



## Assessing the Impacts of Federal Farm Bill Programs on Rural Communities

**Douglas Jackson-Smith, Jessica D. Ulrich-Schad,  
and Curt Grimm**

April 2013

**This publication was commissioned by AGree to inform and stimulate dialogue about policy reform; it does not represent official AGree positions. The views expressed here are those of the individual authors.**

## Foreword

AGree seeks to drive positive change in the food and agriculture system by connecting and challenging leaders from diverse communities to catalyze action and elevate food and agriculture policy as a national priority. Through its work, AGree will support policy innovation that addresses four critical challenges in a comprehensive and integrated way to overcome the barriers that have traditionally inhibited transformative change. AGree anticipates constructive roles for the private sector and civil society as well as for policymakers.

AGree has developed the foundation for its work by articulating four interconnected challenges:

- Meet future demand for food;
- Conserve and enhance water, soil, and habitat;
- Improve nutrition and public health; and
- Strengthen farms and communities to improve livelihoods.

Meeting these challenges will require work over the long term and cannot be solved quickly or through a single policy vehicle. AGree is taking a deliberative, inclusive approach to developing a policy framework that can meet the challenges ahead. We are undertaking research to understand problems and assess options, and we are engaging a broad array of stakeholders to contribute insights, guidance, and ideas that lead to meaningful, evidence-based solutions.

This AGree backgrounder was written by Douglas Jackson-Smith, professor of sociology, Utah State University; Jessica D. Ulrich-Schad, doctoral candidate in sociology, University of New Hampshire; and Curt Grimm, research associate professor of anthropology and deputy director of the Carsey Institute, University of New Hampshire. This report summarizes the impact of federal farm and food programs (commonly referred to as “the farm bill”) on rural communities in the United States. The report focuses on five programs: farm commodity programs; farm risk management, insurance, and disaster programs; agricultural conservation programs; food and nutrition programs; and rural development programs.

We hope you find this paper a helpful resource and source of ideas. And we hope you will join the effort to transform federal food and agriculture policy to meet the challenges of the future.



**Deb Atwood**  
Executive Director

## Contents

<b>Executive Summary .....</b>	<b>V</b>
<b>Introduction .....</b>	<b>1</b>
Study Methods .....	2
<b>Detailed Results .....</b>	<b>4</b>
Impacts of Federal Farm Commodity Programs on U.S. Rural Communities .....	4
Impacts of Federal Farm Conservation Programs on U.S. Rural Communities .....	12
Impacts of Federal Nutrition Programs on Rural Communities .....	16
Impacts of Federal Rural Development Programs on U.S. Rural Communities .....	20
The Comparative Impact of Different Farm Bill Programs on Rural Communities.....	24
Conclusion .....	31
<b>Endnotes .....</b>	<b>33</b>

## Executive Summary

*This report summarizes the state of scientific knowledge on the impact of federal farm and food programs on rural communities in the United States. We focus on the impacts of five specific programs of what is commonly referred to as the “farm bill.” These five include farm commodity programs; farm risk management, insurance, and disaster programs; agricultural conservation programs; food and nutrition programs; and rural development programs. Although there is extensive research on the relative merits and effectiveness of specific rural development programs and policies on rural community outcomes, the impacts of the other four main farm bill programs on rural America have received much less empirical scrutiny.*

Our findings are based on results of key informant interviews, a review of the published scientific research, and analysis of data on the location of farm bill program expenditures. We interviewed 26 key informants, including rural development practitioners, federal agency staff, academics, and USDA employees at both the national and state level. Interviewees were from across the United States and represent the experiences of some of the nation’s top experts in this area and a wide array of expertise on these topics. We searched bibliographic databases (most commonly in the economic and social science literatures) for evidence of farm bill program impacts on rural communities. Finally, we used secondary data from the USDA to examine the relative magnitude of different farm bill programs’ per capita expenditures across different types of rural communities.

Overall, we find that scientific evidence to document the impacts of specific farm bill programs on rural communities is relatively limited. There are few published studies that directly measure farm bill program impacts on rural communities. Those that do exist suggest modest or mixed impacts. However, the studies that exist and our key informants provided generally consistent perspectives on the most common positive and negative impacts associated with each type of program, and there was near unanimity about the relative importance of different farm bill programs to rural community well-being.

Taken as a whole, we believe there is support for the following conclusions:

- The most important farm bill programs for the well-being of most U.S. rural communities are the rural development and nutrition programs because of their wide reach and direct impacts.
- Rural development programs are likely to have the biggest impact on rural community well-being per dollar spent. This is because they are “designed to benefit rural communities” and because they provide the basic “building blocks for rural development.” Loan guarantees are a particularly powerful tool given that they leverage significant investment from other private and public lenders.
- Farm commodity programs are probably the least efficient policy mechanisms for promoting rural community well-being. The key exception might be in farm-dependent areas that have few other major economic engines for rural growth.
- If rural community outcomes are a primary policy goal, and assuming finite federal resources, experts in our study recommended shifting public investments away from direct payments and other commodity programs toward targeted rural development programs.
- Efforts to promote broad rural community development, provide for nonfarm employment, and sustain rural amenities and quality of life may be more important to the well-being of most farm families than benefits from traditional farm programs. Unless farm communities offer social, cultural and economic opportunities to young people, it will be difficult to attract the next generation of farmers.

Evidence of impacts associated with the five specific farm bill programs generated additional conclusions:

### Farm Commodity Program Impacts

- The overall impact of farm programs on the rate and direction of structural change in U.S. farming can be easily overstated. Rather, demographic, market, and technological factors are more likely the principle drivers of consolidation, mechanization, and industrialization in agriculture. At most, farm income support programs may reinforce or moderately accelerate these underlying trends.
- Aside from their impacts on the farm sector, farm commodity programs are neither an efficient nor effective policy mechanism for promoting rural community development mainly because they are not designed to do so; agriculture is not the predominant industry in many rural areas, and farmers are a relatively small portion of the population in most U.S. rural communities.
- While farm income support programs have become important to the economic decisions of many types of commercial farms, they provide only modest positive economic benefits to most rural communities in the U.S. These benefits spring from direct income transfers to landowners, some of which is spent in local businesses. The direct local economic benefits of farm commodity payments have eroded in recent years as non-operators own increasingly more farmland and as larger farms shift their purchasing away from local communities.
- Farm commodity programs can lead to higher and more stable short-term income, which can help stabilize rural economies, particularly in farm dependent counties, but also contributes to rising farmland prices that can erode long-term farm profitability and create obstacles to intergenerational transfers of farms.
- Many experts in this field believe that farm income support and other safety net programs, encourage monoculture crops and greater risk-taking behavior, but results from empirical research on this has been inconsistent.

- Phasing out farm commodity programs would have modest net impact in general on most rural communities in the U.S., largely because the connections between farm income support programs and overall community well-being are not very strong in most rural areas. The effects would vary by place, individual investments, and by the rate of withdrawal of benefits. While a minority of U.S. rural places, some farm dependent towns could be severely impacted in the short run if farm commodity program payments declined rapidly.

### Crop Insurance and Disaster Program Impacts

- There is no strong empirical evidence of a direct positive link between federal subsidized crop insurance or disaster assistance programs and broader rural community-level outcomes.
- Crop insurance or disaster assistance can benefit rural development to the extent that they minimize income volatility and catastrophic economic shock to farmers in particular, and local rural economies in general. When natural disasters strike farm dependent areas, these programs can be critical to the survival of local farms and agribusinesses.
- Aside from reducing risk, these federal insurance premium subsidies can serve as de facto income transfers from taxpayers to farmers (through insurance premium subsidies and disaster payments), and these subsidies presumably stimulate some farmers to spend more in local businesses. Benefits of income transfers to rural economies depend on whether the recipients of benefits live and spend their money in the local community.
- The private crop insurance industry that has emerged to serve federal crop insurance programs is an important source of jobs and income in many rural communities.
- On a dollar-for-dollar basis, crop insurance programs are a less efficient way to encourage rural economic activity than spending on rural community infrastructure and development.

- Crop insurance and disaster programs, according to some interviewees, may distort incentives, encourage risky behaviors, and discourage the use of alternative risk management practices (such as enterprise diversification or use of private market risk management tools). To the extent that these programs reduce diversity in rural landscapes, they reduce levels of potential ecological services that could be provided by more complex cropping systems.
- Phasing out or reducing crop insurance and disaster program benefits would likely have a negative short-term impact for many farm communities. Volatility and risk for the farm sector as a whole could rise because of the lack of a good private-sector substitute. Alternative risk reduction strategies (such as enterprise diversification or use of low-input production systems) have yet to gain sufficient attention among producers to protect against market and climate fluctuations.

### **Conservation Program Impacts**

- Few respondents saw conservation programs as a major driver of rural community development. There is little published research that demonstrates positive or negative impacts of conservation programs on local economic activity.
- The most obvious positive impact of conservation programs on rural communities is associated with improvements in environmental quality from either land retirement or working lands programs. Improved environmental quality can improve health and quality of life, as well as spur other forms of economic development. Evidence is clear that areas with natural amenities are the most rapidly growing and economically vibrant of all U.S. rural communities.
- Land retirement programs often provide important wildlife habitat, which has stimulated recreational and hunting businesses in some areas. Conservation Reserve Program (CRP) payments have also served

as a source of predictable income that has sustained some farms—particularly smaller or mid-sized operations—during periods of low commodity prices.

- Land retirement programs can also reduce the amount of agricultural activity in a rural community, which may shrink the amount of money farmers spend at local agribusiness suppliers. Local conditions determine whether local expenditures associated with outdoor hunting and recreation activities are sufficient to counterbalance these effects.
- Phasing out federal farm conservation programs would have modest negative effects on both the environment and local related businesses that depend on environmental amenities, according to our interviewees.

### **Food and Nutrition Program Impacts**

- Supplemental Nutrition Assistance Program (SNAP, formerly food stamps), Women, Infants and Children (WIC), and Child Nutrition programs are significant and direct contributors to rural community well-being, according to respondents. Because nutrition program payments are typically spent immediately in the community, the local multiplier effects are likely to be significant. Their ability to address hunger and food insecurity problems also alleviates strain on local governments or service providers. Nutrition programs are important across a larger and more diverse set of rural locations in the U.S. than other farm bill programs.
- While much smaller in absolute terms, the food and nutrition programs that specifically target local food systems are seen by our informants as important sources of rural development and social well-being in some areas.
- Phasing out federal nutrition programs would be “devastating,” respondents frequently said.

## Rural Development Programs

- There is a relatively large base of research literature on the impacts of various development models (such as firm recruitment, human capital building, and regional planning approaches) on desired social and economic outcomes in rural communities across the United States. However, there have been few comprehensive scientific studies of the systematic effects of the specific farm-bill funded rural development initiatives on rural community well-being.
- According to our informants (which include several top national experts with decades of experience in applied rural development), federal rural development programs generate obvious and significant benefits for many rural Americans. USDA-RD grants, loans, and loan guarantees are important tools that have increased the availability of critical public infrastructure in communities that otherwise lack a sufficient tax base or access to credit to pay for such projects. The most frequently mentioned examples of public infrastructure projects were community facilities, water systems, and broadband internet.
- Federal rural housing programs are viewed as critical to homeownership for low- to moderate-income households. Access to housing is also seen as important in slowing the rate of outmigration from struggling rural towns.
- Our expert informants suggest that investment in the long-term capacity of rural communities to help themselves is a more effective development strategy than simply subsidizing loans or paying for public infrastructure. Programs designed to build local entrepreneurship, human capital, social capital, and facilitate local planning were identified as important but underfunded elements of current federal rural development programs. Scientific studies that test these conclusions are rare.
- Regional approaches to development are more likely to succeed than individual community-scale efforts because they reduce redundancy and increase the efficiency of public investments.

- Phasing out rural development programs would have a major negative effect on the well-being of most rural communities, respondents agreed. In addition, without USDA grants and loans, rural towns and businesses would lessen access to capital, slow rates of economic growth, increase local fiscal stress, and reduce levels of basic public infrastructure.

## Geographic Differences in Farm Bill Program Impacts

- Using publicly available data on farm bill spending by county, we found that the relative importance of farm versus nutrition program spending varies by the level of urbanization and farm dependence in U.S. counties.
- In absolute terms, roughly 80 percent of SNAP program spending goes to metropolitan counties, while only 25 percent of farm program spending goes to these places.
- SNAP spending exceeds farm program spending in metropolitan and micropolitan counties. Farm programs are more significant in noncore counties.
- On a per capita basis, the most rural counties receive more money from both federal nutrition and farm programs than their urban counterparts. However, the differences are much more striking for farm program payments, which are over 20 times higher per person in noncore counties than in metropolitan counties.
- Farm programs are a more important source of federal cash transfers than nutrition programs in agriculturally important, farm dependent counties and those that have lost population. However, in rural counties with high poverty, low education, housing stress, and low employment, the nutrition programs are a more significant source of federal income transfers than farm programs.
- Most federal spending through the farm bill is not spent in the rural places that have the greatest rural development challenges.

## Introduction

Since the passage of the Agricultural Adjustment Act during the depths of the Great Depression of the 1930s, the U.S. government has sustained an increasingly elaborate set of programs designed to help improve the well-being of farmers, sustain the viability of farm operations, and secure an abundant food supply. Most of these programs are described in a piece of omnibus legislation popularly known as the “farm bill,”<sup>1</sup> which has been renewed by Congress roughly every five to ten years for the last 80 years.

A common argument used to justify public investment in policies to support agriculture is that a vibrant farm sector is important to the health and well-being of rural Americans. The reasoning behind this is that most farmers live in rural places, and any efforts to improve their well-being (or to stabilize returns to farming) should translate into more prosperous and stable rural households and communities. Conversely, others have pointed out that the percentage of rural residents who are actively farming has dropped to under 10 percent, and fewer and fewer rural communities depend on agriculture for their overall jobs and income.<sup>2</sup>

**Table 1 |** Programs and Spending Levels for 2008 Food, Conservation and Energy Act

MANDATORY SPENDING LEVELS (BILLION \$)						
Title	Policy Issue	5-year cost (2008-2012)	Annual Average	% of Total	Projected Avg. Annual Actual 5 yr. Spending	% of Actual Spending Total
I.	Commodities	41.628	8.326	14.3%	6.447	8.0%
II.	Conservation	24.112	4.822	8.3%	4.491	5.6%
III	Trade/Food Aid	1.853	0.371	0.6%	0.308	0.4%
IV	Nutrition	188.902	37.780	65.1%	62.853	78.4%
V	Credit	-1.424	-0.285	na	na	
VI	Rural Development	0.194	0.039	0.1%	na	
VII	Research	0.321	0.064	0.1%	na	
VIII	Forestry	0.038	0.008	0.0%	na	
IX	Energy	0.643	0.129	0.2%	na	
X	Horticulture & Organic Ag.	0.402	0.080	0.1%	na	
XI	Livestock	0.001	0.000	0.0%	na	
XII	Crop Insurance	21.858	4.372	7.5%	5.704	7.1%
XIII	Commodity Futures	0.000	0.000	0.0%	na	
XIV	Miscellaneous	6.382	1.276	2.2%	na	
XV	Disaster Assistance	3.807	0.761	1.3%	na	
XV	Tax/other	-4.798	-0.960	na	na	
<b>TOTAL COST:</b>		<b>283.919</b>	<b>56.784</b>	<b>100%</b>	<b>80.186</b>	<b>100.0%</b>

Source: Monke and Johnson, 2010 “Actual Farm Bill Spending and Cost Estimates” CRS R41195

Note: The Disaster Assistance spending line was added after the act’s passage.

Over time, the farm bill has expanded to address an increasingly wide range of topics. The present farm bill (officially the Food, Conservation, and Energy Act) was passed by Congress in 2008 and has 15 titles (see Table 1). Although one title is specifically directed toward rural development, it authorizes relatively little in annual expenditures, and the overwhelming majority of mandatory funding in the farm bill is spent on four main programs: nutrition, farm commodity price or income support, crop insurance, and conservation.

There is extensive research on the relative merits and effectiveness of different rural development programs and policies.<sup>3</sup> However, whether the four main farm bill programs have benefited rural America has received much less empirical scrutiny. This report summarizes evidence from key informant interviews and a review of the published scientific research to chronicle the state of knowledge regarding the impacts of farm bill programs on rural communities in the United States.

## Study Methods

To assess the current state of scientific knowledge about the impact of federal farm and food programs on rural communities in the United States, we conducted a review of published literature, interviewed key informants, and analyzed secondary data.

