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## Insights and Applications

# Factors Impacting Agricultural Landowners' Willingness to Enter into Conservation Easements: A Case Study

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*Agricultural lands offer an abundance of environmental goods and services, yet face residential development pressures. Conservation easements are frequently used to protect both productive land and environmental amenities. The landowner retains ownership, and may donate development rights or receive compensation for permanently limiting development on the property. Focus groups were conducted with agricultural landowners in Wyoming and Colorado to explore factors affecting their preferences for conservation easements. Results from the focus groups reveal that landowners have concerns about providing easements in perpetuity. They also considered public access to and loss of managerial control of their property as obstacles. Focus-group results indicated that landowners valued the provision of public goods, such as wildlife habitat and open space, to neighboring communities, and generally felt something important would be lost to their communities if their lands were developed. Addressing landowner concerns could potentially increase the volume of easement transactions.*

**Keywords** agricultural lands, conservation easements, landowners, open space

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Agricultural lands offer public goods and amenities in addition to productive capacity (McConnell and Walls 2005). Public amenities might include open space, wildlife habitat, and recreational opportunities (Fausold and Lillieholm 1999; Bergstrom 2005). Rural private lands are being utilized for home sites due to the public's demand for these environmental amenities (McLeod et al. 2003; see also Hellerstein et al. 2002 for a summary of public preferences for amenities). McLeod et al. (2003) noted that the extent of the development pressure depends on location, production values, and the disposition of adjacent lands. Ironically, development pressures jeopardize the provision and flow of the desirable agricultural land amenities.

Several tactics have been employed to prevent the loss of amenities associated with agricultural lands. Duke and Lynch (2006) categorized 28 farmland preservation techniques into four types, including regulatory, incentive-based, participatory, and hybrid (a combination of incentive-based and participatory techniques). Conservation easements (CEs) are one increasingly popular participatory technique used by land trusts to protect private land from development. The western United States is now the fastest growing region for the number of both acres under CEs and land trusts (Land Trust Alliance 2006).

Land trusts work with private landowners to develop mutually agreeable CE contracts (Gustanski 2000). CEs protect amenities by compensating landowners for limiting development on a parcel for the duration of the easement. Terms of a CE include specification of permissible land use activities, the extent of (if any) public access, payment vehicle and amount, easement duration, and conditions governing both changes of land ownership and termination of the contract (Buist et al. 1995). Terms negotiated depend on the land use objectives of both the trust and the landowner.

Given the increased demand for environmental amenities provided by private agricultural lands and the increased use of conservation easements, the primary research question here is the following: "What are the important factors affecting landowners' preferences for placing a CE contract on a parcel?" Understanding these factors and preferences permits communities, public organizations, and land trusts to make better use of conservation resources.

### **Relevant Literature and Theoretical Considerations**

There are several studies that reveal public preferences and demand for farmland protection. Kline and Wichelns (1996) used focus groups and surveys to identify the public's motivations for protecting Rhode Island farmland. The results included protection of water, wildlife, scenic resources, and public access to private working lands. The authors concluded that broadening preservation programs from farmland to environmental protection may lead to greater public benefits. McLeod et al. (1999) found that public support for a Wyoming development right purchase program would depend on managing trade-offs between protecting environmental amenities provided by mountain ranches (recreation and wildlife habitat) and residential development of pastureland. A Delaware-Connecticut study of attribute choices by Johnston and Duke (2007) found that parcel size, access, risk of development, fee simple land purchases, and state CE programs are the preferred policy target characteristics and attributes.

Supply-side or owner interests in land preservation offer some contrast with land use decision making. Zollinger and Krannich (2002) found that difficulty in

renting or purchasing land, lack of heir interest in agricultural production, and falling production profits increased the propensity of Utah agricultural producers to sell their land.

Several comprehensive studies have examined landowner preferences under Maryland's Purchase of Agricultural Conservation Easement (PACE) program. Phipps (1983) indicated that areas with the highest participation rates were actually at less risk of development than regions with lower participation rates. Pitt, Phipps, and Lessley (1986) showed that when potential participants received program details from colleagues, they were more inclined to engage in a PACE. Lynch and Lovell (2003) also found outcomes similar to Pitt et al. (1986): larger parcels, crop production operations, and greater distance from municipal areas increased participation. Duke (2004) offered analysis consistent with Lynch and Lovell (2003) regarding parcel size, distance from dense development, and participation and also noted that high soil and environmental qualities reflected higher incidence of land preservation. Duke and Lynch (2007) conducted extensive individual and small-focus-group interviews that covered a set of five questions. Landowners identified preferred agricultural landscape attributes such as agrarian landscapes with natural wooded settings void of congestion and dense development with high open space. Payment type, tax implications, and the fairness of the appraisal process were also identified as considerations for land preservation.

