


Global justice and the opportunity costs of conservation

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Abstract

Opportunity costs can represent a significant portion of the costs associated with conservation projects and frequently outstrip other kinds of cost. They are typically understood to refer to the benefits someone would have obtained if conservation projects had not required them to give up current activities, such as farming or hunting or if the land had been available for uses other than conservation. This familiar way of identifying opportunity costs is flawed, however, because it threatens to condone, or take advantage of, the injustices that many people face that affect their opportunities. I integrated ideas from the political theory of global justice to examine how the analysis of opportunity costs illustrates the importance of considering conservation and issues of global justice together, rather than thinking about them in isolation. I distinguish four baselines for defining opportunity costs. A status quo baseline defines opportunity costs by asking what people would have earned had a conservation project not happened. A willingness to accept baseline defines them by asking people what it would take to make them indifferent to whether a conservation project takes place or not. An antipoverty baseline suggests that opportunity costs have been met when people affected by a project are not left in poverty. An egalitarian baseline suggests opportunity costs have been met when people are not left in relative disadvantage, with worse than average opportunities. I argue that the egalitarian baseline is the most acceptable from the point of view of justice. Such a baseline would suggest that, in practice, many of the world's poor are being unjustly treated, or even exploited, as a result of conservation activities.

KEYWORDS

conservation, exploitation, global justice, inequality, opportunity costs, poverty

Resumen

Los costos de oportunidad pueden representar una porción significativa de los costos asociados con los proyectos de conservación y con frecuencia superan otros tipos de costos. Comúnmente se entiende que estos costos se refieren a los beneficios que alguien habría obtenido si los proyectos de conservación no los hubieran requerido para renunciar a ciertas actividades, como la agricultura o la cacería, o si la tierra hubiera estado disponible para otros usos además de la conservación. Sin embargo, esta manera familiar de identificar los costos de oportunidad es defectuosa ya que amenaza con perdonar, o aprovechar, las injusticias que muchas personas enfrentan y que afectan sus oportunidades. Integré ideas de la teoría política de la justicia global para examinar cómo el análisis de los costos de oportunidad ilustra la importancia de considerar en conjunto la conservación y los temas de justicia global, en lugar de considerarlos de manera aislada. Distingo cuatro líneas base para definir los costos de oportunidad. Una línea base de orden establecido define los costos de oportunidad al preguntar a las personas lo que habrían obtenido de no haberse realizado un

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proyecto de conservación. Una línea base de la voluntad de aceptación las define al preguntar a las personas qué necesitarían para volverse indiferentes a si se realiza o no un proyecto de conservación. Una línea base de antipobreza sugiere que los costos de oportunidad se han cumplido cuando las personas afectadas por un proyecto no quedan en la pobreza. Una línea base igualitaria sugiere que los costos de oportunidad se han cumplido cuando las personas no quedan en una desventaja relativa, con peores oportunidades al promedio. Argumento que la línea base igualitaria es la más aceptable desde el punto de vista de la justicia. Dicha línea base sugeriría que, en la práctica, muchas de las personas que viven en pobreza son tratadas injustamente, o incluso explotadas, como resultado de las actividades de conservación.

PALABRAS CLAVE

conservación, costos de oportunidad, desigualdad, explotación, justicia global, pobreza

摘要

机会成本可以代表保护项目成本的很大一部分,并且经常超过其他类型的成本。机会成本通常被理解为,当保护项目不要求参与者放弃目前的活动(如耕作或狩猎),或当土地可用于保护以外的用途时,人们获得的利益。然而,这种确定机会成本的常用方式存在着缺陷,因为它有可能纵容或利用许多人所面临的影响其机会的不公正现象。本文整合了全球正义政治理论的观点,以研究机会成本分析如何说明综合而非孤立地思考保护和全球正义问题的重要性。研究者区分了定义机会成本的四种基线。现状基线通过询问人们在没有保护项目的情况下会获得什么来定义机会成本。意愿基线通过询问人们需要什么才能使他们不在意是否开展保护项目来定义机会成本。反贫困基线认为,只要受项目影响的人没有陷入贫困就满足了机会成本。而平等主义基线则认为,当人们没有处于相对不利的地位、没有比平均机会更糟糕的时候,机会成本才得到满足。研究者认为,从正义的角度来看,平等主义基线是最可以接受的。这种基线表明,在实践中,世界上许多贫困人口由于保护活动的开展而受到不公正的待遇,甚至面临剥削。【翻译:胡怡思;审校:聂永刚】

