Exporting Canadian-Made Beehives to Nepal

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SECTION 1

Honeybees

Honeybees are a priceless global resource. Around the world bees' work to pollinate plants, allowing the plants to reproduce and continue growing. A large portion of the human food supply is dependent on bees for pollination. These bees also produce honey and beeswax, which are valuable resources for human life. Honeybees are insects that live in very complex colonies and tend to build their hives within hollow structures such as trees, logs or man-made hives.

Man-made beehives are structures that are intended to mimic natural beehives with the added convenience of access and desirable location. Once a beehive structure is present, bees can be introduced to it in different ways. Feral, or wild, bees can be caught and then introduced to the hive (Beekeeping…, 2016). This can be done by beekeepers or by anyone with basic knowledge or training. These bees tend to be hearty and thrive, as they are already adapted to the local climate. Bait hives or swarm traps can also be used to trap feral bees and bring them to a man-made beehive. Besides using feral bees, bee colonies can also be purchased from breeders and then sent to a new beekeeper's location through the mail system (Beekeeping…, 2016). Once introduced to the man-made hive, the bees will begin working to build up their colony and establish the hive.

The success of introducing Canadian made beehives to Nepal would be enhanced if feral bees were used within the hives. Feral bees are native to their environment and already adapted to the climate. Nepal is rich in insect diversity, including honeybees, distributed through the terai, mid-hill and high-hill regions (Thapa, 2006). Purchasing a bee colony from a breeder would be an added cost for Nepalese farmers, and the non-native bees may not thrive once introduced to the various climates of Nepal.

Product & Company Information

Innisfil Creek Honey is an Ontario based, family run company that sells beekeeping and hive supplies. The company offers beehive kits made of Canadian pine,

starting at $145.00. Customer reviews state that the kits were easy to assemble and received five star customer ratings (About Us, 2016). When compared to similar Canadian products, Innisfil Creek Honey offers less expensive products, which still appear to be durable and high quality. Being a family run company, Innisfil Creek Honey uses small-scale, sustainable production with minimal environmental impacts. This company is completely family owned and operated, and raises bees themselves (About Us, 2016). Raising bees locally environmentally benefits the surrounding area with pollination and honey production. Buying beehive kits from this company helps to support a family and puts money directly back into the local economy, as well as supporting an environmentally conscious production system.

The beehive kits are not perishable, so shipping, storage and assembly will not be time sensitive.

Health & Nutritional Benefits

Honeybees are very effective pollinating insects. Bees play a crucial role in pollinating plants, including crops, worldwide. Of insect pollination, bee's account for about 80%, making them one of the best pollinators (Thapa, 2006). Bees pollinate approximately one third of the human food supply (Thapa, 2006). Having beehives in an area of high vegetation can greatly increase pollination.

An area of increased pollination will display higher crop yields and maintained or improved biodiversity. Insect pollinators, including honeybees, play a vital role in producing high yields due to crop pollination (Thapa, 2006). The pollination done by bees helps to maintain sustainable crop production. Bees pollinate almost all crops, compared to other insects that are more selective.

Higher yields and better quality seeds are even seen in self-pollinating plants, after pollination by bees (Thapa, 2006). Wide diversities of honeybees in Nepal help maintain plant diversity and can greatly increase crop pollination and reward hive products, such as honey and beeswax (Thapa, 2006). Maintaining biodiversity and improving crop yields will be beneficial to Nepalese farmers. Bee pollination is of high importance in helping to maintaining biodiversity (Carroll, & Kinsella, 2013). Increased pollination due to man-made beehives will help keep a large variety of plants alive for farmers to harvest.

The increased crop yields may help to alleviate some hunger for the farmers' family or community. Farmers may also be able to sell more crops, resulting in increased profitability. Bees play a crucial role in natural pollination. Having beehives in rural areas of Nepal will increase pollination, in turn improving the livelihood of farmers.

Not only do honeybees improve pollination in the area of the hive, but they also produce valuable natural resources. Honey and beeswax have a wide variety of human applications and can also be sold for profit.

