



*Natural
Resources
Conservation
Service*

*Science and
Technology
Consortium*

*Social Sciences
Institute*



Draft Draft Draft Environmental Justice: Perceptions of Issues, Awareness, and Assistance

*Social Sciences Institute
Technical Report
Release 1.1 (July 2000)*

The Social Sciences Institute is producing the following materials and documents for use by NRCS employees, our partners, and the public: Resource Books, Technical Notes, Technical Reports, Technical Briefs, and Software Releases. Each series of documents will be consecutively numbered with the date and release number on it. For example,

Technical Note 1.1 (May, 1996) indicates the 1st technical note of this series & the 1st release of that document

Resource Book 3.2 (March, 1997) indicates the 3rd resource book and 2nd release of that document

Technical Report 2.4 (December, 1996) indicates the 2nd technical report and 4th release of that document

Software Program 5.1 (December 1999) indicates the 5th software program and the 1st release

We are providing release numbers for these documents so that when more current information becomes available the material can be updated and released as a later version of the publication. More current information may be provided to us by any NRCS employee, by our partners or customers, or any member of the public.

If you have questions or suggestions on this current document or any other topic, please contact Frank Clearfield, Director, Social Sciences Institute at (336) 334-7058, or leave a voice mail message by dialing (800) 384-USDA; box number 747-4440.

The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, sex, religion, age, disability, political beliefs, sexual orientation, or marital or family status. (Not all prohibited bases apply to all programs.) Persons with disabilities who require alternative means for communication of program information (Braille, large print, audiotape, etc.) should contact USDA's TARGET Center at (202) 720-2600 (voice and TDD.)

To file a complaint of discrimination, write USDA, Director, Office of Civil Rights, Room 326W, Whitten Building, 14th and Independence Avenue, SW, Washington, DC 20250-9410 or call (202) 720-5964 (voice and TDD.) USDA is an equal opportunity provider and employer.

Table of Contents

Executive Summary.....	i
Introduction.....	1
Background.....	2
Review.....	3
Hypotheses.....	6
General Findings.....	7
Awareness.....	10
Assistance.....	10
Specific Findings.....	11
Summary.....	13
Recommendations.....	14
References.....	17
Appendix 1 (Survey)	
Appendix 2 (Map)	
Appendix 3 (Valid Percentages)	

Draft Draft Draft Environmental Justice: Perceptions of Issues, Awareness, and Assistance

Introduction

In 1994, President Clinton issued Executive Order 12898 entitled "Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations." This order mandates the Natural Resources Conservation Service (NRCS) along with other Federal agencies to develop specific agency-wide strategies for implementing environmental justice initiatives. The basis of environmental justice is to provide all populations, including minority and low-income, with the opportunity to voice their opinions prior to the implementation of programs and activities that may affect the natural environment and their health.

The U.S. Department of Agriculture's (USDA) strategy on environmental justice is to incorporate equal access and treatment into departmental programs, policies, planning, public participation processes, enforcement and rulemaking. USDA is committed to pursuing these principles as they relate to health, research, training, data collection, analysis, and interagency coordination (USDA, 1995). The goal of the USDA Environmental Justice Strategy is to make a positive difference in the lives of people, to improve the underlying conditions which put people at risk, and to assist children, youth and families across the nation in striving for a better life.

NRCS is charged with helping private landowners protect their natural resources, which include soil, water, air, plants, and animals. In keeping with that mission, they funded "Environmental Justice: Perceptions of Issues, Awareness, and Assistance" under the leadership of the Social Sciences Institute (SSI). Since environmental justice is a social and economic issue as well as an

environmental one, SSI was in a unique position to gain a better understanding of the issue as it relates to agriculture and underserved populations.

The project focused on the Black Belt region to uncover whether environmental injustices are occurring and, if so, how the NRCS workforce can work more effectively with individuals as well as communities that are experiencing environmental injustices. The Black Belt, a concept used at the turn of the century by Booker T. Washington and W.E.B. DuBois, lies in a large crescent of southern geography representing 623 counties in 11 states (Wimberly 1996). This region was reportedly so named for its black soil and the high percentage of African Americans who reside in this area.