### Review of Research

We began by conducting a review of published research using various online library search engines, searches of government agency websites, and general Google® searches. Key informants also suggested articles and reports. We reviewed a wide range of peer-reviewed journal articles, government reports, and other research.

Our general finding is that there is very limited research that directly evaluates the impacts of farm bill programs on rural communities. However, there is an abundance of research related to the indirect effects of these programs on farm operations, the farm sector,

and agricultural land use patterns. Most of this research is found in agricultural economics and rural sociology journals. We used the information collected in our review to supplement findings from the interviews and secondary data analysis.

### Interviews

We selected our key informants from contacts of the Carsey Institute and participating researchers. At the end of each interview, we asked interviewees to suggest, and provide contact information for other informants they thought might be useful. (This method is known as “snowball sampling.”)

From this list we selected a subset of individuals to contact for the interviews. We chose informants to ensure that we heard from experts across a diverse array of geographic, topical, and organizational backgrounds. By the end of the project, many of our interviewees were referring others who had already been interviewed or brought to our attention, indicating we had reached many of those who are most knowledgeable about our topic.

We sent potential interviewees an email informing them about the project, noting their expertise, and asking for their participation. If potential interviewees did not respond to the first email, we sent an additional two to three follow-up emails or called them directly. Among the 40 people contacted, 26 agreed to be interviewed. Interviews were conducted between July and October 2011 either in person (8) or via phone (18). Interview length ranged from 24 to 90 minutes. Completed interviews were conducted with:

- Eight rural development practitioners (directors of national or regional nonprofit organizations or advocacy groups)
- Eight current or former federal agency staff (mostly senior researchers with PhDs)
- Four active or retired academics (almost all agricultural economists)

- Five USDA Rural Development directors (four state directors, one working at the national level)
- One representative from the Organization for Economic Co-Operation and Development (OECD)

We assured interviewees their anonymity and received consent to record the conversation. We asked about their work and research experience and familiarity with the five major federal food and agricultural programs (commodity, risk/crop insurance, conservation, food and nutrition, and rural development). While we tried to inquire about all five areas, many respondents felt particularly knowledgeable about only one or two policy areas. As a result, we often tailored the interview content to focus the most detailed questions on their areas of greatest expertise. Toward the end of the interview, we asked all interviewees about the overall impact of federal programs and policies on rural communities. See Appendix 1 for a copy of our key informant interview schedule.

Because we promised confidentiality to ensure free and open discussions, the individual identities of our key interview respondents are not reported here. Although our purposive sample is small and not necessarily statistically representative of the population of experts knowledgeable about our topic of interest, we believe those interviewed provide a broad and diverse range of perspectives on the impact of federal farm and food programs on rural community well-being in the United States. As we discuss in more detail below, their views about key topics often converged around similar conclusions.

Once we completed the interviews, we transcribed them verbatim to enable the use of direct quotes and to facilitate detailed analyses. We began analysis by consolidating interviewee answers on similar questions into single documents, organized by specific policy areas and interview questions. We then systematically reviewed the consolidated answers and made notes about emerging themes and consensus views. This approach

also allowed us to see where a diversity of opinions existed among our informants, and to reflect about how well the views of respondents supported the conclusions of the published research literature.

## Secondary Data

Finally, we also compiled secondary data on farm program spending across U.S. counties. Specifically, we examined recent (2007-2010) expenditures from major farm bill programs and compared overall and per-capita spending across programs. We also looked at whether receipt of farm bill program payments was related to county type as measured by metropolitan status (such as metro, micro, or noncore),<sup>4</sup> the importance of the farm sector in each county (for example, farm dependent or agriculturally important),<sup>5</sup> and by various measures of social and economic stress (housing crisis, persistent poverty, low education, low employment, and population loss).<sup>6</sup>

We obtained data for farm commodity program, conservation, and crop insurance and disaster payment program payments for each U.S. county based on official reports generated by the USDA Farm Services Agency. Because these data are publicly released by the USDA on a county-by-county basis, they are difficult to acquire and compile on a national basis. To facilitate our analysis, we were provided access to the large historical database of farm bill payments maintained by staff at the Environmental Working Group (EWG). We spot checked the EWG data to ensure it was consistent with USDA county database records. Data from 2007 to 2010 was averaged to alleviate the impacts of annual variation and possible missing data in some counties during particular years.

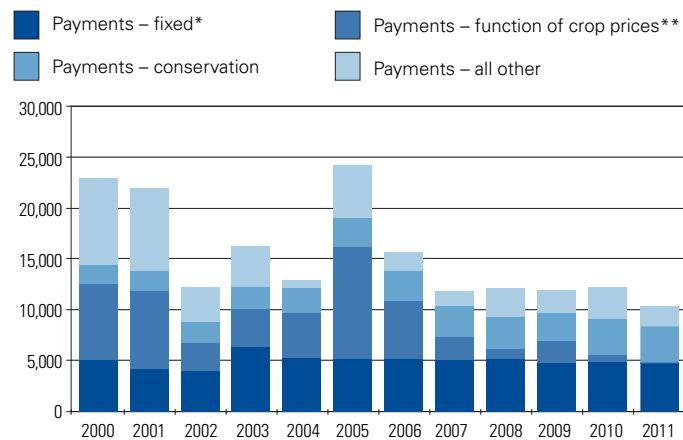
Published data from the USDA Economic Research Service was used to capture county-level federal expenditures associated with Supplemental Nutrition Assistance Program (SNAP) benefits in 2009 (the most recent year for which county-level data were available).

## Detailed Results

### Impacts of Federal Farm Commodity Programs on U.S. Rural Communities

Federal farm commodity programs are diverse and distributed unevenly across the United States.<sup>8</sup> Speaking very broadly, most farm commodity program expenditures are cash payments made to farm owners and/or operators through one of four main ways: (a) **marketing loan assistance** and **counter-cyclical payment programs**, which provide guarantees of certain levels of market prices or producer revenues in the face of market volatility; (b) the **direct payment program**, which provides farmers with annual subsidy payments, regardless of output or market prices; (c) **crop insurance and disaster payment programs**, which compensate for crop losses associated with unusual weather or natural disasters, and (d) **conservation programs**. Collectively, the first three are often referred to as “farm commodity programs.” Conservation programs are discussed separately below.

### Figure 1 | Government Farm Program Payments to U.S. Farmers, 2000-2010

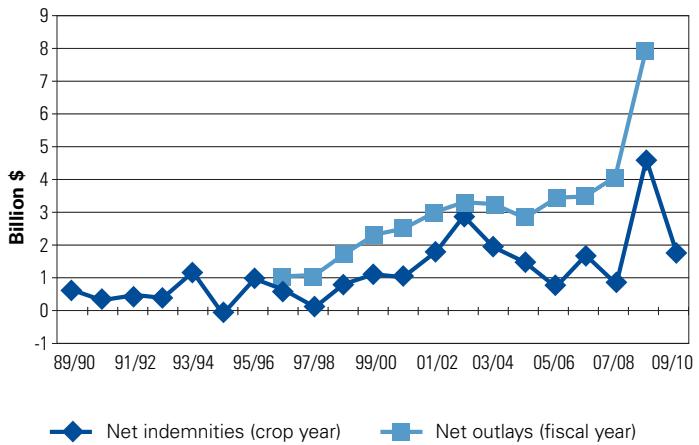


\* Production flexibility contract payments and direct payments whereby payment rates are fixed by legislation.

\*\*Counter-cyclical payments, average crop revenue election (ACRE) payments, loan deficiency payments, marketing loan gains, and certificate exchange gains whereby commodity payment rates vary with market prices.

Source: FSA, NRCS, and CCC.

**Figure 2 |** Crop Insurance Net Indemnities and FCIC Net Outlays, 1989-2010



Source FAPRI 2010.

Over the last decade, the importance of each of these three types of programs has varied widely (see Figure 1). Since 2007, historically high prices for many agricultural commodities have greatly reduced the size and significance of the marketing loans and counter-cyclical programs (green bars). By contrast, because they are not linked to crop output or prices, direct payments have remained relatively stable (red bars). Over the same period of time, federal crop insurance disaster payment expenditures have increased as a growing number of farmers participate in subsidized crop insurance programs (disaster payments are included in blue bars; trends in crop insurance premiums are shown in Figure 2). This reflects greater efforts on the part of private banks to require crop insurance as a precondition of a loan. It also reflects new incentives and efforts to encourage wider participation, and an expansion of insurance programs to cover a wider range of crops and livestock products.

The following section first addresses the first two mechanisms listed above, and generally captures the effects of farm income support programs. The second section examines the impacts associated with crop and disaster insurance programs.

## Impacts of Farm Income Support Programs

### Evidence of Direct Impacts on Communities

Although often justified as such, there is relatively little peer-reviewed empirical research that directly links federal farm income support programs to the well-being of rural communities.

Several respondents mentioned a recent study by Mark Drabenstott that compares the rates of economic growth, among other things, of U.S. rural counties where farmers receive a high share of their income from federal farm program payments with rural counties that are less dependent on farm programs.<sup>9</sup> Results suggest that areas with high reliance on farm programs have slower-than-average rates of growth in employment and new business formation, and often population loss. The author concludes that “Farm payments appear to create dependency on even more payments, not new engines of growth...farm payments are not yielding robust economic and population gains in the counties where they should have the greatest impact.”<sup>10</sup>

One limitation of Drabenstott’s study is that his statistical methods fail to account for other attributes of farming counties that may play a more important role in determining social and economic outcomes. Studies using more sophisticated multivariate modeling techniques have found mixed results for the same question. One study found that larger farm program payments as a share of total cash marketing receipts were associated with greater population losses from rural counties between 1980 and 1990.<sup>11</sup> This result held after controlling for other economic variables that affect population migration from rural areas.<sup>12</sup> By contrast, a more recent analysis identified the distinguishing characteristics of the most “prosperous counties” in rural America as those counties with more farms, more family farms, more farm employment, and received more farm payments (per capita).<sup>13</sup>

### Impacts on Farmers, Farm Structure, and Cropping Patterns

The vast majority of research on farm commodity programs has focused not on rural communities, but on the direct impacts on the economic structure and welfare of farmers and the farm sector.<sup>14</sup> The assumption is often that impacts on farmers will have direct or indirect effects on income, employment, land prices, and patterns of land use in rural communities. Short-term benefits to many U.S. farmers from these programs have been significant (though unevenly distributed). During periods of relatively low commodity prices, such as in 2000, farm program payments composed a significant share of total net farm income. High grain prices in recent years, however, have reduced counter-cyclical payments (overall) and direct payments have been a smaller and smaller share of producer net income.<sup>15</sup>

Recent empirical studies have suggested that farm program income modestly encourages growth in farm size<sup>16</sup> and reduces the rate of business failure, particularly for larger farms.<sup>17</sup> The net effect is a reduction in the total number of farms (particularly smaller operations).<sup>18</sup> Farm program payments are also associated with less off-farm employment among recipients.<sup>19</sup>

Many of our key informants believed that changes in farm structure (and population loss in rural areas as a result of farm consolidations) have adversely affected rural community well-being. This argument has its roots in a famous study from the 1940s by Walter Goldschmidt that compared community dynamics and well-being in two California farm towns. One town had predominantly large farms and hired labor, and the other had more equitable land ownership and was surrounded by mid-sized, family-labor farming operations.<sup>20</sup> Six decades of ensuing research on the “Goldschmidt Hypothesis,” which purports that industrialization and farm consolidation is linked to lower community well-being, have produced three general conclusions. First, farm size (*per se*) is a poor predictor of community outcomes. Second, communities characterized by greater absentee

farmland ownership and hired farm labor often have greater socioeconomic inequality and higher rates of poverty.<sup>21</sup> Third, there are weak or nonexistent relationships between farm structure and general community well-being, largely because agriculture is not typically a major component of most local rural economies (for example, farming provides a small percentage of income and employment).

Even if farm structure is linked to certain rural community outcomes, the research and our key informants generally agreed that the overall impact of farm commodity programs on the rate and direction of structural change in U.S. farming can be easily overstated. Rather, demographic, market, and technological factors are more likely the principal drivers of consolidation, mechanization, and industrialization in agriculture. At most, income support programs may reinforce or moderately accelerate these underlying trends.<sup>22</sup>

Our key informants also generally agreed that farm income support programs provide (at best) only modest positive economic benefits to most rural communities. At the same time, a number of respondents identified several ways in which income support payments to farmers may lead to adverse community outcomes.

Theoretically speaking, our respondents said that most of the rural community benefits are tied to one of two main economic links: direct income transfers to farmers

that multiply as farmers spend additional income at local businesses; and stabilization of rural economies when farms are better able to remain in business in the face of weather or market volatility.

***“...to the extent that the programs are bringing in increased income to farmers and farmers are spending that income in their local economy, (they are) generating demand for services that they purchase.” —Rural development practitioner***

***“The trouble is the farmers are typically not a significant share of the rural population, so ... those payments make individuals better off, but they don’t do much for the community. The linkages are so small.” —Rural scholar***

- Concrete empirical evidence for these positive economic “multiplier” effects is difficult to find, but most experts have agreed that the transfer of billions of dollars to farmers

through these programs has led to short-term increases in economic activity in rural communities that rely more on agriculture for local income and employment.

Many of our informants also noted that land ownership and purchasing patterns in many farm communities have eroded the direct benefits of farm commodity payments. Specifically, the rise of absentee ownership of U.S. farmland and cash rental arrangements during the past 50 years has meant that a growing share of federal farm commodity payments has gone directly to landowners who do not live in rural communities.<sup>23</sup> At the same time, structural change and consolidation in U.S. agriculture have led to growth in average farm size, and larger farms are more prone to purchase a greater share of their farm supplies from non-local businesses.<sup>24</sup>

Over the long run, many respondents believed—and research supports the belief—that higher and more stable income from farm commodity programs has led to rising farmland prices because farmers and investors are willing and able to pay more for this farm asset.<sup>25</sup> Although new programs can financially benefit the original farmland owners, the resulting increases in land prices and cash rents can reduce or eliminate much of the income benefit to future farm operators, who must pay more for land.<sup>26</sup> Rising land prices are also an important entry barrier to young farmers, a problem our informants mentioned frequently.<sup>27</sup>

Several respondents suggested that farm income support and other safety net programs have encouraged monoculture crops, reduced crop diversification, and encouraged greater risk-taking behavior. These trends are seen as unfavorable to rural communities because

a simplified landscape offers fewer visual amenities, disrupts complex agro-ecosystems,<sup>28</sup> and makes rural farms and agribusinesses more vulnerable to variation in market prices of the dominant crops.

Empirical research on this topic is not very extensive and offers ambiguous conclusions. Farm programs that dominated in the mid- to late-twentieth-century had dramatic effects on cropping patterns,<sup>29</sup> including shifts toward greater production of subsidized crops and less diversity in typical crop rotations. However, reforms to federal farm commodity programs since the mid-1990s have greatly minimized these impacts,<sup>30</sup> and efforts to move toward free market policies for agriculture have not always induced greater diversification.<sup>31</sup>

### **Impacts of a Program Phase-out**

When asked what the overall impact on rural communities would be if farm commodity programs were phased out, respondents in general believed that the impacts would be relatively modest, largely because they did not see strong connections between farm income support programs and overall community well-being. The relatively small percentage of population, income, and employment associated with farming in most rural communities suggests that farming is not driving the economy; rather, a community's health is more likely to be determined by trends in the nonfarm sector.

In the short run, several respondents noted that a specific subset of farm-dependent rural communities “in a band starting at North Dakota and going down to Texas through the middle of the country” would experience measurable negative impacts associated with the loss of farm program payments. These impacts could include significant declines in land values, possible bank foreclosures, and a loss of any multiplier effects associated farm program spending. The overall volume of local agricultural output might also decline in areas where production would not be competitive without federal farm income payents.

***“The land values have gone way up as farming income’s gone up. That can be both positive and a negative.***

***It is very hard on new farmers to come in and buy land because it’s so expensive, and they can’t get enough rate of return from their investment to pay it back.***

***But people who bought it at low prices ...that can be a positive. And it can be a positive for the banks as well...***

***This is one of the reasons that farmers, bankers, and citizens in rural communities frequently oppose changing the commodity program benefits because they know it will decrease land values, and it could do it precipitously if those program benefits are removed quickly.” —Rural scholar***

In addition, individual farmers who participated heavily and made investment decisions based on the expectation of future program benefits would be adversely affected. Because larger farms often have deeper pockets, economies of scale, and greater efficiencies, they are more likely to survive a drop in farm program payments. Those most affected would be the subset of small- and mid-sized farmers who participate in farm programs but have less ability to adjust to a post-program world.