Hoag et al. (2005) explained that the supply and demand for CEs might be impacted by private amenity rents as well as public interest values. If both interests were complementary, then they might jointly contribute to a landowner participating in a CE program. See Marshall (2002) and Keske (2006) for expanded development and discussion of public interest values and private amenity rents.

The preceding works provide a basis for understanding some factors that may affect landowners' decisions to enter into conservation easements. These works suggest landowners have incentive to conserve and protect their land as a valuable input for their business and for their own satisfaction. Financial incentives also exist for selling the land for residential development. Thus, several potential theoretical constructs may provide insight into agricultural landowners' decisions about their lands and entering into a CE.

Landowners are often business managers, and their motivation may be profit maximization. They may compare a CE compensation package against the returns from a partial or full land sale. Regulation or land management stipulations written into the CE contract requiring additional managerial, labor, or capital inputs would impact landowners' profits and may be viewed negatively. Moreover, results of Duke (2004) suggest that when looking at this issue from a profit maximization perspective, landowners may consider economies of scale of conservation programs and try to maximize total benefits from all existing programs, including CEs.

Landowners might also seek to maximize the well being of their families. A CE contract preserving agricultural lands/lifestyles might be viewed positively as an increase in private amenity rent (Hoag et al. 2005) or, conversely, as a threat to the future land values as it relates to retirement security or estate value.

Altruism could also be an important component of utility maximization. Landowners may perceive their land as part of a regional landscape that defines the custom and culture of themselves, their neighbors, and their community (Cross 2001). CE negotiations may reveal the extent to which landowners (acting as agents

on behalf of the general public) receive satisfaction from providing public interest values (McLeod et al. 1999; Hoag et al. 2005).

Agricultural landowner preferences for CEs depend upon multidimensional decision-making constructs. The previously discussed theoretical constructs provide potentially conflicting behavioral predictions, while the array of perspectives provided in the literature offers little predictive power related to dominant preferences. For example, someone acting as a profit maximizer might be unwilling to enter into a CE without compensation beyond tax benefits. Someone wanting to preserve amenities for their families or community may be willing to enter into a CE with only tax benefits as a financial incentive. Given our research question and the broad number of issues raised by theory and the existing literature, we specifically focus on landowners and their preferences regarding conservation easements. The work discussed in the pages to follow is exploratory in nature.

## Methods

While we ultimately used qualitative research to inform development of a survey and quantitative analyses for the second phase of our research, that is, a mixed methods approach (Tashakkori and Teddlie 2003), the qualitative research results are the focus of this article. It is important to point out that the objective of the focus groups was to provide a comprehensive inventory of issues and factors that might impact participants' preferences, and ultimately their decisions, to enter into a CE. This was done to avoid important omissions for the second (survey) phase of the project. This is consistent with recommendations by Morgan (1988) and Fern (2001).

Given the objective of our exploratory research, a variety of potential approaches exist for querying small groups for insights and analyses of the resulting qualitative data (for example, see the following: Lofland et al. 2006; Steelman and Maguire 1999; Gladwin 1989). The focus-group method was chosen as our interview technique due to its ability to create interaction and discussion from multiple respondents regarding the topic of interest (Morgan 1988). The focus-group sessions used standardized open-ended questions for each session (Fern 2001) and followed procedures described in Johnston et al. (1995). Language common to respondents was utilized to avoid translation bias and miscommunication. Focus-group participants were questioned in a way that would allow them to explain the kinds of resources found on their land that they and others valued. Diversity of expression regarding resource values and descriptions was encouraged throughout each session.

Seven focus groups were held with 44 participants in three different locations in Wyoming and Colorado. The first focus-group sessions were held in Casper, WY, in conjunction with the Wyoming Stock Grower's Association (WSGA) annual meeting on June 10, 2006. The second set of focus-group sessions were held in Pueblo, CO, as part of the Colorado Cattleman's Association (CCA) meetings on June 20, 2006. The final group discussions were held in Breckenridge, CO, during the Colorado Farm Bureau (CFB) meetings on July 23 and 24, 2006.

The focus groups contained local landowners representing an array of interests and experiences regarding CEs. Sociodemographic data were not formally collected, but based on researcher observation and participant discussion, the age of participants ranged in age from their late 20s to early 70s, with the majority of participants being in their late 50s. Approximately one-third of the participants were females.

Years in production ranged from lifelong agriculturalists to relatively new hobby farm producers. Respondents had varying degrees of experience with CEs: Some were CE holders, while others knew very little about them. This diversity among landowners created compatible group members, but they were not necessarily cohesive, following recommendations by Fern (2001) for exploratory tasks.

