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# Rethinking the sustainable development goals: Learning with and from community-led initiatives

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**Abstract**

This paper explores the actual and potential contributions of community-led initiatives (CLIs) to the Sustainable Development Goals (SDGs). As examples of self-determined practical action for sustainability and social justice, CLIs prefigure many of the intended outcomes of the SDGs. Existing evidence shows that CLIs are already contributing, at local scale, to almost all of the SDGs, and achieving particular success in bringing different goals into synergy. However, these achievements are based on ethics, guiding philosophies, issue framings, practical goals and ways of organising that differ significantly from those behind the formulation and delivery of the SDGs. Embracing those differences, and with them greater plurality and ongoing critical self-reflection, would allow the SDGs to transcend certain self-limiting contradictions, particularly concerning the role of economic growth. Such a shift in orientation is essential if the SDGs are to move from reinforcing to challenging the root causes of unsustainability and injustice.

**KEYWORDS**
civil society, post-growth, social justice, sustainability transformation, transformative social innovation

## 1 | INTRODUCTION

This paper explores the dialogue, actual and potential, between the UN's 2030 Sustainability Agenda, centred on delivery of the Sustainable Development Goals, and relevant local-scale action on the part of various kinds of community-led Initiatives (CLIs). In line with previous work in this area, we define CLIs as self-organised initiatives of people working together on an ongoing basis towards some defined set of environmental and/or social goals, usually within defined localities or communities of place (c.f. Penha-Lopes & Henfrey, 2019: pp. 11–12). We consider the term roughly synonymous with others in the literature such as Grassroots Innovations (Seyfang & Smith, 2007; Smith & Seyfang, 2013) and Community-Based Initiatives (Celata et al., 2019). Many CLIs form part of translocal networks that seek to strengthen local action via collaboration, collective learning, pooling and sharing resources, and mutual support (Avelino et al., 2019; Feola &

Nunes, 2014). CLIs arise and operate independently of government, but are nonetheless inserted in legislative and socio-cultural contexts that influence their development, often in limiting ways (Becker et al., 2018; Celata & Coletti, 2019; Henfrey & Penha-Lopes, 2018).

Our definition above is deliberately broad in order to reflect the diversity of the phenomenon. In this paper, our analysis is informed by the literature and empirical evidence on CLIs generally, but it focuses primarily on a specific subset of CLIs associated with movements for environmental and social justice. These include the Ecovillage movement of sustainability-oriented intentional communities (Lockyer & Veteto, 2013), the Transition movement of local action for sustainability in existing communities of place (Lockyer, 2010), the Permaculture movement of intentional design for sustainability inspired by understanding of living systems (Ferguson & Lovell, 2014), the social solidarity economy movement for reorganisation of economic life based on social priorities at local-to-regional scale (Utting, 2015), and the community of actors mobilising around degrowth as a deliberate socio-economic reconfiguration aiming to minimise the material and energetic throughputs needed to support human welfare (Burkhart et al., 2020). Each of these has developed a set of general methodologies, along with techniques for adapting them to the social, cultural, economic and ecological specifics of place; strategies and mechanisms for their uptake and dissemination; and literatures, training infrastructures and other resources to support both active diffusion and imitation (Feola & Nunes, 2014; Shawki, 2013). They are all instances of what has been termed Transformative Social Innovation, characterised by distinctive modes of framing, understanding, organising and acting and flexible, pragmatic responses to ever-shifting opportunity spaces (Avelino et al., 2017; Pel et al., 2020).

Our central focus is an apparent contradiction between the general substantive aims of the SDGs and the social and cultural conditions in which these aims are agreed and acted upon. On the one hand, the CLIs we consider in this paper are working towards social and environmental outcomes that are broadly consistent with the overall spirit of the SDGs, and many are demonstrably successful, albeit on limited scales, in achieving socially just forms of sustainability. On the other hand, the relationships of CLIs with states and other incumbent institutions mostly tasked with delivery of the SDGs are ambivalent at best, and often conflictual. CLIs' successes in achieving their aims are in most cases rooted in ideological, political, cultural and epistemological bases that are very different from those on which the SDGs were based. Our argument here will be that the tension resulting from this apparent contradiction can be a productive one, able to stimulate much-needed plurality in the 2030 Agenda.

Many different lines of evidence and analysis attest to the need for such pluralism if the substance and delivery of the SDGs are to live up to the 2030 Agenda's aspirations of bringing into being a sustainable and socially equitable world. Assumptions of centralised planning and delivery of sustainability agendas contradict current understandings of the complex, non-linear dynamics of social-ecological and socio-technical systems. Successful navigation of this complexity demands supporting multiple issue framings and action pathways, on the part of diverse actors (Leach et al., 2010; Smith & Stirling, 2010). This, in turn, requires pluralism in both governance and the scientific framings, disciplinary perspectives and research orientations that support decision-making processes (Stirling, 2011; also see Henfrey, 2018). Gopal (2017) goes further, arguing that this requires no less than a paradigm shift in established thinking on sustainability, treating alternative perspectives as critical commentaries that can inform the direction of such a shift. Our specific purpose here is to examine the extent to which the demonstrated, and potential, social and ecological impacts of CLI activity and the forms of understanding and acting that underlie these can contribute to rethinking the SDGs. In practical terms, we contend that the SDGs can (and shall) not be conceived as the top-down delivery of centrally devised interventions or policies by governments or UN agencies, but more fruitfully as the convergence of global aspirations and existing bottom-up, community-led strategies. CLIs can help move the 2030 Agenda beyond seeking civil society consent and participation and towards establishment of local partnerships, connected by translocal learning networks, and supported by appropriate governance structures at all levels. Central to this is a willingness to question continually and invite diversification, pluralisation, and change not just in practices and strategies, but in the institutional, epistemological, social and cultural roots of existing perspectives (also see Stirling, 2011).

