Community Economic Development

Miriam Solis, Martha Matsuoka, and Chad Raphael

Because the economic structures of colonialism, capitalism, and racism have powerfully shaped environmental injustices, advancing environmental justice also requires transforming economic structures and relationships (Faber 2018; Pulido 1996). Dominant approaches to community and economic development impose top-down planning that extracts wealth, excludes local interests and cultures, and extinguishes nature (Agyeman, Bullard, and Evans 2003). Similarly, much development research is conducted in a top-down manner by experts aligned with the perspectives of governments, intergovernmental agencies, philanthropies, and nongovernmental organizations (Munck 2014). In response, activists and researchers aligned with the environmental justice (EJ) movement have promoted different conceptions of development and community-engaged research (CER) that emerge from and prioritize local knowledge, priorities, and power over decisions.

This chapter begins by contrasting dominant approaches to development with alternative visions of the economy and nature advanced by EJ activists and researchers. We then highlight CER's contributions to four strategies for promoting just and sustainable development, including re-localizing economies, community-led worker education and training, just transitions for labor and communities to a decarbonized economy, and community ownership of production. Brief case studies illustrate each strategy, some involving professional researchers and some conducted largely or wholly by lay experts, from whom researchers can learn as well. We conclude by sketching some recommendations for how future CER can support environmentally just community economic development. Table 8.1 summarizes how the main themes of the chapter relate to the dimensions of justice common to CER and EJ that are employed throughout this book.

TABLE 8.1. CER for EJ in Community Economic Development

Dimension of Justice	In CER for EJ in Development
Distribution *Who ought to get what?*	Strengthening investment in community capacities to conduct research for equitable and sustainable communities and economies, including local ownership of production
Procedure *Who ought to decide?*	Asserting EJ communities' participation in and influence over the design and conduct of research to support economies driven by local priorities, control, and cultures
Recognition *Who ought to be respected and valued?*	Applying local knowledge and values to educate and train workers, and re-localize production in response to neoliberalism and globalization
Transformation *What ought to change, and how?*	Transforming economic structures and relations to enact just transitions for workers and communities to a sustainable, regenerative economy

DOMINANT AND ALTERNATIVE ECONOMIC VISIONS

Neoliberalism, Sustainable Development, and Participatory Development

CER and EJ activism challenge the dominant development paradigms of recent decades, including neoliberalism, sustainable development, and participatory development. Many governments around the world pursued neoliberal prescriptions for growth from the 1980s onward, based on liberalizing trade, deregulating markets, reducing protections for labor, and privatizing management and ownership of public services and natural resources (Harvey 2005). The environment and EJ communities bore the brunt of these policies as energy and infrastructure megaprojects destroyed traditional landscapes and livelihoods, speculative real estate investment displaced residents from urban neighborhoods, trade policies weakened environmental and labor protections, and public disinvestment in services worsened inequalities of wealth and living conditions (Apostolopoulou and Cortes-Vazquez 2018).

At the local level, neoliberalism undermined community economic development agencies' ability to meet residents' needs as governments adopted market-based development approaches and partnerships with private sector corporations and finance institutions. In the U.S., for example, these community- and place-based agencies had emerged from local political organizing, such as by the Black Power and neighborhood democracy movements of the 1960s, to strengthen grassroots control over development and social services, fight displacement of working-class communities by urban renewal projects, and demand an end to financial redlining of Black and brown neighborhoods (DeFilippis 2012). As the federal government cut funding for movement-run development organizations, community development agencies increasingly answered to local governments,

banks, and private real estate developers, who reasserted their dominance over urban investment and planning. In many cities, nonprofit community development corporations struggled to fill the vacuum left by federal and municipal disinvestment in public services and affordable housing.

