The Social Goals of Agriculture

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ABSTRACT: An analysis of social goals for agriculture presupposes an account of systematic interactions among economic, political, and ecological forces that influence the performance of agriculture in a given society. This account must identify functional performance criteria that lend themselves to interpretation as normative or ethical goals. Individuals who act within the system pursue personal goals. Although individual acts and decisions help satisfy functional performance criteria, individuals may never conceptualize or understand these criteria, and, hence, social goals for agriculture may not be intentionally sought or desired by any human being. The statement of social goals is not, therefore, reducible to statements about individual desires and preferences, and the validity of social goals does not depend upon deriving a social welfare function, nor upon measuring interpersonal utility.

The paper examines a series of strategies for defining social goals for agriculture, beginning with the statement of goals offered by William Aiken in 1983. Aiken's view stresses individually based constraints upon action, but social goals cannot be adequately defined on this view. Successively more adequate approaches to the problem of social goals are examined with respect to production and efficiency, Jeffersonian democracy, and ecosystem goals of community and self-reliance. The role of family farms, and the change in farm structure is evaluated in light of this analysis for social

goals.

A 1983 essay on the social science components of agricultural science and technology policy by agricultural economist James T. Bonnen states:

Changes in society's values and social agenda, in part the consequence of externalities to agricultural policy and production, will remain an important source of disequilibria. This will require not only social science, physical and biological science, but also humanities research on the ethical and value conflicts in the choices that must be made. [Bonnen, 1983]

It is fair to characterize Bonnen's view as an enlightened one with respect not only to his recognition of the importance of ethics and values for agricultural policy and research, but also for his suggestion that the humanities can make a contribution. Implicit in his statement, however, is the suggestion that the values or goals that influence agriculture arise from the misty

depths of individual subjectivity, a region so alien to social science that we must call upon the humanities, as a last resort, perhaps, to understand them. While the purpose of this paper is to respond positively to Bonnen's call for some humanities research on ethics and values in food and agriculture, the approach I shall take to ethics and values is very much influenced by the account of agriculture that we get from the social sciences.

Agriculture is a human activity that takes its shape from its interactions with nature and the rest of the society in which it is practiced. All but the most primitive of societies have had an agriculture, and even the hunter-gatherers practiced rudimentary forms of environmental management, whether they were consciously aware of doing so, or not. Although the practice of agriculture is a virtually universal component of all human societies, the purposes and

goals that a society was able to achieve through agriculture have been variable. If we are to say anything helpful about ethics and values issues as they relate to food and agriculture today (not to mention the, perhaps, more difficult problems we shall face in the future) we must have a clear sense of agriculture's purpose and goals within American society, and we must realize that the goals for agriculture that we have taken for granted may not always be mutually compatible, or mutually shared by all Americans. This, I take it, is just what Bonnen refers to as "the ethical and value conflicts in the choices that must be made."

So how do we go about resolving these conflicts? The approach that is proposed in the following discussion involves, at the outset, a retreat from the substantive issues, and offers instead a discussion of the concept of a social goal. The thesis has two parts: 1) that the notion of moral value or duty which is derived from an individual human being's conscious or intentional actions is an inadequate basis for understanding social goals; 2) that the analysis of social goals for agriculture depends upon a comprehensive understanding of the social and natural systems in which agriculture is practiced. The strategy for elucidating definitional criteria for social goals is to examine a series of successively more adequate attempts to set social goals for agriculture, and to indicate why each is superior to the one before. The first example is drawn from William Aiken's attempt to set moral goals for agriculture. The second from the standard neo-classical interpretation of agricultural economy. These two approaches to the goals of agriculture are followed by a reinterpretation of Thomas Jefferson's concept of the relation between agriculture and democracy. Finally, an ecologically based approach to social goals is offered as an attempt to address shortcomings in the Jeffersonian model. This final section of the paper will defend the thesis that the tension between economic and political goals can be mitigated, if not resolved, by an analysis of agriculture that stresses the nesting of economic and political functions of agriculture within the natural environment.

The Concept of a Social Goal

The subject of goals for agriculture was philosopher William Aiken's topic in his contribution to the 1982 conference on Agriculture, Change and Human Values at the University of Florida. Aiken describes a list of goals, which he proposes to rank in order of moral importance. He starts with the goal of profitable production needed by people in the agricultural industry.

He then considers sustainable production practices, environmentally safe production practices, meeting human needs, and a just social order as goals that are of greater moral significance than private profit. He sees the role of agricultural production in meeting human food needs to be the overriding moral goal of agriculture, and he finds the other moral goals to be compatible with it. Profitability can be assured, in Aiken's view, by the right combination of subsidies and incentives. [Aiken, 1984a]

The rationale for Aiken's ordering is less explicit than we might like, but it appears to be based upon a reasonably straightforward principle for ordering rights or duties. The principle would hold that one right or duty is more basic than another whenever the moral benefits associated with the second can be extended to all people only after the first has been protected or fulfilled. For example, a right to life would be more basic than a right to a quality education, since eruditon presumably means little to the dead. In conformity with the principle, therefore, one individual's right to life should not be compromised so that another can be educated. Similarly the right to food (or subsistence) is more basic than the right to monetary profit; one can imagine situations in which wealth is rendered meaningless by famine.1 The more difficult cases involve threats to human health from environmental pollution or resource depletion, since it is less clear whether these practices violate a right to life. Nevertheless, a consistent application of the principle would certainly prioritize these goals (as does Aiken) somewhere between immediate threats to life that might be associated with starvation, and more elevated refinements in the quality of life such as social justice, and, least basic of all, wealth.