人造生境

机会成本, 保护, 全球正义, 贫困, 不平等, 剥削

INTRODUCTION

Opportunity costs can represent a significant portion of the costs associated with conservation projects (Green et al., 2018), frequently outstripping other kinds of cost (Balmford & Whitten, 2003). They are typically understood to refer to the benefits someone could or would have obtained if conservation projects had not required them to give up current activities, such as farming or hunting in a particular place (Adams et al., 2010; Naidoo & Adamowicz, 2006). As Green et al. (2018: 2) put it, to identify opportunity costs, one simply needs to measure “the net benefits obtained if the land were available instead for development to some other productive use.” I argue that this familiar way of identifying opportunity costs is flawed and that when it is used to calculate what people affected by conservation projects are owed, it generates considerable injustice. I integrated ideas from the political theory of global justice to examine how the analysis of opportunity costs provides a good example of the importance of considering conservation and global justice together, rather than thinking about them in isolation. I considered ways to identify opportunity costs and argued for the establishment of an egalitarian baseline for opportunity

costs. Measuring costs by using such a baseline would suggest that, in practice, many of the world's poor are being unjustly treated, or even exploited, as a result of conservation activities.

A MORALIZED BASELINE FOR OPPORTUNITY COSTS

In many cases, conservation projects require people to give up valuable economic opportunities. In such cases, they can be said to incur an opportunity cost. To measure those costs, one must judge these costs in relation to some baseline, such as the income they would have earned if they had been able to perform some activity. Policy makers face the empirical challenge of measuring how far conservation might cause someone to fall below the baseline in question. They would then be in a position to offset those opportunity costs, if appropriate. But before they get there, they face the moral challenge of specifying which baseline is appropriate. Policy makers' determination of the baseline will have enormous implications for global justice.

It might be suggested that there is no great moral mystery here: to calculate opportunity costs, one simply needs

a description of the activity an actor would otherwise have engaged in, along with the benefits it would have brought them. In that sense, opportunity costs might be thought to be a morally neutral category. To the contrary, I argue that identifying opportunity costs must involve reflection on the kinds of opportunities that people should have access to. In some cases, the activities people are currently engaged in should be forbidden. Imagine a group of people engaged in the highly lucrative business of growing and selling a recreational drug that is hugely damaging to human health. A protected area is declared locally, and the group asks conservationists to replace the income they would have received from selling the drug. That is not a request conservation policy makers should accede to. The group's members might have a right to help with finding alternative livelihoods. But, using their expected drug revenues to calculate opportunity costs would be to select a morally inappropriate baseline. The same would go for other clearly immoral activities, such as those involving slave labor and the exploitation of children. If an activity is not normally seen as legitimate, then it does not form a suitable baseline for identifying opportunity costs. It makes more sense to connect opportunity costs to opportunities people ordinarily ought to have were it not for the need for conservation at a particular site.

Using actual opportunities as the baseline for opportunity costs could also wrongly cause policy makers to give people much less than they are entitled to. Imagine that a community of farmers is exploited, for instance, by subjection to debt bondage. Their government does not step in to help because the farmers belong to a marginalized ethnic group. As a result, their incomes are far lower than those earned by other locals and they are vulnerable to serious malnutrition in lean years. If a protected area were declared in the locale, it would be wrong for its funders to give fewer resources to members of the exploited group compared with others, even if it is the case that they would have earned less if they had been able to continue farming. Here too, opportunity costs must be connected to a view about the kinds of opportunities people ought to have.

Such cases show that the baseline for calculating opportunity costs must be moralized, rather than morally neutral. It must make some reference, that is, to the kinds of opportunities people should and should not have. But this is not the end of the matter because one can imagine several different moralized baselines for opportunity costs, and policy makers will have to choose between them. I distinguished and evaluated four possible baselines. The first two, status quo and willingness to accept, are common in conservation practice and do not have any explicit connection to theories of global justice. The last two, antipoverty and egalitarian, are less common in conservation, but they both explicitly consider global justice. I argue that the first two baselines ought to be rejected and that the fourth is preferred over the third.

To keep things simple, I focused on cases in which conservation is clearly required, but the actors being asked to change their behavior cannot afford to bear any of the costs of doing so. As such, their opportunity costs must be met by others if conservation is going to take place. In some of the cases I considered, monetary units are in U.S. dollars. It is

possible, of course, that some of the losses that conservation projects cause cannot be adequately captured by focusing on monetary shortfalls. Monetary figures might not capture, for instance, the cultural costs incurred by people required to give up on traditional activities (Tan, 2021). If these were taken into account, the opportunity costs of conservation could be much greater than what is suggested by monetary values. But using monetary values allowed me to capture the way the various baselines diverge in their implications, even if it did not capture everything that is important.

