

Inequality & Environmental Policy

*In an excerpt from his [Resources 2020](#) lecture, Nobel Laureate **Joseph E. Stiglitz** argues we need to view longstanding policy debates through the fresh lens of environmental justice.*

Environmental degradation is everyone's problem, but it's especially a problem for the poor, and for obvious reasons. Their position is more precarious, so when things go wrong, whether it's pollution in a neighborhood or rising sea levels swallowing a country, they are less able to respond effectively. In this sense, inequality ought to be a fundamental consideration when fashioning environmental policies. Let me give two examples.

The first is in a global context, focusing on global warming, which has enormous distributional consequences. Pollution

originates disproportionately from advanced industrial countries. Though more recently we've been in a race between the United States and China in which China has finally pulled ahead (in aggregate, but not per capita terms), the United States has contributed more than a quarter of the cumulative carbon emissions since 1750. Yet it is the poorest countries making the least contribution to carbon emissions that are going to be the most adversely affected, and the reason is quite obvious.

The most deleterious effects of global warming are felt in the tropics. Of course,





Severe flooding hits Dhaka, the capital of Bangladesh.

even in the far North, there are big environmental costs. But from the point of view of people in the tropics, adverse consequences are overwhelming—for instance, for agriculture and diseases.

Some dramatic examples: Bangladesh is likely to suffer widespread flooding as a result of global warming. For some drought-stricken countries in the Sahel of Africa, even their political problems have been vastly exacerbated by climate change—related famine and land shortages. And small island nations risk being completely submerged by rising seas. Wealthy coun-

tries may not have intended to do them any harm, but it's hard to think even a war against them would have done more destruction than what we are doing through global warming. Over and over, throughout the world, the theme is clear: Those with the least capacity to respond to environmental crisis are poised to receive the most direct and punishing blows, and these are the countries that have contributed the least to global warming.

Let me give another kind of example from the United States. Here as well, those with fewer means pay the highest price. My

colleague Janet Currie has provided compelling evidence that children born to less-educated minority mothers are more likely to be exposed to pollution before they're born. She shows that this exposure affects birth weight, with consequences that are life-long and reflected in lifetime earnings. And even more, the effects continue across generations; children of people who have been harmed by environmental pollutants, their children are also of lower birth weight, with lower lifetime prospects.

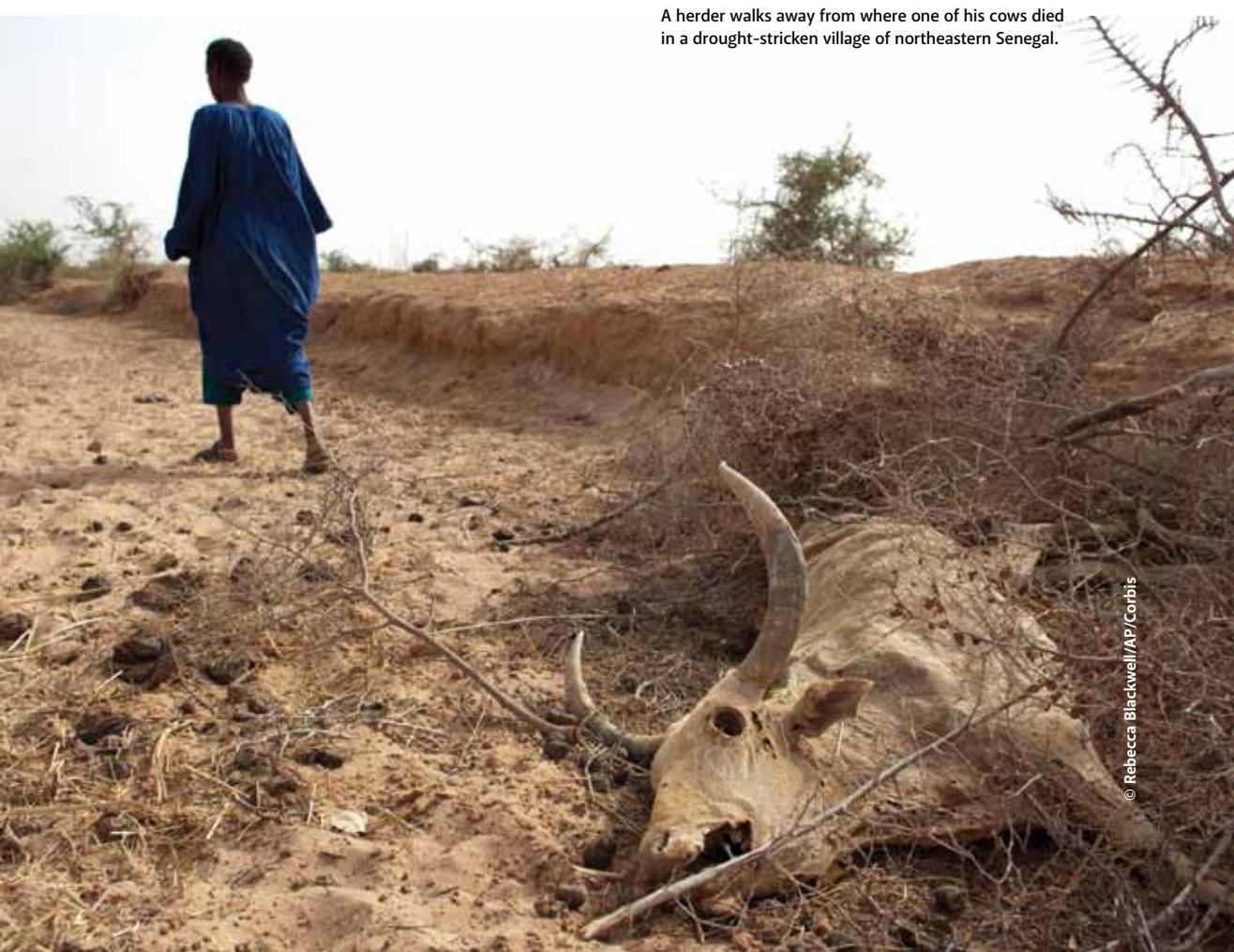
America has the least equality of opportunity and the least social mobility of the developed countries. Probably the most important of the reasons has to do with lack of equal access to good education. But clearly these environmental impacts

are also an important aspect of the inter-generational transmission mechanism that perpetuates inequality.