To the extent that this principle is a fair characterization of Aiken's rule for setting priorities among goals, he has offered a method for resolving ethical and value conflicts in the choices that have to be made. Aiken's more extended analyses of world hunger and of the environmental consequences of agricultural practices offer additional examples of priority setting for agricultural goals. [Aiken, 1978; 1984b] The principle clearly provides a logically consistent application of important moral considerations. It is most effective when comparing rights and duties that can be defined as obligations owed by one individual to another. Thus, one person has the right to pursue a higher standard of living in so far as doing so does not preclude him from fulfilling the morally prior obligation to secure a more basic right for others. A farmer may apply chemicals that increase profitability

so long as doing so does not violate more basic rights to health and safety.

Goals for agricultural producers (as for all of us) are to enhance their quality of life while fulfilling the basic requirements of moral responsibility to others. As such, Aiken's moral goals are defined as guidelines for morally valid intentional actions, and his priority rule provides the individual moral agent with a way to systematically rank her intentions according to a moral hierarchy. Environmentally safe production, for example, is stated fairly specifically by Aiken as a goal that can be achieved through the intentional action of agricultural producers, guided by factual knowledge of the toxic properties of agricultural chemicals. [Aiken, 1984a, 37]

Some of the goals Aiken cites for agriculture are less amenable to the model of individual moral obligation. The goal of sustainability for agriculture, for example, becomes problematic. When Aiken states that sustainability is a goal for agriculture, he means that the entire system of agricultural production should be organized so as to minimize consumption of nonrenewable resources. An individual farmer can set a goal of sustainability on her farm, but this action does not make a meaningful contribution to the aggregate sustainability of agriculture unless many other farmers act the same way. In identifying sustainability as a moral goal, Aiken quite properly draws our attention to the vulnerability of the agricultural ecology and suggests that nonsustainable practices are wrong because they upset the natural balance, they create dangerous dependencies upon fragile processes and scarce resources, and they jeopardize the stability of civilizations and the livelihood of people who come to depend upon them. His method for stating goals, however, demands that they be reducible to statements of obligations and duties owed by one individual to another. Aiken must therefore account for an individual producer's obligation to practice sustainable agriculture.

Aiken struggles with this problem directly in his 1984 essay "Ethical Issues in Agriculture." Here, sustainability is described as an obligation owed not to other human beings, but to nature itself. Aiken draws upon the expanding literature of non-anthropocentric environmental ethics to extend the scope of moral obligation beyond duties owed to other human beings. He discusses duties owed to other animals and to the ecosphere. The duty to practice environmentally conservative agriculture is a consequence of a duty to respect and preserve the natural

world. Aiken maintains the practice of prioritizing duties, making ecosystem duties less basic than duties to secure the survival of other human beings, but prior to one's pursuit of profit. [Aiken, 1984b]

While this approach to sustainability follows Aiken's basic model for stating and prioritizing goals for agriculture, it places a severe burden upon the principle that is intended to resolve conflict among goals. When the ecosystem and other animals are left out of the picture, it seems reasonable to insist upon a stepwise pursuit of goals that are deemed "more basic" when they serve as prerequisites to the enjoyment of more refined moral goods; but this principle yields no obvious order of ranking between human rights, such as life and liberty, and nonanthropocentric goods, such as animal welfare and ecological balance. Why is it that a cow or pig's well-being can be sacrificed to preserve human life, while the integrity of an ecosystem may not be sacrificed to raise farm income? Aiken's attempt to express sustainable or ecologically sensitive agriculture as a duty that individual farmers owe to nature itself strains credulity. The conceptual framework of obligations owed by one individual to another fails to capture the moral importance of holistic outcomes. Such outcomes are consequences of the systematic interelation of individual acts, rather direct consequences of their conscious intentions.2

While the production choices of an individual producer are certainly relevant to the overall sustainability of an agricultural system, it is just false to suggest that the actions of a single producer make much difference either way. The individual producers who choose sustainable methods may perform an act of moral courage, but they also commit a division fallacy if they think that they have adopted sustainability as a personal goal in the morally relevant sense. Their actions, understood individually, cannot reasonably be expected to achieve the collective good of a sustainable agriculture, nor does the fact that these individuals, acting conscientiously, have adopted sustainable practices explain why sustainable agriculture is a morally justified and worthwhile end to pursue. One must understand sustainability at the level of the entire agricultural system in order to understand it at all.

