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*PHOTO : Richard Molinar, Michael Yang
California Cooperative Extension*

**ETHNIC CROPS AND LIVESTOCK
OPPORTUNITIES FOR
SMALL FARMERS AND RANCHERS**



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Production and Marketing of Ethnic Crops and Livestock

Have you noticed how many unfamiliar food products are for sale these days? Grocery shelves, community supported agriculture (CSA), and farmers markets are increasingly offering strange but tempting-looking produce that I'm slowly learning how to cook. Google 'exotic veggies' and you'll see what I mean. This issue of the *Small Farm Digest* explores how small scale producers might take advantage of these new products.

An increase in the availability of new types of food is hardly surprising, as growing minority populations across the nation bring new food preferences from a variety of cultures. The public also shows a growing interest in unfamiliar crops and livestock, perhaps for health reasons or simply to enjoy a wider range of foods. Small, local, ethnic food markets are offering healthy alternatives in some Native American populations, or in low income 'food deserts' in inner cities.

In the first article, Ramu Govindasamy (Page 4) draws on his research to highlight the impressive opportunity for

produce growers on the East Coast, where proximity to large urban markets and growing numbers of minority populations can counterbalance the high cost of land and relatively short growing season.

Opportunities are not limited to produce, however. Sandra Solaiman (Page 9) outlines the strong and growing market for goat meat in the United States, and points out how a small herd of meat goats could enhance small farm diversity and profitability.

Not surprisingly, major retailers are responding to these opportunities. A 2009 article by Andria Cheng in *MarketWatch* describes how Wal-Mart plans to develop and test two supermarkets aimed specifically at Hispanic communities in Phoenix and Houston.

Producers are taking advantage of these expanding opportunities in various ways. The article by Jeanine Castillo and Mark Uchanski (Page 17) highlights how well Luz Hernandez of Gard-N-Hers Farm has adapted to the strong Hispanic market in Southwest.

In many urban areas, such as San Diego, recent immigrant groups begin growing and selling produce within their communities, but often expand into a wider customer base remarkably quickly.

While the opportunities are there, however, it's important to think carefully before starting a new venture. Being able to produce the item is only one step, and perhaps the easiest. What about processing of the crop, or access to slaughter facilities? Who are your customers—and competitors? How will you handle risk? Which government regulations will apply?

Andy Wetherill's article (Page 22) underscores how vital it is to have a detailed business plan. While his article focuses on the mid-Atlantic region, its lessons apply equally well to other parts of the country.

Cooperative Extension provides many resources to help with new production and marketing opportunities. Richard Molinar (Page 25) and his colleagues have been helping Southeast Asian farmers in California's Central Valley develop and market ethnic crops for many years.

And remember, your local extension office can be an excellent place to find information on the new opportunities available from ethnic crops and livestock.

This volume of the *Small Farm Digest*, titled "Ethnic Crops and Livestock," puts me in the mood to reach for one of my favorite cookbooks. It was written by syndicated food writer and television chef David Rosengarten and is chock-full of ethnic favorites. The title of the book? "It's ALL American Food."



***PHOTO : Richard Molinar, Michael Yang
California Cooperative Extension***



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Ethnic Produce Marketing Opportunities in the United States

Profitability, and subsequently farm viability, has been a challenge to produce growers in the eastern United States since the 1980s because of highly volatile market prices.

Growers in the East also operate on a relatively small land base with production costs that are generally higher per unit of crop output. This puts them at a competitive disadvantage against larger commodity growers from other states where production costs are comparatively lower. Encroachment of farmland by development, coupled with the difficulty to maintain profitability create a challenge for some farming enterprises, especially for agronomic crops — such as corn and soybeans — that require large acreage and lower per acre cost of production to remain viable. In the 21st century, success in commercial farming in the East will depend largely on the ability of the growers to focus on high value, specialty crops — such as ethnic produce targeted at specific niche markets — for favorable competitive advantages.

Economic opportunities have arisen in the last decade for specialty crop agriculture catering to the ethnically diverse consumers along the eastern coast of the United States. U.S. Census data projections indicate that New York and Maryland, each with 40 percent minority population estimates, are among the next set of states to become “majority-minority” states. U.S. Census data also shows that the mainstream population increased by 13 percent from 1990 to 2000 as compared to 48 percent for Asians and 58 percent for Hispanics.

Major retailers are responding to these population shifts. For example, to target the fast-growing ethnic population and increase its grocery sales, Wal-Mart Stores, Inc., plans to convert two of its existing Phoenix and Houston supermarkets to stores that will specifically target the Hispanic shopper.

The ethnic population boom along the East Coast is even more pronounced. In ethnically diverse population hubs such as the Northeast Region, the Asian population growth reached 60

percent during this period. Similarly, growing Hispanic concentrations are geographically dispersed along the East Coast, with just five states (Florida, Georgia, New York, North Carolina, and New Jersey) accounting for over one-fifth of the nation's Hispanic population growth and yielding a combined growth rate of 59 percent. The rapid expansion of ethnic populations presents significant opportunities for the produce sector, especially vegetable producers in the region, to take advantage of their close proximity to densely populated areas.