The Southern Food Systems Education Consortium (SOFSEC) partnered with NRCS to help develop an Environmental Justice survey (see Appendix 1). SOFSEC is comprised of six 1890 land-grant institutions: Alabama A&M, Alcorn State, Fort Valley State, North Carolina A&T State, Southern, and Tuskegee universities that are located across the Black Belt. Survey questions covered four areas: environmental issues, awareness, assistance and demographics. SOFSEC then administered the instrument by conducting 743 face-to-face interviews from 1997-1999.

Background

According to "Poverty, Rurality, And Race In Regional And National Perspective," the Black Belt has 40 percent of the African-American population and 47 percent of their poverty. And, the Black Belt has 79 percent of nonmetropolitan African-Americans and 84 percent of their corresponding poverty (Wimberly, 1995). Corresponding statistics indicate populations in this area have overall low-income levels, low levels of education, poor health, high infant mortality, and low employment. Few African-Americans operate farms but they live in nonmetropolitan counties and agriculture is still an important component of these counties.

The plight of Small and Limited Resource Farmers/Ranchers and producers is an area that exemplifies the need for significant actions to protect, support and promote small farmer viability. The future of rural America in general is significant but an often neglected segment of our society. USDA is working toward assessing and addressing the needs of rural communities (USDA, 1995).

Small and Limited Resource Farmers/Ranchers historically do not participate in resource conservation which causes these groups to not only be affected by environmental problems but also be partly to blame for causing them. Understanding how major environmental agriculture problems such as erosion, sedimentation, nonpoint source pollution, watershed degradation, increased flooding, air pollution and the destruction of plant and wildlife habitat can affect these farmers as well as non farm minorities and low income populations is crucial to NRCS' outreach and environmental justice initiatives. Also, understanding how to accelerate their participation in local conservation efforts is an important priority.

In previous NRCS studies it was found that guidelines developed for environmental practices need to consider differences in demographics, topography, farm type, and labor available (Ross, 1994). NRCS also learned that outreach efforts and one-on-one technical assistance are important and that more information is needed on low income and minority groups' resource needs, their ability to implement recommended practices and their attitudes toward participation in Federal and state programs. These studies suggest that there is a need for more Federal and state programs to provide technical and financial assistance along with expanded human resource and rural development programs.

Review

The most basic "Quality of Life" issue confronting this nation's poor and minorities is the right to breathe clean air, drink fresh water and live/work on uncontaminated soils. Environmental justice

began as a grassroots movement organized to bring the environmental inequities of the poor and minority communities into the light of public scrutiny by means and methods traditionally used to address other civil rights' issues (Nance, 1995).

Environmental injustice occurs for several reasons. Often there is a lack of information, money, and access to the decision-making process. Environmental injustice predominately happens to people of color, women and their children, and those lower on the economic scale who live and work in areas where environmental risks are high (Bullard, 1994).

The environmental justice movement began in Warren County, North Carolina when it was selected as the site for a PCB (polychlorinated biphenyl) landfill in 1982. This decision sparked widespread protests and marches resulting in more than 500 arrests including then D.C. Delegate and chairman of the Congressional Black Caucus Walter Fauntroy, Rev. Benjamin Chavis, Jr. of the Commission for Racial Justice, and Rev. Joseph Lowery of the Southern Christian Leadership Conference (Bullard, 1995).

As grassroots groups have grown, they have become the core of the multi-issue, multi-racial, and multi-regional environmental justice movement. These groups have begun to include issues of civil and human rights, land rights, cultural survival, racial and social justice, and sustainable development. Some of the impetus for getting environmental justice on the nation's agenda has come from an alliance of grassroots activists, civil rights leaders, and academicians (Bullard, 1995).

Minority and poor citizens who are tired of being subjected to the dangers of environmental hazards in their communities may confront the power structures through organized protest, legal actions, marches, civil disobedience, etc. Some minority groups use the power of the ballot and economic pressures to make their stands. They have strength in numbers and activist skills to form effective coalitions with environmental organizations to promote effective change (Kuzmiak, 1991).

