Building a Seed Park: Part I
by
Nick C. Parker, PhD

A SEED Park is an agricultural or natural resource-based complex featuring Sustainable Environmental and Economic Development. Building such a park requires at least the same level of planning and selection as that required to build a shopping mall. A shopping mall typically has two major types of stores – the large, anchor stores such as Sears, Dillard's, Macy's and J.C. Penney, and the smaller specialty stores such as Zales Jewelers, Hallmark Cards, the Nature Shop, and fast food outlets in the food court.

By comparison, a SEED Park must have at least one large anchor operator, such as a dairy, a forestry products industry, an electrical power plant, or a cattle feedlot. This large facility becomes the core operation around which all other businesses are centered. The secondary businesses could include greenhouses, fish farms, organically grown produce, aquatic ornamental plants, and even a butterfly ranch.

Think about all the specialty items on the market and their relative value. Rare and non-essential items are usually priced high, but are targeted to only a small sector of our communities. Essential items, such as basic foods, have a broad market with (by comparison to specialty items) low prices.

The challenge to developing a successful SEED Park is to select the right mix of agricultural and natural resource-based businesses. Let's examine some of the possible scenarios. A dairy and a series of greenhouses are a quite compatible mix. However, today's dairies are rather large with thousands of cows and are frequently located in the region of a cheese plant. How would milk and cheese produced in the San Luis Valley compete with dairy products from Eastern New Mexico, or West Texas? There would have to some advantage, either in reduced transportation or a difference in quality. For example, goat milk, goat cheese, soap, lotions, and candles made from goat-based products are very expensive, as compared to similar products made from cow's milk. The goat-based products are specialty items, whereas similar products derived from cow's milk are commodity items. The byproducts from a dairy are manure and nutrient-rich water. Both of these byproducts can be used in a greenhouse. The nutrient-rich water provides both water and fertilizer for the plants. Manure could also be burned directly for heat, or gasified to yield carbon monoxide (CO) and hydrogen (H) as combustible gases.

Another key anchor business could be a poultry farm. Many poultry operations are located in Arkansas, East Texas, and other areas of the South. Poultry farms apparently do well in those regions, yet must contend with the high humidity and the high heat of summer. The high temperature is especially problematical to large fowl such as tom turkeys. The large, 40+ lb birds cannot expel body heat as do smaller birds. The San Luis Valley, with its low humidity and low nitght-time summer temperature could be very attractive for the production of tom turkeys.

The low winter temperature of the San Luis Valley is another asset. Specially designed housed could be constructed to produce ice at a very low cost during the winter. The ice could then be stored to cool poultry houses as needed during the summer. The ice could also be used to cool vegetables and produce in shipment originating in the San Luis Valley or eve those in transit from California to the East.

In future articles, we'll explore some of the other potential anchor businesses, the specialty businesses, and even tourism, education, research and development. I'm sure many people are curious and can't wait to learn more about butterfly ranches.

Nick C. Parker, PhD, is Chief Scientist for Global Scientific, Inc, a Lubbock, Texas-based consulting company that specializes in commercialization of research and development products for sustainability. Dr. Parker can be contacted through www.globalscientific.org or at 806-786-0925.