Status quo baseline

In practice, opportunity costs are often calculated by establishing what people counterfactually would have earned had conservation projects not taken place (Fisher et al., 2011; Green et al., 2018). In financial terms, this could mean the money they would have earned if they had been able to carry out those activities. Alternatively, opportunity costs might be calculated in terms of expected value, where the revenues from the relevant activities are multiplied by the likelihood that they would have been brought to fruition (Naidoo & Adamowicz, 2006). Either way, payments are linked to the status quo before the project took place and specifically to the opportunities that then existed. It is important to recognize, however, that the status quo baseline is a moralized one, insofar as it connects, or ought to connect, conservation payments to activities that could have legitimately taken place. The status quo baseline cannot plausibly be a purely factual one, which describes whatever activities people would have engaged in. As the examples of growing dangerous drugs or using slave labor show, it must be moralized insofar as it describes activities that people could justly have brought to fruition.

There is a potential pragmatic justification for supporting the status quo baseline insofar as people are likely to resist conservation projects that make them worse off. As a result, paying them what they would have earned might be necessary to secure their compliance. And there is a potential fairness justification too: conservation activities should not make people worse off if that can be avoided. This thought is reflected in the familiar principle that conservation projects should do no harm to the poor (Sims & Alix-Garcia, 2017). In this case, doing no harm might mean not making them worse off than they already were.

The problem with the status quo baseline is that the opportunities people have are often deeply unfair. Adopting a status quo baseline condones and may even reinforce that unfairness. Imagine that a global conservation organization has decided to make payments to farmers who agree to let their fields lie fallow. A farmer in the United States could have made \$10,000 if she had grown crops on her land rather than leaving it to rest. Another farmer, in Sierra Leone, could have made \$500. The status quo baseline suggests this is what each should receive. But what if the disparity in opportunities in this scenario emerges within a vastly unfair global economy and is influenced by a historical legacy of colonialism? To accept actual opportunities

as the relevant benchmark is to place the background context offered by the status quo beyond moral question.

This can create problems of both overpaying and underpaying. The status quo baseline could involve overpaying, whereby decision makers send substantial funds in the direction of people who, even without such funds, would have a comfortably above-average standard of living (considered in global terms). But it could also involve substantial underpaying. If people's opportunities are unjustly constrained, it could mean avoidably leaving people in severe poverty. If conservation decision makers have it within their power to offer people a ladder out of poverty, but choose not to, this could render them complicit in that poverty. The global economy offers radically unequal opportunities to people the world over, and many people's prospects continue to be shaped by violent practices of dispossession, slavery, and colonialism. There is no reason conservation policy makers should accept that status quo as morally authoritative. Instead of accepting the status quo baseline, they ought to identify opportunity costs by thinking through the kinds of opportunities people ought to have.

Willingness to accept baseline

In many cases, opportunity costs are identified by establishing affected people's willingness to accept compensation (Bush et al., 2013; Lennox & Armsworth, 2013; Lindhjem & Matani, 2012; Tadesse et al., 2021). This typically involves surveying those who are likely to be affected by a conservation project and asking them how much money it would take to make them indifferent about whether that project took place or not. If someone states they would require a payment of \$800, say, before they accepted a conservation project that disrupted their livelihoods, then a payment of that magnitude might be seen to cover their opportunity costs. One might suppose that the willingness to accept baseline will deliver identical results to the status quo approach. One might even consider surveys of willingness to accept a useful method of identifying what people stand to lose compared with the status quo. But in principle, the two baselines could pull in different directions. For instance, if a community could veto a conservation project, they might ask for an amount higher than the actual economic cost they would incur.

For an illustration of what the willingness to accept baseline could look like in practice, consider a study on forest conservation by Poudyal et al. (2018). Their study concerns a REDD+ pilot project in the Ankeniheny-Zahamena Corridor, a large protected area in eastern Madagascar. Under the REDD+ scheme, the World Bank seeks to defray the opportunity costs of forest conservation by providing alternative livelihood options (e.g., improved agricultural, livestock, and beekeeping projects) to locals who have been required, as a result of the declaration and expansion of the protected area, to give up traditional practices, such as swidden agriculture. As well as being a haven for biodiversity, Madagascar is home to the second-highest proportion of citizens classified as extremely poor of any country in the world, and as a result, the conflict between conservation and poverty is acute. Three findings from the study are of

particular interest. The first is that more than 50% of affected locals have received no compensation at all to date. Second, the official benchmark for compensation is extremely low: the published plan suggested that each eligible household receive a one-off payment of \$100–170, even though the effects of exclusion would be significant and would be felt for decades or more. Third, the baseline for compensation which Poudyal et al. (2018) suggest would be more appropriate (and more generous) is instructive in its own right. The authors conducted a choice experiment intended to elicit locals' willingness to accept compensation. After asking locals how much money they would accept in return for giving up swidden agriculture in the area, they arrived at a median figure of \$2375. This, they claim, represents the true opportunity cost of conservation in the area, and it should, therefore, form the baseline for fair compensation, rather than the relatively modest payments made by the scheme to date.

