

Exporting cumin seeds to Nepal.

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Part 1- Product information.

• Product description: “Cumin, also known as Zeera, is a flowering plant in the family Apiaceae, native from the east Mediterranean to India. Its seeds (each one contained within a fruit, which is dried) are used in the cuisines of many different cultures, in both whole and ground form” (Sahu, 2013). Cumin is “an aromatic spice with a distinctive bitter flavour and strong, warm aroma due to its abundant oil content” (Kitchen dictionary, 2014). Cumin is ranked as second for flavouring spices used in cooking all around the world—after black pepper. People especially in Asian countries like to use cumin as one of the most common spices and Nepal is no different.



Picture reference: left: <http://loghouseplants.com/plants/shop/cumin-cuminum-cyminum/>

right: <http://www.savoryspiceshop.com/spices/cumsd.html>.

• Health information: Cumin is an excellent source of iron as well as a very good source of manganese. Iron helps to transport oxygen throughout the body, for those people with iron deficiency, their body will not have enough health red blood cells (WebMd, 2014). Women have

a higher chance of iron deficiency due to the fact that they lost blood every month through period. People get most of their iron from red meat but local Nepalese on average consume less red meat than they required. A nationally conducted study has been done during the time period from December 1997 to May 1998 called Nepal micronutrient status survey found that there is a high percentage of women and female children have iron deficiency all around the country of Nepal (Tulane University, December 1997 –May 1998).

Picture reference: <http://www.whfoods.com/genpage.php?tname=foodspice&dbid=91>

- Growing condition: “Cumin (*Cuminum cyminum*) is a rainfed crop, but supplemental irrigation is needed in some dry years. Little information is available about its consumptive use of water” (Alizadeh, Hasheminia and Tavoosi, 2002). Cumin is a tropical and subtropical plant, which suits the climate in Nepal (The epicentre, 2014). It is available year round and is also not a very large plant to grow; it grows into only approximately 10-12in. Cumin is harvested by hand, which is great for local people in Nepal because it does not require any machines or technologies (The epicentre, 2014). “Cumin grows best on well drained sandy loam to loamy soils with a pH range of 6.8 to 8.3. Acidic soils and alkaline soil reduce yield unless soil acidity is lowered to pH = 7.5” (Weiss, 2002).

Picture reference: <http://sdwebx.worldbank.org/climateportal/index.cfm?>

[page=country_historical_climate&ThisRegion=Asia&ThisCCCode=NPL](http://sdwebx.worldbank.org/climateportal/index.cfm?page=country_historical_climate&ThisRegion=Asia&ThisCCCode=NPL)

- Pests and diseases: “The most important diseases in cumin cultivation are: wilt, blight and powdery mildew. Wilt is caused by *Fusarium oxysporum* f. sp. *cumini*, resulting in yield losses as high as 80 %. The fungus is both soil- and seed-borne. Frequent epidemics are caused when the soil temperature is between 12.5° C and 14° C, and in fields which are not adequately fertilized. A proper management strategy involves the use of healthy seeds, the application of a

summer plowing session, a crop rotation with beans, wheat, cluster beans and mustard, and seed treatment with fungicides or antagonistic fungi like *Trichoderma*. Die back is an important disease in cumin grown in Morocco. The disease effect is apparently stronger in early sown crops than in late sown cumin” (Pastry and Anandaeaj, 2012).

- Weed Control: “Cumin faces a severe weed competition at all stages of its growth cycle because of its slow growth and short stature. For proper aeration and control of weeds, at least two hoeing and weeding sessions are necessary, respectively 30 and 60 days after sowing. Thinning should also be done during the first hoeing, as well as weeding to remove excess plants. *Cynodon dactylon*, *Chenopodium* spp. and *Plantago pumila* are common weeds, whereas in Ethiopia *Plantago psyllium* is more common” (Pastry and Anandaeaj, 2012).
- Supplier: A Canadian company called William Dam Seeds Ltd. supplies both black cumin and cumin seeds. William Dam Seeds Ltd. is a non-chemically treated seed company founded 64 years ago and is located in Dundas, Ontario by Wim and Maria Dam, two Dutch immigrants that had been working in a Holland seed company for many years. This local seed company has about 20 employees during in season and about 10 employees full time year round. Due to the instability of the Canadian climate, they do not produce their own seeds but rather import from around the world. Their ability to supply orders is dependent upon the seed growers ability to produce the seed. Generally speaking through, they do supply home gardeners up to market growers. Large scale farmers usually buy direct from the seed growers (Michelle, 2014).
- Benefits to Canada: Trading with Nepal may boost the Canadian economy and more Canadians will be hired due to the increase in demand of cumin seeds and the shipping needs of sending those products abroad. Canada can export cumin seeds to Nepal and import some final products back to Canada because cumin is rarely grown in Canada. Trading with Nepal will gain the

relationship between those two countries, which might open a better international trade market with other products. Canada can exporting old-fashioned agricultural technologies or machines that they no longer use in Canada to Nepal at a lower cost.