The following sections develop this line of inquiry in successive stages. First, we outline some of the observed challenges, conceptual and in practice, facing successful implementation of the SDGs at local level. We then summarise key ways in which various kinds of CLIs are already taking action, and achieving outcomes, consistent with some of the aims of the SDGs. We then look more closely at how these outcomes are achieved, and in particular, their reliance on ways of thinking, organising and acting that differ in important ways from those conventionally associated with the SDGs. Finally, we conclude that if the stated aspirations and values of the SDGs are to be realised, this will require significant changes, both in the goals themselves and the institutions, framings, narratives and processes associated with their delivery.

## 2 | THE CHALLENGE OF IMPLEMENTING THE SUSTAINABLE DEVELOPMENT GOALS LOCALLY

The Sustainable Development Goals (SDGs), adopted by the United Nations (UN) in 2015, are the most prominent vehicle for sustainable development globally. They promise to 'transform our world' and offer a comprehensive and virtually all-encompassing framework for thinking about sustainable development, and acting towards it, until 2030.[1]

The SDGs, along with their associated indicators and implementation and reporting mechanisms, were largely defined through an intergovernmental negotiation process. While the UN did set up a consultative process aimed at ensuring civil society participation, in practice this has been widely criticised as inadequately inclusive (especially of marginalised social groups), not representative of social and cultural diversity, and having little actual impact on the negotiations and their

outcomes (Graute, 2016; Sénit, 2020; Sénit et al., 2017). It thus ignored calls from scientists to ensure the goals included attention to multiple dimensions of inclusion, and in particular the need to recognise and empower grassroots actors and processes able to contribute to the 'transformative innovation' that any meaningful efforts towards global sustainability need to foreground (Leach et al., 2012). With the policy focus shifting from adoption to implementation, the legacy of those flaws has become apparent.

Implementation of the SDGs has largely been led by national governments. The consequences reflect concerns that parliamentary democracies are less than fully democratic, and in particular have difficulty accommodating inclusive debate and action on sustainability (Asara et al., 2013). Debates on SDG implementation (e.g., Sachs et al., 2019) have tended to take a narrow view of non-state actors, including local communities and the civil society, as a heterogeneous collective of stakeholders whose participation has been necessary only to build legitimacy for government-led action (also see Cumming et al., 2017 and Sexsmith and McMichael, 2015). The resulting systematic disempowerment of stakeholders implicitly conceived as passive recipients of SDG-related interventions and policies is problematic, not only for specific SDGs that directly relate to inclusion (SDG16), partnership (SDG17) and equality (SDG5 and SDG10), but for the entire SDG project. It also limits the scope for action at other levels of scale identified as important for sustainability, in particular the bioregional scale (Cato, 2013), and via institutional forms other than those of the state and market (Ostrom, 2005).

This centralisation of SDG development and delivery creates particular challenges concerning their local-level implementation. Generalised strategies for either implementation or monitoring are unlikely to fit diverse local contexts and needs (Tan et al., 2019; Valencia et al., 2019). Complex administrative architectures, such as those involving nested layers in highly decentralised government, may exacerbate this (e.g., Horn & Grugel, 2018). This may well, in part, reflect the limitations of a compartmentalised policy approach, which is another recognised issue with the SDG architecture (Biermann et al., 2017; Lim et al., 2018). The coronavirus pandemic has reversed pledged progress on income inequality, increasing the visibility and urgency of the need for radical questioning of the framing and implementation of the SDGs, especially as regards their interconnectivity. Mutual coherence and compatibility among the goals, however, is particularly relevant in a post-pandemic recovery period (Ottersen & Engebretsen, 2020; Shulla et al., 2021).

Other critics point to more fundamental problems with the SDGs, in particular, a failure to address root causes of unsustainability (Easterly, 2015). This creates a danger that implementation of the SDGs perpetuates and even reinforces the unsustainability and injustice they seek to address (Kopnina, 2016; Menton et al., 2020). In most countries, apparent progress towards SDG indicators is at best poorly correlated with actual progress on environmental protection, and may even mask ongoing loss of biodiversity (Zeng et al., 2020). Findings such as these increasingly call into question whether the SDGs can actually be achieved without challenging their own framing assumptions.