The Halifax Environmental Loss Prevention (HELP) in North Carolina fought seven hog farm corporations. In Halifax County, 46 percent of the population have not completed high school, 25 percent live below the poverty level and 50 percent are African-American; however the farms were to be located in areas that were 90 to 98 percent African-American. HELP was concerned about potential: groundwater contamination to shallow wells, surface water quality from excess nitrogen, effects on marine life caused by nitrogen and phosphorous, and air quality problems. HELP was successful in convincing the county commissions to establish an Ad Hoc committee led by the Health Department. The committee passed a livestock ordinance that caused three of the seven farms (four built farms before the ordinance was passed) to abort their plans and deterred another 50 corporations with interests in moving to the county (Statter, 1997).

The Defense Distribution Depot of Memphis, Tennessee has been a site of toxic contamination for almost 50 years. Tests show soil and groundwater beneath the depot to be tainted with chemicals that include potentially cancer-causing agents. A community organization formed a group called the Concerned Citizens Committee (CCC) because they believe the contamination has spread into the community posing health threats to the residents. CCC has not been successful in any lawsuits. The Depot has completed on-site cleanups that have included the installation of wells to intercept groundwater contamination and removed underground storage tanks that contained diesel and gasoline (Rebitzke, 1997).

The two examples above demonstrate how groups are beginning to take action against industries and governmental agencies that target their neighborhoods for municipal garbage dumps, hazardous waste disposal and polluting industries. Unfortunately, environmental justice has not been placed high on the list of mainstream environmentalists and it has not received much attention from civil rights advocates (Bullard, 1994). Mainstream environmental organizations tend to be more concerned with wilderness and wildlife preservation, resource conservation, and population control than with hazards affecting humans, especially those plaguing minority communities. Blacks and other people of color tend to be more concerned about the safety and

health effects associated with nuclear power, toxic, and nuclear wastes, whereas whites tend to be more concerned about ozone depletion and global warming (Jones, 1998).

As local movements have grown and some established national organizations have joined the cause, some new alliances crossing racial and class boundaries have begun to form (Suro, 1993). Legal-aid groups that once concentrated largely on the economic rights of minorities and poor people have begun to pay attention to environmental issues. The result has been an explosion of lawyers now motivated to battle for environmental justice in minority and poor areas.

African-Americans from the southern United States met in Geneva in April 1999 to appear before the United Nations' Commission on Human Rights to seek international support in their struggle against environmental racism. The group, which represented community and environmental organizations, charged the United States with involvement in human rights abuses (Knight, 1999). Most delegates are from communities that are located along the Mississippi River in Louisiana known infamously as "Cancer Alley." This industrial corridor, stretching from North Baton Rouge south to New Orleans along the river, houses more than 140 oil refineries, chemical plants, manufacture fertilizers, gasolines, paints, and plastics. More than 2 billion pounds of toxic chemicals were emitted from these plants from 1987 to 1989. Some of the residents live as close as one mile from the plants. NRCS can play a critical role in assessing and addressing the environmental impacts on water, air, and soil quality.

Hypotheses

The research studies cited here selectively provide examples of community activism that evolve over years if not decades and are advanced by lawyers and activists whose organized efforts are joined by local populations. Several recently popular movies based on true stories also hammer at this theme – *A Civil Action* and *Erin Brokovich*. These themes cause society to ponder questions as to whether the actions of the few overstate the apathy of the majority or if the successes of

those who stand against established polluters are being under or over dramatized. It may be easy to recognize pollution when we have a local tannery or electric company spewing pollution into the local creeks. But, in natural resource conservation, we know that many environmental problems are incremental and are caused by nonpoint source pollution, so there is no climax, no one to sue, and no one to whisk off to jail.

In contrast to these depictions of knowing and active populations, stereotypes about low income and minority populations in the Black Belt region are that they are trapped in cycles of low education, sickness, and grinding poverty. These conditions are said to cause them to focus on finding and keeping jobs while ignoring point and nonpoint environmental issues. They are also thought to be unaware of national and state environmental problems, fail to recognize environmental injustices that occur in their own backyards, are powerless to actively rally against local polluters and do not use governmental and non-governmental institutions for assistance.

This study examines the following hypotheses:

1. Minority populations in the Black Belt region are less likely to identify environmental issues, consequences, or causes than non-minority populations.
2. Low income populations in the Black Belt region tend to be unaware of NRCS services that can address environmental problems and concerns.
3. Low income communities in the Black Belt region are more likely to rate the quality of service from government agencies lower than higher income communities.