Using New Jersey as a case in point, between 1987 and 1997 there was a 6.9 percent drop in total farmland acreage. This coincided with some of the most rapid demographic changes in the country. The Asian, black, and Hispanic populations grew by 69.5, 11.2, and 37.4 percent, respectively between 1990 and 1999. In 2000, these racial groups constituted 32.6 percent of the total New Jersey population, according to the Portrait of New Jersey Census 2000. That report also revealed that the Asian population continues to be the fastest growing segment and increased 77.5 percent between 1999 and 2000, while the black population increased by 10 percent, and all New Jersey residents who identified themselves as Hispanics totaled 1,117,191 in 2000. Today, one-third of New Jersey's

population has a foreign-born background and actively seeks food crops not commonly found in American grocery stores. King-Farris identified this recent influx of new immigrants as one of the irreversible "mega trends" that will impact the way American communities interact. Most Eastern states are seeing similar patterns of population growth, creating tremendous new market potential. For example, Massachusetts has experienced a strong increase of immigrant groups in recent years. According to the 2005 Census estimates, Hispanics were the largest ethnic minority in the state with 8 percent of the population, outnumbering African-Americans (7 percent). Asians represent 5 percent of the total population, a number that is increasing. Forty percent of the southeastern Massachusetts population is of Portuguese and Cape Verdean backgrounds. About 150,000 Brazilians live in greater Boston and Cape Cod, making Portuguese the second most spoken language in Massachusetts according to the U.S. Census.

In the Eastern United States, stakeholders agree that there is an urgent need to make farming more profitable to reduce the decline in the number of farmers and farmland acreage. New Jersey's vegetable marketing structure was recently reviewed by a team of national



experts, who concluded that the economic decline of the state's vegetable industry is imminent without a significant change in marketing strategies. Many state departments of agriculture and extension programs are trying to create or enhance networks between their farmers and niche market distributors to create opportunities to thwart this decline.

East Coast growers also have a competitive disadvantage against larger year-round producers of greens and herbs from California, Florida, Texas, Mexico, and Canada. Instead, innovative growers adopt new crops and value-added opportunities to "ride the crest" of emerging markets. The advantage of close proximity to major population centers with diverse ethnic communities is an advantage for the region's agricultural industry and

economy. Consumption of locally grown vegetables not only supports local farms, but also provides fresh produce to consumers within hours after harvest. Today, produce travels an average of hundreds of miles from the farm to ultimate consumer. Local produce sold at local markets reduces the usage of transport fuel and protects biodiversity. Most of the fresh produce is transported by truck and the transportation of produce is making the United States increasingly dependent on foreign oil resources. Above all, local produce has numerous benefits, such as freshness, taste, more nutrition values, and purity. These characteristics influence the consumer overall purchasing decisions. Most consumers look for attributes such as buying locally, promoting good health, protecting the environment, and supporting the local economy.

A recent study by Rutgers University, funded by a USDA National Research Initiative grant, focused on the ethnic produce market opportunities on the East Coast. The specific ethnic market subjects of study were the Asian and Hispanic segments, chosen for their strong recent growth and continued growth expectations. The top two subgroups within each of these segments were chosen for the study; Chinese and Asian Indian within the Asian sub-groups, and Puerto Rican and Mexican within the Hispanic sub-groups. The geographic focus was the East Coast and includes Washington, DC, and 16 states bordering the East Coast.

A summary of general consumer characteristics indicate that a majority of respondents from each subgroup were female, 36 to 50 years of age, living in a household with two to four members. Social and economic characteristic data revealed that half or more of respondents from each subgroup completed 2 or more years of college, were married, and had annual incomes of less than \$60,000. Two-thirds or more from each subgroup were employed. More Asians than Hispanics completed 4 or more years of college and had higher incomes and there were more married Asians than Hispanics. Analysis of acculturation factors revealed that roughly half of the respondents in each subgroup have lived in their current city and/or state for more than 10 years. A majority from

each group were split between urban and suburban neighborhoods, with a quarter or less of Hispanics and 7 percent or less of Asians residing in rural areas. Three-quarters or more speak their respective ethnic language.

An analysis of shopping patterns, beliefs, and behaviors associated with ethnic produce purchases further defined the ethnic consumer profiles. Purchase pattern data revealed that respondents' ethnic produce expenditures averaged \$86 per month. Asian and Hispanic sub-groups were above and below this mean, respectively. The Chinese shopped an average of six times per month as compared to four times per month by every other sub-group. The Asian Indians had higher expenditures per visit than the other three sub-groups. This seemingly correlates to the fact that half of Asian Indian respondents were vegetarians, as compared to 7 percent or less of respondents in the other groups. Both ethnic and typical American grocery stores were commonly cited as places of purchase by respondents from all ethnic groups, while farmers' and roadside markets were less popular. More Asians than Mexicans frequented ethnic grocery stores, while the converse was true for typical American grocery stores. Twenty five percent of Mexicans grew their own ethnic produce, as compared to less than one-quarter of respondents from each of the other three groups. Ethnic

outlets were evaluated in terms of importance and proximity, and compared to conventional stores to determine respondents' preferences. A majority of respondents in each sub-group indicated that they were "more willing" to purchase ethnic produce from ethnic outlets.

Survey data on respondent willingness assessed consumers' inclination to purchase based on certain attributes, as well as their willingness to pay a premium for ethnic produce. Roughly half or more of respondents in each sub-group were receptive to locally or organically grown ethnic produce. Twenty eight percent of Asian Indians were receptive to new ethnic produce items or country of origin labeling, as compared to half or more of respondents in other three sub-groups. Half or more of respondents from each sub-group were willing to pay a premium for ethnic produce, relative to American substitutes. Respondents' monthly produce expenditure estimates of both ethnic and total produce averaged \$26 and \$37 per month, respectively. The Chinese group was at the high extreme for each (\$32 ethnic and \$48 total) and Mexicans were at the low extreme (\$22 ethnic and \$31 total). The ethnic produce accounted for more than 60 percent of total produce expenditures for each group. Ethnic produce expenditures per person were extrapolated to the larger populations for each respective ethnicity, to arrive

at the following ethnic produce market estimates along the East Coast (within a 90 percent confidence interval, with a margin of error of 5.6 percent or better); Chinese: \$245 million to \$296 million per annum, Asian Indian: \$190 million to \$230 million per annum, Mexican: \$281 million to \$362 million per annum, and Puerto Rican: \$531 million to \$655 million per annum.