An alternative account of goals, thus, becomes necessary. Sustainability is understood not only as a goal for individuals, but for the agricultural system as a whole. Systems are not moral agents, nor do they intentionally follow a course of action in pursuit of some good or to fulfill

some duty. Ecologically sustainable agriculture is a goal that is best expressed, not as a duty that is intentionally pursued by individual producers, but as a particular pattern in the operation of the social and ecological system that encompasses all producers (and consumers) of agricultural products. It is, in this sense, a social, rather than an individual, goal. Powerful and insightful though Aiken's approach is for agricultural goals, it falters when goals cannot be defined readily within the framework of individual moral obligation.

We gain a far more profitable understanding of ethics and values as they apply to agriculture when we approach the subject through the analysis of social goals. Basing the account of moral goals on the model of an individual's moral obligations to others precludes analysis of social goals because the moral importance of social goals has to do with systematic interactions that are beyond the command of individual intentions. While individual intentions may lurk in the misty depths of human subjectivity, accessable only to the introspective and interpretive methods of the humanities, the interactions of human beings become visible through the methods of the social sciences; it is in this sense that the analysis of social goals depends upon the account of agriculture that we get from the social sciences. Furthermore, the ability to distinguish between social and individual goals will enable us to clarify some of the claims that have been raised by critics of agriculture, and, ultimately, to approach the issue of sustainability once again in a fuller and more systematic way. __

The Market Analysis of Social Goals

Neoclassical economic theory provides a model of producers and consumers interlinked through the laws of supply and demand. Supply and demand operate in a market where producers offer their products for exchange, and consumers expend resources according to the pattern that best suits their preferences. Markets allow producers to fulfill their own need for income by supplying the things that consumers (in the aggregate) want. As individual producers determine what things to offer and individual consumers budget their resources, the market, "the invisible hand," guides the aggregate outcome by setting prices at levels that reflect the willingness of all participants to participate in the exchange. Markets can perform this aggregation more or less effectively, however, depending upon a host of factors. Because neoclassical theory gives an account of systematic interactions of individuals, and because it implies standards by which the system can be said to operate more and less well, it provides a basis for identifying social goals that are not defined in terms of the intended goals of individual human beings.

Although a number of social goals can be defined on the basis of neoclassical theory, and considerable effort can be spent examining their relationship to one another, two that are frequently associated with contemporary agriculture can be defined in nontechnical terms. When functioning properly, the market should assure that things people want are, in fact, made available because there are profit incentives for producers; and this might be described as the production goal of the neoclassical model. Secondly, and correlatively, markets should direct investment toward the mixture of enterprises that best satisfies the aggregated demands of consumers, and this can be described as the efficiency goal of markets. (The terms 'production' and 'efficiency' are so badly abused in contemporary use that there can be little harm in abusing them here still farther.)

Agricultural production is a social goal for an industrialized society because everyone needs the food and fiber that agriculture produces, and because industrial societies are organized so that the majority of people are not in any position to produce food and fiber themselves. Although everyone wants food and fiber for their personal use, in a market society no one need set the production of food and fiber for one's own use as a personal goal. Farmers and ranchers may produce food and fiber because they feel a moral duty to prevent starvation or because they hope to sell it at profit; in the market system it makes little difference what the intentions of individuals might be, since the goal of production is defined at the aggregate level.

Agricultural production would not be a social goal, however, in societies where agricultural commodities were never traded in markets. Industrial society functions only because people are able to purchase the food that they need at the grocery store, and grocery stores are able to provide food only because it is produced by farmers and ranchers who represent a relatively small portion of the population. The division of labor in industrial society is possible because market forces are capable of assuring the production of food needed by any society, and because they do so in a way that releases a substantial number of people from agriculture for other pursuits. Modifications of our social organization that are intended to achieve moral goals such as a reduction of poverty, distributive justice, an end to hunger, or environmental protection may reasonably be expected to retain the general division of labor that frees a large portion of a nation's populace from agricultural production.

The question of efficiency is a more difficult one. Technical economic definitions of efficiency will vary from one context to another. The basic idea, however, is that the productive resources of a society can be arranged in a number of different ways, and that some arrangements will be capable of producing more of what people want than others. The 17th century English philosopher John Locke gave an early formulation of the social value of efficiency as it applies to agriculture in his discussion of property rights from *The 2nd Treatise of Government*. He wrote:

... he that encloses land, and has a greater plenty of the conveniences of life from ten acres, than he could have from an hundred left to nature, may truly be said to give ninety acres to mankind: for his labour now supplies him with provisions out of ten acres, which were but the product of an hundred lying in common. [Locke, 1980, 23–24]

Locke's idea is simply that agriculture makes a more efficient use of land than does foraging from the land left in its natural state. This efficiency is a social goal because, as Locke puts it, the efficiency achieved "may truly be said to give ninety acres to mankind."