Honey is an anti-inflammatory, antibacterial and immune boosting substance (Abeshu, & Geleta, 2016). Honey is known to be an energy food due the simple sugars it contains, which are absorbed into the bloodstream directly without being digested. Honey can be eaten on its own, used in cooking and baking or put into beverages. Honey is also known to prevent and treat gastrointestinal disorders (Abeshu, & Geleta, 2016). Besides being a nutritional food source, honey is also known to have a key role in wound care. Due to its antibacterial and antimicrobial nature honey promotes wound healing, clears infection and promotes tissue growth and regeneration (Abeshu, & Geleta, 2016). When stored properly, honey will last for years for long-term use. These healing properties become increasingly important in areas when access to healthcare may be limited, such as rural Nepal.

Beeswax is another natural and valuable substance created by bees in a hive. With very similar properties as honey, beeswax can also be used in treating hair and skin ailments. It can be used as a moisturizer, as well as in itch and pain relief. Beeswax can be used in cooking, making candles or making soap. Burning beeswax candles has been found to reduce allergy, sinus and asthma symptoms (Beeswax Candles, 2016). Beeswax candles have also been found to reduce airborne dust, odours, moulds, bacteria and viruses (About Beekeeping, 2013). Among the many possible applications beeswax may also be used in fabric dyeing, waterproofing shoes and other fabric items, wrapping food, and preventing rust on metal tools (21 Brilliant…, 2013): all of which may be relevant to Nepalese farmers and their families.

Honey and beeswax have a large variety of beneficial applications. Nepalese farmers using beehives can harvest these substances for their own uses, for use within their community or to sell to tourists. Almost 800 000 tourists visited Nepal in 2014

(Government of Nepal, 2015). Many tourists that visit Nepal are in the northern mountain regions to climb mountains. While the tourists would provide a good market for sale of Nepalese honey and beeswax, transporting the substances to areas of high tourism may be costly for the farmers.

Introducing Canadian made beehives to Nepalese farmers has the potential for many benefits. Adding beehives to farms and rural areas of Nepal can help increase pollination, in turn increasing crop yields and maintaining and potentially improving biodiversity. The natural resources of honey and beeswax both have numerous practical uses and may be sold for potential profits.

Market Opportunity

When introducing a Canadian product to Nepal, there are possible language and literacy barriers. Once imported to Nepal, a beehive kit from Innisfil Creek will need to be assembled. According to the product reviews on the website, the kit is easy to assemble. However, possible language barriers with the instructions or limited literacy may become a problem once the product is in Nepal. Instruction manuals will need to be modified by either converting them to Nepali, the national language, or by creating easy to interpret pictures. People in Nepal speak several different languages so even converting the instructions into Nepali may not be sufficient. Besides the assembly of the hive, purchasers may need instructions or training for catching feral bees, and for maintenance of the hive.

The price of a hive kit may be high for the average Nepalese farmer, but many farmers could come together to purchase the hives. The bees from a hive would benefit a large area so the profits could be shared. These beehives would likely have the highest environmental impact when located in areas of moderate to high vegetation. The hill and terai regions of Nepal would be areas of interest when marketing these beehives. The mountain region of Nepal has limited crop growth and not as much vegetation for the bees to pollinate. However, the mountain region brings many tourists to Nepal, so honey and beeswax could be transported there to sell.

In some areas of Nepal, the knowledge of biodiversity and the importance of pollination are minimal. A majority of Nepalese farmers are inadequately educated about

biodiversity conservation (Thapa, 2006). These farmers are unaware of the importance of pollination and natural pollinators (Thapa, 2006). Improving education about the role of natural pollinators in maintaining biodiversity and improving crop yields can have vast environmental impacts for Nepal. Introducing Canadian made beehives to Nepal can act as a starting point for education in these areas.

