

Exporting Canadian Strawberry Seeds to Nepal

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Part 1: Product Information

I) Product Introduction

With Nepal having a large amount of its population in poverty, the sum of funding put towards the quality of its agriculture, as well the amount of money a household can spend on food is extremely limited (Do and Lakshmi, 2010). In general, there are various components that need to be addressed in order to solve this epidemic, but after much research and analysis the simplistic ideas seemed to lead to a clearer resolution. A straightforward solution to attempt to make a difference in this poverty ridden country is to export Canadian strawberry seeds to Nepal (Do and Lakshmi, 2010). In short, the synopsis of this idea is to take strawberry seeds that are harvested from Canadian grown strawberries and send them to Nepal (refer to figure 1). The people of Nepal will then be able to take these seeds and grow the plant to produce fruit for both grocery and production methods. Not only will Nepal find great benefit in the addition of growing strawberries in both their homes and in the economy, but Canada will profit immensely as well (Rowh, 2006).

II) The Benefits of Strawberries

Aside from the obvious outcome of the strawberries being a source of food, there are numerous other ways in which strawberries are a valuable fruit (Hancock et al., 1976). The nutrition value of strawberries is very high, especially in regards to vitamin C – with some variations of the fruit having upwards of 100 mg/100 g of vitamin C in the tissue alone (Hancock et al., 1976). As well, strawberries have been proven to have some of the highest values of antioxidants and ellagic acid in fruits, overshooting both apples and pears combined (Hannum,

2004). Considering that those two fruits are the most harvested in Nepal, it would be extremely beneficial to have a different, “healthier”, food source grow more commonly (Kazama et al.,



2014). **Figure 1.** Canadian Mignonette Alpine Strawberry for export
Image copied from: <https://www.westcoastseeds.com/>

Similarly, it is not very difficult to grow strawberries on a small scale (Wetherbee, 2004). Farmers and people with even little to no planting experience can easily learn how to grow this fruit (Wetherbee, 2004). The plant needs very little space when seeded, and it can even be combined with beans, garlic, onions, and spinach to produce an even stronger, more abundant product (West Coast Seeds, 2015). Seeing as more than 72% of homeowners in Nepal have a household garden to produce food for their own consumption, this fruit would be a great

addition (Abishkar et al., 2013). The strawberries can effortlessly be grown in garden beds, or pots which can be stored inside for during the winter months for those who decide to grow them individually (Wetherbee, 2004). Typically strawberries are perennials, which means the after the fruit is harvested, they will be able to produce more for the following season; thus providing countless amounts of fresh fruit to the Nepalese (Hancock et al., 1976).

III) Company of Choice

After much research in the field of seed distributors in Canada, the most promising findings led to a company called “West Coast Seeds”. This business is located on the very west end of Canada in Vancouver, British Columbia (West Coast Seeds, 2015). It was established in 1973 by a nursing instructor named Mary Ballon – she was a firm believer in the benefits of local, organic gardening (West Coast Seeds, 2015). Since its beginning, West Coast Seeds has been providing its customers across the globe with heirloom, heritage, and certified organic seeds, with the qualification from Pacific Agriculture Certification Society (West Coast Seeds, 2015). As of April 2014, the ownership was taken over by “The Diamond Family”, but the legacy of continuing to keep the seeds, both GMO and GEO free, grows strong (West Coast Seeds, 2015).

Currently, West Coast Seeds has distributors and wholesalers of their brand all over Canada (refer to figure 2) where customers can both purchase and learn about the specifics of that type of seed (West Coast Seeds, 2015). They commonly ship their product throughout North America (as long as the seed is legally allowed to cross the border) and are open to international orders as well (West Coast Seeds, 2015).