The findings from this study indicate that there is a strong growth potential for ethnic produce demand in the Eastern Coastal United States. The local producers, who are struggling to compete in the national market, can benefit by concentrating their efforts in the production of ethnic vegetables and fresh produce and then selling them in the local and regional markets. Small and medium-sized horticultural farmers should consider focusing on these new crops and if they are able to address the local demand for ethnic produce at a reasonable cost, the resulting economic gain to the local farmers from this shift into ethnic produce markets could be far reaching. Finally, today's healthy choice for food calls for increased use of vegetables as part of balanced diet. Adding more varieties to the choice of vegetables through the introduction of ethnic produce might encourage even a larger final demand for ethnic produce than already anticipated. These developments could provide new opportunities for small and medium-sized East Coast farmers.

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Are You Considering Goats to Diversify Your Farm?

Goats are the most popular and versatile animals in the world and their products are used more extensively than those of any other species. Goat meat and goat milk, cheese, and yogurt are the most widely consumed of all animal products, while goat hides, leather, mohair, and cashmere rank high in apparel for millions of people worldwide. Goats are also a holistic tool for land vegetation management. With proper grazing management, goats eliminate noxious weeds, restore native grasses, and prevent fires through fuel load reduction.

Because of their efficient conversion of feed into valuable products, goats are especially popular with small holders. With proper management, a small herd of meat goats can be produced on 10 to 15 acres of pastureland, fitting into more than 90 percent of U.S. farmsteads, and enhancing small farm diversity and profitability. Goats produce more milk than cows based on their unit of body weight. They also produce more meat based on their higher kidding rate, growth rate, and early maturity when compared to other large ruminants.

Three major goat enterprises exist in the United States today: meat goat, dairy goat, and Angora or fiber goat farms. Meat goat farms predominate, with purebred farms, commercial farms, and independent dealers all contributing. These can operate on a local or national basis. Dairy goat and Angora goat production are more established industries than the newly developing meat goat industry.

There is a strong market for meat goats

The United States imported about 23 million pounds of goat meat in 2007, mostly from Australia, to satisfy at least three growing market groups:

Ethnic and faith-based consumers: Goat production has been gaining popularity in the United States in recent years, primarily because of the growing population of ethnic and faith-based consumers who traditionally prefer goat meat and provide a great opportunity for meat goat producers and the entire industry. Currently, estimates indicate the United States will need more than 2 to 3 million goats for meat production to meet the demand of this ethnic population.

Healthy food focus: general consumers, as well as the food service industry, are increasingly interested in a healthier animal protein product. Goat meat is lean and has lower fat, a higher proportion of good fats, and lower cholesterol than beef, pork, chicken, turkey, lamb, and veal because it naturally has less fat. Also, goats produce the least allergenic, most digestible, nutritious milk.

The international goat market is also growing, particularly in Taiwan, the Caribbean, and South Asia. There is enormous potential for U.S. producers to sell to these markets if supply, consistency, and quality can be achieved.

How to Start a Goat Farm

Small producers who want to diversify should strongly consider goat farming, but the decision must not be taken lightly. Buying a few goats from the auction and just turning them loose on a pasture is a recipe for failure, yet many farmers do just that.

Before raising goats, careful and methodical decisions should be made on what type of goat farm you want to have. For example:

- Do you want a few goats as pets and occasional shows?
- Are you looking for a profitable enterprise using goats?
- Are you going to use goats to clear land and property?

- Are you going to be a commercial goat meat producer?
- Is your farm suitable for goat production?
- Will you maintain the integrity of goat breeds by having a purebred farm and provide the industry with breeding stock?

Get as much information as possible:

- Contact your local extension office.
- Search the Internet.
- Visit experienced farmers in your area; networking with other farmers in the business is crucial.
- Analyze the market to determine what type of goat business you should consider.
- Talk to groups such as the Natural Resource Conservation Service, extension, Rural Development, Small Farm Programs, and Sustainable Agriculture Research and Education. These agencies and organizations can help with conservation planning and provide excellent resources to help start your initial goat production enterprise.
- Land-grant universities in goat producing states also provide valuable information.

For beginners, I recommend my easy-to-read book "**Simply Meat Goats**," and, for more advance producers, my newly-published book, "**Goat Science and Production**," may be useful.

The following focuses mainly on meat goats. They are easier to produce on a small farm, require less sophisticated equipment than dairy goats, and face fewer state and federal regulations governing their production.

Goat Production Enterprises

Purebred Production Farms produce a specific breed and preserve the breed quality and integrity. There are a few improved purebred meat type goats, most of them developed in South Africa (Boer and Kalahari Red) and New Zealand (Kiko). They have been bred to withstand environmental conditions similar to those under which they were produced. Spanish and Myotonic goats are indigenous to the United States and are more adaptable to local conditions.

Purebred goats are purchased to improve herd quality and are usually more expensive than commercial goats. Purebred goats may also be a source of income in the 4-H market. As goats gain in popularity, 4-H goat projects and 4-H competition among youngsters will increase and so will market demand for these purebred goats.

It is my contention that the crossing of imported breeds and local indigenous breeds should be a part of a breeding program on purebred farms to produce successful hybrids or crossbreeds, adapted to local environments. This cross breeding may give the industry a

carcass that will consistently meet consumer and wholesalers' expectations on the domestic market.

Commercial Meat Goat Production Farms produce meat mainly for domestic consumption. The type of goats, their age, weight, sex, and color are important factors for different ethnic groups.

As with any type of farm operation, it is best to start small and gradually increase herd size. Buying purebred nannies or bucks to improve herd quality will raise the quality and price received per animal. Most producers purchase their goats from other farms or at auctions and some may produce their own kid-crop.

