

Residence and Farm Experience Influence Perception of Agriculture

A Survey of North Central Residents

Cheryl J. **Wachenheim**
Richard **Rathge**

Although competitive market forces mainly determine the mix of productive activities in a given region, individuals, interest groups, government agencies, and others also influence the type, structure, and practices of local industry. Legislation governing the conduct of industry participants is supposed to be designed to reflect the best interests of all constituents. Therefore, policymakers must know what the preferences and perceptions are.

In developing agricultural policy, policymakers have traditionally relied on input from farmers and their interest groups. Accordingly, the literature has focused on the farm policy goals of those directly involved in production agriculture. However, as farmers have become

Inhabitants of the North Central region have a favorable view of agriculture, regarding farmers as beneficial to the local economy and good environmental stewards. Survey respondents felt that existing environmental regulations are appropriate; that consolidation of agriculture will hurt the environment, society, and local economies; and that government should do more to help local farmers stay in business. Rural nonfarm residents, versus those residing on a farm or in a town or city, were more convinced of farmers' positive impact on the local economy, but were less concerned about the effect of farm consolidation.

fewer and rural residents are increasingly removed from the daily activities of production agriculture, nonfarm residents have become more prominent in farm and environmental policy. Their knowledge, perceptions, and policy goals are increasingly solicited, but are somewhat unknown.

Most of the existing literature considers individual States, narrowly defined issues (e.g., the environmental impact of production agriculture), or a narrow set of individuals (e.g., high school students). In one exception, Roper Starch Worldwide, Inc., compared perceptions of consumers with those of farmers and found a surprising lack of knowledge among consumers regarding modern agricultural production practices. While consumer perceptions often paralleled farmers', the level of concern about the impact of farming was often much higher among consumers.

It is no longer possible to ignore mounting evidence that rural nonfarm residents care about the impact of agriculture on their econ-

omy and the environment. Their input in the agricultural policy process is likely to continue to increase. Furthermore, as rural communities expand through residential development, the resulting mix of rural nonfarm residents may be both more aware of, and less familiar with, production agriculture.

This study solicited perceptions about agriculture and identified how those perceptions differ based on the occupation/situation of North Central residents. The North Central region was selected because it contains the highest share of farm-dependent counties, those from which more than 20 percent of proprietor earnings come from agriculture.

Overall Perceptions of Agriculture Were Positive

The majority of respondents strongly agreed that farmers have a positive impact on their local economy (71 percent); noise, odor, and other environmental issues associated with farming in their area are minimal (62 percent); the loss of

Cheryl J. Wachenheim is an assistant professor in the Department of Agribusiness and Applied Economics and Richard Rathge is a professor in the Departments of Agribusiness and Applied Economics and Sociology, North Dakota State University, Fargo.

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Table 1

Responses to statements regarding farming*Overall, respondents had a favorable view of farmers*

Statement	Mean	Strongly Disagreed	Strongly Agreed
		<i>Percentage of valid responses</i>	
Farmers have a positive impact on the local economy in my area	4.46	3.8	70.9
Most of the agricultural supplies (e.g., seeds, fertilizers, feed) used by farmers in my area are purchased locally	4.02	5.2	47.4
Loss of farmers in the region will greatly hurt our local economy	4.13	9.6	61.8
The government should do more to help farmers in this area stay in business	3.99	8.6	51.5
Farmers in this region are creating an environmental concern that should be addressed	2.69	32.0	19.7
The noise, odor, and other environmental issues associated with farming in this area are minimal	4.29	5.6	62.4
In farming areas, nonfarm residents need to become accustomed to the noise, odor, and other concerns associated with farming	3.86	7.1	41.2
Environmental protection laws regulating farming practices are too strict	3.04	14.7	18.6
As residential development of cities/towns moves closer to farming areas, more restrictive ordinances regarding noise, odor, and other environmental concerns should be allowed	2.57	31.2	12.3
There should be no restrictions on the size of livestock operations even though they may be in close proximity to residential development of cities/towns or public recreational areas	2.70	24.7	15.5
The replacement of smaller family farms in this area by large-scale farms using hired labor will have an undesirable economic and social consequence	3.87	6.5	44.9
Poor economic conditions will likely lead to the replacement of family farms in this area by large farms run by hired labor	3.84	8.3	43.2
More environmental concerns are created by large-scale farms using hired labor than by small family farms	4.06	4.9	49.1

Note: Means are based on a Likert scale with 1 being "strongly disagree" and 5 being "strongly agree." The response of "Do not know" was excluded from the mean.

