

# AGR1110-Promoting Canadian Agrifood Exports to Nepal

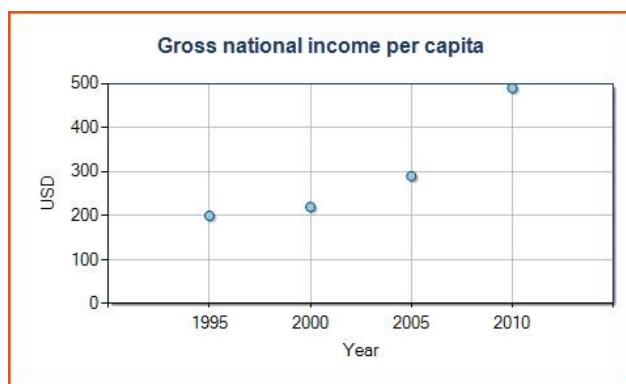
## Hoof Trimmers

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## Nepal and Agriculture in Nepal

Nepal is a poor, undeveloped country with a lot of agricultural opportunities. Nepal has a population of 27.8 million and a labor force of 12.41 million (FAOSTAT, 2014). Of the 12.41 million people in the work force 11.54 million are in agriculture (FAOSTAT, 2014). The percentage of the work force in agriculture is staggering at about 93 percent showing the importance of agriculture in Nepal. The majority of Nepalese farmers are subsistence farmers just growing enough for their own needs and rarely selling excess crops or milk for profit. Nepalese farmers do not make very much profit which leads to the low GDP per capita for the nation which is around \$500 US dollars, however the GDP per capita has been increasing as seen in figure 1 (FAOSTAT, 2014). Nepal is located between China and India, Nepal's leading trade partner is India with a total of \$383.198 million dollars in imports and \$137.776 in exports, India is a competitor for any company trying to export to Nepal. China is also a large trading partner for Nepal with \$35 million in imports and \$5.3 million in exports.



<http://faostat.fao.org/site/666/default.aspx>

Figure 1. Figure one shows the increasing GDP per capita in Nepal.

Nepal can be divided into three physiographic areas the mountain region, the hilly region and the plains or terai region. Each region has its own unique climate and in relation to the climate there own unique agriculture. The plains or terai region are home to the majority of the

cereal crops and legumes grown in Nepal as well as about one third of the livestock production. The major crops grown in Nepal are rice, maize, wheat, potatoes and soybeans (FAOSTAT, 2014). The hilly region is where more than half of the cattle, sheep and goats are raised, the majority of the ruminant production takes place at the bottom of the hills where the villages are located, where there is lots of forage around the houses for the ruminants to eat (Pariyar, 2006). Nepal has many different kinds of livestock including yak, cattle, buffalo, sheep, goats and chickens making up almost all livestock in Nepal. With all the agriculture present in Nepal it is possible for a Canadian agricultural supplier to benefit from Nepalese agriculture as well the Nepalese farmers if the product serves a need and is affordable.

#### Part One – Product Info

The product that is being exported to Nepal is a hoof trimmer, which may also be referred to as hoof nippers. The general purpose of exporting hoof trimmers is to improve hoof health in Nepalese livestock. The specific hoof trimmer chosen to export is the Enderes F12 Hoof Nipper made in the USA. This specific hoof trimmer cost \$33.00 dollars, compared to other hoof trimmers that cost from \$100.00 to \$250.00 dollars. This hoof trimmer has a much more reasonable price and that is why it was chosen to be exported to Nepal. (Brubacher Harness Supply Inc, 2014). The hoof trimmer is 14 inches long and can be packaged easily in a uniform box. The hoof trimmer is only sharpened on one side making the cutting of the hoof more difficult but the benefit of a lower risk of hoof damage out weights the difficulty.

#### Transportation

Using the dimensions and weight of the nipper, a quote for shipping was able to be given for five hoof trimmers to Kathmandu, Nepal from Toronto, Canada in one box it would cost 277.62\$ (A1 Freight Forwarding, 2014). The company doing the shipping is A1 Freight Forwarding a company from Toronto, Canada that specializes in international transportation. Transportation is a serious problem with exporting to Nepal, it raises the cost to 88.474 dollars apiece, and making the cost of transportation more than the good they are buying, also making it harder to compete with products coming from the neighboring countries of Nepal.

### Manufacturing

Even though the product is not currently manufactured in Canada with a large enough order, a hoof trimmer at a similar price could be manufactured through our own tool companies such as Gray tools who have been manufacturing hand tools since 1912 in Canada and they already produce similar tools such as bolt cutters (Gray, 2013). Canada does however have much higher wages than other manufacturing countries. Comparing the minimum hourly wages of Canada, USA, China and India, Canada is the highest with a wage of \$10.25 followed by the USA at \$7.25 and China and India at \$1.19 and \$0.28 respectively (Prynne, 2014). Even though the cost of the product and material have a very close value between countries, the higher labour cost will make a more expensive product.