There is a two-way relationship between environment and inequality. So while environmental degradation contributes to inequality, inequality can also contribute to environmental degradation. The mechanism here, very basically, is a political one. When you're poor, your focus is not on the complex issues of the environment and how the environment affects your economic future. Those seem too esoteric. You're focused on survival. You're focused on income and economic growth.

The result is that in democracies, the desperately poor tend to have less of an interest in pursuing policies designed to

A herder walks away from where one of his cows died in a drought-stricken village of northeastern Senegal.



protect the environment, because their most important concern is doing whatever's necessary to get out of the current situation. So societies with more inequality will get less support for good environmental policies.

Partha Dasgupta, whom I've worked with a great deal, has emphasized the environment-inequality nexus in the context of development. It is the destitute who turn to the forest for their energy, but in doing so, they destroy their own future well-being. This behavior is individually rational, perhaps, but collectively irrational. The interesting thing is that in societies with a reasonable degree of social cohesion, social-control mechanisms may, and often do, actually work. But inequality tends to undermine social cohesion.

The importance of social cohesion was evident in a recent visit to Bhutan, the Himalayan country that has made its national objective Gross National Happiness (GNH), rather than the more traditional

what economists call "social capital" tends to break down.

Let me make a few observations about this. First, it turns out that small interventions can have very big effects. That's important for those of us who are involved in policy because, quite often, we can't solve the big problems. We can't persuade our government to adopt a carbon price, but we can make a big difference even with some small interventions. An example on a national scale that is relevant in many developing countries is the adoption of more efficient cook stoves. These are cook stoves that use less energy, so that the people who use them have to cut down fewer forests. It also means they are exposed to less indoor air pollution, which is a major source of health problems in developing countries, for lungs and eyes.

Interestingly, more efficient cook stoves also help alleviate inequality because the people who bear the cost of gathering the wood and spend a very large fraction of

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GDP. At the start, everybody was allowed to cut down three trees a year. I asked, "How do you enforce this?" The Bhutanese answered, "Nobody would disobey." A few years later, the limit was reduced to two trees, and the Bhutanese people adapted to that.

The point is that in societies with a high degree of social cohesion, people can work together and solve some of these problems better than they can in societies with less social cohesion and more inequality. When the tide of inequality becomes too great,

their time doing so are women. When you have a little innovation like this, it changes the well-being of one part of society that in many developing countries is very oppressed. You might not think of distributing efficient cook stoves as gender policy or even an inequality policy. But a good environmental policy like this one can have very big effects on inequality.

The second general observation I want to make is the fact that these two-way relationships mean that there can exist multiple societal equilibria. You get an equilibrium

in which you have a lot of inequality, and that leads to weaker environmental policies, and those weak environmental policies lead to a lot of inequality, and the prob-

the best way of solving the problem of the commons.

One of the discussion points that economists debate forever is the virtues of price

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lem perpetuates itself. But a much better equilibrium can be obtained, where you have low levels of inequality. With a low level of inequality, you have high demand for good environmental policies, and those good environmental policies then lead to less inequality. This feedback mechanism is really important in understanding that one cannot just assume the market by itself will lead to an efficient outcome. Government intervention can nudge the economy to a better equilibrium.

Another issue involves the longstanding literature on the tragedy of the commons. According to the classic thinking behind the tragedy of the commons, the real problem with overutilization of common resources is that we haven't privatized land. But the privatization agenda often leads to high levels of inequality. So while private property is one mechanism for regulation, there are other ways of regulating asset usage. Nobel Laureate Elinor Ostrom pointed out that in some communities, people were able to get together and have social-control mechanisms without private property.

One of the arguments for the enclosure movement in the 15th, 16th, and 17th centuries in Britain and Scotland was that it prevented overgrazing. But in the process of limiting access to pastures, the movement created a lot of wealth at the top and a lot of misery at the bottom. So the enclosure movement had enormous distributional consequences. It was not, I think,

versus quantity regulation in dealing with environmental issues. But we typically ignore that these different mechanisms can have very different distributional effects and that we typically cannot—or in any case do not—offset the distributional effects. From a practical point of view, one of the things we ought to be thinking about very carefully as we discuss the merits of one or another way of protecting the environment is who benefits and who loses.

What I hope has been evident from these brief remarks is that inequality is not just a moral issue—it's an efficiency issue. We pay a high price for inequality in terms of how our economy performs. If young people at the bottom don't get the education that allows them to live up to their potential, we are wasting our most valuable resource. If children of low-income parents are exposed to toxic environmental effects that undermine their potential to be fully productive, we bear a high cost as a society.

Distributional concerns need to move front and center in environmental and resource economics, especially given America's high inequality—both of outcome and of opportunity. Doing so will provide new perspectives on old policy debates and make what we say of greater relevance in the policy discourse. ●

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