FARMWORKERS AS AN ENVIRONMENTAL JUSTICE ISSUE: SIMILARITIES AND DIFFERENCES

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As the introductory speaker to the panel on agriculture and environmental justice, I'll begin my presentation with a disclosure. By virtue of their tireless work, two of my colleagues on this panel are far better versed in the environmental justice issues in agriculture, in particular, farmworker issues. Attorney Luke Cole and Dr. Marion Moses have worked extensively with farmworker communities and will speak more specifically of particular issues and problems. I will address the issue from a slightly different angle, although an important one. I might be described as a generalist in studying environmental inequities. It may surprise some that there is such a thing. The term “environmental justice” itself evokes a flavor of specialization within the broader field of environmental law. But the reality of the situation is that environmental justice issues dot the landscape of not only environmental law, but land use laws, international law, labor law, transportation law, Native American law, constitutional law, and civil rights law, not to mention several non-legal disciplines.

And that, in part, explains the special dilemma for farmworkers. Out of over 300 law review articles on environmental justice, less than a handful specifically address farmworkers as an environmental justice issue. The same is likely true for the over 117 books on environmental justice published thus far with the work of Dr. Moses being the exception. Those of us who write in this area need to do a much better job of

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3 Id.; Marion Moses, et al., Environmental Equity and Pesticide Exposure, 9 TOXICOLOGY AND INDUSTRIAL HEALTH 913-959 (1993); Marion Moses, Farmworkers and Pesticides, in CONFRONTING ENVIRONMENTAL RACISM: VOICES FROM THE GRASSROOTS, 161-178 (Robert D. Bullard, ed. 1993); Marion Moses, Pesticide-Related Health Problems and Farmworkers, 37 AAOHN J. 115-130 (1989); Marion Moses, On Another Subject: Agricultural Workers and Pesticides, EPA J. 44 (July/August 1988);
bringing this issue to the surface in the legal academy, and this panel at this conference is a good start.

In my time here, I will attempt to situate farmworker issues within a broader context of issues in environmental regulation. But I ask the audience to bear in mind that even environmental regulation is itself a subset of a broader universe of environmental justice concerns. In approaching the issue this way, I want to highlight some of the similarities farmworker issues share with other regulatory environmental justice issues. I also want to highlight that there are dramatic differences as well.

Leaving to others the task of describing the dire conditions of the farmworker, I will take two important examples of regulatory mechanisms designed to protect farmworkers and describe some of the commonalities. The two sites of regulatory activity I use are standard setting and enforcement.

Under the Federal Insecticide Fungicide and Rodenticide Act ("FIFRA"), the EPA promulgated worker protection standards in 1992 to become effective in 1995. Those standards contain entry restrictions, provisions that require a waiting period between pesticide application and worker reentry into the fields. As is intuitively obvious, these restrictions promise to be a key point of intervention, and one, frankly, that would necessarily test a regulatory agency’s commitment to environmental protection of a discrete, identifiable and vulnerable subpopulation within the EPA’s jurisdiction, i.e., farmworkers. As is often noted, this group is overwhelmingly comprised of the lowest income Latinos, with very low educational attainment and few health care opportunities. Like other standards, the worker protection standards—in particular the reentry provisions—presented the EPA with a difficult benefit-cost issue. The longer the reentry restriction, the more protective it is for the farmworker but it is also more economically burdensome upon the grower, who must wait longer to harvest in the area of the application and pesticide drift. How the agency worked through this conflict—with a powerful regulated constituency on the one hand, and a vulnerable subpopulation on the other—reveals a common dilemma for environmental justice communities. This is the dilemma of inadequately protective standards, in this case ultimately resulting in farmworkers literally laboring under a standard that does not account for the economic, political, social, cultural and medical reality of their daily lives.


