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EXPLORING PRODUCERS', STAFF MEMBERS', AND BOARD MEMBERS' COGNITIVE FRAME ON DECISION MAKING IN AN APPALACHIAN ORGANIC FARMING VENTURE

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ABSTRACT

Sustainable development assistance organizations (SDAOs) aim to help producers of natural resource products move their goods and services to market. This article explores how the cognitive frames held by producers, staff, and board members in an agricultural SDAO in rural Appalachia influence organizational decision-making. This study explores identity, characterization, value, and membership frames. Data collected through semi-structured interviews with growers, staff, and board members reveal that the frames these stakeholders hold lead to the institutionalization of decision-making processes that allow organizational managers to make quick, consistent, and clear decisions while avoiding conflicts among members who hold competing frames. Simultaneously, these tacitly-supported practices are exclusionary, and they limit creativity and information exchange, as well as reducing transparency. Consequently, the SDAO may face organizational challenges due to limited problem-solving and adaptive management capabilities. Additionally, the prevailing nature of some members' frames may prevent other participants from changing their views of the SDAO, limiting the firm's flexibility to experiment with new management and organizational structures and resilience in the face of change.

The development of support linkages among producers of natural resource-based products and sustainable development assistance organizations (SDAOs) is one common approach to rural sustainable development. Producers of sustainable goods include entrepreneurs who sell timber and non-timber forest products, agricultural produce, and arts and crafts, among other items. SDAOs are organizations such as government agencies, nonprofit firms, university centers and extension offices, and regional economic development commissions that offer sustainable producers help with internal functions such as developing business plans and proposals, researching and developing new products, and accounting, as well as with external functions such as obtaining start-up funds and marketing and distributing products. Generally speaking, SDAOs are designed to serve as

intermediaries that link local producers to markets and that give producers business management services.

This analysis seeks to understand how sustainable producers that participate in one SDAO and the staff and board members that operate the organization "frame," or make sense of, the entity through which they interact, and how those frames influence decision making in the organization. Following a presentation of relevant stakeholders' frames regarding the SDAO, this research theorizes their implications for the sustainability of the organization itself and the SDAO-centered model of sustainability more broadly.

ANALYTIC FRAME THEORY

Analytic frame theory seeks to explain the ways that people make meaning from their environment. Frames help individuals define, describe, and place boundaries on their observations and interpretations of the world around them (Bateson 1972; Benford and Snow 2000; Gamson and Modigliani 1987; Goffman 1974; Snow and Benford 1988; Tversky and Kahneman 1981; Walton and Bailey 2005). Thus, frames are the result of cognitive actions that individuals use to help situate themselves in the times and places in which they are embedded (Goffman 1974). Gamson and Modigliani (1987:143) have described a frame as "a central organizing idea or story line that provides meaning." Subsequently, frames influence individuals' actions, decisions, and behaviors.

Previous researchers have identified several types of frames (Lewicki, Gray, and Elliot 2003; Walton and Bailey 2005). These forms are founded upon the different ways that individuals observe their environments and are significant influences in their understandings of the world and subsequent behaviors. This analysis focuses on four types of frames: value (Brewer and Gross 2005), identity (Lewicki, Gray, and Elliot 2003), characterization (Lewicki, Gray, and Elliot 2003), and membership (Masterson and Stamper 2003).

Value frames are the cognitive architecture or scaffolding that individuals use to decide what is right or wrong (Brewer and Gross 2005). Individuals use value frames to justify priorities in the face of competing forces and to gain support for their positions by appealing to the values of those whose backing they seek.

Sustainability frames describe how individuals define the concept of sustainability and prioritize its constitutive elements. This analysis explores how one SDAO's stakeholders prioritize the elements of a three-part model of sustainability, in which the economy, environment, and cultural sustainability/social justice all play roles (Agyeman and Evans 2003; IUCN, UNEP,

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and WWF 1991; Lynam and Herdt 1989; Pearce and Turner 1990; WCED 1987; Young 1997); and how participants incorporate those values into decision-making processes concerning the SDAO.

Identity frames, as described by Lewicki, Gray, and Elliot, provide answers to questions such as, "Who am I? What defines me? What do I believe?" People may, for example, define themselves through religious beliefs, professional positions, family status, or community relationships. Identity frames intersect with this analysis because how producers, staff, and board members define their identities has implications for their approach to, and aspirations regarding, their natural resource-dependent work and their relationship to the SDAO. The terms *legacy growers*, *returning growers*, and *lifestyle growers* describe the identity frames of the organic vegetable producers participating in the SDAO upon which this study focuses, and the term *service frame* describes the identity frames of the SDAO's professional staff and volunteer board members.

Characterization frames define how individuals perceive and describe others based on questions such as, "Who are they? What defines them? What do they believe?" This frame allows people to locate themselves in society by defining their identities in relation to others (Stets and Biga 2003). Characterization frames have implications for this research because they inform the ways stakeholders in SDAOs build relationships, interact, and collaborate with others.

Membership frames describe how stakeholders in SDAOs perceive their roles in their organizations as well as three factors that influence the social and cognitive elements of those relationships: need fulfillment, mattering, and belonging (Masterson and Stamper 2003). Individuals use these factors to develop a "psychological contract" (Masterson and Stamper 2003:473) with their employers. Employees, through the ways they make sense of their contracts with employers, set, monitor, and adjust their reasons for participating in, levels of commitment to, and involvement in, the organization. Three elements of membership frames receive attention in this analysis. The first includes stakeholders' general reasons for participating in the SDAO. This factor aligns with the "need fulfillment" factor of organizational membership theory. The second element of stakeholders' membership frames includes the attachment stakeholders have to, or importance they place upon, the SDAO's sustainability mission. This portion constitutes the "mattering" component of membership theory. The third element captures the ways stakeholders view their relationships with other participants in the organization. This element operationalizes the "belonging" component of membership theory. Membership frames include elements of identity, value, and characterization frames.

Distinctions among frame types are not always clear. Individuals draw on multiple types of frames as they work to locate and define their places in their environments. In this analysis, however, distinctions are drawn to symbolize how particular frame types may dominate a person's thinking and behavior, and to explain how frames interact and become hegemonic within an organization.

Previous research has suggested that acknowledging the existence and understanding of different frames among participants in SDAOs is important for maintaining effective working relationships and management practices among producers, staff, and board members. Bhuyan (2007), and Bhuyan and Leistritz (2001), outline the importance of decision-making processes that embrace the diverse frames held by producers and support providers in agricultural ventures like the SDAO that served as the case for this research.

SUSTAINABLE DEVELOPMENT ASSISTANCE ORGANIZATIONS (SDAOs)

For purposes of this analysis, SDAOs are public, private, and nonprofit organizations that embrace a broadly writ concept of sustainability and provide business-management services and training for producers of natural resource-based sustainable products. Bebbington (1997) has argued that support organizations play several important roles in rural sustainable-development initiatives including helping members build social capital, empowering producers with management responsibilities, and linking rural producers to markets and resources that might otherwise be inaccessible.

Nel, Binns, and Motteux (2001:11) further illustrated the importance of SDAOs for local producers of sustainable products, stating, "The reality is that even initiatives that are characterized by high levels of resources and capacity face very real barriers to their ongoing development, and varying degrees of external support and guidance are frequently necessary." These authors outlined five competencies in which producers are often weak and that SDAOs can help address. These include: weak financial and technical expertise, inadequate equipment, limited organizational skills, and unfamiliarity with the market. Besides helping producers overcome deficiencies in these areas, Nel, Binns, and Motteux highlighted two ways that support organizations can enhance local development efforts. These include supporting local leaders so that organizational decisions are acceptable to community members and ensuring that producers do not grow dependent on the external support that SDAOs provide.

