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Meat-goat Market Analysis: A Pilot Study of the Somali Market in Columbus, OH

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This case study focuses on meat goat marketing involving one distinct immigrant group residing in one area of Columbus, Ohio: the Somalis. There are about 20,000–25,000 Somalis living in Columbus, the second largest concentration of Somalian immigrants in the U.S. after Minneapolis-St. Paul, Minnesota. It is estimated that Columbus Somalis consume the meat from about 14,000 goats each year.

The objective of this pilot study is to analyze the meat goat marketing and consumption patterns of the Somali immigrant population of Columbus, Ohio. Understanding gained in the Somali meat market will assist in determining the feasibility of establishing a more structured marketing system, including the possible need for a processing plant dedicated to goat meat. The Southern Ohio Meat Goat Task Force is a group of meat-goat producers, marketers, OSU extension professionals, and Ohio Cooperative Development Center staff members that are working with the meat-goat industry to assess and develop goat production, processing, and meat marketing in Ohio.

Tours of several retail shops within the Somali community were conducted to further understand the preferences of the Somali population. Interviews were conducted with a slaughter-plant manager in nearby Detroit, Michigan, the current major supplier of fresh goat meat to the Columbus market. During January and March 2003, two focus-group sessions were organized and conducted by task force members with Somali consumers, entrepreneurs, and retail grocery owners.

Significant results and discussion presented in detail within this research report include:

- Somali's prefer fresh over frozen goat meat,
- pricing is a key determinant in meat choices for Somali consumers,
- goat meat and lamb meat are somewhat substitutable in Somali diets,
- Somalis will substitute halal chicken and beef if lamb and goat meat is not available,
- lean grass-fed carcass is preferred to a grain-fed goat,
- Somalis eat goat meat 1-2 times a day year-round,
- most people feeding families buy a whole carcass, and
- only a slight preference was indicated between the halal and kosher slaughter practices.

Americans are becoming more and more conscious about the food they eat. Some reasons for this are health concerns, a desire to know where food comes from and how it is produced and processed, and a desire to support local agriculture. In addition to its unique taste, goat meat offers leaner meat and fewer calories than traditional meats such as poultry, beef, and pork. It is expected to become more popular among consumers desiring a healthier diet.

Consumption of meat goat is boosted by an increasing number of ethnic consumers who eat goat meat on a regular basis. Census Bureau projections indicate that the ethnic population will likely

increase in the following decades. The number of non-European consumers in Ohio from the 2000 census is presented in Figure 1 (Inwood, Bergman, and Stinner 2003).

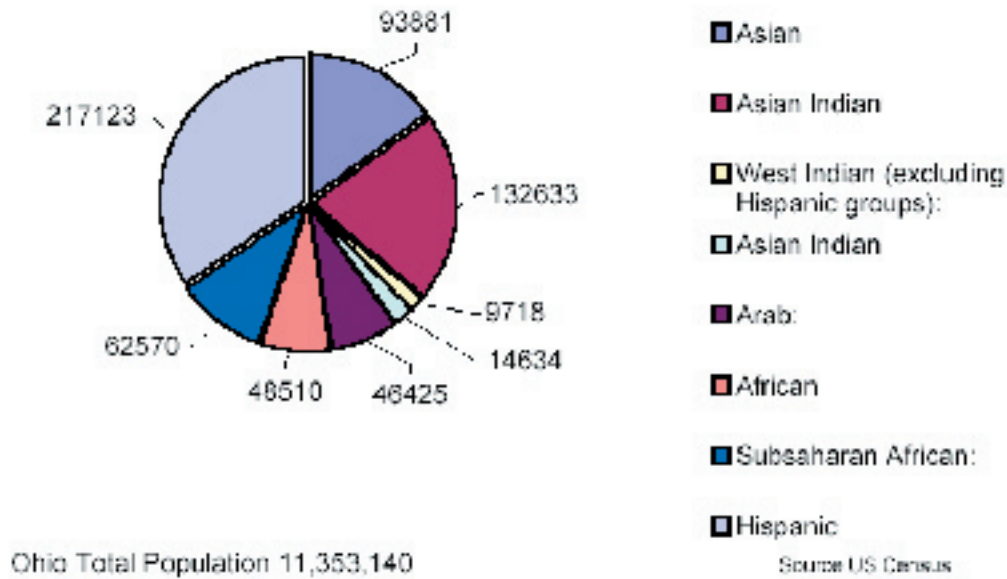
The total number of non-European consumers in Ohio in 2000 was 625,494. Hispanics, especially Mexicans have a very strong and demand for goat meat. Those of African descent also consume significant amounts of goat meat.