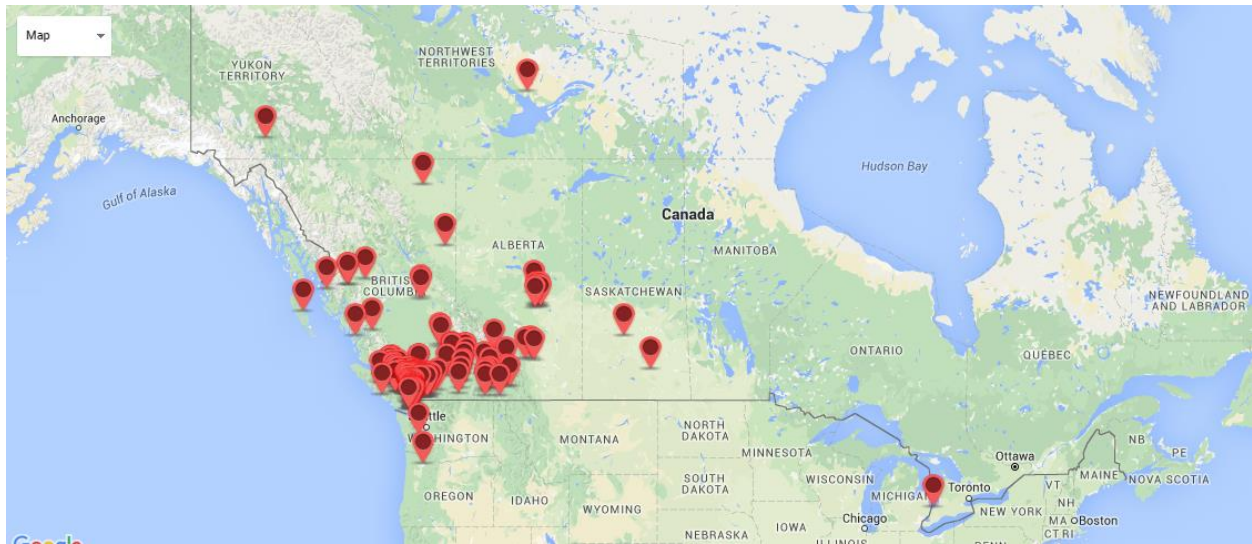


Figure 2. Map of store locations that sell West Coast Seeds' products

Image copied from: <https://www.google.ca/maps>

West Coast Seeds is undoubtedly the most qualified company for the exportation of strawberry seeds to Nepal. Their product is reasonably priced for its outstanding quality, with 600 of the Mignonette Alpine Strawberry Seeds costing \$17.99 (West Coast Seeds, 2015). This type of seed in particular grows large, is easy to upkeep, and is found growing naturally throughout North America – further presenting that these are not high maintenance plants (West Coast Seeds, 2015). In general, this company had the most potential in comparison to the other Canadian businesses researched (refer to table 1). The main issue that lied within the other Canadian companies was their restrictions on shipping.

Table 1. Canadian seed distributors company information

Company	Location	Product/Price	Shipment	Other	Contact
West Coast Seeds	British Columbia	Mignonette Alpine Strawberry Seeds/ \$17.99 for 600 seeds	Ship within North America and Internationally	Non GMO + non GEO seeds Strawberries grow larger than average	Number: 18888048820
Seed Bank*	Ontario	Alpine Strawberry Seeds / \$5.99 for 600 seeds	Ship ONLY in Canada	Non GMO Untreated	Email: sales@seed-bank.ca
McKenzie Seeds**	Manitoba	Seed packets – price differs throughout store	Can only be bought within Canadian stores	Canada’s number 1 seed packager	Number: 18006656340
William Dam Seeds***	Ontario	Temptation Strawberry pack/ \$2.95 for 20-25 seeds	Ship ONLY in Canada	Untreated seed – company of 64 years	Number: 19056286641

*All information found within referencing of (Seed Bank, 2015)

**All information found within referencing of (McKenzie Seeds, 2015)

*** All information found within referencing of (William Dam Seeds, 2015)

IV) West Coast Seeds’ Charity

Not only does this company excel immensely in the business department, but they also take pride in helping humanity (West Coast Seeds, 2015). For many years, West Coast Seeds has donated their time, products, and financial support to charities and organizations throughout Canada and across the globe (West Coast Seeds, 2015). They focus on striving to help the needs of others, especially those without access to good quality fruits and vegetables, as well as providing them with the materials and knowledge to grow them (West Coast Seeds, 2015).