Section 1 References

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SECTION 2

Marketing

In Nepal, the beehive kits would ideally be marketed and sold to farmers. Because of the cold climate and rocky landscapes, not many farmers are located in the northern mountain regions of the country. Marketing should be focused within the hill and terai regions of Nepal. Since Nepalese farmers may have very limited knowledge on the importance of pollinators, they may not be inclined to buy the product. In order for this product to be successfully sold in Nepal, a lot of educational information would need to be introduced. Farmers would need to learn, in a comprehensive way, the importance of natural pollinators and the benefits they bring to farming. Marketing would need to take into account the many different languages spoken in Nepal, as well as the possible limited literacy ability.

The cost of this product will most likely be the main limitation in the success of sales in Nepal. The marketing approach may need to be targeted to a community as opposed to an individual, so the cost can be widely distributed. Even one beehive can greatly benefit an entire community. Since knowledge of this type of product may be

limited, farmers' interest in the product may be restricted. Once the many benefits of the beehives are seen however, interest in the product will probably increase. Allowing a few farmers to try the product for a period of time, a year for example, before actually purchasing it may be a good trial for the product and a good starting marketing strategy.

The beehives can increase crop yields, as well as producing honey and beeswax that can be sold. These benefits have a wide variety of impacts that affect not only farmers but also entire communities. The sale of excess crops can help to alleviate some hunger or food insecurity within the country and the sale of honey and beeswax also generate income that goes back into the countries economy. These outcomes also have the ability to provide people with nutrient rich food sources that can have tremendous health impacts. Hopefully, once people in Nepal experience these benefits of the product, the cost will be more reasonable.

Transportation

Shipping must be taken into consideration when planning to export a product from Canada to Nepal. Canada and Nepal each have specific legislations in place for exporting and importing respectively. In order to successful ship a product from Canada to Nepal, the legislation in both countries must be followed.

Once the product is manufactured in Canada, there are various options for shipping. Goods can be shipped to Nepal by air or by sea through India. Goods shipped by air usually arrive in Kathmandu, the capital city of Nepal, and goods arriving by sea usually arrive in Calcutta, India and are then shipped by land to Nepal. A1 Freight Forwarding is a Canadian cargo company that can ship from Toronto, straight to Kathmandu by air (Air Shipping…, 2016). And Cargo Experts is a company that ships by cargo ship to India (Shipping to Nepal…, 2016). The product could be transported from manufacturing to the air or sea shipping port by vehicle or train, depending on the location. Once arriving in Nepal or India, the goods will probably be shipped using vehicles or trains.

To export commercial goods from Canada the individual or company must have a business number (Step-by-Step…, 2016). A business number can be easily obtained from the Canadian Revenue Agency. The type of good being exported needs to

be classified as either a restricted good or a non-restricted good, in order to determine the type of documentation required. The beehive kits would be classified as a non-restricted good, for which an Export Declaration would only be necessary if shipping more than $2000 CAN worth of product (Step-by-Step…, 2016). When shipping any product it is necessary that the product be properly boxed, crated or palletized prior to shipping (Air Shipping…, 2016). Canada prohibits the export of drugs and narcotics, black bear claws, paws and gallbladders, and counterfeit money (Step-by-Step…, 2016); none of which are included in the beehive kits. After exporting a product out of Canada it is required that documentation is kept for six years after the export.

The regulations for import in Nepal will also need to be taken into account. Nepal prohibits the import of drugs, beef and beef products, and pornography (Shipping to Nepal, 2016). When importing goods to Nepal it is required that new items have Certificate of Origin documents as well as the invoices for the products (Shipping to Nepal, 2016). A Customs Transit Declaration is required for a cargo shipment going through India and a letter authorizing the Destination Agent is required to clear the shipment. It is important that all documentation arrives in Nepal at least 3 weeks prior to the actual import shipment. It is also important to note that shipments travelling through India are subject to inspection by Indian Customs authorities (Shipping to Nepal, 2016). Once the shipment arrives to Nepal, individual beehives may be transported by vehicle or animal transportation, specifically to rural farms.

Section 2 References

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