

## Why Worry About the Agriculture of the Middle?

A White Paper for the Agriculture of the Middle Project<sup>1</sup>

During the past several decades, the American food system has increasingly followed two new structural paths. On one hand, small-scale farm and food enterprises in many regions have thrived by adapting to successful direct markets which enabled them to sell their production directly to consumers. This is an encouraging trend with real benefits to their communities. On the other hand, giant consolidated food and fiber firms have established supply chains that move bulk commodities around the globe largely to serve their own business interests.<sup>2</sup>

This new pattern of food systems has had a disastrous effect on independent family farmers---it has led to a disappearing “agriculture of the middle.” These farms and enterprises of the middle have traditionally constituted the heart of American agriculture. They operate in the space between the vertically integrated commodity markets and the direct markets. While the bulk of these farms have gross annual sales between \$100,000 and \$250,000,<sup>3</sup> it would be a mistake to characterize them simply as “midsized” or “small” farms. Many of these endangered “agriculture of the middle” farms are what the U.S. Department of Agriculture’s Economic Research Service calls “farming-occupation farms” and “large family farms.”<sup>4</sup>

What we are calling the “agriculture of the middle” is, in other words, a market-structure phenomenon. It is *not*, strictly speaking, a scale phenomenon. Yet, while it is **not scale determined, it is scale related**. That is, farms of any size may be part of the market that falls between the vertically integrated, commodity markets and the direct markets. But the midsized farms are the most vulnerable in today’s polarized markets, since they are too small to compete in the highly consolidated commodity markets and too large and commoditized to sell in the direct markets.

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<sup>1</sup> This white paper was begun largely by Fred Kirschenmann, Steve Stevenson, Fred Buttel, Tom Lyson and Mike Duffy. It was placed on the [www.agofthemiddle.org](http://www.agofthemiddle.org) web site to invite interested parties to become involved in this process. Numerous people provided additional information, proposed deletions and alternatives, and suggested rewrites. We have incorporated many of these helpful suggestions into this draft of the paper.

<sup>2</sup> See Willard W. Cochrane, 1999. “A Food and Agricultural Policy for the 21<sup>st</sup> Century.” (Unpublished paper available from the author.) Cochrane points out that as of 1997 over 61 percent of total agricultural production in the United States came from just 163,000 farms and that 63 percent of those farms were already producing a single commodity under contract with a consolidated firm. Meanwhile, 575,000 small to medium-sized family farms generate 30 percent of total national production.

<sup>3</sup> In this paper we are using the term “midsized farms” to describe those farms that USDA’s collapsed farm typology calls “intermediate farms”---these are farms with gross annual sales between \$100,000 and \$250,000 and farming is the primary occupation of the owner(s).

<sup>4</sup> Economic Research Service, “Farm Typology for a Diverse Agriculture.” USDA-ERS Agriculture Information Bulletin No. 759. September 2000.

Ironically it is also the mid-sized farms that have a comparative advantage in producing unique, highly differentiated products. Their smaller size enables them to remain flexible and innovative enough to respond to highly differentiated markets. And currently the demand for such products is increasing dramatically, especially in the food service industry. These products are suitable for the market of the middle. The commodity markets are ill equipped to produce such unique, highly differentiated products, owing to the uniformity and specialization demanded of commodity markets. And the direct markets are unlikely to produce the quantity of unique products that this emerging market demands. Furthermore, direct marketing will only affect the management of a very small percentage of our agricultural lands. As Patrick Martins, director of Slow Food USA, put it, “. . . community supported agriculture programs, wonderful as they are, can’t by themselves save American agriculture.”<sup>5</sup>

This situation presents us with a unique market opportunity. There is a burgeoning market demand for foods that are produced in accordance with sustainable agriculture standards and it is precisely the farmers “of the middle” who are in the best position to produce those products. What is missing is a functional value chain to connect these farmers to the markets. Our main thrust will be to help these farms develop competitive alternatives to commodity agriculture—alternatives which can potentially be much more sustainable economically, socially and environmentally.

Nationally midsized farms still make up the largest share of “working farms”---farms where the chief source of income and primary occupation is farming. These farms also constitute the largest use of farm land and currently remain as a critical variable in rural community success. But the polarizing forces in the current market climate are rapidly driving these farms out of business.

These polarizing forces threaten to “hollow out” many regions of rural America by transferring most of the agricultural economic activities that have sustained rural communities, impacting agribusiness viability, job creation, and the maintenance of local tax bases. And because these are mainly farms that have been in the family for several generations (and good land stewardship is a high priority since they regard their land as part of the family’s heritage and local ecological knowledge has been handed down from one generation to the next), these farms make very important social and environmental contributions.

While the majority of farmland in the United States is still managed by farmers whose operations fall between the two marketing extremes, *if present trends continue, these farms, together with the social and environmental benefits they provide, will likely disappear in the next decade.* The “public good” that these farms have provided in the form of land stewardship and community social capital will disappear with them.

The phenomenon of the disappearing middle, of course, did not emerge in a vacuum. Changes in the structure of agriculture that helped to bring about the disappearance of the middle have been occurring for some time.

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<sup>5</sup> Patrick Martins, 2004. “Set That Apricot Free,” *New York Times*, Op-ed, April 24.

## How Do Declining Farm Numbers Change American Agriculture?

Farm populations in the United States have been declining for more than half a century. In fact, by the early 1990s Calvin Beale at the USDA had begun to refer to the steady decline in farm populations between 1950 and 1980 as a “free fall” situation leading us toward “trauma.”<sup>6</sup> Of course, Americans continue to enjoy a surplus of food and fiber despite these steady declines in farm populations. And many agricultural experts continue to see the attrition of farmers as a necessary “market correction” insisting that depressed farm economies are due to inefficiencies. In their minds we still have “too many farmers.”

So are declining farm populations leading to trauma or to maximum efficiency? If fewer farmers are able to produce more than enough food and fiber to meet our domestic and export needs, why should we worry about declining farm numbers at all? Many policy makers, and perhaps the general public, are, in fact, not concerned. At a meeting which took place at the National Academy of Sciences Board on Agriculture almost 20 years ago, an official of the Office of Management and Budget remarked that “If two or three farmers can produce all of the food and fiber we need, who cares? In fact, if robots can do it, who cares?”<sup>7</sup>

But farm numbers are not the only issue at stake. If we are only asking our farmers to produce bulk commodities to be manufactured into food, fiber, energy and other products as cheaply as possible, without regard for the social and ecological costs associated with such production, then we might indeed want to stay the present course and reduce farm populations to the lowest possible number. But we have traditionally expected more from our farmers. We expect them to take care of the land for future generations. We expect them to care for their animals properly. We expect them to protect the environment. We expect them to be good citizens of their communities. We want them to provide us with food products that have unique attributes. We rely on them to provide us with food security. All of these public aspects contribute to a healthy landscape, healthy communities, pleasurable eating---and to a sustainable future.

The USDA’s *A Time to Choose: A Summary Report on the Structure of Agriculture*, published in 1981, pointed to some of the critical issues facing agriculture that touch on these expectations. The report warned that the structure of agriculture that we choose will “shape the options available for generations to come and . . . affect the quality of life of all citizens.” The report went on to suggest that it was time to “make choices” concerning “our immediate needs” and “the needs of future generations,” between “the maximization of current production and exports and long-run resource utilization and

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<sup>6</sup> Calvin Beale, “Salient Features of the Demography of American Agriculture,” in David Brown, et. al., 1993. *The Demography of Rural Life*, University Park, PA, Northeast Regional Center for Rural Development. Publication #64.