General Findings

SOFSEC interviewers conducted face-to-face interviews with 743 randomly selected respondents in 11 Black Belt states (VA, NC, SC, GA, FL, AL, TN, AR, MS, LA, and east TX). Black Belt counties were defined as those counties having the following: 25 percent or more minority

population, general population under 100,000, city population under 50,000, 25 percent of land in agricultural use, and 25 percent or more of the population living below the poverty level. Each university was to conduct 200 interviews for a total of 1200. The response rate was 62 percent.

The purpose of the project was to gather information about existing environmental issues, as well as to determine: respondents' overall perception of environmental issues and problems, their perception of environmental justice, whether respondents perceived that environmental injustices are occurring, and the level of service being provided by various agencies.

Of the 743 respondents, 54 percent were male and 46 percent were female. Half the respondents listed themselves as being between the ages of 30-49. The ethnic background revealed that 51 percent were African-American and 47 percent were Caucasian. The majority of the respondents, 63 percent, classified themselves as being married while 35 percent said they are single.

The majority of the respondents listed their highest level of education as high school graduates (28 percent). The next highest response was having some college education (24 percent) followed by college graduates (14 percent). In terms of household income, 30 percent listed themselves as having incomes under \$20,000, 22 percent were from \$20,000 to 29,999, and 20 percent were between \$30,000 to \$39,999. The respondents live mostly in towns (40 percent) followed by a rural areas (27 percent), then the city (16 percent).

A Likert scale was used in the survey with 1 being extremely serious, 2 being not serious, 3 being unsure, 4 being serious, and 5 being extremely serious.

By calculating the mean scores for a series of questions, respondents ranked issues in the following order: water pollution (3.3), groundwater contamination (3.2), and air pollution (2.7). The majority of respondents (73 percent) felt their health was being negatively effected by the environment followed by property (54 percent), businesses (47 percent), and animal health (44 percent).

Respondents identified water pollution (65 percent) as their most important natural resource problem, followed by air pollution (49 percent), and groundwater contamination (39 percent). The perceived environmental causes of the issues were said to be industry (39 percent) followed by chemical runoff (38 percent), farm (30 percent), and flooding (26 percent).

Respondents were asked to compare their community's general environmental quality using a scale of poor, below average, average, above average, and excellent. Nearly sixty percent chose average. When asked if they have experienced problems with their drinking water, the respondents identified: unpleasant taste (35 percent), discoloration (30 percent), and chemicals in water (16 percent). Respondents also associated several specific health problems related to the environment: stomach problems (19 percent), breathing problems (15 percent), cancer (10 percent), and unexplained illnesses (10 percent).

Awareness

More than 40 percent of the respondents were unfamiliar with environmental regulations, the agencies that deal with environmental issues, and whether environmental laws are enforced. The respondents were generally unfamiliar with NRCS services according to the following scale: 1 being very unfamiliar, 2 being unfamiliar, 3 being neutral, 4 being familiar and 5 being very familiar. When asked if they were familiar with NRCS services, the highest mean response: was soil surveys (2.3), followed by drainage systems (2.2), erosion control (2.1), and irrigation systems (2.0).

When asked if environmental justice is an issue in the community, 22 percent said it is definitely an issue, 33 percent said it is an issue, 22 percent said it was a small issue, and 23 percent said it was not an issue.

Assistance

Respondents were asked to rate various agencies and institutions on environmental service with 1 being poor, 2 being fair, 3 being neutral, 4 being good, and 5 being excellent. No organization received a rating of 4. The ratings were as follows: the Department of Agriculture (3.2), churches (3.0), colleges and universities (3.0), NRCS (2.8), and the Environmental Protection Agency (2.7).

Respondents listed NRCS barriers for providing assistance as low agency visibility, strict program guidelines, and discrimination. The most beneficial NRCS services listed were water monitoring, marketing of agricultural products, and financial cost-share. Respondents listed their four preferences for being contacted as television, newsletter, radio, and printed materials. The lowest preferences were compact disk, conservation fair, and on-farm demonstration.

Specific Findings

The most significant differences in responses were between respondents with incomes under \$30,000 and those who earn \$30,000 and above. Higher income respondents said the general environmental quality was average, while lower income respondents reported it as below average.

