

Technical Paper No. 07-10

October, 2007

Tuskegee University

FUTURE OUTLOOK OF MEAT GOAT INDUSTORY FOR THE U. S. SMALL FARMS

Sandra G. Solaiman, PhD, PAS

George Washington Carver Agricultural Experiment Station

The purpose of this paper is to assess the current meat goat industry in the U.S. and to determine its future outlook. The data presented in this paper is drawn from four different sources—the U.S. 2000 Population Census, the USDA 2002 Census of Agriculture, the USDA National Agricultural Statistic Service, and the USDA Foreign Agricultural Service. In the U.S. meat goat production has been gaining popularity in recent years particularly because of a growing population of ethnic and faith-based groups who consume goat meat. The national estimates, based on import data only, indicate that the U.S. is more than 750,000 head deficient in meeting current demands for goat meat.

Goat Industry Profile in the U.S.

According to the 2006 USDA-NASS, the U.S. goat population is almost 3 million heads. Goat numbers increased 10% annually from 1985 to 2006. More than 82% of goats in the U.S. are meat goats, 10% are dairy goats and 8% are fiber goats (Figure 1, Table 1).

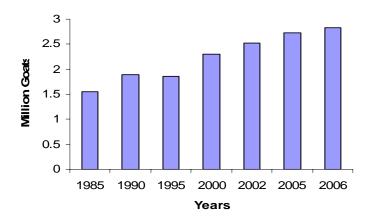


Figure 1. U.S. goat population changes from 1985 to 2006.

Table 1. Goat industry profile in the U.S.

	2002		2006*		Change	
	Number	%	Number	%	% of 2002	
All goats	2,530,466	100	2,934,000	100	115.9	
Meat goats	1,938,924	76.6	2,400,000	81.8	123.8	
Milk goats	290,789	11.5	296,000	10.1	101.8	
Fiber goats	300,756	11.9	238,000	8.1	79.1	

^{*} Reflects USDA-NASS sample data.

Most of the goats in the U.S. are produced in the South (Texas) and the Southeast (Tennessee, Georgia, Kentucky, North Carolina, Florida and Alabama), the Midwest (Oklahoma, Missouri) and the West (California). More than 44% of all goats are produced in the state of Texas alone. The number of goats in the state of Texas is 1.3 million, up 9% from the 2002 USDA Census. More than 70% of the total goat population in the U.S. is produced in the top ten states in goat numbers (Table 2). Many states experienced an increase in the goat numbers from the 2002 USDA Census. The state of Florida with 73,000 goat numbers experienced the highest gain (up 183%). The state of California claimed second place after Texas and moved Tennessee to third place.

The state of Georgia claimed fourth place surpassing Oklahoma. Missouri with more than 166% increase in goat population surpassed Kentucky, North Carolina and Alabama and claimed 6th place in the nation for goat production. State of Florida with highest jump in goat population, made the top 10 list as 9th producer of goats in the nation.

Table 2. U.S. top ten states for numbers of all goats in 2006*

	All Goats	% of Total	% of 2002
U.S.	2,934,000	100	116
Texas California	1,300,000 133,000	44.3 4.5	109 129

Table 15. U.S. top ten states for numbers of meat goats in 2006*

	Meat Goats	% of Total	% of 2002	
U.S.	2,400,000	100	124	
Texas	1,090,000	45.4	116	
Tennessee	117,000	4.9	109	
California	100,000	4.2	163	
Georgia	95,000	3.9	144	
Oklahoma	81,000	3.4	110	
Kentucky	74,000	3.1	120	
North Carolina	70,000	2.9	119	
Missouri	68,500	2.8	183	
Florida	65,000	2.7	180	
Alabama	48,000	2.0	101	

^{*} Reflects USDA-NASS sample data.

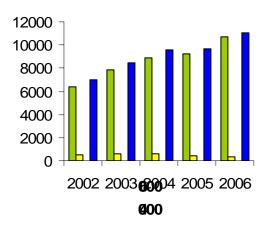
Goat Meat Imports

In 2006, the U.S. imported more than 11,000 MT (metric ton) (nearly 25 million lbs.) of goat meat valued at \$41.8 million up 131% from 8,462 MT in 2003; its total value was up 194% from \$21.5 million in 2003. However, goat meat imports in 2006 were up 329% from 3,360 MT in 1999; its total value was up 535% from \$7,850 million in 1999 (Table 4). The main exporters of goat meat to the U.S. are Australia and New Zealand with 92.5 % of the contribution coming from Australia. As indicated by the Figures 2 and 3, there is a sharp increase in goat meat imports and dollars spent for goat meat. This trend will most probably continue unless there is an increase in domestic production. Imported goat meat prices increased sharply from 2003 to 2006. According to the USDA-FAS, price paid per lb. of imported goat meat in 2006 was \$1.72, up 50% from \$1.15 per lb. in 2003 and up 62% from \$1.06 per lb. in 1999 (Table 4, Figure 3).

Table 4. U.S. Goat meat imports (MT) and its value (\$1000)

	1999	2003	2006*	% of 1999
Goat meat	3,360	8,462	11,070	329
Dollar Value	7,850	21,484	41,816	535
\$/lb	1.06	1.15	1.72	162

^{*} Reflects USDA-NASS sample data.



Goats Slaughtered in Inspected Plants

The number of all goats slaughtered at the state and federally-inspected plants in 2006 were nearly 750,000, up 2.5 folds from 1990. Meat goat slaughter numbers have shown a solid increase since 1990 (Table 5 and Figure 4), and they likely will continue to increase due to trends in population growth that promote meat goat production. Meat goat industry in general is in its infancy; therefore, many on-farm slaughters are probably not reported. It can be conjectured that for every goat reported, there are at least 4 (estimated later in this report) that are not reported. Also it must be noted that 2006 was the first year that goat slaughtered in the state inspected units were reported.