The impacts would be tempered if the phase-out was slow and the prices of farm commodities in global markets held strong. Rapid policy changes induce greater dislocations and preclude strategic adjustments and adaptations. At the same time, recent high commodity prices have reduced the size and importance of farm income support payments for many farmers. Removing payments when prices are high would have much less impact.

As one respondent said, “The large guys are not going to be seriously impacted. There may be a few of the mid-sized folks for whom direct payments still remain a big enough part of their revenue. But even for those folks I don’t think it would be a huge deal. In terms of what it means in terms of economic activity within those communities, there’s already so much leakage that I don’t think you would see any discernible difference at all in the level of economic activity within rural communities.”

*“There are good family-sized producers out here who, when you get into an extreme cycle of bad weather, you’d lose them. You’d lose them from agriculture; you’d lose them from the community. They would go through a wrenching loss, for really, I mean, very little fault of their own...having some kind of a safety net there when you enter a bad cycle is the difference between surviving and losing lots of good producers from agriculture, from the community, and going through a very devastating economic collapse in that area.”*

—Rural development practitioner

Another respondent speculated: “I think in the long run, rural communities would be much better off if farm commodity programs were phased out. However, that’s only true if there remains a good solid program of investments to support our agricultural and rural sector. But that investment would look very different than the current program.”

## Impacts of Crop Insurance and Disaster Programs

### Evidence of Positive Effects

We found no peer-reviewed studies that directly linked variation in the availability of and participation in federal subsidized crop insurance or disaster assistance programs to rural community outcomes. That said, responses from our key informants generally viewed these programs much more positively for rural development than the farm income support programs described earlier.

The biggest perceived benefit of crop insurance and disaster payments was a significant reduction in income volatility and catastrophic economic shocks to farmers (in particular) and rural economies (in general) associated with crop failures. Most observers believed that farming is a uniquely risky enterprise, subject to fluctuations in weather and pests. Crop insurance (and disaster payments) were seen as essential to moderate the more extreme forms of volatility associated with these natural but unpredictable phenomena.

As one respondent noted, “There are good family-sized producers out here who, when you get into an extreme cycle of bad weather, you’d lose them. You’d lose them from agriculture; you’d lose them from the community. They would go through a wrenching loss, for really, I mean, very little fault of their own...having some kind of a safety net there when you enter a bad cycle is the difference between surviving and losing lots of good producers from agriculture, from the community, and going through a very devastating economic collapse in that area.”

***"If you look at what determines investment, risk is an important factor. Your risk reward trade-off determines your investment. So I think there are probably some investments that wouldn't otherwise take place, some capital formation that wouldn't otherwise take place, some improvement in the operation of business, ... might not take place without the risk reduction effects of these programs....Bankers in those regions are not going to make production loans without crop insurance...."*** —Rural scholar

More broadly, the availability of risk management tools like crop insurance was seen as encouraging rural development. Another informant explained:

It keeps resources and income in the county. To some extent, they also help promote some growth I think because they reduce risk. If you look at what determines investment, risk is an important factor. Your risk-reward trade-off determines your investment. So I think there are probably some investments that wouldn't otherwise take place, some capital formation that wouldn't otherwise take place, some improvement in the operation of business, additional building, new equipment being bought, higher technology, that kind of thing which I think might not take place without the risk reduction effects of these programs. The other thing... is there are a lot of areas in this country today that are in risky production. West Texas is a good example. Bankers in those regions are not going to make production loans without crop insurance so crop insurance...facilitates and enables access to credit.

A key debate in policy and scholarly circles is whether public subsidies for crop insurance programs are warranted. Public subsidies now cover from 50 to 80 percent of the annual premium cost of crop insurance policies, depending on the level of coverage.<sup>32</sup> In other words, if viable private insurance markets could be devised, some argue there would be little justification for federal intervention. Experts believe that most U.S. farmers would not elect to participate in these programs without federal subsidies, and a fully privatized system might not be able to control risk as effectively as the current approach.

***"These programs encourage risky behavior (and) an increasing lack of diversification... There are farmers who consistently gather in disaster payments or crop insurance payments year after year, whereas if those programs weren't there, that crop wouldn't be planted... The link to the rural community is... (you're not) using the resources for the type of crop ... that the land is really best suited for. And also a lot of these lands (are in places that) would yield a lot of natural ecological services if they were allowed to be back in wetlands instead of going into the crops that have been covered by crop insurance and disaster programs."*** —Rural scholar

Aside from reducing risk, these federal insurance premium subsidies can serve as de facto income transfers from taxpayers to farmers (through insurance premium subsidies and disaster payments), and these subsidies presumably stimulate some farmers to spend more in local businesses. The potential rural development impacts of these income transfers likely follow the same general pattern as those made to farmers through the commodity programs as discussed above.

### Evidence of Negative Effects

Although nearly all the respondents identified broad benefits from crop insurance and disaster payment programs, they also noted several potential negative consequences of these programs for rural communities.

Research suggests that federal crop insurance subsidies have altered the costs and benefits associated with the production of different crops and shifted the locations of production in the United States.<sup>33</sup> The net effect on national aggregate supply of each crop appears to be negligible,<sup>34</sup> but there is some evidence that farmers with marginal lands are more inclined to participate in crop insurance programs and are encouraged to farm in riskier locations when insurance is available.<sup>35</sup>

Several of the informants believed that subsidized insurance programs have discouraged the use of alternative risk management practices, particularly diversification of crops or farming enterprises to spread out exposure to market or weather risks. This lack of alternative strategies makes local farmers more dependent on these programs and more vulnerable to climate change. Several informants also believed that less diverse landscapes reduce the ability of rural communities to benefit from ecological services associated with more complex cropping systems. One expert commented:

We have in the Northern Great Plains...more and more land is devoted to corn and soy beans as opposed to the traditional small-grain crops like wheat. And part of that's due to crop breeding and part of that's due to more cyclical things like moisture, but also due to the disaster and crop insurance. It's not unusual for some of these areas to get substantial crop and/or disaster insurance every three years or so. So that is so heavily subsidized that it has scared systems away from more ecologically suited systems, like small grains and pasture, hay, and so forth. And that would be the biggest adverse effect in ecological sustainability.

A final concern of a few respondents was that insurance subsidies have provided disproportionate benefits to larger farms, in part because participation rates are higher for larger operations. To the extent that this accelerates structural change in agriculture through farm consolidation and population loss, the impacts on some rural communities can be negative. At the same time, some informants believed that these programs protected small and medium-sized farms more than larger farms, whom they believed had other options for managing risks or obtaining crop insurance. Empirical evidence on structural impacts of insurance and disaster programs is relatively limited, but one recent study found that fewer farm failures associated with crop insurance likely slowed the rate of structural change and concentration of production in the United States.<sup>36</sup>

### Effects of a Program Phase-out

Nearly everyone agreed that the short-term impact of phasing out of federal premium subsidies and insurance programs would be negative on communities. One consequence would be greater volatility and risk for the farm sector as a whole. As one informant put it,

I think there would be more disruption, more instability in the agriculture sector as a result of that. I don't think the private sectors can cover crop insurance as cheaply as government covers crop insurance and disaster assistance. Disaster insurance is free. The farmer pays nothing for that and crop insurance they pay 40 percent of the premium. I think if you eliminate those I don't see a good private sector substitute that's going to provide anywhere near the coverage that we have today so I would say American agriculture would be a lot more exposed to risk and that risk would be disruptive to rural communities in my opinion.

Greater volatility was seen as dangerous for the subset of local businesses that rely on farmers as primary customers. "I would really hate to see [a phase-out] because, as I said, whether it's the implement dealers, the car dealers, parts stores, hardware stores; all of those depend on the stability of the Ag economy.... I don't think there would be any positive impact of them being phased out." This type of impact is obviously more likely in places that are farm-dependent. One rural development practitioner noted: "As you look at rural communities...the ones that would be the most greatly affected would be in the Great Plains, an area where you've got a lot higher weather risk than you do in some other parts of the country, and that's also the area where the counties that are the most farming dependent are concentrated." Some noted that if federal insurance programs disappeared, many farmers would likely lose access to credit, and rural banks would be less able to manage risks in their own local portfolios.

One researcher noted that before 1996, crop insurance was hardly used by most American farmers, and most farms were able to survive. They concluded that "if crop insurance were to go away, then it is not as if the land would not be farmed. But it would be farmed by farmers who can manage risks relatively better."

*"[If you phased out insurance programs] you'd have more volatility. When extreme bad weather events came along, you'd be losing more producers. On the other hand, land prices would be lower. You might give some more opportunities for young people to come in. People would be more risk-adverse and probably try to use more diversity and other things to manage the risk of drought."*

—Rural development practitioner

Several informants noted that the greatest rural economic impacts associated with federal crop insurance subsidies (and some disaster programs) have nothing to do with farming at all. Instead, the large private crop insurance industry that has emerged to service federal crop insurance programs has become an important source of jobs and income in many rural communities. In 2012, there were 16 certified National Crop Insurance Service member companies that employed roughly 18,000 people.<sup>37</sup> Given that this industry relies on government subsidies to lower producer premiums and to compensate for their administrative and operating expenses, it is unlikely that these businesses would survive in their current form if federal programs disappeared<sup>38</sup>. There is also some evidence that administering and servicing these insurance programs through existing USDA or county offices could save taxpayer dollars.<sup>39</sup>

## Impacts of Federal Farm Conservation Programs on U.S. Rural Communities

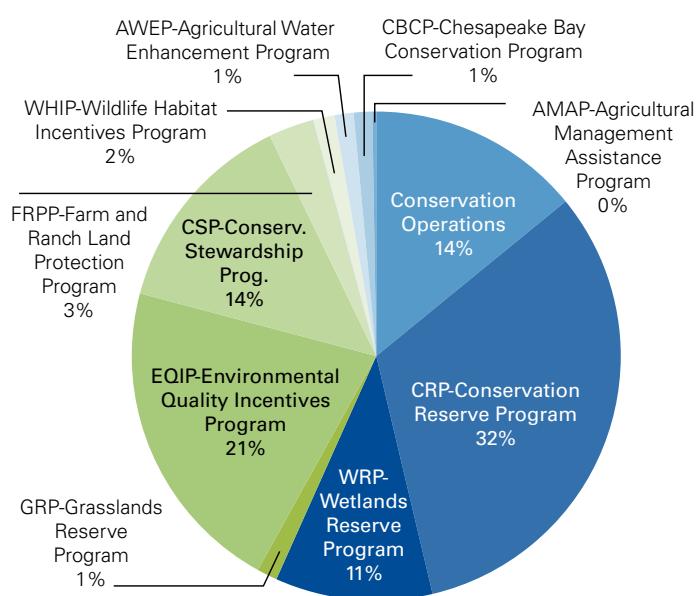
Although traditional farm income support and risk management programs are often justified, in part, because of their rural development benefits, federal agricultural conservation programs are less commonly defended on those grounds. Nevertheless, because conservation programs involve annual expenditures that rival those of the direct payment and crop insurance programs, they do offer potential benefits for the communities. At the same time, because many federal conservation programs focus on retiring land from agriculture, critics worry that these approaches can reduce local agriculture-related economic activity.

Although there are many specific programs, most federal agricultural conservation expenditures fall into one of two categories: (1) land retirement programs, such as the Conservation Reserve Program (CRP),

which pays farmers annual rent to stop farming on highly erodible lands for 10- or 15-year contracts; and (2) working lands programs, where federal funds provide incentives for producers to adopt best management practices (BMPs) that help minimize environmental impacts associated agriculture. In fiscal year 2011, the federal government spent roughly \$5.8 billion on conservation programs of all types. Of this total, roughly \$2.6 billion was for land retirement programs (mainly the CRP), \$2.5 billion for working lands programs, and \$800 million for costs associated with Natural Resources Conservation Service (NRCS) operations and technical assistance (see Figure 3).

Not surprisingly, most of the research on the impact of federal conservation programs focuses on environmental outcomes, which are the primary objectives of these programs.<sup>40</sup> However, our key informants identified several potential positive and negative impacts of conservation programs for rural communities, many of which are supported by empirical research.

**Figure 3 |** Federal Farm Conservation Program Expenditures, FY11



Source: USDA FY2013 Budget Summary and Annual Performance Plan.  
Available at: <http://www.ocfo.usda.gov/docs/FY13budsum.pdf>

## Impact of Land Retirement Programs on Rural Communities

### Evidence of Positive Effects

The most obvious positive effect of conservation programs on rural communities is the improved environmental quality from land retirement or working lands programs. Environmental quality can have benefits for current residents by improving their health and quality of life, and it can also spur other forms of economic development.

Land retirement programs often create wildlife habitat, which can lead to recreational and hunting businesses. One interviewee indicated, “Generally speaking, (the CRP program) improved biodiversity—which is measurable....It took a fair amount of truly marginal land out of production, which lightened up on some of the environmental impacts both in terms of runoff and so forth....In the case of CRP here in the Midwest, it enhanced the value of private land in

the context of other activities—hunting and fishing in particular. So it improved marginally some other parts of the economy, having to do with outdoor activities.”

Several informants noted that CRP payments have also served as a source of predictable income that has sustained some farms—particularly smaller or mid-sized operations—during periods of low commodity prices. A typical comment was: “What we hear in (our organization) is that those are really important programs for our members, and most of our members, if not all our members, are family farmers and average-sized farmers who use those programs and have experience with them and like them. They serve as a sort of a mainstay for the aging farm population.” A small number of published studies have supported these perceptions.<sup>41</sup>

Studies that link federal farm conservation program benefits directly to demographic and economic outcomes are rare. Research does suggest that areas with greater natural amenities are the most rapidly growing and economically vibrant of all U.S. rural communities.<sup>42</sup> One recent analysis found that federal farm program income support payments are not systematically linked to robust rural communities, but it suggested that improvements in natural amenities may be more important to long-term economic well-being than multiplier effects from farm income transfers.<sup>43</sup>

***“Well, I mean, I think that to the extent that a better environment is an asset for a community—and I do believe that a better environment is a community asset—conservation programs make rural places, rural communities better places to live. They made the streams better and things like hunting better; more diversity of scenery; things like that. Some of them have helped protect municipal water supplies from nitrates and other pollutants.”***  
—Rural development practitioner

***“They have in some cases kind of reduced the level of economic activity of some kinds. The CRP in particular has reduced the purchases of inputs and the amount of labor inputs and so on. But on the other hand, the environmental benefits have had very strong and positive economic impacts on the regions as well. So I think overall they have had both good economic and environmental impacts.”*** —Rural scholar

### Evidence of Negative Effects

Most of the key informants noted that land retirement programs have the potential to reduce the amount of agricultural activity in a rural community, which would in theory reduce the amount of money farmers spend with local agribusiness suppliers. One respondent observed: “When you set aside land and you withdraw it from production, then the farmer is not buying the inputs needed to farm that way. You’re not buying equipment. You’re not buying fertilizer from the local dealer. You’re not buying seeds. You’re not hiring labor.” In addition, some reported that land retirement programs allow older farmers to stop actively farming but maintain an income stream, which could enable them to move out of the area, and thus hurt local communities. The consensus view was that these effects may have been more common in past decades, particularly before CRP was initiated in 1985, but that reforms in CRP have minimized these potential downsides. For example, the total amount of land that can be enrolled in CRP is capped at 25 percent of a county’s cropland, and efforts to target CRP payments to boost environmental benefits make it more difficult for operators to place their entire farm in the CRP progra.

A recent comprehensive analysis of the impact of the CRP on rural community development found no strong evidence of major disruptions.<sup>44</sup> Specifically, the authors found that CRP enrollment was unrelated to rural

population trends. Although they identified small, negative, short-run effects on aggregate employment growth in some areas, growth in other forms of nonfarm businesses typically compensated over longer terms. As the CRP program has become better targeted, negative economic effects have declined, and environmental benefits (and associated community development benefits) have increased. A multivariate analysis by Iowa State economists found that the proportion of crop acres in CRP was positively associated with income growth in rural counties in the Midwest between 1990 and 2001.<sup>45</sup> They also found that outdoor recreation and natural amenities were also associated with income growth across all U.S. nonmetropolitan counties between 1990 and 2005.<sup>46</sup>

## Impacts of Working Lands Programs on Rural Communities

Although land retirement programs pay farmers to withdraw land from production, working lands programs typically use incentive payments to encourage farmers to adopt best management practices (BMPs) designed to reduce the environmental footprint from agriculture. Two main working lands programs dominate farm bill spending: the Environmental Quality Incentives Program (EQIP), and the Conservation Stewardship Program (CSP).<sup>47</sup>

EQIP has been a mainstay of efforts to improve water quality since the 1996 farm bill. It is a voluntary program that provides financial assistance to help defray the costs of developing conservation plans or installing BMPs on farms. EQIP can pay up to 70 percent of the cost of adopting conservation practices that are approved for each watershed. By law, 60 percent of EQIP payments must go to livestock-related practices. After changes in eligibility requirements in the 2002 farm bill, a growing fraction of EQIP payments has been used to address environmental impacts associated with large confinement livestock production.