A description of this conflict can be seen in a recent report by the General Accounting Office (GAO), a report that specifically addressed issues relating to the safety of children who may be exposed to pesticides in agricultural settings. EPA staff reported to the GAO interviewers that the EPA had reconsidered the reentry intervals in light of the 1996 Food Quality Protection Act. To its credit, the EPA reevaluated the reentry levels in 1999 and adopted a methodology that purports to consider chronic health effects and in utero effects of farmworkers. But the EPA's general description of its methodology reveals its tendency to use assumptions that the agency is well aware do not reflect the reality of the population it purports to protect. It then patches up this serious methodological flaw by relying, perhaps too heavily, upon the conservativeness of its methodology overall. In this case, for example, the EPA asserted that the reentry levels take into account twelve year old workers, the youngest legal workers in the field. However, the GAO report also discloses, based upon interviews with EPA personnel, that the default body weight used in calculating the reentry intervals is 154 pounds, unless there is potential harm to fetal development. If that is the case, the default weight is 132 pounds, the average weight of women during childbearing years. The median weight of twelve year olds is 100 pounds. The EPA justified the 154/132 pound basis for the reentry period by assuming that although twelve year olds were on average 100 pounds, "their bodies have less surface area and they perform less work, resulting in less physical contact with pesticide-treated plants." Even more unfortunate is the fact, known to the EPA, that farmworker parents often take their preschool children (some of them infants) into the fields with them due to lack of day care services.

This situation is reminiscent of a much more high profile environmental justice issue about EPA standard setting, the controversy over water quality standards that are insufficiently protective because they are based upon an assumption of an average daily fish consumption rate of 6.5 grams per day in the general population. The reality, in contrast, is that some Native Americans and other populations who depend upon subsistence fishing consume much higher amounts of fish, to the upper

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7 Id. at 18.
8 Id. at 16-19; Tool, supra note 2, at 110.
9 GAO Report, supra note 6, at 19.
10 Id. At 17-18; Moses, Foreward, in Silent Invaders, supra note 3.
11 Catherine A. O'Neill, Variable Justice: Environmental Standards, Contaminated Fish, and "Acceptable" Risk to Native Peoples, 19 STANFORD ENVTL. L. J. 3, 17 (2000). Although the twists and turns within these raw numbers raise troubling issues of methodology, a larger point is equally important.
bound range of 280.5 grams per day. After a lawsuit and significant controversy, the EPA is considering revising this assumption.

Two important observations can be drawn from the disjunction between the known reality and the assumption selected for the risk methodology that supports the standard. First, the "conservative" methodology for which the EPA is so frequently criticized is not all that conservative when it comes to environmental justice communities. Second, the standard derived from these assumptions leads to a variable standard that has troubling and objectionable social policy implications.

In the fish consumption context, the EPA justified the effectively lower standard for subsistence fishing populations by noting that the standard was "lower but adequately protective." Professor Catherine O’Neill identifies a particularly thorny issue with the use of this rationale in the environmental justice context. The thrust of her argument is this: when agencies promulgate health based environmental standards, they are aware that certain subpopulations within the general population will be less protected by the standard. For example, an ambient standard for air pollutants may not be as protective for people with respiratory illness or compromised immune systems, but as long as there is a sufficient margin of safety, the lower standard of protectiveness of the vulnerable subpopulation is still within the range of "adequately protective." However, as Professor O’Neill points out, it is one thing when the more susceptible subpopulation is diffuse and unidentifiable within the larger population. Health impaired individuals, for example, may be found in all socioeconomic strata. But when lower standards apply to a discrete and insular populations—particularly groups identified along racial, ethnic, cultural and income lines—then that variability has significantly different policy implications. Those policy implications must be made transparent and debated, and not conveniently eclipsed by the scientific jargon of risk.

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12 Id. at 52.
13 O’Neill, supra note 11, at 54 (citing 95th percentile of the Puget Sound native subpopulation, with a maximum value of 391.4 grams per day).
14 The difference in concentration, itself, might raise the same type of problem Professor O’Neill identifies. It has been noted that asthma is on the rise in low income communities of color. Craig N. Oren, Run Over by American Trucking Part I: Can EPA Revive Its Air Quality Standards? 29 ENVTL. L. REP. 10,653, 10,661 (1999) ([A]sthma is apparently becoming more common—even though air pollutant concentrations have been dropping—and appears to be concentrated among the poor and non-white. According to the Center for Disease Control in Atlanta, the incidence of acute asthma attacks among children has doubled in the past decade, even though highly effective medications have been developed. Asthma is the most common cause of hospitalization among children—five million hospitalizations each year—and deaths among children with asthma rose by 78 percent from 1980 to 1993. The disease in concentrated in heavily populated urban areas. A recent study in New York City shows that hospitalization rates for asthma are far higher in poorer, minority areas than in affluent areas....)
assessment. One part of that debate must be an examination of why the agency is relying upon general conservativeness overall instead of selecting an assumption that better conforms to known conditions.