<sup>7</sup> Reported by Fred Kirschenmann who attended the meeting.

conservation.” “The most critical” choice of all, the report went on to say, was deciding “what structure of agriculture” could meet those goals.

The report also suggested that “there can be little doubt that one of the most important tasks before us is maintaining the productive capability of our resource base over the long term” and that “the market may fail to adequately reflect the full costs of resource use over the long run.”<sup>8</sup> Nothing has happened in the last 20 years to alter that assessment. Everything that has happened makes that call to action more urgent than ever.

The central question still facing us is whether we can reasonably expect farmers to provide these public services within the framework of the current structure of the food and agriculture system we have developed.

We have now reached a critical crossroads. This is not just about farm numbers or “saving the family farm.” The decline in farm populations, as the USDA report pointed out, is closely linked to the structural changes that drive that decline, and the disappearing middle plays an important role in that decline. Consequently, as we enter the 21<sup>st</sup> century, a whole segment of the food and farming industry---the agriculture of the middle---is about to become extinct. And the reason we are calling attention to this development is that it will dramatically change the very landscape of rural America, jeopardize the future productive capacity of the land, and severely limit our food choices.

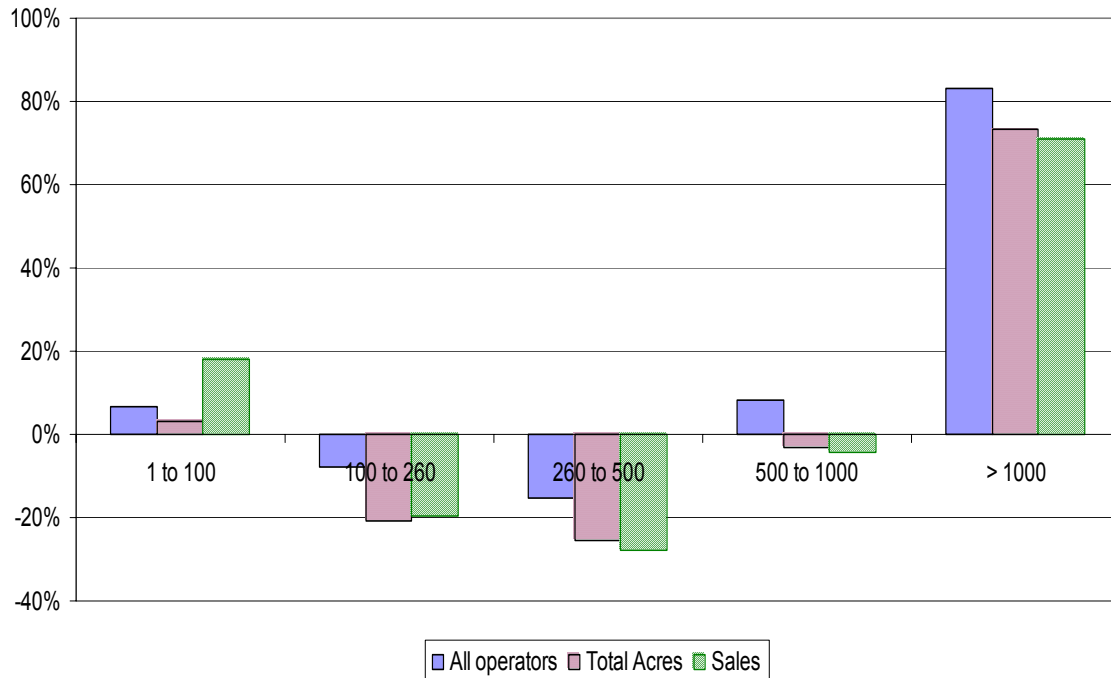
### **The Disappearing Middle**

Evidence of the disappearing middle is already accumulating. Iowa serves as a compelling example. The decade from 1987 to 1997 saw an 18 percent sales increase in farms that are 1 to 100 acres in size and a 71 percent sales increase in farms that are more than 1000 acres in size. Farms in the 260 to 500 acre range averaged a 29 percent *decrease* in sales. The percentage of operators and acres in all farms between 100 and 999 acres in size declined 23 and 25 percent, respectively.

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<sup>8</sup> USDA, 1981. *A Time to Choose: A Summary Report on the Structure of Agriculture*. Washington, D.C. January. 147, 150.

## Percent Change in the Share of Each Category's Contribution to the Total, 1987 to 1997, Iowa



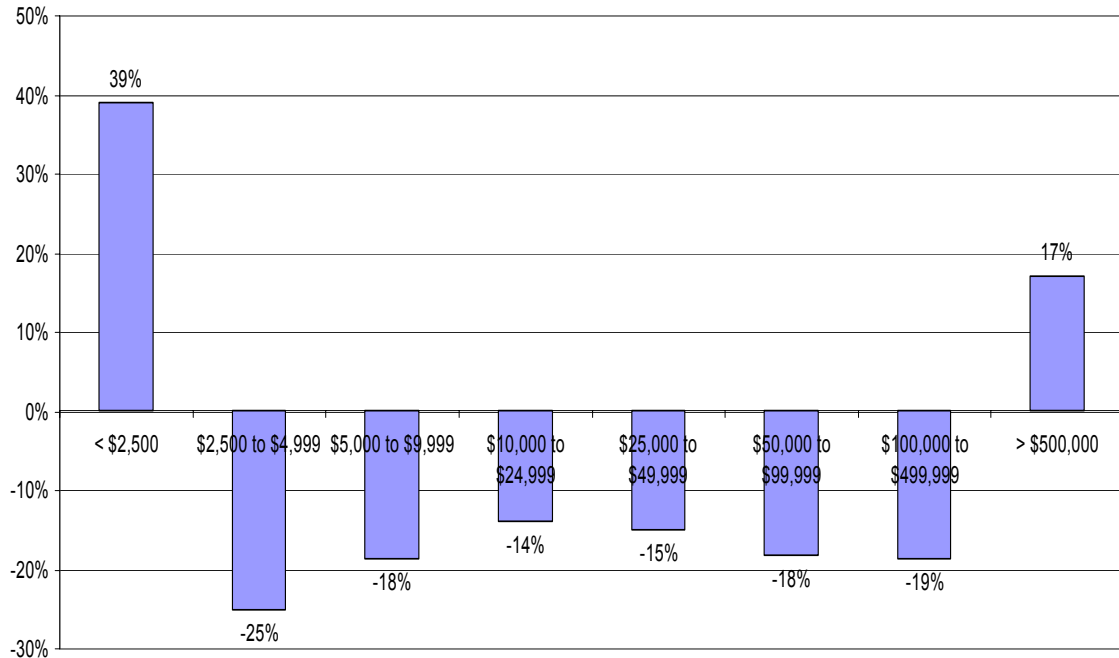
In the time since the USDA’s 1997 data was published, we have seen the “middle” disappear at an even more alarming rate. In Iowa during the five-year period from 1997 to 2002, there was a 17 percent drop in farms with sales ranging from \$5,000 and \$500,000 while the number of farms with gross sales of more than \$500,000 increased by 17 percent. Farms with less than \$2,500 of gross sales increased by 39 percent.

Of course, statistics vary from region to region. Many Southern states have seen a drop in farms with gross sales of more than \$500,000 while California, Washington, Alabama, Hawaii and Rhode Island have seen a drop in farms with gross sales under \$2500. But the pattern repeats itself often enough to demonstrate that the bi-polarization of the food system into direct and commodity markets *is* scale related.