Activism and research have also sought to elevate EJ in the sustainable development paradigm, defined initially as development "that meets the needs of the present without compromising the ability of future generations to meet their own needs" (World Commission on Environment and Development 1987, 16). Proponents of sustainable development call for a green economy, which promises to raise environmental protection to a top priority, coequal with economic vitality and social inclusion. A green economy is defined as one "that results in improved human wellbeing and social equity, while significantly reducing environmental risks and ecological scarcities" (United Nations Environment Programme 2011, 2). After the 2008 financial crisis, green economy ideas influenced national stimulus plans in countries such as the U.S., South Korea, and Ethiopia, and policy discussions in intergovernmental bodies such as the World Bank, United Nations Environment Programme, and World Business Council for Sustainable Development. Proposals included private and public investment in ecosystems management, waste management, clean technologies, renewable energy, green cities, and sustainable agriculture (Affolderbach and Krueger 2017). Other policy levers included incorporating the value of ecosystem services into economic policy decisions; green subsidies, ecotaxes, and pricing strategies that encourage environmentally and socially beneficial shifts in consumption and investment; and regulations that foster technology innovation and diffusion (Fiorino 2017).

Some local development agencies have incorporated sustainable development themes in their planning (Wheeler and Beatley 2014). They have pursued changes to the built environment—such as denser housing, more and rehabilitated green spaces, and transit-oriented development—to reduce greenhouse gas emissions and improve residents' health and quality of life. In addition, these measures are often promoted on the basis of the "green jobs" they will create for local residents. Local governments and universities have also fostered ecopreneurialism, or initiatives to incubate start-up companies that focus on improving environmental performance (Levenda and Tretter 2020).

However, the more that sustainable development policies bend toward the logic of the market and the priorities of the state, the less likely they are to fulfill EJ goals of distributing environmental benefits more equitably, recognizing alternative worldviews of humans and nature, and democratizing control over decision making. Sustainable development programs led by states and intergovernmental agencies have often promoted extractive and exploitive growth strategies at the expense of local ecosystems and equity—for example, by imposing expensive and culturally damaging megaprojects on local communities, supporting conservation schemes that deny Indigenous people access to their ancestral lands, and

sacrificing the interests of future generations and nonhuman nature for short-term growth (Agyeman, Bullard, and Evans 2003; Atapattu, Gonzalez, and Seck 2021). In cities, many development plans touted as advancing equity have ended up spurring speculative investment that reinforces patterns of economic disenfranchisement (Campbell 1996). EJ researchers and activists increasingly question whether efforts to build more sustainable urban communities are displacing residents rather than ameliorating urban planning's consequences (Agyeman et al. 2016; Anguelovski 2015). Community gardens, farmers markets, bike lanes, and other public and private investments can also fuel gentrification and ecotourism that displace local people, overtax local ecologies, and increase transportation-related greenhouse gas emissions.

CER's values and methods inherently question who has knowledge, whose knowledge is valued, and who gets to decide on the scope, scale, purpose, and process of research. Participatory development emerged as an approach among those who acknowledged that development projects conceived and imposed from above had often failed to reduce poverty and inequality, and to distribute environmental benefits fairly and democratically. At its best, participatory development engages grassroots communities to develop projects, technologies, and organizations that respect local self-determination and cultural specificity (see Levidow and Papaioannou 2018; Pansera and Sarkar 2016; and the example of Barefoot College discussed below). At its worst, this approach is coopted by state and intergovernmental organizations to make false promises of influence to communities, design manipulative and time-consuming consultation processes, and use them to legitimate decisions foisted on communities from above (Cooke and Kothari 2001).

Alternatives to Development

Movements and researchers concerned with EJ have proposed a variety of alternative approaches to the economy and relations with nature that are best understood as alternatives *to* development. These approaches share some common themes, including local control, culturally appropriate economic relations and technologies, greater equity, reduced consumption, and liberation of people and nature from exploitation. For example, the founding *Principles of Environmental Justice*, adopted at the First National People of Color Environmental Leadership Summit (1991), called for "securing our political, economic and cultural liberation that has been denied for over 500 years of colonization and oppression" by promoting "economic alternatives which would contribute to the development of environmentally safe livelihoods"; economic self-determination; "the right of all workers to a safe and healthy work environment"; "oppos[ition] to the destructive operations of multi-national corporations"; and "consum[ing] as little of Mother Earth's resources and [producing] as little waste as possible." Around the world, a host of alternative visions to development address EJ (see table 8.2).

