



**HAL**  
open science

## Environmental Justice and Transformations to Sustainability

Adrian Martin, M Teresa Armijos, Brendan Coolsaet, Neil Dawson, Gareth a S Edwards, Roger Few, Nicole Gross-Camp, Iokiñe Rodriguez, Heike Schroeder, Mark G L Tebboth, et al.

► **To cite this version:**

Adrian Martin, M Teresa Armijos, Brendan Coolsaet, Neil Dawson, Gareth a S Edwards, et al.. Environmental Justice and Transformations to Sustainability. Environment: Science and Policy for Sustainable Development, 2020, 10.1080/00139157.2020.1820294 . hal-03018544

**HAL Id: hal-03018544**

**<https://hal.science/hal-03018544v1>**

Submitted on 22 Nov 2020

**HAL** is a multi-disciplinary open access archive for the deposit and dissemination of scientific research documents, whether they are published or not. The documents may come from teaching and research institutions in France or abroad, or from public or private research centers.

L'archive ouverte pluridisciplinaire **HAL**, est destinée au dépôt et à la diffusion de documents scientifiques de niveau recherche, publiés ou non, émanant des établissements d'enseignement et de recherche français ou étrangers, des laboratoires publics ou privés.



# Environment: Science and Policy for Sustainable Development

ISSN: (Print) (Online) Journal homepage: <https://www.tandfonline.com/loi/venv20>

## Environmental Justice and Transformations to Sustainability

Adrian Martin , M. Teresa Armijos , Brendan Coolsaet , Neil Dawson , Gareth A. S. Edwards , Roger Few , Nicole Gross-Camp , Iokiñe Rodriguez , Heike Schroeder , Mark G. L. Tebboth & Carole S. White

To cite this article: Adrian Martin , M. Teresa Armijos , Brendan Coolsaet , Neil Dawson , Gareth A. S. Edwards , Roger Few , Nicole Gross-Camp , Iokiñe Rodriguez , Heike Schroeder , Mark G. L. Tebboth & Carole S. White (2020) Environmental Justice and Transformations to Sustainability, Environment: Science and Policy for Sustainable Development, 62:6, 19-30, DOI: [10.1080/00139157.2020.1820294](https://doi.org/10.1080/00139157.2020.1820294)

To link to this article: <https://doi.org/10.1080/00139157.2020.1820294>



© 2020 The Authors. Published with license by Taylor & Francis Group, LLC.



Published online: 16 Nov 2020.



Submit your article to this journal [↗](#)



View related articles [↗](#)



View Crossmark data [↗](#)



# Environmental Justice and Transformations to Sustainability

by Adrian Martin, M. Teresa Armijos, Brendan Coolsaet,  
Neil Dawson, Gareth A. S. Edwards, Roger Few, Nicole Gross-Camp,  
Iokiñe Rodríguez, Heike Schroeder, Mark G. L. Tebboth, and Carole S. White

*An informal settlement on hazardous terrain in Colombia.*

**G**lobal carbon emissions continue to rise,<sup>1</sup> rates of global biodiversity loss continue to increase,<sup>2</sup> and social and economic inequalities continue to widen.<sup>3</sup> Significant global social movements such as Fridays for Future are declaring this situation an “emergency,” regarding it as a crime against humanity in which political and business leaders stand accused of ignoring the plight of current and future vulnerable people.

This association between environmental crises and social injustice is now widely accepted. Many feel that time is running out for incremental approaches to prove effective and that there is an inescapable need for a radical, transformative change that combines sustainability and justice.

The COVID-19 pandemic provides a potentially crucial setting for how such a change might play out. The urgency

to rebuild shattered economies is pressuring leaders to fire up their economies again. On March 26, 2020, for example, the U.S. Environmental Protection Agency (EPA) announced temporary deregulation of enforcement of air pollution standards,<sup>4</sup> an action intended to ease financial costs for businesses but at the price of increasing health risks for vulnerable populations. On the other hand, this time of systemic breakdown provides an opportunity to rebuild societies in new ways, mobilizing new understandings of vulnerability and resilience, and exploring ways to build and connect the potentially transformative networks of compassion and resistance emerging in neighborhoods and communities around the world. We must ensure that vigorous efforts to resolve environmental crises are connected to our resolve to tackle social crises such as racism.

Our primary purpose here is to underline the importance of placing

justice at the heart of transformative change. We seek “just transformations” to sustainability. This will require giving special attention to the treatment of those most vulnerable to the impacts of the climate and ecological crises and to those who are vulnerable to the actions to address these crises. The consequences of failing to pursue just transformations are increasingly clear. There is a moral consequence, because it would be unfair to allow disproportionate burdens to continue to fall on already marginalized groups (current or future), or to suppress their voices and values. This principle is enshrined in the central, stated commitment of the Sustainable Development Goals (SDGs): “leaving no one behind.”<sup>5</sup>

There are also practical consequences. First, efforts to bring about sustainability will only succeed—and will only themselves be sustained—if they are widely seen to be both fair and legitimate. We



*A Tanzanian villager shares local forest knowledge passed down from her mother and grandmother.*



Adrian Wacziarg

*Dwellings and forest coalesce in a sacred location in northern Laos.*

often see justice barriers to environmental policy where perceived unfairness leads to insufficient acceptance. For example, green taxes on fuel were met with intense resistance in France, partly because of very specific fairness concerns related to the disproportionate costs falling on rural, working-class people, and partly because of larger frustrations with a political system that was seen to disempower these groups. If we are to build a shared vision and constituency for transformative change, it must have justice at its heart. Second, if we fail to provide justice for marginalized groups, we will lose capacity to resolve the environmental crisis. For example, indigenous peoples make a huge contribution to protecting global biodiversity, yet this vital role is threatened by failure to recognize and appreciate their territories.<sup>6</sup>

We begin by briefly addressing the meaning of transformations to sustainability. Coming at this from a justice angle, we emphasize the challenge of addressing not only the unequal outcomes of environmental change, but also the underlying distributions of power that produce these inequalities. Hence, we combine transformations with environmental justice. We then review four

important insights from environmental justice scholarship to help us better understand how to make progress on just transformations to sustainability.