Efficiency is a problematic social goal because it is difficult to define in terms that reflect the diversity of resources in agricultural production. In the passage quoted from John Locke, it is efficient use of land that is at issue. Throughout the history of American agriculture, land efficiency has never been as important as labor efficiency. There has always been plenty of land; more frequently the efficient farmer is the one who has made the best use of available labor. [Fite, 1981] More recently, there has been a great deal of talk about energy efficiency. Under a criterion of energy efficiency, American agriculture does rather poorly when compared to peasant agricultures of the developing world. [Perelman, 1977] Yet another type of efficiency is cost efficiency, and this seems to be what Aiken has in mind when he says, "Efficiency in agriculture rests on one idea: Does it pay?" [Aiken, 1984a, 31] A mode of production is cost efficient if it gets the best return on input costs, but cost efficiency leaves out important resources, too. Permanent soil or water loss is not something one pays for as an input cost, hence it may be left out of cost efficiency calculations. |Batie, 1984| As a social goal, efficiency

would need to reflect all the resources that go into agricultural production, but though we can say what efficiency means for any one given resource, it is very difficult to say what it would be for all of them. As such, efficiency becomes difficult to measure, and it is a matter of some controversy as to which resources it is most important to use efficiently. These problems notwithstanding, the general notion of efficiency can be recognized as a legitimate social and moral goal for agriculture, since, like production, efficiency speaks to the way that agricultural production contributes to the general welfare of society at large.

The neoclassical model provides a stronger account of social goals for agriculture than does Aiken's hierarchy because it clarifies the distinction between production as a social need and production goals an individual farmer sets for herself. Production is a social goal because it provides both for food needs and for a social organization that takes people out of agriculture, but farmers are interested in production for an entirely different set of reasons. There will be some economic conditions under which high individual production will help a farmer stay in business, but this will not always be the case. There are myriad cultural factors that have encouraged farmers to become "prize-winners" by increasing production per acre on a limited plot. Accepting production as an individual goal in these cases is only indirectly related to production as a social goal, and, indeed, a single minded emphasis upon individual farm production might create an agricultural system so unstable that it would defeat the attainment of production as a social goal. A similar argument can be made for efficiency.

On the other hand, under a market analysis production and efficiency become important social goals for agriculture not because of what agriculture is in itself, but simply in virtue of the fact that agricultural products are traded. like pencils and shoes, on markets. If there is any sense in which agriculture makes unique contributions to the workings of society, contributions not shared by the pencil and shoe industries, the market analysis is sure to miss them. Neoclassical theory achieves explanatory power precisely because of its simplifying assumptions, which focus on production and exchange characteristics that apply to all forms of economic activity. If there are social goals that derive from what agriculture is in itself, as opposed to what it is as a sector of the general economy, the market analysis will need to be augmented.

The possibility of unique social goals can be

clarified by reviewing an account of agriculture's social role that takes agriculture out of the market almost entirely. Although it goes without saying that the goals of agriculture are to produce vital necessaries of life and to produce them in a way that makes efficient use of our productive resources, understanding this as a statement of agriculture's social goals would not be possible in a society where a large percentage of the population are subsistence farmers. Food production would be an individual goal, and agriculture would contribute more obviously to the functioning of the society through its influence on institutions of social order than through commercial production and market efficiency. Indeed, when Thomas Jefferson made, his famous remarks on the importance of agriculture to the new American republic, production and efficiency did not figure in his thinking at all. We can obtain a sense of perspective, a sense of the relativity of market goals for agriculture, by looking at the goals that Jefferson set for 18th century American agriculture.

The Political Goals of Agriculture Under Jeffersonian Democracy

Jefferson's views on the moral virtues of farming are part of the stock rhetoric on American agriculture. He wrote in his *Notes on the State of Virginia*.

Those who labour in the earth are the chosen people of God, if ever he had a chosen people, whose breasts he has made his peculiar deposit for substantial and genuine virtue... Corruption of morals in the mass of cultivators is a phaenomenon of which no age nor nation has furnished an example. [Jefferson, 1984, 290]

The letter to John Jay in 1785 contains the most quoted passage, "Cultivators of the earth are the most valuable citizens. They are the most vigorous, the most independent, the most virtuous, & they are tied to their country & wedded to it's liberty & interests by the most lasting bonds." [Jefferson, 1984, 818] These passages can be used to praise or condemn virtually any change or development in American agriculture. Furthermore, it is not at all clear that the modern tendency to read these words as praise for family farms and as condemnation for commercial agriculture was ever part of Jefferson's intent. In order to interpret the moral and social goals for agriculture that these passages portray, it is necessary to give some attention to both the content and context of his remarks.

One of the great contemporary interpreters of the agrarian vision is poet and essayist Wendell Berry. Berry ties Jefferson's remarks on the vir-

tues of farming to his conviction that democratic liberty is not only a human birthright, but a right to be protected and cultivated through education and moral development: "... to keep themselves free, [Jefferson] thought, a people must be stable, economically independent, and virtuous ... [and] he believed ... that these qualities were most dependably found in the farming people." [Berry, 1978, 143] According to Wendell Berry, the "lasting bonds" Jefferson spoke of in his letter to Jay went beyond those of economics and property, and were derived from effects of farming and farm life on the development of moral character. Berry quotes Jefferson on industrialists to contrast his views on the effects of agriculture:

Jefferson wrote: "I consider the class of artificers as the panderers of vice, and the instruments by which the liberties of a country are generally overturned." By "artificers" he meant manufacturers, and he made no distinction between labor and management.... [The quote] suggests that he held manufacturers in suspicion because their values were already becoming abstract, enabling them to be "socially mobile" and therefore subject preeminently to the motives of self-interest. [Berry, 1978, 144]

Berry thus finds the farm to be a superior environment for the cultivation of a moral sense, and the occupation of the farmer to be a superior activity for the development of moral virtues. These themes represent the keys to an agrarian statement of social and moral goals for agriculture: the anchoring of self interest in a community, and the necessity of self reliance.