Source: C. J. Wachenheim and R. Rathge, *A Survey of Residents of the North Central Region*, 2000.

farmers in the region will greatly hurt the local economy (62 percent); and government should do more to help farmers in their area stay in business (52 percent) (table 1). Forty-seven percent

strongly agreed most agricultural supplies used by farmers are purchased locally.

Respondents tended to be negative about evolving farm structure. Nearly half strongly agreed that

large-scale farms create more environmental concerns (49 percent) and that their replacement of smaller farms will have undesirable economic and social consequences (45 percent).

Perceptions Differ Depending on Location and Association with Livestock

Social and physical distance from production agriculture can influence perception. Differences in perception can result, for example, from unfamiliarity with farm practices (Thelen). In the current study, we investigated whether the experience or residence of respondents influenced their perceptions and found they did. How agriculture is perceived differed among farm, rural nonfarm, and city or town residents; between those with a livestock association and others; and between those residing in a county that is rural versus nonrural, farm-dependent versus nonfarm-dependent, or growing versus declining in population. We discuss differences in perceptions between these groups in three areas: the environmental impact of production agriculture and its appropriate regulation, perceptions about the changing structure of production agriculture, and the economic impact of production agriculture on local communities.

Environmental Impact of Greatest Concern to Those Further Removed from Farming

Overall, respondents indicated that farmers are good environmental stewards and that existing environmental regulations are appropriate. Sixty-two percent of respondents minimized the significance of environmental issues associated with farming; 41 percent strongly agreed that, in farming areas, nonfarm residents need to become accustomed to noise, odor, and other concerns associated with farming (table 1). More respondents strongly disagreed (32 and 31 percent, respectively) than strongly agreed (20 and 12 percent) that

farmers are creating an environmental concern and that more restrictive ordinances should be imposed to address environmental concerns as residential development moves closer to farming. Although this supports the perception of farmers as good environmental stewards among residents of the North Central region, differences in perception were at times substantial.

Perceptions of farmers' environmental stewardship differed by locale (table 2). Farm residents were less apt than city residents to think farmers were creating an environmental concern, more apt to minimize environmental issues associated with farming, and more inclined to find laws regulating farming practices too strict (table 2). Farmers were more apt (mean level of agreement was higher) than other rural and city residents to feel that nonfarm residents need to become accustomed to concerns related to farming and less apt to favor more restrictive ordinances as residential development moves closer to farming. Finally, farm residents were more likely to favor no restrictions on the size of livestock operations, regardless of locale.

Given the distinct perceptions of individuals grouped by residence, it was surprising that perceptions about agriculture and the environment did not differ between residents of counties with differing rural classifications (table 3). If anything, those in nonrural counties (with an urban population of more than 20,000 or more than 2,500 and adjacent to a metropolitan area) are more supportive of agriculture's role in the environment, though it is not clear why.

There were few differences in perception between residents of farm-dependent versus nonfarm-

dependent counties (table 4). In general, those in farm-dependent counties more strongly agreed that there were environmental concerns associated with farming and less strongly agreed that there should be additional restrictions under residential development, although the numeric differences were not statistically significant. Those in farm-dependent counties less strongly agreed that there should be no restrictions on the size of livestock operations. The difference was significant.

Residents living in counties that had gained population over the past two decades more strongly agreed than those in counties losing population that farmers in the region were creating an environmental concern that should be addressed (table 5). And, while population-gain counties more strongly favored restrictive ordinances as residential areas develop, they also more strongly opposed restrictions on the size of livestock operations regardless of proximity.