TABLE 8.2. Alternatives to Development Relevant to Environmental Justice

Approach	Definition
Buen Vivir (Latin America)	An umbrella term for multiple Indigenous life philosophies, *buen vivir* (living well) encompasses "harmony with nature (as a part of it), cultural diversity and pluriculturalism, co-existence within and between communities, inseparability of all life's elements (material, social, spiritual), opposition to the concept of perpetual accumulation, return to use values and movement even beyond the concept of value" (Kothari, Demaria, and Acosta 2014, 367–368)
Ecological Swaraj (India)	Also known as radical ecological democracy, ecological swaraj ("self-rule" or "self-reliance") is a framework that emerged from local civil society organizations, which "respects the limits of the Earth and the rights of other species, while pursuing the core values of social justice and equity"; embraces direct, grassroots economic democracy; and has a "holistic vision of human well-being encompass[ing] physical, material, socio-cultural, intellectual, and spiritual dimensions" (Kothari, Demaria, and Acosta 2014, 368)
Ubuntu (Southern Africa)	Ubuntu philosophy recognizes the communal constitution of identity ("I am because we are") and prescribes an ethics of caring for other humans and natural beings, and restrained use and sharing of natural resources (Etieyibo 2017)
Degrowth (Europe, North America)	Degrowth rejects the goal of economic growth as destructive, calling instead for "a democratically led redistributive downscaling of production and consumption in industrialized countries as a means to achieve environmental sustainability, social justice, and well-being" (Kothari, Demaria, and Acosta 2014, 369)
Social and Solidarity Economies (Europe, North America)	These grassroots economic initiatives foster cooperation, mutual aid, relationship building, local self-reliance, and environmental sustainability, such as community development credit unions; land trusts; urban gardens, community-supported agriculture, and worker, consumer, and producer cooperatives (Miller 2009)
Regenerative Economy (United States)	A vision of the economy embraced by the U.S. EJ movement and labor allies, the regenerative economy includes restoring nature, local economic control and democratic workplaces, respect for local cultures and traditions, and racial and economic equity (Movement Generation Justice and Ecology Project, n.d.)

Rooted in community knowledge, experience, and questions, a community-engaged approach to research aligns well with these alternative visions. Like these approaches, CER helps endow community organizations with resources to conduct research (distributive justice), promotes communities' participation in directing and conducting research for their own ends (procedural justice), draws on their local knowledge and values (recognition justice), and can help create long-term research and economic relationships that are locally controlled, democratically governed, and in harmony with nature (transformational justice).

Having provided this broad overview of how EJ relates to mainstream development, we turn now to highlight four emergent strategies for using CER to advance economic alternatives, including efforts to re-localize economies, rethink worker

education and training, create just transitions to renewable energy economies, and promote community ownership of production. These strategies are not mutually exclusive nor exhaustive of the alternatives to dominant economic approaches. In addition, the examples of CER we present vary in the degree to which they challenge neoliberal and sustainable development models. Our aim is to illuminate the strengths and limitations of how these efforts employ CER to enact EJ, rather than provide simplistic "success stories" or "replicable models."

RE-LOCALIZING THE ECONOMY

Some approaches to CER for EJ advance economic alternatives by drawing on local knowledge and values to promote local production of goods, services, food, and energy. These re-localization initiatives are not new—they have taken various forms since the emergence of industrial capitalism's corporate takeovers (North 2010a). Many recent re-localization efforts have also emerged in response to the precarious working and economic conditions created by neoliberalism and globalization. While a few re-localization models pursue complete self-sufficiency, most efforts promote diverse and connected localized economies where residents can equitably benefit from and democratically participate in deciding trading terms. To achieve these goals, communities have organized their own currencies, alternative exchange models, and community banks (North 2010b), as well as local supply chains, as discussed below.

The re-localization of the economy stands in opposition to neoliberalism's intensification of globalized processes of production based on profit maximization and economic efficiency principles. Neoliberalism has involved the relocation of manufacturing jobs to places where the state fails to impose regulations that protect communities from industrial environmental harms and exploitative labor practices. Globally, free trade policy supports this approach, by doing away with tariffs, quotas, and other restrictions. In re-localization efforts, regulation is a powerful way to support multiple economies, as opposed to one global economy (Cato 2006).

