

ENHANCED ECONOMIC BENEFITS FOR MEAT GOAT PRODUCERS THROUGH PRODUCTION, MEAT YIELD AND PALATABILITY, AND CONSUMER INFORMATION

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JUSTIFICATION

The meat goat industry is the most rapidly growing livestock category in the U.S., but is highly unstructured compared with other livestock industries. Specific information is needed about each segment so that potential common market and product linkages can be identified and relative product values in each segment can be distinguished. There is minimal substantiated data on production practices, live goat and meat marketing, consumer demand and preference, and influences of live characteristics on goat meat properties.

Project information will promote communication and link product valuation among the production, processing, and retail market sectors. The information and resulting recommendations will be conveyed to producers through regional extension meetings, fact sheets, and bulletins. Specific objectives are to:

1. Survey representative sample of consumers to determine desired traits for selected goat meat products and to estimate consumer willingness to pay for the desired traits
2. Measure the live, carcass, and meat traits of kid and yearling meat goats and evaluate the palatability of goat meat from the types of goats representative of those marketed in the U.S.
3. Survey producers to determine current production and marketing practices and the changes needed to increase net margins and productivity within the next 5 years



RESULTS and OUTPUT

- Data has been collected and is being analyzed on meat goats representing 50%, 75% and 87.5% Boer breeding.
- Questions for the consumer survey and comparisons of goat meat cuts for conjoint analyses are being developed.
- The producer survey questions are being structured for review by a selected group of meat goat producers.

METHODOLOGY

- Consumers from 5,000 representative U.S. households surveyed by an internet market information company.
 - Questions on household food consumption/purchase, choice-based conjoint experimental design for goat meat attributes, demographic/socio-economic characteristics.
 - Survey data analysis using a mixed conditional logit model and conjoint analysis.
- Goats (n=550) purchased to represent conformations and weights of currently marketed kid and yearling goats.
 - Weighing, linear measurement, and humane sacrifice after transport to LSU AgCenter, Angelo State University, and Fort Valley State University meat laboratories.
 - Carcass data and fabrication into standardized cuts to determine boneless lean meat yields.
 - Sensory panel and shear force on leg and shoulder samples at SUAREC. Focus groups to relate palatability attributes with traits identified in consumer survey.
 - Data analyzed with Mixed Model and LSM SAS methods.
- Random mail/internet survey of 2,000 meat goat producers for production, management, and marketing practices on numbers and kinds of goats produced; net margins; expansion or profitability; and meat goat industry opinions.
 - Dillman's total design method for survey; goal structure questions with fuzzy pair-wise comparisons analyzed with regression techniques.
 - Multinomial logit model for discrete dependent variables.
- Data sets from the 3 major objectives collated for computing relationships among consumer responses, producer practices, and goat and goat meat traits.
- Regional producer seminars conducted in 6 major goat production states on project results, implications, and recommendations for meat goat producers.

POTENTIAL OUTCOMES

- Information on desired consumer goat meat traits will allow production, processing, and marketing strategies to improve producer productivity and profitability.
- Grades and standards for yield and/or palatability of goat meat and data on consumer purchasing habits and desires will relate price sensitivity to goat meat palatability traits.
- Production practice and profitability information will promote useful recommendations to goat producers.

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