

The 'Snicker Factor' Aside, Hemp is Serious Business

Rita Trichur - Published Sunday, Jul. 10, 2011

Hemp is fast becoming a staple of daytime TV as Oprah, Dr. Oz and others extol the health virtues of hemp oil, protein powders and pasta. At the same time, industrial interests tout it as a potential base for products ranging from textiles to car parts. As a result, demand is surging in the United States, Germany and Japan.



But American farmers are prohibited from growing hemp. That leaves farmers in Canada – where it's been a legal crop since 1998 – free to tap the growing U.S. interest in hemp-based products.

First, though, they must navigate the shifting sands of public opinion – or, as one Alberta report called it, “the snicker factor.”

According to an Alberta Agriculture Department report on industrial hemp production in Canada, the plant's cultivation evokes chuckles “largely because of its hippy-dippy image and close association with marijuana, its consciousness-altering cousin.”

Nevertheless, this is serious stuff. The North American market for industrial hemp – which has only a minuscule amount of the chemical that gives marijuana its punch – is booming.

For centuries, hemp had been ubiquitous in global commerce – from paper making to the rope used on sailing vessels – until synthetic fibres usurped its naval role and global anti-drug sentiment put paid to the rest.

Now the market, while still small, is growing by about 10 per cent a year, with annual sales estimated between \$350-million and \$400-million, according to some estimates.

Mike Fata, co-founder and chief executive officer of Winnipeg-based Manitoba Harvest Hemp Foods & Oils, believes Canada's hemp industry has a golden opportunity to turn lingering taboos on their heads – especially south of the border. Hemp-based foods, he notes, are rich sources of protein and essential fatty acids like Omega-3 and Omega-6.

“The great thing about marketing hemp is that hemp is in everyone's psyche – whether they think that hemp is marijuana or they think that hemp is clothing or rope or they already know that hemp is a food product ...” Mr. Fata said. “It is easy when you have their attention to educate them about what hemp really is and all the great things that it can offer.”

Canadian hemp exports have increased by 500 per cent over the past four years. Even so, total exports were worth just \$10.38-million in 2010.

The industry's goal is to generate more than \$100-million for the Canadian economy by 2015, partly by boosting production from 10,855 hectares to 40,000 hectares over that time.

Eager to capitalize on that burgeoning potential, the federal government recently boosted its investment in the industry. In December, 2010, Agriculture Canada announced an investment of more than \$728,000 to help the industry boost production capacity and to increase exports to the United States. That amount was split among three funding streams – including some repayable contributions. Ottawa is also handing out more licences to grow the value-added crop and has increased the number of approved varieties for the 2011 growing season.

Canada's hemp industry, though, is also grappling with some serious growing pains after years of boom-and-bust production. The high Canadian dollar is eroding the value of exports, and celebrity endorsements notwithstanding, hemp has yet to fully shake its "ditch weed" image with U.S. consumers and regulators.

Toward that end, Canadian hemp food products have yet to overcome a key regulatory hurdle with the U.S. Food and Drug Administration by achieving "GRAS" status, an acronym for Generally Recognized As Safe.

Without that certification, Canadian companies are prevented from selling hemp to big multinationals like General Mills and Kellogg's, and another three years' worth of costly study is required before the Canadian industry can even apply, says the Canadian Hemp Trade Alliance.

Mr. Fata of Manitoba Harvest says he recognizes those obstacles but is optimistic about the industry's long-term potential.

Manitoba Harvest is now one of the world's largest hemp food manufacturers. Its sales growth has averaged about 50 per cent every year since 1998. It currently makes 68 per cent of its sales in the United States, 30 per cent in Canada and 2 per cent in Europe and Asia.

In addition to health food stores, it is penetrating mainstream grocery chains in the United States and collaborating with Maple Leaf Foods Inc. on hemp-based research and development in Canada. Manitoba Harvest has provided product and technical support to Maple Leaf's majority-owned subsidiary Canada Bread as it experiments with hemp bakery products, Mr. Fata said.

While hemp foods continue to represent the bulk of the Canadian industry's exports, there is also a growing appetite for hemp fibre for industrial uses. German auto maker Mercedes-Benz, for instance, has been using natural fibre such as hemp, flax, sisal and abaca for many years in various components. One example is the Mercedes-Benz CLS, where hemp is used in the door panels.

"A typical example is the application as a base for car interior lining parts. In these parts, the natural fibres replace mineral fibres such as fibreglass," said Matthias Brock, spokesman for parent company Daimler AG. "As reinforcing material, natural fibres have the same characteristics like mineral fibres but they are much lighter."

With the price of cotton still high, albeit down from its peak, garment makers are also eyeing hemp as a substitute textile as manufacturers increasingly experiment with new blended fabrics to contain costs.

Vancouver-based Naturally Advanced Technologies Inc., established in 1998 as Hemptown Clothing Inc., is developing alternative fibres made out of flax and hemp. Its Crailar technology uses an enzyme process to remove lignin, which is the natural glue that binds fibres like flax and hemp. Doing so gives those fibres a smoother texture and allows them to be processed in new blended fabrics that can result in savings for clothing makers because they require less cotton and are less prone to shrinkage.

Earlier this year, Naturally Advanced signed purchasing and development agreements for its Crailar flax fibre product with apparel giants Hanes and Levi Strauss & Co., along with pulp-and-paper manufacturer Georgia-Pacific LLC and specialized-products manufacturer Cintas Corp.

Flax is currently much cheaper for Naturally Advanced to process than hemp partly because it contains less lignin and also because it can be grown in the United States, where both its pilot facility and major partners are based.

“We’re not giving up on hemp. Hemp is just going to follow in or feed in after we lead off with flax,” chief executive officer Ken Barker said. “None of our agreements preclude us from having hemp being part of them.”

Moreover, the company is also fielding enquires about its hemp fibre product from a range of other industries, including mattress makers and the medical sector.

Still, Mr. Barker recognizes that there remains a marketing challenge for hemp: “That’s just the reality of the U.S. consumer.”

[Click here to see Naturally Advanced Technologies in the Globe and Mail.](#)