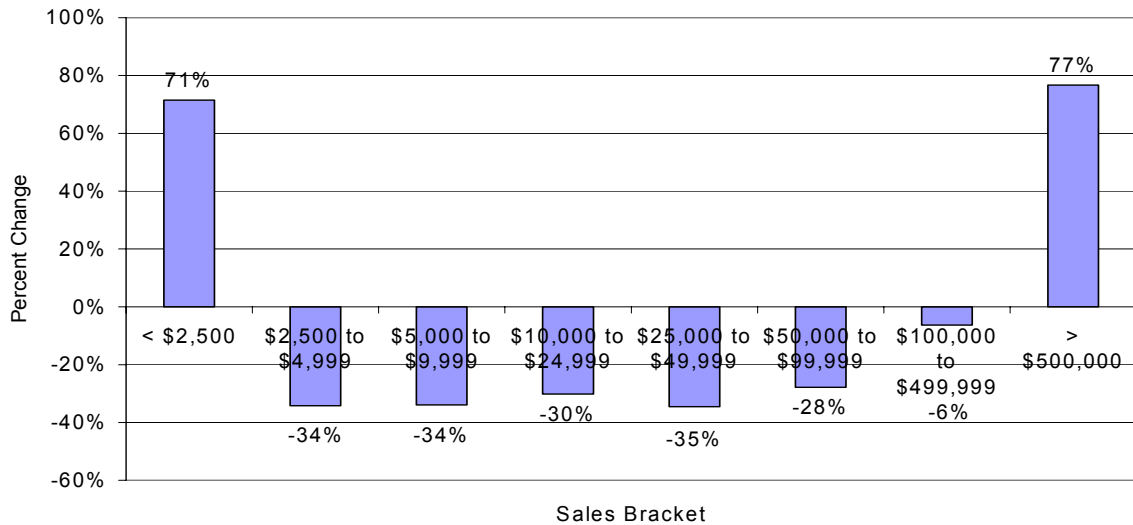
Following are some additional examples of the changes in farm numbers which have taken place in percentage of total sales during the five-year period between 1997 and 2002. While the percentages vary from state to state, owing largely to differences in the

value of commodities being produced and differences in climate and rainfall, the general pattern of the disappearing middle seems clear.

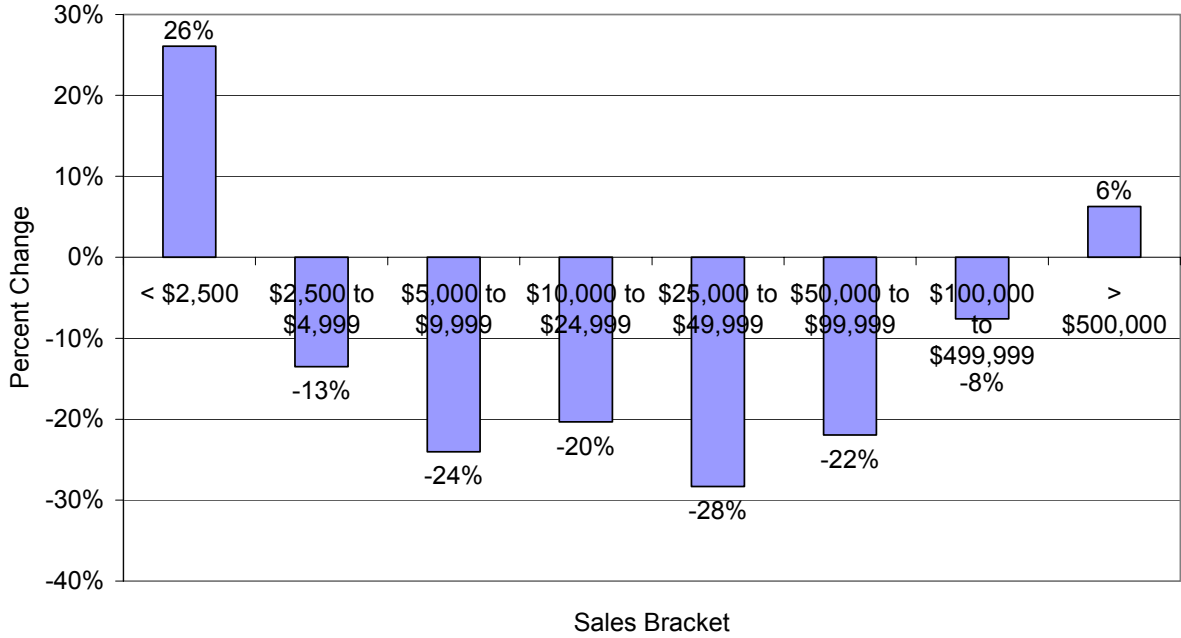
Percent Change in Iowa Farms by Sales Category, 1997 to 2002



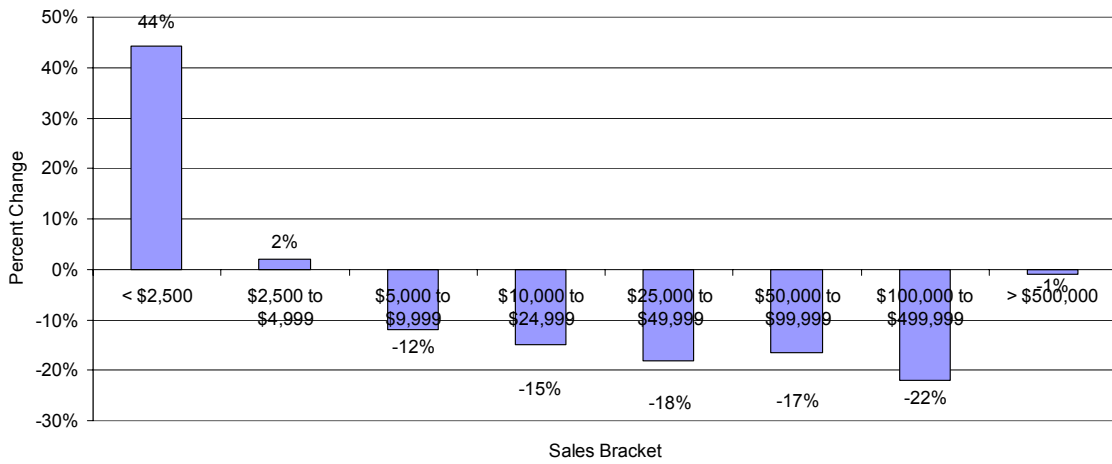
Percent Change in North Dakota Farms by Sales Category, 1997 to 2002