A particularly glaring problem concerns the role of economic growth. Although both a stated objective of SDG8 and implicitly assumed precondition for realising other goals, continued growth in global GDP - and, therefore, in national GDP in all industrialised countries - is likely to be incompatible with specific targets relating to reduced resource consumption (including greenhouse gas emissions) set out in Goals 6, 12, 13, 14, and 15 (Hickel, 2019). This finding adds to an increasingly large and compelling body of evidence pointing to a basic incompatibility between perpetual economic growth and the prospects of either sustainability and equity (e.g., Brockway et al., 2021; Hickel et al., 2021). Accordingly, calls are increasing for revision or removal of SDG8, and along with it the assumed dependency, or even correlation, between achieving the SDGs and continued adherence to ongoing GDP growth as a fundamental tenet of national and international economic strategies (Naidoo & Fisher, 2020; Steinberger et al., 2020). In other words, in their current format, the SDGs reflect the inherent contradiction in the term 'sustainable development' that critics have recognised ever since the Brundtland Report (la Court, 1990).

As pre-figurative experiments that often question the imperative behind perpetual economic growth, and strive to realise post-growth socio-economic organisation, CLIs can be important vehicles for a reorientation of the SDGs towards forms of socio-ecological transition that reconsider the role of economic growth in the pursuit of well-being and environmental and social justice. In contrast, a decontextualized approach to SDG implementation that marginalises public participation implicitly dismisses possible implementation pathways, especially those arising from a creative, diverse and autonomous civil society, and consequently reduces possibilities for success. By obscuring the plurality of perspectives and diversity of approaches that already inform civil society action at local level, the top-down approach (to formulating and advancing the implementation of SDGs) misses a large, dynamic and growing body of understanding and activity. If taken seriously and adequately supported, such community-led mobilisation could bring to the SDGs the transformative potential necessary for their rethinking and eventual delivery. As an initial exploration of the form this could take, the next section summarises some of the main documented achievements of CLIs in relation to the SDGs.

## 3 | CONTRIBUTIONS OF COMMUNITY-LED INITIATIVES TO IMPLEMENTATION OF THE SUSTAINABLE DEVELOPMENT GOALS

CLIs have long been recognised as prefigurative of wider societal transitions to sustainability (Frantzeskaki et al., 2016). Their activities, in some cases now ongoing over several decades, pre-empt many of the aspirations of the SDGs in important ways, both in relation to the context of specific goals and the way the 2030 Agenda as a whole attempts to integrate diverse environmental and social goals (Henfrey & Penha-Lopes, 2015). Since the SDGs came into being, some CLIs (and their networks) have partially incorporated them into strategic frameworks for their work, at both local and translocal levels (Penha-Lopes &

Henfrey, 2019: 88–89). The importance of actively involving CLIs in the 2030 Agenda is widely recognised, both as sources of knowledge and experience and as participants in the decentralised processes necessary for effective SDG implementation at local scales (Global Taskforce of Local and Regional Governments, 2016; Rieckmann, 2017; Waage et al., 2015). CLIs engage with thematic streams within the SDGs in ways that are often critical and creative, leading to a reshaping of their meaning and possible implementation formats.

A selective survey of the literature found evidence that CLIs are already addressing almost every one of the 17 SDGs, and in many cases doing so with considerable success, at least at their local scale of operation. The evidence is particularly strong in relation to SDGs that directly reflect the priorities of CLIs, such as SDG3 (good health and well-being), SDG7 (affordable and clean energy), SDG11 (sustainable communities) SDG 12 (responsible production and consumption) and SDG 17 (partnership for the goals). The main exception was SDG14 (life below water), for which literature research revealed no clear examples of CLI contributions. However, many coastal and marine environments have long histories of self-management by local communities. In collaboration with state and parastatal actors, these have become the basis of numerous initiatives in co-management, sustainable development and environmental education worldwide (e.g., Barracosa et al., 2019; Friedlander & Gaymer, 2021; Johannes, 2002), providing some indication of the potential for community-led action in this area. Table 1 lists illustrative examples of impact for each of the other 16 SDGs.[2]

Listing these impacts goal-by-goal risks obscuring the integrated nature of many CLI actions that is perhaps among their biggest strengths. The synergies among SDGs thematics that arise in the context of the holistic orientation typical of many CLIs is evident both in specific cases and in relation to more general concepts. As one example, the Chikukwa Project was initiated when small-scale farmers in several neighbouring rural villages in Zimbabwe adopted permaculture as part of a strategy to address ecological and social challenges that threatened subsistence food production (SDG2), and basic livelihoods (SDG1). Villagers worked together to restore degraded woodlands and protect watercourses (SDG6). They also established new mechanisms for peer learning (SDG4), conflict resolution and collective decision-making and action (SDG16), paying special attention to empowerment of women (SDG5). Outcomes include improved overall standards of general well-being (SDG3), creation of new economic opportunities (SDG8), maintaining and strengthening low-carbon lifestyles and livelihoods largely rooted in sustainable management and use of local resources (SDG12, 13) and safeguarding the future of the villages as viable communities (SDG11), as well as linking to wider national and international networks in permaculture and related areas of community action (SDG17) (Didarali & Gambiza, 2019; Richardson-Ngwenya, 2021).