### **Transformations to Sustainability: Why and How?**

One of the persistent debates within modern environmentalism is between the reformist and transformative approaches. The reformist approach aims to maintain existing political and economic arrangements of societies while adapting them to ecological constraints. By contrast, the transformative approach is premised on the need to change societal arrangements profoundly, transforming relationships between humans as a necessary condition for required changes in relationships between humans and nature.<sup>7</sup> For many political ecologists, the primary societal arrangement that needs transforming is global capitalism, because it structures relationships between humans in a way that perpetuates uneven accumulation of wealth and deepening inequalities and because it requires a relationship between humans

and nature based on continuous growth in material consumption.<sup>8,9</sup>

This distinction can be illustrated through two ways of responding to concerns about global food security. A reformist approach might conclude that the basic arrangements underlying the current food system are satisfactory. What is needed is to adapt this system to increasing demand for food crops and to ecological constraints through technical interventions that promote sustainable intensification of food production alongside reductions in food waste. A transformative approach is likely to examine underlying drivers of the problem. It might point to the way in which the global economy (as currently arranged) is predicted to double the demand for food crops between 2005 and 2050,<sup>10</sup> including use for biofuels. And it might also argue that if you really want to tackle food insecurity you need to also address the reasons why 500 million Sub-Saharan Africans continue to live in extreme poverty.<sup>11</sup>

Even before the COVID-19 pandemic, the need for transformative rather than reformist change increasingly was accepted in global environmental policy bodies such as the Intergovernmental Science Policy Platform on Biodiversity and Ecosystem Services (IPBES), the Intergovernmental Panel on Climate Change (IPCC), the United Nations Environment Programme (UNEP), and the UN SDGs. For example, the IPBES *Global Assessment Report on Biodiversity and Ecosystem Services* calls for transformative change that enables “visions of a good quality of life that do not entail ever-increasing material consumption,” that lowers “total consumption and waste,” and that addresses “inequalities, especially regarding income and gender.”<sup>12</sup> Such changes to the everyday goals of society, to the indicators of societal progress, and to what we all owe to each other, are the kinds of things we consider as transformative changes to society.

While agreement is growing that change will need to be transformative, there is less agreement about how this can be directed. Researchers are studying how transformative change has happened



*Pemón indigenous peoples protesting the building of a high voltage power line through their ancestral lands (Canaima National Park, Venezuela) in June 1997.*

historically, in order to find clues about how it can be governed in the future.<sup>12</sup> One important school of thought holds that we should focus our attention on trying to understand the conditions under which small-scale and local innovations become the seeds that grow into more profound societal change.<sup>13</sup> This is commonly known as the multilevel perspective: Local-level innovations such as alternative food networks gain momentum to a point where they start to disrupt and transform middle-level sectoral regimes such as the agribusiness-led food system. At the same time, momentum is facilitated by change to slower moving societal-level (or landscape-level) variables including cultural and political values: “In a nutshell the core logic is that niche-innovations build up internal momentum ...; changes at the landscape level create pressure on the regime; and destabilisation of the regime creates windows of opportunity for the diffusion of niche-innovations.”<sup>14</sup> For example, the emergence of wind turbines as a

competitive energy technology required nurturing and protection by states, assisted by a political landscape that included growing public demand to act on the climate crisis, even when opposed by the fossil fuel lobby.

One of the crucial lessons here is that transformative change requires intervention to weaken the prevailing regime and its powers to resist change. For example, Newell et al.<sup>15</sup> show that attempts to promote climate smart agriculture as a radical and innovative contribution to sustainability have faltered because the prevailing agribusiness regime retained sufficient power to keep it out of the public debate. Large agribusiness players used their dominance to weaken the more radical activities of climate smart agriculture and then incorporate what remained into their regime. This capacity of powerful regimes to resist, weaken, or coopt radical innovation is why Geels<sup>14</sup> portrays the struggle for sustainability as a David and Goliath encounter. Nurturing the

little Davids is very much a transformative action, but it won't produce transformation unless there are parallel efforts to curb Goliath's power.

This multilevel perspective has been developed through studies of transitions in particular sectors (energy, food, mobility, etc.) and is therefore said to have a midscale focus.<sup>16</sup> By contrast, researchers in political ecology and development studies, including work on climate change vulnerability and adaptation, tend to place greater emphasis on society-level change, including redistributing power in favor of currently marginalized social groups.<sup>17-19</sup> It is this insight—that transformative environmental change needs to be premised on redistribution of power—that brings matters of justice clearly into the picture. Redistribution of power requires the removal of forms of discrimination based on social divisions such as gender and race, as well as divisions across geographical space and across generations. This is of course something desirable in its own right. But it is also



An Extinction Rebellion environmental protest in London in 2019.

instrumental to transformations to sustainability, facilitating better decision making, greater legitimacy for environmental policy, and movements with broader bases. For example, promoting equality of status across different social groups opens up wider alternatives, such as fresh ideas about the meaning of human development or well-being. The current environmental crisis will not be resolved by suppressing radical alternatives to the status quo.<sup>20–22</sup>

### ‘Just’ Transformations to Sustainability: Why and How?

Environmental justice analysis emphasizes the unequal distribution of environmental costs, benefits, and associated well-being outcomes and seeks to understand both the proximate and underlying drivers of this inequality. Why, for example, are some social groups regularly more vulnerable to environmental disasters such as flooding or to zoonotic coronaviruses such as COVID-19? The critical insight from environmental justice is that the patterns of environmental inequality observed are associated with

existing social inequalities and distribution conflicts. In fact, the patterns of winners and losers often reveal underlying lines of discrimination across social categories such as race, wealth, gender, and coloniality, as well as location in place and time.

Environmental justice scholars have tended to break down the idea of justice into different dimensions of concern.<sup>23</sup> *Distributive justice* refers to the allocation of environmental costs and benefits. *Procedural justice* refers to the decision-making process—in particular, who gets to participate. *Justice as recognition* refers to the political and cultural status afforded to identity groups defined by social characteristics such as gender, ethnicity, or worldview, intersecting with spatial and historical contexts. These concerns are typically linked, for example, where failures to respect territorial rights of access to and control over natural resources (ostensibly concerns about distribution and procedure) have roots in more systemic failures of recognition. Kyle Whyte describes how protestors against the Dakota Access Pipeline often highlighted injustices arising from the pollution risks falling to local people (a

distribution concern) and the impossibility of participating in consultation processes on equal terms (procedural).<sup>24</sup> But for the Standing Rock Sioux tribe, there was a larger story of 150 years of U.S. settler colonialism that has defined the status of indigenous peoples in a manner that consciously or tacitly condones the domination of their knowledge, culture, and governance systems. This is the underlying cause of environmental injustice for the Dakota Access Pipeline (and for many cases involving indigenous peoples): a form of misrecognition, with historical roots in coloniality and racism, which undermines attempts to promote more sustainable relations with nature.