The higher amounts are closer to a just outcome, but are still far too low. The problem with using a willingness to accept baseline to identify opportunity costs is that we have little reason to believe that what people would accept, if they had to choose between conserving and continuing as they are, is equal to what they are entitled to. A willingness to accept the framework can undoubtedly provide the conservation planner with useful practical information about how much conservation can be gotten for the same money in different parts of the world. But it is far less clear that it reveals what people ought to receive when they are required to give up on activities they are committed to. On the one hand, social scientists tell us that privileged actors, with plenty of alternatives, can leverage their position to extract conservation payments greater than they would in fact have received if they had used their land to earn income in the formal economy (Lennox & Armsworth, 2013). On the other hand, disadvantaged actors may, when giving responses to a willingness to accept experiment, settle for what they expect they would have received without the policy intervention. But that might be much less than they ought to have received if their opportunities were fair. In the formal economy, people often after all accept exploitative wages. This fact does not prove that they are not entitled to more; it simply shows they inhabit a weak structural position in which they take modest rewards because they do not have better options (Mayer, 2007). The willingness to accept baseline is problematic, then, inasmuch as it may allow privileged actors to extract excessive payments, but may involve disadvantaged actors settling for much less than they should receive if their opportunities were genuinely fair. But this, of course, requires an account of what fair opportunities are. The next baseline provides such an account by connecting payments to the goal of the eradication of poverty.

Antipoverty baseline

According to “minimalist” views about global justice (Armstrong, 2012), everyone should have a realistic chance of escaping from poverty (Miller, 2007; Rawls, 1999). In some cases, this means the privileged should provide the

disadvantaged with positive assistance, aimed at helping them find their way out of poverty. In other cases, it means they must be vigilant to ensure that institutions, practices, and policies do not make it harder for people to escape poverty or take advantage of people's unfairly limited opportunities. Minimalism as a view about global justice has not been applied extensively to conservation issues, aside from discussions of climate change and carbon sinks (Miller, 2009). But its implications appear to be fairly clear: if people ought to have realistic opportunities to escape from poverty and if conservation measures threaten to remove their only realistic path for doing so, that would be unjust. Minimalists can, therefore, support an antipoverty baseline, which rules out conservation outcomes that cause people to fall into poverty or diminish their chances of escaping it.

Minimalists can also object to cases of exploitation, which involve some actors taking unfair advantage of others. David Miller (1999), for example, argues that outcomes can be unjust if they arise in conditions of significantly unequal bargaining power and if they grant people less than they are entitled to. Problematic outcomes, for the minimalist, would presumably include those that left people in conditions of poverty. For example, imagine a situation where the prevalent wages in a region are \$1 per day, but these wages leave people in serious poverty. Perhaps the ability to lead a decent life would demand that everyone receive at least \$2.15 instead (World Bank's current extreme poverty line), or perhaps it would require even more. The advocate of a status quo baseline will see nothing wrong with a situation in which conservation projects grant people incomes of \$1 if that is the prevalent wage in a region. But minimalists can argue that it would be exploitative for conservation organizations to leave people with an income of \$1 simply because they had the power to do so. Although conservation outcomes can sometimes be objectionable because they push people into poverty, in other cases, they can be objectionable simply because they avoidably leave people in poverty, where this involves denying them a fair return for their sacrifices. For minimalists, those who determine conservation policies can have a duty to avoid taking unfair advantage of the unequal structural position people find themselves in, and avoidably leaving people below a reasonable poverty line is a good example of such an unfair practice.

The antipoverty baseline, then, delivers quite distinctive guidance in practice. In some cases, the antipoverty baseline will be less demanding than the status quo and willingness to accept baselines. Imagine a farmer who earns an income far above the global average. If a conservation project requires him to forego that income, the status quo baseline suggests he should be given help in obtaining a similar income in some other way. The willingness to accept baseline is likely to lead to similar results, assuming that the farmer will not be prepared to accept a reduction in income. But the antipoverty baseline focuses on ensuring that the farmer is not left in poverty, so it is not clear that there would be an objection to him ending up worse off than average as a result of the conservation project, so long as he stays above the poverty line.

In other cases, as I have shown, adopting an antipoverty baseline suggests people are owed more than they are used to

receiving, and in those cases, this baseline will be more demanding than the status quo or willingness to accept baselines. This may be because outcomes that leave people in poverty can count as exploitative, where they result from unequal bargaining power, or because we have a positive duty to help people escape from poverty. This marks a clear difference between the antipoverty baseline and the two previous baselines I considered. Unlike the status quo and willingness to accept baselines, advocates of the antipoverty baseline need not accept outcomes in which people are left below the poverty line.