An example of a more general pattern is the formation by CLIs of *commons ecologies*, self-organised governance and management systems at local to regional scale designed to promote, harmonise and integrate defined social and environmental goals (De Angelis, 2017; Esteves et al., 2021). Historically the basis of traditional and indigenous

management of natural resources in both terrestrial (SDG15) and marine settings (SDG14), commons have been created by CLIs as the basis for sustainable and socially responsible production and consumption (SDG12) in areas such as agroecology and food production (SDG2), renewable energy infrastructures (SDG7), education and learning (SDG4), cooperative enterprise (SDG8), healthcare (SDG3) and finance (SDG1, SDG10) (Bollier & Helfrich, 2019). Often initiated as local responses to climate change (SDG13) (Henfrey & Kenrick, 2017), they have through various forms of *boundary commoning*—partnership both among commons and with state and market actors (SDG17)—provoked multi-level institutional change (SDG16) (Macedo et al., 2020; Wittmayer et al., 2020), resulting in new forms of sustainability-oriented governance at both community and city scale (SDG11) (Burnett & Nunes, 2021; Russell, 2019). In some cases, CLIs have become the foundations of new regional economies and global sustainability industries (SDG9) (Lewis & Conaty, 2012; Ornetzeder & Rohracher, 2006).

The examples listed above are, while selective, not in our assessment untypical: impacts of this kind are likely to be observed wherever CLIs are established, active, and operating effectively. Aggregated analyses drawing on data from multiple CLIs in different countries, local contexts and fields of activity are rare, but confirm this assertion. One study of 38 CLIs in six European countries found significant reductions in carbon footprints of both active members and direct beneficiaries, especially in the fields of transportation, diet, waste avoidance and renewable energy production (Landholm et al., 2019). Although focussed on realised and potential reductions in greenhouse gas emissions, the study noted considerable and diverse further environmental and social benefits arising from CLI activity, highlighting the holistic nature of this activity and ability to support progress on multiple SDGs simultaneously, in complementary or synergistic fashion (Celata & Sanna, 2019). Extrapolation from these data indicated the potential aggregate contributions of CLIs to meeting progressive emissions reduction targets to be considerable, under a scenario of high levels of activity and public participation, though inadequate by itself without structural changes and the active participation of government and business (Martellozzo et al., 2019). Although data maintained by some national and international CLI networks indicate the numbers, diversity and levels of activity of CLIs to be considerable, the absence of any systematic records or analysis makes their actual numbers and impacts difficult to ascertain (Penha-Lopes & Henfrey, 2019). A considerable resource for effective local-scale action towards outcomes consistent with the SDGs thus remains only partially visible, at best, and lacks the support necessary to grow to its full potential.

While we have so far emphasised the positive qualities of CLIs, it is important to recognise that they do not provide perfect, ready-made solutions that can simply be scaled up. In many cases and respects they reflect, and fail to address, features of their wider social context that contradict their own stated commitments to inclusion, diversity and tolerance (Ferguson & Lovell, 2015; Quilley, 2015). At local levels, many initiatives struggle to attract participants and engage publics beyond a narrow white, middle class and well educated demographic (Merritt & Stubbs, 2012; Nicolosi et al., 2018; Smith, 2011). Key local organisers often lack the skills, resources or opportunity to