The CSP program is designed to reward producers for environmental care. Producers can receive annual land use payments (averaging \$18/acre) for maintaining or improving their current conservation practices and for adopting resource-conserving crop rotations. In fiscal year 2011, CSP distributed nearly \$650 million to U.S. farmers, and EQIP distributed \$1.2 billion. Both set aside a portion of funds for beginning or socially disadvantaged farmers.

Few of our respondents specifically identified working lands programs as important drivers of rural community development. Because payments typically cover only a portion of the actual costs of most BMPs, the direct economic benefits to farmers are not expected to be high. Because some projects enable producers to buy equipment or pay for labor to help install BMPs that they otherwise might not have done, they can generate modest economic benefits to local workers or input suppliers. Several also suggested that these programs can reduce potential tension between farmers and other neighbors over perceived effects of farming on local water quality. We did not find any published research that quantifies these direct or indirect economic benefits to farmers or local businesses.

A few informants raised concerns that the EQIP program may encourage consolidation and industrialization in livestock production, which they believe could adversely affect community well-being. This concern is rooted in the fact that much of the EQIP funding has been used to help pay for manure storage and manure management systems on large industrial livestock farms. Without public subsidies of these systems, they argue, the rapid concentration of livestock production might not have occurred as quickly.<sup>48</sup> Conversely, some argue that these public programs help minimize the environmental impacts of industrial farms on rural communities. Solid research on the specific effects of EQIP funding in the livestock industry is hard to find, although it is clear that trends toward concentration of livestock production and confinement systems began well before the development of the EQIP program.<sup>49</sup>

## Impacts on Rural Communities If Farm Conservation Programs Disappeared

When asked about the effect on rural communities of a phase-out of federal farm conservation programs, all respondents agreed that the result would be negative. A typical statement was:

Well, we would have a lower quality environment, and that would make rural places less attractive places to live. We'd lose some of our best environmental stewards from the communities because if there are no conservation programs, no regulations, no support for conservation, then often times farming just becomes a race to the bottom. Whoever is most willing to abuse the land to make a buck, wins. And the strongest position competes for land. You tend to drive out some of your best stewards. I think that can have a very negative impact both in the nature of how we farm and live in the rural community.

Some believed that rural communities are increasingly expected to address their local environmental problems, such as impaired waterways and air pollution. Given

that some of these problems are tied to agricultural activities, without federal subsidies to help pay for conservation practices, farmers and others in the community may have to pick up the tab to meet new environmental regulations. Unlike many other industries in the United States, federal policy historically has relied on a largely voluntary approach to address agricultural environmental issues. If there were no federal funds to create incentives to participate, either little would get done or stricter regulatory approaches would be likely required, and farmers could incur greater costs.

Finally, local businesses and recreational opportunities that have grown up around land retirement programs might be lost if conservation programs disappeared. One rural development practitioner noted: "There will be some changes in the mix of economic activity. On net I don't know how much it will be, but there will be winners and losers. In the Northern Great Plains, some of the businesses that have been built up around bird watching and bird hunting ... will experience losses. Well, you know, maybe the farm equipment dealer and the fertilizer company are making more."

- "I think rural communities would be greatly stressed if [conservation programs] were phased out. There's a large increasing need out there to deal with environmental issues. We know we have challenges with air quality. We know we have challenges with climate change, the need to reduce greenhouse gases, the need to improve air quality, protect our water quality, maintain wildlife habitat. The problem is, none of these ecosystem services can be paid for in the traditional market. And that means we've got to find a mechanism whereby our land owners, our farmers, our cities, our communities for that matter can help maintain these ecosystem services, recognizing they can't charge a fee for service in other words. So we do need some public investment in maintaining those public goods.*

- Let me add that that public investment cannot simply be purchasing private land and trying to make a preserve out of it, nor should it simply be regulatory. Those two approaches, by themselves, do not work on private working landscapes. I think a system where we provide technical assistance and some resources to those private landowners to allow them to make sure that they are protecting public goods to the greatest degree possible. And every study I have seen shows that's a far more cost-effective and productive way to do it than simply trying to regulate it." —Rural development state director*

## Impacts of Federal Nutrition Programs on Rural Communities

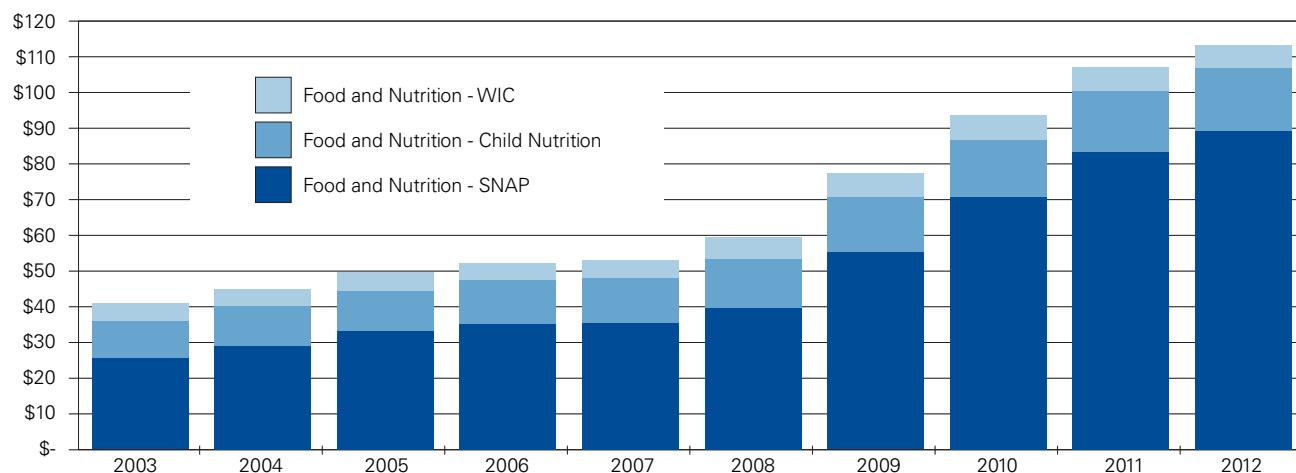
As noted earlier, by far the largest amount of spending under the current farm bill is associated with federal nutrition assistance programs. Particularly as economic conditions worsened with the onset of the Great Recession in 2008, expenditures on entitlement programs have soared. In fiscal year 2012, for example, spending on SNAP is expected to be \$88.6 billion, with another \$25.3 billion spent on nutrition programs targeted to children and mothers of infants, such as the WIC program (see Figure 4).<sup>50</sup> Because these programs are allocated based on need, the proportion of payments that go to rural areas depends on levels of poverty in those communities.

Aside from these larger core programs, there are a host of smaller federal initiatives to promote the development of local food markets. These initiatives mainly consist of supplemental allocations to encourage use of farmers markets by seniors and recipients of

WIC benefits, grants to farmers to develop value-added products (most of which are marketed locally), and grants to local communities to support food security initiatives. Total spending on these programs ranged from \$64 to \$78 million over the life of the last farm bill, a tiny fraction of expenditures on main food and nutrition programs (see Figure 5).

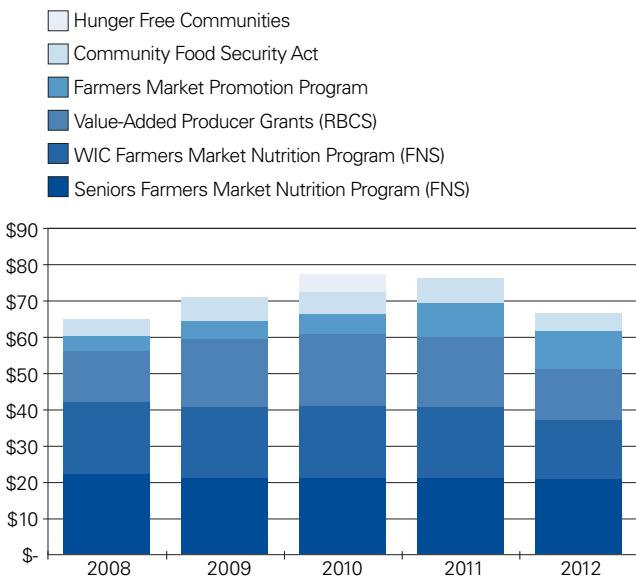
In 2009, two-thirds of rural counties in the United States had poverty rates in that exceeded the U.S. national average.<sup>51</sup> Roughly 14 percent of rural households are “food insecure” and rates of food insecurity and hunger are roughly equal to those in metropolitan areas.<sup>52</sup> Although not usually justified in terms of their potential rural development benefits, federal nutrition programs clearly have an impact. For example, the sheer size of these programs means that nonmetropolitan communities receive greater transfers of income from SNAP programs than federal farm income support, crop insurance, or conservation programs combined.

**Figure 4 |** USDA Expenditures on Major Food and Nutrition Programs, Billion \$, FY 2003-2012.



Sources: USDA budget documents (various years); most recent = USDA FY2013 Budget Summary and Annual Performance Plan. Available at: <http://www.ocfo.usda.gov/docs/FY13budsum.pdf>

**Figure 5 |** Federal Spending on Local Food Systems and Farmers Markets, Actual Outlays, Selected Programs (in \$ millions).



Based on program actual spending reported by Series of USDA Budget Summary and Annual Performance Plans (see link above for FY13); confirmed by National Sustainable Agriculture Coalition (NSAC) annual farm bill budget reports – latest version: <http://sustainableagriculture.net/wp-content/uploads/2008/09/NSAC-FY-2013-Ag-Appropriations-Chart-Including-House-Full-Com.pdf>.

## Impacts of Federal Nutrition Assistance Programs

There is little published research on the impact of SNAP, WIC, and child nutrition programs on rural communities in the United States. On the other hand, our interviews with experts and practitioners consistently identified these as significant contributors to community well-being. One expert commented: “There are more poor people per capita living in rural places, and so more people depend on these things. I think it’s been a real important safety net.” Moreover, our respondents believed that nutrition programs were important to a larger and more diverse set of rural locations than the other farm programs. Rural communities, whether or not farm-dependent, often have at least some low-income families.

Economically, because nutrition program payments are typically spent immediately in the local community, the multiplier effects are likely to be significant. One respondent noted that “It’s so positive...especially in this economy as people have become unemployed or their income has gone down. It’s created a stable food source, but beyond that...grocery stores in rural areas can credit their profitability to these programs.”

*“It’s important that people be fed and, speaking as a farmer, job one for me is making sure that people are fed. What I take most pride in by being a farmer is that I’m growing food for a lot of people. And those people who aren’t eating because they can’t afford to eat, well, it’s not always their fault, and in most cases, it’s not their fault at all. They just sit on the bottom tier of our society. And it’s to society’s benefit to see that they are fed and act differently so that they don’t become a burden to us in later life. So that they have good body development, good mind development, and are able to get out and make their way in the world. So those programs are extremely important. It helps the rural communities, those underprivileged people.”*

—Rural development practitioner

More broadly, these programs provide a way to address hunger and food insecurity problems that otherwise might strain the capacity of local governments or service providers. Reducing hunger and improving nutrition also was widely credited with creating the conditions for general social and economic development. As one practitioner observed, “The long-term effect would (be) on an individual’s ability to become fully incorporated in our society. If they’re hungry maybe they can’t pay attention in school and don’t graduate and they never get a good job. Or the health thing, maybe they suffer from a preventable disease and they become handicapped. Those types of impacts can’t be measured by GNP—those are different types of impacts and different types of studies would have to be looked at to look at those.”

Although many U.S. farm families have household incomes higher than the median for all U.S. households, about one in ten farmers’ household income falls below the federal poverty line. A few respondents even pointed out how nutrition program payments have been frequently used by low-income farmers to help their households make ends meet, though studies suggest that farmers who qualify use the SNAP program at lower rates than nonfarmers.<sup>53</sup>

## Impacts of Local Food System Programs

Although much smaller in absolute terms, the food and nutrition programs that specifically target local food systems (described in Figure 5) were cited by several respondents as important sources of rural development and social well-being. One respondent discussed a popular nutrition program: “[In our state we have] about 1,000 farmers who have signed up to participate in [the farmers market nutrition program] and we’ve got 1,100 markets. We don’t grow anywhere near the produce that California does, obviously, but as a percentage of what’s grown, we do a lot more direct marketing than California does in our rural communities. That was a big deal. This Tuesday, the farmers market is going to be open down at the library in the parking lot. You know, it’s a good community event. It’s a mobilizing unit for that community.”

A growing base of research has quantified some of the economic benefits of farmers’ markets and other local food systems initiatives.<sup>54</sup> Studies generally have found that farmers’ markets are important keystones for building local food systems, providing new market outlets for local farmers, and creating new sources of fresh, local food for consumers.<sup>55</sup> A recent review by

**Table 2 |** Importance of Direct Farm Sales to Consumers, by County Metropolitan Status, 2007

County Type	AGGREGATE VALUE		PERCENT OF U.S. TOTAL	
	Direct Sales 2007 (\$1000)	Direct Sales 2007 (farms)	Direct Sales 2007 (\$1000)	Direct Sales 2007 (farms)
Metro	758,304	70,795	67	52
Micro	195,430	31,647	17	23
Noncore	185,883	33,085	16	24
ALL:	1,139,617	135,527	100	100

Source: Analysis of data from 2007 U.S. Census of Agriculture.

the USDA of growth in local food systems found that local markets (farmers' markets, community-supported farms, and farm-to-school programs) still represented a fairly small share of U.S. food production and consumption, but they were growing at very rapid rates.<sup>56</sup> Researchers have estimated that there were more than 7,000 farmers' markets in 2011 (up 17 percent from the previous year).<sup>57</sup> All told, direct farm sales to consumers exceeded \$1.2 billion in 2007, more than double the level in 1997. However, they still accounted for just 0.4 percent of total U.S. farm sales that year. Roughly 0.2 percent of at-home consumed food was purchased directly from farmers in 2007.<sup>58</sup>

Some scholars have suggested that the social benefits of local food markets to communities may be more important than economic benefits. Farmers' markets are clearly important locations for social interaction and community discussion; they have been linked to improvements in social capital and reported quality of life.<sup>59</sup> Others have claimed that local foods provide opportunities for improved diets and health outcomes, although the research to support such claims is still in its infancy.<sup>60</sup>

Although local food markets are a growing segment of the U.S. farm and food system, they are much more likely to occur in urban or near-urban locations.<sup>61</sup> This is likely because urban areas provide a larger critical mass of potential consumers with higher levels of income to spend on local food products. Census of Agriculture data show that more than two-thirds of all direct sales by U.S. farmers to consumers in 2007 were in metropolitan counties (see Table 2). As a result, local food systems are a relatively small contributor to economic growth in most rural communities.

## Impacts of Phasing Out Federal Nutrition Programs

When asked how rural communities would be affected by phasing out federal nutrition programs, our informants frequently used the term "devastating." Typical comments included:

- "Of all these programs you've been talking about, I think this would have the most impact if it was phased out."
- "I think it'd be devastating. I think it would be terrible...I think it's beyond the scope of the rural communities to do that for all the people who would be impacted. I think it would be terribly negative."
- "It would be devastating, and all you have to do is look at the poverty differences in rural America, and it would be devastating."
- "There'd be a lot of hungry kids. There'd be a lot of disruption in the schools. There'd be a lot more people in poverty, and the consequences of people being in poverty is the sort of breakdown of families, society does the things which is what we are seeing now. I think if that was to be accelerated, that could be a pretty devastating thing, especially considering the alternative that's usually put forth is hoping private charity will take care of this; the church take care of it. Well, not anymore."
- "I think you would see a huge increase in hunger. I think you would see families struggle to survive. I also think that you would see some limited impact on agriculture itself. Part of our support system for ag in general includes these nutrition programs."