Table 5. Goats (numbers) slaughtered at the inspected plants in the U.S.

	1990	2006	% of 1990	% of 1990
U.S. Federal	229,600	581,743	254	
Total Inspected		749,300*		326

^a First reported year for non Federally inspected units.

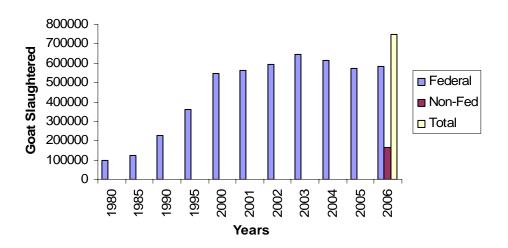


Figure 4. Goats slaughtered in federally and state inspected plants in the U.S.

Goat Consumption Based on Import and Slaughter Data

Goat consumption in the U.S can be estimated based on imported goat meat and slaughter data. Goats consumed in the U.S. are nearly 1.5 million heads of goats annually. This represents an increase of 150% from 2002 and over 320% increase from 1999. Total goats imported were estimated based on total goat meat import and an average carcass weight of 32.5 lbs. (65 lbs. of live weight is average slaughter weight reported by USDA). Goat consumption in the U.S. has increased steadily since 1999 and will likely continue to increase as the demand is growing (Figure 5). The sharmpor1e c we199ported were ey

or 25% of the population in the year 2050 (Table 6). This group of immigrants has a strong preference for goat meat and will add to the opportunity for this sector of agriculture to grow.

Table 6. Projections of total U.S. population changes by ethnic groups from 2000 to 2050

	2000	%	2005	%	2050	%
Total	281,421,90)6	295,507,000		419,854,000	
Asian	10,242,99	3.6	12,419,000	4.2	33,430,000	7.9
Black	34,658,19	00 12.3	38,056,000	12.9	61,361,000	14.6
Hispani	c 35,305,81	8 12.5	41,801,000	14.1	102,560,000	24.4

Source: U.S. Population Census (2000)

U.S. Foreign Born Population

Changes in Ethnic and Faith-Based Populations in the U.S. Having Preference for Goat Meat atioBTZT4

Estimating Population Having Preference for Goat Meat in the U.S.

An attempt will be made to estimate demand for goat meat based on Hispanic, Asian, foreign-born African and Caribbean populations in the U.S. Based on the U.S. Census Bureau (2005), there are about 12.4 million Asians and about 41.8 million Hispanics in the U.S. Among an estimated 7 million illegal immigrants (U.S. Census, 2000), over 90% are Mexican and other Latin Americans that consume goat meat. There are almost three million foreign-born Caribbean and almost one million Africans in the U.S. In total there are about 62.4 million potential goat meat consumers in the U.S. (Table 8).

Estimating Goat Meat Consumption and Meat Goats Needed in the U.S.

The average number of persons living in a U.S. household is 2.59 (U.S. Census, 2000). For the ethnic population under consideration, a slightly higher number of 3 persons per household are used. Assuming conservatively that only 10% of these ethnic households consume goat meat, a total of 20.8 million households may consume goat meat in the U.S. (Table 8). According to the Agriculture Fact Book (2001-2002), American consume on average annually 195 pounds of red meat and poultry per capita in the year 2000. If every ethnic household (three persons) consumes only 72 pounds of goat meat annually, including holidays, there will be a projected demand for 149.76 million pounds of goat meat. Assuming a 32.5-pound carcass weight per goat (according to the 2006 USDA-NASS, average weight of goat slaughtered in the federally inspected plants was 62 pounds) the total number of goats needed is 4.08 million per year (Table 8). This is a modest estimate of the numbers of meat goats needed for the U.S.

Estimating the Numbers of Goats Processed on Private Establishments (Unaccounted)

Based on the import and slaughter data, more than 1.5 million goats were consumed in the U.S. in 2006. Undoubtedly, there are more meat goats consumed in the

U.S. that are not reported. The remaining 2.58 million goats (4.08 million - 1.5 million) represent unaccounted numbers of

New Zealand have sharply increased since 1999. The U.S. has changed from a net exporter to a net importer during the last decade. Increases in ethnic populations in the U.S., especially Hispanics, Asians and Muslims, have contributed to this development. Also, goat meat is healthy meat and fits the designer diets of health-conscious Americans. Goat production is a great opportunity for small farm producers in U.S. to target these markets and diversify their farm products. There is a great opportunity for value-added products. However, consumer as well as producer education is needed and marketing structure must be strengthened.

REFERENCES

U.S. Census. 2000. US Census Bureau (www.census.gov)

USDA Census. 2002. Census of Agriculture (www.nass.usda.gov/census/census02/)

USDA-FAS. (www.fas.usda.gov/ustrade.)

USDA-NASS. National Agriculture Statistic Service.

(http://usda.mannlib.cornell.edu/reports/nass/livestock/pls-bban/lsan0305.pdf)

U.S. Census Bureau. 2005. Race and Hispanic Origin in 2005. Population Profile of the United States: Dynamic Version.

AKNOWLEDGEMENT

The author appreciates the support for writing part of this report through a grant provided by Agricultural Marketing Resource Center at Iowa State University Extension. The full report is at:

http://www.agmrc.org/NR/rdonlyres/49CF62F6-4612-4FEC-A17F-661DB90CA115/0/USGoatProductionFinal.pdf

All inquiries should be addressed to: Dr. Sandra G. Solaiman 105 Milbank Hall Tuskegee University Tuskegee, AL 36088 Phone: (334) 727-8401

Fax: (334) 727-8552 ssolaim@tuskegee.edu

Publication No. 07-10