The antipoverty baseline is in this respect an advance, insofar as it reduces the conflict between conservation and poverty. No one should be kept in poverty as a result of the need to engage in conservation, and people's poverty should not provide an opportunity to interact with them on exploitative terms. Global justice scholars have made a somewhat parallel argument in the case of climate change: if it is possible to meet the costs of mitigation without pushing anyone into poverty—or removing their only means of escaping it—then that is what ought to be done (Moellendorf, 2014). The same argument has not been extended to the biodiversity crisis, but it can be. As such, an antipoverty baseline is an indispensable part of any account of conservation justice. Nevertheless, the antipoverty baseline is not sufficient because of the way it treats people above the threshold of poverty. For the minimalist, injustice occurs when costs are unfairly loaded onto the shoulders of people below the poverty baseline. But minimalists are not concerned with the distribution of benefits and burdens above the poverty baseline (Armstrong, 2012). In fact, minimalism implies that there would be no injustice even if all of the opportunity costs of conservation were loaded on the shoulders of people who live just above the poverty threshold as long as this does not push them into poverty. Implausibly, it implies this would be a fair outcome even if there were many other people with far greater capacity to absorb burdens. In the case of climate change, Miller (2007) suggests, to the contrary, that above the threshold of poverty, burdens ought to be shared equally. But making that claim takes him away from the minimalist position and into the territory of an egalitarian account (Armstrong, 2012). Strictly speaking, the structure of the minimalist view refuses to accept that facts about people's comparative opportunities (above the poverty threshold) are relevant when a particular distribution is evaluated. Instead, it focuses solely on ensuring that everyone has the opportunity to escape poverty.

Theories of justice should also concern themselves with what happens above the poverty baseline, however. It would be unjust if the most advantaged loaded the costs of conservation onto people who were not poor, but were much worse off than themselves. But to share burdens fairly above the poverty baseline, an egalitarian baseline is needed.

Egalitarian baseline

Egalitarian theories of global justice maintain that, other things being equal, people the world over ought to have roughly equal prospects in life (Caney, 2005). The alternative is to

argue, implausibly, that it is fair for some people to have worse prospects than others simply because of where these people are born or the position of their country in the global economy. If our lives have equal moral value, it is hard to see how such a case could be made successfully. The idea of equal prospects has to be unpacked in some way, and my suggestion is that it is best understood in terms of people's access to well-being (Armstrong, 2017) because what matters morally is the ability to lead a healthy, fulfilling, and reasonably autonomous life wherever one happens to live. Like minimalists, egalitarians, therefore, care about ending poverty because poverty seriously jeopardizes one's ability to lead a flourishing life. But distinctively, egalitarians are also concerned with people's comparative opportunities, even above a baseline of poverty. It is wrong if some have better or worse opportunities than others through no fault of their own, even if they do not find themselves in poverty.

According to an egalitarian baseline, opportunity costs should be calculated in terms of shortfalls from an equal sustainable standard of living. This baseline would suggest that an allocation of conservation burdens is unjust if it prevents people from achieving an equal sustainable level of well-being or if it involves exploitative transactions that take advantage of people's unequal opportunities or access to resources. This represents a more demanding standard than the antipoverty baseline, which would only judge an allocation to be unjust if it prevented people from achieving a minimal or decent standard of living or exploited their inability to secure such a living. The egalitarian baseline is more compelling, though, because setbacks to access to well-being are objectionable not only when they leave people below some suitable poverty line, but also when they mean some have better opportunities than others.

This means that conservation projects should not push people into relative disadvantage or worsen their chances of escaping from it. But it also means that conservation projects should not exploit people's relative lack of opportunities. Even if they do not fall below some reasonable poverty line, people in the global south often face relative disadvantages, such as inferior access to productive capital, weak institutions, modest educational opportunities, limited access to healthcare, geographical disadvantages, and so on. Often, these impediments will have been created or intensified by a legacy of colonialism, unjust aggression, and global economic institutions that continue to treat people unfairly in the global south. It might well be that, even in the absence of impediments to their opportunities imposed as a result of unfair conservation policies, many of the worst-off people in the world would have struggled to achieve anything close to an equal sustainable standard of living. But conservation schemes can still be unjust when they take unfair advantage of people's inferior access to well-being. Conservation projects that take advantage of people's unfavorable structural positions in order to pay less than they ought to get—which egalitarians will define in terms of an equal sustainable standard of living—violate a duty not to exploit those who are worse off through no fault of their own.