CER efforts for re-localizing the economy have highlighted and created a stronger case for local production and consumption. In Oregon, for example, researchers at Portland State University partnered with the local makers movement and the Portland Made collective. The partnership generated information on the economic impacts of artisans and makers through survey and interview methods. Findings also highlighted the diversity and complexity of Portland's artisan and maker community (Heying and Marotta 2016). Seeking to push back against valuing local economies strictly in monetary terms, the New Economics Foundation based in London collaborated with trade associations and university researchers to conduct research on the social and cultural value of traditional retail markets. The research project built on the trade associations' long-standing role of advocating

for traditional retail markets that provide relatively healthy and affordable products to historically marginalized communities (Bua, Taylor, and Gonzalez 2018).

Case Study: Cleveland's Anchor Institution Framework

A CER partnership between the Democracy Collaborative, a nonprofit think tank and research center, and the Cleveland Foundation provides a valuable case study of strategies to re-localize the economy. In 2007, the foundation invited the Democracy Collaborative to discuss community-based approaches to building wealth in Cleveland's Greater University Circle, an area that includes large educational and medical institutions, as well as predominantly Black communities that have experienced persistent poverty and disinvestment (Dubb and Howard 2012). Based on interviews with 200 community members, the research highlighted the city's University Circle area wealth and $3 billion in procurement spending (Wright, Hexter, and Downer 2016). The identification of these resources and influence prompted the Democracy Collaborative, community-based organizations, civic leaders, and residents to brainstorm ways to establish sustainable cooperative business models that created and kept wealth in the local community. This led to the creation of Evergreen Cooperatives, a group of worker-owned green businesses, to "[focus] on economic inclusion and building a local economy from the ground up" (Dubb and Howard 2012, 10).

This "Cleveland model" of linking worker-owned cooperatives to achieve market scale and viability took hold. Evergreen's first three cooperatives were the Evergreen Cooperative Laundry, Ohio Cooperative Solar, and Green City Growers (at the time the nation's largest hydroponic greenhouse). Each has been operating for more than ten years, and together they employ approximately 100 people, 40 percent of whom are from the Greater University Circle neighborhood (Howard and Camou 2018). University Circle area universities and medical institutions have committed to long-term contracts with the cooperatives, strengthening their long-term viability, increasing their access to credit, and enabling economic re-localization. Employing workers and making them company owners allows capital to flow and stay in the local community, and large institutions are able to source locally.

Another key outcome of these efforts is evident in the Democracy Collaborative's role in conceptualizing and disseminating an anchor institution framework. Anchor institutions are large organizations rooted in place, like universities, hospitals, cultural institutions, and municipal governments that have the potential to shape local markets (Dubb and Howard 2012). The Democracy Collaborative has disseminated the framework, including insights on implementation and potential roadblocks, through toolkits, online resources, and capacity-building support services that cover workforce and inclusive hiring; purchasing and inclusive local sourcing; and investment and place-based investment (Koh et al. 2020). They emphasize that community-wealth building is necessarily participatory; it requires

"stakeholder mobilization" and local interpretations of community wealth (Howard and Camou 2018, 280). Long-term collaborative structures with historically marginalized communities can preempt power imbalances that elite institutions—including anchors themselves—can generate. Many anchor institutions have since advocated for and adopted aspects of the framework, contributing to a growing understanding of challenges and possibilities involved in re-localization efforts.

EDUCATION AND TRAINING

Increasing the knowledge, skills, and capacities of workers or organizational members is central to alternative economic models. Building the capabilities of people based on community members' existing knowledge and local priorities challenges corporate models in which technical experts with little connection to a place drive decision making. Ongoing education and training of workers has the goal of ending communities' reliance on harmful work conditions in extractive industries, which contribute to the morbidity and premature death of members from historically marginalized communities (Pollin and Callaci 2019). In industrial capitalism, workers often face unhealthy and unsafe environments, including exposure to toxic chemicals, dangerous equipment, or overwork—all at little pay. Workers often have limited access to work opportunities beyond their current positions, or they may experience employer harassment and intimidation.

