

Native American Consumer Perspectives: A Study of Household Assets and the Decision to Purchase Local Food Products

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Extended Abstract

Food security and economic development are high priority concerns for Native American tribes. In arguably the richest nation in the world, there can be little doubt that Native Americans live in economic hardship. The 2005-2009 American Community Survey (ACS) enables U.S. individuals and households to be compared with Native American individuals and households on reservations. While the annual per capita income of the U.S. population was \$27,041, Native American annual per capita income was about 38% less at \$16,626. While median household income was over \$51,000 for U.S. households, median household income was nearly 20% less, or \$41,798, for Native Americans. The percent of the civilian labor force that was unemployed stood at 7.3% in the U.S. general population, but for Native Americans, the unemployment rate was over double that at 15.8%. While 13.5% of U.S. population lived below the poverty level, nearly one-third, or 32%, of Native Americans lived below the poverty line.

This research project addresses several important questions of national and tribal significance. Firstly, it describes the local foods purchased and consumed in the community. Secondly, it assesses the ability of household members to produce local foods now and their interest in learning more about producing them. Thirdly, this study asks, what factors associated with household-defined assets can influence consumer decisions to purchase local food products? And finally, the study asks, what factors associated with household-defined assets influence the household members' interest in producing (gardening, preservation, and butchering) local foods? The answers to these questions are pursued through using demand (consumption) and supply (production) model, and a family capitals and perceptions conceptual framework.

This research investigates the relationship of household human, financial, social, and cultural capital and the decision to purchase locally produced food products. Specifically, this research identifies the household or family assets (capitals) that influence consumer decisions to purchase local food products in tribal communities. This research also describes the availability of local food products that meet the purchasing criteria of households. The research questions and corresponding sub-questions for the study are as follows:

R1: What family capitals (human, social, and financial) influence consumer decisions to consume locally produced food products?

R2: What positive perceptions (health, cultural, financial, and social) influence consumer decisions to consume locally produced food products?

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R3: What family capitals (human, social, and financial) influence decisions to produce (supply) food?

R4: What positive perceptions (health, cultural, financial, and social) influence consumer decisions to produce food?

This research project used a quantitative survey questionnaire to collect data. Quantitative analysis is the numerical representation of observations for the purpose of describing and explaining social phenomena. Survey questions were developed based on a previous exploratory qualitative study conducted on Native American consumer sentiments. The research team identified sampling frames and variables of interest. Surveying was conducted using face-to-face interviews with trained interviewers using a written questionnaire. The unit of observation was the household food purchaser, who was identified by the interviewer.

Human capital (education) and health and social perceptions are the most important determinants of the number of locally produced foods consumed and the frequency of consuming those foods. People with a higher level of education are more likely to know about the benefits of a healthy diet and associate a healthy diet with consuming locally produced foods. In addition, those people concerned about health issues, and who have more positive health perceptions, are more likely to be concerned about a healthy diet and associate a healthy diet with consuming locally produced foods. If the intent is to maximize the consumption of locally produced foods, it would appear that educating people about the health benefits would yield the most substantial results. In essence, the primary issue facing the locally produced food notion is successfully marketing the concept, where locally produced food is perceived to be a safe and healthy alternative to other non-local food available.

The two Native American communities assessed in this study were nearly 1,000 miles apart and had substantially different local foods potential. The Native American reservation was in the northwest inter-mountain region and considered big game (primarily, elk and deer) and chokecherries to be their most important local foods. The Native American pueblo was in the southwest region and considered corn, chili, and melons to their most important local foods. The reservation is occupied by Native Americans with a history of hunting and gathering in relatively small bands; while the pueblo is occupied by Native Americans with a history of farming and ranching. The distinctive characteristics of these two Native American communities were revealed in the most important factors influencing the number of local foods consumed. The hunting and gathering community of the reservation cited human capital and health perceptions as the most important factors positively influencing their consumption; while the more socially coordinated farming and ranching community of the pueblo cited social perceptions as the most important factor influencing their consumption. Marketing the local foods notion to these two communities will likely require two distinct strategies: (a) emphasizing the importance of the health benefits, such as added nutritional value, to the reservation community; and (b) emphasizing the social value, such as philanthropic value of sharing with others, to the pueblo community.

The farming and ranching community of the pueblo is currently heavily vested in agricultural production with nearly half of the respondents growing gardens, nearly two-thirds preserving food, and nearly 90% butchering livestock. In contrast, the reservation community has only 15% of the respondents growing gardens, one-third preserving food, and just over 50% butchering. There are many factors not considered in this study that would account for these differences in production, such as climate, availability of arable land, local rules on hunting wildlife, land tenure (or property rights), distance to market, knowledge passed down from elders, and a host of other considerations. This study suggests people who have more human capital (education), more positive health attitudes, are employed, and feed larger numbers of people in their households each day are more likely to have a garden. In order to successfully market the notion of local production, programs educating people about gardening and the positive health attributes of local production are critical. It appears that those with more education, more positive health attitudes, and a higher probability of being employed have the most potential to become suppliers in the local food market.