**TABLE 1** Selected illustrative examples of CLIs' contributions to achieving the Sustainable Development Goals (SDGs)

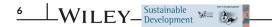| UN SDGs | Indicative examples of approaches taken by community-led initiatives |
| --- | --- |
| SDG1—No poverty | CLIs use diverse strategies and methods to support individual and collective well-being, often in ways that are organised along non-market logics and require lower levels of material affluence. This not only directly addresses, and mitigates, experienced poverty, it also invites a reframing and reappraisal of poverty as commonly defined as a direct function of material scarcity (Vita et al., 2020). Many CLIs have created new alternative or complementary currencies to help improve and diversify creation, distribution and circulation of wealth and increase alignment with requirements for sustainability. For example, 31% of the studies of alternative or complementary currencies reviewed by Michel and Hudon (2015) reported that such currencies contribute to tackling social exclusion and 23% helped improve quality of life in terms of well-being. Michel and Hudon (2015) also found that 24% of the studies had identified income increases and improvement of living standards as economic impacts of these currencies, while 29% reported that members of alternative or complementary currencies gained access to otherwise unaffordable goods and services |
| SDG2—Zero hunger | Many CLIs employ organic, regenerative and agroecological forms of food production and local/regional provision, including linking producers and consumers of food through mechanisms such as solidarity purchasing, community-supported agriculture and farmers' markets. Sustainable and equitable provision of food is thus brought into synergy with creation of environmental, economic, social and cultural benefits (Cristiano, 2021). Quantitative assessments of short food supply chains, including Community Supported Agriculture, Urban Gardens, and Farmer Markets, show that these CLIs outperform conventional food retail and long food supply chains for most environmental and social assessment criteria (Doernberg et al., 2022) |
| SDG3—Good health and wellbeing | CLIs generally align with alternative economic philosophies and methodologies that prioritise health and well-being rather than economic indicators. Specific strategies include deliberately building social capital (and to lesser degrees, other forms of non-fiscal capital), and leveraging it to promote well-being through a range of social, spatial and material design strategies including a healthy work-life balance, inclusive and deeply democratic decision making, conflict resolution institutions, and self-development practices, among others (Hall, 2015) |
| SDG4—Quality education | Learning is central to CLIs, both their internal development as projects, initiatives and networks and their bridging with wider society (Henfrey, 2017). Many operate their own learning programmes, and actively cultivate learning collaborations with wider society through communities of practice and other forms of learning partnership (Ulbrich & Pahl-Wostl, 2019 for an example of learning partnerships involving the German Permaculture initiatives, and Macedo et al., 2020 for an example of such partnerships involving Transition Towns) |
| SDG5—Gender equality | The actual performance of CLIs is mixed, with high levels of women's representation and leadership in some areas combined with reproduction of more typical patterns and forms of gender imbalance in others (e.g., Celata & Sanna, 2019; Ferguson & Lovell, 2015). Many CLIs involve social experimentation and questioning of dominant cultural norms and narratives, with potential to go beyond numerical equality to progress towards genuinely gender-equitable and gender-inclusive societies (e.g., Hanaček et al., 2020) |
| SDG6—Clean water and sanitation | CLIs implement a diverse range of appropriate water management technologies. For example, in Tamera Ecovillage in the Alentejo region of Portugal, water management is a central ecological topic. The community develops and tests a wide variety of infrastructures for water retention in the landscape and usage within the community, and promotes wider discussion, reflection and innovation through various forms of collaboration with internationally recognised authorities as well as testing a wide variety of infrastructures to support and enhance water cycling and storage (Vizinho et al., 2015). Lockyer (2017), quantified water consumption at the Dancing Rabbit Ecovillage in the United States, and found that per capita daily water use was 23% of the average United States citizen, thanks to rainwater catchment technologies and water saving practices, among other simple but effective socio-technical innovations |
| SDG7—Affordable and clean energy | CLIs are active in both supply-side and demand-side interventions relating to sustainable energy, both through various forms of community-owned energy generation and initiatives to promote less energy-intensive settlements and lifestyles. Community energy in many cases is the initial and/or most important form of action, with community energy projects often providing a focus for a wider range of activities powered and/or funded by renewable energy generation infrastructure, or helping to create enabling conditions for other work by reducing dependencies on infrastructures that are corporate-run, environmentally destructive and dependent on fossil fuels, nuclear or other forms of unsustainable generation (Becker et al., 2017; Hewitt et al., 2019). Hewitt et al. (2019) provide an overview of sizeable renewable, community energy production across eight European countries, while on the demand side, Lockyer (2017) quantified natural gas and electricity consumption at the Dancing Rabbit Ecovillage, which were, respectively, approximately 5% and 18% of the average per capita consumption of United States citizens |
| SDG8—Decent work and economic growth | CLIs are developing many alternative models of entrepreneurship representing distinctive forms of economic and organisational philosophy, reinventing the nature of work and creating livelihood opportunities that are intrinsically linked with equity, sustainability and ecological, social and cultural regeneration (Hillman et al., 2018; Genus et al., 2021). In addition, increasing numbers of community initiatives explicitly associate with zero-growth or degrowth economic scenarios in the global North (Robra et al., 2020), as a fundamental element of decent work and human flourishing. Watson (2020) found that Community Supported Agriculture initiatives can involve meaningful, non-alienating work relations, although the risk of self-exploitation and erosion of community relations has been observed in other cases (Galt et al., 2016) |

(Continues)

**TABLE 1**   (Continued)

| UN SDGs | Indicative examples of approaches taken by community-led initiatives |
|---|---|
| SDG9—Industry, innovation and infrastructure | CLIs are key examples of transformative social innovations, capable of challenging and overcoming technical, social and cultural lock-ins in dominant regimes and associated infrastructures. CLIs such as cohousing, renewable energy communities and car-sharing (Ornetzeder & Rohracher, 2013), as well as ecovillages (Barani et al., 2018) and hackerspaces, repair cafes and appropriate technology initiatives (Smith et al., 2014 ) develop material innovation in technologies and sectors as diverse as housing, transport, finance, food production, and other areas, creating infrastructural systems that maximise their capacity for self-maintenance, regeneration and flexible adaptation to changing circumstances at the same time as they minimise their reliance on external inputs of materials and energy |
| SDG10—Reduced inequalities | CLIs empower their members through creating local and translocal connections, favouring learning and reskilling, and supporting political voice (Avelino et al., 2019). Direct practical outcomes include engagement of diverse publics (Celata & Sanna, 2019) and creation of local-regional economic systems that practice inclusion and equity as core organisational principles (Esteves et al., 2021; Genus et al., 2021; Hillman et al., 2018) |
| SDG11—Sustainable cities and communities | Most documented ecovillages and co-housing projects achieve per capita ecological footprints far below national averages, including the only two documented examples of European settlements with per capita ecological footprints below levels required for global sustainability (Daly, 2017; also see Lockyer, 2017). CLIs have been identified as a core component of transitions to sustainability in urban settings (Frantzeskaki et al., 2016) |
| SDG12—Responsible production and consumption | Several general surveys of CLIs such as ecovillages and other intentional communities reveal significant impacts in more sustainable production and consumption, along with numerous related social benefits (Barani et al., 2018; Celata & Sanna, 2019; Daly, 2017). For example, Cloughjordan Ecovillage in Ireland employs a range of technical, behavioural and social measures, leading to a per capita ecological footprint less than half the national average. Ecological Footprint methodology is proactively employed as a learning and feedback mechanism to work towards more sustainable production and consumption (Carragher & Peters, 2018) |
| SDG13—Climate action | CLIs such as food cooperatives and renewable energy communities show significant realised reductions in beneficiaries' lifestyle-associated greenhouse gas emissions in several areas, including food consumption, transport, energy consumption, waste production and disposal (Landholm et al., 2019). The aggregate potential emissions reductions, in scenarios assuming high levels of public engagement in CLIs, exceed 2020 targets in most EU countries and would represent significant contributions to 2030 to 2050 targets (Martellozzo et al., 2019) |
| SDG15—Life on land | Many CLIs are adopting and promoting agroecological and agroforestry-based methods of food production rooted in local cultural and environmental conditions and able to mitigate climate change, increase biodiversity, increase soil quality and generate other socio-ecological benefits (Doernberg et al., 2022; Wartman et al., 2018). Permaculture and other CLIs reinvigorate traditional forms of customary land management and show strong complementarity with more conventional conservation methods like protected areas (Chakroun & Droz, 2020) |
| SDG16—Peace, justice and strong institutions | CLIs typically operate as commons, self-organised institutions for collective action rooted in local social and ecological realities capable of nesting at multiple spatial and social scales (Esteves et al., 2021). Some have a specific focus on new forms of relationship building for global peace (Esteves, 2020). Interactions between CLIs and incumbents in the energy sector are creating new hybrid forms of institutionalisation better able to respond to pressures for transformative change (Wittmayer et al., 2020) |
| SDG17—Partnership for the goals | CLIs organise and collaborate within translocal networks that create diverse forms of connection, partnership, support and learning among local initiatives (Avelino et al., 2019). Several translocal networks exist globally each involving hundreds to thousands of local initiatives; for example, the Transition Network, the Global Ecovillage Network, national Community-Supported-Agriculture networks and their European umbrella Urgenci, various national Repair Café networks, and national and international Social and Solidarity Economy networks, among others. New forms of multi-actor local partnership include the Municipalities in Transition framework, which supports collaborations for transformative action on sustainability between Transition initiatives and local government, designed to help to navigate uncertainty and complexity and support emergent and unplanned outcomes (Macedo et al., 2020) |