Increasing Affordability from Ethnic Consumers

Another trend affecting the consumption of ethnic foods is the increase in the household income of ethnic groups. As incomes increase consumers tend to purchase more foods that they want, rather than foods they need. In other words, as ethnic consum-

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Figure 1. Non-European Heritage in Ohio.



ers become mainstreamed into the U.S. economy they are becoming more particular about the food they eat.

The percentage increase in income was generally larger among ethnic groups than among the population as a whole (Table 1). Asians had the highest household income and percentage increase. The percentage increase in the household income of African-Americans is the second largest (U.S. Census Bureau 2000).

The increase in household income should lead to more disposable income for ethnic households, which will result in more consumption of goat meat.

A third factor that should effect the consumption of goat meat is an increased interest in ethnic food from non-ethnic consumers.

Market Outlets for Goat Meat in the Somali Community in the Columbus Area

This study focuses on one ethnic market segment: Somali immigrants/refugees from Eastern Africa living in the Columbus, Ohio area. Most of them came to the United States in the early 1990s to seek political asylum from the tribal conflict in their country. Minneapolis, MN has the largest Somali population in the nation; Columbus is second, with

between 20,000 and 25,000 Somalis living in the Columbus metropolitan area (City of Columbus 2003). Most of them reside in the northern part of Columbus. They have their own church, restaurants, and retail shops. This population is growing because Somalis tend to have larger-than-average families, and refugees continue to flow into the U.S.

Field Research with Grocery Store Owners

Seven Somali retail stores supply most of the grocery needs of the Somali population in Columbus. Three of these Somali grocery stores were visited in June, 2002. The grocery stores are small specialty stores with a wide variety of goods. Goods on their shelves include traditional Somali foods as well as typical American foods. They also sell daily necessities such as soap, toothpaste, etc.

All three grocery stores sold goat meat, along with other Halal meat. Both frozen and fresh goat meat are sold in all three stores. Frozen goats are Australian or New Zealand imports that are packaged as a whole or half carcass. There are some large distributors of imported frozen goats in Minneapolis, Minnesota and Detroit, Michigan. Due to the proximity of Detroit to Columbus, all the Somali grocery stores buy their frozen goat from Michigan. However, when they need a large quantity of frozen

Table 1. Income Increases by Ethnic Groups, 1990–2000.

	1990 (In 2000 Dollars)	2000	Percentage Increase
Household income	Mean	Mean	
All households	\$48,024	\$57,047	18.79%
White	\$49,962	\$59,280	18.65%
African-American	\$31,860	\$40,067	25.76%
Hispanic	\$35,915	\$42,411	18.09%
Asian	\$46,412	\$70,231	51.32%

goat meat, they go to Minneapolis for the frozen goats if they can get the meat much cheaper. Frozen goat meat sells at \$1.99/lb most of the time. It is often sold as a whole or half carcass.

Fresh goat meat is always preferred, according to the grocery store owners. Coming from a country where food travels neither very far nor for very long, the Somalis are used to purchasing fresh meat. Even though fresh goat meat is more expensive than the frozen counterpart, it is more popular among the Somalis. Like frozen, fresh meat goats are often sold as a whole or half carcasses. Some cuts, such as legs, are more popular and more expensive. In general, fresh goat meat sells for about \$2.99/lb in the Somali grocery stores. The stores procure almost all their fresh goat meat from Detroit. Some grocery stores rent trucks and buy truckloads from Detroit, and some have the goat meat delivered from Michigan.

