The benefits of industry of growing cannabis sativa, the friendly relative of the...

Health & Medicine, Addiction



In 1938, just as the cotton industry was booming in America, the reputable technology magazine Popular Mechanics predicted the next billion-dollar crop. Now, 78 years later, would you believe this crop is used to make thousands of different products, is currently grown in 30+ countries, and is illegal in NM? Well, you better believe it, because that is the reality that surrounds industrial hemp production. Cannabis sativa L., or industrial hemp, is a genetically distinct and non-psychoactive species of Cannabis that is grown for fiber and seed internationally and is legal on a state-by-state basis in the US. Agriculture is an iconic image involved in the survival of New Mexico's economic market and cultural preservation. As water use, land management, and sustainability become more important in the application of agriculture throughout the state; it is becoming increasingly more important to address the most effective and efficient ways to sustain a healthy economy and environment in New Mexico. Cultivation of this crop would promote the environmental, economic, and social aspects of sustainable agriculture in New Mexico.

It is becoming increasingly more important in today's world to promote agricultural practices that not only make the most efficient use of natural resources, but also enhance the quality of the surrounding environment. According the 2012 Industrial Hemp Task Force Report published by the New Mexico Department of Agriculture, industrial hemp cultivation could be sustained in the majority of New Mexico agro-climatic zones where irrigation can be accessed. Industrial hemp thrives in climates similar to cotton, a major NM agricultural product. However, according to the Ecological footprint and water analysis of cotton, hemp and polyester published in 2005 by the

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nonprofit research organization the Stockholm Environment Institute, cultivation of industrial hemp crops left a noticeable smaller ecological impact on the environment than cotton cultivation in all case studies. Not only does industrial hemp cultivation require fewer nutrient applications and average zero pesticide use compared to cotton, hemp crops also released less soil contaminants and air emissions than cotton crops.

In the most recent years, New Mexico has struggled to maintain a growing economy, but industrial hemp could help create a profitable new industry for the state. According to data published in a 2013 report Economic Considerations for Growing Industrial Hemp by the University of Kentucky Department of Agricultural Economics, the value of hemp-based products imported into the US more than tripled in 10 years from 2000-2010 as it reached \$10 million. By 2015, a report produced by the US Congressional Research Service titled Hemp as an Agricultural Commodity reported that the retail value of hemp-based goods sold in the US was over \$500 million dollars. Because industrial hemp is not federally regulated in the US, all hemp-based products have been imported and still are imported from other countries (or states). There is currently a chance for New Mexico to take advantage of an emerging interstate industry, but the opportunity won't be as promising forever, as more states around the country seek to take advantage of what industrial hemp can provide.

A final major component of sustainable agriculture is not only enhancing environmental quality and economic growth, but also enhancing the overall quality of life for society. Lately, there has been a huge buzz about organics and super foods. Industrial hemp seed is one of the most nutritionally rich food sources grow to date. An article published in a 2000 issue of the Journal of Nutraceuticals, Functional & Medicinal Foods titled The Composition of Hemp Seed Oil and Its Potential as an Important Source of Nutrition that reported results of hemp seed composition with average 20-25% protein content and up to 35% oil content rich in essential omega3 and omega6 fatty acids. We as people need nutritional sources of essential polyunsaturated fatty acids because the human body cannot produce them, and industrial hemp seed provides that source.

Despite its historically controversial legal status and misunderstood genetics, industrial hemp is emerging from the shadows as a crop that could positively contribute to New Mexico's sustainability. All three major components of sustainable agriculture (environmental, economic, and social) and promoted with the cultivation of industrial hemp. The National Conference of State Legislatures reports that currently 28 states have enacted laws that allow for cultivation of hemp for commercial, research, or pilot programs. It's time for New Mexico to take advantage of the potential laying in our wake, and open the doors that are offered with the legalization of industrial hemp.