Livestock farmers (those receiving some portion of their net income from or having worked with livestock within the past 5 years) more strongly disagreed that environmental issues associated with farming exist, that additional environmental legislation is necessary, and that more strict ordinances should be allowed as rural areas develop (table 6). They were more likely to agree that environmental issues associated with farming are minimal, that nonfarm residents need to become accustomed to farming practices, that environmental protection laws regulating farming practices are too strict, and that there should be no limit on the size of livestock operations regardless of their proximity to urban development.

Table 2

Perception comparison by residence

Farm residents expressed greater concern about the impact of farm consolidation and perceived there to be less of an environmental concern associated with agriculture

Statement	Onfarm population	Rural area, not farm	City or town
	<i>Mean response</i>		
Farmers have a positive impact on the local economy in my area	4.40	4.53	4.44
Most of the agricultural supplies (e.g., seeds, fertilizers, feed) used by farmers in my area are purchased locally	4.06	4.16	3.88
Loss of farmers in this region will greatly hurt our local economy	4.33	4.02	4.09
The government should do more to help farmers in this area stay in business	3.83	4.03	4.05
Farmers in this region are creating an environmental concern that should be addressed	2.45	2.72	2.81
The noise, odor, and other environmental issues associated with farming in this area are minimal	4.46	4.29	4.19
In farming areas, nonfarm residents need to become accustomed to the noise, odor, and other concerns associated with farming	4.20	3.90	3.62
Environmental protection laws regulating farming practices are too strict	3.22	3.00	2.92
As residential development of cities/towns moves closer to farming areas, more restrictive ordinances regarding noise, odor, and other environmental concerns should be allowed	2.21	2.56	2.82
There should be no restrictions on the size of livestock operations even though they may be in close proximity to residential development of cities/towns or public recreational areas	2.87	2.58	2.70
The replacement of smaller family farms in this area by large-scale farms using hired labor will have an undesirable economic and social consequence	4.01	3.77	3.86
Poor economic conditions will likely lead to the replacement of family farms in this area by large farms run by hired labor	4.00	3.67	3.87
More environmental concerns are created by large-scale farms using hired labor than by small family farms	4.14	4.15	3.94

Note: Means are based on a Likert scale with 1 being "strongly disagree" and 5 being "strongly agree." The response of "Do not know" was excluded from the mean.

Source: C. L. Wachenheim and R. Rathge, *A Survey of Residents of the North Central Region*, 2000.

Table 3

Perception comparison by metro residents versus rural, mean response

Metro residents concurred with those who lived in rural areas regarding the impact of agriculture on the environment and the impact of the changing structure of agriculture on the environment and local economy

Statement	Metro and adjacent counties	All other counties	Nonrural counties	Rural counties
	<i>Mean response</i>			
Farmers have a positive impact on the local economy in my area	4.49	4.43	4.55	4.41*
Most of the agricultural supplies (e.g., seeds, fertilizers, feed) used by farmers in my area are purchased locally	4.17	3.89***	4.21	3.90***
Loss of farmers in this region will greatly hurt our local economy	4.23	4.04*	4.26	4.06*
The government should do more to help farmers in this area stay in business	3.95	4.03	3.95	3.99
Farmers in this region are creating an environmental concern that should be addressed	2.65	2.72	2.62	2.73
The noise, odor, and other environmental issues associated with farming in this area are minimal	4.32	4.26	4.38	4.22
In farming areas, nonfarm residents need to become accustomed to the noise, odor, and other concerns associated with farming	3.95	3.78*	3.99	3.79*
Environmental protection laws regulating farming practices are too strict	3.02	3.05	3.04	3.06
As residential development of cities/towns moves closer to farming areas, more restrictive ordinances regarding noise, odor, and other environmental concerns should be allowed	2.51	2.64	2.58	2.59
There should be no restrictions on the size of livestock operations even though they may be in close proximity to residential development of cities/towns or public recreational areas	2.77	2.64	2.82	2.64
The replacement of smaller family farms in this area by large-scale farms using hired labor will have an undesirable economic and social consequence	3.85	3.89	3.81	3.88
Poor economic conditions will likely lead to the replacement of family farms in this area by large farms run by hired labor	3.87	3.81	3.85	3.82
More environmental concerns are created by large scale farms using hired labor than by small family farms	4.00	4.12	3.96	4.13