Other researchers have proposed that linking support organizations with producers can create tension. Bhuyan (2007:276) has argued that producers, the

target beneficiaries of SDAOs' work, often complain that they "feel disconnected from their [SDAO], or that their voices are not being heard by management." Jesse and Rogers (2006) contended that missteps by an SDAO's management team can result in a crisis of confidence among producers that lead them to withdraw from the organization.

This analysis uses the lens of analytic frame theory to address the following concern: How do the cognitive frames of producers, staff, and board members in one sustainable development assistance organization interact and influence decision making within the organization, and how can the perspective of analytic frame theory enhance management of the SDAO to strengthen stakeholder commitment and organizational resilience?

CASE DESCRIPTION AND METHODS

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Glasmeier and Farrigan (2003) provided an excellent overview of the economic and environmental struggles that have faced residents of Appalachia over the past several decades. Among the challenges these authors described as confronting Appalachia's residents are those related to dependence on natural resource industries for incomes and jobs; absentee land ownership that restricts local access and decision-making control of local natural resources; topographic challenges that prevent infrastructure development; public health problems related to inadequate housing conditions and water contamination; racial inequality; enormous income gaps between rich and poor; a lack of political influence among low-income residents; and unsatisfactory educational systems, among others. The authors summarized the history of the region with the following statement (Glasmeier and Farrigan 2003:134):

The poverty so evident in Appalachia today arises from a complex history of regional economic and political exploitation. Despite 30 years of active policy intervention and billions of dollars in federal and state funds allocated to encourage economic development in the region, the heart of Appalachia remains stagnant and distinct from economic trends experienced nationally and within the more immediate urban areas of the region.

Traditionally, three natural resource dependent industries served the region of Appalachia addressed in this study: coal mining, logging, and tobacco farming. During the past several decades, however, these industries have struggled, mechanized, or been displaced in the midsouth and employment within them has

declined. Our research pays particular attention to transitions in the tobacco industry, since many of the study's respondents were tobacco farmers, or from tobacco farming families, before undertaking organic vegetable farming and egg production.

This brief description of Appalachia paints a bleak picture of the natural environment, relative wealth, employment, and opportunity in the region. Witnessing this impoverishment, several respondents in this study, among others, decided to launch the Blue Ridge Sustainability Forum (BRSF), a not-for-profit organization that seeks to find solutions to environmental and economic problems in the region, in 1995. BRSF aims to enhance sustainability in central Appalachia through the creation of natural-resource based, for-profit businesses that employ, and use the skills of, local residents. BRSF's mission aligns with a three-part model of sustainability. The organization seeks to develop ecologically sensitive businesses, empower community members to take responsibility for their community's economic well-being, and build upon the region's cultural strengths and values.

Shortly after creating BRSF, the organization launched Blue Mountain Organic Vegetables (BMOV), the SDAO examined here. BMOV is a for-profit subsidiary of BRSF. One of BMOV's goals is to find new crops for farmers transitioning out of tobacco so that they can continue to earn a living from agriculture. BMOV helps individual organic vegetable and free-range egg producers to collectively produce, package, market, and distribute their products under a single brand name.

There are three types of participants in BMOV: 1) growers (also called producers and farmers), who are responsible for cultivating fruits, vegetables, and free-range eggs, and for transporting their produce to the BMOV packinghouse where it is packaged and shipped to grocery stores; 2) staff members, who are responsible for functions that include accounting and payroll management, fundraising, marketing, supply-chain management, recruiting new growers, and packaging and shipping produce; and, 3) board members, who are responsible for the long-term strategic positioning of BRSF, fundraising, program development, and accountability.

This research focuses on all three stakeholder types. Data were collected through semi-structured interviews. Stakeholders' frames, and the relationships of those frames to decision making, emerged through these discussions. In total, interviews were conducted with 31 stakeholders. Growers eligible for interview included all those who cultivated produce for BMOV in 2008. All eligible growers were invited to participate in the study; 19 of 32 did so. Sometimes spouses and children shared farming duties, and in those cases, family members were

interviewed simultaneously. While it is possible that some sentiments felt by family members went undiscovered because respondents did not feel comfortable talking about difficult topics in the presence of their family, it is believed that the benefits of interviewing family members together outweighed the disadvantages. Indeed, family interviews often resulted in deep discussions about the roles that family, in a conceptual sense, can play in farming.

BMOV employs seven full-time staff members. Six participated in this study. Last, interviews were conducted with six of fourteen board members. Numeric codes (growers = G1-G19; staff = S20-S25; board members = B26-B31) are used throughout this analysis to maintain respondents' confidentiality.

This research focuses on a limited set of frames including identity, characterization, value, and membership frames. This analysis does not explore other frame types such as race, gender, conflict, or social control, for example.

RESULTS

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Analysis reveals three general variations to the frames held by BMOV's growers. All growers approached their work through one of these variations, although there was overlap among them. The notion of membership was central to each variation and carried a host of implications for the ways growers viewed their work with, decided about, and related to others in BMOV. The terms legacy tobacco, returning tobacco, and lifestyle farmers are used here to describe the three variations in frames held by BMOV's producers.

One difference among the frames held by growers is the way they view their financial dependence on farming. This distinction plays a fundamental role in determining which of the three overarching frames different growers subscribe to, and how farmers within each group view organizational decision making within BMOV. Legacy tobacco farmers are dependent on their farm's income for their economic livelihoods. Returning farmers are less concerned about the financial success of their farmsteads, although as a group they did wish to see them at least break even. Lifestyle farmers, on the other hand, suggested they had little concern for their farm's financial success. Figure 1 illustrates the spectrum of financial dependence and concern exhibited by farmers participating in this study.

Legacy Tobacco Farmers

Legacy tobacco farmers have been involved in agriculture their entire lives. The parents, and often grandparents, of these producers also farmed. Legacy growers

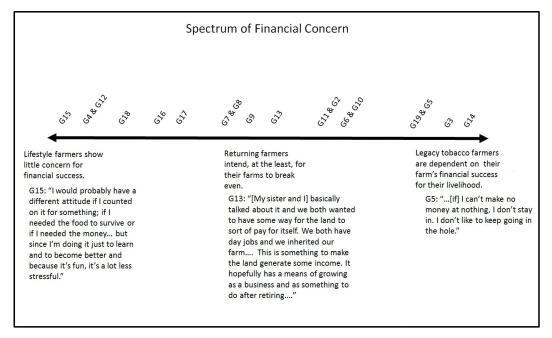


FIGURE 1. GROWERS AND THEIR CONCERN FOR ECONOMIC SUCCESS. GROWERS LISTED IN PAIRS REPRESENT SPOUSES THAT SHARE FARMING DUTIES.

are full-time, professional farmers who rely on the incomes their farms generate for large portions of their economic livelihoods.

Legacy tobacco growers justify their decisions to participate in BMOV by claiming that organic produce offers a higher return over other crops, including conventional vegetables or tobacco. Legacy tobacco farmers also share the perception that they have limited employment options outside farming. These growers frame BMOV as their last chance for financial security. Simultaneously, however, legacy growers describe farming as more than a way of making a living. Agriculture, for these individuals, is a way of life, and their notions of what it means to be a farmer are embedded in the many decisions they make. Legacy growers suggest that their financial aspirations dominate over other reasons for participating in BMOV, although their desire to continue living a way of life with which they are comfortable and confident, and to which they are strongly attached, also plays a key role. G3 described elements of legacy growers' farming identity:

I was raised on a farm, me and my two sisters.... And farm life: there's nothing like it. It's hard work before daylight till after dark most days, and it's the only way to raise children. ... I turned 62 in March. My wife's 62. We've worked ourselves to death all of our life. As long as our health will

stand it, we'll stay with it. But you know, I'm crippled, and of course I don't let that slow me down. I know a lot of people that's been in the shape I was in, and they'd have sat down and wouldn't have got back up. I was determined. I ain't ready to give up.