Be sure to buy your breeding stock from a broker or an individual rather than a commercial auction and a stockyard. Evaluate the farm as meticulously as you evaluate the animals. Most of the older nannies in the auctions are culled for various reasons. Buying younger kids may be acceptable, but be mindful of parasites and diseases. If you are new to the business and do not know much about quality goats, find someone more experienced, even if you have to hire that expertise.

Organic Meat Goat Production can add value and revenue to your farm. Your operation must be certified organic and the animals need access to fresh water and outdoor pastures equipped with

shade and shelters. Animals should be managed under minimum stress and disease conditions and the farm setting should accommodate natural animal behavior.

Pastures must be free from chemical fertilizers or pesticides for 3 years. Processing and application of manure as fertilizer should optimize nutrient recycling. Livestock produced organically must be managed according to the USDA organic standards from the last third of gestation. Feeds must be 100 percent organic. Hormones and antibiotics are not permitted, but vitamin and mineral supplements are allowed, as is the use of vaccines as preventive management practices. Sick or injured animals that need antibiotic or other prohibited medication should be treated, but their meat cannot be sold as an organic product.

Locating a veterinarian who specializes in organic health management is advisable, but goat farmers, more than other livestock owners, generally use home remedies to prevent or cure diseases since there are fewer drugs made or approved for goats.

For more information regarding organic goat production, visit the [USDA Organic Program website](#).

Multi-Enterprise Goat Farms not only produce meat, fiber, or milk, they can also serve as a holistic tool to control brush and restore vegetation. Gross margins for the combination of two

(meat and fiber), three (meat, fiber, and milk), four (meat, fiber, milk, or brush control) or any combination of enterprises requires evaluation. With careful planning, it is possible to manage a dual or multi-purpose cross breeding enterprise that produces for fiber, milk, meat, or vegetation management markets, increasing cash flow and spreading the risk of production.

On multi-enterprise farms, the improved meat type goat can be successfully crossed with dairy animals as a terminal sire to produce a heavier carcass. In addition, dairy goat kids are very popular in ethnic markets. Multi-enterprise farms are well suited as specialty farms serving farmer's markets and organic market locally.

Goat Production Systems in the United States

Generally meat goats in the United States are raised in the Southeast under a temperate and a sub-tropical climate; in the Southwest under a semi arid climate; in the West (California)



under a Mediterranean climate; and in the Midwest under a temperate climate. Management practices specific for meat goat production in these regions are covered briefly below.

The Southeast generally has a mild temperate environment with relatively high rainfall throughout the year, hot and humid summers, and mild winters with fewer than 20 freezing days. Goat production systems in this region vary from pasture and browsing woodlands, to total confinement, or fall somewhere in between.

Feeds include grasses, legumes, browse (mimosa, kudzu), forbs, and under-story brush as forage, sweet potatoes, and peanuts. Cotton by-products and other conventional supplements are available. Forage quality drops drastically in the summer, especially in pastures, requiring commercial energy and protein supplements for optimum gain, but legume or small grain pastures may be used with proper management to reduce the need for supplemental feed.

It is necessary to understand animal production systems at a local level and to take a realistic approach to feeding livestock. To develop sound feeding programs, potential resources must be identified and encouraged. Pasture and browse can play an important role in feeding goats year-round, particularly in the Southeast. Parasite control is one of the major problems in this region and using browse as a part of goat's diet can help reduce parasite load.

The Southwest: Semi-arid goat production is found in parts of Texas, Arizona, New Mexico, California, and elsewhere, on rangeland, chaparral, grasslands, and woodlands, and where dry, sandy, rocky, and saline soils predominate and the environment dictates quality and quantity of vegetation available. This system is characterized by extensive goat production with minimum inputs. Low rainfall, diversified native forage material, extensive rangeland goat production, large numbered goat herds, and hundreds of acres of rangeland per ranch are other characteristics unique to this system. Rangeland vegetation, brush, browse, and other bushes and forbs are naturally present. Natural grassland can provide sufficient forage for growth and meat production in rainy seasons (spring and summer), and forbs, bushes, shrubs, and trees feed free-ranging goats other times of the year. The nutritive quality of vegetation diminishes drastically during the winter and dry seasons and productivity can only be sustained with supplemental feeds; however, supplemental feeding practices are limited. Unlike other systems, dry environmental conditions and extensive goat production mean that internal and external parasites do not pose a major problem and parasite control is rarely practiced.

Highly variable climate and environmental conditions from season to season and from year to year make it difficult to

design supplementation programs for optimum production. Experienced managers can assess range conditions as well as animal conditions to determine quality and quantity of supplemental feeds.

The West - California: An abundance of agricultural products and small-sized farms make California especially suitable for small grazing units, such as goats. Also, its extensive rangeland caters to the browsing ability of goats and mixed grazing. California's Mediterranean climate may help to manage gastro-intestinal parasites in goats with low capital and labor input. Locally grown cereal grains and protein feeds are readily available. Roughages, such as good quality hays and silages, and by-products, such as rice bran, wheat bran, and sugar beet pulp, are common. All kinds of leftover garden produce, sometimes sold in farmers' markets as compost, are a favorite meal.

The Midwest: Many locations provide model conditions for raising goats. Annual rainfall can be plentiful, averaging 100 to 200 inches. Lower precipitation and humidity reduce internal goat parasite problems, and animals thus require less frequent deworming, compared to Southeast. In winter, average daily temperatures range from 15 to 45°F, and in summer are a comfortable 65 to 80° F. Temperatures are more moderate and precipitation is higher in the lower

Midwest, compared to the colder and dryer climate in the upper Midwest.

The Midwest also produces the best quality pastures and forages, reducing the need for supplemental grain feeding. Because winterkill is always a problem, a mixture of plant species for pasture and hay production is needed to ensure quality forage.