This leads to the second commonality that the development of the reentry restrictions has with other environmental justice situations. The EPA conceded that the reentry intervals did not take into account children younger than twelve years old. In its response to the GAO report, the EPA noted that to take enforcement action under the worker protection standard, the state or the EPA had to show that the worker is being compensated and is employed. The standard, after all, is designed to protect "workers." It appears then, that the failure to specifically address children younger than twelve years lies in the Agency's concern about the limits of its own legal authority in promulgating the standard. But this concern is undercut by the agency's own observation in the GAO report that its "focus on children [is] further strengthened by specific provisions of the Food Quality Protection Act (FQPA) to consider and apply, where appropriate, additional safety factors for children." Although it is not clear, it is at the very least arguable, that the FQPA gives the EPA sufficient legal authority to consider children under 12 years of age in the development of reentry intervals. At the very least, the EPA should be able to push its legal authority to the limits of clear statutory authority and use 100 pounds—clearly the median weight of twelve year old legal workers—as the default assumption. In this instance, the EPA's own advisory committee expressed a similar sentiment. The chairman of the Children's Health Protection Advisory Committee, a federal advisory committee that was tasked to comment upon the standards, noted the committee's significant concern about the lack of protection for children below the legal working age. I have discussed elsewhere that the EPA and state authorities, in the context of facility permitting, have a similar tendency to be exceedingly conservative in interpreting their legal authority under omnibus clauses (existing in environmental statutes) to mandate additional pollution control measures. This approach stands in stark contrast to the EPA's aggressive and expansive interpretation of its legal authorities to promote market-based pollution control regimes and other regulatory flexibilities at the behest of industry stakeholders.

15 GAO, supra note 6.
16 Id., at 32.
17 Id., at 31.
18 Id., at 30.
19 Id., at 20.
21 Id., at 10557-61.
To be sure, the political reality is that the EPA and its sister state agencies are under enormous political pressure, and despite that have made courageous decisions and progress in addressing environmental injustice. Moreover, what appears to present itself as a general problem of (a) conservative assumptions that turn out not to be conservative; (b) lower standards for susceptible subpopulations that happen to be comprised primarily of the poor and people of color; and (c) the cautious use of legal authority in protecting environmental justice communities—might well be justified upon the closer examination of the merits of any particular agency decision. But that said, undoubtedly the pressure to loosen standards exists and there are enormous disincentives for the EPA to be aggressive in promoting protections for farmworkers in particular, historically one of the most exploited groups of people. This disincentive is even more troubling in the context of a statutory regime that is more heavily oriented towards quantitative risk analysis and benefit cost analysis, analytical frameworks that can hide political decisions within the jargon of science, and use of a benefit cost analysis that may fail to capture real benefits and costs that are difficult to quantify.

A second set of similarities that the farmworker condition has with other environmental justice contexts is the persistent problem of underenforcement. A 1999 report by the Pesticide Action Network North America, and others, illustrates this. Analyzing 3,991 reported cases of occupational poisonings by agricultural pesticides in California for the years 1991-1996, the report disclosed troubling problems. First is that the rough average of 665 cases a year is inaccurate because incidents often go unreported. Farmworkers are afraid of incurring medical bills because few have health insurance and many are unaware of their entitlement to workers' compensation benefits. Moreover, the reporting system addresses only acute effects and does not account for chronic effects. Nearly one third of the reported cases identify no specific crop and contain little or no information on the specific pesticides involved. Of the incidences studies, 44% were drift from pesticide spraying and 33% from field residues. Statewide, fines were issued for about only one-tenth of

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24 Hornstein, supra note 22.
26 Id. at 6.
27 Id.
the violations. For example, in fiscal year 1996-97, a total of 657 fines were issued statewide. The majority of the 5153 actions were “notices of violation” and “letters of warning” which carry no fine and are not recorded in permanent statewide records. The report also noted a startling fact: that no county in California’s Central Valley, the state’s agricultural heartland, issued more than an average of 25 fines per year. The problem of state unenforcement in this context, where about 79% of migrant workers are Latino is reminiscent of a high profile report on the racial disparities in the EPA’s enforcement patterns published by the National Law Journal in 1992. This is even more troubling, however, when considering that in the context of hazardous occupations, the death rate among agricultural workers is an estimated 20.9 per 100,000 workers compared to an average of 3.9 per 100,000 workers in all industries in the year 1996, clearly making agriculture one of the most hazardous occupations in the United States.