build and broker relationships with existing diverse sub-communities, leading to a tendency to sideline such work in favour of more familiar and volunteer-friendly activities (Grossmann & Creamer, 2017; Nicolosi & Feola, 2016). Some initiatives unwittingly perpetuate discriminatory and/or exclusionary social norms, for example relating to gender and sexuality (Dinnie & Browne, 2011). This perhaps reflects a wider tendency towards depoliticisation, with the ironic outcome of actually perpetuating features of neoliberal discourse and foreclosing framings and courses of action that more diverse voices could bring (Argüelles et al, 2017). A recent, and welcome, trend is for systematic decolonisation of thought, discourse and action, drawing on and

entering into dialogue and collaboration with indigenous, feminist, post-colonial and other subaltern movements in order to become part of a pluriverse of sustainable and just alternatives, rooted in diverse cultural and ecological specifics of place (Nirmal & Rocheleau, 2019; Paulson, 2017). Great agency and discursive influence of CLIs within global sustainability agendas will be counterproductive if it does not actively integrate and strengthen this commitment to including and empowering an ever-greater diversity of voices, perspectives and interests.

Despite these limitations, we argue here that CLIs are contributing meaningfully to almost all of the SDGs (Table 1), and that they are

doing so in ways that transcend, and in some ways challenge, many predominant assumptions concerning the formulation and implementation of SDGs. In particular, the proactive, prefigurative and creative nature of CLI action on the SDGs challenge conceptions of civil society as consisting of either passive stakeholders whose compliance is necessary for reasons of public acceptability, or even vehicles for delivery of centrally defined goals, targets and implementation strategies. In contrast to such conceptions, our review highlights the roles played by CLIs as pioneers in sustainability practices and techniques and as influencers and supporters of local government through active and collaborative partnership in sustainability governance arrangements. These findings invite us to look beyond what CLIs do, can and could contribute to SDG implementation, and also take into account the how and why. Attention to mechanisms and motivations highlights the potential for CLIs to contribute to a wider reformulation of the SDGs, both conceptually and in practice, as the next section explores.

# 4 | BEYOND THE SUSTAINABLE DEVELOPMENT GOALS: COMMUNITY-LED INITIATIVES AS PRACTICAL AND EPISTEMIC ALTERNATIVES

A growing body of knowledge on the actual practices and guiding philosophies of CLIs emphasises their nature and potential as agents of the transformative change that the 2030 Agenda implies rhetorically, but struggles with in practice. As instances of transformative social innovation, they offer new ways of framing, understanding, organising and acting potentially well suited to making substantial progress towards sustainability (Pel et al., 2020). This includes offering possible routes to overcoming the limitations of the SDGs as a centralised and top-down process driven by the very structures and guiding assumptions that are the root causes of the issues it purports to address. In this respect, we identify four general qualities of CLIs as being of particularly great potential importance:

1. Their activities are rooted in the actual practice of sustainability, as lived and embodied, grounded in specific local and regional contexts and supported by appropriate social institutions and cultural perspectives.
2. They question the necessity and desirability of perpetual economic growth, (a core internal barrier for reaching most of the SDGs) along with many other guiding assumptions of the dominant paradigm that the SDGs tacitly or explicitly perpetuate (separation of people and nature, quality of life as a function of material accumulation, gender and racial blindness).
3. They provide operating and replicable examples of systemic alternatives - along with ongoing efforts to create these - that express joined-up and (aspirationally, at least) evolving holistic understandings of environmental and social issues.
4. They include, and on an ongoing basis generate, new perspectives and approaches with wider transformative potential, ones that continuously evolve in a reflexive and self-critical fashion.