The egalitarian should also want to draw linkages between conservation policy and the wider project of ameliorating the disadvantages faced by the world's poor by using conservation

as an opportunity to promote better opportunities than they would otherwise have enjoyed. We live in a deeply unjust world and are likely to do so for the foreseeable future. In moving toward a more just world, many tools are likely to be important, including, *inter alia*, trade policy, tax policy, lending and investment, aid, migration policy, and climate policy (Armstrong, 2019, chapter 3). None of these is likely to be sufficient by itself. As such, the egalitarian has reason to seize any additional opportunities that promise to shift resources in the direction of the disadvantaged and should view with favor permissible policies that would grant them more control over their own destinies. The egalitarian will argue not only that the allocation of conservation burdens should not worsen opportunities to achieve an equal sustainable standard of living, but also that conservation policies should promote equal access to such a standard of living. Egalitarians can envision conservation policy as an integral part of a movement to secure a more equal and democratic world order.

EGALITARIAN BASELINE AND THE BIODIVERSITY CRISIS

I have shown that opportunity costs are not a neutral category, but are inevitably calculated in relation to one baseline or another and that all of these baselines inevitably involve moral judgments. In conservation practice, costs are often calculated in relation to either a status quo or willingness to accept baseline. But I have argued that those baselines should be rejected because they would render conservation policy makers complicit in the severe disadvantage many people wrongly face. Adhering to such baselines could also mean that conservation policies are exploitative if they take unfair advantage of people's unfavorable structural position to give them less than they are entitled to when their lives are disrupted by those policies. This is a good example, I would suggest, of the fact that one ought to evaluate the impact of conservation policy in light of broader concerns about global justice. Minimally, I have argued that policy makers should commit to an antipoverty baseline, with the implication that conservation policies should not make it harder for people to escape from poverty or exploit their poverty. But the antipoverty baseline, while important, is not enough. Conservation policy should not make it more difficult for people to achieve an equal sustainable standard of living either, and this means that conservation policies that merely avoid locking people into poverty are insufficiently demanding. More ambitiously, I have suggested that conservation policy could aim to shift the opportunity structure that people face, improving their situation and making an equal sustainable standard of living more accessible.

I recognize, however, that this is a challenging view. It might be thought that making conservation policy a vehicle of global justice is inappropriate because poverty and biodiversity loss are separate problems that ought to be dealt with separately (Terborgh, 1999). It might be argued that linking the two challenges will only slow urgent action to tackle the biodiversity crisis (Kinzig et al., 2011). If urgent action is required now, then

making individual conservation projects more costly (as both the antipoverty and egalitarian baselines would do) will only undercut collective responses to the biodiversity crisis.

To reinforce that point, some might invoke a distinction between justice as fair burden sharing and justice as harm avoidance (Caney, 2014). Justice as fair burden sharing asks what an ideal allocation of burdens would be when it comes to tackling some common problem. Justice as harm avoidance, by contrast, begins by suggesting that urgent action is required to tackle a problem and asks how it might be brought about speedily and effectively. In some cases, the two approaches may deliver similar conclusions. But in others, justice as harm avoidance can condone unfair allocations of burdens, if this is necessary to avoid still greater harms further down the line. In the case of climate change, for instance, someone might suggest that the only practical way to get very affluent people to stop driving SUVs is to offer them generous incentives to trade them in for electric vehicles, even if the drivers in question can and should bear these transition costs themselves. Although affluent drivers do not deserve such incentives, neither do future people deserve the very great harms that will come about if dangerous climate change is not avoided. If drivers will not give up their SUVs without incentives and if moving away from SUVs is necessary to avoid climate catastrophe, then the harm avoidance argument might suggest that it is better to give in to their demand for incentives (even if it is an unreasonable one), rather than let climate disaster unfold. In the case of biodiversity loss, the harm avoidance argument might be thought to imply, for example, that policy makers should pay very affluent people to set aside farmland, even if they could easily bear the costs of doing so themselves. That would introduce some unfairness—but doing so might be necessary to prevent much greater harms to innocent others. If one focuses on justice as fair burden sharing, such policies look unpalatable. But if one focuses on justice as harm avoidance, such policies might be justified in the interests of avoiding still greater unfairness (towards people who would otherwise be harmed in the future as the biodiversity crisis unfolds).

If one emphasizes harm avoidance, it could be argued that policy makers are justified in giving some people less than they are entitled to, if this is the only feasible way to achieve action on a sufficiently large scale, in the right time frame, and with the resources available. Requiring poor locals to bear some of the opportunity costs of biodiversity conservation is morally objectionable, and it may well be exploitative; but, allowing environmental catastrophe to unfold would be even worse. On grounds of harm avoidance, it might be argued that it would be a mistake to operate an egalitarian baseline for conservation costs, if this means that the biodiversity crisis is not averted or even if it becomes significantly less likely that it will be averted.

