

Canadian Vine Seeds to Grow on Terrace Walls

By: Samantha McNeil

Due: Monday November 23, 2014

TA and Section: Anne, 104

Nepal is a very poor country that is land locked between China and India. It is a unique country because it has 3 different types of climate and terrain (Anonymous, 2012). Nepal is known for its unique land demographics. In the southern-most part closest to the Indian boarder is where almost all of its farming takes place. As you move north you enter the hilly region. Then the most northern part closest to China is Nepal's mountain region (Anonymous, 2012). Nepal is a developing country so they need guidance on some farming techniques and some new diversity. Therefore sending over some vines seeds from a Canadian company will help them out. Vine crops in Nepal can help benefit in many ways. Outlined in this paper are all the positives and negatives effects of this product on Canada and Nepal. An outline about the product and all the costs associated with it; right from shipping, to seeds cost, to planting, maintaining and harvesting the final crop.

About the Company

A Canadian company called The Prairie Garden Seeds is a seed company located in western Canada in Humboldt, Saskatchewan (Ternier, 2014). The Prairie Garden Seeds is a family owned and operated Seed Company. Husband and wife Jim and Marie-Louise Ternier started this operation back in 1986. Jim and Marie-Louise Ternier have three kids David, Daniel and Rachelle. Jim's sister Judy lives and works on the family farm as well. Each family member has an important role to keep the operation going. Gardening in the prairies has been apart of this family's life for a long time. Jim's daughter Rachelle took the strongest interest in this family operation since a very young age. She has always been there helping garden; if it was from collecting and saving seeds or to going to Seedy Saturdays with her dad; Rachelle always showed an interest. Today

she is helping take over the family operation along side her parents (Ternier, 2014). This seed company is completely independent and does everything themselves. They start with the seeds planting and managing them to harvesting them when they are ready. This company doesn't stop there though they harvest and package all the seeds themselves as well. They are a very family oriented and run company (Ternier, 2014).

Seeds for Nepal

Since Nepal is a very poor and uneducated country that highly depends on fruits and vegetables for survival it is important to send over vine crops (Zuchora-Walske, 2008). Vine Crops can help the people of Nepal in many ways; this will allow for them to grow many more fruits and vegetables in places where they haven't been able to grow anything before. Since this product isn't overly expensive the farmers of Nepal could buy their own seeds or buy a bunch between 2-3 farmers; this would allow them to split up the seeds so they can have a little bit of each variety.

Seed Production and Costs

The Prairie Garden Seeds grow 80% of the seeds they distribute. A commercial farm grows the remaining 20% of the seeds on a contract (Ternier, 2014). These seeds that are grown on the commercial farm are labeled specially with a (C) after the variety. Labeling them this way allows customers to be aware of who grew the seeds. The most important and interesting part is that the Prairie Garden Seeds farm and garden without the use of agricultural chemicals or the use of synthetic fertilizers. All of their seeds are open pollinated, untreated and not genetically engineered (Ternier, 2014). The Prairie Garden Seeds is a very busy little company. At peak season it takes up to 6 weeks to order seeds and get the order processed. This little company has 44 different varieties of

the vine crops and many more other seeds. Each package contains a range of 24-50 seeds per package depending on what variety you buy. Prairie Garden Seeds stands behind their name because you will receive a full discount if you are unhappy with the seed you bought (Ternier, Personal Communication September-November 2014).

Producing these seeds to sell requires a lot of time and effort. This family plants and maintains it all by themselves with a few hired hands. With having little cost and less hired people they can sell their seeds for less money than competitors because their input costs are a lot lower.

Benefits

Sending this product overseas to a developing country is very beneficial to Canada. This opportunity to trade with developing countries will allow Canada to expand its trading market. They will be able to make new ties with countries and help each other out. This will help increase the Canadian economy by importing new money and creating more jobs. With having more stable jobs in Canada will help improve peoples lives so they can spend more money in our country to keep it running instead of buying cheaper imported products. Selling these seeds to Nepal would help improve Canada because it would support this family company and will help get their name out on the market and help make this company grow. With this it helps build competition and competitiveness between companies. This competition and competitiveness forces companies to produce even better products than before.

Challenges

All of the Prairie Garden Seeds are grown on the natural soils of western Canada. This only allows the company to grow their seeds when conditions are

good. A challenge is if this company expands it will be harder to keep up with the demand. The weather can make or break this family company if things don't go right with planting, harvesting or the time in between. Growing in outdoor conditions can be troublesome because for open pollinations you need the perfect temperature and weather for it to be successful (Zamir, 1982).