Year-long grazing is possible in the lower Midwest, where winter pastures provide cool season grasses and legumes. In the mid and upper Midwest, grazing is only possible for a few months, mainly in May and June. In July and August, Sudan grass or corn can be fed to goats, and harvested hay or silage can be used when the pasture is not available.

Use caution when feeding silage or haylage to goats. Corn silage produces more energy per acre, and more goats can be maintained on it than on any other harvested feed. It is under-utilized because of its labor requirements and because it can harbor the bacteria that cause *listeriosis* (circling disease) if harvested poorly and contaminated with soil. Corn silage is also deficient in protein, calcium, and phosphorus and, for best results, should be supplemented with a protein source like alfalfa.

Haylage is usually produced from alfalfa and brome forage. The quality may be variable, but it is higher in protein and minerals than silage.

It is advisable to feed hay or other roughages along with silage and haylage to reduce metabolism disturbances in goats. A variety of protein supplements are also available for meat goat production, including distillers grain by-products, which are plentiful in the Midwest.

Marketing

Marketing is the business of identifying and understanding consumer needs, tailoring products to best meet those needs, then delivering the product to achieve maximum consumer satisfaction in tandem with maximum financial return. Marketing channels include transportation, handling and storage, ownership transfers, processing, and distribution. In this section I will try to focus on several potential marketing possibilities. However, as indicated in the earlier sections, the meat goat industry is in its infancy in this country, and the United States needs important industry leadership to reduce our dependency on imported meat and safely serve domestic consumers.

Internet Marketing is proving to be a profitable system and, with some creativity, it can produce significant revenue (for more information, see *The Farmer's Guide to the Internet*). It requires meat sold out of state to be slaughtered according to USDA guidelines and in federally-inspected slaughterhouses. Such facilities are not readily available in many states, or the

cost to process the product in these facilities is prohibitive.

Farms selling goat meat must also comply with USDA HACCP (Hazard Analysis and Critical Control Points) principles and must have liability insurance. Seek advice from others who have sold beef or other meat products through the Internet.

Direct Marketing (Farmers' Markets and Fairs/Restaurants/ Community-supported Agriculture): You can also supply goat meat as cooked or processed products. These outlets will increase visibility of goat meat products as a healthier meat alternative and promote awareness of the health benefits of goat meat to non-ethnic populations. Check for regulations governing your region.

Cooperatives: One of the most significant steps that the goat meat industry can undertake is to establish cooperatives of commercial producers. These cooperatives are formed to sell in volume because the market is interested in guaranteeing a constant supply of goats. Among other things, the co-op can also put a floor in the market for goat meat, as for beef, and bring more attractive prices. However, market feasibility studies are important to strategically place the meat in appropriate marketing channels so that maximum profitability is obtained for co-op members. Locating slaughter facilities is important; there is much less profitability in selling live goats for

meat. Selling various cuts of goat meat is considerably more profitable.

Value-Added Agribusiness: Agricultural producers, including goat farmers, receive a much smaller proportion of the consumer's dollars than food processors. Value-added means changing a product and taking it closer to a consumer product, and is a goal of many producers. A value-added meat goat producer must understand the desires of the customers, and focus on the demand side to provide a unique product or service. For example, instead of selling 90-day-old weaned kids at auction, you would keep ownership of the goats while growing to 60-80 pounds, while slaughtered and sold as various meat cuts or, processed into sausage links or patties, etc. There may even be a market for skin, tongue, viscera, etc.

Some value-added agribusinesses in Texas, for example, average more than 60 percent return on product assets, have fewer than five employees and sell less than 50,000 pounds of meat per year (or less than 25 goats processed per week).

These smaller firms are usually more profitable, as they generally have developed a solid business plan and have conducted market feasibility studies. These agribusinesses are located in rural areas and serve the local population. A successful value-added agribusiness entrepreneur will adapt to change, be open to new ideas and opportunities, and manage internal and external resources well. (For more information, please see *Adding Value to Agricultural Products* by Anderson and Hall, 2005.)





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New Mexico Chile **a Staple for Small Farmers**

When you buy chile peppers at the store or local market, how much do you typically bring home? One or two jalapeños? Maybe a pound? It probably depends on where you live and how much you like “spice” in your food. In New Mexico, most consumers take their “chile,” as it is usually called, very seriously. New Mexicans generally do not buy their chile in small quantities. In fact, it is not at all unusual for a single family to take home 40-80 pounds of the pungent pods in one shopping trip.

Luz Hernandez of Gard-N-Hers Farm knows this fact first hand: She sells several thousand pounds of this “hot” commodity each season from her small farm in Las Cruces, NM. Luz’s farm is a beautiful 3.5-acre converted horse farm located in the Mesilla Valley along the Rio Grande River in southern New Mexico. Her Hispanic and Native American roots run deep as she shares how she transitioned her family farm into an “all natural” vegetable and culinary herb operation. When Luz

began vegetable farming full time 5 years ago, she knew she needed a niche to get into the market. Drawing on her Native American heritage, she decided to try her hand at blue corn and other traditional crops. However, she quickly learned that the market for these crops was relatively small in Las Cruces. She needed something that fit the local market better. She decided that vegetables paired with potted culinary herbs were the key.

This strategy proved to be quite successful, but she continued to adapt and learn. “When I first started out at the farmers market, I took a small basket full of chile and I couldn’t sell them.” Customers at the market commented, “These peppers look so good..., but next week can you bring me a 30-pound bag?” This may not be surprising due to New Mexico’s unique cultural heritage: A majority of the state (45 percent) is “Hispanic or of Latino origin,” according to the U.S. Census Bureau.

Growing and processing chile is big business in New Mexico, accounting for \$30 million in annual sales. Chile is considered to be the signature crop of New Mexico, and is even alluded to in the official state question: "Red or green?" The long growing season (nearly 8 months) and unique climatic conditions contribute to the flavor and popularity of the crop. When asked what makes her chile unique, Luz replies "The soil."