How this argument about harm avoidance be assessed? I agree that harm avoidance can sometimes mean that policy makers can be justified in imposing policies that do not distribute burdens fairly. But this does not mean (and Caney would not himself claim) that considerations of fair burden sharing should be put aside entirely. There are four reasons why it is important to be clear about what fair burden sharing would

look like, even if urgent action to arrest the biodiversity crisis is absolutely vital.

First, even if the only way to tackle a pressing problem involves imposing an unfair allocation of burdens, it is important to know what a fair pattern of burden sharing would be. For one thing, political or material circumstances can change over time, such that policy makers can move closer to justice. To do so, they need to know what a just allocation of burdens would look like. For another thing, even if justice is not approached, it is important to recognize when its demands have been departed from. Disadvantaged people might be owed a profound apology if they receive less than they are owed when conservation policies are set. If such an apology were sincere, it would imply a commitment to make policies fairer if and when it becomes possible to do so.

Second, it might not be the case that implementing fair policies is impossible or even politically infeasible. Given the immense resources available in the world, it might be that applying an egalitarian baseline to many conservation projects is eminently possible. The existing funding channeled towards conservation projects pales in comparison, for example, to the funds earmarked for new fossil fuel extraction schemes and other infrastructure projects (Watson et al., 2021). Diverting just a small share of these immense resources might allow policy makers to give affected people the support they are entitled to. Even those funds that are already earmarked for conservation are poorly targeted, with the vast majority of funding spent in the global north, despite the fact that the global south contains most biodiversity (Stark et al., 2021: 2). This should be urgently remedied. The question of political feasibility, of course, is a more moveable feast, and the point of arguments about global justice is often to shift consensus about what is morally acceptable. But even if fair burden sharing is in some sense politically infeasible—whatever that might mean—it is important to register that this is often not because of an overall lack of resources, but because of their hugely unequal distribution and because of the hold that the very well-off have on the exercise of political power. Those who make a fair allocation of burdens infeasible might be acting wrongly, and if so it is important to recognize that fact. Other actors can work to reveal their advantaged position and their pernicious effect on policy making.

Third, imposing unfair policies will often serve to undermine commitment to conservation projects in the long run. An allocation that is widely recognized as fair, by contrast, can expect to garner greater public support (Martin, 2017). To the extent that this is true, it cuts against the claim that there can be pragmatic reasons for imposing an unjust allocation of burdens. Imposing an unfair allocation of costs may not in fact be politically sustainable over time if it undermines overall support for conservation policies. More broadly, conservation pressures are often generated within a highly unjust global economy in which the poor are locked out of valuable opportunities and then, to add insult to injury, asked not to exploit local natural resources in the interests of conservation. In such cases, it is the assumption that locals should cooperate with conservation projects on the usual terms that might be better labeled *unrealistic*. Offering them better opportunities to advance their well-being would not only be

fair in its own right, but also might make them more likely to cooperate. Giving them an appropriate degree of control over the projects concerned could help still more.

Fourth, it is important not to underestimate the extent to which conservation policy not only can, but also does in practice sometimes internalize goals of global justice. Take, for instance, the transfers made under the payments for ecosystem services (PES) framework. There are reasons to be cautious about the PES framework as a way to conceptualize people's moral relation to conservation projects. But it is interesting to note nevertheless that PES often does function as a kind of redistribution, easing poverty and hence pressure on local ecosystems (Buscher & Fletcher, 2020). According to Martin (2017: 88), "most operational PES schemes have far less to do with markets than is typically assumed – and in some cases rather more to do with governments and other agencies seeking positive action to redistribute costs and benefits." My claim is that we should be explicit about the justice goals that conservation policy ought to embody, rather than allowing them to emerge in an ad hoc fashion. Justice goals should be an integral part of conservation policies from the start, both in terms of fair burden sharing and fair participation. But to do that, one needs to know what fair burden sharing would look like. Establishing the right baseline for opportunity costs is an important part of that project.

IMPLICATIONS FOR CONSERVATION PRACTITIONERS

My arguments have implications for conservation practitioners—people who design, fund, and implement conservation projects. I emphasize the philosophical distinction between negative and positive duties. Negative duties include duties not to harm other people or to treat them wrongfully. A small-scale example would be the duty not to push someone who cannot swim into a swimming pool or to make it harder for this person to get out of the pool if somebody else has already pushed her in. In debates about global justice, it is commonly agreed that negative duties are held by everyone, regardless of their location or social position (Miller, 2007). It is wrong for anyone to push someone into a swimming pool, whoever or wherever they happen to be. Because negative duties are held regardless of distance or the particular roles one inhabits, it is plausible that they apply to conservation practitioners too.