Like many moral and political theorists of his time, Jefferson was mindful of the importance of self-interest in individual decisions. He and the other founding fathers saw their task as one which would marry self-interest to social unity (and, thereby, to a broader concept of the good) rather than to dissolution, to avarice, unrestrained competition and social chaos. The presupposition that underlies Jefferson's reasoning in the passages on the agrarian vision (passages that are primarily about statecraft, not agriculture) is that an economy based upon agriculture would be superior to one in which self-interests could be attached to movable and consumable assets. The farmer was tied to his land; the good of the land was identical to the farmer's self interest. Since a farmer must stay in one spot. he must learn to get along with his neighbors and take an interest in long term stability. The virtues of honesty, integrity, and charity promote a stable society, and are also the virtues that promote the farmer's own interest. A manufacturer.

however, is not so firmly tied to a community. The artificer, to use Jefferson's phrase, can spoil the air, exploit the local work force, poison the wells, and then pick up his assets and move on down the road when the business environment becomes hostile (or demands that these externalities be internalized). Now Jefferson was no enemy of industry, but through this rationale he was, nonetheless, able to portray the encouragement of farming as a key to a unified and stable economy.

The second virtue, self-reliance, can also be tied to a distrust of manufacture. The farmer must be adept at a variety of skills. This fact requires the farmer to appreciate the complexity of nature, and the need for flexibility and multiple approaches in coping with challenges. The farmer, thus, incorporates one aspect of the civil society—strength through diversity—in his personal character. The manufacturer, on the other hand, succeeds not through diversity, but through specialization—through learning how to do one thing better than anyone else. Wendell Berry lays heavy stress upon specialization in his critique of modern agriculture.

What happens under the rule of specialization is that, though society becomes more and more intricate, it has less and less structure. . . . The community disintegrates because it loses the necessary understandings, forms, and enactments of the relations among materials and processes, principles and actions, ideals and realities, past and present, present and future, men and women, body and spirit, city and country, civilization and wilderness, growth and decay, life and death—just as the individual character loses the sense of responsible involvement in these relations. [Berry, 1978, 21]

Berry describes a tragic irony in the increasing reliance upon social systems rather than upon diverse skills incorporated in a single self. As human beings become less reliant upon their own individual abilities to make flexible and ingenious response to adversity, they lose the capacity to appreciate the importance of community, becoming destructive of the natural and social systems which have replaced the yeoman farmer's need for self-reliance.

Some insight into the way that traditional agricultural households might have been thought to instill the twin virtues of community and self-reliance can be obtained from a description of the typical Jeffersonian era household. According to social historian Ruth Cowan, the husband was traditionally the man who looked after the household, who cared for and tended the land,

deriving his title from the house (hus) to which he was bonded. The housewife and husband worked the land, hence the term "husbandry" for what we would now call farming. Their economic security depended upon working together and "husbanding" their resources. The success of the household depended upon both sexes successfully completing a diverse set of well defined tasks which were thoroughly interrelated by sexual role. Cowan writes:

Buttermaking required that someone had cared for the cows (and . . . this was customarily men's work), and that someone had either made or purchased a churn. Breadmaking required that someone had cared for the wheat (men's work) as well as the barley (men's work) that was one of the ingredients of the beer (women's work) that yielded the yeast that caused the bread to rise. . . . Women nursed and coddled infants; but men made the cradles and mowed the hay that, as straw, filled and refilled the tickings that the infants lay on. Women scrubbed the floors, but men made the lye with which they did it. [Cowan, 1983, 25]

Cowan concludes this discussion by noting that before industrialization, survival required that each household contain both sexes to perform requisite sexually defined tasks. The farmstead thus represented a closed social system in which self-reliance was established in an environment where it was absolutely essential to interact with others of the opposite sex, and, hence, of a fundamentally different social role. Today, by contrast, it might be argued that the chief requirement of a household is simply cash income—a need that can be secured only by activity outside the household.

By placing Jefferson's praise of farming within historical context, one can see how he might have identified self-reliance and community as the essential goals for agriculture. We can also understand why production and efficiency would not have been social and moral goals for Jefferson's agriculture. To be sure, the production of the food necessary to sustain human life has always been a goal of agriculture, but in Jefferson's America it was not a social goal. With upwards of 80% of the population employed in farming, the need to produce food enough to feed the family and to trade for other items was an important individual goal for each farm family; but precisely because these families were primarily feeding themselves with this production, there was no need to define agricultural production as a social goal, as something which must be encouraged and maintained to support the structure and sustenance of society at large.