More households engage in food preservation activities than gardening. Interestingly, those respondents with higher income were more likely to preserve food in the pueblo than other households. Perhaps, higher income households have enough financial resources to enable one or more people in the

household to engage in household production, such as canning, freezing, and other food preservation. While lower income households might have more time available for household production, they may find that time utilized in obtaining public assistance from the tribe, state or federal government. Making the acquisition of public assistance more efficient may actually “free-up” more time for household production.

Butchering was the most widely practiced local production activity in both communities. Those respondents with more social capital were more likely to butcher than other households in both communities. Butchering for cultural events is still important; hence, those with more social capital still engage in butchering. Interestingly, age was positively related to butchering in the reservation and negatively related to butchering in the pueblo. Based on other conversations, butchering in the two communities was substantially different; in the reservation community, more big game animals (elk and deer) are butchered, while in the pueblo community, more domestic livestock (cattle, sheep, and pigs) are butchered. Hunting is largely an activity of younger men in the reservation community. Since domestic livestock don't need to be hunted, butchering of domestic livestock is the responsibility of younger people in the pueblo community. In the reservation community, elk and deer require young men to spend time hunting and dressing-out these animals, while the actual butchering is left to older people in the community.

Three other factors—financial capital, positive health perceptions and number of people fed—were important determinants of butchering on the reservation. The hunting activity and consumption of big game meat are both normal goods, where individuals with higher income are more likely to hunt and consume big game meat. While people with less income may have more time to hunt, they may not have the other resources (e.g., vehicle, gas, gun, and ammunition) to hunt often. Big game animals graze on the vast natural pastures of the reservation; hence, there are perceived to be many health benefits to consuming elk and deer meat. Positive health attitudes were not an important factor on the pueblo perhaps because the health benefits of consuming locally produced livestock are perceived to be somewhat lower and less important to them. And finally, the number of people fed was an important factor for the reservation because big game meat can be a less expensive source of protein. These larger families are more likely to hunt year round, which is permitted for tribal members on reservation land, to sustain their family, rather than occasionally for the “sport” of hunting.

The best evidence of local production likely comes from those who currently produce. While a majority of the households surveyed had people residing in the household who knew how to produce, a substantially lower percentage of households were actually producing. Unfortunately, this study didn't explore how much local production was consumed in the household versus how much local production was sold on the market. Clearly, the local market is substantially larger on the pueblo because of its proximity to a large metropolitan area (less than 50 miles from a city of more than 500,000 people). Perhaps, the higher production numbers reflect the much larger local market available to them. The reservation is located over 100 miles from a much smaller metropolitan area of less than 150,000 people.

In addition, the pueblo community has a much longer growing season for garden produce. The longer growing season allows them to grow a wider variety of crops and supply produce to the community for a longer period of time. Although, drought conditions in the pueblo have severely delayed and diminished local production over the past year. Conversely, flood conditions on the reservation have delayed planting and delayed local production over the past year.

Land tenure arrangements in the community appear to foster agricultural production because families are allocated the same parcels of land each year with minimal risk of the property being reallocated to another family. Hence, these family plots of land are relatively well maintained. In addition, their most precious input, water, is available because of concerted effort of all men in the community to clean and maintain the irrigation ditches and make sure each plot has access to water. In the reservation community, land tenure arrangements are more tenuous and most arable land is less productive. While some community members have garden plots next to their houses, the size of the plots is much smaller and the productivity of the land is lower. Most importantly, given the productivity of the land, tribal authorities lease out large parcels of land for grazing to more large scale producers. The small farm or household producer is not able to compete for this land for financial and political reasons. Any attempts to increase local food production in the reservation community will require reevaluating current leasing arrangements and making more tribal land available to small scale local foods producers.

This study suggests that both communities have the capacity to participate in the local foods market. While local consumption is an important factor, the opportunity to market local foods to a larger population is also important. Location is a critical factor for both communities. It would appear that the pueblo community has an excellent market available for its specialty products, blue corn and melons. The reservation has a much more substantial challenge on two fronts; a large market is not easily accessible and they don't produce local foods unique to the reservation. Their two most popular local foods, big game and chokecherries, are not domesticated foods; hence, they depend on traditional hunting and gathering practices on the reservation. Wild meat and chokecherries could be marketed with appropriate processing facilities on the reservation. In short, the costs of entering the local foods market will be more costly on the reservation than on the pueblo community.