Note: Means are based on a Likert scale with 1 being "strongly disagree" and 5 being "strongly agree." The response of "Do not know" was excluded from the mean. Significance of two-tailed F-statistic is denoted as * (< .10), ** (< .05), and *** (< .01). Nonrural counties were defined to include those with an urban population of 20,000 or more or an urban population of more than 2,500 and adjacent to a metropolitan area (ERS).

Source: C. J. Wachenheim and R. Rathge, *A Survey of Residents of the North Central Region*, 2000.

Table 4

Perception comparison, farm-dependent versus nonfarm-dependent counties

Respondents in farm-dependent counties agreed that farmers had a more positive impact on the local economy and expressed greater concern about the consolidations of production agriculture

Statement	Farm-dependent counties	Nonfarm-dependent counties
	<i>Mean response</i>	
Farmers have a positive impact on the local economy in my area	4.66	4.40***
Most of the agricultural supplies (e.g., seeds, fertilizers, feed) used by farmers in my area are purchased locally	3.92	4.06
Loss of farmers in this region will greatly hurt our local economy	4.42	4.06***
The government should do more to help farmers in this area stay in business	3.91	3.99
Farmers in this region are creating an environmental concern that should be addressed	2.77	2.65
The noise, odor, and other environmental issues associated with farming in this area are minimal	4.16	4.32
In farming areas, nonfarm residents need to become accustomed to the noise, odor, and other concerns associated with farming	3.84	3.91
Environmental protection laws regulating farming practices are too strict	2.95	3.10
As residential development of cities/towns moves closer to farming areas, more restrictive ordinances regarding noise, odor, and other environmental concerns should be allowed	2.45	2.64
There should be no restrictions on the size of livestock operations even though they may be in close proximity to residential development of cities/towns or public recreational areas	2.48	2.79**
The replacement of smaller family farms in this area by large-scale farms using hired labor will have an undesirable economic and social consequence	4.04	3.81*
Poor economic conditions will likely lead to the replacement of family farms in this area by large farms run by hired labor	4.15	3.74***
More environmental concerns are created by large-scale farms using hired labor than by small family farms	4.17	4.01

Note: Means are based on a Likert scale with 1 being "strongly disagree" and 5 being "strongly agree." The response of "Do not know" was excluded from the mean. Significance of two-tailed F-statistic is denoted as * (< .10), ** (< .05), and *** (< .01). Farm-dependent counties are those with 20 percent or more of labor and proprietor income from farming.

Source: C. J. Wachenheim and R. Rathge, *A Survey of Residents of the North Central Region*, 2000.

Table 5

Perception comparison by population change

Respondents in counties that have experienced a population loss more strongly agreed that farmers had a positive impact on the local economy, and that changes in the structure of production agriculture have negative consequences

Statement	Loss	Population Gain
<i>Mean response</i>		
Farmers have a positive impact on the local economy in my area	4.63	4.30***
Most of the agricultural supplies (e.g., seeds, fertilizers, feed) used by farmers in my area are purchased locally	4.09	3.92
Loss of farmers in this region will greatly hurt our local economy	4.33	3.94***
The government should do more to help farmers in this area stay in business	3.95	4.02
Farmers in this region are creating an environmental concern that should be addressed	2.81	2.57*
The noise, odor, and other environmental issues associated with farming in this area are minimal	4.32	4.26
In farming areas, nonfarm residents need to become accustomed to the noise, odor, and other concerns associated with farming	3.93	3.80
Environmental protection laws regulating farming practices are too strict	3.02	3.05
As residential development of cities/towns moves closer to farming areas, more restrictive ordinances regarding noise, odor, and other environmental concerns should be allowed	2.47	2.68*
There should be no restrictions on the size of livestock operations even though they may be in close proximity to residential development of cities/towns or public recreational areas	2.57	2.83**
The replacement of smaller family farms in this area by large-scale farms using hired labor will have an undesirable economic and social consequence	4.10	3.64***
Poor economic conditions will likely lead to the replacement of family farms in this area by large farms run by hired labor	4.12	3.57***
More environmental concerns are created by large-scale farms using hired labor than by small family farms	4.16	3.96**

Note: Means are based on a scale from 1 to 5, with 1 being "strongly disagree" and 5 being "strongly agree." "Do not know" was excluded from the mean. Significance of two-tailed F-statistic is denoted as * (< .10), ** (< .05), and *** (< .01).