Those not employed in farming could be fed easily by the surplus. Similarly, a kind of efficiency is presupposed in the notion of self-reliance. Being self-reliant involves seeking efficiencies; but again, these efficiencies are sought not as social goals, but as individual ones. Community and self-reliance are sought, on the contrary, not only as individual goals or character traits that members of the farm household must acquire, but also as social goals, as traits that all citizens of the new republic must acquire, in part through the experience and example of agriculture, if democratic liberties are to be secure.

This vision of the moral importance of agriculture in forming the American character was shared by several generations of American philosophers and political thinkers, but frequently the emphasis is shifted. The farm way of life is seen as vital to the formation of intrinsically valuable traits of character, but in stressing the intrinsic value of these traits, one loses sight of their instrumental value for the Jeffersonian theory of democracy. In offering tribute to "the tiller of the soil" Theodore Roosevelt expressed these sentiments:

... the permanent growth of any State must ultimately depend more upon the character of its country population than upon anything else. No growth of cities, no growth of wealth can make up for a loss in either the number or the character of the farming population. [McGovern, 1964]

Before that, philosopher and poet Ralph Waldo Emerson wrote:

... that uncorrupted behavior which we admire in animals and in young children belongs to [the farmer], to the hunter, the sailor—the man who lives in the presence of Nature. Cities force growth and make men talkative and entertaining, but they make them artificial. [Emerson, 1904, 153–154]

If the experience of the Jeffersonian household farm is so fundamental to the formation of moral character, what are we then to think about ourselves? What goals can we set for tomorrow's agriculture? Are we consigned to the moral lot of the urbanite, talkative and entertaining, but hopelessly artificial?

These questions can be answered in part by reinforcing the distinction between community and self-reliance understood as intrinsically valuable individual goals, and as instrumentally valuable social goals. Some interpreters of the American agricultural scene take their concern for the moral character of people quite literally. Wendell Berry concludes that the urban experience is incapable of instilling the crucial virtues

of community and self-reliance. He particularly laments the fact that modern agriculture has turned the farm itself into an environment lacking the virtues of the Jeffersonian farmstead. But this is, in an important sense, a misunderstanding of the social character of Jefferson's moral goals for agriculture. Although Jefferson doubtlessly thought that the life experiences of the American farmstead were a reliable means to inculcate community and self-reliance into the moral character of Americans, it is also true that the structure and conduct of agriculture was to serve as a demonstration or model of these virtues for society as a whole. Community and self-reliance were essential not just for agriculture, but for democracy. The goal of agriculture was to serve as model of these virtues for the society as a whole. Other occupations, most notably education, were to serve as models of essential virtues for democratic liberty, as well. The teacher serves as a model for the virtues of discipline and respect for truth [Jefferson, 1984, 479-481]; and these virtues, too, are needed for the new republic to succeed. Agriculture happened to play a particularly pivotal role in displaying the virtues requisite for democracy because its virtues, community and selfreliance, embodied the need to coordinate a pluralistic society in ways that would reinforce a sense of self-identity and independence-and these, of course, were central to the purposes and goals of the new republic, itself. As such, the mere fact that as a nation we no longer live and grow up on farms is not a reason to give up on the Jeffersonian vision of agriculture's moral purpose. The key point is that we must learn these virtues somewhere, and one way to encourage them is to have them prominently displayed in the social purpose of a socially and economically central and vital activty, such as agriculture.

The idea that agriculture is to serve as a moral example to the rest of us seems pretty old fashioned in today's world. Furthermore, today's farmers, agricultural researchers, and agribusiness employees must feel a justifiable lack of patience with the suggestion that they must be moral saints, exhibiting the virtues of community and self-reliance, when their individual goals, their livelihood and quality of life, are in such grave danger. Understood as moral duties which citizens in agriculture must perform for the salvation of the city folk, the Jeffersonian goals are absurd.

The Jeffersonian model of democracy demonstrates how agriculture might play a unique role in a society's social goals, and thus indicates why it is appropriate to talk of social goals for

agriculture, rather than simply of economic goals in general. This portrayal of agriculture's contribution to political stability, however, appeals to an agricultural economy so different from that of industrialized society that the substantive claims for these goals appear archaic. If they are to be made plausible to us today, these goals must be interpreted not as duties that people in agriculture have to the rest of society, but as functional components of larger social and natural systems. They must explain the need to structure our society in such a way that it becomes possible for agriculture to embody principles of community and self-reliance, as well as production and efficiency.