Environmental justice scholarship explores the distribution of winners and losers and the reasons for this spread. We suggest this kind of analysis must be central to any transformation to sustainability because interventions to bring about transformative change cannot be assumed to have homogeneous effects across diverse groups of people. First, different groups and individuals within society will vary in their values and objectives for development and therefore will experience change differently. Second, efforts to accelerate transformative change will inevitably involve trade-offs between conflicting outcomes, and in the context of unequal power, there is a danger that conflicts of interest are settled in ways that disproportionately impact already marginalized or vulnerable groups.<sup>25</sup> For example, there is evidence that protected area conservation has frequently reproduced and enhanced the vulnerabilities of the most marginalized.<sup>26–28</sup> Many are concerned that imposed energy transitions place the burdens of change on those working classes whose employment is threatened<sup>29</sup> and on rural populations whose land is repurposed for bioenergy crops. This can increase incentives for land grabs and potentially worsen local food security.<sup>30</sup> This is not to suggest that we want to delay the energy transition, or even that biofuels have no role to play in this transition. Rather, transitions that fail to embrace justice as a fundamental goal



*Kibera slum, Kenya: 500,000 people still live in extreme poverty in Africa.*

will not enable long-term, sustainable transformation.

We illustrate the connection between a transformative approach and justice through the example of adaptation to climate change risks. Few et al. identify three types of intended outcomes in the climate change literature.<sup>31</sup> First, there are interventions that they describe as “instrumental” that aim for generalized mitigation of risk, mainly through technical measures such as flood defences. Second, there are interventions described as “progressive” that specifically seek to mitigate risks for the most vulnerable people by employing non-technical actions such as those to ensure people have access to adaptation opportunities. Third, they identify “radical” interventions that target the underlying causes of vulnerability, seeking to change the underlying social structures and power configurations that produce vulnerability.<sup>32–35</sup>

All three forms of intervention can be considered as some kind of transformation. However, that does not mean that each can be considered a socially *just* transformation. For example, resettlement of populations from low-lying urban areas at risk from sea-level rise and coastal storm surges might be classed as an adaptation measure that fundamentally alters how we manage that risk. An instrumental approach could entail blanket restrictions on all habitation within an at-risk zone. A progressive approach to resettlement could actively seek to help poorer groups move out through incentives and help to access services in alternative sites. A radical approach could institutionalize legal measures that free up privately held vacant land in high-value city center sites. Justice, therefore, comes into consideration more clearly in a progressive approach, and it lies at the core of the ideals of a radical approach to transformation. A justice

lens orients us toward a particular conception of transformation.

### **Just Transformation: Four Insights From Environmental Justice Research**

We have to appreciate that in practice many actions purporting to be in the name of sustainability are perceived to be unjust. Existing literatures on transformative change, especially from political ecology and development studies (such as the ‘safe and just’ spaces) already recognize this concern,<sup>36,37</sup> which we develop more fully below.

#### ***Multidimensional Environmental Justice***

While global environmental governance commitments such as the 2015 SDGs incorporate some reference to



equality, it is narrowly conceived, without any explicit attention to justice and not well incorporated into goals and targets.<sup>38</sup> We suggest that it would be beneficial to incorporate a broader and more explicit conception of environmental justice that covers the different dimensions of concern mentioned above (distribution, procedure, and recognition).

One example relates to climate change via the UN Framework Convention on Climate Change (UNFCCC) Reducing Emissions from Deforestation and forest Degradation (REDD+) mechanism. This reflects some important negotiated global norms for climate change mitigation. One of these is “Common but Differentiated Responsibilities”—the idea that the greatest polluters bear the greatest responsibility. The other is a set of social safeguards to ensure the full and effective participation of local communities, by means of their free, prior, and informed consent, equitable benefit sharing, and respect for customary tenure

systems.<sup>39</sup> However, environmental justice analysis has revealed that REDD+ has supported existing power asymmetries,<sup>40</sup> narrowed power over program design and implementation to central state agencies and international actors, and limited recognition or empowerment of local actors.<sup>41</sup> This failure to address underlying power relations (a matter of both procedure and recognition) has resulted in limited support among indigenous peoples and grassroots social movements<sup>42</sup> and has been linked to failures to demonstrate environmental gains. For example, Sikor and Cam<sup>43</sup> show how a pilot REDD+ project in Vietnam was undermined by concerns about distribution, procedure, and recognition. The original project designated 400 hectares of dense forest for protection, but due to emerging justice concerns was relocated to “protect” an area of barren rocks, with hardly any trees.

A second example related to biodiversity conservation is the expansion of

protected areas. Again, this is a sector that has incorporated commitment to social equity in recent decades, from the weaker “do no harm” to more progressive calls to be “pro-poor.”<sup>44,45</sup> However, political ecology and justice scholars find that practices that exclude local populations persist.<sup>46,47</sup> Rather than recognizing territorial claims and local institutions governing natural resources (i.e., attending to justice dimensions of recognition and procedure), trends toward more equitable conservation have mainly focused on distributional issues such as sharing of tourism revenues, compensation for wildlife damage, and alternative livelihoods. This narrow approach has led to claims that concepts like equity are being coopted to legitimize old regimes based on exclusionary models of conservation.<sup>48</sup> However, a growing body of evidence indicates that alternatives that embrace social justice more fully, such as provision of territorial rights of Indigenous peoples and local communities, and enabling



*In March 2020, the U.S. Environmental Protection Agency announced temporary weakening of enforcement of pollution regulations. Air pollution disproportionately affects poorer communities, marking a central issue in environmental justice.*



*Some social groups are both more exposed to environmental hazards and more vulnerable to their impacts.*

local stewardship, are the most effective, ethical, and cost-efficient way to conserve or restore habitats.<sup>49,50</sup>