In terms of service provided by agencies, higher income respondents rated agencies more favorably than lower income respondents. The most beneficial NRCS service to higher income respondents was water monitoring followed by soil survey. The most beneficial NRCS service to lower income respondents was also water monitoring followed by marketing of agricultural products.

	\$30,000 and above Means	Under \$30,000 Means	Significance (2 tailed) * not significant
<i>Environmental Quality</i>	3.1	2.8	.000
<i>Service provided by</i>			
<i>EPA</i>	2.8	2.5	*
<i>USDA</i>	3.3	3.1	*
<i>NRCS</i>	3.0	2.5	.000
<i>Districts</i>	2.9	2.6	.000
<i>Colleges</i>	3.1	2.7	.000
<i>Churches</i>	3.0	3.0	*

<i>NRCS services</i>			
<i>Soil survey</i>	2.9	2.4	.000
<i>Water monitoring</i>	3.1	2.9	*
<i>Marketing ag. products</i>	2.6	2.8	*

Caucasian respondents rated the overall community environmental quality significantly higher than African-American respondents did. Caucasians rated environmental justice as less of an issue than did African-Americans. Overall, however, both groups indicated that environmental justice is a pressing issue in their communities. The two groups split on the issue of water systems. African-Americans rated drinking water as more of an issue than Caucasians; however, Caucasians rated stream water and lakes as more of an issue than African-Americans.

Caucasians rated discrimination followed by agency visibility as NRCS barriers. African-Americans rated NRCS barriers as agency visibility followed by program guidelines. Both groups rated NRCS as having more barriers than benefits when it comes to providing assistance to customers.

	African-Americans Means	Caucasians Means	Significance (2 tailed) * not significant
<i>Environmental Quality</i>	2.9	3.1	.000
<i>Environmental Justice Issue</i>	2.3	2.6	.000
<i>Water systems</i>			
<i>Drinking water</i>	2.9	2.6	*
<i>Stream water</i>	2.7	3.0	*
<i>Lake</i>	2.4	2.8	.005
<i>Ocean</i>	1.9	2.1	*
<i>Well</i>	2.5	2.7	*
<i>Underground water</i>	2.8	2.8	*
<i>NRCS barriers</i>			
<i>Agency information</i>	2.8	3.0	.004
<i>Agency visibility</i>	2.6	2.8	*
<i>Program accessibility</i>	2.7	2.9	*
<i>Discrimination</i>	2.7	2.8	*
<i>Program guidelines</i>	2.6	2.9	*

The difference in responses between men and women were not great, however, women rated the environmental quality less favorably than men. Women rated air pollution as more of an issue than men did, while men rated soil erosion as a more serious issue than women did. Women also rated the services agencies provided lower than men, and women rated NRCS services as less beneficial than men did.

	Men Means	Women Means	Significance (2 tailed) * not significant
<i>Environmental Quality</i>	3.0	2.9	*
<i>Air pollution</i>	2.5	2.9	.004
<i>Soil Erosion</i>	2.7	2.5	*
<i>Service provided by</i>			
<i>EPA</i>	2.8	2.6	*
<i>USDA</i>	3.2	3.1	*
<i>NRCS</i>	3.0	2.6	.002
<i>Districts</i>	2.8	2.7	*
<i>Colleges</i>	3.1	2.9	*
<i>Churches</i>	2.9	3.1	*
<i>NRCS services</i>			
<i>Soil survey</i>	2.7	2.5	*
<i>Water monitoring</i>	3.0	2.9	*
<i>Marketing ag. products</i>	2.8	2.7	*

Summary

Florence Robinson (1994) asserts that people who suffer environmental injustices are most often people of color and the poor. The data would support this theory since respondents earning less than \$30,000 as well as African-Americans rated their communities' environmental quality significantly less than the more affluent and Caucasian respondents did. Further analysis shows that more than half the African-Americans earned less than \$30,000.

The study's hypotheses that:

1. Minority populations in the Black Belt region are less likely to identify environmental issues, consequences, or causes than non-minority populations is rejected based on repeated minority respondents' responses that demonstrated a knowledge of environmental issues such as water, air, health, and soil. They also were aware of environmental potential pollution sources such as chemical runoff, flooding, and industry.
2. Low income populations in the Black Belt region tend to be unaware of NRCS services that can address environmental problems and concerns is accepted because most low income respondents said on a consistent basis that they were unfamiliar with NRCS services.
3. Low income communities in the Black Belt region are more likely to rate the quality of service from government agencies lower than higher income communities is accepted because low income respondents mean scores were lower than higher income respondents' on all of the three choices.

