THE SUGAR INDUSTRY IN UTAH
Leonard J. Arrington

Utah achieved prominence in nineteenth-century America for its efforts to produce sugar from sugar beets; and the production of beet sugar contributed substantially to Utah’s economy for almost one hundred years.

Sewing sacks of refined U and I sugar circa 1935

A first bold attempt was made in the early 1850s, when LDS leaders studied French manufacturing, formed a company, imported 500 bushels of seed, transported heavy machinery from Liverpool to New Orleans, then by riverboat to Fort Leavenworth, Kansas, and thence via fifty-two ox teams across the plains to the Salt Lake Valley, where it was placed in a factory at “Sugar House,” south of Salt Lake City. Though beets were raised and processed, the factory never quite managed to solve the chemical problems of converting beets grown in alkali soil into granulated sugar.

With the further development of the beet and its manufacture, and with the increased population in the territory, a renewed attempt was made in the 1880s. Particularly active in keeping interest in the industry alive was Arthur Stayner, a horticulturist from England, who used his energies and property in experiments with sugar cane, sorghum cane, and sugar beets. In 1887 Stayner received a $5,000 bounty from the legislature for the first 7,000 pounds of marketable sugar produced in Utah. Stayner visited other early experimental sugar-producing plants, and with passionate earnestness he solicited the support of the LDS Church and business leaders in the formation of a company to finance further investigations. Incorporated in 1889, the Utah Sugar Company, which was largely financed by the LDS Church, sponsored studies, analyses, and investigations leading to the completion in 1891 of a $400,000 beet sugar factory at Lehi. Constructed by E.H. Dyer, this 350-ton capacity plant was the first beet sugar factory in the United States built with American machinery. When asked their motive in using the agency of the church to promote an enterprise of this nature, Mormon officials replied that this was one means of fulfilling their covenant to redeem the earth and build up the Kingdom of God.

Fact:

The sugar beet is the “historic” state vegetable.

The Spanish sweet onion is the state vegetable.

The success of the Lehi factory encouraged Mormon capitalists to establish factories in other settlements. Utah had several advantages in attaining leadership in beet culture. With a high birth rate and underemployment in many towns, the state had an abundance of boys to thin, weed, and harvest the beets, as well as many men to work in factories. With the state’s well-developed irrigation agriculture, and the improved practices developed by scientists at the Utah State Agricultural Experiment Station at Logan, beet growing soon became attractive and profitable. After the Lehi plant was confirmed as a technical and financial success in 1897, many new factories were established in the West, including seventeen in Utah.

Sugar beet proponents were confident that a local factory would increase employment opportunities, bring higher wages, and assure higher and more stable farm incomes. Sugar would be available for humans, the plants' tops, pulp, and molasses were fed to animals, and the roots remained in the soil to enrich and condition it. Since the sugar was a mixture of water, sunshine, and air, the beet took nothing from the soil that was not returned in the form of manure from the animals that ate its by-products. Beets were ideal for rotation with grains, vegetables, and other crops that tended to exhaust the soil. The crop lent itself to stockfeeding, improved the land, and provided the farmer participating in irrigation projects with the cash to meet his payments and buy new equipment.

David Eccles joined with C.W. Nibley and others to build factories in Ogden (1898), Logan (1901), and Lewiston (1905). These and other factories outside the state were combined in 1915 as the Amalgamated Sugar Company. The LDS Church and its associates built a factory in Garland in 1903, as well as others in Idaho to form the Utah-Idaho Sugar Company in 1907.

The American Sugar Refining Company, under the leadership of Henry Havemeyer, purchased a controlling interest in all of these factories in 1902. The advantages of this arrangement were that it returned capital to local investors, left the management of the companies in the hands of local people, and promised that Havemeyer and his associates would put up half the money on new factories. Havemeyer also furnished "three wise men" from the East—a chemist, an engineer, and an agronomist—to serve as technical advisors. This deal made possible the erection of factories in Garland and Lewiston. Later factories were built either by Utah-Idaho and/or local interests: in Elsinore (1911), Payson (1913), Layton (1915), West Jordan (1916), Brigham City (1916), Moroni (1917), Delta (1917), Mapleton (1918), Gunnison (1918), and Honeyville (1920). Most of these factories employed Lehi "alumni" to pass on the benefit of their expertise.

Three problems plagued the beet sugar industry in the years that followed. First, the failure of the U.S. government to prevent a postwar agricultural depression after World War I. Farm prices and incomes dropped precipitously in 1920-21, and remained low until the 1930s, when as a result of the Great Depression they declined even further. Second, the invasion of the beet leafhopper (Eutettix tenellus, or white fly) in the 1920s caused a "blight," or "curly top," that devastated crops. Where the disease seemed to be endemic, factories were dismantled or removed to more promising locations. Thus, the plants in Lehi, Elsinore, and Payson were dismantled; the plant at Nampa, Idaho, was moved to Spanish Fork; the plant at Moroni was moved to Toppenish, Washington; and the plant at Delta was moved to Belle Fourche, South Dakota. In the 1930s a strain of highly resistant beet seeds was developed, but in the meantime the industry had been hurt.

The third factor was that the industry was forced to mechanize in order to remain competitive with cane sugar. Labor costs were reduced mechanized planting and harvesting. Before World War I, eleven hours of labor were required to produce a ton of sugar beets; by the 1930s this had declined slightly to nine hours; in 1958 it had gone down to four; and by the 1960s, it was less than three hours, which was less than one-fourth the labor requirement of the pre-World War I period. Factories also underwent improvements, especially with a process invented by Utah-born Harold Silver. But it all required capital. Although the cost of producing a ton of sugar had gone down, it still was not always competitive with the cane sugar coming in from Hawaii, the West Indies, the Philippines, and Africa.

By the 1980s there were no beet sugar factories in Utah. The Utah-Idaho Sugar Company had abandoned the production of sugar, and the Amalgamated Sugar Company, with headquarters in Ogden, had only four plants—three in Idaho (at Rupert, Twin Falls, Nampa), and one in Oregon (at Nyssa). Despite this reduction in plants, in 1990 Amalgamated was the second largest producer of beet sugar in the United States, with sales grossing $400 million per year.

See: Fred G. Taylor, A Saga of Sugar, Being a Story of the Romance and Development of Beet Sugar in the Rocky Mountain West (1944); Leonard J. Arrington, Great Basin Kingdom: An Economic History of the Latter-day Saints, 1830-1900 (1958); J.R. Bachman, Story of the Amalgamated Sugar Company, 1897-1961 (1962); Leonard J. Arrington, Beet Sugar in the West: A History of the Utah-Idaho Sugar Company, 1891-1966 (1966); and Charles L. Schmalz, "The Failure of Utah's First Sugar Factory," Utah Historical Quarterly 56 (Winter 1988).