Clearly, there was universal agreement among our interviewees concerning the importance of federal nutrition programs on the well-being of rural communities.

## Impacts of Federal Rural Development Programs on U.S. Rural Communities

As a whole, rural America has long lagged behind metropolitan areas on many indicators of social and economic well-being, with lower levels of educational attainment and median incomes and higher unemployment and poverty rates.<sup>62</sup> Rural people, on average, have poorer health, and rural families have more limited access to health care than in urban places.<sup>63</sup> Vital community infrastructure in many places is deteriorating.<sup>64</sup> Lower population densities, greater distances, and a weaker tax base all make it more difficult to provide public services in rural areas.<sup>65</sup>

Although the research affirms the value of different approaches to rural development in generating desired social and economic outcomes,<sup>66</sup> there are few comprehensive studies of the overall effect of farm-bill funded rural development initiatives on rural community well-being. One problem is that rural development programs encompass an extremely diverse set of programs—with more than 88 programs administered by 16 different federal agencies.<sup>67</sup> It is also difficult to obtain comprehensive information about the locations and amounts of federal money that were spent under the Rural Development farm bill title.

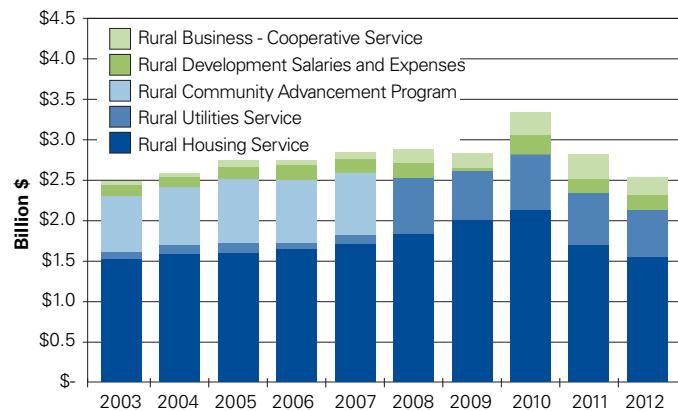
The 2008 Food, Conservation, and Energy Act mandated only \$194 million in spending (\$39 million per year, or 0.1 percent of the total) under the Rural Development title (Title VI). However, discretionary allocations by Congress have increased outlays to more than \$2.5 billion in each year since 2004 (see Figure 6), and they now compose roughly 2.5 percent of the USDA's total budget authority. Special appropriations as part of the federal Recovery Act (particularly for grants and loans for water and waste disposal facilities, rural broadband infrastructure, and rural housing loans) increased rural development spending in 2010. The USDA Rural Development budget authority is dominated by the Rural Housing Service, most of which is devoted to rental assistance and housing loan guarantees (see Figure 6).<sup>68</sup>

The USDA Rural Development budget reflects the level of new annual spending that is authorized by Congress. However, because these outlays are often used to leverage loans (through loan guarantees or subsidies), actual program spending levels reported by the USDA agencies are much higher. For example, while the fiscal year 2011 USDA budget included about \$2.9 billion in total budget authority, it supported a program level of roughly \$24 billion in loans, grants, and other assistance.

## Impacts of Federal Rural Development Programs

Our key informants were largely in agreement that USDA Rural Development (RD) programs have generated significant benefits for rural Americans. In addition to the farm bill programs, we asked respondents to identify the RD programs that they believed had the largest positive impact on rural communities. Their answers reflected the diversity of major RD programs, including rural infrastructure grants and loans (in particular, wastewater and facilities to provide community services), rural business loan guarantees, and rural housing direct loans and loan guarantees. They also touched on the emerging significance of rural development planning and coordination at the regional scale.

**Figure 6 |** USDA Rural Development Program Budget Authority, By Agency



Sources: USDA budget documents (various years); most recent = USDA FY2013 Budget Summary and Annual Performance Plan. Available at: <http://www.ocfo.usda.gov/docs/FY13budsum.pdf>

***“(Infrastructure loans) have had a terrific impact because the ability of a small community to actually go out and borrow money to put those things in, it’s sure that we certainly don’t have the wherewithal to just write checks. And the wherewithal that they would have to actually go and borrow the money would be extremely limited without these programs.”***

-Rural development practitioner

The general view was that federal rural development grants, loans, and loan guarantees increase the availability of critical public infrastructure in communities that otherwise lack a sufficient tax base or access to credit to pay for such projects. The most frequently cited examples of public infrastructure projects included community facilities, water systems, and broadband internet. Most development specialists viewed the availability of basic public infrastructure as a precondition for any sustained local economic development activity. Similarly, respondents commonly credited the USDA intermediary relending and loan guarantee programs designed to stimulate private investment in local businesses and industries (B&I programs) with increasing the availability of credit for rural businesses. Several noted that local banks have used these programs to take on larger and riskier projects that might otherwise exceed their fiscal or legal capacity. A recent study of federal loan guarantee programs suggested that they are more effective than direct farm payments in generating sustained improvement in local economic activity, in part because they leverage significant additional public and private investment.<sup>69</sup>

Finally, informants viewed the federal rural housing programs as critical to homeownership for low- to moderate-income households in rural communities. Supporters of these programs believed that access to

housing was important in slowing the rate of population loss from struggling rural towns. One said, “If you think about the foundation for a rural community, it’s population base. As rural areas are losing population, that makes housing issues a preeminent one. So I think the fact that we can help low- to moderate-income families buy a home in a small town, rural community with no money down has been a very valuable program.”

Others noted that the USDA has shifted most of its portfolio in recent years from grants (designed for the lowest income households) to loan guarantees (that tend to benefit moderate- to middle-income homeowners). Several respondents believed that this shift weakened the net benefits of housing programs for the most needy rural families and communities.

***“I think the USDA is the closest agency to the ground in terms of delivering programs in rural communities. The impacts of them I’m sure are mixed, not that there are negative impacts, but I think there are programs for whom the benefits don’t necessarily accrue in an even manner across rural places and among, within communities. But I think that their mandates to work in non-metropolitan areas and their understanding that they don’t have enough money by themselves to create much on their own; but they do have opportunities to seed ideas that provide leverage to encourage and cheerlead. I feel like eighty-eight programs is probably too many...but nobody else is focused on rural communities, and that makes the USDA role particularly important and special.”***

—Rural development practitioner

***"The problem is these (rural development) programs tend to be either very, very small relative to some of the other forces influencing rural communities—the amount of money going into them—or they tend to be things like venture capital, where they're bidding on maybe one firm getting developed and they're not really building the entrepreneurial needs of rural communities. I think those programs that seriously look at the community in terms of investing in human capital—be that education or human nutrition, building social capital, investing in arts and humanities, or in natural capital—are the ones that research says pay back the most."*** —Rural scholar

All rural development professionals emphasized the need to approach rural development in a comprehensive or holistic manner. As one noted, “It doesn’t do any good to support an upgraded school if there isn’t a sewer system working in that community. And it doesn’t do any good to help people access a loan to purchase single family housing if you don’t have a hospital nearby. And none of it works if you don’t have economic development going hand in hand with all of this.”

A number of respondents noted that because the USDA is the lead agency for most rural development programs, the USDA RD state and local offices are able to effectively coordinate their investments across multiple program areas and ensure that projects complement and reinforce one another.

Most of the scholars we interviewed argued that investments in the long-term capacity of rural communities to help themselves was a more effective development strategy than simply subsidizing loans or paying for public infrastructure. Programs designed

to build local entrepreneurship, human capital, social capital, and facilitate local planning were often identified as important but underfunded elements of current federal rural development programs.

These scholars also suggested that regional approaches to development were more likely to succeed than community-scale efforts. They stressed the importance of coordinating multiple communities under a regional approach; doing so reduced redundancy and increased the efficiency of public investments. Several recent RD initiatives support regional approaches, in particular the Stronger Economies Together (SET) program and support for regional economic development partnerships (such as the Delta Regional Authority). However, in the past these were often created through congressional earmarks and remain a small part of the USDA portfolio. Moreover, the four USDA Regional Rural Development Centers that have served as key players in promoting regional innovation and coordination have seen dramatic budget cuts and face an uncertain future.<sup>70</sup>

That said, the rural development practitioners with the closest ties to local communities still believed that congressional earmarks and rigid agency rules lead to a suboptimal allocation of resources and can force communities to go after whatever projects are most likely to receive funding, as opposed to what they might most need. Several respondents also worried that there were too many separate programs, and they argued that consolidating them into fewer and more flexible programs would make them more effective. One said, “You don’t need four different ways to capitalize a revolving loan fund.”

Although most rural development practitioners in our interviews could identify many instances of positive rural community benefits associated with USDA rural development programs, few knew of systematic empirical studies that documented the impacts of these programs (particularly net of the impacts of

economic, demographic, and geographic forces). Unlike in Europe, where strict monitoring and evaluation is required as a condition of receiving rural development funding, U.S. programs have apparently devoted relatively little time or funding to track benefits of alternative approaches to promoting rural community development.

## Impacts of Phasing Out Rural Development Programs

As with the other types of USDA farm bill programs, we asked our informants how rural communities in the United States might be affected if rural development programs were phased out. Nearly all respondents believed that this would have a major negative effect on the well-being of most rural communities. They agreed that without USDA grants and loans, rural towns and businesses would generally see less access to capital, slower rates of economic growth, increased local fiscal stress, and less support for public infrastructure. This is primarily because many rural communities lack alternative sources of public support and are not in a competitive position to attract private investment for these types of projects. The net result would likely be a decline in population and well-being in many rural communities, as well as a more rapid concentration of population and economic activity in regional centers and urban areas across the United States.

That said, numerous respondents emphasized the diversity of rural communities in the United States. Depending on the structure of the local economy, presence of natural amenities, and proximity to transportation corridors and urban areas, some rural places would likely continue to thrive without targeted federal programs. The places most likely to suffer are communities that have persistent rural poverty, high reliance on agriculture and extractive resources, or few natural amenities to attract urban migrants seeking a more rural lifestyle.

*"The greatest challenge we have in this country is that we do not have a stated policy goal for rural development programs. In every other developed nation, the executive of the nation recognizes that rural people and places are structurally, from a scaling and distance dynamic, uniquely disadvantaged in access to federal programs and policies. And therefore, a set of policy goals are created. We have never done that."*

*"What we have done over time is created a set of categorical programs, largely by happenstance... So we have housing programs; we have community facilities programs; we have business and industry programs; we have energy programs, etc. etc. ...these are individual programs. They do not align in any way to a broader set of policy goals, and they don't let local folks have flexibility to design approaches to essentially take federal dollars and build a future as they envision it. It precludes rural development personnel from aligning a more creative, innovative, flexible program with other federal investments and with state and philanthropic investments..."*

*Rural development practitioners would all say the rules are too strident and rigorous; the forms to receive the money are too difficult. Most rural communities do not have grant writers or technical assistance on site, and so we have a program that has a set of things it can do but not a set of visions that it can fulfill. That's the challenge. The housing programs have been outstanding. The entrepreneurship business and industry programs have been outstanding. The energy programs have been outstanding. The challenge with all of those is they remain in a federal stovepipe. The stovepipes do not talk; they aren't allowing flexibility for local communities to determine their needs and to try to fulfill them with federal funding."*

—Rural development practitioner

## The Comparative Impact of Different Farm Bill Programs on Rural Communities

### Perspectives of Key Informants

Overall, our respondents generally agreed that the most important programs for rural communities were the rural development and nutrition programs. They viewed these programs as reaching “a wider variety of clientele, a wider variety of communities, and reach populations that tend to be more disadvantaged, more needy, (and that) need something to get under them to help them.”

They identified rural development programs as making the biggest difference per dollar spent. This is because they are “designed to benefit rural communities” and because they provide the “building blocks for rural development.” Federal support to build rural infrastructure and support for regional collaborations were most often cited as the most important types of rural development programs. Nutrition programs were seen as significant in part because they involved the transfer of many more federal dollars to rural areas than the other programs under the farm bill, and because they are designed to help the most needy segments of the rural population.

- ***“Farming and rural communities are pretty much decoupled. As the Farm Bureau has said that farmers are more dependent upon rural communities than rural communities are on farmers.... If you put that money into more broadly based rural development, so it was money that continued to flow to rural America, albeit not through commodity programs; that could allow you to do more things that would benefit more people.” —Rural scholar***

- ***“What a lot of people don’t understand, especially from the urban areas, is that there is a nexus between agriculture production and rural economic and community development. You can’t have one without the other. It’s like salt and pepper, peanut butter and jelly. ... I understand that they put food on the table and clothe us, but they (have) also got to understand that when they drive from the farm to Main Street, that they look around them and see that there’s still much need for economic development...Our rural youth has realized that in many cases, they no longer can stay on the farm and have to go sometimes into the urban areas to find another way of life or to maybe even commute to urban areas to hold two different jobs; work on the farm a little bit, go into town and work a separate type of job.” —Rural development state director***

A handful of respondents believed that agricultural conservation and risk management programs were the most important to rural community well-being, and roughly one-half indicated that these were in their “top two” most effective program types. In each case, they saw these as important to providing the amenities or stability that increased quality of life and supported non-farm economic activities in most rural communities.

Most of the key informants considered farm commodity programs to be the least effective policy mechanisms for promoting rural community well-being, in part because agriculture is not the predominant industry in many rural areas and farmers are a relatively small portion of the population in most rural communities.

Although we did not specifically invite a head-to-head comparison, almost all of the respondents chose to compare the impacts of farm commodity subsidies with rural development programs. Many argued strongly in favor of reducing or terminating direct payments and other commodity programs and shifting the savings to targeted rural development programs. One expert noted that farm program spending, “doesn’t necessarily spill over to generate lots of rural development benefits. One way to think of it, the same amount of money, if you’re trying to make a case for farm programs as something that stimulate broader rural development, I can think of better ways to spend the same amount of money. If your objective is primarily rural development, I would spend the money in other ways.” Another respondent noted: “It’s like comparing a mouse to an elephant. There’s just a tremendous amount of money going into commodity programs; there’s not that much going into rural development programs.”

Although farm programs are often promoted as beneficial to rural America in general, most of our respondents argued that the opposite is likely more true: that efforts to promote broad rural development would be a more effective way to help most farmers than traditional farm programs.

### The Importance of Diversity

Ultimately, it is clear that rural communities in the United States are extremely diverse, and it is unlikely that there is a single one-size-fits-all solution to promoting rural community development. Similarly, the positive and negative impacts of different farm bill titles on rural communities are likely to vary depending on the diversity of their economic base and relationship between local agricultural activities and landscape amenities. As one expert concluded: “There is no such thing as a rural place... once you’ve seen one rural community, you seen one rural community. There are regions in this country where American agricultural policy is absolutely central to their survival. However, there are an awful lot of other regions where that is totally irrelevant to the future of the communities in that state or region.” The most

successful programs target clusters of communities that share common challenges. Future research and policy discussions should recognize the different impacts farm bill programs have on different types of rural communities.

### Geographic Patterns of Farm Bill Program Expenditures

To ascertain the relative importance of the major farm bill programs in transferring income to residents of rural communities, we gathered data about annual spending by county on each of four major types of farm programs (commodity programs, insurance premium subsidies, disaster programs, and conservation programs) between 2007 and 2010. These data were aggregated and provided to our research team by staff at the Environmental Working Group (EWG) and are publicly searchable at their website ([farm.ewg.org](http://farm.ewg.org)). Because of the considerable year-to-year volatility in farm program spending in specific areas (based on fluctuations in markets and weather), we computed an average level of annual county spending on these programs over the four-year period. We also obtained published statistics for spending on the federal SNAP program in 2009 by county (<http://www.ers.usda.gov/data/SNAP/>). Similar county-level data for federal rural development program spending were not available for comparison and are not included here.

We compared the overall and per capita spending on these programs across different types of U.S. counties based on metropolitan status, farm dependence and agricultural importance, and various indicators of rural economic stress. The results are presented in Table 3.

Across all U.S. counties in the analysis, food assistance to the poor (SNAP) commanded almost four times as much federal spending as the major farm programs. The federal government spent nearly \$15 billion on farm programs (combined average per year, 2007-2010) compared with \$54 billion expended on SNAP (in 2009). This translates into roughly \$50 per capita for farm programs and \$177 per capita for SNAP programs in recent years (see Figures 7a and 7b).