If I grow a good crop now, I'm proud. I come out here and I see a big old beautiful pea patch that's bloomed, blossomed out and about that tall (gesturing waist high with hand), I'm proud because I know I'm going to make some money (laughs).

Legacy growers rarely say that they hold strong attachments to the sustainability mission of BRSF and BMOV. These growers give passing references to the environmental and health benefits of organic produce, but do not seem concerned with supporting or furthering organic agriculture in the region unless doing so increases their profits. This does not mean that legacy tobacco growers do not value BRSF's mission. Rather, that mission is simply not a cornerstone of their motivation to participate in the SDAO. For these growers, sustainability means being able to continue earning a major portion of their income from farming and living the agricultural lifestyle to which they are accustomed. While legacy tobacco farmers have social and cultural aspirations that relate to their farms, such as the maintenance and reinforcement of the cultural values they associate with an agricultural life, they do not view BMOV as playing a role in building or maintaining those values.

Legacy growers view their farms as sustainable because their cultivation practices meet the standards for organic certification required by the U.S. Department of Agriculture (Organic Foods Production Act 1990). Once legacy growers have achieved certification, which they regard as a pinnacle achievement, they believe it unnecessary to pursue environmental excellence further.

Legacy tobacco farmers view BMOV staffers as possessing key technical expertise in areas such as marketing and accounting, among others. Consequently, they frame BMOV as an intermediary firm whose purpose is to market farmers' produce and to ensure growers are paid accordingly. G14 articulated this perspective: "They're more like a broker, in my opinion. We take our product there, if it needs to be graded, it's graded and shipped; they sell it; we get paid. If they don't sell it, we don't get paid."

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Legacy tobacco farmers' approach to decision making in BMOV.

Legacy tobacco farmers are uninterested in the ways that BMOV's management team makes decisions, as long as the choices managers make maintain or increase growers' incomes. These farmers are willing to leave organizational decisions to BMOV's staff and remain uninvolved in the firm's management. This perspective does not mean that these growers do not critique the organization or its managers, but that they do not attempt to influence decision making within the firm. For example, participating in BMOV has been a difficult and losing proposition for G3 as well as for the families of G5 and G19. Still, they have not attempted to become more involved in BMOV's management. These respondents simply accept the decisions BMOV makes as a condition of their membership. G14, who has found a higher degree of economic success than other growers in this group, described the disinterest legacy growers show for decision making in BMOV in the following conversation:

Interviewer: Were there any early points when you were working with the management team at BMOV and had to make a big decision?

G14: No like I said S25 takes care of all that. We take it up there and they send it somewhere. We don't care where they send it as long as we get paid.

Returning Tobacco Farmers

Growers in this group spent their childhoods on their families' homesteads, but left farming as young adults. These individuals frequently describe how, as children, they disliked farm work. Most attended college and now work in professions outside of agriculture or are retired. Farmers in this category are now returning to agriculture after inheriting farmsteads from relatives no longer able to maintain them. Growers in this group do not rely on their land for their economic livelihoods and often farm part-time.

Returning growers frame their involvement in farming as a way of honoring the life work of their relatives. G21, a returning grower that raises free-range egg laying hens, expressed this perspective: "[I] feel blessed to have the opportunity to do something with the land. My dad farmed this place, my great-grandparents, then my grandparents, and my dad and mom..."

This frame allows returning growers to see farm work, which they once despised, as fulfilling and to view financial concerns as secondary to other motivations, such as pride in their families' heritage. Growers in this category enjoy a number of aspects of farm work including time spent with family working in the

fields, feelings of spiritual connectivity with the land, and the satisfaction of using the land to produce their own food.

Returning growers' sustainability frame focuses on being able to keep their family farms in working order so they may continue carrying out the lifework of their ancestors. Returning growers see BMOV as key to meeting this goal. For them, the organization is a source of knowledge for relearning the farming skills of their youth and acquiring new capabilities related to organic cultivation.

Like legacy growers, returning growers view their farms as environmentally sustainable because they meet the federal government's minimum standards for organic status. Returning growers also extend their framing of sustainability beyond their farms to see themselves as playing a role in addressing regional problems related to food security. These respondents see themselves as helping to provide low-income residents in the region with fresh, nutritious, and inexpensive food that might otherwise be inaccessible.

Returning farmers frequently look to legacy growers as mentors. As a result, these farmers view BMOV as a linked, interdependent network of growers and staff members. Individuals returning to agriculture frame BMOV's staff members as trustworthy, sincere, and committed to organic farming, as well as personally invested in the success of the growers who participate in the firm. G21 described these elements of returning growers' characterization frame: "I think they're very committed to sustainable agriculture. I think every person that works for them works not just for a salary, but they work for an ideal. They believe in what they're working for. I believe that truly."

Returning farmers' approach to decision making in BMOV. Growers in this group have a stronger interest in BMOV's decisions than legacy tobacco farmers, yet they are not more active in the organization's decision-making processes. Returning growers contend that they do not want to be involved in decision-making because they are busy with other activities and concerns, apart from their farms and partnership with BMOV, and they believe that they are too inexperienced to participate in management. Additionally, these farmers explain that they trust staff members to make decisions on their behalf because they perceive those individuals as sharing their ideals related to family farming, food justice, and community. This framing allows returning growers to give BMOV's staff members freedom and authority to make decisions without wondering whether growers' values will be compromised. G17 expressed the financial goals of many returning growers and reliance on BMOV's staff: "I [told BMOV] that if I can raise enough stuff to sell it

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and pay for all my seeds and plants—to break even—I've done well. And basically with the water bill and stuff last year, that's what I did."

Lifestyle Growers

Before joining BMOV, growers in this group had little farming experience. These producers express an almost inexplicable motivation to farming; they feel "called" to the activity. G18 exemplified this perspective: "I just identified. I didn't know I had the roots to grow food for other people. I didn't know that about myself. I had no idea. [I'm not from] a farm family at all. I descended from the mountains. I came out of there, but there's just some kind of an unconscious connection with the motive."

Lifestyle growers have a variety of motivations for participating in BMOV. Some home-school their children and describe their farms as living laboratories for learning about horticulture and biology. These individuals also perceive their farms as a way to bring their families closer together and to build connections to nature. Some lifestyle farmers enjoy the creativity they believe is required to operate a small-scale organic farm. These individuals consider themselves tinkerers who relish experimenting with new agricultural techniques. Still, other respondents in this category think of themselves as crusaders for food security. They aim to supply healthy, delicious, locally-grown, and inexpensive food to local consumers and to help farmers in the region retain ownership of their land.

Lifestyle growers view BMOV as a way to meet their diverse objectives because the firm helps them cover some of the costs of operating their farms while providing them an opportunity to learn the basics of organic agriculture. These producers suggest that they are unconcerned about the financial success of their farms and describe "success" as simply completing the tasks associated with cultivating produce and contributing to the venture. For these growers, achievement is measured in personal accomplishments and pride. Many describe their participation as a way to "give back" to the local community. G15 stated this element of lifestyle growers' membership frame:

I like that instead of just mowing [my yard], it actually makes food that went back into the community. [BMOV] gave some to the food bank, which I like. So you know you're actually making things that go back into the community. And I really like that, and the land is more than just grass that you mow.