Toward a More Comprehensive Statement of Social Goals

The idea that emphasis upon production and efficiency has led us to lose sight of agriculture's broader moral purposes was argued by E. F. Schumacher in his 1972 book, Small Is Beautiful. Like Wendell Berry, Schumacher laments specialization and the stress upon cash income that it brings. He describes "the philosophy of the townsman" who interprets the economic failure of agriculture as evidence that it is merely a "declining enterprise." The townsman. he says, sees no need for improvements, "... as regards the land, but only as regards farmers' incomes, and these can be made if there are fewer farmers." [Schumacher, 1972, 115] For Schumacher, the main focus is on the proper use of land, and his intention is to demonstrate that economic values have undercut agriculture's traditional land ethic, the main danger to the land in our time being, "... the townsman's determination to apply to agriculture the principles of industry." [Schumacher, 1972, 109] He condemns those who see agriculture as essentially directed toward the production of salable commodities, and writes,

A wider view sees agriculture as having to fulfill at least three tasks:

- —to keep man in touch with living nature, of which he is and remains a highly vulnerable part;
- —to humanize and ennoble man's wider habitat: and
- —to bring forth the foodstuffs and other materials which are needed for a becoming life.

I do not believe that a civilization which recognises only the third of these tasks, and which pursues it with such ruthlessness and violence that the other two tasks are not merely neglected but systematically counteracted, has any chance of long-term survival. [Schumacher, 1972, 113]

Schumacher sees broader goals for agriculture than production and efficiency. He states them not in terms of community and self-reliance, however, but in terms of duties to nature, to the natural environment.

Another recent critic of production and efficiency was Aldo Leopold, whose statement of the land ethic in A Sand County Almanac also appeals to an appreciation of the natural environment. Leopold describes an "ethical sequence" in which freedoms have been restricted down through history as human civilization has come to understand more clearly the distinction between social and anti-social conduct. He cites the abolition of slavery as a great example of moral progess. The key to this advance, in Leopold's eyes, was to dispense with the notion that human beings could stand as property. The disposal of property, he writes, "... is a matter of expediency, not of right and wrong." [Leopold, 1948, 201] Leopold thought that the next stage in humanity's moral development was to move beyond the notion of land as property.

Land, like Odysseus' slave-girls, is still property. The land-man relation is still strictly economic, entailing privileges but not obligation. The extension of ethics to [land] is, if I read the evidence correctly, an evolutionary possibility and an ecological necessity. . . . All ethics so far evolved rest upon a single premise: that the individual is a member of a community of interdependent parts. His instincts prompt him to compete for his place in that community, but his ethics prompt him also to cooperate (perhaps in order that there be a place to compete for). [Leopold, 1948, 203]

Leopold shares with Schumacher an interest in environmental values, but unlike Schumacher, he centers his argument on the place of community as the central organizing value for any system of ethics. For Leopold as for Jefferson, community is a value and a goal that brings into focus the sense in which we are dependent upon each other even for the independence or liberty that is the overarching purpose of society.

There are two crucial points to be learned from Schumacher and from Leopold. The first is that economic goals need to be moderated by values that state clearly our society's dependence upon natural systems. Both of these authors think that the economic goals of production and efficiency can lead to an abuse of natural resources and a degradation of the natural systems on which human society depends.

The argument is a rather complicated one, and it cannot be adequately developed here. There is a sense in which economics serves quite adequately to express our dependence upon natural systems, for as natural resources become scarce or our use of them becomes in any way imperiled, prices go up and effective demand goes down. In the case of foodstuffs, however, demand goes down only when population goes down, and this, as Malthus wrote, is achieved only through human misery and vice. A main purpose of society, then, in minimizing human misery, is to establish an agriculture with margins of safety. This margin of safety is, in the economic sense, an inefficiency. It is a waste of productive resources that might be put to another use, and indeed would be put to another use if falling market prices were allowed to drive down production. It is an inefficiency, however, that reduces misery, thus securing a vital social goal.

On the other hand, at the same time that our margin of safety isolates us from the tragedy of starvation, it isolates us from the feedback mechanisms that inform us when we are increasing our vulnerability to a breakdown in the environmental system that supports agricultural practices. Those of us outside the system of agriculture become oblivious to our dependence upon nature and upon the people within agriculture who cultivate nature to fulfill our needs. The second point to be learned from Schumacher and Leopold is that our agriculture must now find a way to provide feedback on our use and abuse of natural resources well before the Malthusian controls of famine and warfare occur. This new goal for agriculture, which is a creation of agriculture's success in achieving production and efficiency goals, is, as Leopold thought, a modification of the old Jeffersonian goals. We must become cognizant of our community, and this now means not only our community of fellow citizens, but also our dependence upon the natural environment; and we must become self-reliant, responsible for moderating our use of economic and natural resources through a conscious process of selfcontrol.

We have not accepted these broader readings of the old Jeffersonian goals for today's agriculture, or, at least, we have not accepted them all the way. As a society we want the production and the efficiency, and we also want the margin of safety that prevents us from experiencing market adjustments which carry the price tag of hunger and misery. We have an agriculture that serves these goals, but our agriculture does not communicate to us, to the rest of society, the

sense in which our way of life depends upon a broader community—a community that includes both the human beings who today are suffering from low prices and impossible debt loads, and the interactions with the natural environment that determine the biological conditions for agricultural production. Our agriculture does not inform us of our responsibility to make a conscious and judicious application of our abilities to produce and consume the produce of the earth in a way that is consistent with the sustainability of our agricultural system and the long term survival of our society. We are consuming our agricultural resources at an alarming rate, and no resource is being lost faster than the human resource, the people of our agricultural sector who possess the skills and desire to fulfill the goals of community and self-reliance for agriculture in the years to

How do we build an agriculture that respects our sense of community with the people on our farms and with the natural world? The first step, I submit, is to abandon the modern conceit that agriculture has no moral purpose beyond the economic goals of production and efficiency. These economic goals are real goals to be sure, and critics like Wendell Berry or E. F. Schumacher are wrong to denigrate them so mercilessly. But we will never find our complete salvation merely in the right set of economic policies. To make an agriculture that will serve our need for a spirit of community and selfreliance in the future, we must first accept the need for community and self-reliance once again as social and moral goals for agriculture.