With the support of various individuals, companies, and organization donations, West Coast Seeds has had the ability to travel to remote locations in Zimbabwe, Guatemala, and Nepal, where anyone from orphans to indigenous Mayans have been helped (West Coast Seeds, 2015). In relation to their assistance in Nepal, an important factor to consider would be the potential contacts that are already present within that country. West Coast Seeds' main station of assistance was with Thrangu Tara Abbey, a Buddhist nunnery located in Swayambunath Nepal (West Coast Seeds, 2015). This connection can have a major influence on how the exported product will affect the Nepalese people. With such experience in the field of understanding the livelihoods of the people who live in poverty, this company's actions reinforce the decision that they would be best for the initiative to export Canadian strawberry seeds.

V) Canadian Benefits

The overall project idea possesses many potential benefits for both Canadians and Canadian companies. Not only will the economy be positively affected (for the basis of this development relies heavily on specific Canadian businesses) but the population as a whole will be able to witness copious improvements.

It is of strong importance to support all branches of grassroots companies – especially those that are found locally (Rowh, 2006). This not only helps the company itself, but as well as the economy (Rowh, 2006). By advertising and choosing to use a Canadian company for the exportation of goods, there is a transfer of money coming from a different nation that now stays inside the country (Rowh, 2006). Considering West Coast Seeds is a Canadian built

company which provides seeds to stores and farmers all over North America, this will produce a progressive impact (West Coast Seeds, 2015). As well, seeing as this would be the first time the people of Nepal would be purchasing these seeds, the company will receive an immediate and immense profit as they would most likely be ordering the product in bulk. Once there is a realization that there is this a new market for these particular seeds in countries that typically do not order, perhaps this will allow West Coast Seeds to further expand for new sales opportunities. This constant effect will then have the ability to create more jobs, or higher hours for current employees as the amount of sales will increase - generating more work.

Additionally, West Coast Seeds provides the shipping arrangements for their products being exported (West Coast Seeds, 2015). With all of their distributors being located in Canada, and their firm belief in supporting the local economy, it can be assumed that a Canadian shipping company will be used to transport the seeds (West Coast Seeds, 2015). Similar to how an increase in production creates more jobs, an increase in the amount of items being shipping through a particular company will also provide additional jobs. Although in theory this represents a major benefit to Canada, further investigation on which particular shipping company is needed.

Finally, a variety citizens throughout Canada may also benefit from the exportation of strawberry seeds to Nepal. As mentioned in *Part 1. IV*, West Coast Seeds contributes immensely to many local food bank gardens, charities, schools and much more (West Coast Seeds, 2015). They find ways to provide both an education on the importance of growing healthy, natural foods, and the knowledge of how to grow it, along with donating seeds (West Coast Seeds, 2015). Through taking part in this initiative, the charity that they run will have the ability to gain

popularity, as well as more financial support. With more people aware of this excellent organization, there is a greater chance of the budget for their projects to increase; an increased budget equals an expansion on the missions they are able to do.

In 2004, 1 in 5 Canadian households suffered from food insecurities, with the expectation on that statistic to rise (Kirkpatrick and Tarasuk, 2009). With the availability of options such as community gardens, food banks, and school snack programs being implemented into locations of need, these families were helped greatly (Kirkpatrick and Tarasuk, 2009). This further shows the need for more programs such as these in Canada. Companies, West Coast Seeds for instance, have the ability and experience on how to make this happen (West Coast Seeds, 2015). Therefore, an increase in publicity for West Coast Seeds leads to more funding for possible projects that will improve the lifestyles of some/many Canadians.

