PolicyPennings by Dr. Daryll E. Ray

## CAFO critics promote alternative approaches to production

As we look at livestock production in the US and the concerns that have been raised about the impact of Concentrated Animal Feeding Operations (CAFOs), it is important to look at some of the alternatives that have been proposed by CAFO critics.

Those alternatives, it seems to us, fall into four broad categories: location of production, inputs, animal welfare concerns, and indirect outputs. All of these affect the scale of production, an issue that is the target of many CAFO critics. In this discussion we are talking about critics who offer alternate production systems. We are not talking about those opposed to the eating of meat altogether.

The idea behind this series on CAFOs and alternative livestock systems is to summarize the origins, motivations, and challenges of CAFO and non-CAFO livestock operations. We will end the series with an analysis of the future role of each system in light of the diverse economic, social, and environmental realities of modern society.

Many CAFO critics remember a time when a large percentage of the meat consumed in a given area was also produced in that same area. While large-scale cattle drives and Chicago packing houses have been a part of the American landscape for more than a century, 50 years ago local livestock production accounted for a larger percentage of meat consumption than it does today.

With the concerns of global warming, agricultural sustainability, and the economic vulnerability of small-scale agriculture in mind, those interested in an alternative to industrial-scale agriculture have been promoting the idea of locally grown foods.

Because locally grown food is not shipped over long distances, they argue that its carbon footprint must be smaller than meat shipped to the local grocery store in refrigerated semis. In addition, without large processors in between the grower and the customer, the grower has the opportunity to capture a larger portion of the food dollar spent on meat.

The issue of inputs includes a number of concerns that are partially interrelated. Some of the critics of large-scale meat production want meat that is organically grown. In response to this concern, the meat cases of many larger supermarkets contain a section for organically grown meat.

Depending upon the area, local producers are providing meats from chicken, to goat, to beef that

may not have USDA organic certification, but nonethe-less meet the requirements of their customers. These meats are usually available in channels other than chain supermarkets.

A major issue for those who are concerned about meat and dairy production inputs is the prophylactic use of antibiotics and the use of rBGH (recombinant bovine growth hormone), a genetically modified product. RBGH is only used in the production of milk and primarily affects dairy products and the meat produced from cull cows. Most grocery stores carry some milk that is rBGH-free.

The prophylactic use of antibiotics to prevent the spread of disease among animals grown under confinement conditions as well as to reduce the amount of time and feed required to raise an animal to market weight is an issue that affects a wide range of meats. In the US as much as 70 percent of all antibiotics sold are for veterinary use. This leads to the concern that this volume and type of use will speed up the development of antibiotic resistant disease strains. Then when humans are infected with one of these antibiotic-resistant strains, the number of effective antibiotics available to the doctor becomes limited.

On the other side of the coin, livestock grown under more open-range conditions can be subject to significant exposure to harmful micro-organism including salmonella and trichinosis.

Animal welfare concerns can involve setting the minimum allowable pen/cage size used in the production of meat animals, particularly broilers, egg layers, sows, and veal animals. While setting minimum pen/cage sizes is acceptable to some, others argue for cage-free/free range/pasture raised animals.

The animal welfare goal in meat production is to reduce the stress on the animal and provide a more humane production system.

The direct output of the meat-animal production system is the meat that we eat. Examples of indirect outputs could include air and water pollution, the development of a concentrated industry that captures an increasing share of the profits generated from meat-animal production, and a change in product quality. The development of antibiotic-resistant disease strains in CAFOs and increased incidence of certain diseases in more open-range operations are

Cont. on p. 2

## CAFO critics promote alternative approaches to production

## Cont. from p. 1

other examples of possible indirect outputs.

Most of the production systems advocated by CAFO critics, involve raising animals over a larger area, thus reducing the problems that arise when animal wastes are concentrated in smaller areas and higher concentrations. Traditionally in dispersed animal production systems, animal wastes were used as a means of restoring land fertility after grazing or crop production.

For many critics the increased use of dispersed production systems would reduce many of the air and water pollution problems that result from CAFOs while achieving other objectives including more space for animals and when possible the replacement of grains with forage in the diets of animals such as beef and dairy cattle.

In this series, we have focused our discussion on livestock's production side, there are of course other considerations of importance. For example, often marketing considerations are of great importance to non-CAFO proponents including the use of direct marketing, cooperative-like arrangements in which a group of farmers sell to wholesalers, community supported agriculture groups, and other approaches to

market their output.

Each of these marketing mechanisms have multiple objectives and serve several needs but they all aim to help farmers receive more revenue per unit of production via higher prices and sharing less of the revenue with intermediaries. Proponents also believe their food, produced using non-CAFO methods, is exceptionally wholesome and nutritious.

Clearly, there are advantages and challenges to organizing livestock production around both CAFO and non-CAFO production methods. Farmers, who have committed their resources and family livelihood to one approach or the other, usually see the their chosen approach as THE right one, dismissing the OTHER approach as inappropriate or unrealistic.

Is it a matter of one or the other? That's the topic of the next column.

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