Producers in this category describe BMOV's staff as passionate, trustworthy, sincere, and committed. These growers tell stories about employees who go beyond the call of duty to answer questions, assist with farm chores, and otherwise facilitate inexperienced and small-acreage growers' development and involvement in the firm.

Growers in the lifestyle group describe legacy tobacco farmers as noble and genuine, and describe their own aspirations to emulate certain aspects of the way of life those farmers lead. Lifestyle growers are especially enamored with what they perceive as legacy producers' values related to self-sufficiency, ecological sustainability, hard-work, family, patience, and honesty. Lifestyle producers, as G12 illustrated in the following statement, perceive BMOV as a network of growers founded upon mutual trust and respect for these ideals:

I was [impressed] that the people leading this organic thing in BMOV, would not look at the growers that had been growing for years with any contempt, but with respect and deference to their experience. Late in the year I pulled up [to the BMOV packinghouse] with my Jeep and little trailer full of green peppers. The guy that pulled in beside me to unload had a great big farm truck with all kinds of stuff on it that just dwarfed what I was bringing in. He got out of the truck and shook my hand and looked at my peppers and complimented them. It hit me that here are a bunch of guys that had been growing for years, had acres and acres and acres. They had barns the size of my field. And I was not treated with, I don't want to say contempt, but it wasn't like they looked at me like I'm some sort of upstart yuppie wannabe farmer. I think that kind of attitude is an outgrowth of what BMOV's leadership has brought to it. They treat everybody as if they are a commercial farmer; an organic commercial farmer. They knew [the growers like me] didn't know what we were doing, but they knew that we were asking the questions and that we were willing to do what they were saying needed to be done to maintain the integrity. They let us know that what we were doing was important and made it feel important even though it was just a quarter-acre, and that was reflected in the big multi-acre, hundred-acre farms that [more experienced growers have].

The primary sustainability-related concerns of lifestyle growers are the environment and food justice. Lifestyle growers enjoy experimenting with methods that exceed the U.S. Department of Agriculture's organic standards. These farmers

experiment with less invasive methods of controlling weed and bug infestations, for example, and convey an elevated appreciation for the environmental benefits of organic farming and maintaining a landscape of working farms in the region.

Lifestyle growers' approach to decision making in BMOV. Lifestyle growers state that they are interested in how BMOV decides, but they are no more actively involved than other growers. Growers in this group explain their lack of involvement by extolling their trust in, and loyalty to, BMOV's employees whom they see as sharing their passion and commitment to the firm's mission. Growers in this category believe that BMOV's staff will make management decisions that align with their interpretation of the mission, and therefore are satisfied to let the staff take full responsibility for decision making.

Staff Members

Staff members describe BMOV as playing three key roles to support growers. As they outline each role, staffers shift the ways they frame themselves and their functions in the organization. First, employees describe the creative ways that, in their view, BMOV shields growers from changes in the regulatory, market, and political environments that threaten producers' economic success. When describing this role, staff frame themselves as political advocates fighting to protect independent family farmers from an agricultural industry that stacks the deck against them. The following discussion among staff members concerning how to help growers comply with new requirements from grocery stores regarding the safe handling of produce on farms, without significant changes to the ways growers operate, provides an example of this orientation:

S25: The whole emphasis on Good Agriculture Practices is a spinoff from a series of events that have begun to be miscategorized and displaced by not just the consumer, but a lot of scientists and big corporations that really don't want [groups like BMOV] in the market in the first place. Let me just tell you a few historic moments: [first there was] the E. coli in the spinach. Then we had the lettuce issues like the famous wild hog that ran through the dirty pond that contaminated everybody's lettuce in California. So that's where we're coming into the Good Agricultural Practice era of agriculture. Some of our buyers are requiring [a program] to be put in place. We don't have to have a seal from the U.S. Department of Agriculture or the Food and Drug Administration, but something in place that shows that we're demonstrating necessary steps to make sure that our agriculture

practices as well as our facility practices are meeting some sort of safety criteria. They're letting us set the criterion right now, which is good, because it's saving the growers \$92/hour for a guy coming from [the capital to do an audit]. So, by being proactive and doing some of the smaller components to demonstrate that we have our best foot forward on food safety, water quality, and packing house management, we're developing our mirror program. It's not a certification, it's a lookalike.

S22: It's a fun house mirror?

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S25: Yeah. It's one of those funny mirrors at the fair.

Second, staffers describe the business-related services that BMOV provides, such as payroll processing and accounting, research and development, and marketing. When describing this role, the firm's employees see themselves as managers of a business with goals of turning a profit, growing the organization's membership of growers, and increasing BMOV's customer base and production capacities. When describing the organization's educational services, which include holding workshops concerning such topics as organic crop irrigation and pest control, staff frame themselves as experts in organic cultivation able to help producers make their farms more productive.

When interacting with growers in each of these capacities, BMOV staffers present themselves in ways that encourage producers to view them with legitimacy and authority. In other words, these individuals adopt identities that they believe give them credence in growers' eyes. Furthermore, the characterizations of farmers that employees embrace may play significant roles in the development of staff members' identity frames. Staff members' identity and characterization frames are dialectically constructed. For example, to justify the need to shield growers from changes in the regulatory and political environments, staff members characterize growers as political and economic underdogs. Without being able to describe growers in this way, the value of BMOV's role as a buffer against changes in regulations is diminished—what is the purpose of protecting producers from these changes if they do not see them as threats? Staff members' identities are dependent on their abilities to characterize growers as requiring BMOV's services, and their abilities to convince growers that they do, in fact, need such services to succeed. S23 exemplified the way that staff members often characterize BMOV's growers:

To be candid, there are some growers who really don't have many other options in terms of how they're going to earn extra money. I truly believe

that part of the reason we've been a little more successful recruiting growers this year is because of the economy. You know everybody is worried about money and jobs. 95% of our growers have day jobs and farming supplements their income. Well, if you think about everyone being paranoid about being laid off or what have you, it kind of makes sense. But I honestly think, if you've got land and it's sitting there, a lot of these people are used to thinking about what they can do to make money on their land. Particularly if you look at it as a replacement to tobacco.... [Tobacco] was like their Christmas savings account a lot of times, or college tuition.

Staff members frame the concept of sustainability differently at individual, organizational, and regional scales. At the individual level, staff members focus on growers' financial success. BMOV staff suggests that, at the individual scale, sustainability means growers earn enough income from the sale of their produce to permit them to maintain their farms. At the organizational level, staff members focus their attention on growing BMOV so that it no longer requires external subsidies to survive. S22 illustrated the economic focus of this element of staff members' frames:

We're really convinced from the analysis we've done that the more we move up the volume [of produce we grow], the more net income we'll be generating... Like last year we did \$513,000 in business. If we did \$750,000 or \$800,000 this year, we should be at the break-even point. Beyond that we should be able to start paying [staff] salaries and then beyond that, like around \$1.2-\$1.5 million, we should be able to pay all the expenses [of BMOV]....

At the regional level, staffers frame BMOV as helping to move the economy of central Appalachia away from dependence on nonrenewable, extractive, resource-dependent industries to renewable resources that provide more stable incomes and jobs for local residents, while protecting the environment.