Gard-N-Hers farm is an "all natural" operation, adopting most of the principals of organic production, including an emphasis on active soil management. Luz takes all natural vegetable farming seriously because, "I feed the community."

Traditionally, New Mexican families picked or purchased large quantities of chile each year at the peak of the season, then returned home for a day of roasting, peeling, stuffing, freezing, processing, and socializing. Today, the pungent smell of chile still wafts through the air in the Mesilla Valley, but now it is in the market place and at the point of sale for customer convenience. When Luz transitioned from growing just a few of rows of chile for fresh sales to nearly an acre a few years ago, she discovered this unique market demand and had to borrow, then buy, a chile roaster of her own. Her customers not only demanded her delicious green chile in a 40-pound



sack, but they also wanted it roasted. Much like the aroma of brewing coffee can increase sales near a local cafe so, too, can the intoxicating smell of roasting green chile.

New Mexico is the nation's premier producer of green chile peppers. Green chile is picked while still immature, fire-roasted, and peeled before further use. Consumers take the roasted chile home for immediate consumption or to freeze for later use. Unlike the mild canned supermarket green chile, New Mexico green chile (sometimes mistakenly referred to as 'Anaheim') can range from mild to quite hot.

Chile has been grown in what is now New Mexico for centuries, mostly in small, family gardens. In 1894, Fabian Garcia, a pioneering horticulturalist at New Mexico State University, looked to improve and standardize chile peppers for commercial production. Garcia found success with the release of 'New

Mexico No. 9,' which had characteristics that appealed to both Hispanic and non-Hispanic consumers and opened new, commercial markets. This led to the establishment of the New Mexico chile pepper food industry which continues to grow.

The New Mexico chile crop serves as an anchor for traditional Hispanic culture in the state, and Luz Hernandez will continue to serve the needs of that market. She already has orders

coming in for green chile that will be harvested later this summer, although the young plants are only 3 inches tall right now. "I'm already getting orders in and I'm sweating it." She does it because of her heritage and because she loves it: "I am a farmer through and through ~ from the heart."



**Anchi Mei, International Rescue Committee
San Diego, CA**

Sharing and Selling New Crops at the New Roots Community Farm

The San Diego International Rescue Committee's (IRC San Diego) Food Security and Community Health Department has a wide range of programs aimed at creating locally-grown food projects involving refugees and new immigrants within a community-building context.

Background

IRC San Diego opened its doors in 1975 to respond to the heavy influx of Vietnamese refugees resettling in to the San Diego area. Since that time, IRC San Diego has emerged as a

community leader in the safe resettlement, integration, and economic empowerment of over 21,000 refugees and other new immigrants. In early 2006, IRC San Diego expanded core re-settlement services to directly address the health and nutrition disparities often experienced by refugees.

Since then, the Food Security and Community Health Department has evolved into a multi-faceted program that addresses the systemic health concerns of refugees through

emergency food assistance, nutrition education, urban agriculture, increased access to and purchasing power for healthy foods, and advocacy. IRC San Diego's work in creating farming opportunities for refugees is well-situated within a wider community network of local food activists, backyard gardeners, health professionals, and community organizations all devoted to increasing access to and local capacity to produce healthy foods.

In 2009, IRC San Diego started the 2.3-acre New Roots Community Farm (the Farm). The Farm offers growing space to refugees, new-immigrants, and neighbors. Operating from sunrise and sunset, the community farm has 80 individual plots (approximately 600 square feet). The Farm also has a tool shed, compost education center, greenhouse, and a shaded gathering space/outdoor classroom. The Farm has the following three primary goals:

- Provide land on which low-income community members can grow fresh, culturally-desirable food for newly re-settled refugees; and
- Create a pathway towards larger-scale farming for refugees interested in returning to their agrarian roots.

Enterprise Opportunities

Over the past year, many New Roots farmers have begun to engage in entrepreneurial activities on multiple scales.

From a production perspective, New Roots Farmers have been growing many culturally-desirable crops (including foods not readily available or affordably-supplied in local markets) for their families and, thus, extending their food budgets by a significant percentage. Farmers have exchanged and gifted crops amongst themselves. It is now common for farmers belonging to a church or community organization to bring their harvest for group celebrations.

Farmers have also given, sold, and exchanged crops grown at the Farm with neighbors, friends, and family off the Farm. Farmers are also selling crops to local ethnic restaurants in their community. Additionally, IRC San Diego's food and farming resource coordinator has worked with several farmers to sell their produce to several "farm-to-table" restaurants (and garnering top dollar in those cases!). These "farm-to-table" restaurants are particularly interested in the specialty niche crops that the farmers are able to offer.

In the autumn of 2009, IRC San Diego began the Refugee Entrepreneurial

Agriculture Program (REAP) to support New Roots farmers interested in larger-scale farming as a form of economic livelihood. Nineteen New Root farmers participated in a 4-month training program that resulted in hand cultivation of over 2 acres of land. As part of a the USDA Community Food Projects grant, Tierra Miguel Farm has donated the use of 5 acres of land on their property for the REAP program. Crops were chosen based on desired vegetables for Tierra Miguel’s community-supported agriculture (CSA) box. A portion of the crops grown were sold into the CSA box, and the rest have been sold to local restaurants.

In the early spring of 2010, IRC San Diego began its newest venture with an aquaponics system. We currently have

over 1,400 tilapia growing in two tanks connected to 12 hydroponic vegetable beds all housed in a greenhouse. The aquaponics system sits on a small urban site in the center of the neighborhood’s commercial core and will eventually house several demonstrations of efficient aquaponic growing techniques.

The next project on the Food Security and Community Health Department’s horizon is certification of all our various farms for sale at the local farmers’ market. This certification will enable IRC San Diego to offer an affordable, accessible local sales venue to a wider range of farmers to sell their produce.