The failure to reorient environmental governance toward a wider understanding of justice principles has served as a barrier to progress toward sustainability. However, the positive side is that we also see evidence that attention to procedure and recognition is, in some areas, beginning to foster more transformative change. There are seeds of such change to be seen in the emerging post-2020 Biodiversity Framework, including the Convention on Biological Diversity (CBD) and International Union for the Conservation of Nature (IUCN) recognition of alternatives to traditional protectionist conservation models, for example, under the collective banner of other effective area-based conservation measures (OECMs). Similarly, the 2015 Paris Agreement includes a shift toward recognizing and advocating community-level

governance approaches.<sup>51</sup> More widely, we are witnessing the emergence of an ever-growing nongovernmental sector becoming active in sustainability and climate change community governance,<sup>52</sup> supporting transformations in cities while building innovative partnerships that foster entrepreneurship for change.<sup>53</sup> In the private sector, financial organizations have begun to take account of ESG (ethical, sustainable, and governance) benchmarks, divest from fossil fuels, and even refuse insurance coverage to fossil fuel businesses.<sup>54</sup> While more urgent change is clearly needed, the influence of climate justice activists in winning the argument for divestment is contributing to the transition to green energy.<sup>55</sup> These might be small steps, but they suggest that the mobilization of more holistic justice goals can help to enable transformations that transcend lock-ins to unsustainable pathways.<sup>56</sup>

### ***Environmental Justice as Conflict Transformation***

There is strong evidence for a troubling association between environmental injustice, conflict, and transformation. This is most noticeably visible in the 3000+ cases of environmental conflict reported in the Environmental Justice Atlas.<sup>57</sup> These cases provide compelling evidence that mobilization for environmental protection is most often initiated by local communities and indigenous peoples and frequently takes the form of resistance to forms of resource extraction that are regarded as both unjust and unsustainable. These conflict-based struggles for environmental justice form a major part of the environmentalism of the poor.<sup>58</sup>

In recent years, environmental justice scholars have incorporated insights from the field of peace and conflict studies to better understand the links between

conflict transformation and transformations to sustainability and, in particular, the role that justice plays here.<sup>59</sup> This work shows how the pursuit of justice is fundamental to the pursuit of peace as part of a transformative process. The basic premise is that conflict is rooted in situations that are perceived as unjust, and that by uncovering these injustices, conflicts become catalysts for social change.<sup>60,61</sup> Conflict transformation also engages with the underlying roots of disputes, seeking justice through the rectification of wrongs and the creation of respectful, equitable, and intercultural relationships.<sup>62</sup>

Conflict transformation scholars conceive power not only as a negative (oppressive) force but also as a positive (empowering) force that can enable local people to transform environmental conflicts and achieve justice.<sup>59</sup> Exploring these dual forces of power can help us to understand why justice is achieved or denied within particular environmental conflicts. Most importantly, it provides evidence of the kinds of interventions that are tried and tested in many real-world struggles for just sustainability and that have contributed demonstrably to empowerment toward transformative change. This is starting to be achieved through close examination of the strategies used by powerful actors in environmental conflicts to retain power and also by environmental justice movements to resist, weaken, or bypass such incumbent powers. There is much still to learn, for example, about what kind of interventions are linked to what outcomes and in what contexts. What we have already learned from the cases in the Environmental Justice Atlas is that communities often seek justice through official complaint channels but complement this with street mobilization, building alliances with nongovernmental organizations or trade unions, media campaigning, and legal advocacy. Furthermore, contesting knowledge is often a central strategy, with efforts to revitalize local culture and knowledge, to produce alternative knowledge products, to advocate for alternative models of development, and to launch technical challenges against developers' environmental impact

statements.<sup>21,58</sup> The promotion of “alternatives” to dominant development models is viewed increasingly as an important strategy for promoting just transformations. Naomi Klein encapsulates this view in the book title *No Is Not Enough*—meaning that it is not sufficient to criticize current models; we also need to articulate better ways. For example, the appeal to alternative ways of knowing and valuing nature—the assertion of sacredness—was central to the successful struggle by India's Kondh people to gain the Supreme Court's backing to stop bauxite mining in the Niyamgiri hills in Odisha.<sup>63</sup>

### ***Plural and Decolonized Environmental Justice***

Environmental justice advocates a pluralist approach to both defining justice and recognizing worldviews.<sup>64</sup> Its scholarly traditions have historically lacked diversity, drawing mainly on Western traditions of liberalism and critical theory.<sup>65,66</sup> However, engagement with feminist and postcolonial scholarship has been growing. This includes Latin American decolonial theory that pays special attention to how legacies of colonial dominance continue to contaminate development and conservation practice throughout the world.<sup>59,67–69</sup> This persistent coloniality remains virulent in the realm of ideas. In particular, a multitude of indigenous and local ways of knowing and relating to nature (the “pluriverse,” as Kothari et al. put it<sup>70</sup>) continue to be forcibly suppressed and replaced by reductionist and anthropocentric ways of valuing nature.

While global institutions such as the UNFCCC and the CBD now formally acknowledge indigenous and local alternatives to mainstream, modernist knowledge, in practice these knowledge forms remain suppressed.<sup>71</sup> This is a form of domination that serves to exclude many groups of people from participation unless they assimilate dominant worldviews. This is clearly an injustice based on a failure of recognition. It also has severe consequences for the availability of pathways to sustainability, because it elevates ways of knowing the world that

prioritize material growth while destroying the diversity of ancient and modern wisdom that offers alternatives. These failures to recognize knowledge diversity become institutionalized in education systems, government, and even environmental organizations, ignoring deep cultural values and constraining policy learning.<sup>72</sup>

In this light, some environmental justice researchers are now aligning with social movements such as Black Lives Matter in demanding the decolonization of knowledge. This is a call to transform environmentalism itself, in ways that recognize and promote alternative conceptions of justice, progress, nature, and culture.<sup>67,70,73</sup> A more plural, inclusive, decolonized environmentalism will need to be part of the justice agenda for transformations to sustainability. For example, visioning and scenario building are popular academic tools for exploring the kind of futures we want and possible pathways toward these. We must always be asking whose visions are represented<sup>22</sup> and following inclusive processes that ensure that we are not restricting which ways of valuing and knowing nature are taken seriously.