Source: C. J. Wachenheim and R. Rathge, *A Survey of Residents of the North Central Region*, 2000.

Table 6

Perception comparison by experience with livestock

Those who have worked with livestock—or have close friends or relatives who have—were more supportive of the current role of agriculture in the environment, were more likely to agree that environmental protection laws regarding farming practices are too strict, and were more readily opposed to restrictions on the size of livestock operations

Statement	Livestock farms	All others	Livestock associates	All others
	<i>Mean response</i>			
Farmers have a positive impact on the local economy in my area	4.55	4.43	4.54	4.18***
Most of the agricultural supplies (e.g., seeds, fertilizers, feed) used by farmers in my area are purchased locally	4.01	4.03	4.03	3.99
Loss of farmers in this region will greatly hurt our local economy	4.24	4.09	4.16	4.02
The government should do more to help farmers in this area stay in business	3.91	4.01	3.94	4.15
Farmers in this region are creating an environmental concern that should be addressed	2.59	2.73	2.64	2.84
The noise, odor, and other environmental issues associated with farming in this area are minimal	4.46	4.23**	4.29	4.31
In farming areas, nonfarm residents need to become accustomed to the noise, odor, and other concerns associated with farming	4.09	3.78***	3.94	3.61**
Environmental protection laws regulating farming practices are too strict	3.34	2.91***	3.12	2.71***
As residential development of cities/towns moves closer to farming areas, more restrictive ordinances regarding noise, odor, and other environmental concerns should be allowed	2.36	2.65**	2.50	2.86**
There should be no restrictions on the size of livestock operations even though they may be in close proximity to residential development of cities/towns or public recreational areas	2.89	2.64*	2.81	2.34***
The replacement of smaller family farms in this area by large-scale farms using hired labor will have an undesirable economic and social consequence	4.01	3.82	3.92	3.69*
Poor economic conditions will likely lead to the replacement of family farms in this area by large farms run by hired labor	4.01	3.78*	3.85	3.79
More environmental concerns are created by large-scale farms using hired labor than by small family farms	4.01	4.02	4.10	3.92

Note: Means are based on a scale from 1 to 5, with 1 being “strongly disagree” and 5 being “strongly agree.” “Do not know” was excluded from the mean. Significance of two-tailed F-statistic is denoted as * (< .10), ** (< .05), and *** (< .01).

Source: C. J. Wachenheim and R. Rathge, *A Survey of Residents of the North Central Region*, 2000.

There were similar perceptions when the livestock group was defined as livestock associates, those individuals associated with another who works or has worked on a livestock farm. However, unlike livestock farmers, livestock associates did not differ from other respondents in mean level of agreement that environmental concerns associated with farming are minimal.

Farm Size Seen As a Potential Problem

North Central respondents generally believe that poor economic conditions will likely lead to the replacement of family farms by larger farms and that this will have undesirable consequences. Two-thirds of respondents agreed that poor economic conditions will likely mean displacement of family farms in their area by large farms run by hired labor; only 19 percent disagreed. Sixty-four percent agreed that such displacement will have undesirable economic and social consequences; only 16 percent disagreed. Finally, nearly three-fourths of respondents thought that large farms using hired labor create more environmental concerns than small family farms, while only 12 percent disagreed. These findings concur with others regarding perceptions about farm structure, although the real effects of changes in farm structure on agriculture, society, and the environment are far from definitive (Wachenheim and Lesch, Drabenstott).