Andy Wetherill
Delaware State University

Exploring Marketing Opportunities for Ethnic Vegetable Producers in Urban Centers

For beginning and immigrant farmers in Delaware and the Mid-Atlantic region, marketing ethnic and specialty produce to retail outlets in urban centers can be a successful and profitable venture. However, producers may be unfamiliar with some of the risks associated with the marketing of ethnic crops in urban centers of the Mid-Atlantic states. They may know how to produce ethnic crops in the sub-region but have limited knowledge of what is required to sell their produce. With proper planning, good research, and an effective selling strategy, producers will be able to ask the right question to find the right answers. These answers will help the producer develop a series of steps to sell his produce to these markets and realize economic returns on his investment.

Where does the producer start? The producer begins with the development of a business plan. The business plan is used to define the organization of the business. Among other things, the business plan determines the agricultural output to be produced, the financial justification to conduct business, and the human resource capability of the business. A [SWOT](#)

analysis (strengths, weaknesses, opportunities, threats) further refines the farm's capability to thrive as a business. In summary, the business plan will assess the producer's viability and feasibility of producing crops for market.

The marketing plan is an essential part of the business plan. The marketing plan will identify and address product, price, place, and promotion to deliver produce from operation to market. Through market research and analysis, the producer will identify his competitors, his customer base and his customers' needs. The producer will then develop a marketing strategy. The marketing strategy will help him to decide the product to be marketed, his consumers, and when and how the products will be sold. The final step in the marketing strategy is the selling of vegetable product at these markets.

Selling occurs when producer and buyer develop a relationship to conduct business. In this relationship, the producer sells himself, his company, and his product. So, where can the producer go to identify potential buyers?



Retail outlets that purchase ethnic vegetables include restaurant, independent grocery stores, and vendors and specialty food stores. Information on these businesses is found through market assessment. Information sources include local, state, and federal agencies, extension professionals, other farmers, and not-for-profit organizations that assist farmers. Information can also be found in magazines, newspapers, Internet, and the food sections of local newspapers and food festivals.

What does the producer need to know to begin implementing a selling strategy? How does he make a connection with potential buyers? He should have good communication with the buyer or customer.

Make contact with the seller. Cold call; with good research you can pinpoint the right customer to call. Making personal visits and bringing samples to customers is another way of making contact. The customer has to know

what you produce. Follow-up visits or phone calls are important to make that initial connection to consumers.

Buyers may be interested in receiving additional information, such as:

- Does the producer have a business license?
- What quantity can producers supply, for how long, and at what price?
- In the case of spinach, can producers deliver produce as stalks or as leaves?
- Is other produce available in the product mix?

Timeliness of visit is very important. Discussion of business opportunities should be during an off period of the business. For example, it may be better to visit chefs between 2 and 4 p.m., when they are not preparing lunch or dinner. For grocery stores, it may be better to visit the buyer on Wednesday when store traffic is slow, rather than on Friday when store traffic is high.

How does the producer maintain a good relationship with his customers? The producer does this by delivering the product at the right time, place, and in the right quantity. The producer should show the buyer that he will deliver the produce that he says he will deliver. If the producer cannot deliver the goods, he should inform the buyer early enough for him to seek the

produce from another source. The producer should seek to create a regular delivery schedule unless the buyer prefers a more irregular schedule. Consistency of produce is important as well. The retailer expects to receive high quality produce for every delivery. In this way, the producer develops a culture based on trust and integrity. Only when trust is built between buyer and sellers will the seller be able to increase his sales and increase his price, creating a platform to increase income and increase profits for producers.

Success in selling is enhanced by fostering regular communication between seller and buyer. With regular communication, a producer can evaluate the effectiveness of his selling strategy and address obstacles that impede marketing transactions. In addition, this feedback will position the farm business to increase sales to the same buyer, increase the product mix to the same buyer, and expand market opportunities to other buyers. For example, if the customer is taking regular orders, ask him if you can be of any further assistance. This will show the customer that you are interested in the success of his business.

You should expect professionalism and fairness from your buyers. For your business to thrive, timeliness of payments and timeliness of orders

should be expected from your buyer. It will facilitate the smooth flow of operation and ensure that high quality products reach the retailer in a timely manner. The producer should expect a fair price for his products and his time.

The producer should be open to feedback from the buyers of his product. If a customer no longer buys your produce or has reduced his orders, ask why.

The end product of marketing goes beyond selling your products to your present buyers. It also involves constant evaluation of marketing strategies, and the operations capacity to deliver more products to more customers. Thus, the producer should be able to answer the following questions: What are our products? What are our strengths? And, what are our customer needs? This will help the producer set realistic targets and make sound business decisions, allowing him to formulate a plan to implement and control his marketing strategy.

Market research should be ongoing as well. Market research will illuminate any changes that are taking place in the market. The researcher should identify changes in the regular pattern of buying and competitors influence on the markets, as well as price. This research will help producers answer the following questions: What are the opportunities to sell other products to

existing customers? Can customers buy larger quantities more frequently? What else do they need? Are there opportunities to sell to more new customers?

Knowing the trends and habits of the market, conducting ongoing business analysis, implementing a sales strategy

that focuses on the needs of consumers, and selling at competitive prices will increase the chances of new and beginning farmers developing a successful and thriving business.

Richard H. Molinar,
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Gailon, Bittermelon, and other Unusual Ethnic Crops

The demographics of our American population are rapidly changing. Asian, Hispanic, and other minority numbers will continue to increase over the next 30 years, eventually comprising the majority of our society. This diverse population incorporates separate cultures, languages, and food preferences into our traditional American culture.