One of the most important negative duties, which has been the topic of much discussion in the literature on global justice, is a duty to avoid pushing people into poverty and, relatedly, a duty to avoid making it harder for people already in poverty to escape from it (e.g., Pogge, 2002; Miller, 2007). Another is the duty not to exploit people by taking unfair advantage of their limited opportunities. These duties surely apply to anyone involved in conservation policy, funding, research, or implementation, all of whom should be vigilant that their decisions do not make the problem of global poverty worse if at all possible or exploit people's straitened circumstances.

But it is not only by pushing people into poverty, exploiting their poverty, or making it harder for them to escape from

it that people are harmed. Conservation policies are objectionable not only when they lock people into (or take advantage of) poverty or absolute disadvantage, but also when they lock people into (or take advantage of) comparative disadvantage. This is the clear implication of the egalitarian baseline, which condemns conservation policies that make it more difficult for people in poor countries to catch up with the rest of the world. Observing their negative duties means that conservation practitioners must also take care to ensure that their interventions do not make it more difficult for the poor to attain an equal sustainable standard of living or exploit their unjustly limited opportunities.

Positive duties, by contrast, typically involve offering active assistance to others in need, as opposed to merely not harming them. For instance, on seeing that someone has been pushed into a swimming pool, a bystander might have a duty to help them out, assuming they can swim. In debates on global justice, positive duties are often connected with the capacities of particular actors to make a difference. For instance, it has been argued that those who can help reduce global poverty ought to do so, at least when doing so involves them taking on no more than moderate costs (Barry & Overland, 2016). I would argue, further, that those who can assist in the transition to a more equal world should join that effort, even if it involves them taking on some costs. The question then becomes who actually possesses the capacity to make a difference, and what would be a fair division of labor.

I do not claim here that conservation practitioners or those who determine conservation policies and priorities are the only actors with the capacity to make a difference. There are many actors who can help improve opportunities for people caught in the conservation versus development dilemma, including national governments in the global south, governments in the global north, aid agencies, and nongovernmental organizations, and international institutions, such as the World Bank, International Monetary Fund, and World Trade Organization. Among all of these actors, conservation practitioners and policy makers are surely not the most powerful. What should be expected of such actors depends on the time and other resources they possess and the likely costs to them of pressing for change (Caney, 2012a). Much may depend on their class, race, and gender. The double bind of asking actors who are already disadvantaged to bear special burdens in tackling injustices should be avoided, and a greater onus should be placed on members of more privileged groups (Yankah, 2019). In many cases, it may be that the part any particular actor can and should play in discharging positive duties towards the world's poor will be quite small. Nevertheless, there are a whole series of ways in which academics and other professionals can contribute to tackling problems like global poverty (Caney, 2012a), and it is likely that they can make some difference. They might be able to contribute, for example, by arguing for a more robustly antipoverty and even egalitarian approach to conservation policy, which avoids leaving those affected by conservation interventions locked into poverty and even assists them in accessing a fairer and more equal standard of living. They might contribute to debates that over time could shift the policies of conservation

organizations, governments in the global north, and even international institutions. Even if their capacities to change the world are limited, conservation practitioners can still be important allies in the struggle for global justice.

CONCLUSION

Simon Caney (2012b) argues powerfully that discussions of the response to the climate crisis should not play out in isolation from issues of global justice because if they do, policy makers risk entrenching existing injustices. To the contrary, debates about climate change ought to be integrated with broader discussions of global justice to ensure that responses to the climate crisis are fair. I believe that the same holds for debates on conservation. I have attempted to illustrate the importance of that kind of integration by arguing that the baseline for calculating opportunity costs can be defined in a number of different ways and that we have moral reasons for preferring some baselines rather than others. The danger of applying a status quo or willingness to accept baseline to conservation funding schemes is that this may either entrench or exploit distributive injustice, given that people's actual incomes, and expectations, are shaped within a context of profound injustice. At a minimum, justice requires that policy makers apply an antipoverty baseline, which would avoid locking those affected by conservation into poverty. More ambitiously, I have argued here for an egalitarian baseline connected to an equal sustainable standard of living. A powerful objection to the egalitarian baseline suggests that applying such a baseline might slow progress in tackling the biodiversity crisis, in effect placing much greater demands on a limited conservation budget. It may or may not be true that operating a more demanding baseline will make progress in tackling the biodiversity crisis less likely. But even if it was true, it would be important to recognize that, in their drive to tackle the biodiversity crisis, policy makers would be imposing an unfair distribution of conservation burdens. Over time, they ought to work to make it possible to apply a fairer—more egalitarian—baseline. In doing so, conservation policy makers can be important allies in the struggle for global justice.

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