Farmers were more apt than rural nonfarm residents to see the replacement of smaller family farms by large-scale farms as having undesirable consequences and as following from poor economic

conditions (only the latter difference was statistically significant). Rural residents were more apt than city residents to view large-scale farms as creating greater environmental concerns. The difference was not statistically significant.

Residents of farm-dependent counties and those that had experienced a population loss more strongly agreed (than nonfarm-dependent or population-gain counties) that the displacement of smaller farms will have undesirable economic and social consequences and that poor economic conditions will likely hasten this replacement. Both groups also more strongly agreed that large farms create more environmental concerns, but only the difference between the counties by population loss/gain was significant.

Economic Impact of Farming Seen as Positive

North Central respondents overwhelmingly agreed that farmers have a positive impact on their local economy. While 71 percent strongly agreed (table 1), only 5.5 percent disagreed. Over 70 percent believed that most of the agricultural supplies used by farmers are purchased locally, while only 10 percent did not. Three-fourths agreed, most of them strongly, that a loss of farmers in the region would greatly hurt the local economy. Over two-thirds agreed that the government should do more to help area farmers stay in business. Regardless of how they were defined, there were no significant differences between groups of respondents on whether the government should do more to help farmers stay in business.

Some evidence suggests that perceptions about the economic impact of agriculture should differ

by the size of the nearby community (Wachenheim and Lesch). In the current study, perceptions did not, in general, differ between individuals residing near different size towns or cities. One exception was respondents near very small towns (population of the nearest town is less than 250), who were less likely to agree than those near larger towns that most agricultural supplies used by farmers are purchased locally. One explanation is that towns of fewer than 250 inhabitants are generally not large enough to support agricultural input suppliers. The same respondents were more likely than those near larger towns to agree that a loss of farmers in the region would greatly hurt the local economy. Finally, persons residing near towns of more than 2,500 inhabitants were less likely than persons near smaller towns to agree that farmers have a positive impact on the local economy.

Residents in a metro adjacent or in a nonrural county more strongly agreed than those in non-metro or rural counties that most of the agricultural supplies used by area farmers are purchased locally and that the loss of farmers would greatly hurt the local economy. This is contrary to our expectations, but also demonstrates that the perception of farmers as shopping locally is stronger when there is a population base large enough to support local suppliers.

As expected, residents of farm-dependent counties more strongly agreed than residents of nonfarm-dependent counties that farmers have a positive impact on the local economy and that the loss of farmers would greatly hurt the local economy. The same differences in perceptions were evident between

Who Are the Respondents?

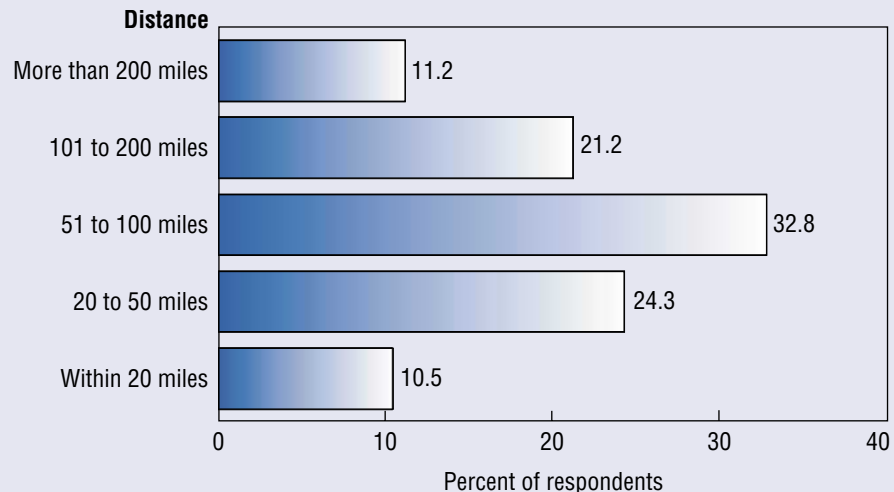
Characteristics of respondents reflected a rural population. A majority of those surveyed were long-term residents of rural areas. Forty-two percent lived in a city or town, 33 percent in a rural area but not on a farm, and 25 percent on a farm. Among those not currently living on a farm, a slight majority had previously lived on a farm, over two-thirds of them for more than 15 years.

