Jute is a native Nepali plant and Nepal is the world's fourth largest exporter of the plant<sup>1</sup>. Jute is a thin long green plant that grows to a height of 1 to 4 meters and has a diameter of 7 to 20 microns<sup>2</sup>. Jute typically grows in the tropical lowland areas with high humidity, up to 60-90%. One of the many benefits of Jute is that it is a rain fed crop and has little need for fertilizers or pesticides. Jute yields are approximately 2 tons of dry jute fiber per hectare<sup>3</sup>.

The fiber removed from the bark of the white jute plant is the prime part of the plant as it is primarily used for natural textile products<sup>4</sup>. The fiber is long and shiny and also called the 'golden fiber'. The fibers can be removed from the bark by a biological or chemical process. In Nepal, jute is often separated in a biological fashion, due to the expense of the chemical extraction. The biological process involves grouping jute stems together, soaking them in water to loosen and separate the fibers from their stems before stripping them and removing non-fibrous matter<sup>5</sup>. The processing operation is not as simple as the extraction. Jute is often processed in mills, it includes selecting the strong fibers over the weaker ones, softening of the fibers, conditioning, spinning, winding, weaving and then the cutting, sewing and packaging of the final product<sup>6</sup>. The final product itself varies, as jute is a versatile fiber that can be used to make an abundance of goods. Jute fibers can be used to make carpets, cigarettes and textiles<sup>7</sup>. From turning jute

<sup>&</sup>lt;sup>1</sup> <u>http://www.fao.org/economic/futurefibres/fibres/jute/en/</u>

<sup>&</sup>lt;sup>2</sup> http://www.fao.org/economic/futurefibres/fibres/jute/en/

<sup>&</sup>lt;sup>3</sup> <u>http://www.fao.org/economic/futurefibres/fibres/jute/en/</u>

<sup>&</sup>lt;sup>4</sup> <u>http://www.fao.org/economic/futurefibres/fibres/jute/en/</u>

<sup>&</sup>lt;sup>5</sup> http://www.fao.org/economic/futurefibres/fibres/jute/en/

<sup>&</sup>lt;sup>6</sup> <u>http://www.worldjute.com/jute\_technology/techno\_chart\_processing.html</u>

<sup>&</sup>lt;sup>7</sup> <u>http://www.jute.org/wjp/cp\_nepal.htm</u>

fibers into a textile it can then be fashioned into upholstery, furnishing fabrics, attractive shopping bags, fashion accessories and even paper<sup>8</sup>.

One of the greatest features about jute-based products are the environmental benefits. Jute fiber is 100% biodegradable and recyclable<sup>9</sup> therefore jute products are considered to be environmentally friendly. In fact many rural households use the jute stick, after the removal of the fiber, as fuel for cooking, thus reducing the need for firewood that otherwise contributes to deforestation<sup>10</sup>. The living jute plant itself also provides environmental benefits. One hectare of jute plants consumes approximately 15 tons of carbon dioxide and releases 11 tons of oxygen<sup>11</sup>. Jute propagation can help rice farmers, as it can be grown during the rice off-season. By using jute as a rotation crop, a farmer will be enriching the fertility of their soil for the next season's crop. This is beneficial in multiple ways as using jute as a crop rotation plant increases the nutrients in the soil and if the jute is harvested an income can be made off of selling the fibers. This is one of the reason's jute been a favorite of poor farmers as it offers additional income<sup>12</sup>.

Numerous financial benefits have been reported for jute. The International Trade Center has stated that jute "has helped very poor families improve their livelihoods and hopes for the future. The planting, control, harvesting and primary processing has given much-needed employment for women and landless laborers in Nepal."<sup>13</sup> This is because jute is a plant that does not require much physical labor to harvest and maintain, therefore it is easy to grow alongside other high maintenance crops.

<sup>&</sup>lt;sup>8</sup> <u>http://www.intracen.org/itc/sectors/jute/</u>

<sup>&</sup>lt;sup>9</sup> http://www.fao.org/economic/futurefibres/fibres/jute/en/

<sup>&</sup>lt;sup>10</sup> http://www.fao.org/economic/futurefibres/fibres/jute/en/

<sup>&</sup>lt;sup>11</sup> <u>http://www.fao.org/economic/futurefibres/fibres/jute/en/</u>

<sup>&</sup>lt;sup>12</sup> http://www.intracen.org/itc/sectors/jute/

<sup>&</sup>lt;sup>13</sup> <u>http://www.intracen.org/itc/sectors/jute/</u>

Despite the apparent advantages of jute, there has been market declines for this crop. With the rise of synthetic fabrics in the past 50 years, markets and prices for jute have taken a plunge. The prices for jute fibers also seem to correlate with oil prices<sup>14</sup>. An increase in the price of jute fibers can also be seen to correlate with the worldwide health and environmental friendly craze. However, the demand for all natural products is on the rise, particularly in wealthy developed countries, offering hope for this crop.

## **Export Potential**

If properly marketed the sale of jute reusable grocery bags, jute carpets and even any form of linen can maintain a permanent position in Canadian markets. One primary market Nepalese farmers could advertise jute linen in is the gardening industry, as jute linen is a strong, firm, yet biodegradable, which makes it perfect for gardening. Jute linen would be used to wrap the roots and base of plants when they are transplanted, to retain the dirt and roots together. Because of the biodegradable jute bags it would be a simple task to replant the bush or tree, while the jute bag is still on. This would result in less effort and there would be no negative side effects because of the biodegradable bag.

One dilemma is that jute bags remain an unknown product in the Western world. Furthermore, Canadians would have no incentive to purchase these degradable bags over other plain canvas bags. Therefore, similarly to selling any other product worldwide, a very strategic marketing team would be necessary.

<sup>&</sup>lt;sup>14</sup> http://www.intracen.org/itc/sectors/jute/

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