The following paragraphs explore each of these points in turn.

As examples of practical efforts to live more sustainably, CLIs offer many important lessons in relation to what successful delivery of the 2030 Agenda might look like in practice. First, they operate through experimentation and learning by doing, which is prone to setbacks and apparent 'failures', yet embraced as vital learning opportunities (Feola & Nunes, 2014). Second, they operate in 'messy' social conditions marked by clear internal and external contradictions, conflicts and struggles. Yet, many of their conflicting elements provide a 'fertile soil' for innovation, evolution, and dynamic and constructive responses to fast-changing, uncertain and unpredictable contexts (Sekulova et al., 2017). Third, they exhibit forms of distributed agency that allow them to adapt rapidly and flexibly to whatever opportunities for innovative action arise in their immediate contexts (Pel et al., 2020). Fourth, local experiences are often shared, distilled, critically assessed, and transferred or adapted to new contexts through translocal networks that connect diverse local actors (Avelino et al., 2019; Feola & Nunes, 2014). In all these respects, CLIs offer a necessary complement to the logics of bureaucratisation and commodification that mark state-led and market-led approaches, leading to creation of new hybrid institutions, flexibly able to reconcile impulses towards transformation and stability (Wittmayer et al., 2020). To be most effective, such institutional hybridisation should become an integral part of the SDGs, not just in delivery, but as part of active and ongoing processes of critical reflection and reformulation.

The decentralised and autonomous nature of CLIs also allows them to challenge some of the self-limiting assumptions that underlie the SDGs. Foremost among these is that of continuing economic growth as the ultimate goal of humanity, which is now widely recognised to be a product of particular social, cultural, historical and political processes and institutions. The pursuit of perpetual economic growth has proved to be disconnected from, and even undermining, strong sustainability targets and social welfare in a wide range of countries (Fanning & O'Neill, 2019; Jackson, 2017, 2021; Kallis et al., 2018; Tilsted et al., 2021). This said, in the absence of broad-based redistribution within and across the Global North and South, growth is often perceived as the only way of addressing poverty, in line with the highly questionable assumption that its benefits will trickle down to the poor (Akbulut et al., 2019).

While not all CLIs share discourses that are explicitly critical of economic growth, many CLIs offer prefigurative examples of post-growth societies, operating according to alternative economic philosophies, structures and practices able to combine high levels of human well-being, social justice, and the preservation or even enrichment of the environment (Jackson, 2017). The highly centralised processes so far associated with formulation and delivery of the SDGs thus tend to marginalise key sources of visions, experience, understanding and expertise that are vital to their success.

As working examples of sustainability thinking in practice, many CLIs are holistic endeavours in which different social and environmental goals are approached not as separate issues, but as interdependent and needing to be addressed collectively. Although rooted in common understandings of the ecological embeddedness of human society and transformative potential of self-organised, bottom-up action, they

exhibit considerable diversity, both among and within movements, in specific framings of the forms of collaboration and practical action necessary to realise such transformation (Feola & Jaworska, 2019). In a practical sense, evidence is growing of their ability to bring about systemic change at local to regional levels, in ways that naturally bring multiple SDGs, social and economic, into synergy (Esteves et al., 2021). Delivery of the SDGs may take such working cases as inspirational examples for wider action, actively exploring and mobilising their potential for translation to other contexts, including via institutional reform at all levels. Doing so will provide an opportunity to integrate novel problem framings that introduce new perspectives and ideas, and apply and connect established ideas in original ways. The diffusion of sustainability principles and practices through translocal networks of CLIs shows that while local initiatives develop highly embedded and locally-specific ways of addressing pressing sustainability issues, situated experiences can be translated into more general principles and practices that, in turn, can inform initiatives elsewhere (Avelino et al., 2019; Feola & Nunes, 2014). In this, translocal networks play an important role in scaling out, rather than upscaling, particular experiences and impacts, ensuring their replicability and evolution in function of the contexts and subjectivities that underpin and embody them.

Examples of the transfer and replicability of alternative logics through translocal networks of CLIs include the concept of 'Regenerative Cultures' (Wahl, 2016), which consciously build individual and collective capacities to respond constructively to emerging crises and navigate the inherent complexity and uncertainty of social and ecological systems. Regenerative Development and Design (Mang & Reed, 2012) works from a deep connection with place, potential and vocation as guiding principles for understanding and action. Permaculture employs a set of heuristic, analytical and decision-making tools based on deep observation of the self-organising properties of living systems and rooted in overlapping ethics of sustainability and equity, and applies these in the deliberate design of everyday life (Taylor Aiken, 2017). The Global Ecovillage Network (GEN) has captured key principles derived from practical experience of life in sustainability-oriented principles as the Ecovillage Mandala,[3] which emphasises the social, cultural, economic and ecological dimensions of sustainability, and the need to integrate these (Litfin, 2014). Combining this with the principles of Regenerative Development, GEN-International has recently reconceptualised the SDGs as a set of Regenerative Development Aims,[4] which emphasise the need to move from sustainability to regeneration, as an ongoing aspiration and life ethic rather than a fixed goal that can ever be definitively reached.