There is still a long way to go, but it is encouraging to see progress toward a more diverse environmentalism. IPBES revised its conceptual framework to give recognition to alternative ways of knowing and valuing nature and referred to Mother Earth and “systems of life.” Where its predecessor the Millennium Assessment envisioned the purpose of sustainability as “human wellbeing,” IPBES added “living well in balance and harmony with Mother Earth.”<sup>74</sup> This approach was pushed by countries such as Bolivia and Ecuador, where constitutions have been rewritten to recognize these worldviews. Widening the knowledge base is already playing a role in challenging dominant environmental worldviews and critiquing the science of conservation without playing into the hands of antiscience agendas.<sup>75</sup> This in turn will provide a more nuanced understanding of justice than currently deployed in interpretations of sustainable development or safe and just futures.

## The Capabilities Approach to Environmental Justice

The capabilities approach to justice has become a prominent alternative to traditional economic-based measures of development.<sup>76–79</sup> At its heart, capabilities is a liberal, freedom-oriented theory of comparative justice, which asserts that justice does not lie in an equality of material goods, but rather in the ability of individuals to live lives they consider meaningful. The focus has therefore been on whether people have the capability to achieve particular functionings that they have reason to value. For example, having a bicycle does not in itself bring mobility or other desired functionings; that is dependent on a bundle of physical and social capabilities, including gendered norms, for example. In this sense, material goods are only ever means rather than ends. Because of this, capabilities-based approaches to environmental justice must necessarily engage much more strongly with well-being than has been common in the literature so far.<sup>78,80,81</sup>

From the current perspective, the capabilities approach is important because it has been very influential as a way of defining well-being, and this offers a possible way in for introducing and framing environmental justice in a way that is broad-based and incorporates multiple dimensions such as distribution, procedure, and recognition. The capabilities approach has been influential in global policymaking, informing the various iterations of the World Development Report since the approach was proposed. More recently, it has also been taken up in the Global Sustainable Development Report,<sup>3</sup> which includes human well-being and capabilities as an entry point for transformation and proposes that transformative change to protect the planet will “require expanding human capabilities far beyond the thresholds of extreme poverty ... so that people are empowered and equipped to bring about change” (p. xxiii). This is an example of how thresholds of justice are implicitly being defined in terms of capabilities, in this case the minimum capabilities to live a valued life.

However, while the adoption of a capabilities approach appears to offer a way in for an explicit and multidimensional consideration of justice concerns, recent work to elaborate capabilities within an environmental justice framework has raised questions about how transformative capabilities-based approaches to justice actually are. As it stands, the capabilities approach generally focusses on minimum social requirements for justice and for empowerment for transformative change. But this focus on minimum thresholds lacks attention to either ecological limits or to associated upper limits on possessions, consumption, or the like.<sup>82</sup> For a capabilities framework to help define the outcome parameters of a safe and just space for humanity, it might need to be put to this additional task of establishing capability ceilings and thereby attending to underlying sustainability challenges of consumption and inequality.

## Conclusion

In *The State of Exception*, Giorgio Agamben warns how states exploit crises and emergencies to legitimize undemocratically conceived policies.<sup>83</sup> We currently face a combination of environmental crises for which failure to act decisively is a massive injustice for many current and future humans and non-human life. But at the same time, there is the danger that powerful actors will seek to justify unjust policies on the back of exceptional circumstances. Our contention here is that if it isn't a just transformation, then it isn't a transformation to sustainability.

What will a just transformation look like? The starting point has been to identify a radical but increasingly widely held premise that transformative change needs to address underlying causes of unsustainability, including roots in political economies that are dependent on consumption growth and inequality. Tackling these underlying causes will require redistribution of power. This can seem a forlorn hope, but there are achievable steps that we see taken, including protection of alternative (potentially more

sustainable) technologies, knowledge, values, and so on, against resistance from incumbent interests, and interventions in law and social movements to empower previously marginalized groups to resist discrimination and act for justice and sustainability. For the SDGs, enabling sustainability requires overcoming forms of discrimination that include “race, colour, sex, language, religion, political or other opinion, national or social origin, property, birth, disability or other status.”<sup>33</sup> p.viii

Just transformation is a challenging agenda, requiring forms of action that remove symptoms of inequality (such as uneven distribution of risks), as well as actions to change society itself.<sup>31</sup> Justice must be conceived as multidimensional in terms of the types of moral concern that are routinely incorporated into policy and practice. This requires attending to justice outcomes, such as the maldistribution of risks, but also attending to underlying causes, such as institutionalized cultures of discrimination based on failures of recognition. More singular conceptions of justice, such as the emphasis on distributive equity that dominates current environmental interventions (payments for ecosystem services schemes, fair trade, compensation schemes, revenue-sharing schemes, etc.) will not in themselves ensure that such transformation is just.

How can just transformation be supported? The study of environmental conflicts reveals that transformative change is pursued through strategies to reduce repressive forms of power while enhancing community agency. This is pursued through a range of strategies, depending on the target for change, including political protest, engagement with formal government procedures, and the nurturing of local and alternative values and knowledge. As academics and practitioners, we can acknowledge and support the role of civil society at the vanguard of establishing moral direction for just transformations. We can do this through analysis and advocacy in support of environmental protection efforts that are socially progressive in their distributional outcomes. We can also do this through actions to ensure that a greater plurality of environmental


knowledge and worldviews is recognized and respected. This is increasingly viewed as a “decolonizing” agenda, something that is fundamentally transformative because to rebalance the status of different worldviews is also to redistribute power in ways that serves both justice and sustainability. For one thing, greater recognition of diverse values will facilitate richer dialogue about human well-being and the capabilities that are considered necessary for a “safe and just” future.


Attention to justice requires reflection on whether the knowledge produced under the banner of environmental justice is in danger of replicating power inequalities. Thus, we need to design a radical research and engagement process that truly incorporates many different voices and cultures. This calls for a stronger shift toward forms of research that engage with activists, communities, and other actors in ways that help to transform power relations, strengthen their capabilities, and overcome the increasing vulnerabilities to which they are subjected in the face of the current global climate and ecological crisis.