Bittermelon (*Mormodica charantia*) and **Gailon** (*Brassica oleracea* var. *alboglabra*) are but two of the more than 100

Asian vegetables being grown in Fresno, CA. These little-known vegetables are very common to the 1,300 Hmong, Mien, Lao, Chinese, and Cambodian refugee farmers growing them for the specialty markets in Fresno and the rest of the nation. About 850 of the Asian refugee farmers in Fresno are Hmong, 350 are lowland Lao, and 50 are Mien, primarily from Laos via refugee camps in Thailand.

We are all familiar with squash, watermelons, and cucumbers in the cucurbit family, but less familiar with bittermelon, Luffa, opo, donqua, snake gourd, moqua, sinqua, Hmong

pumpkin, and kabocha in that same family. Radishes are common in salads and salad bars, but when was the last time you had daikon? It is of the same genus and specie as radish, but daikon is 10-18" long, white, and has a much milder, very pleasant taste. Gailon, or sprouting broccoli, is a milder and more tender form of the regular broccoli.

Almost every traditional American vegetable will have an equivalent Asian vegetable, used in a similar fashion. Sinqua is to the Hmong consumer as zucchini is to the American, but sinqua is usually sweeter and better tasting. For years the supermarkets have been selling the large globe-shaped American eggplant from the Solanaceae family, not offering the lesser known elongated Chinese or Japanese eggplants, which are also more flavorful.



Lemongrass (*Cymbopogon citrates*) can be found on every Asian farm in Fresno. Last

year's plants are divided and single culms are planted in March. The harvest starts in November, 9 months after planting, and can continue throughout the next year, when market prices improve. Plants are sensitive to frost and are protected in the wintertime with a 4 mil clear plastic in the form of a modified greenhouse.

Are Ethnic Crops profitable? The short answer is YES *and* NO. Like any other crop in the market, prices fluctuate. I can tell you from experience that having a unique and different crop does have certain advantages. For one, it may get you into a farmers' market easier if there happens to be a waiting list. Market managers like to be able to offer diversity in the market for the shoppers. Restaurants and retail stores like to be able to offer some specialty items along with the regular offerings. The American consumer is becoming more educated and adventuresome – willing to try different foods. We have a dozen cost studies that look at different specialty crops and, given the right price and yield, the Asian crops can be quite profitable.

For example, at an average yield of 2,100 pounds per acre from **Chinese eggplant** and a wholesale price of \$8 per 30-pound box, the farmer would net \$3,500 per acre. When you consider eliminating costs for plastic tunnels in the spring for frost protection and labor to harvest (use your own family), the potential net would be considerably higher. The nice thing about these online cost studies is they are also available in EXCEL, so the user can subtract or modify costs or prices to reflect their own farm conditions. (See Bittermelon, Beans-Longbean, Cucurbits-Sinqua, Cucurbits-Moqua, Daikon, Eggplant-Oriental,

Lemongrass, Squash, Strawberries, Tomatoes-cherry.)

The farmer needs to be involved. I don't want to imply it is a 'cake-walk' or easy-pickins' with growing ethnic crops. The farmer still needs to sell his/her crop. Restaurants have to be called upon and market managers have to be convinced your crop is something the consumer does indeed want. You may need to distribute recipes or promote other advantages of your crop (antioxidants, local, organic). If it is a crop you are not accustomed to growing you may encounter a different set of problems – e.g., fewer pesticides registered for the crop you are

growing, less information about the growing of the crop, or a lack of postharvest information in the storage of the crop. Check with your extension service and local non profits working with ethnic farmers.

Always be sure to research your ethnic crop, research your customer base (ethnicities, preferences), research potential market channels, and evaluate potential revenues and expenses.



*PHOTOS : Richard Molinar, Michael Yang
California Cooperative Extension*

RESOURCES

- ◇ [Alternative Farming Systems Information Center](#), USDA's National Agricultural Library. Search "Ethnic Crops."
- ◇ [ATTRA news](#) and [Weekly Harvest](#): newsletters from The National Sustainable Agriculture Information Service
- ◇ [Ethnic Crops](#): production and marketing information from the University of Massachusetts Extension
- ◇ [Exploring New Opportunities for Scotch Bonnet Hot Peppers](#): Florida A&M University, Cooperative Extension
- ◇ [Florida A&M Small Ruminant Program](#)
- ◇ [Food Safety Costs Doubles for California's Leafy Greens Growers](#): University of California Small Farm News
- ◇ [Food Safety.Gov](#): information from the federal government
- ◇ [Guide to Asian Specialty Vegetables in the Central Valley](#), by [Richard Molinar](#) and Michael Yang, produced through the University of California, Small Farm Program
- ◇ [Healthy Food Healthy Communities: a decade of community food projects in action](#)
- ◇ [Institute for Social and Economic Development](#)
- ◇ [National GAPS Educational Practices](#): from Cornell University
- ◇ [National Immigrant Farming Initiative](#): resources, including seed sources
- ◇ [New Entry Sustainable Farming Project](#): from Tufts University. This program is highlighted in the recent *SARE report: [Large-Scale Help for Small-Scale Farmers](#)*.
- ◇ [Niche Meat Processor Assistance Network](#)

- ◇ *Raising Goats*: NIFA Small Farm Digest, fall 2007
- ◇ Small farm programs at land-grant colleges and universities
- ◇ Small Farms and Alternative Enterprises: Florida A&M University
- ◇ Small farms and Specialty Crops
- ◇ Sowing the Seeds for a Better Future: Alvarez Farms; one of an interesting series of case studies from Northwest Direct
- ◇ Sustainable Agriculture Research and Education
- ◇ Tohono O'odham Community Action's "Traditional Foods Project"
- ◇ World Crops: a website providing information on crops that are popular among ethnic groups in the North East United States. The website is supported by Cooperative Extension in New Jersey, New York, and Massachusetts, as well as SARE and the Risk Management Agency.

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