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**Lower Livestock Inventories; Higher Meat And Milk Production  
Agriculture Doing More With Less**  
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The U.S. livestock inventory has seen significant changes over the last 40 years: livestock numbers have been steadily declining while meat and milk production have increased indicating a substantial improvement in U.S. livestock production efficiency. For example, according to USDA's January 29, 2010 Cattle Report, the U.S. cattle inventory decreased for the third year in a row. At 93.7 million head, the size of the U.S. cattle herd is down 38.33 million head from its inventory high of 132 million head in 1975 and 1.2 million head lower than 1954. Yet,

U.S. beef production in 2009 of 26.1 billion pounds was almost double the amount produced in 1954. (See Table 1)

The size of the U.S. dairy cow herd in 2009 at 9.2 million head, is about half the size of the dairy herd in 1954, but milk production is up 55.1 percent.

**TABLE 1: Selected U.S. Livestock Inventory and Production  
Comparing Inventory to Production in 1954 and 2009**

	1954	2009	Percent Change
Total Cattle Inventory (Million head) <sup>1</sup>	95.679	94.521	-1.2%
Beef Cows (Million head)	25.050	31.712	26.6%
Beef Production (Billion lbs.)	14.152	26.068	84.2%
Beef Production per Cow (lbs.)	565	822	45.5%
Milk Cows (Million head)	21.581	9.201	-57.4%
Milk Production (Billion lbs.)	122.094	189.320	55.1%
Milk Production per Cow (lbs.)	5,657	20,576	263.7%
Hogs and Pig Inventory (Million head) <sup>1</sup>	50.474	65.327	29.4%
Hogs and Pig Production (Billion lbs.)	18.218	31.131	70.9%
Hogs and Pig Production per Hog and Pig Unit (lbs.)	361	477.000	32.1%

<sup>1</sup> 2009 Cattle numbers as of January 1, 2010; Hogs December 1, 2009  
Source: USDA/NASS data and statistics website, and "Meat Animals Farm Production, Dispositin, and Income, By States, 1950-54", Statistics Bulletin No. 184

The U.S. hog and pig inventory in 2009, while up about 15 million head from 1954, at 65.327 million head is down two million head from an inventory of 67.318 million head in 1979. But, pork production in 2009 at 31.13 billion pounds was up 70.9 percent from the 18.2 billion pounds produced in 1954.

Since 1954, production efficiency has increased 46% for beef cows, 264% for milk cows, and 32% for hogs and pigs.

During the last 60 years, U.S. agriculture has dramatically increased production efficiency. Corn,

the number one crop produced in the U.S, is consumed in most food products, from livestock to beverage sweeteners to pet food. During the last 55 years, U.S. corn production efficiency has increased close to 400 percent. The combination of increased crop production and feed supplies, advances in nutritional science and genetics, and other research derived food and livestock production system improvements have made it possible for U.S. agriculture to provide the least expensive, highest quality, and safest food supply in the world.

But, the agricultural sector has been under criticism for so called “factory farms” producing unsafe and low quality food where animals are mistreated, the production system destroying the environment, and other accusations. Consumer advocates of grass (forage) fed beef, for example, contend that the common practice of fattening livestock with feed consisting largely of corn before slaughter is unnatural for the animal and leads to fatty, less healthful meat. They claim that feedlot-raised cattle have far more saturated fat and substantially reduced levels of healthy omega-3 fatty acids than that of grass-fed cattle.

A recent Texas AgriLife Research study comparing beef from pasture-fed and grain-finished cattle came to a different conclusion. The study looked at the effects of ground beef from both production systems on the blood lipids in a group of volunteers. The study found that ground beef from grain-fed cattle, which is high in monounsaturated fats, increased HDL cholesterol (the good cholesterol), increased LDL particle diameters (the particle diameters of the bad cholesterol), and decreased insulin, all positive benefits. Grass-finished beef did not provide the same beneficial effects in this study.

Typically, most calves are born on ranches, weaned at about 450-600 pounds, moved to grass pastures and finished in a feedlot on grain, usually corn. Grain is not a cow's natural diet but it is the feed of choice for two reasons: it makes cattle gain weight quickly and it results in a product of consistent quality and palatability.

Some consumers prefer grass-finished beef based on its flavor or their perceptions of health, environmental, or animal-welfare benefits. U.S. agriculture fully supports grass fed beef production, organic farming, and any other alternative production system to satisfy consumer preferences. But, a major change to alternative production systems would significantly reduce agriculture’s ability to supply the quantity of food we have today. A shift to produce more grass fed beef would require a substantial increase in the use of input resources and likely reduce meat supplies.

## **Lower Livestock Inventory, Lower GHG Emissions**

Global warming, as a result of increased greenhouse gas (GHG) emissions, is a major national and international concern. To the extent that livestock contribute to GHG emissions, the decrease in livestock numbers while increasing meat and dairy production means that livestock have a smaller environmental impact today compared to the mid-1970's.

There are those who advocate a shift to grass-fed beef production in an effort to reduce GHG emissions. Since grass-fed cattle emit more methane ( a GHG) than grain-fed animals, a shift to grass-fed beef production would be counterproductive.

U.S. beef, dairy, and pork production systems are producing abundant supplies of the safest, healthiest, and least expensive foods in the world. This streamlined production efficiency has reduced the need for larger livestock inventories and reduced GHG emissions.

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