## ORCID

Adrian Martin  <http://orcid.org/0000-0003-2916-7712>

M. Teresa Armijos  <https://orcid.org/0000-0003-1020-6056>

Brendan Coolsaet  <http://orcid.org/0000-0001-8800-3609>


Gareth A. S. Edwards  <https://orcid.org/0000-0002-0552-1206>

Roger Few  <https://orcid.org/0000-0001-6653-1400>

Nicole Gross-Camp  <https://orcid.org/0000-0003-4606-5873>

Iokiñe Rodríguez  <https://orcid.org/0000-0002-7003-5394>

Heike Schroeder  <https://orcid.org/0000-0003-2342-2030>

Mark G. L. Tebboth  <https://orcid.org/0000-0003-1193-8080>

Carole S. White  <https://orcid.org/0000-0001-7741-0444>

**Adrian Martin** is a professor of environment and development at the University of East Anglia (UEA) who specializes in interdisciplinary research into environmental

justice and human wellbeing. He mainly applies his work to governance of protected areas, integrated conservation and development, participatory forestry, and rural livelihoods. **M. Teresa Armijos** is a lecturer at the School of International Development at UEA. Her research focuses on disaster risk reduction and environmental justice using arts-based participatory methods to generate dialogue and change with and for communities at risk. **Brendan Coolsaet** is associate professor at the European School of Political and Social Sciences at Lille Catholic University and a member of the Global Environmental Justice research group at the University of East Anglia. He works on environmental justice, biodiversity governance and food politics. **Neil Dawson** is a research fellow with the Global Environmental Justice Group at the University of East Anglia, chair of the Human Wellbeing and Sustainable Livelihoods Theme for the IUCN Commission on Environmental, Economic & Social Policy, and a postdoc at the European School of Political and Social Sciences in Lille. **Gareth A. S. Edwards** is a senior lecturer at the School of International Development, UEA. His research is positioned at the interface between political ecology and environmental justice, and has addressed issues including the urban governance of climate change, the neoliberalization of water governance, the politics of climate justice, and the political ecology of coal in the context of climate change. **Roger Few** is a professor in the School of International Development at University of East Anglia. His research centers on vulnerability and adaptation to environmental hazards, and the justice dimensions that influence, promote, and constrain people's susceptibility to risk and their recovery from disaster events. **Nicole Gross-Camp** is an environmental scientist whose work focuses on the intersections of biodiversity conservation, governance, and human well-being in East Africa with an emphasis on local voices. **Iokiñe Rodríguez** is a Venezuelan sociologist and has specialized in environmental conflict transformation in Latin America using participatory action research. She has worked in Venezuela, Guyana, Ecuador, Chile, Bolivia, and Colombia, building local and institutional capacity to transform environmental conflicts. She is currently a senior lecturer in Environment and Development at the University of East Anglia, where she forms part of the Global Environmental Justice Group. **Heike Schroeder** is professor of environmental governance at the School of International Development, University of East Anglia. Her work focuses on forest governance and REDD+, the international climate negotiations, nonstate actors, indigenous peoples/knowledge and sustainable development, transformative learning, trust, and sustainable food governance. **Mark G. L. Tebboth** is a lecturer in environment in the School of International Development, UEA. His research focuses on how populations respond and adapt to risks arising primarily from global environmental change, and he specializes in issues linked to human migration. **Carole S. White** is a research fellow in the Global Environmental Justice Group at the School for International Development, University of East Anglia. Her research focuses on well-being and transformations in coastal fishing communities, across the Caribbean, Pacific, India, United Kingdom, and Europe. She is also a senior social researcher in the UK Government Department for Environment, Food and Rural Affairs.

This work was supported by the UK GCRF-ESRC and Universidad de Manizales under grant ES/P004326/1 (Armijos); by the International Social Science Council and Swedish International Development Cooperation Agency under grant ISSC2015-TKN150317115354 (Rodríguez, Martin); and by the UK ESRC under grant ES/R010404/1 (White).

© 2020 The Authors. Published with license by Taylor & Francis Group, LLC.

This is an Open Access article distributed under the terms of the Creative Commons Attribution License (<http://creativecommons.org/licenses/by/4.0/>), which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

## NOTES

1. UNEP, *Emissions Gap Report 2019* (United Nations Environment Programme, 2019).

2. S. Diaz et al., Summary for Policymakers of the Global Assessment Report on Biodiversity and Ecosystem Services of the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services, <https://ipbes.net/global-assessment> (2019).

3. P. Messerli et al., *Global Sustainable Development Report 2019: The Future Is Now—Science for Achieving Sustainable Development*, <https://sdgs.un.org/publications/future-now-science-achieving-sustainable-development-24576> (2019).

4. U.S. Environmental Protection Agency, EPA Announces Enforcement Discretion Policy for COVID-19 Pandemic, <https://www.epa.gov/enforcement/enforcement-policy-guidance-publications> (2020).

5. United Nations, *Leave No One Behind: Equality and Non-Discrimination at the Heart of Sustainable Development*, Report No. 1780449283 (New York, NY: United Nations, 2017).

6. W. S. Walker et al., "The role of Forest Conversion, Degradation, and Disturbance in the Carbon Dynamics of Amazon Indigenous Territories and Protected Areas," *Proceedings of the National Academy of Sciences* 117 (2020): 3015–3025.

7. A. Gorz, *Ecology as Politics* (Portland, OR: Black Rose Books Ltd., 1980).

8. J. Hicckel and G. Kallis, "Is Green Growth Possible?," *New Political Economy* 25 (2020): 469–486.

9. D. Harvey, *The Enigma of Capital and the crises of capitalism* (London, UK: Profile Books, 2010).

10. D. Tilman, C. Balzer, J. Hill, and B. L. Befort, "Global Food Demand and the Sustainable Intensification of Agriculture," *Proceedings of the National Academy of Sciences* 108(2011): 20260–20264.

11. W. Bank, *Poverty and Shared Prosperity 2018: Piecing Together the Poverty Puzzle*, Report no. 1464809585 (Washington, DC: The World Bank, 2018).

12. J. Patterson, et al., "Exploring the Governance and Politics of Transformations Towards Sustainability," *Environmental Innovations and Societal Transformations* 24 (2017): 1–16.

13. E. M. Bennett et al., "Bright Spots: Seeds of a Good Anthropocene," *Frontiers in Ecology and the Environment* 14 (2016): 441–448.

14. F. W. Geels, "Regime Resistance Against Low-Carbon Transitions: Introducing Politics and Power Into the Multi-Level Perspective," *Theory, Culture and Society* 31 (2014): 21–40.

15. P. Newell, O. Taylor, and C. Touni, "Governing Food and Agriculture in a Warming World," *Global Environmental Politics* 18 (2018): 53–71.

16. K. Hölscher, J. M. Wittmayer, and D. Loorbach, "Transition Versus Transformation: What's the Difference?," *Environmental Innovation and Societal Transitions* 27 (2018): 1–3.