## Metropolitan vs. Nonmetropolitan Counties

The U.S. Office of Management and Budget categorizes U.S. counties by the degree of urbanization and population size. Three main categories of counties are (1) “metropolitan,” or those with large urbanized areas with at least 50,000 residents, (2) “micropolitan” counties, which have an urban cluster of 10,000-49,999 residents, and (3) “noncore counties,” which have no urban clusters with at least 10,000 people.

Our analysis suggests that almost 80 percent of SNAP spending in 2009 went to metropolitan counties, closely tracking the share of the U.S. population in those places. By contrast, only about one-fourth of total farm program spending went to metropolitan areas.

Another one-fourth of farm program spending went to micropolitan areas, with about one-half total farm program spending going to nonmetropolitan, noncore counties.

In absolute terms, SNAP spending exceeds farm program spending in both metropolitan and micropolitan counties. Only in noncore nonmetropolitan counties did total farm program spending exceed expenditures on food assistance. On a per capita basis, the amount of SNAP money provided in metropolitan counties was 10 times higher than transfers associated with farm programs. In micropolitan counties (home to about 10 percent of the total U.S. population), per capita SNAP program

**Table 3 | Significance of Farm Bill Spending by Program and County Type**

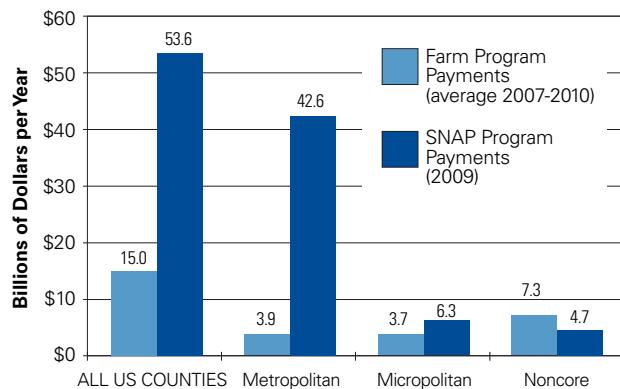
Type of County	Number of counties**	Total Population***	Percent of United States Total				2007-2010 Average Farm Program Payments*				2009 SNAP Program Payments			
			Population	Farm Numbers	Farmland Acres	Gross Farm Receipts	Number of Recipients	Total Payments (\$1000)	Payment Per Capita (\$)	Payment Per Recipient	Percent of Total U.S. Payments	Total Payments (\$1000)	Payment Per Capita (\$)	Percent of Total U.S. Payments
ALL US COUNTIES	3,079	302,261,699	100.0%	0.0%	0.0%	0.0%	1,467,911	14,950,455	49	10,185	100.0%	53,602,302	177	100%
<b>By Metropolitan Status</b>														
Metropolitan	1,066	249,491,402	82.5%	0.0%	0.0%	0.0%	410,210	3,923,717	16	9,565	26.2%	42,585,562	171	79.4%
Micropolitan	665	31,156,987	10.3%	0.0%	0.0%	0.0%	374,837	3,699,290	119	9,869	24.7%	6,333,854	203	11.8%
Noncore	1,348	21,613,311	7.2%	0.0%	0.0%	0.0%	682,864	7,327,449	339	10,730	49.0%	4,682,886	217	8.7%
<b>NON-METRO ONLY</b>	<b>2,013</b>	<b>52,770,297</b>	<b>17.5%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>1,057,701</b>	<b>11,026,738</b>	<b>209</b>	<b>10,425</b>	<b>73.8%</b>	<b>11,016,740</b>	<b>209</b>	<b>20.6%</b>
<b>By Nonmetro County Type</b>														
Agriculturally Important	626	20,068,480	6.6%	0.0%	0.0%	0.0%	509,829	6,087,573	303	11,940	40.7%	3,721,991	185	6.9%
Farm Dependent	420	3,691,898	1.2%	0.0%	0.0%	0.0%	265,479	4,029,773	1,092	15,179	27.0%	669,420	181	1.2%
Population Loss	530	7,425,655	2.5%	0.0%	0.0%	0.0%	363,440	4,785,856	645	13,168	32.0%	1,656,946	223	3.1%
Persistent Poverty	335	6,640,393	2.2%	0.0%	0.0%	0.0%	126,863	1,647,044	248	12,983	11.0%	2,578,064	388	4.8%
Housing Stress	277	9,516,558	3.1%	0.0%	0.0%	0.0%	77,382	1,230,090	129	15,896	8.2%	2,535,293	266	4.7%
Low Education	488	10,481,617	3.5%	0.0%	0.0%	0.0%	199,111	2,409,166	230	12,100	16.1%	3,308,372	316	6.2%
Low Employment	381	8,691,871	2.9%	0.0%	0.0%	0.0%	93,127	1,017,805	117	10,929	6.8%	2,976,216	342	5.6%

\*Includes Payments from Farm Commodity Programs, Conservation Programs, Disaster Programs and Insurance Premium Subsidies.

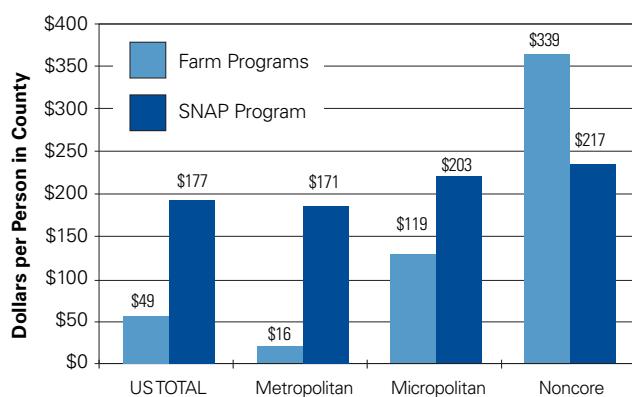
\*\*Only includes counties for which we have data for at least one column.

\*\*\*Average of revised estimates 2007, 2008 and 2009 and census 2010 count.

**Figure 7a |** Total Annual Payments by Program and Metropolitan Status of County



**Figure 7b |** Per Capita Spending by Program and Metropolitan Status of County



Source: Based on analysis of Farm Bill Program Expenditure data compiled and provided to the researchers by the Environmental Working Group (dataset known as the EWG Farm Subsidy Database; described at <http://farm.ewg.org>)

expenditures were almost double the level of per-person spending on farm programs. By contrast, in noncore counties (44 percent of all counties, but home to just 7 percent of the U.S. population), farm program payments per person were almost 60 percent higher than per capita SNAP program transfers. Interestingly, although most SNAP funding goes to metropolitan counties, the per capita spending on SNAP is highest in noncore counties. In addition, people living in noncore counties receive more than 20 times more per person in farm bill payments than residents in metropolitan areas.

## Distribution of Payments among Nonmetropolitan Counties

Because 80 percent of the U.S. population lives in metropolitan counties, most studies of rural America use data that combine the two nonmetropolitan county types (micropolitan and noncore).

Nonmetropolitan America is quite diverse, and the USDA's Economic Research Service has developed a set of county typologies that highlight differences in a county's economic base and/or indicators of social and economic stress that might warrant public policy intervention.<sup>71</sup> The bottom of Table 3 presents information about the importance of farm and SNAP program payments to seven types of nonmetropolitan counties.

Two of these types reflect places that are either agriculturally important or farm dependent.

Agriculturally important (AI) counties are places that rank in the top quartile of U.S. counties in total farm sales and are where most economically significant agricultural activity occurs. An alternative but widely used indicator for rural counties reflects the concept of "farm dependence." Farm dependent (FD) counties are defined as places that have a relatively high proportion of local employment and income from farming activities. Interestingly, fewer than one-half of FD counties are considered agriculturally important, and two-thirds of AI counties are not farm dependent.<sup>72</sup>

Because many farm program payments are linked to the level of commercial farm output, it is not surprising that a disproportionate share (41 percent) of farm bill payments to farmers flow to AI counties (and a notably smaller proportion—or 27 percent—flow to farm dependent places). However, relatively low population levels in most FD counties lead to a situation where more than three times as much farm program spending per person flows to FD counties compared to AI counties (\$1,092 vs. \$303). Interestingly, SNAP program payments per capita are relatively similar in both AI and FD counties (\$185/person).

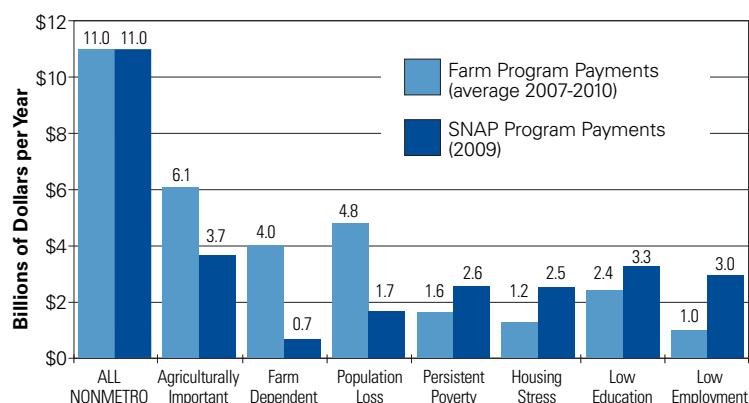
The other five types reflect the presence of social and economic conditions that make rural economic development particularly difficult (population loss, high poverty, housing stress, low education levels, and low employment). These are areas that often receive special attention from rural development specialists. The results in Table 3 suggest that a relatively small share of total federal farm program payments (7 to 16 percent) and SNAP payments (5 to 6 percent) typically go to these types of counties. One exception would be counties experiencing population loss, where almost one-third of total U.S. farm program expenditures flowed in

recent years. In all of the other cases, on a per-capita basis, more SNAP dollars were transferred into these “needy” rural counties than major farm program dollars combined. Figures 8a and 8b show the distribution of farm and SNAP program payments (in absolute and per capita terms) by type of nonmetropolitan county.

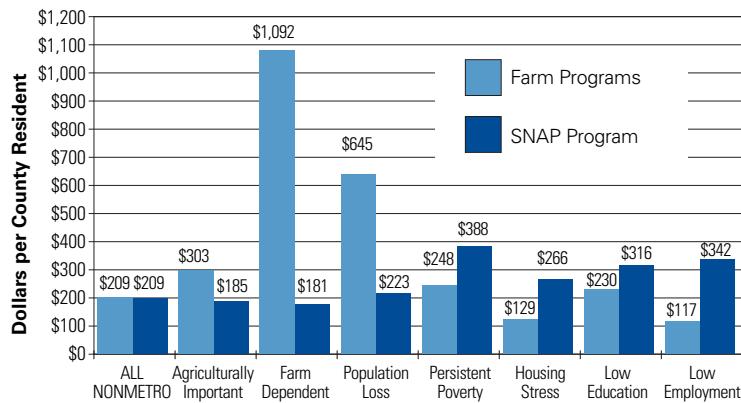
What does this suggest about the ability of federal farm and nutrition programs to combat rural development problems? On the one hand, the overwhelming majority of federal spending on these programs is not spent in the rural places that have the greatest need.

On the other hand, these programs can still represent significant investments of public dollars on a per capita basis in some types of counties. Farm programs are more significant sources of cash transfers into agriculturally important, farm dependent counties, and those that have seen population loss. Nutrition programs, on the other hand, are the dominant influence in the other rural county types.

**Figure 8a | Total Program Payments in Nonmetropolitan Counties, by Program and County Type**



**Figure 8b | Per Capita Spending by Program and County Type**



Source: Based on analysis of Farm Bill Program Expenditure data compiled and provided to the researchers by the Environmental Working Group (dataset known as the EWG Farm Subsidy Database; described at <http://farm.ewg.org>)

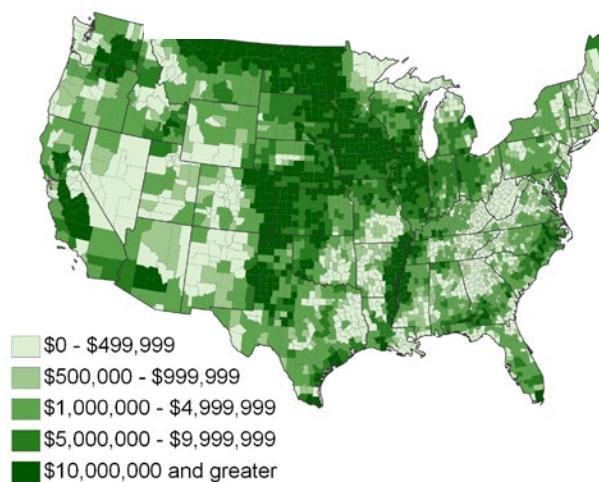
### Importance of Different Farm Bill Programs By Region

The distribution of farm bill program payments varies widely across the United States. These geographic patterns help explain the distinctively regional (and often surprisingly bipartisan) character of political support for different farm bill programs in Congress, and underscore the complex political forces that must be addressed in altering the balance of funding among the various major farm bill programs.

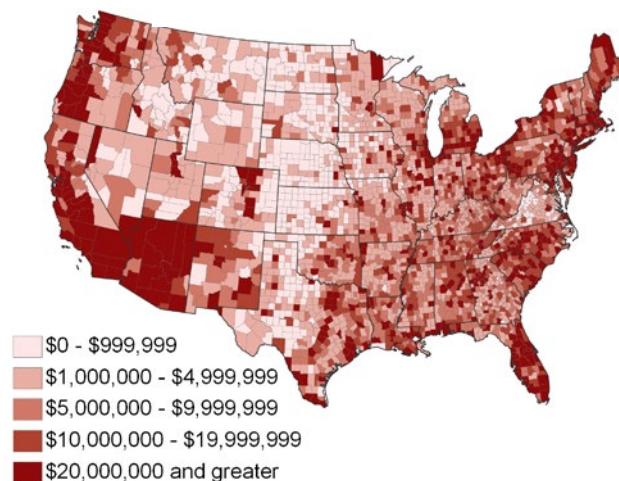
Figures 9 and 10 illustrate the relative amount of total spending nutrition (SNAP) and farm programs. In each case, we rank counties by total spending in each program (the colors represent quintiles – or groups that each include

20 percent of U.S. counties). The maps suggest that overall farm program spending is highest in counties in the Great Plains, the midwestern Corn Belt, along the lower Mississippi river, in central Washington and the California Central Valley, along the south Texas coast, and in a band from extending from southern Georgia through South Carolina and into North Carolina. As noted above, these are all places that grow significant crops that are eligible for federal farm program payments.

**Figure 9 |** Average Total Farm Program Payments by County, 2007-2010



**Figure 10 |** Total SNAP Program Payments by County, 2009

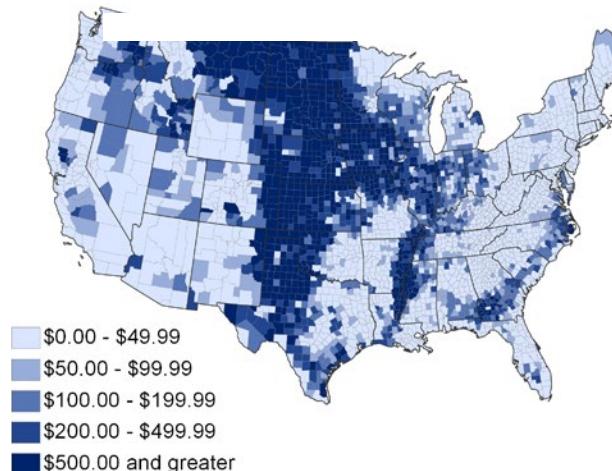


Source: Based on analysis of Farm Bill Program Expenditure data compiled and provided to the researchers by the Environmental Working Group (dataset known as the EWG Farm Subsidy Database; described at <http://farm.ewg.org>)

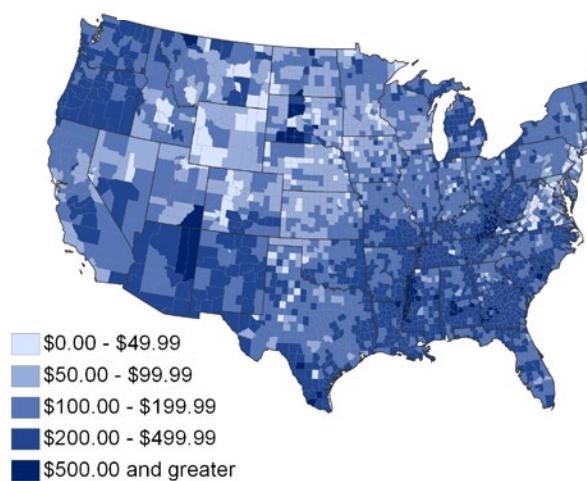
By contrast, overall SNAP expenditures are lowest in the interior West, the Great Plains and West Texas, and generally highest along the East and West Coasts (including most of Florida), in the industrial cities of the “Rust Belt” in the upper Midwest and Northeast, and in scattered urban areas with large populations throughout the country.