CER for EJ has brought attention to the environmental risks workers face, as well as the critical role of education and training in improving work environments and communities. Academically based labor centers in the U.S., for example, have collaborated with unions to conduct research on worker protections, skills, and education. For example, Cornell University's Worker Institute leads research collaborations that emphasize workers' rights and collective representation. The Institute's Labor Leading on Climate Initiative advances the leadership role of labor in responding to the environmental and climate crisis through a wide range of activities, including research, leadership development, and technical assistance. Among their initiatives are climate jobs studies pursued in partnership with labor unions in different states, as well as workshops to train workers to advocate for expanding the clean energy sector while providing unionized, well-paying jobs. In 2021, this work helped a labor coalition to persuade the New York state legislature to pass wind power subsidies and a first-in-the-nation set of labor standards for construction of clean energy projects, including prevailing wage requirements for workers (ILR Worker Institute 2021).

At the University of Texas, Austin, a CER project by Miriam Solis in collaboration with EcoRise, an environmental education organization, aims to spur educational and career pathways in the green building field with and for youth of color (Solis, Davies, and Randall 2022). The project employs critical race theory and the concept of community cultural wealth (Yosso 2005) to engage youth participants'

understanding of and connection to place. By identifying their concerns about, priorities for, and ideas regarding environmental injustices in their neighborhoods, the education programming is being used by participating youth and city officials to assess whether local climate action plans are responding to these insights.

Case Study: Barefoot College

Barefoot College, founded by Bunker Roy in 1971 in Rajasthan, India, is one of the best-known institutions in the Global South that takes a participatory approach to workforce development, emphasizing local knowledge and self-reliance.[1] Barefoot provides an alternative to top-down worker training programs that rely on external experts and resources, which typically impose statist and corporate development paradigms on people in poverty. We highlight this example *not* because its success stems from partnering with research institutions, but because it has become a closely studied model for bottom-up participatory development, which could inform how university-community collaborations might recognize local knowledge and capacities more fully.

Barefoot College's inclusionary model is founded on the idea of bricolage—making the most of what is at hand (Westley 2013). Barefoot's use of bricolage places an emphasis on both appropriate technology and human capital. It values using resources already available to the community, rather than seeking external resources, and respects local knowledge and empowers local people in order to make progress. Barefoot prioritizes recruiting women and low-caste people as employees to elevate their financial status and subsequently their well-being. Common barriers to success, such as the inability to read and write, are not barriers to success at Barefoot, where very poor and illiterate women have become successful water engineers, solar engineers, designers, architects, and so on (Roy 2011).

Barefoot's model has four key components: alternative education, valuing traditional knowledge and skills, learning for self-reliance, and dissemination (Roy and Hartigan 2008). Its approach to education aligns with Mahatma Gandhi's philosophy, championing practical skills and traditional knowledge while emphasizing a humble way of life—everyone works, sits, and eats on the floor. The college teaches students to unlearn the significance of degrees and qualifications by placing no importance on them and instead underlining the importance of traditional knowledge and skills, which teaches the villagers to value the skills they already possess and thus serves to empower them. Through providing learning opportunities that enhance villagers' ability to serve their communities, Barefoot bolsters their confidence and self-reliance. When illiterate or semi-literate villagers are trained to be accountants, educators, and engineers by Barefoot, they learn that certifications and degrees are not a requirement to do these jobs successfully, which improves the self-sufficiency of the community as a whole. Barefoot has disseminated its

---

1. Thanks to Skyler Kriese for research assistance and for writing an initial draft of this case study.

model across India and throughout the world with a few nonnegotiable core principles: the absence of hierarchy, a living wage, and collective decision making (Roy and Hartigan 2008).

Other factors contributing to Barefoot's success include its ability to build social capital, mobilize local resources, and achieve financial sustainability (Kummitha 2017). Providing a platform to the excluded creates social capital through consistent interaction among community members, which has opened up doors to new development. Barefoot's evolution from a voluntary organization to a social enterprise has facilitated its mobilization of local resources to become self-sustaining. It increases its internal resources by securing funds from the communities in which it works, and it acquires resources from external sources and agencies that adhere to Barefoot's principles. Employing this approach helped Barefoot to have a transformative impact in a short amount of time in its home district of Rajasthan and beyond. CER projects that want to take a participatory approach to developing education and job training can learn a great deal from Barefoot about how to institutionalize local participation and respect for local knowledge, and spread a model of education and training to involve large numbers of workers around the world.