References

- Abishkar, S., Gautam, R., Shrestha, P. K., & Sthapit, B. R. (2013). Developing a priority setting approach for domestication of indigenous fruit and nut species in Makawanpur District, Nepal. *Acta Horticulturae*, 979, 97-106.
- Do, Q., & Lakshmi. (2010). Geography, poverty and conflict in Nepal. *Journal of Peace Research*, 47(6), 735-748.
- Hancock, J. F., Lawrence, F. J., & Scott, D. H. (1976). *Fruit breeding: vine and small fruits* (Vol. 2). New York, NY: John Wiley & Sons, Inc.
- Hannum, S. (2004). Potential impact of strawberries on human health: a review of the science. *Critical Reviews in Food Science and Nutrition*, 44(1), 1-17.
- Kazama, F., Manandhar, S., & Pandey, V. (2014). Assessing suitability of apple cultivation under climate change in mountainous regions of western Nepal. *Regional Environmental Change*, 14(2), 743-756.
- Kirkpatrick, S., & Tarasuk, V. (2009). Food insecurity and participation in community food programs among low income Toronto families. *Canadian Journal of Public Health*, 100(2), 135.
- McKenzie Seeds (2015). *Welcome to McKenzie seeds*. Retrieved from <http://www.mckenzieseeds.com/>
- Rowh, M. (2006). Advantages of buying locally. *Office Supplies*, 23(4), 40.
- Seed Bank (2015). *Seed Bank shop*. Retrieved from <https://www.seed-bank.ca/>

West Coast Seeds (2015). *Untreated, non GMO seeds for organic growing*. Retrieved from
<https://www.westcoastseeds.com/>

Wetherbee, K. (2004). Grow superb strawberries. *Mother Earth News*, 203, 79.

William Dam Seeds (2015). *Temptation strawberry packet*. Retrieved from
<http://www.damseeds.ca/productcart/pc/viewPrd.asp?idproduct=4307&idcategory=0>

Part 2: Critical Analysis of Potential Benefits to Nepal

1) Introduction to Nepal

Nepal can be considered a small country, just faintly larger than the American state of Arkansas (Central Intelligence Agency, 2015). Its population as of July 2015 was 31 551 305 Nepalese people, with just over 80% of them practicing the Hindu religion (Central Intelligence Agency, 2015). Geographically, it is located between the countries of China and India (refer to figure 3), with terrain alternating between flatlands and vast mountain ranges (Central Intelligence Agency, 2015). Nepal is overall a very beautiful country, with an extremely diverse ethnic representation and a well-rounded colourful culture (Central Intelligence Agency, 2015). In the terms of agriculture, not much of the land is ideal for farming, thus many farmers must make do with growing their crops along the mid-hill sides and on uneven land (Gregory et al., 2005).



Aside from the many beautiful characteristics of Nepal, there are countless other statistics that can be seen as negatives to the country (Govinda, 2000). A majority of the issues lie within the access to livelihood essentials, the nutrition of the population, as well as a lack of education – especially for those who live in rural areas (Do and Lakshmi, 2010). The population is approximately 30% children, which are 14 years of age or under; sadly, 29.1% of these children are classified as underweight (Central Intelligence Agency, 2015). As well, Nepal also has an issue relating to child labour, with 2,467,549 children (34%) taking part in some form of work for either pay or compensation (Central Intelligence Agency, 2015). Further information can be found within table 2.

Figure 3. Map of Nepal

Image copied from: <https://www.google.ca/maps>

Table 2. Facts regarding Nepal’s geography and society

Fact*	Nepal Results
Name	Federal Democratic Republic of Nepal
Capital	Kathmandu
Area	147 181km ²
Agricultural Land	28.8%
Life Expectancy	67.52 years
Hospital Bed Density	5 beds/1000 population

*All table data was found from (Central Intelligence Agency, 2015).

Many plans and procedures have been put into action, or are currently be evaluated to ensure a more positive future to come for the Nepalese; but there is always more that can be done (Govinda, 2000).

II) Product Shipping

In order to help provide an affordable nutritious food source to the Nepalese, there are several methods of transportation combined to get the seeds all the way from British Columbia, to Nepal (West Coast Seeds, 2015). The packaging begins in Vancouver, British Columbia, where the harvested strawberry seeds will be safely wrapped in protective envelopes to ensure that the seeds will not be damaged during their travels (West Coast Seeds, 2015). From there, the seeds will be flown to an airport in Kathmandu, – a very busy and populated city in Nepal (McWilliam, 1996). The seeds will then be transported by truck to Swayambunath, Nepal, which is just west of the main city in Kathmandu (Thrangu Tara Abbey, 2015). In Swayambunath, a nunnery called Thrangu Tara Abbey will store the seeds and take control of the distribution to the Nepalese people (Thrangu Tara Abbey, 2015).