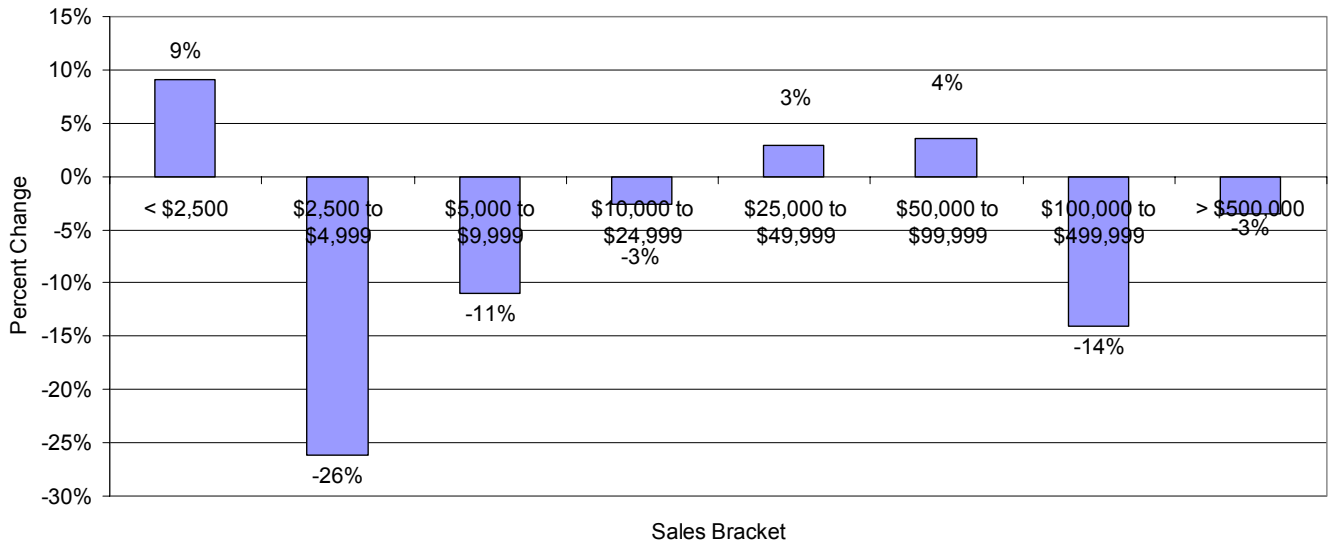
## Percent Change in Pennsylvania Farms by Sales Categories - 1997 to 2002



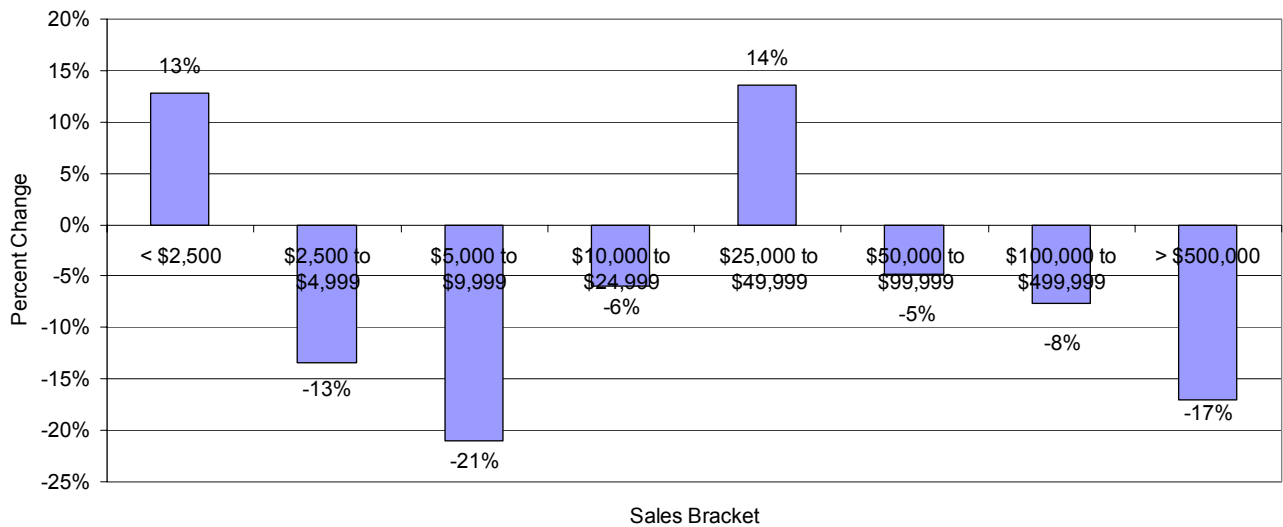
## Percent Change in Colorado Farms by Sales Categories - 1997 to 2002



