

**Exploring the export potential of the Healing Pine cream idea manufactured by the Chir  
Pine Cooperative**

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Introduction:

The Chir Pine Cooperative is the idea for a production company based in Nepal. The Chir Pine Cooperative will produce a general healing cream created using the resin tapped from the chir pine tree. “Healing Pine” will be the name of the topical cream produced by Chir Pine Cooperative. This report will examine the viability of Healing Pine, the Chir Pine Cooperative’s Product, and its export potential to Canada.

Introduction to the Chir Pine Tree:

The Chir Pine (*Pinus Roxburghii Sargent*) is an evergreen that grows to approximately 55 m (Chandra, 2013) and can grow well on degraded soil. The chir pine forest extends from Pakistan, Northern India, through into Nepal and Bhutan (Aggarwal, Dhirender, Kaushik, & Mehra, 2010). The chir pine grows between a range of elevation of 900 and 1950 m in sheltered valleys and in the foothills and it can grow to an elevation 2700 m in some regions (Forestry Nepal, 2014). In the west of Nepal, the chir pine forms large areas of almost pure pine forest on north-facing and south-facing hillsides (Forestry Nepal, 2014). The hillside growth of chir pine forests creates the possibility for the resin industry to remain within the hills of Nepal and therefore contributing to the prosperity of Hillside farmers.

### Tapping the Chir Pine for Resin:

The Chir Pine tree is the only species tapped for resin in Nepal (Chandra, 2013). Tapping of the pine tree is practiced in Nepal in over 80% of the forests (Subedi, 2014) and the chosen method depends on the technology available. In Nepal, resin can be harvested using the light and continuous tapping method (Forestry Nepal, 2014). This method is considered more environmentally sustainable because only one section of the bark is removed at a time and the exposed section is tapped for four to five years (Forestry Nepal, 2014). After the four to five year tapping period, a new section of bark is removed and tapping continues using the new section.

### Use of Chir Pine Resin to Produce Healing Pine:

Healing Pine is manufactured using the resin harvested from the chir pine tree. The unprocessed resin has traditional uses in Nepal because of the existence of essential oils and antibacterial chemical compounds in the resin (Ali, Basalah, Salem, 2014). Traditionally, the resin reduces swelling and inflammation, and soothe boils. The goal of Healing Pine is to capture to indigenous knowledge about the benefits of the resin, and extend its use outside of Nepal (Aggarwal et al., 2010).

### Production of Healing Pine Cream:

The unprocessed resin would be harvested, and then the required additions to transform the resin into a cream would be added. Healing Pine is manufactured through a process requiring value added steps, which would possibly occur away from the forest. In the Banke District of Nepal, there exists resin-processing plants (FAO, 2009). There may exist the possibility of transforming a pre-existing production facility in the Banke district into a production site for Healing Pine.

However, if the production is to remain within the Hills of Nepal, a production facility could be created. The new production facility could host other small forest-based enterprises to form a cooperative. Cooperatives, according to the International Labour Organization (2002), can create gender empowerment as well socially distribute the wealth to all those who contribute to the success of the operation. This could be very beneficial to the workers employed through the Chir Pine Cooperative.

#### Environmental Sustainability:

Forests are home to great biological diversity as well as other useful natural products (Chandra, 2013). For example, edible mushroom, herbs with medicinal properties and wildlife traditionally used for hunting and furs can be found in chir pine forests (Chandra, 2013). Resin can be harvested without cutting the tree down which will preserve the forests for traditional use. The resin tapping industry has potential to conserve forests by giving economic value to a standing tree. However, sustainable tapping methods are vital as to remove the risk of a tree dying prematurely from overuse. The resin is an extractive, and removal of the resin does not mean the death of the tree (Anderson, 1955). Therefore, if done sustainably a tree can be tapping continuously for decades (Forestry Nepal, 2014).

#### Socio-economic Concerns:

Labour intensive industries are not efficient when labour costs are high (Chandra, 2013) because the firm must pay their workers a high wage to account for the level of work required. A firm may be unable to pay the workers the high wage and fewer workers would be willing to undertake a labour-intensive job if firm is unable to pay a high enough wage (Chandra, 2013). This creates an issue, as resin tapping is a labour intensive industry. The Chir Pine Cooperative

would need to find solutions to be able to provide a living wage while operating efficiently. A possible solution could be the formation of a multi-stakeholder cooperative, where workers as well as management owns the firm. (Kent State University). This solution would require further analysis.

The FAO has reported that “Small and medium forest enterprises (SMFEs) as well as micro-enterprises have been instrumental in providing rural Nepalese with a livelihood.” (FAO, 2009). However, the local products lack the ability to compete in the global market. In order to be a successful product, a strong, stable company must produce the Healing Pine product. A cooperative has the ability to provide the needed support for success of this product. Support can be sought through an international organization that provides technical guidance to new cooperatives. As an example, SOCODEVI is “a network of cooperatives and mutual that have their technical expertise and knowledge with partners in developing countries” (SOCODEVI, 2015). SOCODEVI has an approach that helps distribute the wealth, and empower communities, women and men alike (SOCODEVI, 2015). Involvement of an organisation such as SOCODEVI will help the Chir Pine Cooperative be a viable and equitable business.

#### Export Potential of Product to Canada

Nepal exports its non-timber forest products like medicinal herbs and decorative pinecones to more than 30 countries currently. This include Asian, European and North American countries (FAO, 2009). As a result, there is potential to export pine resin in the form of Healing Pine to Canada. In 2011, Functional Food and Natural Health Products imports accounted to be \$670 million (Statistics Canada, 2011). Canada would consider Healing Pine to be a Natural Health Product, under regulations enforced by Health Canada (Health Canada, 2013) and would face a review process through Health Canada (Health Canada, 2013).

Potential Buyers of Healing Pine:

In Canada, products in the Functional Food and Natural Health Product category are distributed directly to the retailer from the exporting business (Statistics Canada, 2013). Therefore, potential buyers in Canada are proposed below. Since Healing Pine is not a well-known product, it would be marketed to smaller firms initially. Once it has gained recognition, larger firms can be contacted.

1. Goodness Me! is a natural health and food store located in Southwestern Ontario.

Guelph  
36 Wellington Street. W.  
Guelph, Canada  
N1H 3R8  
Canada-wide phone number: 1-844-255-0842

2. Good Health Naturally is a store specializing in health supplements, natural food and natural products located in London, Ontario.

Good Health Naturally  
760 Hyde Park Rd.  
London, Ontario  
N6H 5W9  
Phone number: 519-474-0140

3. Grocery chains with natural/organic Product sections. For example, Loblaw Companies Limited owns the Real Canadian Superstore, which sells a wide selection of consumer products and food.

Loblaw Companies Limited  
1 President's Choice Circle  
Brampton, Ontario, L6Y 5S5

Conclusion:

This report has presented the Chir Pine Cooperative business for the creation of the Healing Pine Cream. The product shows potential as a natural health product in Canadian Markets. There is need for further research in order to analyze the regulations and capital available to small enterprises in Nepal. In addition, further investigation into the production abilities of the pre-existing capital in Nepal. Furthermore, an enterprise must formulate a recipe in order to actual produce the Healing Pine Cream as well. This would involve a chemical analysis of the Chir Pine resin to find the properties of the beneficial compounds.

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