

## **ANIMAL AGRICULTURE**

Worldwide, over 50 billion animals were raised and killed for food in 2007, according to the United Nations, and that number has increased annually. The 2007 U.S. figure, over 10 billion, accounts for 98% of the total number of animals killed in the U.S. for all reasons, including those killed for "sport," euthanized in animal shelters, used in biomedical research and testing, and slaughtered for food. The total does not include the enormous number of aquatic animals used for food (see Fact Sheet: Fishing and Marine Issues), or the 900 million farmed animals who die from stress, injury, or disease before leaving the farm for the slaughterhouse (USDA).

A 2008 Pew Commission Report on Industrial Farm Animal Production concluded that industrial farmed animal production "often poses unacceptable risks to public health, the environment and the welfare of the animals."

### **IMPACT ON ANIMALS**

#### **Absence of Anti-Cruelty Laws**

Federal laws do not protect farmed animals. The Animal Welfare Act, which regulates the treatment of animals used for commercial purposes, specifically excludes farmed animals not used in research or for exhibition. Most states have exempted the treatment of farmed animals from their cruelty laws. Individual companies decide the conditions in which the animals must live, including the number of egg-laying hens per small wire cage, and whether an artificially inseminated sow will spend her entire pregnancy chained to the cement floor of a cage.

#### **Which Species?**

When most of us picture farmed animals, we think of cows, pigs, sheep, goats, chickens and turkeys, but many other species of animals are raised in confined agricultural settings (not all for food), including fish, geese, horses, emus, and dogs and cats.

Much of the fish now sold is "farmed" in large industrial tanks or controlled ponds. Other animals are "farmed" for their fur or feathers (see Fact Sheet: The Fur Industry), and the leather industry is independent, not just a byproduct of the meat industry. Dogs and cats are used in pet food and, in some countries, as food for human consumption. Horses are kept tied in stalls and their urine is collected for the pharmaceutical industry. In Asia, bears are kept in cages so small they cannot move, where they are connected to tubes that collect their bile for the pharmaceutical industry. When they no longer produce enough bile, they are killed and their gall bladders and other body parts are sold. Many animals, such as mice and rabbits, are "farmed" for use in medical or product research (see Fact Sheet: Animal Experimentation).

#### **Natural Instincts Denied**

Most animals used in agriculture, like other domesticated animals, can no longer survive on their own in the wild, but they retain many of their natural instincts. Chickens' natural behavior is to spread their wings and scratch in the ground, like many other birds. Pigs are particular about their mates, mother cows have close bonds with and nurture their calves, sheep easily find their youngsters in a crowd of sheep of similar age, and fish maintain complex social relationships, have language and emotions, and use tools.

Pressure to produce as much meat, milk, and other products as rapidly as possible at the lowest cost results in depriving animals of their basic needs, including adequate space and environmental and social stimulation, and causes disease, disability, and pain. This can be true even on the few remaining small family farms. Labels such as "from happy birds," "humanely raised," or "natural" have no legal definition

and their use in marketing is unregulated. "Free-range" is not regulated for cows, and while it is for chickens, the requirements are, in reality, meaningless for the welfare of the birds. The term "organic," although regulated, does not mean that animals have been raised humanely.

Animals raised in captivity do not live out their natural lifespan. The natural lifespan of a dairy cow, for example, would be 20–25 years, but the lifespan of a U.S. dairy cow is only 3–4 years and her male calf raised for veal only 3–16 weeks. (See [www.chai-online.org/lifespan.htm](http://www.chai-online.org/lifespan.htm) for a chart comparing animals' natural lifespans with their lifespans in captivity)

## **IMPACT ON HUMAN HEALTH**

The overcrowding and unsanitary conditions typical of intensive confinement result in diseases in the animals. These diseases are passed on to humans who consume animal products. They include *Campylobacter*, *Salmonella*, mad cow disease, avian flu, giardiasis, listeriosis, toxoplasmosis, yersiniosis, and *E. coli* O157:H7. Cryptosporidiosis and caliciviral infections are frequently spread by those who handle meat products.

In 2006, an outbreak of *E. coli* bacteria in spinach quickly spread to 26 states and caused illness in 276 people, including 31 cases of kidney failure, and three deaths. Investigators matched the *E. coli* bacteria found in the water used to irrigate the spinach to the manure of cows on a farm within a mile from the fields where the contaminated spinach was growing. In another investigation following an *E. coli* outbreak, University of Minnesota researchers found fecal contamination (*E. coli* bacteria) in 69% of over 1,000 pork and beef samples and in 92% of poultry samples taken from multiple markets.

To contain these illnesses and to promote rapid growth in animals, intensive agriculture relies on antibiotics, hormones, and other drugs. These substances are retained in the animals' fat cells, flesh, and secretions (such as milk), and are passed on to humans. According to the CDC (Centers for Disease Control): "[t]he reason we're seeing an increase in antibiotic resistance in foodborne diseases [in the United States] is because of antibiotic use on the farm."