Adding to the grim picture of underprotective standards and insufficient enforcement, is a very different regulatory context of pesticide regulation, when compared to other forms of environmental regulation. This leads to my discussion of the differences between farmworker protections under the law and other environmental justice issues in environmental regulation.

It has often been noted in the legal literature that FIFRA is the one major environmental statute without a private citizen suit provision. Although it is widely noted, it is often noted in passing and without much elaboration. The full implications of that legislative omission have seldom been explored. In the context of air pollution, water pollution and hazardous waste regulation, private citizen suits have been the engines that drive the regulatory agenda forward, as conventional environmental groups sued the EPA to meet statutory deadlines and routinely sue polluters directly to enforce requirements of the environmental statutes. The “safety net” of private enforcement to back up and prod governmental enforcement is a key structural feature of modern environmental regulation. It is this critical feature that is missing in federal pesticide regulation. Dr. Moses, who has for years documented and written about the human tragedy caused in part by that omission, noted that in addition to the acute poisonings of large numbers of workers in the field that one single violation can cause, there are other equally troubling aspects to

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28 Id. at 8.
29 Id. at 10.
31 Unfortunately, I must add myself to that list. In 1995, I noted that “[a]lthough pesticide exposure was identified as an area of grave concern, FIFRA does not contain a citizen suit provision.” Id. at 42 n.145.
this health problem. Billions of pounds of pesticides, known less euphemistically as economic poisons, are deliberately added to the global environment annually.\textsuperscript{32} The toxicity of pesticides increases as new formulas must be developed for pests that become resistant to older pesticides. Yet, we simply do not know what health effects might be caused by low-level chronic exposures, nor do we understand potential additive and synergistic effects of multiple exposures. Meanwhile, workers and their children continue to work in the fields for hours each day, often without protective clothing or safety gear. The chronic and acute exposures to these poisons that farmworkers must absorb over the course of their lives are likely to leave them much less protected than the more widely dispersed releases caused by violations of other environmental laws.

In addition to the lack of a private enforcement safety net, the entire regulatory structure of FIFRA might set it apart from other more conventional pollution control statutes. In a probing review of this structure—one with cumbersome procedures that is heavily oriented towards risk assessment and cost-benefit—Professor Donald Hornstein concludes that such a structure misses the more easily obtained risk reduction strategies that other environmental laws have long since harvested. He notes that

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perhaps the larger danger of risk-reduction methodologies is that they can become the tail that wags the dog, forcing EPA to define its mission away from serious analysis of environmentally sustainable policies. So demanding has risk analysis been in pesticide regulation that it has distracted EPA from any serious attention to the underlying reasons why pesticides might be overused in the first place or to developing policies (or proposing legislation) that might encourage low-input agriculture. \ldots This, although FIFRA allows EPA to conduct a risk-benefit analysis of pesticides in which benefits might be measured against alternative non-chemical pest control options, EPA is wary of assuming the informational burdens of such an inquiry; accordingly, its benefits assessments ‘do not generally contain detailed economic analyses of alternative non-chemical or IPM [integrated pest management] strategies. \ldots’\textsuperscript{33}
\end{quote}

Thus, unlike conventional pollution control regulation, particularly of point-sources, where it is often noted that the “low-hanging fruit has been picked” leaving the more intractable environmental problems to solve, in the area of agriculture there may be abundant opportunities to

\textsuperscript{32} Moses, \textit{Foreward}, in \textit{Silent Invaders}, \textit{supra} note 3.

\textsuperscript{33} Hornstein, FIFRA, \textit{supra} note 22, at 443-44 (citing BOARD ON AGRIC., NATIONAL RESEARCH COUNCIL, ACADEMY OF SCIENCES, ALTERNATIVE AGRICULTURE, at 218) (additional citations omitted).
do away with much of our pesticide use altogether. In this instance, the "low hanging fruit" ready for regulatory harvesting appears to be rotting on the vine. It is the farmworker who is tragically paying the price for our collective failure to do so.