When both types of program payments are adjusted by county population, the per capita spending patterns are noticeably different (Figures 11 and 12). For farm

**Figure 11 |** Average Total Annual Farm Program Spending Per Capita by County, 2007-2010



**Figure 12 |** SNAP Program Spending Per Capita by County, 2009

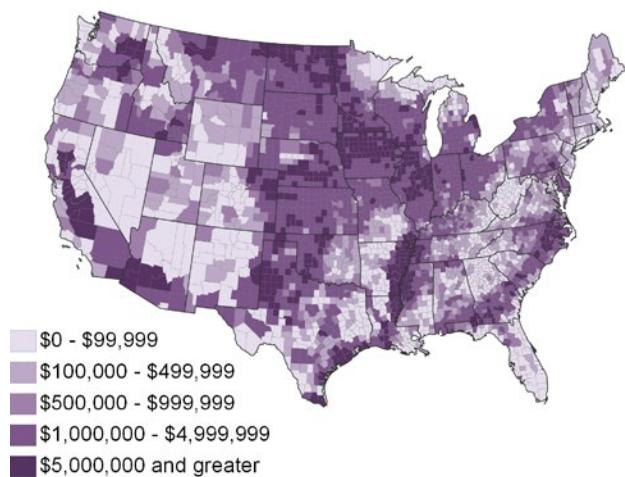


programs, areas in California and Arizona that received relatively large overall payments no longer rank very high in terms of payments per resident. Similarly, relatively high population density in farm counties in Indiana, Michigan, Ohio, and Wisconsin make farm spending less important when viewed on a per capita basis. Conversely, some counties in the interior West and southwestern Texas appear to receive relatively high amounts of farm program spending per person.

Examining SNAP spending on a per capita basis also shifts the locations of counties where the SNAP program has a significant impact on the local economy. For example, neither of the top two counties in terms of total SNAP payments (Los Angeles and Cook County, IL, each of which received over \$1 billion in payments in 2009) are in the top two quartiles of per capita spending on nutrition programs. Meanwhile, the per capita spending map in Figure 12 reveals a clearer geographic concentration of SNAP spending in relatively low-income areas of the United States, including Native American reservations, Appalachia, and the southern Black Belt.

A final geographic comparison illustrates the more nuanced geographic distribution of farm program spending by type of farm program. Figures 13-16

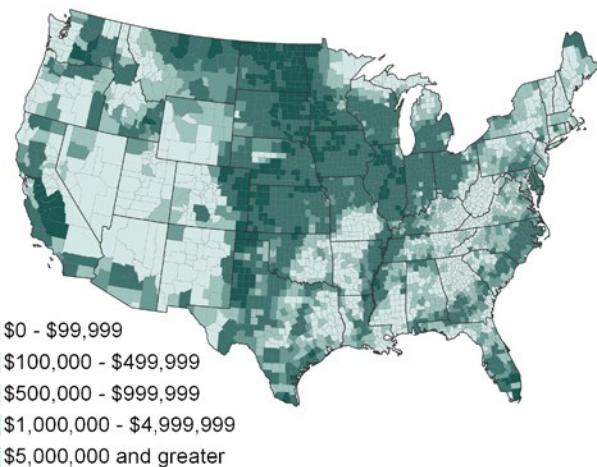
**Figure 13 | Average Commodity Program Payments, 2007 - 2010**



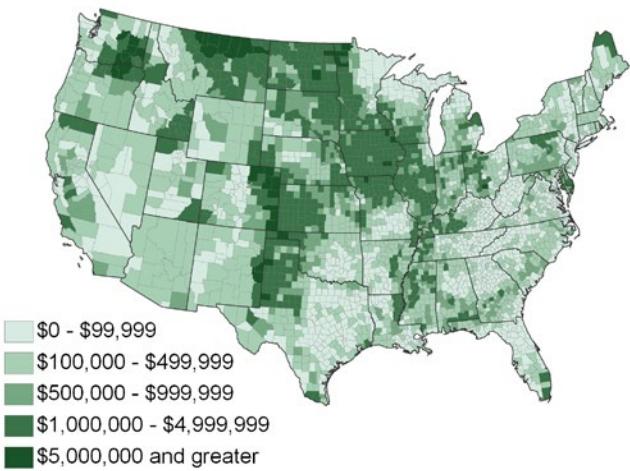
Source: Based on analysis of Farm Bill Program Expenditure data compiled and provided to the researchers by the Environmental Working Group (dataset known as the EWG Farm Subsidy Database; described at <http://farm.ewg.org>)

highlight the relative levels of farm bill spending through commodity programs, crop insurance premium subsidies, conservation programs, and disaster relief programs. Although many counties receive relatively high levels of funding from all four of these programs (particularly in Iowa, the Dakotas, and along the Mississippi river), there are interesting differences. For example, conservation programs are often the most important source of farm bill spending in the interior western states and New England.

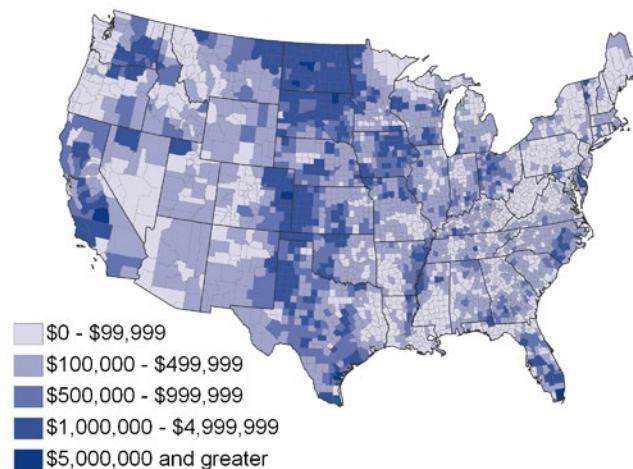
**Figure 14 | Average Premium Subsidy Payments, 2007–2010**



**Figure 15 | Average Conservation Program Payments, 2007–2010**



**Figure 16 |** Average Disaster Program Payments, 2007–2010



Source: Based on analysis of Farm Bill Program Expenditure data compiled and provided to the researchers by the Environmental Working Group (dataset known as the EWG Farm Subsidy Database; described at <http://farm.ewg.org>)

### Importance of Different Farm Bill Programs to Different Types of Counties

In addition to comparing the relative significance of nutrition and farm programs (overall), we used the EWG data set to explore the degree to which different farm programs are more or less significant in each of the county types. The results are shown in Table 4.

Although the patterns are complex, on a per capita basis it is clear that all four types of farm programs have been a significant source of federal income transfer in noncore counties overall, but particularly in farm dependent and counties losing population. By contrast, farm programs provide relatively fewer per capita transfers in metropolitan counties, or in nonmetropolitan counties experiencing housing stress and low employment.

## Conclusion

Overall, we found that direct scientific evidence to document the impacts of specific farm bill programs on rural communities in the United States is relatively limited. There are few published studies that directly

measure the impacts of farm bill programs on rural communities. However, the studies that exist and our key informants provided generally consistent perspectives on the most common impacts of the programs, and there was near unanimity about the relative importance of different farm bill programs to rural community well-being. Taken as a whole, the following conclusions emerged:

- The most important farm bill programs for the well-being of most rural communities are the rural development and nutrition programs because of their wide reach and direct effects.
- Rural development programs are likely to make the biggest impact on rural community well-being per dollar spent. This is because they are designed to benefit rural communities and because they provide the basic building blocks for rural development. Loan guarantees are a particularly powerful tool because they leverage significant investment from other private and public lenders.
- Farm commodity programs are probably the least efficient policy mechanisms for promoting overall rural community well-being. The key exception might be in rural farm-dependent areas that have few other major economic engines for growth.
- If rural community outcomes are a primary policy goal, and assuming finite federal resources, experts in our study recommended shifting public investments away from direct payments and other farm commodity programs toward targeted rural development programs.
- Although farm programs that help farmers are often promoted as beneficial to rural America in general, the reverse impact may be more important. Efforts to promote broad rural community development, provide for nonfarm employment, and sustain rural amenities and quality of life may be more important to the well-being of most farm families than benefits from traditional farm programs. Unless farm communities offer social, cultural and economic opportunities to young people, it will be difficult to attract the next generation of farmers.

**Table 4 |** Average Farm Program Payments by Program and County Type, 2007-2010 Average

	Farm Commodity Programs					Farm Conservation Programs				
	Number of Recipients	Total Payments (\$1000)	Payments Per Capita	Payments Per Recipient	Percent of Total U.S. Payments	Number of Recipients	Total Payments (\$1000)	Payments Per Capita	Payments Per Recipient	Percent of Total U.S. Payments
All US Counties	1,167,348	6,566,688	22	5,625	100.0%	495,434	2,169,143	7	4,378	100.0%
<b>By Metropolitan Status</b>										
Metropolitan	333,762	1,864,892	7	5,587	28.4%	113,732	441,402	2	3,881	20.3%
Micropolitan	298,831	1,719,519	55	5,754	26.2%	125,096	521,655	17	4,170	24.0%
Noncore	534,754	2,982,276	138	5,577	45.4%	256,606	1,206,087	56	4,700	55.6%
<b>NON-METRO ONLY</b>	<b>833,585</b>	<b>4,701,795</b>	<b>89</b>	<b>5,640</b>	<b>71.6%</b>	<b>381,702</b>	<b>1,727,741</b>	<b>33</b>	<b>4,526</b>	<b>79.7%</b>
<b>By County Type</b>										
Agriculturally Important	398,028	2,631,912	131	6,612	40.1%	198,274	854,063	43	4,307	39.4%
Farm Dependent	209,844	1,548,475	419	7,379	23.6%	104,644	619,917	168	5,924	28.6%
Population Loss	289,114	1,908,801	257	6,602	29.1%	144,749	681,369	92	4,707	31.4%
Persistent Poverty	99,505	932,554	140	9,372	14.2%	36,328	183,291	28	5,045	8.4%
Housing Stress	59,061	658,012	69	11,141	10.0%	25,076	177,900	19	7,094	8.2%
Low Education	159,647	1,350,411	129	8,459	20.6%	55,506	288,144	27	5,191	13.3%
Low Employment	71,316	579,612	67	8,127	8.8%	24,059	127,201	15	5,287	5.9%
	Insurance Premium Subsidies					Disaster Payments				
All US Counties	1,984,720	4,889,793	16	2,464	100.0%	190,327	1,318,781	4	6,929	100.0%
<b>By Metropolitan Status</b>										
Metropolitan	461,491	1,267,420	5	2,746	25.9%	47,882	347,260	1	7,252	26.3%
Micropolitan	462,359	1,159,158	37	2,507	23.7%	43,403	297,801	10	6,861	22.6%
Noncore	1,060,870	2,463,215	114	2,322	50.4%	99,041	673,721	31	6,802	51.1%
<b>NON-METRO ONLY</b>	<b>1,523,229</b>	<b>3,622,373</b>	<b>69</b>	<b>2,378</b>	<b>74.1%</b>	<b>142,444</b>	<b>971,522</b>	<b>18</b>	<b>6,820</b>	<b>73.7%</b>
<b>By County Type</b>										
Agriculturally Important	846,833	2,138,212	107	2,525	43.7%	57,436	462,463	23	8,052	35.1%
Farm Dependent	616,635	1,467,225	397	2,379	30.0%	44,747	393,650	107	8,797	29.8%
Population Loss	749,635	1,763,801	238	2,353	36.1%	52,896	431,257	58	8,153	32.7%
Persistent Poverty	176,528	398,306	60	2,256	8.1%	21,537	132,230	20	6,140	10.0%
Housing Stress	102,808	289,121	30	2,812	5.9%	12,164	104,298	11	8,574	7.9%
Low Education	244,957	561,212	54	2,291	11.5%	32,300	208,648	20	6,460	15.8%
Low Employment	87,283	220,535	25	2,527	4.5%	16,404	89,587	10	5,461	6.8%

## Endnotes

- 1 Interestingly, the word “farm bill” has never appeared in the official title. The 2008 farm bill is officially called the “Food, Conservation, and Energy Act.” The 2002 farm bill was the “Farm, Security, and Rural Investment Act,” and the 1990 farm bill was the “Food, Agriculture, Conservation, and Trade Act.”
- 2 Dimitri, C., A. Effland, and N. Conklin. “The 20<sup>th</sup> Century Transformation of U.S. Agriculture and Farm Policy.” Economic Information Bulletin No. 3. (Washington, DC: Economic Research Service, U.S. Dept. of Agriculture), 2005. [www.ers.usda.gov/publications/eib3/eib3.pdf](http://www.ers.usda.gov/publications/eib3/eib3.pdf).
- 3 Irwin, E., A. Isserman, M. Kilkenny, and M. Partridge. “A Century of Research on Rural Development and Regional Issues,” *American Journal of Agricultural Economics*, Vol. 92, No. 2, 2010, pp. 522-553. doi: 10.1093/ajae/aaq008. See also Olfert, M.R., and M.D. Partridge. “Best Practices in Twenty-First-Century Rural Development and Policy,” *Growth and Change*, Vol. 41, No. 2, 2010, pp. 147-164.
- 4 See the U.S. Census Bureau for technical definitions. [www.census.gov/population/metro/about/](http://www.census.gov/population/metro/about/).
- 5 Jackson-Smith, D. and E. Jensen. “Agricultural Importance Versus Farm Dependence: A New Typology,” *Rural Sociology*, Vol. 74, No. 1, 2009, pp. 37-55.
- 6 See the USDA Economic Research Service website for technical definitions. Available at: <http://www.ers.usda.gov/Briefing/Rurality/Typology/>.
- 7 See [farm.ewg.org](http://farm.ewg.org).
- 8 Mercier, Stephanie. “Review of U.S. Farm Programs.” (Washington, DC: AGree: Transforming Food and Ag Policy), 2011. [http://foodandagpolicy.org/sites/default/files/Review%20of%20US%20Farm%20Programs-S%20Mercier%20110611\\_0.pdf](http://foodandagpolicy.org/sites/default/files/Review%20of%20US%20Farm%20Programs-S%20Mercier%20110611_0.pdf)
- 9 Drabenstott, Mark. “Do Farm Payments Promote Rural Economic Growth?” *The Main Street Economist* (Kansas City: Center for the Study of Rural America, Federal Reserve Bank of Kansas City), 2005, pp. 1-4.
- 10 Ibid. pp. 3-4.
- 11 Goetz, Stephan J. and David L. Debertin. “Rural Population Decline in the 1980s: Impacts of Farm Structure and Federal Farm Programs,” *American Journal of Agricultural Economics*, Vol. 78, No. 3, 1996, pp. 517-529.
- 12 Ibid. p. 517.
- 13 Isserman, A.M., E. Feser, and D.E. Warren. “Why Some Rural Places Prosper and Others Do Not.” *International Regional Science Review*, Vol. 32, 2009, p. 300. doi: 10.1177/0160017609336090.
- 14 White, T.K. and R.A. Hoppe. “Changing Farm Structure and the Distribution of Farm Payments and Federal Crop Insurance.” EIB-91. (Washington, DC: Economic Research Service, U.S. Dept. of Agriculture), 2012. [www.ers.usda.gov/publications/eib91/](http://www.ers.usda.gov/publications/eib91/).
- 15 Kilman, S. “Crop Prices Erode Farm Subsidy Program.” *Wall Street Journal*, July 25, 2011. <http://online.wsj.com/article/SB10001424053111903461104576460272550902038.html>.
- 16 Ahearn, Mary Clare, Jet Yee, and Penni Korb. “Effects of Differing Farm Policies on Farm Structure and Dynamics,” *American Journal of Agricultural Economics*, Vol. 87, No. 5, 2005, pp. 1182-1189. See also Yee, Jet, and Mary Clare Ahearn. “Government Policies and Farm Size: Does the Size Concept Matter?” *Applied Economics*, Vol. 37, 2005, pp. 2231-2238.
- 17 Key, Nigel, and Michael J. Roberts. “Government Payments and Farm Business Survival.” *American Journal of Agricultural Economics*, Vol. 88, No. 2, 2006, pp. 382-392.
- 18 Leathers, Howard D. “The Market for Land and the Impact of Farm Programs on Farm Numbers,” *American Journal of Agricultural Economics*, Vol. 74, No. 2, 1992, pp. 291-298.
- 19 Ahearn, Mary Clare, Hisham El-Osta, and Joe Dewbre. “The Impact of Coupled and Decoupled Government Subsidies on Off-farm Labor Participation of U.S. Farm Operators,” *American Journal of Agricultural Economics*, Vol. 88, No. 2, 2006, pp. 393-408.
- 20 Goldschmidt, W. *As You Sow: Three Studies in the Social Consequences of Agribusiness*. (Montclair, NJ: Allanheld, Osmun, and Co), 1978 [1944].
- 21 Labao, L. and C. W. Stofferahn. “The Community Effects of Industrialized Farming: Social Science Research and Challenges to Corporate Farming Laws,” *Agriculture and Human Values*, Vol. 25, 2008, pp. 219-240. DOI 10.1007/s10460-007-9107-8.