The second step takes us beyond the land ethic as it was articulated by Schumacher and by Leopold. It is to see that opposition to individual greed and avarice will not resolve our problems. It is with regard to social goals that we must press the importance of community and self-reliance as a counterweight to production and efficiency, and not as a battle for the soul of the individual farmer and rancher. The traditional land ethic, the agrarian morality that Berry, Schumacher and Leopold attempt to revive, stresses the notion that stewardship and harmony with nature are salvific for individuals, not social systems. But even the most well intended, land sensitive farmers can engage in agriculture that will run a society right into the ground, if not through a failure to meet environmental requirements, then through a failure to secure other vital social goals. Furthermore, they themselves can be run out of agriculture by less altruistic competitors. We must, therefore, recognize that the general subject of ethics and values in food and agriculture has as much (or more) to do with tax incentives, technological change, price supports, or population trends as it does with the personal values and intentions of farmers, grocers, or agricultural scientists. Agricultural philosophy is, thus, philosophy for everyone, and not at all the kind of professional ethics or applied philosophy that has arisen to meet the special needs of the medical, business, and engineering communities.

Finally, of course, it must be brought back to intentional actions that will be carried out by individual human beings. These will be actions that support economic and political policies to bring agricultural practices into accord with social goals. They will also be educational and informational practices that are designed to broaden our understanding of agriculture and society, and to make possible the reforms and sacrifices that are needed to support social goals. We will need to have thought through the ways that individual actions alternately serve or frustrate social goals, and that will not be an easy task. I hope that this is a start.

Notes

- Amartya Sen [1984] has offered convincing evidence that
 this seldom happens in fact; but the conceptual priority of
 the right to food is not weakened by his argument. Henry
 Shue [1981] has developed an extensive decision procedure for establishing the heirarchy of rights; the right to
 food plays key role in that theory.
- 2. Onora O'Neill [1986] finds the notion of rights inadequate to the task of ellucidating the moral importance of hunger. She rejects a "basic rights" theory for reasons not unlike those recounted here, but her response to the failings of rights theory does not make an important use of social goals.

References Cited

- Aiken, W. 1978. The Right to Be Saved From Starvation, World Hunger and Moral Obligation W. Aiken & H. LaFollette, Eds., Englewood Cliffs, NJ: Prentice-Hall.
- Aiken, W. 1984a. The Goals of Agriculture, Agriculture Change, and Human Values R. Haynes & R. Lanier, Eds., Gainesville, FL: The Humanities and Agriculture Program, The University of Florida; 29-54.
- Aiken, W. 1984b. Ethical Issues in Agriculture, Earthbound T. Regan, Ed., New York: Random House.
- Batie, S. 1984. Soil Conservation Policy for the Future, The Farm and Food System in Transition 23, Cooperative Extension Service, Michigan State University, East Lansing, MI.
- Berry, W. 1978. The Unsettling of America, San Francisco: Sierra Club Books.
- Bonnen, J. 1983. "Historical Sources of U.S. Agricultural Productivity: Implications for R&D Policy and Social Science Research," American Journal of Agricultural Economics 65 (5), 958-966.
- Cowan, R. S. 1983. More Work For Mother, New York: Basic Books.
- Emerson, R. W. 1904. "Farming," The Complete Works of Ralph Waldo Emerson Concord Edition Vol. 7 (Boston: Houghton, Mifflin).
- Fite, G. C. 1981. American Farmers, Bloomington, IN: University of Indiana Press.
- Jefferson, T. 1984. Writings, New York: Literary Classics of the United States.
- Leopold, A. 1948. A Sand County Almanac, Oxford: Oxford University Press.
- Locke, J. 1980. Second Treatise of Government, C. B. MacPherson, Ed., Indianapolis: Hackett Publishing Co.
- 13. McGovern, G. 1964. Agricultural Thought in the 20th Century, Indianapolis; Bobbs-Merrill.
- O'Niell, O. 1986. Faces of Hunger, Totowa, NJ: Rowman & Allanheld.
- 15. Perelman, M. 1977. Farming for Profit in a Hungry World, Totowa, NJ: Allanheld, Osmun & Co.
- Sen, A. 1984. Poverty and Famine, Oxford: Oxford University Press.
- Schumacher, E. F. 1972. Small Is Beautiful, New York: Harper & Row.
- Shue, H. 1981. Basic Rights, Princeton, NJ: Princeton University Press.