Meat-goat organs are a regular part of the Somali diet and are therefore in high demand by the Somalis. Almost all the grocery stores sell goat kidney and liver. Somalis usually eat kidney and liver as a breakfast food. The price of the internal organs is about equal to the price of the goat meat, it can be very expensive when demand is high.

The Somali shopkeepers are very entrepreneurial and independent. Even though all grocery stores buy from processors in Michigan, they never get together to buy in large quantity in order to receive a deeper discount. There is no data on how much goat meat they buy as a group. The owner of one of the largest grocery stores estimated that his store alone could sell 15 head of goat per week. However, when he did a survey of his customers, he found that the demand far exceeded his estimation. The survey

indicated a demand of 90–100 goats per week just for his store.

Somali Tastes and Preferences

To gain an understanding of Somali consumption patterns and tastes and preferences, two focus-group sessions were conducted in January and March, 2003. The focus groups included consumers such as housewives, who buy groceries for the family, and entrepreneurs and grocery owners.

The emphasis of the first focus group was to determine meat-consumption patterns. The group indicated that goat meat and lamb meat are substitutes in Somali diets. However, 85% of participants would prefer goat meat if a good quality product were available at a reasonable price. They purchase lamb when goat meat is not available during certain times throughout the year. Somalis will also substitute Halal chicken and beef if lamb and goat meat are not available. They perceive goat as leaner than lamb. When asked about the difference in carcass preference between meat goat and the dairy goat, they responded that there is only one kind of goat in Somalia. They generally eat the males as goat meat and use the females for production of milk and kids.

Somalis prefer a 35–40 pound carcass because of their perception that carcasses over 40 pounds are from older goats and will lack the level of taste and quality they prefer. They believe that 35–40 pounds is a “rule-of-thumb” range for a trim, tender carcass that will cook fast, but they will use carcasses ranging from 20–40 pounds. The smaller carcasses are usually stuffed and served whole with vegetables at larger family dinners.

Somalis prefer a lean grass-fed carcass to a grain-fed goat. They indicated that they could tell the difference between grain-fed and grass-fed in the taste and texture of the meat. The group indicated that the smell of cooking goat meat indicates whether it is grain-fed or grass-fed.

Frozen goat meat is mostly imported into the U.S. from New Zealand and Australia; it is leaner meat because it is grass-fed. The meat-market owners purchase most of their frozen goat-meat supplies from a local Columbus food distributor. The Somalis were very assertive in saying that they prefer fresh goat meat to frozen goat meat if it is available at a reasonable price.

Somalis eat goat meat 1–2 times per day year-round. When buying goat meat at the market, most people who are feeding families will buy whole carcasses, while individuals will buy 5–6 pounds at a time. The participants estimated that the average Somali family eats about 60 pounds of goat meat per month.

They indicated a preference for certain cuts of the carcass, but the group was divided on what the preferred cuts were. One consumer indicated a preference for the shoulder and ribs, especially when hosting dinner guests. Three other participants indicated that leg roasts are the preferred cut (similar to lamb). The meat-market owners agreed that they sell more legs than any other cut. Consumer preference and fewer bones justify the higher price that consumers are willing to pay for a leg of goat meat in the local markets.

The focus group's desired preparation method for goat meat is stewing. The Somalis make a goat soup (similar to the American chicken noodle soup) that they believe will make people feel better and keep them healthy. Most restaurants in the Somali community use frozen goat meat from the local food distributor instead of fresh meat. The main reason is that frozen goat meat is cheaper and available year-round with a consistent quality.

There is more to a goat than the meat on a carcass. Livers and kidneys are a desirable breakfast food, but are in short supply from Detroit because they do not take the time to remove them and clean them for consumption.

Skins harvested from the goats are shipped to Italy and made into purses and wallets. Organs and entrails are processed into cat and dog foods. The heart and brains can be eaten, but are not desired by many Somalis as a food source.

The group indicated that there would be a market for stomachs in Ohio if it were easier to clean them without using chemicals. Cleaning the stomachs without chemicals is a very time-consuming and laborious effort for a low-value product.

