

Nepalese Juniper Essential Oils

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Product Details and Benefits to Nepal

Juniper Oil is an oil that is extracted from the juniper plant (*Juniperus communis*). The juniper plant has existed and been used by humans in Asia and Northern Africa since ancient civilizations; its medicinal uses and oil were utilized by ancient peoples and it has continued to be an important cultural medicine (Shrestha, 2014).

The juniper plant holds significant potential as a commercial product for Nepal. The juniper plant is a high altitude plant and grows on hilltops and mountainsides. This makes the plant ideal for the hillside farmers of Nepal. It is a shrub plant and does not grow very tall. The processing of the plant into oil requires steam, which extracts oil from the berries, needles, and twigs (Milojevic, 2008). Therefore there is a very low work load, because Nepalese farmers do not have to extract the specific berries. The production of the oil utilizes the whole plant. The juniper plant is a highly resistant and common crop. As a result the plant would be easily obtainable by Nepalese farmers at a low cost (Shrestha, 2014). The juniper plant relies on wind pollination. This is highly advantageous for Nepalese hillside farmers because the wind is harder and faster higher up the hillsides. As a result of being a shrub plant, the roots of the juniper plant do not grow very deep, but grow laterally. This would help reduce the amount of erosion and the loss of valuable soil on the Nepalese hillsides. The oil is steamed refined which creates minimal ecological repercussions (Milojevic, 2008). As well, this method requires some rudimentary distilling equipment (Milojevic, 2008) which is potentially easy for subsistence farmers to obtain. The labour required to harvest the plant and distil the oil is surprisingly low. As a result of being able to distill the berries, needles and twigs, the harvesting of the juniper plant requires not much more work than simply pruning the plants. Simple pruning tools can be used to harvest parts of the plant necessary for distilling. The distilling of the juniper plant is simple in practice, but does require some education. It requires to be steamed which is simple

enough, however depending on the genotype there are specific water-plant ratios that need to be adhered to (Milojevic, 2008). This can be problematic if the Nepalese farmers are not able to access this information, and would have to go through a practice of trial and error to find the correct ratios.

An issue with the juniper plant lies in biodiversity. Juniper is an immensely common plant. This acts in a good way and a negative way: it makes the plant cheap and readily available for Nepalese farmers, but at the same time does not promote the biodiversity of the region and could risk an overpopulation of the plant (Baniya, 2009). What the plant would lack in promoting biodiversity, it would allow for the continuation of local culture. The juniper plant holds significance to many indigenous farmers and communities because of its homeopathic benefits (Shrestha, 2014). As brought up earlier, the juniper plant had been used medicinally for generations. This means that the juniper has a history deeply rooted in indigenous culture and by supporting the cultivation and production of juniper oil would not encroach or negatively affect the cultures of Nepalese culture.

The inputs required for the production of juniper oil for exportation include materials required for distillation which included various pots, pans, and a method to capture steam (Milojevic, 2008). These materials individually are cost-efficient, but the purchasing of everything required to create juniper would be an investment.

The juniper oil has many proven health benefits. The needles can be used in the making of herbal teas that are easy to brew, and are rich in various vitamins and nutrients (Gavini, 2005). Nepalese have used this as a method of remedying illness. The oils have multiple health benefits, including the ability to be used as an antiseptic (Gavini, 2005). As well the oils can be used to create incense which has health benefits for the emotional state of people. These benefits, along with improving blood circulation and urination, make the juniper plant and juniper oil rich with health benefits that can benefit the foreign market as well as the Nepalese farmers who grow the plant (Gavini, 2005).

In Nepal, juniper would economically benefit mainly the hillside farmers that would be the main proprietors of the juniper oil. Growing the plant would allow them to sell to a wide foreign market allowing for money to flow into the community. The materials used in the distilling of the plant could also be used in other communal activities, making the purchasing of the materials a good economic decision for the communities (Milojevic, 2008). As a result there would be more money flowing directly to the Nepalese farmers allowing them to increase the standard of living in the hillside communities. A problem with the harvesting of the crop would be the workload for women. The harvesting requires a lot of bending over because this crop is low to the ground. As a result the women who do the harvesting would have a heavy stress on their backs and necks. A long reaching harvesting tool would be deeply beneficial to the women's health, but adds to the cost of the already relatively high start up cost of creating juniper oil.

Export Potential

There is a large market for this product. Many western developed countries use juniper oil in medicines and perfumes. This makes the market relatively large as it can be used as a secondary material to make a larger product like medicines and incense and perfumes, but also sold as a commodity in and of itself for health benefits.

A potential buyer that could be contacted about this opportunity is Essential Oils Canada. They are a company that deals in many different essential oils. They would be able to market and sell the oil produced by Nepalese farmers. Their website and contact information can be found at <http://www.essentialoilscanada.ca/contact/>. They would be an excellent contender because they are a small Canadian business. This would therefore help the Nepalese rural economy, and help the Canadian small business sector promoting economic growth in both countries. Export Development Canada (EDC) claims that it is willing to provide support to Canadian business wanting to do business with Nepal. Through EDC, Essential Oils

Canada would be able to import juniper oil from Nepalese hillside farmers and help support the economies of both countries.

Bibliography

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