JUST TRANSITION

The concept of a just transition has been central to shaping community, worker, environment, and climate-centered economic development models. In current research and practice, just transition strategies typically refer to the pursuit of decarbonization in ways that mitigate and redress the inequities experienced by people whose lives are dependent on a fossil fuel economy and/or who lack reliable access to energy supplies (Newell and Mulvaney 2013; Mascarenhas-Swan 2017). The concept of just transition emerged from the labor movement and broadened as labor-community alliances formed in the EJ movement. For example, the Oil, Chemical and Atomic Workers union leader Tony Mazzocchi called for a "just transition," to provide "a new start in life" for workers threatened by environmental policies (Córdova, Bravo, and Acosta-Córdova 2022; Labor Network for Sustainability and Strategic Practice Grassroots Policy Project 2017). With a focus on protecting needs of workers in the transition away from the fossil fuel economy, the just transition framework addresses the potential harm caused by decarbonization, while remaking the economy in ways that prioritize the well-being of the environment and the people who live there (Cha et al. 2019). These efforts focus especially on places that industries have exploited through extractive practices, including the degradation of the natural environment and poor working conditions (Newell and Mulvaney 2013). Environmental justice requires not just prohibiting these harmful practices, but making these places front and center in both building a post-carbon future and enabling self-determination. Just transition approaches challenge the tenets of neoliberal economic development by bringing attention to how a green

economy can reinforce the fossil fuel–based economy's patterns of social, political, and economic disenfranchisement.

CER efforts for a just transition involve identifying and prioritizing the groups most affected by climate injustice and a changing economy. In the U.S., for example, the Alliance for Appalachia is building on a long local history of using participatory action research methods to document the region's extractive and exploitative coal industry, as well as to envision a post-carbon future. It is "building power through knowledge" (Tarus, Hufford, and Taylor 2017, 156) by asking, "Who owns Appalachia?" through multiple projects, including one that gathers data on self-bonding practices that enable coal corporations to eschew their commitment to reclaim lands they have damaged. Alliance for Appalachia members used the information to advocate for a rule change on the corporate bonding practices. (For urban planning research projects guided by just transition goals, see chapter 11.)

Case Study: Black Mesa Water Coalition

The case of organizing and economic development in Black Mesa, Arizona, presents an example of just transition strategies in the face of powerful institutional entrenchment, informed by research conducted largely by lay experts. The Black Mesa Water Coalition (BMWC) was founded by Indigenous (Navajo and Hopi) and Chicano students at Northern Arizona University to address exploitation and extraction by coal mining and the impact on water supplies in Navajo land (Liu 2010). In the early 2000s, 12 extracting industries were operating in the Navajo territories, including Peabody Energy Corporation, the largest coal mining company in the U.S. (Smith and Black Mesa Water Coalition 2007). The coalition grew from a student-run organization to a broader coalition of organizations rooted in communities affected by mining, collaborating to build power to transform the fossil fuel economy in ways that benefit the Black Mesa and Indigenous communities. Recognizing that many local people relied on hazardous mining jobs in a region where the unemployment rate was 48 percent, the coalition's strategy centered alternative employment opportunities for community residents and workers. Through local and regional campaigns, BMWC developed solar and wind projects and created the Navajo Green Economy Coalition, which organized a green jobs campaign that sought to change the Navajo economy and in the process democratize tribal government (Liu 2010).

Recognizing the impacts of coal mining were not just environmental and economic but spiritual and cultural, the campaign began by "translating green into Navajo" (Curley 2018, 61) in an intentional effort to generate a community-informed conceptualization of green priorities. The BMWC collected and synthesized this information by leading dialogue circles with Navajo Nation chapter presidents, reservation residents, college students, and allies from other organizations to discuss what a green Navajo Nation could look like and how the Navajo Nation could transition its economy. Through these efforts, participants and coalition members

decided that good green jobs for the Navajo Nation would mean adopting traditional ways of subsistence, such as green manufacturing through wool mills (Curley 2018; Liu 2010). The campaign also helped identify and realize several policy and governance changes needed to activate a participatory and green economy, resulting in the passage of green jobs legislation through the Navajo Tribal Council, the first green economy legislation passed by any tribal government (Chorus Foundation 2014). By 2020, the Navajo Nation produced enough solar energy to power its territories and much of the Southwest (LaDuke and Cowen 2020).