Most respondents have had experience with or, because of close proximity, exposure to both crop and livestock farming. Almost 90 percent lived within 5 miles of a farm; 56 percent lived within 1 mile. Among those who lived more than 5 miles from a farm, 48 percent said they had at one time lived within 5 miles of a farm. Of all respondents who do live or have lived within 5 miles of a farm, over three-fourths said the nearest farm raised both livestock and crops. More than half of respondents had either lived on or within 5 miles of a farm for more than 15 years, nearly 80 percent for more than 5 years.

About 28 percent of respondents reported owning or operating a farm. Most farms were classified as individual or family farms (94 percent). Over half of those owning or operating a farm said none or less than one-fourth of their net household income came from their farming operation during the past 5 years. Overall, 97 percent of respondents had finished high school or obtained their GED. Fifty-four percent had attended college. A lower percentage of those owning or operating a farm (19 percent) had completed a bachelor's degree than did others (28 percent).

Distance respondents live from a city of at least 100,000 inhabitants

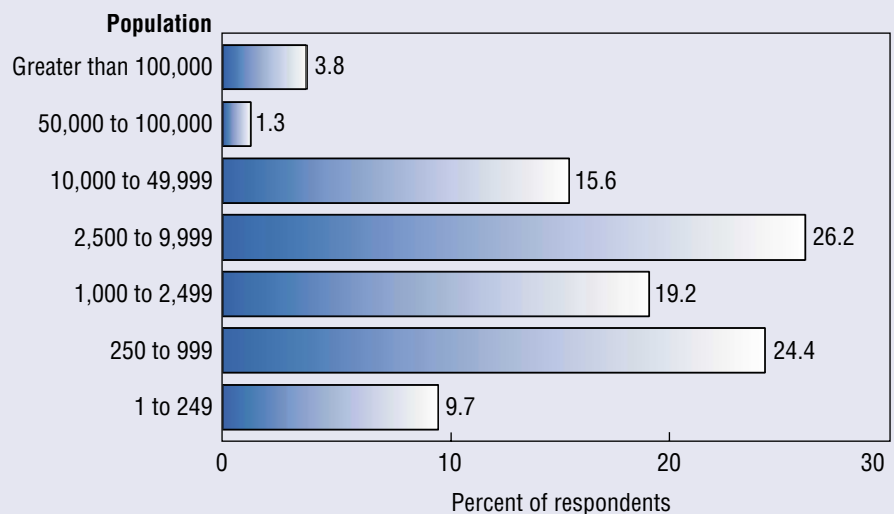
Respondents lived an average of 108 miles from a city with at least 100,000 inhabitants



Source: C. J. Wachenheim and R. Rathge, *A Survey of Residents of the North Central Region*, 2000.

Population of nearest city or town to respondents

Slightly more than half of respondents said the city or town closest to them had fewer than 2,500 inhabitants



Source: C. J. Wachenheim and R. Rathge, *A Survey of Residents of the North Central Region*, 2000.

Methods

Data were derived from a telephone survey of households in the 12-State North Central region using a 2-stage disproportional random sample. Residents in 63 counties were surveyed. All but three counties are classified as nonmetro (ERS). Of these, 27 are adjacent to a metropolitan county.

Counties in the region were first stratified into 12 groups by location relative to a metropolitan center and by population change between 1980 and 1998. Counties were categorized as metropolitan and adjacent or nonmetro and nonadjacent counties. Within each locational category, counties were split into six population categories: population increase from 1980 to 1998 of less than 10 percent, between 10 and 30 percent, and more than 30 percent, and population decrease of less than 5 percent, between 5 and 10 percent, and more than 10 percent.



Next, 10 households within each of 5 counties in a strata were surveyed by telephone. An equivalent number of households was selected for survey regardless of the population within the county or the State, and responses, as reported, were not weighted. Thus, responses represent only the respondent group and not the general population of the region.