Percent Change in Missouri Farms by Sales Categories - 1997 to 2002

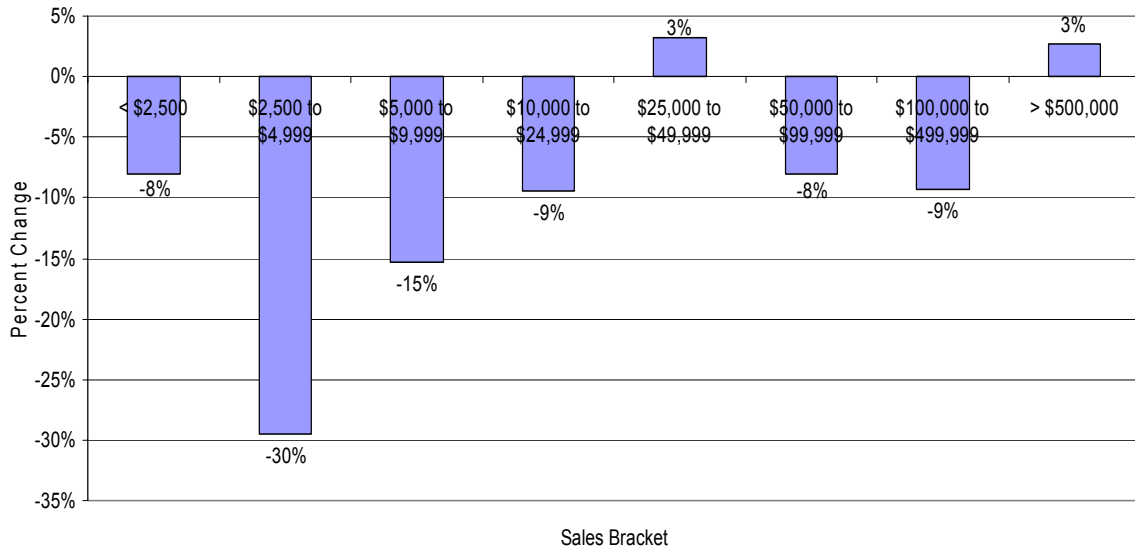


Percent Change in Mississippi Farms by Sales Categories - 1997 to 2002

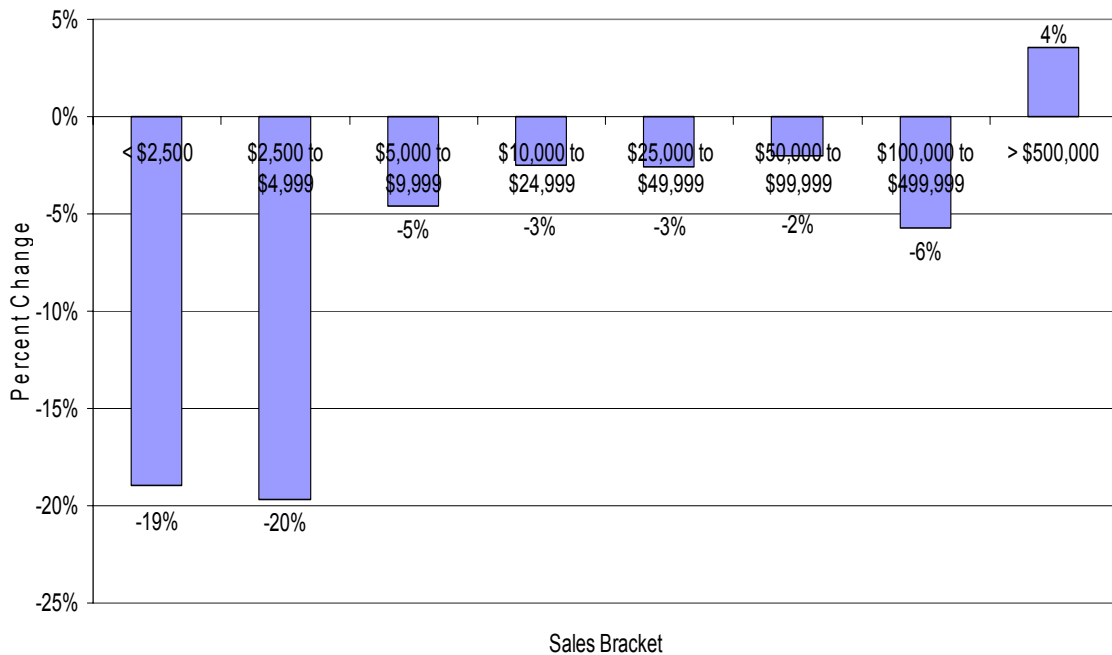




Percent Change in Washington Farms by Sales Categories - 1997 to 2002



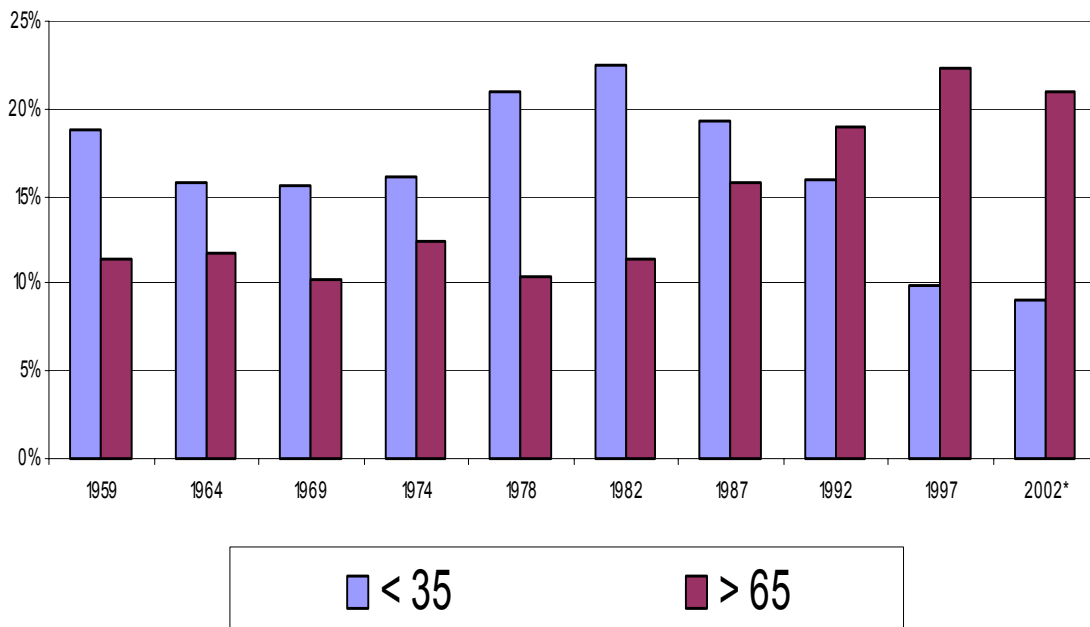
Percent Change in California Farms by Sales Categories - 1997 to 2002



Percent Change in Wisconsin Farms by Sales Categories - 1997 to 2002

The impact of these trends is further exacerbated by the fact that the age distribution of farmers has altered dramatically in the past 20 years. In Iowa, for example, there were almost three times as many farmers under age 35 as over age 65 in 1982. By 1997 those numbers had exactly reversed!

Percent of Iowa Farmers by Age Category and Year



National age distribution data appear to mimic those in Iowa. These disturbing statistics indicate that we do not have much time left to make significant changes in our food and farming system. Once the independent farmers and their diversified farms are gone, we will have lost the human capital necessary to make the changes we need to meet our goals of providing our citizens with the food choices they want, while restoring the ecological health of the land, and revitalizing our local communities.

### **Some of What We Will Lose<sup>9</sup>**

So, exactly what is it that we stand to lose if the agriculture of the middle disappears?

- The opportunity to choose foods with special desirable attributes.
- Open spaces that are easily accessible
- Wildlife habitat
- Clean air
- Soils that hold rainwater for aquifers
- Soils in crop and pasture land that help reduce flooding
- Taxes will increase because farmland requires fewer services than residential areas
- Diversified farmland that includes perennials serves as a carbon “sink” to reduce greenhouse gases that are implicated in global climate change
- Face of America altered from featuring smaller farms on a diverse landscape to endless fields of mono-crops

### *Changes on the Landscape*

The emerging bi-polar food and agriculture system increasingly will dictate how farm management decisions are made. While direct market farms generally are able to operate independently and make land management choices that benefit the social and ecological communities in which they exist, they can never manage significant amounts of land. When a farmer grows, prepares, processes and delivers a food product, there is a severe limit on the amount of acres he can manage. Meanwhile, farmers linked to large consolidated firms through contract relationships will be less able to make independent management decisions. They must make choices that serve the business interests of the consolidated firms with which they contract, and those decisions may not always benefit the community in which the farm exists.

Rapid consolidation, initially in the seed and manufacturing sectors, but now in the huge food retail sector, means that in the near future about six multinational retail firms<sup>10</sup> will

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<sup>9</sup> Parts of this section are reprinted from an essay by Frederick Kirschenmann, “The Current State of Agriculture: Does It Have a Future?” published in Norman Wirzba (ed.) 2003, *The Essential Agrarian Reader*. Lexington, Kentucky: The University of Kentucky Press.

<sup>10</sup> See the work of William Heffernan, et al., who has tracked the consolidation in the agriculture and food industry for the past 25 years. His most recent work is “Consolidation in Food Retailing and Dairy:

determine not only the size of America's farms but the type of management decisions made on those farms. This has serious, long-term implications not only for U.S. food security, but also for food production and processing enterprises.

Independent farmers, selling their production into the free market, have always made on-farm decisions based on a variety of intended outcomes. In addition to managing the farm for profitability, most farmers also made decisions that assured the survival of the farm in its particular community so that it could be passed on to future generations in good health. This is *not* to suggest that small, independent farms have always been managed to prevent soil loss, protect water quality, or maintain vibrant communities. There is a long history of degradation and loss that belies such a romantic picture of the yeoman farmer of the past.<sup>11</sup> But it *is* to say that many independent farmers have included these nobler considerations in their management decisions as a way of insuring the health of the farm for future generations. As farmers increasingly enter into contractual arrangements with highly consolidated firms, the nobler considerations of the past will be ignored.

The commercial interests that drive these large consolidated firms are based on three primary business objectives: the development of supply chains, biological manufacturing, and the reduction of transaction costs.<sup>12</sup> Each of these business objectives will have a profound effect on how local farms are managed.

The **development of supply chains** means that on-farm decisions will no longer be made to benefit the long-term sustainability of the farm, or the good of the community, or the health of the natural resources that sustain the farm. Decisions throughout the supply chain will be made solely on a profit basis to help a given large enterprise compete effectively with other supply chains to gain a larger share of the consumer's food expenditures.

The introduction of the concept of **biological manufacturing** means that farmers can no longer produce commodities based on what is best for the normal functions of the animals on the farm, or for the diversity of the landscape, or for the general health of the farm. Rather, farm management necessarily will be focused on technologies designed to produce uniform products that meet the desired processing and retail objectives of the firm.

And the need to **reduce transaction costs** means that consolidated firms will do business only with the largest farmers. It simply is less costly to contract with one farmer who raises 10,000 hogs than it is to issue contracts to ten farmers who each raise 1,000 hogs. All but the very largest farms will become "residual suppliers."