Somali immigrants are accustomed to feeding their babies goat milk back in Somalia, but they now use cow milk because of the limited availability of goat milk in Ohio and the U.S. They use goat cheese but do not prefer it to cow cheese. They like using goat butter. They indicated that a good market for goat butter exists, but the supply is very limited.

The birth of a baby is reason for a traditional cultural and religious ceremony in the Muslim faith. Somalis are encouraged to get a live goat and sacrifice it to celebrate the baptism of their child. They purchase and kill the goats on the farm by slitting the throat, and dress the carcass themselves. The group indicated that they have a connection with a producer in Mansfield, OH that provides the goats for these celebrations. The parents of the child go to the farm and select the goat, which is then killed (sacrificed) in order to baptize the baby. They then eat the meat in celebration.

The focus group conveyed that there is little difference between the halal and kosher slaughter practices. They will eat kosher meats just as they eat halal meats. Although the person who cuts the throat of the animal does not have to be a Muslim, he must believe in a religion and be trusted by the Somali community; the preference is that someone of the Muslim faith slit the animal's throat. Somalis will not consume animals that are slaughtered with the same equipment or in the same facility as pork. Even a thorough cleaning of the equipment and facility will not satisfy the Somali population. There is a demand for halal slaughtered beef, chicken, fish, and camels in Ohio.

Pricing is a key market determinant for producers as well as consumers of goat meat. The Somalis currently pay \$0.80–\$0.85 per pound live-weight or \$60.00 per head for goats from the Mansfield producer. The focus group identified some average retail prices they would be willing to pay for goat meat: \$1.99 per pound for frozen goat meat and \$2.99 per pound for fresh goat meat. These are average prices, so they would be willing to pay a little above and below these prices. One market owner said that he uses 25–30 goat carcasses each week for fresh product in his stores. He sells to some smaller stores, but most are retail sales to the end

consumer. He estimated that 15–20% of the retail price is the transportation costs to and from Detroit to obtain the product.

The focus group discussed the Detroit plant where they purchase fresh goat meat. They said that it is very hard to get goats from the Detroit plant from Thanksgiving (October) through New Year's (January) because of increased demand for the limited supplies. The Somalis feel that the plant resembles a monopoly because there are very few other outlets for fresh goat meat. They feel that they cannot buy the cuts and quality they want when they go to Detroit. They are suspicious that the best carcasses are not in view and are reserved for the local customers in the Detroit area. They feel that they are labeled out-of-towners and are treated unfairly most of the time. The plant gets its supply of goats by the semi load from New Mexico, Texas, and Arizona. The meat-market owners have used 3–4 slaughter facilities for product acquisition, but they principally rely on the main slaughter facility, Berry and Sons. The group estimated that Berry and Sons kills 200 lambs and goats per day in the Detroit plant. There is also a plant in Memphis, Tennessee that the meat-market owners have used before, and this plant is still processing goats, as far as they know.

The Somalis were very enthusiastic about and committed to a local supply of goat meat because they are driving to Detroit 2–3 times per week to purchase fresh goat carcasses. They would support a processing facility for Ohio goats or a location where they could go to obtain fresh local goat meat year-round at a reasonable price. A large demand exists for Ohio goat producers just in the Somali community in Columbus.

Slaughtering House Visit in Detroit, Michigan

In January, 2003 we visited Berry and Sons, a slaughterhouse in Detroit, Michigan where the Somalis in Columbus area got most of their fresh goat meat. The general manager of the slaughtering facility was interviewed. He claimed his processing facility was the only Islamic USDA-approved plant in the country. Although several other plants are located nearby, this plant is the only one that processes goats. The plant processes approximately 2000 head per week (300 head per day) of lambs and goats. About 95% of the animals are lambs, and the remaining 5% are goats. The dressed goat carcass

weighs 40 pounds (about 80 pounds live-weight).