Staff members' approach to decision making in BMOV. Staff members state that they make most decisions in BMOV working independently or in pairs. Growers are periodically informed during decision-making processes, but not directly involved. S23 explained this process, and justified growers' limited involvement in it:

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I honestly don't ask [growers] to participate in day-to-day decisions. ...I'm not big on managing by committee. I feel like it's our job and our commitment to the growers to run this place right. And if ever I have any questions or anything, I'm more than happy to pick up the phone and call, or schedule a meeting. I feel like we've got the right group in place to operate this as a business and that [growers] shouldn't have to. They should go grow, and they should have enough faith that we're doing our jobs, that they don't have to worry about it, and they don't have to spend their time [doing management]. These people don't have any time anyway.

Staff members often prioritize the needs of legacy growers over those of returning and lifestyle growers, because they perceive legacy farmers as needing to generate income. Staffers assume that legacy tobacco growers will accept nearly any type of relationship to BMOV that assures them income, even if that means being left out of day-to-day decision making. Furthermore, staff members view legacy farmers as having little experience with organizational management and use this characterization to justify their inclination to exclude these individuals from the firm's decision-making processes.

Sometimes BMOV's employees solicit input from producers by inviting them to form advisory committees. These groups, however, are largely symbolic and give growers little opportunity to effect change. S23 described the process she used to develop and facilitate one such committee convened to discuss potential adjustments to growers' membership dues. S23's goals for organizing the group included creating feelings and impressions of inclusion, while steering members to support the decision already made by staff:

I started by sharing our financials with [the growers]. I mean just 'here it is. Isn't that a thing of beauty? That bright red large number at the bottom that doesn't even include staff salaries! Look at how much the boxes cost, look at how much the labels cost, look at how much fuel costs...' showing them all the details. It seemed at the time, I'm sure, to them 'good grief, it's overkill!' But it helped them understand, 'wow! I can see how this just isn't going to work.' And we ended up changing how we structured the fees and never got any beef about it. It went surprisingly well. I just kind of put down examples so that they could understand the financial impact to them and to BRSF. I think those meetings and those discussions gave them an understanding of the fact that, if we cannot get BMOV to ever break

even, we will not be here. So there was enough interest and buy-in in keeping BMOV around that they were willing to spend that effort and in some cases take more money out of their pockets just so that they could make sure [the organization] was viable. They really didn't do much of any work. They were more of just a sounding board...

Board Members

Board members frame themselves as playing two roles in BMOV. First, they perceive the board as playing a key role in organizational accountability. Second, they believe they are critical to long-term strategic planning for the organization. When board members describe the ways that they hold the organization's stakeholders accountable to the firm's mission, they point out contradictions in organizational practices that make achieving those goals difficult. For example, early in the interview phase of this research, the board decided BMOV would not sell its produce to a large, national retail store because some board members disagreed with the store's management practices related to expansion and land-use, competition with local stores, and employee benefits. Simultaneously, other members of the board saw the chain store as a large market that could give growers a new source of revenue and extend BMOV's reach throughout the region. Board members from each perspective believed their position aligned with the firm's mission, and therefore framed their perspectives as holding BMOV true to its purpose, while characterizing the position held by those who disagreed as steering the organization off-course. B28, in the following conversation, illustrated one view on this issue as well as the complexity of perspectives among the board members:

Interviewer: Is neglecting [the chain store] as a customer in some ways contrary to BMOV's mission?

B28: I think it is. I absolutely do. But I haven't strapped on a sandwich board and stood out and said "I don't want [that store] here," and some board members have. I don't blame them for not wanting the store here either, especially where they put it. But, this is a perfect example of the complexity of this whole issue. I'll tell you, it's just not simple.

Board members, when involved with strategic planning, view themselves as working to enhance the efficiency and effectiveness of BMOV by exercising the various professional skills they possess, including marketing and expertise in the education and health arenas, among others. Each individual sees him/herself as

supplying specific capabilities to the SDAO that would otherwise cost the organization money to obtain or be difficult to find. In this sense, the identities of board members match their professional orientations.

Members of the board are divided concerning the scales at which they believe sustainability is most effectively achieved. Some suggest that BMOV's mission calls for focusing sustainability efforts at the individual level while others argue that sustainability should be pursued at the regional scale. Those who favor directing sustainability efforts to the individual level perceive legacy tobacco growers as the organization's most significant target beneficiaries, and frame sustainability in economic terms. These board members frame BMOV as an agricultural business with highly-focused financial objectives. Those who suggest that sustainability should be addressed at the regional scale see sustainability as the development of a new area economy based on renewable resources. These individuals suggest that BMOV's key audience is the region's network of economic development organizations. Board members with this vision frame BMOV as an advocate for, and example of, a particular brand of economic development that is environmentally sustainable and based on the region's natural-resource heritage.

When deciding whether to partner with the large, national retail outlet, board members who saw producers as target stakeholders, and frame BMOV as a profit-driven business, suggested that sustainability would be attained when the firm no longer relied on external subsidies. Board participants with this perspective supported selling produce to the national retail outlet. Meanwhile, members who framed the organization's objectives in regional economic development terms were opposed to selling to the large grocer because they believed the store threatened aspects of the economy and social fabric of the region.

Board members' approach to decision making in BMOV. Board members describe themselves as providing guidance to BMOV on philosophical issues, but not operational matters and decisions. As a group, these individuals suggested that if they involved themselves in day-to-day decision making, their personal values and objectives might distract the organization from addressing its mission. B28 explained this perspective:

The board has not been involved in deciding, nor should the board be involved in deciding, where the vegetables are sold. ... I don't think the board should be involved in the operational planning of the organization. I think the board is too involved in that right now in a lot of ways. But I don't

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think that boards should meddle in the management practices that are going on.

Board members often tell stories about lengthy and lively debates among the group about philosophical topics that relate to sustainability. When members disagree, the board tries, through discussion, to arrive at practical agreements that members find tolerable in the short term, while continuing to discuss challenging topics over longer periods when necessary. Thus, when the board decides contentious topics, they are considered temporary and members share the understanding that they may be revisited. B30 described some elements at play in the board's philosophical discussions regarding BMOV's work:

I can give you an example of where we're not on the same page. ...Some people really believe that a nonprofit is a holy entity that is above common business practices. [These people believe that not-for-profits are] creative entities and... have the philosophical mindset that we don't want to have things too well defined because then we paint ourselves into a box. ...We don't want to micromanage. We don't want to restrict things. We want to be very creative. We want to be very loose. We don't want to do policies. We don't want any guidelines or specifications about what we do because that way we can do more. And there's validity to that argument.... But on the flip side, our organization is a business. And so whether or not you like the idea of businesslike and professional practices, that's the reality of what we have....

Managing Tensions among Growers, Staff, and Board Members

When talking with BMOV's stakeholders about their different needs, concerns, and aspirations, not all participants clearly agreed with the way the organization was being managed. During interviews, growers, staff, and board members described a variety of decisions that occasioned discontent among members. Friction existed concerning whether BMOV should sell its produce to national chain grocery stores or restrict sales to local and privately-owned firms; the rates growers pay for membership in the firm and the costs covered by such dues; enhancing educational opportunities for less experienced growers or limiting the organization's functions to essential services such as marketing, packaging, and distribution; and the roles of board members in fundraising, among others.

Views among participants over the severity of these conflicts varied. Growers suggested they represented minor differences to be easily addressed, while staff and board members claimed they threatened the organization's abilities to fulfill its mission and obligations. These perspectives correlated with the ways that members of each group framed their interest and involvement in decision making. Staff and board members, who are more aware of BMOV's financial position than growers, suggest that the operational outcomes that emerge from these decisions could dictate the organization's ability to stay afloat and maintain its role in the producer/SDAO/market model of sustainable development.