Nepal

Nepal is located in Asia; it is a very small developing country; it has a population of about 28 million people. This country is still one of the poorest among the world. The majority of the people in Nepal are uneducated and resort to farming and live off the land for survival (Zuchora-Walske, 2008).

Costs

Since Nepal is so far away and is very poor the cost of importing almost anything seems to be unreasonable priced when you factor in exchange rates. Importing seeds into this country would look expensive in the beginning but once the farmers sat down and laid it all out on paper including their cost and profits it wouldn't look so expensive than. The Prairie Garden Seeds offers competitive priced seeds compared to other companies. Prairie Garden Seeds has a standard \$3.00 US per package on almost any seed in their inventory, while other competitors have a large range in prices (Terneir, 2014). The range in prices depends on what kind of seeds farmers purchase. Below is a chart that compares Prairie Garden Seeds with a tough competitor in Canada. The seeds are produced a little differently and the competitor isn't a family run operation but has headquarters in Canada and the United States.

Prairie Garden Seeds	Competitor in Canada
Tomatoes \$3.00/ pkg (25 seeds)	Tomatoes \$15.10/ pkg (25 seeds)
Squash \$3.00/ pkg (25 seeds)	Squash \$5.05/ pkg (25 seeds)
Peas \$3.00/ package (25 seeds)	Peas \$3.70/ package (25 seeds)
Cucumber \$3.00/ package (25 seeds)	Cucumber \$3.95/ package (25 seeds)
Strawberry \$3.00/ package (25 seeds)	Strawberry \$7.15/ package (25 seeds)

Note: All prices are in US dollars. (25 seeds – 50 grams) (Ternier, 2014) , (Anonymous 5, 2014).

For Nepalese people to buy in their own continent of Asia it would save them on transportation costs. Their seed would still cost a considerable amount more than the Canadian seed. The seed produced by a company in China does not have near the selection as the Canadian company. The Canadian company is still very competitive on the market across the globe.

Prairie Garden Seeds	Competitor in China
Peas \$3.00 / (50 grams)	Peas \$3.20 / (28 grams)
Cucumber \$3.00 / (50 grams)	Cucumber \$32.00 / (28 grams)
Tomatoes \$3.00 / (50 grams)	Tomatoes \$15.00 / (28 grams)

Note: All prices are in US dollars. (Anonymous 3. 2013), (Ternier, 2014)

Another large cost with importing these seeds is transportation and shipping cost. Since Nepal is landlocked between China and India it is hard to import products to them unless it can be flown right into the country. Shipping these seeds through a company like UPS would be quite costly but the best way to get to the direct destination (Anonymous 4, 2014). By shipping a box 18 x 13 x 3 inches that is roughly 100lbs would cost

anywhere from 1800-2000 US dollars. To get to Nepal it would also take a little longer than just a quick flight. Shipping to Nepal via UPS can take anywhere from 8-14 days depending on how much you want to spend and your time line. By shipping through UPS you can pick from whatever city you would like in Nepal and have direct shipment. This saves a lot of headaches of trying to ship it from one end of the country to the other once its in Nepal. Another positive to shipping these seeds right to the city of choice is not having to worry about Nepal being landlocked; this insures the seeds wont get stuck in another residing country. Another alternative to this shipping choice is that you could also send it to the seed dealer or Seed Company that is going to be retailing the seeds to the farmers. Below I mapped out transportation from the supplier right out of Saskatchewan to Nepal's capital city. This includes ground and air transportation right to Nepal.

Package
Freight

Please provide information about your shipment including destination, origin, shipment date, and weight. Required fields are indicated with *

1 Where and When? [Edit](#)

Ship To:
KATHMANDU, 44600 NEPAL
Commercial

Ship From:
HUMBOLDT, S0K 2A0 CANADA
Commercial

Shipment Date:
Saturday 22 November 2014 ²

Customs Value:
100 CAD

Duty Type:
01 - Dutiable

2 Enter Detail to Show Cost [Edit](#)

Packaging:
My Packaging
18 x 13 x 3 in

Package Weight:
100 lb

Number of Packages:
1

Additional Resources / Tools
[Zones and Rates](#)
[Service Guides](#)

Showing Results For:
HUMBOLDT, S0K 2A0, CANADA to KATHMANDU, 44600, NEPAL. [Find Locations](#) [Print](#)