Part 2 - Export potential to Nepal.

• Introduction to Nepal: “Nepal is a landlocked country located in South Asia. With an area of 147,181 square kilometres (56,827 sq mi) and a population of approximately 27 million” (Government of Nepal, 2012). Nepal is the world's 93rd largest country by land mass and the 41st most populous country” (Central intelligence agency, 2014). It is located in the Himalayas and bordered to the north by the People's Republic of China, and to the south, east, and west by the Republic of India” (Government of Nepal, 2012). “Nepal is a multi-party system federal republic. The Interim Constitution of Nepal, 2063 has defined three organs of the government” (Central intelligence agency, 2014).



Picture reference: <http://travel.nationalgeographic.com/travel/countries/nepal-guide/>.

- Target market: Local Nepalese that own a family garden or a small farm, who are mainly focused on supply their own families.
- Transportation logistics: Because Nepal is a landlocked country, air shipping will be the easiest way of shipping. An international courier company called NEX offers worldwide shipping services. The package needs to be less than 150 lbs (70 kg). NEX provides two types of package shipping services to Nepal, both of them offer door-to-door services. Priority express, which takes 2-3 business day and economy service, which takes 4-10 business day.
- Storage: The shelf life of cumin seeds are around 1-2 years vary from different types. It should be stored in room temperature with no direct sunlight.
- Cost: Shipping with NEX costs around 50 Canadian dollars for a 0.05 lbs package. The shipping cost is very high from Canada to Nepal.
- Needs and benefits to the importing nation: Cumin is listed as one of the most commonly used spices in cooking in Nepal (Pathak, 2011). Cumin is an easy-grown crop which does not require a lot of technic to grow and its easy to harvest. Local Nepal people can grow cumin in their family farm and sell the final products back to Canada for profit because the Canadian climate does not suit cumin's growing condition.
- Price:

Region	Price	Source
Qingdao, China	US \$1000-2000/Ton	alibaba.com, 2014
Ontario, Canada	CAD \$9.75/100g	damseeds.ca, 2014

One short ton equals to 907185 grams. Cumin seeds price in Canada is CAD\$88450.5/Ton, which is 44 - 88 times of the price from China. The only disadvantage Chinese cumin producers have is they only trade in a bigger quality, average order limit is minimum 2 tons.

- Local cumin farmers and grocery shops in Nepal might be hurt from trading. Because most Nepalese will grow their own cumin at home, the demand of cumin seeds will decrease.
- Local individuals or local grocery chains in Nepal may purchase cumin seeds from local seed retailers such as NFC Seed Co. Pvt. Ltd or Nepal Agro Sales & Services (Seedquest, 2014).
- Global competition: “Today, cumin production is mainly concentrated in Central and South Asia. Nowadays India is the largest producer (70% of world production), exporter and consumer of cumin seed in the world. In 2006- 2007 it was cultivated over 409,033 ha and produced 176,511 tons (Table 1), mainly concentrated in Gujarat and Rajasthan. The production is relatively stable over the years. The other main producing countries are Syria (7%), Turkey (6%) and Iran (6%); all other producers together account for about 10%. China is a major producer but has no statistics available” (Agri commodity prices, 2012).
- Future studies required: The sales representative Michelle told me their company (William Dam seeds LTD.) does not do international trade with other nations right now due to stringent import regulations from the US. More studies need to be done about the import and export regulations of Canada and Nepal to prove this idea is doable.

Part 3- conclusion.

- In conclusion, I do not think exporting cumin seeds from Canada to Nepal is a good idea. Three reasons why I do not recommend my exporting idea are Canada does not produce its own cumin seeds, the shipping cost are too expensive from Canada to Nepal, and China and India are big

producers of cumin seeds, they are closer to Nepal and the price is cheaper, so local Nepalese will save more money if they import the seeds from those countries.

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