All of these, and many more in CLI networks around the world, have roles to play in informing a more pluralistic, inclusive and ambitious global sustainability agenda, drawing upon the full range of available perspectives and tools and rooted within grounded experience of dedicated action towards sustainability as embodied practice at human scale. Not all local initiatives nor all types of CLIs share a common vision or agenda (e.g., regarding perpetual economic growth); neither are they immune from limitations as regards their replicability or issues of inclusion and representation of diverse groups and interests (e.g., Argüelles et al., 2017). However, as shown also in Table 1, effectives practices do exist, as does empirical evidence of their impact on almost all the SDGs.

## 5 | CONCLUSION: TOWARDS A RESEARCH AND POLICY AGENDA

From the above analysis of the ways many CLIs are working towards the SDGs, and the outcomes of these (Table 1), we conclude that the patterns underlying successful efforts by CLIs to achieve outcomes consistent with the aspirations of the SDGs reflect fundamental epistemic, ontological, ethical, analytical and operational contradictions between CLIs and dominant forms of being, knowing, understanding and doing, including those behind the 2030 Agenda. We have argued above that globally CLIs have been effectively realising key elements of the SDGs as embedded features of social and economic life, in ways that tend to spur stronger forms of sustainability and wider notions of justice. We believe that our findings above, provide a sound basis for rethinking the SDGs, and making them stronger, more just, intersectional and inclusive. Nevertheless, this potential is currently unproven, and urgently needs testing through an action research approach where researchers act as brokers between CLIs seeking to offer more than isolated local-scale experiments and established actors (especially government at all levels) working to implement the 2030 Agenda. This approach needs to be experimental, reflexive, responsive to ongoing learning, and adaptive in the face of change.

In practical terms, we believe that the SDGs can (and shall) not be conceived as the top-down delivery of centrally devised interventions or policies by governments or UN agencies, but more fruitfully as the convergence of global aspirations and existing bottom-up, community-led strategies. How to design and govern this convergence is an open question. On the one hand, the top-down rollout of pre-defined, supposed sustainability solutions that are 'validated' through community and civil society's consent (as in Sachs et al., 2019) would reproduce the well-documented implementation issues, or gaps, discussed above (Cumming et al., 2017; Horn & Grugel, 2018; Tan et al., 2019; Valencia et al., 2019). On the other hand, CLIs are not imagined here as mechanisms that shift existing responsibilities for the public good from state actors onto individuals and civil society. Neither should CLIs be seen as ready-made solutions to be simplistically transferred to every context.

In contrast, we propose that CLIs can help move the 2030 Agenda beyond seeking civil society consent and participation and towards establishment of local partnerships, connected by translocal learning networks, and supported by appropriate governance structures at all levels. Central to this governance approach is a willingness to question continually and invite diversification, pluralisation, and change not just in practices and strategies, but in the institutional, epistemological, social and cultural roots of existing perspectives (also see Stirling, 2011). This in turn, requires a recognition of the uncertainty inherent in any genuinely transformative endeavour (Scoones & Stirling, 2020). Horizontal governance structures that foster interaction among partners (CLIs, state authorities, business sector, etc.) on an equal footing (Lange et al., 2013), may facilitate such open, inclusive and learning-prone arrangements. However, we suggest that such settings, differently and probably newly designed

for distinct contexts, should be a structural rather than ad-hoc component (e.g., as many so-called 'living labs' are) of the transformative implementation of the SDGs. There is no expectation that such governance processes would be smooth, or devoid of tensions and conflict, with different partners, including CLIs, required to question their own assumptions, learn from each other and negotiate in order to facilitate a convergence of global and local sustainability aspirations, and existing bottom-up, community-led strategies. The evidence compiled here suggests that CLIs hold many useful clues and propositions, but we can only guess what the end product will look like. The single projection that we can make is that the eventual result will in many ways be completely unrecognisable from the world we have today.

The first step towards this transformation is a radical democratisation of the SDGs' formulation and implementation, in all respects. This will include, at the very least, major collective rethinking and reworking of each SDG; contextualisation of SDG delivery in relation to diverse and place-based social, ecological and cultural realities; and the creation of new, inclusive, multi-level institutions and processes for both application and ongoing critical reflection upon and learning from the consequences. A key outcome of all this will be the reconceptualisation of the SDGs not as goals or targets, but as visions or pathways in the making, or as questions to be posed in different ways and combinations in each locality, addressed through action learning collaborations across multiple stakeholder groups and building on existing local and translocal experience of practical action for justice and sustainability.

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## ENDNOTES

[1] https://sdgs.un.org/goals

[2] A fuller and dynamic list, in interactive format that supports contributions, can be found at https://wiki.communitiesforfuture.org/wiki/Sustainable_Development_Goals

[3] https://ecovillage.org/solution/the-5-dimensions-of-sustainability/. Accessed October 21st 2021.

[4] https://ecovillage.org/sustainable-development-the-ecovillage-way/. Accessed October 21st 2021.

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