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On: November 18th 2014

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Nepalse Arabica green coffee beans

In Nepal the Arabica green coffee bean (*Coffea arabica*) provides the region with an exciting glimmer of hope for its rural farmers. Based on studies Nepalese coffee has been shown to be climatically and genetically of superior quality when compared to others on the market. This crop has potential for the international market, and its export has the potential to benefit local farmers (Poudel, 2005).

### **Economic Benefits to hillside farmers:**

Coffee is a relatively new crop in Nepal, so its potential is exciting given the benefits the region has seen so far, with inadequate support in terms of government funding and research. Coffee plays a significant role in the Nepalese economy; its economic potential is evident given that Nepalese Arabica beans have a relatively higher price structure than the competition (Subedi, 2010). Coffee is seen as a high value / low volume cash crop, meaning that especially for midhill farmers with less land, this is a much better alternative compared to cereals. So other than the fact that coffee is a profitable crop, it provides economic benefits in other ways. For example, the need for labour to pick the fruit is one prime example of how coffee farming would promote the development of employment in rural areas (Subedi, 2010). Other economic benefits can be seen in the fact that there is a low cost of entering into coffee production for rural farmers, given that the Nepalese climate and soil grants them the ability to grow coffee without the use of synthetic fertilizers and pesticides. An interesting fact to add also is that since coffee production and processing technologies are still being developed and investigated, this means that with proper research and government funding, farmers' yields and the quality of the product have the ability to increase which provides a benefit if action is taken to make use of the area's potential (Subedi, 2010).

## **Inputs required:**

The inputs required to cultivate these beans is extremely minimal as is demonstrated by the Nepalese mid-hill farmers; however there are inputs which could increase their yields as well as maintain proper soil conservation. One input can be seen in technology and this requires extension either through government or farmer to farmer, where an agent or farmer instructs another farmer on better methods of drying or sorting to relate it to the coffee beans (Juo & Thurow). Other inputs can be seen as physical measures to promote steepland farming, such as rock barriers and water ways to promote resource efficiency and sustainability however these require a great amount of labour especially since they are being constructed on a slope, mulch is also an input worth implementing since it hinders soil erosion (Shrestha, 2006).

#### **Environmental sustainability:**

Nepalese methods of farming are organic in their nature, meaning they use few inputs, and generally rely on physical labour and indigenous knowledge passed down. As stated previously coffee is cultivated with no use of synthetic fertilizer or pesticides but this only relates to the growth of the product (Subedi, 2010). Following growth, harvesting of the bean involves removing the fruit and drying the bean to prepare it for export, and there are two methods. One method is called the dry process, where the farmer literally gathers all the fruit once they are ripe and lays them out to dry in the sun, afterwards removing the exteriors and harvesting the beans. This method is less costly to the farmers but produces much lower quality beans since there is really no quality control since all are dried and husked. Nevertheless, this process is extremely sustainable as it requires no resources other than the sun and no need for a large facility. The second method is called the wet method, which is much more intense with higher costs but in turn produces a more valuable and acceptable trade item for the world market. This process involves a floatation method where the fruits are placed in water and their quality determined by their density where those that sink to the bottom are discarded. This method uses a lot of water which would be regarded as being wasteful, but given how the crops are grown and hand-picked, this usage is granted and this does not mean that new, more sustainable ways cannot be developed with proper research (Subedi, 2010).

### **Export Potential:**

Coffee is the world's most popular beverage after water and the second most traded commodity after oil, hence there is great international export potential for the Arabica green coffee bean from the mid-hills of Nepal (Subedi, 2010). In wealthier nations, specialty coffee is becoming increasingly popular. There is a niche market for organic and specialty coffee, one that possesses a lot of potential for the organic farmers of Nepal (Subedi, 2010). There are however some barriers to export that are being experienced by Nepalese farmers and that is mainly the inconsistency in quality, due largely to the fact that they do not have the proper equipment or resources due to their poor financial position and lack of government support. In that sense there must be some government action to enforce quality standards as well as provide the means to either pay for or have those services such as wet processing subsidized because in the end it benefits the government and local economy. Another barrier to export is the low quantity of supply and this is due to two main factors, one being the poor economic conditions of the farmers and the other being that since it is a fairly new crop, farmers who are beginning to expand its production are forced to wait a 7 year period for the trees to reach maturity (Kattle, Jena, & Grote). Potential buyers would include food stores specialising in organic foods such as the Stone Store in Guelph, Canada, which is the exact type of niche store where the Arabica beans of Nepal could flourish. This store can be reached by telephone or email, and their address is 14 Commercial Street, Guelph, Ontario, N1H 2T7.

# **Conclusion:**

In conclusion, the Arabica green coffee bean provides an excellent solution to many social issues affecting rural farmers such as poverty and lack of education. If government subsidies and programs are put in place to provide opportunities for these farmers, such as marketing programs and workshops, proper seed banks, and extension programs, many of the problems plaguing farmers would be solved or at least made manageable.

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