The overall cost of the transportation of the seeds can only be estimated at this current moment. Aside from paying for the cost of seeds, the shipping addition from West Coast Seeds, along with the cost to truck the seeds to the nunnery will have to be taken into consideration. The flat rate to ship anywhere in Canada for orders of 100grams to 750grams is \$7.50, with the addition of \$2.00 for every increment over 1kg (West Coast Seeds, 2015). With this price just relating to Canada-wide shipments, it can be assumed that the prices to fly the seeds to Nepal will be drastically higher. With that being said, the price is also a lot cheaper to ship the product in bulk, rather than in smaller packages (West Coast Seeds, 2015). This furthermore influences the idea that it is more economically logical to buy a large mass of seeds rather than just a small order. In relation to the cost of getting the seeds from the airport back to nunnery in Swayambunath, there are several options. There are most likely already products, or people, travelling from the main city to the nunnery on almost a weekly basis – since the Buddhist nuns

live there, they will need supplies brought to them (Thrangu Tara Abbey, 2015). The strawberry seeds can be brought along with the travelers and other supplies for an additional fee to what they were already paying for this service, or if the transportation was voluntary (Thrangu Tara Abbey, 2015).

III) Distribution

As mentioned in *Part 2. II*, the Buddhist nunnery Thrangu Tara Abbey would be used as a destination for the end of the seeds' travels. This particular location and religious community was chosen for a variety of reasons. To begin, the company of choice for this exportation of Canadian strawberry seeds was West Coast Seeds. Referring back to *Part 1. IV*, West Coast Seeds has already worked in partnership with the Buddhist nuns in Nepal (West Coast Seeds, 2015). This connection would make the transition of the seeds from Canada to the Nepalese people a lot easier as the communication between the two countries has already been established (West Coast Seeds, 2015). As well, the nuns at Thrangu Tara Abbey are all very familiar with planting, and growing fruits and vegetables (Thrangu Tara Abbey, 2015). They have had a community garden located at their sanctuary for many years, and have even had one of their own Buddhist nuns visit one of the West Coast Seeds locations in Canada (Thrangu Tara Abbey, 2015).

With all of the strawberry seeds imported to this location, the nuns will be able to take charge in the distribution and selling of this product. Depending on the total cost of the seeds and the transportation fees, the nuns will be able to price the seeds accordingly to their customers. Considering the nunnery is already a popular establishment, with its own website

and various networks with other corporations, Thrangu Tara Abbey will most definitely have the ability to locate customers throughout Nepal (Thrangu Tara Abbey, 2015). The seeds can once more be transported to shops where seeds and other gardening needs are already sold, or personally purchased from the nunnery.

IV) Benefits of Thrangu Tara Abbey

Through the process of selling and distributing the seeds within the cities and townships of Nepal, Thrangu Tara Abbey will be able to provide the local Nepalese people with many other important services. Thrangu Tara Abbey holds an important role in the increase of woman as teachers and creating an overall better education both spiritually and mentally for women as well (Thrangu Tara Abbey, 2015). With multitudes of women in Nepal deficient of citizenship related rights, more funding for this nunnery will create a betterment for many women throughout the country (Laczo, 2003). As well, the Buddhist nuns are big supporters in teaching others how to grow their own foods, and assisting them in starting their own gardens; by selling seeds they will have more equipment and supplies to do so (Thrangu Tara Abbey, 2015). Refer to figure 4 for an example of one of Thrangu Tara Abbey's religious shrines. Over



all, the nunnery alone holds many amazing initiatives through the possible profits it can receive.

V) Customer Outlook

The class of people who will most likely be purchasing the strawberry seeds will either be those who are living below the poverty line or the general middle class families (Devhota and Upadhyay, 2013). The purpose of this initiative is not to export seeds that will be used on large farm lands and in industrial farming, but rather for household cultivation. With a majority of families in Nepal already having their own home garden (Abishkar et al., 2013), the addition of strawberries to their home garden would be a great benefit. The seeds can be grown in baskets/containers inside the home which will be quite useful (Wetherbee, 2004).

