



Acequia Culture and the Regional Food System

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Acequia irrigation originated in the highlands of Central Asia more than 10,000 years ago and traveled to places such as India and the Middle East. As acequias were established in different areas from the Old World to the New, crops from those areas were incorporated into the diet and practice of acequia culture. By the time the acequia system arrived in the Americas in the 16th century, it carried with it an entourage of crops and animals that represented its origins: apple trees and chickens from Asia, cattle and sorghum from Africa, sheep and many legumes from the Near East, to name a few.

The Old World acequia tradition was matched by incredible agricultural development of indigenous populations in the Americas. Indigenous peoples were practicing many kinds of agricultural production that relied on intensive management of the landscape, including dryland agriculture, floating gardens, agri-forestry, terracing and flood irrigation, among others. The acequia concept came northward with Spanish and Mexican settlers and later included the crops and practices of Puebloan cultures as it took root in what would become New Mexico.

Over time, a unique and integrated food system developed that can only be found in New Mexico. A mixture Old and New World foods, crops and traditions developed into a regional food system that was mostly sustained by acequias. Communities relied on each other to provide staples that could be produced abundantly in their respective environments. What could not be grown in particular areas was obtained through barter with other communities. For example, chile produced in villages of lower elevations could be traded for potatoes that came from higher elevations.

New Mexico eventually experienced significant changes of modernization, many of which interrupted agricultural practices and our relationship to local food and acequias. Some lands shifted to pasture and alfalfa production, feeding our desire for dairy and meat products. Today, acequia use can be measured in the production of bulk commodities and smaller-scale specialties that feed farmers' markets, as well as the continuation of traditional agriculture and food traditions. Many foods from acequia systems continue to be the cornerstone of local culture and regional cuisine, with specialty foods like *chicos* (dried *horno*-roasted corn stew), *tamales*, *posole*, and of course, chile, making appearances at least for holidays. Many others regularly consume *atole* and *chaquegüe* (blue and white cornmeal porridge), crops that were grown in or originated from an acequia landscape.

As a person looks to reconnect with local food, the best place to start is with what has worked in the past. The acequia tradition offers practicality and sustainability for food production in our environment, which can be characterized by alkaline soils, limited water and potential weather extremes. Over generations of agricultural refinement, acequia culture offers examples for the expansion of our regional food system in terms of community organization, resiliency in practice and its relationship with incidental food production in the landscape.

The term acequia not only refers to the physical irrigation channel but to all the members who belong to it and help manage it. Local knowledge contained within the community and the organizational structure that keeps people connected to the tradition will be important for strengthening our regional food system. Acequia communities manage resources like water and land together for mutual benefits in agricultural production. These relationships result in people coming together to continue the practices necessary to the production of food such as cleaning acequias, picking up bales, or butchering animals (*matanzas*).

The acequia agricultural tradition can be described by the use of diverse crop and animal types and land-use techniques in the watershed. Production takes on a seasonal character with different activities meeting each season. Root crops and certain grains can be planted in the late fall; certain frost-tolerant legumes, roots and other grains can be planted in the late winter/early spring; and most grains, legumes, fruits and vegetables can be planted in the late spring and early summer. Working with various crops at different times of the year can allow the grower to take advantage of the potential qualities of each season, such as temperatures and moisture, and can create the conditions for more sustainable yields over the long term.

Acequia culture also carries with it the concept of *jardín de riso* and gathering the landscape, components of a regional food system likely to gain importance as we increasingly feel the effects of a deteriorating industrial food system and climate change. The *jardín de riso* is the collection of wild plants that serve as food and medicine that happen to self-propagate in the irrigated landscape as “weeds.” Several varieties of wild spinach (*quelites*) and purslane (*verdolagas*) flourish among crops in acequia-irrigated fields. The relationship acequias have with the extended landscape provides a connection to additional food resources such as piñón, *chimaja* (wild parsley) and other food and medicinal plants. In this tradition, gathering from the landscape can strengthen our regional food system by making use of wild plants such as four-wing saltbush and Indian ricegrass. These food sources that thrive in our landscape were an important part of the diet of indigenous people of the region prior to European contact.

It is inevitable that there will be some challenges to our food security in the future. But these challenges can be met by innovations in our relationship to food if they are based on what has worked in the past and developed in a manner that is respectful to the environment and the cultures from which they came. Acequia agriculture has been a cornerstone in the organization of the community and the actualization of food security and can (and should) continue to play a fundamental role into our future. Then our regional food system not only will serve the food needs of our population, but will allow the continuation of longstanding agricultural traditions in New Mexico. The acequia landscape has changed, but every square foot of land connected to the acequia now represents a great part and potential of our regional food system and its ability to feed our communities.

Miguel Santistevan is dedicated to the conservation of traditional agricultural practices, seeds and acequia systems. He maintains a small acequia-irrigated Permaculture farm in Taos with his wife and two daughters. More information about Santistevan's various activities can be found at sofelizfarm.wordpress.com