A pre-questionnaire was given to participants prior to the start of discussion to stimulate respondents' thoughts about land conservation and CEs. Questions in the pre-questionnaire asked the following:

1. Have you been or are you currently considering a conservation easement on all or part of your land? Why or why not?
2. From your perspective list two of the most valuable characteristics to conserve on your land.
3. Now list two characteristics someone else would want to conserve on your land.
4. What do you think you would require to give up development rights for a parcel (some or all of your current holdings) of your land?
5. Do you know of any land trusts or other organizations that have transacted conservation easements in your area?

Landowners were then asked the following in the focus-group sessions:

1. Describe the characteristics of the perfect CE for you.
2. Indicate the top two attributes to conserve on your property.
3. What are the top two attributes someone else (the public) would like to protect on your property?
4. Explain what kinds of things would be "deal breakers" that would prevent you from participating in a CE.
5. Tell us what your community would lose if your property was developed.

The first step in the data analysis involved transcription of the focus-group audiotapes and typing of notes from other researchers present at the sessions. These electronic records were then used in the data-logging process to identify issue categories by question, which ultimately resulted in descriptive codes (i.e., perpetuity as a problem, conservation of wildlife habitat as important, etc.) used to group responses by focus group question (i.e., questions 1 through 5 as described in the previous paragraph). This process and indexing of issues by question is recommended as one potential systematic approach to compare and contrast data from focus groups (Krueger 1998; Fern 2001). Notable quotes deemed demonstrative of a coded issue were tagged in the transcripts for possible inclusion in reporting of the data as recommended by Krueger (1998). The results reported in this article were chosen based on their prevalence across respondents both within and across focus-group sessions.

## **Results**

Landowner preferences pointed to potential schisms between generally accepted CE requirements and "deal breakers." Landowners seem to be motivated by both private and public interests when thinking about CEs. Opportunities exist to improve the likelihood of agricultural landowners entering into CEs.

When asked about the "perfect CE," respondents overwhelmingly indicated a dislike for an agreement into perpetuity. Many of the people that attended the

groups seemed more willing to consider CEs if some type of term easement were available. Many believed that perpetuity would “tie the hands” of their children. “I really would prefer to leave everything to the children. I would prefer to not tell them how to run that land before they get it” (CCA). “Down the road later, if my daughter and son-in-law and my grandkids . . . decide they want to do something different, I would not want to tie their hands right now with a conservation easement that would limit what they might want to do. So, that’s my primary reason, when I say it would not fit our operation” (WSGA). “Well, I’m not so much concerned with the cost, but my son is also only 20 years old, and I don’t want to tie his hands with perpetuity, which basically means 50 years until the big shot lawyers get it changed anyway. If I could get into an arrangement with a term easement, I would consider something like that” (CFB).

When asked what attributes they wanted to conserve, the most frequent responses related to conserving wildlife habitat, open space, and agricultural production. Respondents interested in conserving wildlife habitat spoke of its importance to them and others. “Allowing for a home for wildlife is something that we enjoy, and that outsiders enjoy as well” (WSGA).

Participants also wanted to protect the open space that their land provided. Landowners enjoyed looking for miles around and not seeing any type of development. They felt that this was a benefit for themselves as well as neighboring properties. “Where we sit is on a valley floor, so it keeps that valley floor open. People in our town love that meadow at the bottom” (CFB). “Open space . . . Keeping it in one piece for its size” (WSGA). “The aesthetics of open space . . . People like to look into the valley and see cattle grazing” (CCA).

The agricultural production their land provided also was something respondents wanted to protect. “I would like to be able to continue to make a viable living. I take a lot of pride in running a good outfit” (CCA). “Well, open space and ongoing agricultural use . . . That’s my main objective” (WSGA).

To compare landowner preferences with their external perceptions, participants also were asked what they thought the public would like to see protected on their property. Respondents indicated that the land attributes they valued would largely be the same as what others would like to conserve. Interestingly, they sometimes gave different reasons for conserving the same things. Wildlife habitats would be a priority to conserve for the general public, although mainly for hunting purposes. “They would want to conserve wildlife, but not because it’s good for the ecosystem. They just want the wildlife for hunting” (WSGA). “I think others would be very interested in the wildlife” (CFB). “They would want to turn my farm into a safe habitat for the animals . . . Facilitator: So, the wildlife habitat? Participant: That, and I also think a recreational area would be important to outsiders” (CFB).

Respondents also indicated they felt that many urban people view their land as valuable because of the recreational prospects it holds. This tended to be a more negative answer. “People like the recreation on your land, but they certainly don’t want to pay for it. If they want to use it, then they need to pay for what we provide” (WSGA). Landowners thought that while recreational opportunities are important to the general public, it was important that users compensate property owners.