The purchase of these seeds will be exponentially cheaper than buying the fruit already grown at the market (Minten et al., 2010). This makes this idea both affordable and assessable to the Nepalese people with a lower income. As well, it was mentioned earlier that most families already have gardens for growing both fruits and vegetables, this means that they will also have the essential tools needed to grow the strawberries from the seeds (Abishkar et al., 2013). With household gardens contributing to 60% of each family's intake of fresh produce, it is safe to say that there will be a market for inexpensive, nutritious, easily maintained seeds (Abishkar et al., 2013).

VI) Product Potentials

The obvious use of the exported strawberry seeds is to have them grown in small home gardens and then eaten by the low income families in Nepal. Aside from the typically use of the seeds, there is also an abundant number of ideas that can be produced from the fruit. Firstly, if the people who are growing the strawberries find they would rather have a source of income than another source of food, they have a few options. The fruit can be harvested and then sold to neighbours, local grocers, and markets at a price they find acceptable for their needs. As well, the strawberries can also be easily processed into a variety of products. Some of the most common include jams, preserves, sauces, juice, baked goods, and many more. These products typically will retain more value than just then the just the strawberries alone. Additionally, these specialty goods and merchandises can be used as a simple product to sell at tourism stores, or even be exported to other nearby countries that do not have the right climate to produce strawberries.

References

Devhota, S., & Upadhyay, M. (2013). Agriculture productivity and poverty reduction in Nepal.

Review of Development Economics, 17(4), 732-746.

Gregory, P. J., Mathema, S. B., Pilbeam, P. J., & Shakya, P. B. (2005). Soil fertility management in

the mid-hills of Nepal: practices and perceptions. *Agriculture and Human Values*, 22(2),

243-258.

Govinda, D. (2000). Population and environment issues in Nepal and the need for community

development policy. *Contributions to Nepalese Studies*, 27(1), 23.

Laczo, L (2003). Deprived of an individual identity; citizenship and women in Nepal. *Gender and*

Development, 11(3), 76-82.

McWilliam, F. (1996). Sensory overload (Kathmandu valley in Nepal). *Geographical Magazine*,

68(4), 34.

Minten, B., Reardon, T., & Subtrader, R. (2010). Food prices and modern Delhi: the case of

Delhi. *World Development*, 38(12), 1775-1787.

Thrangu Tara Abbey (2015). *History and purpose of Thrangu Tara Abbey*. Retrieved from

<http://www.thrangutaraabbey.org/>

*Previous references have been used from Part 1 of report

Part 3: International Distributor Options

Although the exportation of strawberry seeds to Nepal was based solely on the use of a Canadian company (in order for Canada to receive a form of benefit) other international companies were also investigated. Through this process, more options are opened for the people of Nepal to look into, as well as to assist the Canadian companies in seeing on how they can improve their international relations.

Table 3. International seed distributor options for Nepal

Company	Country	Product/Price
Shanghai Herbarry Biotechnology Co.	China	Strawberry seeds/ \$220 for 350kg bag
Gaungzhou Lead You Seed Co.	China	Strawberry seeds/ \$5 for 5.7 bags (minimum order of 100 bags)
Sanjay Nursery	India	Strawberry seeds/ price available upon request. Minimum order of 100kg
Maido Trading International Company	China	Organic strawberry seeds/ \$1.79 per bag

*All information was from:

Alibaba (2015). *Strawberry seeds*. Retrieved from <http://www.alibaba.com/showroom/strawberry-seeds.html>

Canadian exporters have a lot to improve in the terms of shipping to different nations – but each company individually has specific needs they should focus on. In regards to the shipment of the strawberry seeds, cost is a big component in competitiveness. Thus, for Nepal to import seeds it is definitely more financially affordable from a closer location. As well, the

product has to be with the familiar with environment it will residing – especially when it comes to living organisms. Perhaps by purchasing a seed that has been inhabited in a country with a similar climate, the overall product will grow to a greater potential.