

Sustainable agriculture and rural development: The need for humane, sustainable livestock production methods

“Feeding the world”

Industrial livestock production damages the ability of indigenous farmers to feed themselves

Part of the response to growing populations and increasing need for nutrition in developing countries must be consideration of the livestock sector of agriculture. Unfortunately, to date such consideration has often involved simplistic assumptions. First, it is often assumed that a large increase in meat production is needed to meet a supposed demand for meat consumption; in fact, other sources may provide for increased protein requirements, more readily, more affordably and more sustainably. Second, it is suggested that industrial methods of meat production will provide ‘cheap food’ for the needy. In fact, such food is only apparently cheap in developed countries, supported by subsidies that are not available in developing countries and incurring external costs that cause long-term harm to all countries, developed and developing alike. Worst of all, expansion of industrial livestock production – particularly under foreign ownership – damages the ability of indigenous farmers, especially in rural areas, to feed themselves and their neighbors.

The agricultural industry in developed countries increasingly talks about ‘Feeding the World’. Unfortunately this phrase cannot be taken at face value. The drive for ‘efficiency’ in this industry has been self-defeating in economic terms: profits achieved by cutting costs are short-term, as they are constantly pared away by competition on prices. As such, the industry is seeking (a) to increase exports (including to developing countries), (b) to restrict imports from foreign suppliers that will compete with their home market, and (c) to build facilities abroad with even lower costs than at home, then to re-import the products themselves.

Concentrated Animal Feeding Operations will never be able to provide meat to more than a relatively affluent urban minority, especially given difficulties in refrigeration, distribution and so on. By contrast, many studies show that local, small-scale, indigenous farming systems can be helped to become more productive while improving sustainability. See, for example, Pretty & Hine’s 2001 report for the UK Department of International Development: ‘*Reducing Food Poverty with Sustainable Agriculture*’. Such systems often utilize livestock, increasing the supply of meat protein to the farming family and/or the surrounding community.

Sustainability

Small-scale livestock production utilizes and recycles local resources

Concentrated Animal Feeding Operations are intrinsically inefficient for protein production, requiring a regular input of plant material to feed the animals, much of which could have been used for human food. They have two other major problems for sustainability. First, they require considerable water supplies. Second, they produce huge quantities of manure, with toxic concentrations of nitrogen, phosphorus and antibiotics, and all too frequently this results in soil and water pollution. Small-scale livestock production, on the other hand, can utilize local resources much more effectively and recycle the manure to improve, rather than reduce, productivity.

There are other problems for sustainability that arise from the globalization of agriculture. Movement of materials, animals and products (accumulating what are known as ‘food miles’) uses non-renewable fuel and produces pollution, while also increasing the risk of spreading disease – as happened within the UK in the recent outbreak of Foot & Mouth Disease. These factors suggest that contrary to the current pressure for liberalization of agricultural trade there should be considerable reductions in movement of animal feed, animals and food from animals, both internationally and within countries. Diseases also spread more rapidly in the hugely concentrated animal populations kept in industrial systems – as is happening now in US poultry with Exotic Newcastle Disease and Avian Influenza.

One of the central problems with industrial-style animal agriculture is that it has taken a technical approach (seeking mechanical, chemical and technological solutions to problems) rather than biological (using animal-centered approaches such as integrated, ecological, free-range systems). This has resulted in negative consequences for the environment, food safety and food quality as well as animals. As an example, consider the feeding practices that produced Bovine Spongiform Encephalopathy (BSE).

Humane, sustainable livestock production

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To take a humane approach to farming is to remember that these are animals we are dealing with, not just economic units or machines: to use biological rather than technical solutions to problems. Had such an approach been prevalent in the dairy industry, BSE might never have happened. Such an approach will militate against the major problems of sustainability in livestock production; for example, if animals are kept on bedding rather than concrete this changes the manure handling system and reduces the chance of run-off and water pollution. We argue that humane farming is sustainable, and sustainable farming is humane.

In the vast majority of cases worldwide, improving conditions for livestock will also improve their productivity: helping animals will also help their owners. For example, in many developing countries basic measures for preventing disease will be beneficial to both farm animals and farmers. Only in highly concentrated industrial agriculture does improving animal well-being potentially have an economic cost. We have demonstrated above that such production is unsuitable for increasing food availability in developing countries, so it is apparent that humane approaches to farming are appropriate for both the food-poor and their environment.

There are many aspects to ‘humane treatment’: it is not achieved simply by maximizing animal survival and growth. But humane treatment is not closely defined. It will always be subject to interpretation, which is reasonable as people in countries with particular ideas about animal welfare cannot dictate to others, in completely different contexts, what they should do. However, humane treatment of animals is never inappropriate

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