Service	Time	Cost (All Packages)
UPS Express Saver □ Latest Pickup Time: By End of Day Tuesday 25 November 2014 Schedule by ¹ :	Delivered By: By End of Day Wednesday 3 December 2014 Guaranteed	1,983.62 CAD * Billable Weight: 100.0 lb View Details Ship Now
UPS Worldwide ExpeditedSM □ Latest Pickup Time: By End of Day Tuesday 25 November 2014 Schedule by ¹ :	Delivered By: By End of Day Tuesday 9 December 2014 Guaranteed	1,731.28 CAD * Billable Weight: 100.0 lb View Details Ship Now

Rate estimates are based on export rates from the origin (Ship From) country.
 Result estimates calculated by UPS: Saturday 22 November 2014 3:38 P.M. Eastern Time (USA)
 * Rate includes a [fuel surcharge](#) [□](#), but excludes taxes, duties and other charges that may apply to the shipment. For information about the final charge, contact UPS.
¹ Schedule a pickup online or by calling UPS at least one business day in advance of your needed pickup date.

[Guarantees and Notices](#) [□](#)

(Anonymous 4, 2014).

Benefits

Importing vine crops to this country will help benefit in more ways than just one. This crop will help with many things such as creating more jobs, helping make a little

more money for families, preventing hill side erosion in the mountains; and these are just some benefits for this country (Zuchora-Walske, 2008).

In Nepal these vine crops would be beneficial because this could be a new thing for them; new fruits and vegetables could open up a new trade on the markets they attend. Farmers would now be able to grow in areas where they could not already farm. The idea for sending over these vine crop seeds is to expand the Nepalese peoples diets and help them achieve a little extra money on the side. For people with little to no education, but know a little about farming could really benefit from this (Zuchora-Walske, 2008). Vine crops take little to no effort to maintain. With the seeds coming from The Prairie Garden Seeds; the seeds have never been exposed to synthetic fertilizers or agricultural chemicals (Ternier, 2014). This provides a benefit to the seeds Nepalese people plant because they wont be set lacking nutrients when they don't receive any type or fertilizers or agricultural chemicals while growing in Nepal. With being so easy to maintain this will create jobs for the husband's wife and children. They could be responsible for taking care of these crops, this would allow for them to help with the family farms. The ideal idea is for the people to grow these crops on terrace walls so they can take the extra fruit to market. Sending this extra fruit to market would help out theses families a lot because they aren't taking away from their valuable farmland; they also don't require a lot of input costs. Vine plants would just be able to help their economic standards and provide more food for their country. Also adding new plants to the mix will help increase the genetic diversity in their plants they already grown and help increase yields (Sthapit, 2008).

In Nepal a major downfall is that they have so many land demography's. This country has a very unique land demography; it has 3 different types of terrain, Mountains in the north, hills in the middle and the southern most part of the county is the plains; this is where most the farming occurs. With this Nepal has lots of problems with erosion and landslides in the hilly region and mountain areas (Zuchora-Walske, 2008). With creating some terrace walls for the plants to survive on will help with erosion. The terrace walls they have created on the hillsides to prevent erosion or landslides would be perfect for the plants. The plants could help reinforce the walls and help with the erosion of the mountains while providing food for the country. Helping prevent landslides and erosions will give the people of Nepal some reinsurance and relief. Landslides could take out towns and kill lots of people.

Planting all of these seeds will take a lot of effort. The people of Nepal could plant them by hand or create some kind of hand planter like Prairie Garden Seeds had in the 1930's to plant their seeds (picture below). This unique device saves time and is cheap hand-labour. The device would allow for the wives to plant and not be bending down all of the time making for a more comfortable work environment.



(Ternier, 2014)

Pre and post-Harvest

To keep the seeds viable and alive once you receive your packets of seed you must take care of them. The seeds need to be stored in a cool, dry area (Flowerdew, 2012). This will prevent rotting or sprouting of the seeds before they are planted. For best result you should keep them out of the sunlight as well. Although these seeds are important and cost more than regular seeds; you cannot keep them for more than a few years. Seeds only stay viable for a couple years before they die (Flowerdew, 2012).

Since vine crops in Nepal will be able to survive all year long post-harvest refrigeration wont be that big of an issue. Each week women and children can pick enough fruits and vegetables to take and sell at the market. They wont have to pick in abundance, as it will keep producing fruits and vegetable for a long period of time. Although a refrigerator would be beneficial and keep fruit stay fresher for a longer period of time rather than sitting out in the bushel baskets.