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Implications for Farmers and Consumers in a Global Food System," January 8, 2001. Available from the National Farmers Union.

<sup>11</sup> W.C. Lowdermilk, 1953. "Conquest of the Land through Seven Thousand Years," USDA, Soil Conservation Service, Agriculture Information Bulletin No. 99.

<sup>12</sup> Michael Boehlje, 1999. "Structural Changes in the Agricultural Industries: How Do We Measure, Analyze and Understand Them?" *American Journal of Agricultural Economics*, December.

The combination and broad scale impact of these three objectives may well lead to huge losses of both biological and social diversity, increasing standardization, and simplification of complex natural and social systems.

### *Social and Economic Transformations*

Given that farms will be pushed to these new levels of specialization, concentration and homogeneity, a new generation of profound changes will take place on the landscape. First, farms will be replaced by industrial centers. In Iowa, for example, it is now being suggested that farms of the future will consist of 225,000-acre industrial complexes. This transformation would reduce the number of “farms” in Iowa to 140.

It is being argued that it will be necessary to consolidate farms into such industrial assemblages to gain access to markets and to negotiate effective prices with input suppliers. Surely such “farms” will not buy equipment from local dealers or fertilizer from local suppliers, nor will they deliver grain to local elevators. As with other industrial complexes, labor will consist largely of minimum wage earners.

For the most part, commodities produced on farms will be owned by the consolidated firms that issue the contracts. Just as Tyson retains the ownership of chickens placed on “farms” to be raised for them, using *their* feed, managed in accordance with *their* management plan, so other livestock species and patented seed crops increasingly will be owned by the firm and raised for the firm in accordance with the firm’s management plans, using only the firm’s technology and inputs. In 1992, *Time* magazine had already begun to refer to the contract “farmers” raising Tyson’s chickens for them as “serfs on their own land.”<sup>13</sup>

This is a future, in other words, where all local business transactions will be made with distant supply chains, the benefit accruing not to local rural communities, but likely to shareholders who live in far-off places. And the “farmers” who provide the labor for these operations will be allowed only minimal independent judgment and creativity. Like any other franchised business, such franchised farms will be given the *freedom* to operate the farms in accordance with the firm’s directions and to accept most of the liability. In effect, this further transformation will amount to emptying the rural landscape of all its local agriculturally-related economies and its local talent. And it will deprive our food and agriculture system of the innovation and entrepreneurship which have been part and parcel of the independent owner/operator farm.

Amid today’s greatly magnified concerns about homeland security, Americans should be aware that the changes in the nation’s food system are harming our ability to control our own food supply. Food produced on large, far-flung farms is not likely to be reliably available in times of disaster, whether natural or manmade. Food that originates locally

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<sup>13</sup> *Time*, 1992. “Arkansas Pecking Order,” October, 26.

from a multitude of midsized farms faces far less risk from terrorist attacks. David Orr points out, “A society fed by a few megafarms is far more vulnerable to many kinds of disruption than one with many smaller and widely dispersed farms. . . . no society that relies on distant sources of food, energy, and materials or heroic feats of technology can be secured indefinitely.”<sup>14</sup>

### *Biophysical Transformations*

In addition to such social and economic transformations, there will be a biophysical transformation on the landscape. We know from past experience that large industrial complexes, owned by absentee landlords, and managed by a highly centralized managerial class do not exhibit a commitment to the care of the environment in which they exist---witness Love Canal, Louisiana’s “cancer alley,” the burning Cuyahoga River, the PCBs in the Hudson River, the dried up Rio Grande River, and the hazardous waste inserted into farm fertilizer in Quincy, Washington. There is no good reason to believe that industrial farm complexes will operate with any higher degree of environmental care than any other industrial complex---indeed some “factory farm” poultry and hog complexes already serve as harbingers of the future of industrial agriculture. When short-term economic returns are the only business motivation of a firm, then long-term ecological, social and human health will inevitably be compromised. Farms are no exception.

Specialization being one of the means to achieve efficiency in industrial operations, each of these agricultural industrial complexes likely will specialize in the production of only one or two commodities. That will foster additional biophysical degradation. We now know that imposing specialization on any ecosystem causes a host of ecological problems. These problems include the elimination of the biodiversity that is essential to the resilience and productivity of any ecosystem.<sup>15</sup> Furthermore, the uniformity and specialization demanded by this new level of industrialization invites genetic uniformity which, in turn, leads to additional vulnerability.

Again the poultry industry serves as a portent of the future. William Heffernan reports, for example, that “90 percent of all commercially produced turkeys in the world come from three breeding flocks.”<sup>16</sup> Such genetic uniformity, initiated to obtain a standardized product, results in birds with such compromised immune systems that their health cannot be maintained without the extensive use of antibiotics.

Farms, of course, are ultimately micro-(or small) ecosystems that exist within macro- (or larger, more complex) ecosystems. Every farm is an inevitable part of the larger dance of

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<sup>14</sup> David W. Orr, 2002. “The Events of 9-11: A View from the Margin,” *Conservation Biology*, Vol. 16, No. 2, April.

<sup>15</sup> See, for example David Tilman’s work: “The Greening of the Green Revolution,” *Nature*, Vol. 396, 19 November, 1998; “Biodiversity and Ecosystem Functioning: Current Knowledge and Future Challenges,” *Science*, Vol. 294, 26 October, 2001.

<sup>16</sup> Quoted in William Greider, 2000. “The Last Farm Crisis,” *The Nation*. November 20.

life---part of that complex, interdependent web of life that evolved (and continues to evolve) over almost four billion years. We ignore that evolving complexity at our peril.

The standard industrial answer to this cautionary tale is, of course, that we will always have the technological capability to restore any damage we may do to the ecosystem --- especially with the newly discovered technological capacity of genetic engineering. We now seem to have convinced ourselves that we can redesign life to live better in a new biological order of our own making with our technological prowess.

In his book, *The Future of Life*, E.O. Wilson analyzes the technological optimism which believes that we can redesign nature with technology to maintain its vitality, and he gives the proper response to such misplaced optimism.

Such is the extrapolation endpoint of techno mania applied to the natural world. The compelling response, in my opinion, is that to travel even part way there would be a dangerous gamble, a single throw of the dice with the future of life on the table. To revive or synthesize the thousands of species needed---probably millions when the still largely unknown microorganisms have been cataloged---and put them together in functioning ecosystems is beyond even the theoretical imagination of existing science. Each species is adapted to particular physical and chemical environments within the habitat. Each species has evolved to fit together with certain other species in ways biologists are only beginning to understand.<sup>17</sup>

Wilson, of course, is speaking here of whole ecosystems not farms. But, again, farms are simply micro-ecosystems within macro-ecosystems. Consequently, anywhere agriculture is practiced, it must become part and parcel of the task of restoring our natural capital by restoring the species richness that is as essential to a healthy farm as it is to a healthy ecosystem. From this perspective, industrial agriculture with its specialization, centralization and uniformity is simply another example of what Wilson calls “mistaken capital investment.” We must now redesign agriculture so that it becomes an integral part of restoring the landscape’s biodiversity.

And the reason that the human resource factor on farms is important to that task is that such restoration is not likely to be accomplished without caring people on the land. As Wendell Berry has reminded us, “. . . there is a limit beyond which machines and chemicals cannot replace people; there is a limit beyond which mechanical or economic efficiency cannot replace care.”<sup>18</sup>

### *Technological Transformations*

A third likely effect from this new level of industrialization is the further promotion of authoritarian technologies. Lewis Mumford, arguably one of America’s most important

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<sup>17</sup> Edward O. Wilson, 2002. *The Future of Life*. New York: Alfred A. Knopf.