BMOV has developed three decision-making principles to manage the tensions that emerge from frame clashes among its primary stakeholders. Table 1 describes and provides examples of these principles. These practices are commonly used by members of all three stakeholder groups within BMOV, although the examples presented focus on how they are carried out by staff members, and their implications for growers, since these two groups are those most directly involved in, or affected by, management decisions. Furthermore, while each principle included in Table 1 is institutionalized at all three hierarchical levels of the SDAO, they are tacit agreements, not bylaws. In fact, many stakeholders may be unaware of the ways in which these practices are used and the influences they have for organizational life.

The three principles that guide decision making in BMOV are constructed by the frames that organizational stakeholders hold. These principles are evidenced in the stories individuals tell during interviews. For example, statements by S23 illustrated staff members' characterizations of legacy growers as highly focused on the economic success of their farms, with little time, experience, or desire to participate in decision making. Legacy growers, as evidenced by G14, framed themselves as independent from the organization and view staff members as experts paid to make management decisions. Consequently, staffers can justify excluding growers from decision making, or closely mediating their involvement, while growers can justify their lack of participation in such choices. S23's discussion of the ways that she involves (or does not involve) growers in decisions supports this analysis.

Staff members and growers view decision making differently, but their frames lead them to agree on a common decision-making process. The frames of staff members and growers are aligned. That is, their otherwise disparate frames allow them to arrive at a common solution and, as a result, construct and lend legitimacy

TABLE 1. BMOV'S GUIDING PRINCIPLES FOR PREVENTING AND MANAGING CONFLICT.

| | corn are r. | |
|---------------|-------------------|---|
| PRINCIPLES OF | | |
| | CONFLICT | |
| \mathbf{N} | ANAGEMENT IN | |
| | BMOV | PRINCIPLES IN ACTION |
| 1. | Stakeholders | Staff members often make decisions before, or without, |
| | directly involved | informing growers that a decision process is needed |
| | in decision | and/or underway. Additionally, staffers closely mediate |
| | making often | the few decisions in which growers are invited to |
| | exclude others | participate. Growers are not encouraged to interact, or |
| | from | to find/examine new information or draw alternative |
| | participating in | conclusions to those generated by staff members. |
| | organizational | |
| | management. | |
| 2. | Decision makers | Depending on context, staff members give the needs of |
| | frequently | some growers preferential consideration. When facing |
| | emphasize the | financial decisions, staff members emphasize the needs |
| | concerns and | of legacy growers. At other times staff members |
| | needs of some | emphasize the aspirations of lifestyle and/or returning |
| | participants over | growers. |
| | others. | |
| 3. | Decision makers | Staffers abide by three tacitly accepted rules regarding |
| | often narrow the | the prioritization of sustainability values: A) financial |
| | meaning of | sustainability takes precedence over environmental and |
| | sustainability to | cultural sustainability, once baseline standards in each |
| | a specific set of | area are satisfied; B) environmental sustainability is |
| | objectives and | limited to the USDA's standards of organic |
| | give priority to | certification; and C) social sustainability is primarily |
| | those objectives | defined in economic terms as the payment of fair wages |
| | over others. | to legacy growers. |

to the first principle by which BMOV manages tensions in the organization: the exclusion of some stakeholders from decision-making processes.

The second principle of decision making in BMOV holds that staff members decide by prioritizing the needs of some growers over others. The third principle is based on the ways that staff members prioritize the three values embedded in sustainability. Both the second and third principles lead staff members to favor the

financial considerations of legacy growers over the environmental and social aspirations of lifestyle and returning growers because they perceive legacy growers' needs as more urgent. This view dovetails with staffers' desires to reduce the reliance of BMOV on external funding. S22's focus on increasing the organization's revenues exemplifies this perspective.

One consequence of this orientation is that if lifestyle and returning growers intend to continue participating in BMOV, they must be willing to see their needs as secondary to those of legacy growers and staff members during decision-making processes. While lifestyle and returning growers have shown a willingness to make these concessions in the past, future challenges or changing demographics among BMOV's growers may place the frames of less economically-focused participants at the forefront of the organization where they are more difficult to set aside.

DISCUSSION AND CONCLUSIONS

The current model of decision making in use by managers of BMOV has been highly successful for the organization's membership numbers and finances. Since its creation, the firm has grown its ranks of growers and improved its bottom line. Additionally, producers and other participants in BMOV accept the organization's methods of making decisions. These practices allow the firm to decide quickly, with clarity, and with relatively little conflict. BMOV's decision-making model is based on the three features outlined in Table 1, which are founded upon members' frames.

Understood through the lens of analytic frame theory, BMOV's focus on efficiency arises from the prevailing nature of the frames shared by legacy growers and staff members. While there are members of BMOV who de-emphasize economic success in favor of an accounting that weighs social and environmental values more highly, these viewpoints are seldom considered during decision-making processes, because those activities are the exclusive domain of employees. Through the efficiency lens, participants view decision making as an instrumental process designed to enhance the organization's operational practices rather than relationships among members.

Furthermore, the procedures by which BMOV makes decisions are reified by the frames that generated them. The reification of BMOV's decision-making process works as follows: as growers express their lack of interest in becoming involved directly in the management activities of the firm, staff members assume increasing decision-making responsibility. Staffers frame their identities on the premises of expertise and authority, and act accordingly. As employees frame themselves as experts in organic agriculture and organizational management, they simultaneously

frame growers as lacking proficiency and interest in the management arena. Growers accept this characterization as reality and integrate it into their identities. Within the context of the firm, growers see themselves as producers only, and enact this perspective by further distancing themselves from organizational decision making. These actions further contribute to staff members' identity development. In short, growers grow and managers manage, and the frames and choices of each group perpetuate these perspectives in reciprocal fashion. In this way, the frames of participants in BMOV both guide and limit action. Because of this system, the same decision practices that allowed the organization to grow, and with which members illustrate satisfaction, have evolved to exclude many stakeholders, restrict collaborative thinking, and prioritize the goals of some members over others.

Prior research concerning sustainability-oriented initiatives suggests that effective decision-making practices that successfully manage conflicts, promote organizational learning (Argyris and Schon 1996; Dodgson 1993; Probst and Buchel 1997), and nurture resilience (Holling 1973; Milestad and Darnhofer 2003; van der Leeuw 2000)—all key components of sustainability (Molnar and Mulvihill 2003; Senge and Carstedt 2001; Senge et al. 1999; Siebenhuner and Arnold 2007)—include the formation of democratic and team-based decision-making structures; participation by individuals and groups with diverse viewpoints, opinions, and aspirations; high levels of trust among participants; development of shared visions regarding organizational purposes; and creativity and systems thinking (Bolton 2004; Frankel 1998; Kaufnam and Senge 1993; Keen and Mahanty 2006; Moote, McLaran, and Chickering 1997; Schusler, Decker, and Pfeffer 2003; Tierney 1999). Yet, stakeholders in BMOV do not frame the goals of decision-making processes in these terms, and the practices used by the firm do not meet these criteria.

Subsequently, organizational learning and resilience only develop among the small group of individuals involved in management of BMOV and are not extended throughout the organization. It is possible that as the social, political, and environmental contexts in which the organization operates become more complex, the short-term gains brought by BMOV's decision practices may face long-term challenges. The decisions the firm faces, such as those regarding the types of stores at which the organization should sell produce, the cost and uses of membership dues, the value of educational programming, and fundraising may place the diverse frames of staff; legacy, lifestyle, and returning growers; and board members at odds with one another. The current model of decision making in BMOV does not provide a structure for discussing participants' different viewpoints on these issues.