The BMWC and its members identified several important lessons from their research. Among them is the importance of "[tailoring] the definition of green to your community" (Liu 2010, 14). What constitutes good green jobs are thus contextual and ought to reflect local history, concerns, and priorities. Nonetheless, Curley (2018) points out that despite the BMWC's efforts, its forward-thinking conceptualization was appropriated by tribal governments and extractive industries to justify a simultaneous reinvestment in coal production as part of the Navajo Nation's energy transition plan. This aftermath provides an important lesson on how transitions are nonlinear and require a complete detachment from oil and coal companies (Curley 2018).

COMMUNITY-BASED OWNERSHIP

CER for economic development has also informed the pursuit of community governance over land and the means of production. Local control and governance are alternatives to corporate ownership models that commodify natural resources for private gain. Communities have pursued alternative organizational models that reflect these principles. For example, in worker-owned cooperatives, members participate in decision making and equitably share its benefits. In community land trusts (CLTs), a nonprofit organization holds land "in trust" to support the community; the land can be used for many purposes, including housing and agriculture, and land is kept affordable in perpetuity by removing it from the speculative market (Axel-Lute 2021). CLTs emerged through civil rights activism in the 1960s to promote asset ownership (Meehan 2014). Another strategy includes community benefits agreements whereby communities negotiate and secure social uses for private development. To varying degrees, these strategies enhance local decision-making power in community economic development matters. Mascarenhas-Swan (2017) points out that "[w]hile solutions will be applied locally, communities' ability to wrest control of the economy from the current governing forces requires these local communities to band together in ways that build movement muscle." Community-based ownership thus requires movement building across places and issues.

Local organizations have used CER to set their own priorities for advancing community-based ownership and to influence public investment. For example,

a nonprofit collaborative of hospitals formed the One Brooklyn Health System to create an integrated healthcare system for the borough's predominantly low-income central and northeast neighborhoods. The system employed participatory action research (PAR) to design its community health needs assessment and community services plan processes every three years. Three rounds of PAR conducted in 2016–2018 included surveys, focus groups, and interviews, some of them led by local youth, in collaboration with community organizations and academic partners (the MIT-affiliated urban planning consultancy NextShift Collaborative, Pratt Institute, and University of California, Berkeley). These studies identified local priorities and developed a holistic analysis of the neighborhoods' assets and needs. The resulting recommendations informed a $1.4 billion state investment in community-based healthcare infrastructure, but also in affordable housing and other local capital improvements the community now recognized as necessary to address social determinants of health (One Brooklyn Health System 2019).

Case Study: Jackson Cooperative's Community Production Initiative

The Cooperation Jackson network in Mississippi is challenging capitalism and white supremacy by advancing a model of eco-socialism. The Black-led network owns 7.4 acres of land where members operate a community land trust on reclaimed and repurposed areas. The CLT is the site of worker-owned cooperatives focused on urban farming, cooperative housing, and sustainable energy (Akuno 2017). The network of cooperatives supports new cooperative conceptualizations, formalization, and growth, and it runs worker education and training programs.

Among the cooperatives is the Center for Community Production (CCP), an initiative to democratize the ownership, control, and use of technology. The worker-controlled small-scale manufacturing center opened in 2019 (Cooperation Jackson 2019). Its worker-owners are identifying production needs via community engagement and local market and industrial production trends. Among the CCP's projects is the Ewing Street Eco-Village Pilot Project to create sustainable urban housing. The CCP collaborated with City College of New York's Advanced Design Studio to generate prefabricated modular home concept designs to inform the final project (Bagchee 2019). The research-practice partnership's final report was also an educational tool on collaborative design. The CCP will grow to have a commercial manufacturing division, a training center, and an innovation hub that prototypes products, such as toys, tools, and medical equipment (Akuno 2017).

The CCP's engagement and analysis of new information from within the cooperative network and outside of it reflects the relevancy and influence of research activities for radical community development. Large corporations generally drive and own technological innovation; even "open source" approaches systemically exclude the priorities and concerns of community members. The CCP provides an alternative to exclusionary expert-driven approaches to sustainable

development by offering a "radical vision of technoscientific practice" (Ludwig 2021, 12). In addition, these efforts aim to head off anticipated job losses due to automation that threaten communities of color. The project adapts technological innovation to establish new social freedoms for Cooperation Jackson members and collaborators.