17. I. Scoones, M. Leach, and P. Newell, *The Politics of Green Transformations* (Abingdon, UK: Routledge, 2015).

18. I. Scoones et al., *Transformations to Sustainability* (Sussex, UK: STEPS Working Paper 104, 2018).

19. M. Pelling, K. O'Brien, and D. J. C. C. Matyas, "Adaptation and Transformation," *Climatic Change* 133 (2015): 113–127.

20. U. Brand, "'Transformation' as a New Critical Orthodoxy: The Strategic Use of the Term 'Transformation' Does Not Prevent Multiple Crises," *GALA-Ecological Perspectives for Science and Society* 25 (2016): 23–27.
21. L. Temper, M. Walter, I. Rodriguez, A. Kothari, and E. A. Turhan, "A Perspective on Radical Transformations to Sustainability: Resistances, Movements and Alternatives," *Sustainability Science* 13 (2018): 747–764.
22. G. Feola, "Capitalism in Sustainability Transitions Research: Time for a Critical Turn?," *Environmental Innovation and Societal Transitions* 35 (2020): 241–250.
23. D. Schlosberg, "Reconceiving Environmental Justice: Global Movements and Political Theories," *Environmental Politics* 13 (2004): 517–540, doi:10.1080/0964401042000229025.
24. K. Whyte, "The Dakota Access Pipeline, Environmental Injustice, and US Colonialism," *Red Ink: An International Journal of Indigenous Literature, Arts, & Humanities* 19 (2017) 1.
25. M. Tebboth, R. Few, M. Assen, and M. Degefu, "Valuing Local Perspectives on Invasive Species Management: Moving Beyond the Ecosystem Service–Disservice Dichotomy," *Ecosystem Services* 42 (2020): 101068.
26. T. M. Daw et al., "Elasticity in Ecosystem Services: Exploring the Variable Relationship Between Ecosystems and Human Well-Being," *Ecology and Society* 21 (2016), doi:10.5751/ES-08173-210211.
27. A. Martin, *Just Conservation: Biodiversity, Wellbeing and Sustainability* (Abingdon, UK: Routledge, 2017).
28. E. Woodhouse and J. T. McCabe, "Well-Being and Conservation: Diversity and Change in Visions of a Good Life Among the Maasai of Northern Tanzania," *Ecology and Society* 23 (2018).
29. D. Stevis and R. Felli, "Law & Economics. Global Labour Unions and Just Transition to a Green Economy," *International Environmental Agreements: Politics, Law and Economics* 15 (2015): 29–43.
30. J. Fairhead, M. Leach, and I. Scoones, "Green Grabbing: A New Appropriation of Nature?," *Journal of Peasant Studies* 39 (2012): 237–261, doi:10.1080/03066150.2012.671770.
31. R. Few, D. Morchain, D. Spear, A. Mensah, and R. Bendapudi, "Transformation, Adaptation and Development: Relating Concepts to Practice," *Palgrave Communications* 3 (2017): 1–9.
32. K. O'Brien, "Global Environmental Change II: From Adaptation to Deliberate Transformation," *Progress in Human Geography* 36 (2012): 667–676 (2012).
33. P. Tschakert and A. L. S. Clair, "Conditions for transformative change: The role of responsibility, solidarity, and care in climate change research," in *Transformations in a Changing Climate* (Oslo, Norway: University of Oslo, 2013), 267–275.
34. S. Eriksen, T. H. Inderberg, K. O'Brien, and L. Sygna, "Introduction: development as usual is not enough," in *Climate Change Adaptation and Development* (Abingdon, UK: Routledge, 2014), 17–34.
35. R. Gillard, A. Gouldson, J. Paavola, and J. Van Alstine, "Transformational Responses to Climate Change: Beyond a Systems Perspective of Social Change in Mitigation and Adaptation," *Wiley Interdisciplinary Reviews: Climate Change* 7 (2016): 251–265.
36. N. J. Bennett, J. Blythe, A. M. Cisneros-Montemayor, G. G. Singh, and U. R. Sumaila, "Just Transformations to Sustainability," *Sustainability* 11 (2019): 3881.
37. J. J. Patterson et al., "Political Feasibility of 1.5° C Societal Transformations: The Role of Social Justice," *Current Opinion in Environmental Sustainability* 31 (2018): 1–9.
38. M. Menton et al., "Environmental Justice and the SDGs: From Synergies to Gaps and Contradictions," *Sustainability Science* (2020): 1–16.
39. E. Turnhout et al., "Envisioning REDD+ in a Post-Paris Era: Between Evolving Expectations and Current Practice," *Wiley Interdisciplinary Reviews: Climate Change* 8 (2017): e425.
40. R. Myers et al., "Messiness of Forest Governance: How Technical Approaches Suppress Politics in REDD+ and Conservation Projects," *Global Environmental Change* 50 (2018): 314–324.
41. N. M. Dawson et al., "Barriers to Equity in REDD+: Deficiencies in national Interpretation Processes Constrain Adaptation to Context," *Environmental Science & Policy* 88 (2018): 1–9.
42. M. M. Bayrak and L. M. Marafa, "Ten Years of REDD+: A Critical Review of the Impact of REDD+ on Forest-Dependent Communities," *Sustainability* 8 (2016): 620.
43. T. Sikor and H. Câm, "REDD+ on the Rocks? Conflict Over Forest and Politics of Justice in Vietnam," *Human Ecology* 44 (2016): 217–227.
44. K. Schreckenber, P. Franks, A. Martin, and B. Lang, "Unpacking Equity for Protected Area Conservation," *Parks* 22 (2016): 11–26.
45. D. Roe, "The Origins and Evolution of the Conservation–Poverty Debate: A Review of Key Literature, Events and Policy Processes," *Oryx* 42 (2008): 491–503.
46. N. Zafra-Calvo et al., "Progress Toward Equitably Managed Protected Areas in Aichi Target 11: A Global Survey," *BioScience* 69 (2019): 191–197.
47. D. Brockington and D. Wilkie, "Protected Areas and Poverty," *Philosophical Transactions of the Royal Society of London B: Biological Sciences* 370 (2015): p20140271.
48. D. M. Tumusiime and P. Vedeld, "False Promise or False Premise? Using Tourism Revenue Sharing to Promote Conservation and Poverty Reduction in Uganda," *Conservation and Society* 10 (2012): 15–28.