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The challenges presented here are accompanied by high levels of uncertainty; varying time horizons; and interactions among social, ecological, and economic factors, and require multi-level and multi-scalar thinking (Siebenhüner 2005). Challenges that exhibit these attributes carry numerous possible solutions, the merits of which may be interpreted differently by various stakeholders. Developing the organizational skill set required to address complex challenges such as these can take time, and unless BMOV begins to involve wider groups of stakeholders in decision making and develop formal structures for collaborative problem solving, it may find itself unable to adapt its decision-making practices when necessary.

Furthermore, BMOV's decision practices push aside or disregard frame clashes when they do arise, in the name efficiency. If the organization's demographics grow and change—the numbers of lifestyle, returning, or legacy growers fluctuate, for example—decisions may emerge that make the frames of participants previously uninvolved in decision making more difficult to ignore. Without creating organizational structures that allow members to recognize, acknowledge and integrate diverse frames into decision making, the firm may have difficulty reaching the heightened levels of communication, understanding, and trust found among high-learning organizations (Kroma 2006; Nattrass and Altomare 1995).

Recommendations for Aligning and Nesting Frames in SDAOs

This research suggests that managers of SDAOs facilitate the reframing of decisions within their organizations so that they are not only seen through the lens of efficiency, but are also viewed as opportunities for nurturing resilience and organizational learning. Just as participants in decision-making processes will discuss management alternatives for operational challenges related to production, marketing, and distribution, stakeholders can also discuss their purposes for participating in SDAOs, perspectives on organizational missions and objectives, and the meanings of membership and sustainability. Accomplishing this will help participants in SDAOs enhance their understanding of members' needs, values, concerns, and objectives related to complex problems. Open discussions, and the heightened sensitivities and understandings they generate, may be accompanied by new and creative solutions to challenges that might otherwise go uncovered, and which can allow SDAOs to address organizational changes with enhanced agility.

We elucidate four recommendations for helping members of SDAOs reframe the roles of decision opportunities in organizational development so that decisions are understood by members in new ways. These recommendations are to:

- 1. approach decision making as an opportunity for enhancing members' awareness of the diverse frames held by other participants, so that organizational discussions are sensitive to, and inclusive of, the spectrum of frames embedded in the organization's membership;
- 2. improve managers' awareness and understanding of frames held by participants in the organization so that managers can create structures for including participants with diverse frames in decision-making conversations;
- 3. encourage members to see themselves as key participants in decision making, with tangible opportunities to contribute to organizational development;
- 4. assist stakeholders in envisioning decisions as experiments that generate shared organizational wisdom and that, over time, culminate in improved operations and the resilience to weather future changes.

Our recommendations support the development of several characteristics crucial to an organization's adaptive capacities. These are: an explicit commitment to learning; the development of senses of community and interconnectedness among members; a willingness to take risks and experiment; an environment in which challenging core organizational assumptions is accepted; and a willingness to accept, absorb, and welcome change as a core organizational function (Braham 1995). Moreover, it is important that these characteristics are spread beyond staffers throughout an SDAO's network of producers.

Analytic Frame Theory and the Evolution of SDAOs

The bottom-line for SDAOs is that framing decision making in purely instrumental terms, as a way to get from point A to point B or to turn raw ingredients into finished products, for example, does not nurture the capacities of the firm for organizational learning and resilience and will not achieve sustainability. Developing these characteristics takes time and effort, and reframing decision making so that it is seen as a learning and adapting process is one way to develop these skills. Indeed, sustainable agriculture is a field in which change is normal and therefore adaptation must become a standard operating procedure (Hinterberger, Giljum, and Kohn 2000; Pretty 1997). Milestad and Darnhofer (2003:81) wrote:

...the ability to adapt to ongoing change and cope with unpredictability is decisive both for a farming system as well as for an individual farm. ...resilience focuses explicitly on the capacity to change and reveals the

shortcomings of a focus on stability and the accompanying command-and-control approach of classical resource management (cf. Holling and Meffe, 1996).

Secondarily, managers of SDAOs should be careful not to push aside frame clashes among participants because they fear they may bring conflict to the organization. Participants come to SDAOs with a variety of frames regarding personal identity, organizational purpose, sustainability, the meaning of membership, and characterizations of other members. Acknowledging these differences, and indeed openly and explicitly integrating them into decision-making processes, may help to strengthen members' commitments to one another and the organization itself.

Areas for Future Research

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This study had several limitations that may appropriately be addressed in future research. First, it focused on only one organization. Future research can strengthen the generalizability of the conclusions drawn from this study by increasing the numbers of SDAOs investigated to understand whether the BMOV case represents common or unique challenges. Second, this research focused on an organic vegetable firm, which is only one type of SDAO. A variety of other sectors of sustainable development exist, such as arts and crafts-oriented firms, eco-tourism businesses, and small-scale energy developers, among others. Future inquiry could explore whether the same forces influence SDAOs in these sectors. Third, while this research explores frames in one conceptualization of sustainable development, the producer/SDAO/market model, other views of sustainable development exist. Alternative models of sustainable development should be examined to investigate whether they differently address the challenges observed in the BMOV case. Fourth, this research is interpretive and other analysts may interpret data differently. Other types of information could be collected and might reveal alternative understandings of the events and processes observed in BMOV. Likewise, alternative methods and interpretations might yield different conclusions and critiques of sustainable development. Finally, this research introduces the notion that the types of challenges faced by SDAOs are fundamentally different from those faced by conventional firms. Future research should identify specific differences in the kinds of challenges faced by SDAOs and provide recommendations for managing these complexities. Future research could also further explore how collaborative learning and resilience can be deliberately built

into management structures in SDAOs and how SDAOs can adapt to the turbulent conditions that often characterize their operating environments. In spite of these limitations, this study makes a valuable contribution to the existing literature, as well as suggesting avenues for both practical application and future research.

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REFERENCES

Agyeman, Julian and Tom Evans. 2003. "Toward Just Sustainability in Urban Communities: Building Equity Rights with Sustainable Solutions." *Annals of the American Academy of Political and Social Science* 590:35–53.

Argyris, Chris and Donald A. Schon. 1996. *Organizational Learning II. Theory, Method, and Practice.* Reading, MA: Addison-Wesley.

Bateson, Gregory. 1972. Steps to an Ecology of the Mind. New York, NY: Ballantine. Bebbington, Anthony. 1997. "Social Capital and Rural Intensification: Local Organizations and Islands of Sustainability in the Rural Andes." The Geographical Journal 163(2):189–97.