It appears that the Black Belt residents in this survey are most concerned about water quality problems as well as health problems caused by adverse environmental impacts. NRCS is in a position to address many of the environmental concerns that surfaced during this initiative through outreach, technical assistance, locally-led conservation and watershed planning.

Recommendations

1. Based on the continual emergence of water related issues, water quality programs should be targeted to these communities as it relates to water pollution, groundwater contamination, and flooding.
2. Further study is needed to explore environmental impact on human health, which proved to be a primary concern for the respondents. Specific studies should include the environmental impacts on stomach and respiratory problems, cancer, and unexplained illnesses.

3. Assistance is needed to address chemical runoff and flooding in Black Belt communities.
4. Drinking water is a problem in these communities. Assistance should address unpleasant taste, discoloration, and chemicals in water.
5. Agencies and institutions should market their environmental services to these communities so they will know whom to contact for assistance.
6. Customer service needs to be improved to residents of these communities because their responses indicate that the level of consumer service is not good.
7. NRCS needs to address the respondents' perception of program discrimination, difficult program guidelines, and lack of agency visibility.
8. NRCS should communicate to respondents through the mediums they prefer which are television, newsletter, and radio. Realistically television is too expensive so developing community newsletters on the environment could frame the issues, raise awareness and offer available assistance. To maximize effectiveness, there should be community input to the newsletter.
9. NRCS outreach efforts should target women and African-Americans as these groups rated the agency low in terms of visibility and access to programs.

10. Where possible, the agency should provide soil survey and water monitoring services since the residents felt they were beneficial. Laminate a soil survey book and provide it to community centers in low income and African-American communities.

REFERENCES

- Bullard, Robert. (1994) Dumping In Dixie: Race, Class and Environmental Quality, Westview Press, Inc.; Boulder, CO.
- Bullard, Robert. (1995) "People of Color Environmental Groups 1994-1995 Directory." Environmental Justice Center, Clark Atlanta University.
- Fried, John J., (1993) "Black Communities fight Environmental Racism." The Oregonian, Monday, August 16, 1993.
- Jones, Robert Emmet, (1998) "Black Concern for the Environment: Myth versus Reality." Society & Natural Resources, Apr/May 98, Vol. 11 Issue 3, p. 209.
- Knight, Danielle. (1999) "The Black Environmental Justice Groups Heads to U.N. Mission," New York Amsterdam News, 4/15/99, Vol. 90 Issue 16, p. 2.
- Kuzmiak, D.T., (1991) "The American Environmental Movement." Geographical Journal, 157 (3): 265-278.
- Nance, Sharon, (1995) "Environmental Justice: Present and Future." Influence of Social Trends on Agricultural Symposium.
- Robinson, Florence. (1994) "Environmental Racism, Environmental Injustice, and Environmental Equity," Louisiana Legislative Briefing Book, p. 21.
- Rebitzake, Jeffrey. (1997) "Environmental Justice Case Study: Toxic Contamination at the DDMT," University of Michigan Environmental Justice Center.
- Statter, Harry. (1997) "Environmental Justice Case Study: Hog Farming in North Carolina," University of Michigan Environmental Justice Center.
- Suro, Roberto. (1993) "Pollution-Weary Minorities Try Civil Rights Track," The New York Times, Monday, January 11, 1993, section A, Page 1, Column 2.
- U.S. Department of Agriculture. (1995) Environmental Justice Implementation Strategy, Washington, DC.
- U.S. Department of Agriculture. (1995) Small or Limited Resource Farmer/Rancher Initiative Departmental Action Plan Framework, Washington, DC.
- Wimberly, Ronald and Libby Morris. (1995) "Poverty, Rurality, and Race in Regional and

National Perspective, Local Communities And Sustainable Development.” Edited by Robert Zabawa, Ntam Baharanyi, and Walter Hill.

Wimberly, Ronald and Libby Morris. (1996) “The Reference Book on Regional Well-Being: U.S. Regions, The Black Belt, Appalachia,” Mississippi State, Mississippi, p. 1.

Appendix