49. J. Schleicher, C. A. Peres, T. Amano, W. Lactayo, and N. J. Leader-Williams, "Conservation Performance of Different Conservation Governance Regimes in the Peruvian Amazon," *Scientific Reports* 7 (2017): 11318.
50. V. Reyes-García et al., "The Contributions of Indigenous Peoples and Local Communities to ecological Restoration," *Restoration Ecology* 27 (2019): 3–8.
51. J. W. Kuyper, B. O. Linnér, and H. Schroeder, "Non-State Actors in Hybrid Global Climate Governance: Justice, Legitimacy, and Effectiveness in a Post-Paris Era," *Wiley Interdisciplinary Reviews: Climate Change* 9 (2018): e497.
52. J. Kuyper, H. Schroeder, and B.-O. Linnér, "The Evolution of the UNFCCC," *Annual Review of Environment and Resources* 43 (2018): 343–68.
53. S. Burch et al., "Governing and Accelerating Transformative Entrepreneurship: Exploring the Potential for Small Business Innovation on Urban Sustainability Transitions," *Current Opinion in Environmental Sustainability* 22 (2016): 26–32.
54. S. Braungardt, J. van den Bergh, and T. Dunlop, "Fossil Fuel Divestment and Climate Change: Reviewing Contested Arguments," *Energy Research & Social Science* 50 (2019): 191–200.
55. G. Curran, "Divestment, Energy Incumbency and the Global Political Economy of Energy Transition: The Case of Adani's Carmichael Mine in Australia," *Climate Policy* 20 (2020): 949–62.
56. H. Schroeder, S. Burch, and S. Rayner, "Novel Multisector Networks and Entrepreneurship in Urban Climate Governance," *Environment and Planning C: Government and Policy* 31 (2013): 761–768.
57. L. Temper, D. Del Bene, and J. Martinez-Alier, "Mapping the Frontiers and front Lines of Global Environmental Justice: The EJAtlas," *Journal of Political Ecology* 22 (2015): 255–278.
58. J. Martinez-Alier, L. Temper, D. Del Bene, and A. Scheidel, "Is There a Global Environmental Justice Movement?," *Journal of Peasant Studies* 43 (2016): 731–755.
59. I. Rodriguez and M. L. Inturias, "Conflict Transformation in Indigenous Peoples' Territories: Doing Environmental Justice With a 'Decolonial Turn,'" *Development Studies Research* 5 (2018): 90–105.
60. E. F. Dukes, *Resolving Public Conflict: Transforming Community and Governance* (Manchester, UK: Manchester University Press, 1996).
61. J. P. Lederach, *Preparing for Peace: Conflict Transformation Across Cultures* (Syracuse, NY: Syracuse University Press, 1996).
62. J. Botes, "Conflict Transformation: A Debate Over Semantics or a Crucial Shift in the Theory and Practice of Peace and Conflict Studies?," *International Journal of Peace Studies* 8 (2003): 1–27.
63. M. Tatpati et al., "The Niyamgiri Story: Challenging the Idea of Growth Without Limits" (Pune, India: Kalpavriksh, 2016).
64. D. Schlosberg, *Environmental Justice and the New Pluralism: The Challenge of Difference for Environmentalism* (Oxford, UK: Oxford University Press, 1999).
65. M. Lawhon, "Situated, Networked Environmentalisms: A Case for Environmental Theory From the South," *Geography Compass* 7 (2013): 128–138.
66. D. Schlosberg, *Defining Environmental Justice—Theories, Movements, and Nature* (New York, NY: Oxford University Press, 2007).
67. L. Álvarez and B. Coolsaet, "Decolonizing Environmental Justice Studies: A Latin American Perspective," *Capitalism Nature Socialism* 31 (2020): 50–69.
68. L. Pulido and J. De Lara, "Reimagining 'Justice' in Environmental Justice: Radical Ecologies, Decolonial Thought, and the Black Radical Tradition," *Environment and Planning E: Nature and Space* 1 (2018): 76–98.
69. S. Vermeylen, "Environmental Justice and Epistemic Violence," *Local Environment* 24 (2019): 89–93.
70. A. Kothari, A. Salleh, A. Escobar, F. Demaria, and A. Acosta, *Pluriverse: A Post-Development Dictionary* (New Delhi, India: Tulika Books and Authorsupfront, 2019).
71. M. M. She and T. F. Thornton, "Tracing Country Commitment to Indigenous Peoples in the UN Framework Convention on Climate Change," *Global Environmental Change* 58 (2019): 101973.
72. H. Schroeder, M. Di Gregorio, M. Brockhaus, and T. T. Pham, "Policy Learning in REDD+ Donor Countries: Norway, Germany and the UK" *Global Environmental Change* 63 (2020): 102106.
73. J. Mbaria and M. Ogada, *The Big Conservation Lie: The Untold Story of Wildlife Conservation in Kenya* (Seattle, WA: Lens and Pens, 2016).
74. U. Pascual et al., "Valuing Nature's Contributions to People: The IPBES Approach," *Current Opinion in Environmental Sustainability* 26 (2017): 7–16.
75. I. Rodriguez, "Linking Well-Being With Cultural Revitalization for Greater Cognitive Justice in Conservation," *Ecology and Society* 22 (2017): 24.
76. M. Nussbaum, *Creating Capabilities: The Human Development Approach* (Cambridge, MA: Belknap Press of Harvard University Press, 2011).
77. A. Sen, *The Idea of Justice* (New York, NY: Allen Lane, 2009).
78. G. A. S. Edwards, L. Reid, and C. Hunter, "Environmental Justice, Capabilities, and the Theorization of Well-Being," *Progress in Human Geography* 40 (2016): 754–769.
79. R. Day, "A capabilities approach to environmental justice," in *The Routledge Handbook of Environmental Justice* (Abingdon, UK: Routledge, 2017), 124–135.
80. J. O'Neill, A. Holland, and A. Light, *Environmental Values* (Abingdon, UK: Routledge, 2008).
81. R. J. Arneson, "From Primary Goods to Capabilities to Well-Being," *Critical Review of International Social and Political Philosophy* 16 (2013): 179–195.
82. I. Robeyns, "Having Too Much," *Nomos* 58 (2017): 1–44.
83. G. Agamben, *State of Exception* (Chicago, IL: University of Chicago Press, 2005).