- Benford, Robert D. and David A. Snow. 2000. "Framing Processes and Social Movements: An Overview and Assessment." *Annual Review of Sociology* 26:611–39.
- Bhuyan, Sanjib. 2007. "The 'People' Factor in Cooperatives: An Analysis of Members' Attitudes and Behavior." *Canadian Journal of Agricultural Economics* 55:275–98.
- Bhuyan, Sanjib and F. Larry Leistritz. 2001. "An Examination of Characteristics and Determinants of Success of Cooperatives in the Non-agricultural Sectors." Journal of Cooperatives 16:45–62.
- Bolton, Diane. 2004. "Change, Coping, and Context in the Resilient Organization." Mt. Eliza Business Review 7(1):56–67.
- Braham, Barbara J. 1995. Creating a Learning Organization: Promoting Excellence through Education. Menlo Park, CA: Crisp Publications.
- Brewer, Paul R. and Kimberly Gross. 2005. "Values, Framing, and Citizens' Thoughts about Policy Issues: Effects on Content and Quantity." *Political Psychology* 26(6):929–48.
- Dodgson, Mark. 1993. "Organizational Learning: A Review of Some Literatures." Organizational Studies 14(3):375–94.
- Frankel, Carl. 1998. *In Earth's Company: Business, Environment, and the Challenge of Sustainability*. Gabriola Island, BC: New Society Publishers.
- Gamson, William A. and Andre Modigliani. 1987. "The Changing Political Culture of Affirmative Action." Pp.137–77 in *Research in Political Sociology*, edited by R. D. Braungart. Greenwich, CT: JAI Press.
- Glasmeier, Amy K. and Tracey L. Farrigan. 2003. "Poverty, Sustainability, and the Culture of Despair: Can Sustainable Development Strategies Support Poverty Alleviation in America's Most Environmentally Challenged Communities?" *Annals of the American Academy of Political and Social Science* 590:131–49.
- Goffman, Erving. 1974. Frame Analysis: An Essay on the Organization of the Experience. New York, NY: Harper Colophon.
- Hinterberger, F., S. Giljum and J. Kohn. 2000. "On the Interrelation of Social, Economic, and Ecological Systems—Theoretical Approaches and Policy Implications on the Feasibility of Comprehensive Sustainability." Presented at the 3rd Biennial Conference of the European Society for Ecological Economics, May 3–6, Vienna, Austria.
- Holling, C. 1973. "Resilience and Stability of Ecological Systems." *Annual Review of Ecology and Systematics* 4:1–23.

80

- Holling, C. S. and Gary K. Meffe. 1996. "Command and Control and the Pathology of Natural Resource Management." *Conservation Biology* 10(2):328–37.
- International Union for the Conservation of Nature, United Nations Environment Program, and World Wildlife Fund. 1991. *Caring for the Earth: A Strategy for Sustainable Living*, edited by IUCN. Gland, Switzerland.
- Jesse, Edward V. and Richard T. Rogers. 2006. *The Cranberry Industry and Ocean Spray Cooperative: Lessons in Cooperative Governance*, edited by F. S. R. Group. Department of Agriculture and Applied Economics, University of Wisconsin, Madison, WI.
- Kaufman, F. and Peter M. Senge. 1993. "Communities of Commitment: The Heart of Learning Organizations." *Organizational Dynamics* 22:4–24.
- Keen, Meg and Sango Mahanty. 2006. "Learning in Sustainable Natural Resource Management: Challenges and Opportunities in the Pacific." *Society & Natural Resources* 19(6):497–513.
- Kroma, Margaret M. 2006. "Organic Farmer Networks: Facilitating Learning and Innovation for Sustainable Agriculture." *Journal of Sustainable Agriculture* 28(4):5–28.
- Lewicki, Roy J., Barbara Gray, and Michael Elliot, eds. 2003. *Making Sense of Intractable Environmental Conflicts*. Washington D.C., Covelo, CA, London, England: Island Press.
- Lynam, John K. and Robert W. Herdt. 1989. "Sense and Sustainability: Sustainability is an Objective in International Agricultural Research." *Agricultural Economics* 3:381–98.
- Masterson, Suzanne S. and Christina L. Stamper. 2003. "Perceived Organizational Membership: An Aggregate Framework Representing the Employee-Organization Relationship." *Journal of Organizational Behavior* 24:473–90.
- Milestad, Rebecka and Ika Darnhofer. 2003. "Building Farm Resilience: The Prospects and Challenges of Organic Farming." *Journal of Sustainable Agriculture* 22(3):81–97.
- Molnar, Eleonora and Peter R. Mulvihill. 2003. "Sustainability-focused Organizational Learning: Recent Experiences and New Challenges." *Journal of Environmental Planning and Management* 46(2):176.
- Moote, Margaret A., Mitchel P. McLaran, and Donna K. Chickering. 1997. "Theory into Practice: Applying Participatory Democracy Theory to Public Land Planning." *Environmental Management* 21(6):877–89.

- Nattrass, Bryan F. and Mary Altomare. 1999. *The Natural Step for Business: Wealth, Ecology, and the Evolutionary Corporation.* Gabriola Island, BC: New Society Publishers.
- Nel, Etienne, Tony Binns, and Nicole Motteux. 2001. "Community-based Development, Non-governmental Organizations and Social Capital in Post-Apartheid South Africa." *Geografiska Annaler. Series B, Human Geography* 83(1):3–13.
- National Organic Program United States (N.O.P.U.S.). 1990. "Organic Foods Production Act." Washington D.C.: U.S. Department of Agriculture.
- Pearce, David W. and R. Kerry Turner. 1990. *Economics of Natural Resources and the Environment*. New York, NY: Hemel Hempstead; Harvester Wheatsheaf.
- Pretty, Jules N. 1997. "The Sustainable Intensification of Agriculture." *Natural Resources Forum* 21:247–56.
- Probst, Gilbert and Bettina Buchel. 1997. Organizational Learning: The Competitive Advantage of the Future. London, UK: Prentice-Hall.
- Schusler, Tania M., Daniel J. Decker, and Max J. Pfeffer. 2003. "Social Learning for Collaborative Natural Resource Management." *Society & Natural Resources:* 16(4):309–26.
- Senge, Peter and G. Carstedt. 2001. "Innovating Our Way to the Next Industrial Revolution." MIT Sloan Management Review 42(2):24–38.
- Senge, Peter, Art Kliener, Charlotte Roberts, Richard Ross, George Roth, Bryan Smith, and Elizabeth C. Guman. 1999. *The Dance of Change: The Challenges of Sustaining Momentum in Learning Organizations*. New York, NY: Doubleday.
- Siebenhüner, Bernd. 2005. "The Role of Social Learning on the Road to Sustainability." Pp. 86–99 in *Governance and Sustainability*, edited by J. N. Rosenau, E. U. Weizsäcker, and U. Petschow. Sheffield, UK: Greenleaf.
- Siebenhuner, Bernd and Marlen Arnold. 2007. "Organizational Learning to Manage Sustainable Development." *Business Strategy and the Environment* 16:339–53.
- Snow, David A. and Robert D. Benford. 1988. "Ideology, Frame Resonance, and Participant Mobilization." *International Social Movement Research* 1:197–218.
- Stets, Jan E. and Chris F. Biga. 2003. "Bringing Identity Theory into Environmental Sociology." *Sociological Theory* 21(4):398–423.
- Tierney, Pamela. 1999. "Work Relations as a Precursor to a Psychological Climate for Change: The Role of Workgroup Supervisors and Peers." *Journal of Organizational Change Management* 12(2):120–34.
- Tversky, Amos K. and Daniel Kahneman. 1981. "The Framing of Decisions and the Psychology of Choice." *Science* 211:453–8.

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- van der Leeuw, Sander E. 2000. "Land Degradation as a Socionatural Process." Pp. 357–83 in *The Way The Wind Blows: Climate, History, and Human Action*, edited by R. J. Mcintosh, J. A. Tainter, and S. K. McIntosh. New York, NY: Columbia University Press.
- Walton, Bryon K. and Conner Bailey. 2005. "Framing Wilderness: Populism and Cultural Heritage as Organizing Principles." Society & Natural Resources 18(2):119–34.
- World Commission on the Environment and Development. 1987. Our Common Future: Report of the World Commission on the Environment and Development. Oxford University Press; U.S.A.
- Young, James W. S. 1997. "A Framework for the Ultimate Environmental Index-Putting Atmospheric Change into Context with Sustainability." *Environmental Monitoring and Assessment* 46:135–49.