SCALING UP, OUT, AND DEEP

CER is playing a critical role in advancing the economic alternatives EJ leaders have identified as necessary for healthy, regenerative communities. The strategies discussed here—re-localization, education and training, just transition, and community-based ownership—point to several important lessons. Among them is the potential role of large educational or independent research institutions. In the case of the Cleveland model, the Democracy Collaborative was a critical convener. It brought resources to the local effort, including funding, staff with formal training in research design and methods, and the capacity to disseminate information in wide-ranging formats and to multiple audiences. It also leveraged the power of anchor institutions' purchasing policies to support local producers and EJ. Research institutes also often adhere to ethics protocols for conducting research with historically marginalized communities. In order for these institutes to be effective, however, they must have the institutional flexibility required to follow the lead of community-identified priorities. Researchers are often limited in their ability to grant control and oversight to communities, due to administrative constraints and their own underlying logics of efficiency and productivity. CER on the social economy also needs to pay heed to how change can be achieved, including an understanding of existing governance systems and strategies based on the issues that most matter to communities (Downing 2009).

However, large institutional research partners are not always necessary. Communities can design, implement, and synthesize research on their own accord. For example, the BMWC met with community members to translate *green* into Navajo, and Cooperation Jackson members worked with residents to conceptualize the CCP's focus. These efforts certainly reflect participatory approaches to problem identification and deliberation (Forester 1999), but are they "research" in a traditional sense? On the one hand, we must question the imposition of a "research" classification; in these examples, members may not have used this designation. Communities might reject such a descriptor for their information-gathering efforts, due to research's exploitative and extractive role in communities (Tuck and McKenzie 2014). On the other hand, the research questions and methods communities are using increasingly resemble those used by professional researchers, often in combination with normative theoretical frameworks that challenge structures of power. In addition, community-based organizations often build their own capacities by hiring personnel dedicated to research and writing. We seek

to elevate these critical community-led efforts as contributions to larger bodies of knowledge and as examples of the potential that comes from justice-oriented approaches to research.

CER that advances economic alternatives also disrupts conventional notions of how we define and measure economic well-being. Credentialed experts from the fields of economics, urban planning, and public policy often conduct evaluation and cost-benefit analyses to assess economic performance (Hufschmidt et al. 1983). These approaches can be useful when they reveal disparities among groups; communities often use this information to create a basis for stronger regulatory action. However, the efforts for economic alternatives and liberation discussed in this chapter are presenting new forms of understanding what an economy is. As LaDuke and Cowen (2020) point out, if the economy is "how we live," we cannot separate economic from social and environmental well-being. Similarly, Movement Generation Justice and Ecology Project (n.d.) uses economy's root words to extrapolate that its meaning is "management of home," requiring that we tend to the web of relationships, or ecosystem, within which our home is nested.

At the same time, this definition of economic well-being points to a central challenge for future CER for EJ: bringing isolated examples to scale. Recent research and practice emphasize the need for community economic alternatives to expand their impact across three different scales (Moore, Riddell, and Vocisano 2015). Often, local initiatives seek to *scale out* by extending the size of their organizations and the reach of their solutions to more places and people, as Barefoot College has done. However, many local practices cannot be replicated or diffused mechanically across diverse communities, and many efforts to scale out produce incremental change that is too slow and piecemeal to reach large populations. Thus, we also need strategies for *scaling up* by influencing laws, policies, and institutional practices that can help spread innovations faster and farther, for example by partnering with social movements to influence governments and intergovernmental agencies. Additionally, community economic innovators can aim for *scaling deep* by shifting underlying cultural norms, beliefs, and narratives, forming new relationships within civil society that can create more profound transformations for equity and sustainability over time. Even less is known about how to scale up and deep than about how to scale out (Moore, Riddell, and Vocisano 2015). It would be especially useful for teams of engaged researchers and community-based partners to illuminate these three processes of scaling through cooperative research with the many players involved—innovators, movements, legislators, and so on—across multiple sites. Otherwise, promising local economic alternatives may remain vulnerable to resistance from outside, above, and within.