Farm perceptions were measured by respondents' level of agreement with statements modified from those originally designed by Buttel and Jackson-Smith (used for a study exploring Wisconsin farmers' views on livestock expansion) and Wachenheim and Lesch (used to explore rural residents' perceptions of corporate and family farms in Illinois). Respondents were asked to indicate their level of agreement with a series of statements regarding farming using a five-point Likert scale. The 13-item index was designed to represent 5 specific themes: (1) the impact of agriculture on the local economy; (2) farmers' interaction with the environment; (3) the effect of farm structure on the environment, economy, and society; (4) responsibilities of nonfarm residents; and (5) the role of government in assisting farmers, protecting the environment, and restricting the size of livestock farms. The total usable sample was 584. The refusal rate was 55 percent.

those residing in counties that had experienced population loss (more strongly agreed) than residents of counties experiencing population gains.

Farm residents were more apt to cite the potential loss of farmers in the region as greatly hurting the local economy than were rural nonfarm residents. Ironically, city residents more strongly agreed than farm residents that government should do more to help farmers stay in business. This finding concurs with Leistritz and Ekstrom, who found nonfarm residents more

inclined to support government financial aid for farmers than farmers themselves.

Implications for Rural America

This effort contributes to a small but growing body of literature about perceptions of agriculture and its role in the environment, economy, and society. In general, North Central respondents have a favorable view of agriculture. They overwhelmingly agreed that farmers have a positive impact on their local economy. Three-fourths agreed that a loss of farmers in the

region would greatly hurt the local economy; respondents living near small towns were more likely to agree than those living near larger towns or cities.

Overall, farmers were considered good environmental stewards, and existing environmental regulations were perceived as appropriate. A majority of respondents agreed that noise, odor, and other environmental issues associated with farming in their area are minimal. Respondents had strong negative opinions about how the consolidating structure of agriculture will

influence the environment, society, and local economies, and a majority agreed the government should do more to help farmers in their area stay in business.

The current study concurs with existing literature in finding that an individual's experience with and proximity to agriculture influences their perception. Residents living in or near small towns expressed a greater concern about the effect of fewer farmers in the region. Respondents tied to livestock production were less likely to agree that environmental issues associated with farming exist and that additional environmental legislation is needed. Farm residents expressed greater concern about the impact of farm consolidation, perceived less of an environmental concern associated with agriculture, and more strongly approved of existing legislation regulating agriculture than did nonfarm residents. Residents living in farm-dependent and population-loss counties showed the greatest level of concern about changes in farm structure, and most strongly agreed that farmers contribute to the local economy and that their loss would be felt.

Knowing residents' perceptions is important in its own right. These perceptions have been shown to influence the priorities and legislative agendas of governmental agencies (Nordstrom et al.). If these perceptions are inaccurate, individuals, interest groups, and even policy-makers may unwittingly work against the competitive forces otherwise defining the role of farms.

Inaccurate perceptions can be corrected. A good example of correcting misperceptions by educating nonfarmers about agriculture is reported in Knapp and Griffieon. Presentations and farm tours were used to educate nonfarmers about

agriculture in Polk County, Iowa. To accurately evaluate the need for educational efforts, we must first identify existing gaps between reality and perception. That is, we need to know the facts and the perceptions.

Equally important to knowing the perceptions of rural America is recognizing that they cannot be represented as a single viewpoint. Perceptions of individuals with different characteristics and experiences may be unique and perhaps predictable. As demonstrated here, there is likely some correlation between the characteristics defining a group (for example, the size of the nearby town, level of exposure to production agriculture, or farm

or nonfarm residence) and the priorities and values they hold. Values and priorities are often difficult to change. However, the position an individual takes on legislation that will influence the viability of agriculture may be based less on these values and priorities and more on the information that is available to them. If the perceptions of individuals differ by characteristics or experiences that can be used to group them, and if group perceptions differ in part because the knowledge they have differs in level and/or accuracy, then it may be useful for groups promoting particular agricultural policies to target educational campaigns to particular segments of the population. **RA**

For Further Reading . . .

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