<sup>18</sup> Wendell Berry, 1995. *Another Turn of the Crank*. Washington D.C: Counterpoint Press.

social critics, pointed out that from Neolithic times to the present two technologies have “recurrently existed side by side”---one authoritarian, the other democratic. Authoritarian technology, while powerful is “inherently unstable.” Democratic technology, while relatively weak is “resourceful and durable.” Mumford reminds us that democratic technologies usually consist of

. . . the small scale method of production, resting mainly on human skill . . . remaining under the active direction of the craftsman or farmer, each group developing its own gifts, through appropriate arts and social ceremonies, as well as making discreet use of wide diffusion and its modest demands . . . [and has] great powers of adaptation and recuperation.

Authoritarian technologies, on the other hand, tend to be large scale and concentrate power in the hands of the few. They rest mainly on high-tech inventions and scientific discoveries. They are generally under the direction of centralized management, usually exploiting the gifts of nature to suit the purposes of management. Because of its centralization and insatiable demands, authoritarian technology has little power of adaptation or recuperation.<sup>19</sup>

These are some of the losses we will experience with the disappearance of the agriculture of the middle. R. Edward Grumbine reminds us that we can provide sound ecological management for natural systems only if we have someone living in those systems long enough and intimately enough to learn how to manage them.<sup>20</sup> Technology will not be a substitute for such wisdom. And since (as noted earlier) farms are micro-ecosystems within macro-ecosystems, the same holds true for farm management. It is precisely the farmers in the agriculture of the middle who fit that description and who currently manage the majority of the land. Once they are gone, we will have lost an irreplaceable human resource.

### **Opportunities, Needed Explorations, and Outcomes**

*Given the changes that are taking place in the agricultural and food system, this is very likely to be our last chance to develop effective strategies for regenerating a significant agriculture of the middle.* The task before us is to frame a convincing rationale for a national initiative that will marshal the public and private resources to develop and test models, as well as supporting existing models, for linking smaller, sustainable food enterprises on a regional basis and/or piggy-backing such value chains onto existing distribution systems. These new food system approaches would explore and evaluate linkages between farms of the middle and corresponding enterprises of the middle in the rest of the food system; e.g., regionally-based food processors, distributors, and retailers. The new task will be to develop “value chains”<sup>21</sup> that create a partnership among farmers, processors, distributors and retailers based on a set of values that are tied to the

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<sup>19</sup>Lewis Mumford, “Authoritarian and Democratic Technics,” in John Zerzan and Alice Carnes, eds. 1991. *Questioning Technology*. Philadelphia, PA: New Society Publications.

<sup>20</sup>R. Edward Grumbine, 1992. *Ghost Bears*. Washington, D. C.: Island Press.

<sup>21</sup> A value chain is a network of collaborating players who work together to satisfy market demand for a specific product and/or set of services.



products the value chains produce. Regionalism must be taken seriously in these explorations as opportunities and constraints will differ among various regions of the country.

And according to Elbert van Donkersgoed, value chains at their best consist of unique relationships in which “real partnership between all players in the chain” exists and relationships are built on trust.<sup>22</sup>

Fortunately, we also have unprecedented opportunities to develop a food and farming system that can enable the agriculture of the middle to thrive. Already many small farms have demonstrated success with wood products, composting, agri-tourism, flowers, herbs, horticultural crops, nursery products, or wine. Midsized operations will be able to provide greater quantities of some of these products and both small and midsized farms can be linked into marketing networks that can efficiently supply substantial quantities of these unique products.

Furthermore, a new market climate is emerging that will change the way we produce what we eat. The new market climate, especially where food is concerned, consists of three distinct elements. Rick Schnieders, President and CEO of the SYSCO Corporation, describes them as “memory, romance and trust.”<sup>23</sup> These are the attributes that an increasing number of food-conscious consumers are seeking. They want high-quality food, produced with farming practices they want to support and brought to them through a value chain they can trust. All of these attributes can be supplied readily and in sufficient quantity by the farmers and entrepreneurs who occupy the “middle.”

In fact, it may be that these unique food products can *only* be supplied in sufficient quantity by the farmers in the middle. The food service industry which distributes the majority of these unique products depends on the farmers of the middle to supply them. Again, as Rick Schnieders points out, the needs of the food service industry are very different than those of the traditional retail food market. Most food products in a typical retail grocery supermarket are manufactured from a very few ingredients---notably corn, soybeans, sugar and salt. The food service industry, on the other hand, supplies food operations that demand in excess of a hundred varieties of flour, not to mention thousands of food products with unique attributes—Vermont lamb, antibiotic-free meat, Niman Ranch pork. The commodity market simply is not structured to provide such variety---their profits are based on the mass production of huge quantities of uniform commodities on narrow margins.<sup>24</sup>

Furthermore, the climate of markets has changed as we enter the 21<sup>st</sup> century. The concept of markets as conversations is an especially important one and is imaginatively described in a book written by four authors, two of whom are on the management team of

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<sup>22</sup> Elbert van Donkersgoed, 2003. “Value Chains Versus Supply Chains,” *Corner Post*, June 23.

<sup>23</sup> Rick Schnieders, 2003. Keynote address, January 25, Practical Farmers of Iowa annual meeting.

<sup>24</sup> Rick Schnieders, 2004. “The Strategic Role of the General Counsel at SYSCO,” Speech delivered to the General Counsel Institute at Georgetown University. April (Available from the author)

Sun Microsystems. The book is entitled *The Cluetrain Manifesto*.<sup>25</sup> Markets, these authors contend, are undergoing a major change as we enter the 21<sup>st</sup> century. During most of the 20th century markets consisted of “broadcast” information. If one wished to put a product on the market, one published a Sears Roebuck catalog, bought advertising in newspapers or magazines, purchased a spot on the radio, or bought time for an advertisement on prime time television. Marketing consisted of one-way communication.

The authors of *Cluetrain* argue that the broadcast era is over, that 21<sup>st</sup> century customers grew up using the Internet, and therefore are no longer receptive to having information broadcast to them. They are used to having a conversation about everything---including the products they buy and the food they eat. And therefore, anyone who does not provide an opportunity for customers to have a conversation about what they are selling will be at a distinct disadvantage in the marketplace. As they remind us---customers are not “seats or eyeballs or end users or consumers,” they are human beings whose reach exceeds our grasp.

What this analysis of the market of the 21<sup>st</sup> century tells us is that people increasingly will want to have *relationships* as part of their purchasing experience. Consequently, food marketers of the future who do not provide an opportunity for food customers to experience the *story* behind the food they buy are not likely to be in that market for very long. This is the special magic behind today’s direct market success. When food customers go to the farmers market or buy from their local CSA<sup>26</sup>, they are buying a relationship as much as a food product. The late Ken Taylor, founder of the Minnesota Food Association, used to describe this sort of relationship marketing in graphic terms. “People who live in urban communities for the most part don’t like to get their hands dirty, but they surely want to shake the hand of someone that does.”<sup>27</sup>

What are the implications of this transformation in the marketplace for the future of the agriculture of the middle? In the first place, this new development clearly gives the comparative advantage to precisely those farmers who are most threatened in the emerging two-part food system. Imagine a large number of small and mid-sized family farmers, linked together in a marketing network, producing food products for regional food sheds, using sound conservation practices, providing their animals with the opportunity to perform all their natural functions, preserving the identity of such food products by processing them in locally-owned processing facilities, and making them

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<sup>25</sup> Christopher Lacke, et. al. 2000. *The Cluetrain Manifesto*. Boulder, CO: Perseus Books Group.