Numerous scientific studies have linked a diet high in animal products to many illnesses, including high blood pressure, heart disease, cancer, diabetes, osteoporosis, and autoimmune diseases. Several major health organizations, including the American Dietetic Association, are in agreement that healthier lifestyle choices, including reducing or eliminating animal products from our diet, can have a major impact on maintaining good health.

The American Dietetic Association states that numerous health benefits are associated with vegetarianism, including "lower intakes of saturated fat and cholesterol and higher intakes of carbohydrates, fiber, magnesium, potassium, folate and antioxidants such as vitamins C and E." According to an ADA spokesperson and registered dietician, "Vegetarians have been reported to have healthier body weight than non-vegetarians, as well as lower rates of death from heart disease, lower blood cholesterol levels and lower rates of high blood pressure, type 2 diabetes and prostate and colon cancer." The American Heart Association states that vegetarian diets are "usually lower than nonvegetarian diets in total fat, saturated fat and cholesterol. Many studies have shown that vegetarians seem to have a lower risk of obesity, coronary heart disease (which causes heart attack), high blood pressure, diabetes mellitus and some forms of cancer."

## **IMPACT ON THE ENVIRONMENT**

Raising billions of animals annually worldwide (mostly on factory farms) for meat, eggs, and dairy contributes to global warming, air pollution, water pollution and water shortages, soil erosion, soil pollution, and soil depletion, the destruction of tropical rainforests and other valuable habitats, rapid species extinction, and other environmental problems.

The United Nations has cited animal agriculture as the number two cause of global warming, just slightly less destructive than energy production. According to a 2006 United Nations' Food and Agriculture Organization report, animal-based agriculture emits more greenhouse gases than all the world's cars and other means of transportation combined.

The number of farmed animals has doubled worldwide since 1961 and is projected to double again by 2050. If that increase occurs, the FAO report warns, the resulting increase in greenhouse gas emissions would negate the effect of increased efficiencies in other areas and make it extremely difficult to avoid major negative repercussions from global warming.

Following are just some of animal agriculture's negative impacts on the environment:

- **Fossil fuel consumption**—Animal-based diets require 10 times as much energy as vegan (non-animal-product) diets.
- **Deforestation**—Livestock production is the leading cause of global deforestation today, taking up 70% of all agricultural land and 30% of the total land surface of the planet. In the Amazon alone, 70% of previously forested land is now occupied by pastures, with feed crops for animals covering a large part of the remainder.
- **Water shortages and pollution**—The standard American diet requires up to 14 times as much water as a vegan diet. In the United States, livestock is responsible for 55% of soil erosion and sediment buildup, 37% of pesticide use, and 33% of nitrogen and phosphorous contamination of freshwater. If the situation is not reversed, by 2025, 2/3 of the world's population will live in water-stressed areas.
- **Environmental impact of aquaculture**—Farming aquatic organisms such as fish, mollusks, and crustaceans is the fastest growing food production sector in the world. To prevent and contain disease caused by overcrowding, feed is laced with antibiotics. Wasted feed and drug-contaminated feces cause water pollution and release antibiotics into the water stream, increasing drug resistance. Fish farming can also destroy sensitive coastal habitats, threaten aquatic biodiversity, and promote disease. Harmful algal blooms ("red tides") can develop. These may contain powerful neurotoxins that kill marine and coastal species of fish, birds, marine mammals, and sometimes humans. For detailed information, see the Fact Sheet: Fishing and Marine Issues.

## IMPACT ON POVERTY

Worldwide, 800 million people suffer from hunger or malnutrition, but 60% of global corn and barley and 90% of soy are used to feed livestock. It takes two-to-five times more grain to raise livestock than to feed people directly. That ratio rises to ten times more in the case of America's favorite: grain-fed beef. 70% of the grain produced in the United States and 40% produced worldwide are fed to animals raised for slaughter. The International Food Policy Research Institute (IFPRI) estimates that a 50% reduction in meat eating in the developed world by 2020 could mean 3.6 million fewer malnourished children in developing countries.

Intensive animal agriculture forces small farmers out of business, creating rural unemployment and economic stratification—the rich become richer, the poor become poorer. It is estimated that 80% of the world's food supply is controlled by only a few multinational enterprises.

In rural communities where fewer, larger farms have replaced smaller, locally owned farms, residents have experienced lower family income, higher poverty rates, lower retail sales, reduced housing quality, and consistently low wages for farm workers.

Many small farmers resort to becoming contract growers, raising animals for the large corporation and bound to it by loans to cover their start-up costs (buildings, equipment). Contractors assume higher risks

and costs, but they are told what and how to produce and cannot make independent decisions. As a result, they often suffer financially. When the industry is in decline, their contracts are terminated. Over 71% of all contract chicken growers earn below poverty-level wages, according to the United Food and Commercial Workers Union.

## Resources

### Fact Sheets:

Animal Experimentation and Xenotransplantation  
Fishing and Marine Issues  
The Fur Industry

### Websites:

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