Wamsler & Brink, (2018); Woiwode et al., (2021)
- <sup>60</sup> IPCC Report, Impacts, Adaptation and Vulnerability. (2022b)
- <sup>61</sup> IPCC Report, Mitigation of Climate Change (2022). Section 17.2.3
- <sup>62</sup> Human Development Report, (2020)
- <sup>63</sup> Wamsler et al., (2021)
- <sup>64</sup> Meadows, (2009); Meadows et al., (1972)
- <sup>65</sup> Freud, (1955); Kamil & Abidin, (2013)
- <sup>66</sup> Abson et al.,(2017); Fischer & Riechers, (2019); Meadows, (2009); Woiwode et al.,(2021)
- <sup>67</sup> Hochachka, (2021); Ives et al., (2020); Scharmer & Senge, (2016); Wilber, (1999); Wamsler et al. (2018); Wamsler et al. (2021)
- <sup>68</sup> Whilst it has to be noted that some scholars have raised concerns regarding the colonial nature of stage development theories (Ryan & Bateson, 2021), adult development theory refers here not to a hierarchical perspective, but as a way to address and integrate different perspectives and worldviews in sustainability work.
- <sup>69</sup> Kegan & Lahey, (2009)
- <sup>70</sup> Hochachka, (2019); Lynam, (2019); Thiermann & Sheate, (2020).  
Whilst its focus is not per se related to sustainability, some scholars thus define adult development similar to inner transformation (cf. Section A), as being “the unfolding of human potential towards deeper understanding, wisdom and effectiveness in the world” (Cook-Greuter, 2004, p. 277).
- <sup>71</sup> cf. Section C; Girgis et al., (2018); Kegan & Lahey, (2009); Kjellström & Andersson, (2017); Moyer & Sinclair, (2020)
- <sup>72</sup> Wamsler et al., (2020), (2021)
- <sup>73</sup> Eisenstein, (2013); Wamsler et al., (2021)
- <sup>74</sup> Leichenko & O’Brien, (2020); Wamsler et al.,(2021); White Jr., (1967)
- <sup>75</sup> Vásquez-Fernández A.M & Ahenakew pii tai poo taa, (2020)
- <sup>76</sup> Wamsler et al., (2018)
- <sup>77</sup> Wamsler et al., (2020), (2021)
- <sup>78</sup> Jordan, (2021)
- <sup>79</sup> Jordan, (2021)
- <sup>80</sup> This conceptual framework is still in development, but the current version is referred to here.
- <sup>81</sup> Fraude et al., 2021; Mar et al., 2021



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<sup>82</sup> Bristow et al.,(2022); Kapoor, (2007); Sajjad & Shahbaz, (2020),(2020); Thiermann & Sheate, (2020), (2021); Wamsler, (2018); Wamsler et al., (2018); Wamsler & Restoy, (2020); Keniger et al, (2013)

<sup>83</sup> One of the most widely used evidence-based psychotherapeutic modalities, it aims to challenge and change dysfunctional cognitive, emotional, relational and behavioral patterns.

<sup>84</sup> Gouwy, (2014)

<sup>85</sup> Ardila Sánchez et al., (2020); Cihon et al., (2021)

<sup>86</sup> Lilley R., (2021), in Bristow (2021)

<sup>87</sup> Issah, (2018)

<sup>88</sup> Fraude et al., (2021); Mar et al., (2021); Wamsler et al., (2020)

<sup>89</sup> Fraude et al., (2021); Mar et al., (2021); Wamsler et al., (2020)

<sup>90</sup> Macy & Brown (2014)

<sup>91</sup> Scharmer & Senge (2016)

<sup>92</sup> Sharma, (2017); Walsh et al., (2020); Wamsler, (2019)

<sup>93</sup> Awaris, (2022)

<sup>94</sup> Fischer et al., (2017); Geiger et al., (2017); Geiger at al., (2018)

<sup>95</sup> Ivanova & Rimanoczy, 2021; Wamsler et al., 2021, 2022

<sup>96</sup> Wamsler et al., (2021)

<sup>97</sup> The mindfulness-self compassion (MSC) course teaches core principles and practices that empower participants to respond to the stresses and difficulties of their lives with a kind, connected presence. In MSC, participants cultivate skills of self-compassion with experiential exercises and practices that they can apply in their daily lives. The programme consists of six training sessions, in which participants are required to participate. The weekly 1.5 hours sessions include short talks, experiential exercises, group discussion, and home practices.

<sup>98</sup> The TNC mindfulness initiative is based on 5-week introductory workshops to interested individuals, offering access to Headspace and Insight Time mindfulness apps, and coaching teams in mindfulness practices. Thus far, they have trained 12 TNC staff members to deliver over 20 workshops to more than 700 staff in 5 languages and five continents. And over 2000 colleagues are regularly using mindfulness apps. As they grow the program, they are exploring nature-based contemplative practices as a foundation for skillful engagement in ecological problem solving. One of the TNC findings has been that their teams are facing increasing levels of stress and anxiety as the environmental and social conditions worsen around the world. The most commonly reported benefits from the mindfulness initiative have been stress reduction and support for wellbeing. (Personal communication: Michael Tetreault)

<sup>99</sup> UN Foundation, Peace on Purpose, (2016)

<sup>100</sup> Fraude et al.,(2021); Mar et al., (2021); Wamsler et al., (2020)

<sup>101</sup> Fraude et al., (2021); Mar et al., (2021); Wamsler et al., (2020)

<sup>102</sup> Scharmer & Senge, (2016)

<sup>103</sup> Ritter L., & Zamierovski N., (2021), pp. 101-115.

<sup>104</sup> This is being done by the Peace Hut Alliance for Conflict Transformation in Liberia.

<sup>105</sup> Peace Hut Alliance for Conflict Transformation in Liberia <https://earthtreasurevase.org/liberia-peacebuilding-project/#mindfulness-in-peacebuilding>

<sup>106</sup> Wamsler et al. (2021)

<sup>107</sup> As part of the [25 Year Environment Plan](#) focusing on protecting and enhancing natural landscapes and habitats, the British government has supported programmes that connect people with the environment to improve health and wellbeing. A wide range of outdoor activities have been promoted with the aim of connecting people more systematically with green space to improve mental health, using the natural environment as a resource for preventative and therapeutic purposes. Concrete examples of the application of this nature-connection policy are:

- Encouraging mental health service providers to explore the potential offered by environmental therapies and do more to spread the benefits of nature.
- Encouraging children to be close to nature, in and out of school (for example, a Nature Friendly Schools Programme has been launched to help more communities create the kind of school grounds that support learning about the natural world and keep children happy and healthy).

Greening cities by creating green infrastructure and planting one million urban trees.

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<sup>108</sup> Beshara et al., (2013) ; Kristeller et al., (2014)

<sup>109</sup> EoL is an holistic certification standard that attests that products are sustainable, ethical and transparent throughout the whole supply chain. EoL certification aims to pave the way for individuals and organizations to be more mindful of their impact on people and the environment through daily purchasing decisions. Indeed, SEKEM became the first Economy of Love (EoL) certified company.

<sup>110</sup> Annex I, Case Study 9, Global consumer engagement on Mindful Snacking, by Mondelez International. The company is adding a Snack Mindfully icon on the front of the package for all (participating) products by 2025. This icon helps consumers be aware of standard portions with a visual depiction of the serving size, in combination with required nutrition information based on local regulation.

<sup>111</sup> Wamsler et al., (2021)