<sup>26</sup> Community Supported Agriculture (CSA) refers to a community of individuals who pledge support to a farm operation so that it becomes the community's farm, with the growers and consumers providing mutual support and sharing the risks and benefits of food production. Typically, members or "share-holders" of the farm pledge in advance to cover the anticipated costs of the farm operation and farmer's salary. In return, they receive shares in the farm's bounty throughout the growing season. Members also share in the risks of farming, including poor harvests due to unfavorable weather or pests. This provides the farmers with working capital in advance and they are relieved of much of the burden of marketing.

<sup>27</sup> Personal conversation

available in the marketplace with opportunities for consumers to access the entire story of the product's life cycle using existing food service delivery systems.

Or, imagine that a food service provider has a web site listing thousands of food items with unique attributes and qualities. The chef in a restaurant could click on Vermont lamb, or Niman Ranch pork, or Organic Valley cheese and the web site would link to a distribution network that would immediately place the order with the farmer or network of farmers who produces those unique products. Ten days later the product would appear at the chef's restaurant, together with the unique story of that product ready for the chef's menu, the chef's credit card would be charged and the farmer's account would be credited.

Models already are being developed by farmers and other food systems entrepreneurs that can provide a foundation for the national initiative we are proposing here. These models involve new enterprise structures and mid-tier value chains that can simultaneously serve the environment, rural communities, farmers, and the growing segment of the consuming public that wants to purchase foods with unique attributes. Mid-tier value chains are strategic alliances between independent (often cooperative) food production, processing, and distribution/retailing enterprises that seek to create and retain more value on the front end of the chain, and often operate at a regional level. Examples of these new mid-tier value chains include the wine industry in upstate New York and emerging alternative pork production and marketing systems in Iowa, as well as developing regional agricultural marketing labels (e.g., the Organic Valley Family of Farms, Wisconsin; PlacerGROWN, California; and Puget Sound Fresh, Washington).

*It is this nation's larger small farms and midsized farms that have the comparative advantage in developing this new agriculture since they have the flexibility to implement innovative production and marketing systems and can produce the volume necessary to supply significant quantities of food into these new food chains.*

The good news in all this is that we don't have to *develop* the markets for these new value chains. The markets are already there. Again, Rick Schnieders asserted that the demand for differentiated products in the food service industry is large and the demand for sustainably produced foods is growing. Among other food customers, the health care industry has recently shown strong interest in acquiring more health promoting foods for patients in hospitals and other care facilities. What is missing is a functioning value chain to get those products from the farmers to the consumers<sup>28</sup> and an extension system that assists farmers in making the transition from producing commodities to producing unique, differentiated products.

Farmers and other food entrepreneurs will not be able to develop such value chains by themselves. They lack sufficient capital and business experience. Furthermore, farmers have little experience in producing differentiated value products. They are experienced producers of undifferentiated commodities. It also would be helpful if there were changes in transportation and trade policies, as well as meaningful constraints on the

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<sup>28</sup> Schnieders, *Op. cit.*

trends toward consolidation in the food and agriculture sector to reinvigorate significant free market competition in the food industry.

The research and education community must provide responsive leadership relative to analysis, model building, evaluation, and education in three areas: (1) new production systems that meet the requirements of the emerging markets for highly differentiated products, (2) market structures and relationships that link farmers producing these products with other food system entrepreneurs in a marketing value chain that enables farmers to produce and retain more value on the farm, and (3) procedures and policies for recognizing, evaluating and rewarding non-market benefits from the new agriculture as well as identifying and modifying policy structures that currently put smaller food enterprises and farmers of the middle at a competitive disadvantage.

It is the goal of the Agriculture of the Middle project to link the essential partners necessary to achieve these objectives.

Our purpose is **not** to challenge or change commodity agriculture. Consolidation in the food and farming system is driven by powerful forces that are likely to play themselves out and are probably largely beyond our control, especially as long as we continue to subsidize that system with public funds, and ignore enforcement of anti-trust laws. But as Michael Porter reminds us, there are **two** ways to be competitive in a global economy; by being the lowest cost supplier of an undifferentiated commodity or by providing the market with a unique and superior value in terms of product quality, special features or after sales service.<sup>29</sup>

Since only 10 percent of today's farmers produce more than 60 percent of the bulk commodities for the commodity market, it falls to 90 percent of the farmers, including the farmers in the middle, to supply the other market. And it is precisely those farmers who are in the best position to produce the unique products demanded by that market. As numerous market analyses have shown, approximately 25 percent of today's food customers want the unique products that this second market can offer them. One of the attributes which these markets increasingly want in their food choices is "locally grown by a family farmer."<sup>30</sup> And that market appears to be growing. So the markets are there and the producers are there. What is needed is the value chain to connect them.

A national task force consisting of farmers, university researchers and food industry specialists began to meet in fall 2003 to begin addressing these issues. We are (1) identifying how best to structure and fund the research that can begin to identify the opportunities and barriers involved in developing such value chains, (2) determining how to provide educational opportunities for farmers, officials, and the public as to the importance of the agriculture of the middle and what should be done to preserve it, and (3) developing the structure to make this marketing middle a reality. We will devise a plan to obtain a substantial commitment to public-sector research and education, and

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<sup>29</sup> Michael E. Porter, 1990. *The Competitive Advantage of Nations*. New York: The Free Press.

<sup>30</sup> Rich Pirog, 2004. "Ecolabel Value Assessment Phase II: Consumer Perceptions of Local Foods," Leopold Center for Sustainable Agriculture. [www.leopold.iastate.edu](http://www.leopold.iastate.edu).

private sector partnerships that can evolve food systems approaches to revitalizing the agriculture of the middle through such market opportunities.

The immediate, specific outcome we expect from this effort will be a plan of action to secure the support to carry out this ambitious agenda. If we are successful in that effort, the long-term outcomes we envision include the following:

- The development of more comprehensive, regionally appropriate, ecologically sound agricultural production systems that enable farmers of the middle to produce and retain more value on their farms while restoring the health of local ecosystems and contributing to the revitalization of rural communities.
- The creation of new market structures/models and marketing relationships for midsized farms that create and retain greater value in the farm and rural community sectors, and that increase the viability of local and regionally-based food processing and distribution enterprises, and/or develop such value chains within existing enterprises.
- The exploration of policy alternatives that support these new marketing and production systems.
- The education of a large number of consumers in the market of the middle who are aware of the contributions of the agriculture of the middle and who support these farmers with their food choices and purchases.
- The development of a national cadre of researchers and food system practitioners with expertise and commitment to micro-enterprise food system analysis and reform.
- The assurance that the information and other inputs needed for healthy, diverse food systems remain in the public domain.

It is important to remember that none of this can happen apart from sustaining a particular kind of farmer with a particular kind of farm. Of all the millions of words that have been written about agriculture in the last 50 years, perhaps none have described what we need more eloquently than the particulars outlined by Wendell Berry more than a decade ago:

... if agriculture is to remain productive, it must preserve the land, and the fertility and ecological health of the land; the land, that is, must be used well. A further requirement, therefore, is that if the land is to be used well, the people who use it must know it well, must have time to use it well, and must be able to afford to use it well. Nothing that has happened in the agricultural revolution of the last fifty years has disproved or invalidated these requirements, though everything that has happened has ignored or defied them.<sup>31</sup>

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<sup>31</sup> Wendell Berry, 1990. *What Are People For?* San Francisco: North Point Press.