The animals are shackled by their rear legs and are dressed by an assembly line of 12 to 14 workers. This facility is not capital-intensive but very labor-intensive, using workers from Lebanon, Iraq, Iran, and Turkey. The carcasses are stored in a cold-storage room, which is a constant 38°F. The goat carcass is shipped at a temperature below 60°F. It only requires a storage (chilling) time after slaughter of about one hour because the carcass is small.

The skins are sold to foreign countries and some of the organs (livers) are marketed for local consumption. The plant is supplied with animals (again, 95% lambs and 5% goats) from the Southwest, primarily New Mexico and Texas. They also get some goats from Colorado and Iowa. Primarily, one broker supplies Berry and Sons with their slaughter needs. The animals are transported in a semi truck; a full load is 44,000 pounds, or about 500 head. Goats are purchased for about \$1.10 per pound live-weight, which includes shipping costs, (live prices range from \$1.00 to \$1.30, depending on supply and demand), and are then sold for about \$2.40 per pound. The manager indicated that the limiting factor for their plant is supply. The plant has extra capacity and would welcome Ohio goats. He offered a processing price of \$10 per head if 300 animals—a full day's work—were supplied. His payroll is \$2000 per day.

The manager suggested packing the chilled carcasses in a large plastic-lined box on a pallet for efficient handling. Each pallet will hold approximately 50 animals. He has contacts with refrigerated-trucking firms that could be contracted to move the carcasses to Columbus. During our visit a delivery truck from a Convenience Store located in Columbus, OH was being loaded with lamb and goat carcasses.

Slaughtering/Storage Options

The results of the Detroit plant visit were presented to the Somali community at the second session of the focus group in March, 2003. The community was generally receptive of the quality and price that Berry and Sons offers. However, transportation and cold storage become a problem. To keep the slaughtering cost as low as possible, 300 head of goat have to be transported to Detroit and be slaughtered in one day and then transported back the Columbus. The transportation fee is estimated

to be at \$0.025 per pound live-weight. This could add as much as \$.50 to the cost of the goat meat. At the same time, no grocery store in the Somali community has a cold storage room that can hold 300 carcasses. Even if the Somali grocery owners want to work cooperatively to buy 300 carcasses, other options need to be explored.

The option of renting a cold-storage facility—possibly a mobile one—was discussed in the focus group. Again, cost is a major issue. The Ohio Cooperative Development Center offered to finance part of a pilot test to assess the feasibility of marketing goat meat in this way. Additional funding through the Somali community is also being explored at the same time.

Collaborative Efforts of Producers in Ohio

Meat-goat producers in Ohio have been working with the Ohio Cooperative Development Center and the Meat Goat Task Force to develop a market for goat meat. Most of the attention has focused upon the Somali ethnic group. A producer from Clinton County has earned the trust from the Somali community through meetings and has initiated sales of goat meat to one Somali grocery store. The hope is that after a connection is built, the Somalis will trust the Ohio producers enough to buy most of their goat meat from other Ohio producers.

At the same time, producers from southeastern and eastern Ohio are working together to provide a steady supply of consistent quality to satisfy the Somali consumers. The Buckeye Meat Goat Association was formed in an effort to help all the producers to work with one voice. The association was formed and incorporated in May, 2003 with the purpose of both education and marketing. So far, the association has five members; it has held two meetings and is working on a membership-drive

to increase their membership. The association is looking at developing into a co-op for processing and marketing in the foreseeable future.

Conclusion

Overall, even though the meat-goat industry in Ohio is still fledgling, a great demand for goat meat exists in ethnic groups because of the growing ethnic population, the increasing income of the ethnic group, and their continuing trend of buying fresh, local products. As long as sound marketing efforts make goat meat more readily available to the consumers, there will be a market for it.

Moreover, marketing and processing opportunities for goat-meat producers exist as long as they are willing to work together to serve ethnic niche markets. Individual producers have experienced profitability difficulties because of the level of marketing services or the volume necessary to service the market. Marketing and processing in groups can reduce costs and efforts in marketing, transportation, grading, processing, distribution, and research and development, while reducing the costs and risks of the individual grower.

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