Landowners also thought that the public would opt for conservation of open space due to diminishing open space in many areas, “Open space, including view shed, clean air and clean water . . . all the benefits that agriculture gives” (CCA).



When respondents were asked what they thought would be a “deal breaker” with CEs, many felt that if public access was a requirement with the CE, they could not be persuaded to do an easement. “If they had required public access, that would have been a major problem for me” (CCA). Although they are very proud of the amenities that their land provides for others, landowners were not comfortable with allowing the general public on their land. They believed strongly that this would interfere with their current operation and management practices and create potential liabilities for them. This concern may be related to issues landowners expressed regarding recreational use of their land by the public.

Landowners were also concerned with the potential loss of managerial control on their property. “I think a deal breaker for us would have been putting restrictions on the land that wouldn’t allow us to do what we love to do” (CFB). “Restrictions are one thing, but they can get too controlling on an operation” (CCA). Many stated that if they would have to give up anything more than development rights on their property, they would not be interested in a CE: “The only thing that I want to give up is the right to subdivide” (CFB).

When asked what they thought their communities would lose if their land were subdivided, many mentioned open space and wildlife habitat. Participants also indicated that the community would lose its connection with an agricultural lifestyle and culture if those lands were subdivided. Many believed that the decline or even loss of agriculture would worsen quality of life in their communities. “Quality of life always goes downhill when there’s development” (WSGA). “I think the loss of that kind of ground is a loss of a way of life and a culture” (CFB). “If they developed, people would lose that small town safety. You’d have to start locking your doors at night and things like that” (CCA).

### **Summary**

Discovering landowners’ preferences for placing a parcel of land under a CE provides information that better informs land trusts and government agencies about what potential easement providers need and want. Knowing what landowners prefer to protect should help organizations wishing to obtain easements.

There are several main insights drawn from these focus groups of agricultural landowners. Producers are concerned about providing easements in perpetuity, which is the typical duration of CEs at this time. While this finding contrasts with the results of Duke and Lynch (2007), this may be an indication of the importance of option value for landowners when it comes to CE commitments, and it underscores the value of further investigation. Landowners also expressed concern about the possibility of public access to their lands, which is another relatively common requirement of CEs. This concern may be related to liabilities and loss of solitude.

Landowners acknowledged that open space is important. They recognized the value of having this resource available for themselves and for the general public, although reasons relating to the importance of open space are somewhat different for landowners compared to the general public. Landowners thought that protecting open space was important to maintaining production and wildlife habitats. Landowners also predicted that others would most likely want to conserve their land for, among other things, recreational reasons, which implies public access across their lands. Landowners seemed to believe that open space should be enjoyed by all, but from a distance. Allowing non-landowners to enjoy the open space through

recreation could mean impacts on production enterprises and potential liability for the landowner.

Many landowners in the focus groups thought that they provided ecosystem services such as wildlife habitat. In the intermountain West, wildlife habitat is decreasing rapidly to development and fragmentation (McLeod et al. 2003). Producers know this and think that the local habitat they provide is important.

Marshall et al. (2007) define sense of place as the level of connection that individuals have with their physical community. Results indicate that landowners view their land as providing important benefits to local communities, including cultural benefits. They believe that their land is a valuable resource not only for themselves but their communities as well. Also, by providing wildlife habitats, some respondents indicated that this may help stimulate the hunting economy for a community. Overall, these outcomes seem to indicate a sense of attachment to place for landowners.

### Implications

There are benefits to understanding potential “deal breakers”—including length of easement and public access—to Western landowners considering CEs. Our research indicates that landowners, as resource and ecosystem service suppliers, acknowledge the importance of amenities not only for themselves but also for the general public. As many lands are being taken out of production for exurban development, the conservation of the remaining lands ensures biodiversity in wildlife, a healthy ecosystem, local production, and working landscapes for those lands in the future, which may enhance the emerging market for CEs.

The challenge is to determine whether addressing landowner concerns would meet the land trust’s objectives, in addition to making CE contracts more appealing and desirable to landowners. Addressing these issues could reduce transaction costs and incidence of litigation and potentially could increase the volume of easement transactions, thereby benefiting many groups across society.

Educational efforts for landowners and land trust agents could improve the functioning of easement markets. As indicated in previous research, some landowners were fairly knowledgeable about CEs. There was also a fairly substantial group that knew very little, suggesting potential for outreach education to landowners regarding their options and helping them find an agreement that is acceptable and rewarding to them. Education efforts regarding issues and factors impacting landowners’ preferences could help improve land trusts’ marketing efforts. Moreover, these educational efforts could improve the allocation of both human and financial resources used to protect land.

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