- 22 MacDonald, James, Robert Hoppe, and David Banker. "Structural Changes in U.S. Agriculture." Pp. 23-41 in *Policy Reform and Adjustment in the Agricultural Sectors of Developed Countries*, edited by D. Blandford and B. Hill (Oxfordshire, UK: CAB International), 2006.
- 23 Goodwin, B.K., A.K. Mishra, and F. Ortalo-Magne. "The Buck Stops Where? The Distribution of Agricultural Subsidies." NBER Working Paper 16693. (Washington, DC: National Bureau of Economic Research), 2011. [www.nber.org/papers/w16693.pdf](http://www.nber.org/papers/w16693.pdf).
- 24 Foltz, J.D., D. Jackson-Smith, and L. Chen. "Do Purchasing Patterns Differ Between Large and Small Dairy Farms? Econometric Evidence from Three Wisconsin Communities," *Agricultural and Resource Economics Review*, Vol. 31, No. 1, 2002, pp. 28-38.
- 25 C.H. Barnard, G. Whittaker, D. Westenbarger, and M. Ahearn. "Evidence of Capitalization of Direct Government Payments into U.S. Cropland Values," *American Journal of Agricultural Economics*, Vol. 79, No. 5, 1997, pp. 1642-1650.
- 26 Lence, S.H. and A.K. Mishra. 2003. "The Impacts of Different Farm Programs on Cash Rents," *American Journal of Agricultural Economics*, Vol. 85, No. 3, 1997, pp. 753-761.
- 27 McGranahan, David and Patrick Sullivan. "Farm Programs, Natural Amenities, and Rural Development," *Amber Waves*, 2005, pp. 28-35.
- 28 Robertson, G.P. and S.M. Swinton. "Reconciling Agricultural Productivity and Environmental Integrity: A Grand Challenge for Agriculture," *Frontiers in Ecology and the Environment*, Vol. 3, 2005, pp. 38-46. doi:[http://dx.doi.org/10.1890/1540-9295\(2005\)003\[0038:RAPAEI\]2.0.CO;2](http://dx.doi.org/10.1890/1540-9295(2005)003[0038:RAPAEI]2.0.CO;2)
- 29 Epplin, F.M. "Wheat Yield Response to Changes in Production Practices Induced by Program Provisions," *Journal of Agricultural and Resource Economics*, Vol. 22, 1997, pp. 333-344.
- 30 Halloran, J.M. and D.W. Archer. "External Economic Drivers and U.S. Agricultural Production Systems," *Renewable Agriculture and Food Systems*, Vol. 23, No. 4, 2010, pp. 296-303. See also Biermacher, J.T., F.M. Epplin, and K.R. Kiem. "Cropping systems for the Southern Great Plains of the United States as Influenced by Federal Policy," *Renewable Agriculture and Food Systems*, Vol. 21, No. 2, 2008, pp. 77-83.
- 31 Bradshaw, B. "Plus C'est la Meme Chose? Questioning Crop Diversification as a Response to Agricultural Deregulation in Saskatchewan, Canada," *Journal of Rural Studies*, Vol. 20, 2004, pp. 35-48.
- 32 Shields, D.A. "Federal Crop Insurance: Background and Issues." Congressional Research Service Report R40532. (Washington, DC: CRS), 2010. [www.nationalaglawcenter.org/assets/crs/R40532.pdf](http://www.nationalaglawcenter.org/assets/crs/R40532.pdf).
- 33 Wescott, Paul C. and C. Edwin Young.. "U.S. Farm Program Benefits: Links to Planting Decisions and Agricultural Markets," *Agricultural Outlook*, 2000.
- 34 Lin, William and Robert Dismukes. "Supply Response under Risk: Implications for Counter-Cyclical Payments' Production Impact," *Review of Agricultural Economics*, Vol. 29, No. 1, 2007, pp. 64-86.
- 35 Wu, Junjie. "Crop Insurance, Acreage Decisions, and Nonpoint-Source Pollution," *American Journal of Agricultural Economics*, Vol. 81, 1999, pp. 305-320.
- 36 Lin and Dismukes, "Supply Response under Risk."
- 37 See <http://www.cropinsuranceinamerica.org/about-crop-insurance/facts-figures/>.
- 38 Babcock, Bruce A. "The Politics and Economics of the U.S. Crop Insurance Program." Pp. 83-113 in Joshua Graff Zivin and Jeffrey M. Perloff (Eds.) *The Intended and Unintended Effects of U.S. Agricultural and Biotechnology Policies*. 2012. Chicago: University of Chicago Press.
- 39 Informa Economics. "Cost and Efficiency Analysis of U.S. Crop Insurance Program: Implications of Additional FSA Responsibilities." Report prepared for the National Association of FSA County Office Employees (NASCOE), 2011. [www.nascoe.org/Documents/Executive\\_Summary\\_insurance\\_Feb\\_2012.pdf](http://www.nascoe.org/Documents/Executive_Summary_insurance_Feb_2012.pdf).
- 40 Gagnon, S.R., J.R. Makuch, and T.J. Sherman. "Environmental Effects of USDA Conservation Programs: A Conservation Effects Assessment Bibliography." Special Reference Briefs Series no. SRB 2004-01. (Beltsville, MD: National Agricultural Library Water Quality Information Center), 2004. [www.nal.usda.gov/wqic/ceap/01CEAP.shtml](http://www.nal.usda.gov/wqic/ceap/01CEAP.shtml).
- 41 Leistritz, F. Larry, Nancy M. Hodur, and Dean A. Bangsund. "Socioeconomic Impacts of the Conservation Reserve Program in North Dakota," *Rural America*, Vol. 17, No. 3, 2002, pp. 57-65. [www.ers.usda.gov/publications/ruralamerica/ra173/ra173i.pdf](http://www.ers.usda.gov/publications/ruralamerica/ra173/ra173i.pdf). See also Nowak, Peter J., Max Schnepf, and Roy Barnes, "When Conservation Reserve Program Contracts Expire...A National Survey of Farm Owners and Operators Who Have Enrolled Land in the Conservation Reserve..." (Ankeny, IA: Soil and Water Conservation Society), 1990, pp. 80.

- 42 McGranahan, D.A. "Natural Amenities Drive Rural Population Change." Agricultural Economic Report No. 781. (Washington, DC: Economic Research Service, U.S. Dept. of Agriculture), 1999. [www.ers.usda.gov/publications/aer781/aer781.pdf](http://www.ers.usda.gov/publications/aer781/aer781.pdf).
- 43 McGranahan and Sullivan, "Farm Programs, Natural Amenities."
- 44 Sullivan, P. et al. "The Conservation Reserve Program. Economic Implications for Rural America." Agricultural Economic Report No. 834. (Washington, DC: Economic Research Service, U.S. Dept. of Agriculture), 2004. [www.ers.usda.gov/Publications/AER834/](http://www.ers.usda.gov/Publications/AER834/).
- 45 Monchuk, D.C., J.A. Miranowski, D.J. Hayes, and B. Babcock. 2005. "An Analysis of Regional Economic Growth in the U.S. Midwest." Working Paper 05-WP 392. (Ames, IA: Iowa State University Center for Agricultural and Rural Development), 2004. <http://ageconsearch.umn.edu/bitstream/18552/1/wp050392.pdf>.
- 46 Monchuk, D.C., D.J. Hayes, J.A. Miranowski, and D.M. Lambert. "Inference Based on Alternative Bootstrapping Methods in Spatial Models with an Application to County Income Growth in the United States." Working Paper 10-WP 507. (Ames, IA: Iowa State University Center for Agricultural and Rural Development), 2004. [www.card.iastate.edu/publications/dbs/pdffiles/10wp507.pdf](http://iastate.edu/publications/dbs/pdffiles/10wp507.pdf).
- 47 Initially authorized in the 2002 farm bill, this was formerly called the Conservation Security Program.
- 48 Gurian-Sherman, D. "CAFOs Uncovered: The Untold Costs of Confined Animal Feeding Operations." (Cambridge, MA: Union of Concerned Scientists), 2008. [www.ucsusa.org/assets/documents/food\\_and\\_agriculture/cafos-uncovered-executive-summary.pdf](http://www.ucsusa.org/assets/documents/food_and_agriculture/cafos-uncovered-executive-summary.pdf)
- 49 MacDonald, J.M and W.D. McBride. "The Transformation of U.S. Livestock Agriculture: Scale, Efficiency and Risks." Economic Information Bulletin No. 43. (Washington, DC: Economic Research Service, U.S. Dept. of Agriculture), 2009. [www.ers.usda.gov/publications/eib43/eib43.pdf](http://www.ers.usda.gov/publications/eib43/eib43.pdf).
- 50 The originally projected spending on these programs was expected to total roughly 66 percent of total mandatory farm bill expenditures when the 2008 Food, Energy, and Conservation Act was passed. However, since eligibility for the program is based on household income, rapid growth in poverty and unemployment since 2008 led to far greater expenditure levels (exceeding 75 percent of total farm bill spending in recent years).
- 51 Bishop, B. "Poverty Highest in Rural America, Rising During Recession." Blog: Daily Yonder, Dec 27, 2010. [www.dailyyonder.com/poverty-highest-rural-america-rising-recession/2010/12/21/3098](http://www.dailyyonder.com/poverty-highest-rural-america-rising-recession/2010/12/21/3098). See also: <http://www.ers.usda.gov/Briefing/IncomePovertyWelfare/PovertyGeography.htm>.
- 52 Nord, M., A. Coleman-Jensen, M. Andrews, and S. Carlson. "Household Food Security in the United States, 2009." Economic Research Report No. 108. (Washington, DC: Economic Research Service, U.S. Dept. of Agriculture), 2010. [www.ers.usda.gov/Publications/ERR108/ERR108.pdf](http://www.ers.usda.gov/Publications/ERR108/ERR108.pdf).
- 53 Gundersen, C. and S. Offutt. "Farm Poverty and Safety Nets," American Journal of Agricultural Economics, Vol. 87, No. 4, 2005, pp. 885-899.
- 54 Brown, C. and S. Miller. "The Impacts Of Local Markets: A Review Of Research On Farmers Markets And Community Supported Agriculture (CSA)." American Journal of Agricultural Economics, Vol. 5, 2008, pp. 1296-1302. DOI: 10.1111/j.1467-8276.2008.01220.x.
- 55 Gillespie, G., D.L. Hilchey, C.C. Hinrichs, and G. Feenstra. "Farmers Markets As Keystones In Rebuilding Local And Regional Food Systems," pp. 65-83 in Remaking the North American Food System: Strategies for Sustainability, edited by C.C. Hinrichs and T.A. Lyson. (Lincoln: University of Nebraska Press), 2007.
- 56 Martinez, S. et al. "Local Food Systems: Concepts, Impacts and Issues." Economic Research Report No. 97. (Washington, DC: Economic Research Service, U.S. Dept. of Agriculture), 2010. [www.ers.usda.gov/Publications/ERR97](http://www.ers.usda.gov/Publications/ERR97).
- 57 Eamich, A. "7,175 Markets and Counting: Farmers Markets at your Fingertips." USDA Blog. (Washington, DC: U.S. Dept. of Agriculture), 2011. <http://blogs.usda.gov/2011/12/28/7175-markets-and-counting-farmers-markets-at-your-fingertips/>.
- 58 Martinez et al., "Local Food Systems."
- 59 See Hinrichs, C.C. "Embeddedness and Local Food Systems: Notes on Two Types of Direct Agricultural Markets," Journal of Rural Studies, Vol. 16, No. 3, 2000, pp. 295-303; see also Hinrichs, C.C., G.W. Gillespie, and G.W. Feenstra, "Social Learning and Innovation at Retail Farmers' Markets," Rural Sociology, Vol. 69, No. 1, 2004, pp. 31-58.

- 60 McCormack, L.A., M.N. Laska, N.I. Larson, and M. Story. "Review of the Nutritional Implications of Farmers' Markets and Community Gardens: A Call for Evaluation and Research Efforts," *Journal of the American Dietetic Association*, Vol. 111, No. 3, 2010, pp. 399-408. doi: 10.1016/j.jada.2009.11.023.
- 61 Martinez et al., "Local Food Systems."
- 62 Jolliffe, D. "The Cost of Living and the Geographic Distribution of Poverty." ERR-26. (Washington, DC: Economic Research Service, U.S. Dept. of Agriculture), 2006. It is worth noting, however, that the unemployment rate in nonmetropolitan America fell more rapidly and was below that of metropolitan counties in 2010 and early 2011.
- 63 Jones et al., "Health Status and Health Care Access."
- 64 Powell, A. E. "The Infrastructure Roundtables: Seeking Solutions to an American Crisis." *Civil Engineering*, Vol. 80, No. 4, 2010, pp. 42-103; West Central Initiative. "Infrastructure Study for West Central Minnesota Communities." (Fergus Falls, MN: West Central Initiative), 2003. [www.wcif.org/?page=Infrastructure\\_Study](http://www.wcif.org/?page=Infrastructure_Study).
- 65 Brown, D. "Rural Transportation at a Glance." AIB-795. (Washington, DC: Economic Research Service, U. S. Dept. of Agriculture), 2005.
- 66 Irwin et al., "A Century of Research on Rural Development and Regional Issues."
- 67 Cowan, T. "An Overview of USDA Rural Development Programs." CRS Report RL31837. (Washington, DC: Congressional Research Service), 2010. [www.nationalaglawcenter.org/assets/crs/RL31837.pdf](http://www.nationalaglawcenter.org/assets/crs/RL31837.pdf).
- 68 See the USDA FY 2012 Budget Summary and Annual Performance Plan, available at: [www.obpa.usda.gov/budsum/FY12budsum.pdf](http://www.obpa.usda.gov/budsum/FY12budsum.pdf). Information also compiled from Monke, J. "Agriculture and Related Agencies: FY2011 Appropriations." CRS Report R41475. (Washington, DC: Congressional Research Service), 2011. [www.nationalaglawcenter.org/assets/crs/R41475.pdf](http://www.nationalaglawcenter.org/assets/crs/R41475.pdf).
- 69 Johnson, T.G., D. Robinson, and K. Miller. "Economic Impacts of Direct Farm Payments and Business and Industry Loan Guarantees." RUPRI Farm Bill Policy Brief No. 3. (Columbia, MO: Rural Policy Research Institute), 2007. [www.rupri.org/Forms/PolicyBrief\\_Johnson.pdf](http://www.rupri.org/Forms/PolicyBrief_Johnson.pdf).
- 70 See [www.rrdc.info](http://www.rrdc.info) for background information about these centers and their activities.
- 71 See methodological details at: <http://www.ers.usda.gov/Briefing/Rurality/Typology/Methods/>.
- 72 Jackson-Smith and Jensen, "Agricultural Importance Versus Farm Dependence."

## About AGree

***AGree is designed to tackle long-term food and agriculture issues.*** The initiative seeks to drive positive change in the food and agriculture system by connecting and challenging leaders from diverse communities to catalyze action and elevate food and agriculture policy as a national priority. AGree also recognizes the interconnected nature of agriculture policy globally and seeks to break down barriers and work across issue areas.

AGree is a collaborative initiative of nine of the world's leading foundations, including the Ford Foundation, Bill & Melinda Gates Foundation, The David and Lucile Packard Foundation, W.K. Kellogg Foundation, The McKnight Foundation, Robert Wood Johnson Foundation, Rockefeller Foundation, and The Walton Family Foundation, and will be a major force for comprehensive and lasting change.

### ***Contact us:***

1920 L Street, NW • Washington, DC 20036 • 202-354-64400

**[www.foodandagpolicy.org](http://www.foodandagpolicy.org)**



[www.foodandagpolicy.com](http://www.foodandagpolicy.com)