Marketing Strategy

To get these seeds distributed throughout the country a good marketing strategy would be to join together with Seed Company's in Nepal. As of right now farmers buy their seeds from dealers in Nepal. If The Prairie Garden Seeds could hook up with one of these companies they would be able to advertise to all the farmers across the country very fast. Farmers could join together and buy a couple varieties and split them between themselves. This would allow each farm to have a little more option and varieties of different fruits and vegetables. Getting involved with National Seed Company in Nepal or the Salt Trading Corporation Limited in Nepal would be beneficial. These two

companies distribute seed through their private dealers across the country (Anonymous 2, 2013).

In Nepal I think this might take a few years of sending over seed and getting one or two farmers to start growing it before it catches on like wild fire. Nobody likes to be the test dummy and jump into something they know nothing about; especially if it's a developing country. Once families start taking new fruits to the markets and making a little extra cash people will begin to look into vine crops because everyone wants the newest and latest products. People of Nepal will be more open to expanding their agricultural practices and improving their way of life with new ideas and concepts. This product will help break the mold the people of Nepal are living with and help expand and teach them how to work with the land conditions they are given. People can always work with what they are given they just need to be creative and think a little differently than the normal day to day logic. With this not only can the people themselves benefit greatly from the product but also so can the countries of Nepal and Canada. Both countries can take advantage from sending over new vine crop seeds. Each country has something to offer if it is between money, jobs, opportunities or friendship. With this being said some recommendations for this product would be to buy through The Prairie Garden Seeds located out of Saskatchewan because of their competitiveness and their value behind their products. They are a little company therefore believe you should be 100% satisfied or your money back. The shipping makes the most sense if people can directly send it to whichever city of choice they would like. UPS shipping can do this and for a affordable price. With this the countries could be creating new bonds and opportunities that come once in a lifetime; this shouldn't be passed upon but only taken advantage of. Importing

these vine seeds to Nepal is one of those opportunities for both countries involved in the trade.

References

- Anonymous 1. (2012). Nepal. *Department of State Publication. Background Notes Series (Online)*, , 1-7.
- Anonymous 2. (2013). NATIONAL SEED VISION. *Seed Sector Development Strategy*. Retrieved from http://www.moad.gov.np/downloadfile/combibed_1374486353.pdf
- Anonymous 3. (2013), Oriental Vegetable Seeds Retrieved from <http://evergreenseeds.stores.yahoo.net/index.html>
- Anonymous 4. (2014). UPS Retrieved from https://wwwapps.ups.com/ctc/request?loc=en_CA&WT.svl=PNRO_L1
- Anonymous 5. (2014) Stokes Seeds. Retrieved from <http://www.stokeseeds.com/home.aspx>
- Dhakai, S. (2013). Seed Producer Organization of Farmer: An Experience of Western Terai, Nepal. *Agronomy Journal of Nepal, volume 3*. Retrieved from <http://www.nepjol.info/index.php/AJN/article/view/9018>
- Esteve Agelet, L. (2013). Differences between conventional and glyphosate tolerant soybeans and moisture effect in their discrimination by near infrared spectroscopy. *Food Chemistry, 141*(3), 1895-1901. doi:10.1016/j.foodchem.2013.04.087
- Flowerdew, Bob (2012). *Sowing, planting, watering, and feeding*. New York: Skyhorse Publishing, Inc.

Sthapit, B. (2008). The value of plant genetic diversity to resource-poor farmers in nepal and vietnam. *International Journal of Agricultural Sustainability*, 6(2), 148-166.

Ternier Rachelle, T. J. (2014). *Prairie garden seeds: About us*. Retrieved october 7th, 2014, from <http://prseeds.ca>

Thapa, M. (2013). Regulatory framework of GMOs and hybrid seeds in Nepal. *Agronomy Journal of Nepal, volume 3*. Retrieved from <http://nepjol.info/index.php/AJN/article/view/9015>

Top 100 food plants. (2010). *Choice Reviews Online*, 47(06), 47-47-2932. doi:10.5860/CHOICE.47-2932

Zamir, D. (1982). Haploid selection for low temperature tolerance of tomato pollen. *Genetics*, 101(1), 129-37.

Zobiolo, L. (2010). Glyphosate affects photosynthesis in first and second generation of glyphosate-resistant soybeans. *Plant and Soil*, 336(1), 251-265. doi:10.1007/s11104-010-0474-3

Zuchora-Walske, C (2008). *Nepal in Pictures*. Denver: Twenty-First Century Books.