

Apple Cider Beer as an export from Nepal

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November 24, 2015

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## **Introduction**

In Nepal, three quarters of the population depend on agriculture for employment and 40% of the population is living below the poverty line (Devkota, n.d.). If the primary job of people is not meeting the needs of the people, something needs to change. There is also significant soil erosion occurring in Nepal that threatens future farming (Devkota, n.d.). A proposed solution is for subsistence farmers to begin intercropping apple trees with their crops to harvest for apple cider beer to be exported to Canada as a way to generate a secondary income and help the soil conditions. Apple cider beer is a growing trend in Canada, with sales tripling from 2007 to 2012, and still growing, (McKee, 2013). If Nepal has the means to produce it, Canada could potentially start buying it, transferring money to the Nepal economy and this could potentially improve conditions for farmers in Nepal.

## **Product information**

Apple cider beer, or sparkling hard apple cider, is a carbonated alcoholic cider, with an alcohol content of 5%, made from the fermentation of apples (McKee, 2013).

### Types of apples

A species of apple, *Malus pumila*, otherwise known as a Granny Smith apple, is a suitable type of apple to make cider from in Nepal, as it is native to the area (Devkota, n.d., McKee, 2013). Commercial companies like Growers are already using Granny Smith apples for its tart taste, as the tartness improves the taste of the cider (Growers Cider, 2015). This species of apples are a high chilling cultivar that does well in cool hills, making them suitable to be grown by hillside farmers in Nepal (Devkota, n.d.).

### Where apples can be grown

Apple trees, like any tree, can be intercropped on a farm (Neupane, 2001), so subsistence hillside farmers can grow these trees while also growing food to provide to their families. Apple trees grow well in high elevations, like those found in the high mountains of Nepal, and they can grow even when there is low rainfall (Devkota, n.d.). The hill regions are suitable for high chilling cultivar apples; apples that need to chill in cool temperatures for at least a thousand hours before they are ready to be harvested (Devkota, n.d.).

A problem with growing apples is that there are a number and pests and diseases that apples trees are susceptible too such as wooly aphid, defoliating beetle pests and powdery mildew root rot, and while there are some solutions to these problems they can be expensive and not accessible to all farmers (Devkota, n.d.)

#### Producing cider from apples

To make the cider, apples need to be harvested, then they are crushed or milled, and the juice, with the addition of yeast and sugar, ferments into a sparkling hard apple cider (McKee, 2013). They can be made in already existing wineries and breweries, and it is a relatively quick process and the cider is packaged right after fermentation to keep it fresh (McKee, 2013).

In Nepal, apples are harvested by hand and transported by mules to somewhere that is can be transported by trucks and airplanes, or they can be airlifter from the mountainous region (Devkota, n.d.). If not transported, they can be store in cellars for half a year to be used when needed (Devkota, n.d.).

There are already fruit processing units in Nepal, including 130 small units in the hill districts, and of these, 25 are wineries due to the increasing popularity of producing alcohol from fruit (Devkota, n.d.). As creating alcohol for export is already being done in Nepal, it shows that

exporting cider beer could be viable. There is mention of producing wine (Devkota, n.d), but not cider beer, meaning that there is potentially an open market for production in Nepal.

## **Benefits to Nepal**

### Benefits of apples

In Nepal, It is more profitable to have a farm with trees as it provides an extra crop that can be sold (Neupane, 2001). It is generally more profitable to sell fruits than it is to sell a cereal product, but it is hard to find a large market for fruit in Nepal, resulting in farmers selling their fruit for low prices (Devkota, n.d.). A bushel of apples can produce 13.5 liters of cider, where that amount of cider can be sold for more than the worth of the apples (McKee, 2013). By selling a more profitable item in another country, it would allow farmers to increase their income and stop living in poverty, thus improving their living conditions (McKee, 2013). Fruits are also a perishable product easily damaged in transport, so it would be logical to process the product before exporting it (Devkota, n.d.).

### Benefits to soil quality

Currently, production of crops in Nepal, especially in the hillside, is limited by low soil fertility, which is declining from soil erosion (Neupane, 2001). Trees provide a solution to this as their roots hold the soil together, preventing it from eroding away, and the roots also help retain water below the surface (Neupane, 2001). By planting apple trees, farmers can help stabilize their soil and harvest an additional crop to be sold.

### Drawback of apple cider beer production

There are some constraints in Nepal that would make it difficult for the to start mass exporting cider beer. Some infrastructural constraints are that Nepal is in a mountainous region with limited access to roads, which would be necessary for farmers to export their product as

well as some farms do not have enough space to intercrop a new plant (Devkota, n.d.). The cultivation of fruit and start of a new mill is expensive, and in Nepal farmers do not have access to a credit system to cover the start up costs, so these financial problems would make it difficult for farmers to start up a new business (Devkota, n.d.). There are also certain rules and regulations necessary to start selling a foreign product commercially in Canada (Importing to Canada, 2014), and farmers in Nepal could potentially have difficulty deciphering the laws and making sure their product meets all necessary criteria.

### **Evaluation of export potential to Canada**

The market for cider is growing in Canada, as shown by the Ciders, Coolers, and Other Refreshment Beverages (CCORB) category selling \$692.9 million in 2013, up 9.5% from the previous year (Statistics Canada, 2013). In 2013, Canadian CCORB sales increased 1.5%, while imported beverages of the same category increased 15.9% (Statistics Canada, 2013). This growing market of imported cider beer means that there is potential for Nepal to export their product in Canada and have it successfully sold.

According to Statistics Canada, (2013), prior to 2015, data on cider was included with wine data, and data on beer coolers was listed under beer, so as the category of cider beer is relatively new, data from beer and wine will also be used. Looking at distribution of imported alcohol in Canada, the sales are increasing; in 2014 imported beer sales were up 3.7% from the previous year, wine was up 0.8%, and coolers were up 37.7% (Beer Canada, 2015). The quantity being sold for beer and coolers in 2014 were 3 571 558 hectoliters and 128 760, respectively (Beer Canada, 2015). The profits from alcohol sales are increasing as well, with \$21.4 billion being sold in 2013, up 2.2% from the previous year (Statistics Canada, 2013). People of Nepal

can potentially capitalize on the lucrative market of imported beverages in Canada that is currently increasing.

### **Potential buyers**

The following is a list containing Canadian liquor stores and their contact information that have the potential of selling cider beer:

#### **British Columbia**

BC Liquor Stores  
2625 Rupert Street, Vancouver, B. C. V5M 3T5  
604-252-3000

#### **Alberta**

AGLC  
50 Corriveau Ave. St. Albert, AB, T8N 3T5  
780-447-8600

#### **Saskatchewan**

Saskatchewan Liquor  
2500 Victoria Ave, Regina, SK S4P 3M3  
306-787-5563

#### **Manitoba**

Liquor Mart  
131 Selkirk Ave, Thompson, MB, R8N 0M5  
204-677-0210

#### **Ontario**

The LCBO  
55 Lake Shore Blvd East, Toronto, ON, M5E1A4  
416-864-2570

#### **Quebec**

SAQ  
905, De Lorimier Avenue, Montreal, QB, H2K 3V9  
514-254-2020  
info@saq.com

#### **New Brunswick**

NBLC  
170 Wilsey Road, Fredericton, NB, E3B 5B8  
506-462-2024

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