### Benefiting Canada

This product can be exported out of Canada, Brubacher's Harness supply inc are a specific dealer for the Enderes F12 Hoof hoof trimmers the company is based in Wallenstein Ontario, it is a Mennonite company that offers quantity discount for larger orders. Brubacher's Harness supply can be reached toll free at 1-866-669-2064. The price difference between the American manufacture and our Canadian dealer is very small so supporting our Canadian dealer

contributes to Canada's economy without hurting the Nepalese farmers. It would be even more beneficial to Canada if the product was to be manufactured in Canada but it would increase the price of the product. The hoof trimmer is being shipped by a Canadian company out of Toronto, Canada A1 Freight Forwarding increasing their business will also contribute to the Canadian economy.

## Part 2 Export Potential to Nepal

### Need for Hoof Trimmers

In western Nepal, foot rot is an epidemic in sheep and goats due to the wet soil and warm climate they live in (Ghimire, 1996). Hoof rot is a very contagious disease in sheep and goats as well as other animals with hoofs, it has a health effect on the animals and an economic effect on the farmers. Hoof rot is caused by multiple bacteria but the main bacteria is *Dichelobacter nodosus* an anaerobic bacteria (Wani, 2007). The Bacteria causes severe damage to the epidermis tissue on the bottom of the hoof causing extreme lameness as well as other problems such as lack of wool production (Wani, 2007). Sheep and Goat production is very important to the family farms in Nepal so avoiding this issue can be very beneficial to the Nepalese farmers. Factors such as keeping hoofs and claws trimmed helps prevent foot rot as well as other hoof issues such as overgrown hoofs (Schoenian, 2014). Since hoof rot is caused by an anaerobic bacteria and hoof trimming increases oxygen levels by getting rid of overgrown hoof tissue it creates a less favorable growing condition for *Dichelobacter nodosus* bacteria. Trimming hoofs also decreases mud and manure packing making a less favorable growing condition for the bacteria (Schoenian, 2014). Other problems associated with hoof rot are premature culling in animals and as well as sore feet causing limping (Schoenian, 2014). Limping in animals that the Nepal farmers use for work and transportation can be very problematic because it can be the difference of getting there

crop in or not or the inability to do many other jobs they use Yak and cattle for. Hoof rot and other diseases spread through different herds and different animals in Nepal due to the mixing of animals and herds. Ninety three percent of herdsman in Nepal say that they mix there yak herds with other yak and/or other animal herds (Jackson, 2014). Having hoofs properly trimmed as a prevention method to the spread of disease through mixing herds should be used to minimize the health risks to the hoofs of the livestock. Hoof trimmers will be very useful to the Nepalese farmers and livestock hoof health if they are used correctly.

#### Transportation and Documentation in Nepal

After the product is exported out of Canada it will land at the airport in the capital city of Nepal, Katmandu. The shipment of hoof trimmers is required to have a bill of landing, as well as an export permit for the Canadian government. There is an exception for the export permit if the commercial goods are valued at less than \$2000 dollars it is not required (Canadian Border Services, 2014). The first shipment going over will most likely not require an export permit but if sales increased to Nepal, export permits would be needed. Hoof trimmers are not a restricted good so certain documentation is not required. A piece of information required to export is a business number, it must be on all export declarations. Export declarations can come from many different methods but the best method for our purpose would be the Canadian Automated Export Declaration. The Canadian Automated Export declaration is a free program to be downloaded by the exporter where the information can be entered and sent electronically to the Government of Canada where the permit or declarations will be given (Canadian Border Services, 2014). For air transport like our project is using it must be given at least two hours prior to being loaded on to the plane.

Two companies that transport goods inside Nepal are the Himalayan Transport Company (P.)Ltd. and East India Transport Service both companies ship across Nepal (Buisness Portals, 2014). The exact cost of transportation is unknown but when calculating cost of the product it must be considered and acknowledge that it will increase the price of the product. A company in Nepal that deals in agricultural tools and products is Nova Nepal Pvt. Ltd. in Katmandu Nepal (TradeKey, 2014). The hoof trimmers should be sold to a dealer that will then sell them to the Nepalese farmers. The location of Nova Nepal Pvt. Ltd. is very important, it minimizes transportation cost because the hoof trimmers are landing in Katmandu, Nepal. A benefit of exporting hoof trimmers is that they can be stored in any condition and not go bad which leads to a lower cost in storage than other exports.

#### Required Cost and Cost Saving Plan

The selling price of the product to achieve a 15 percent profit would have to be \$101.80 in Canadian dollars. The majority of the cost is transportation at \$55.53 Canadian dollars apiece, the remaining cost includes the price of the trimmers at \$33.00 Canadian dollars and profit at 15 percent of the total cost at \$13.37 Canadian dollars shown in table 1. There are two other factors that can affect the price of the hoof trimmers, transportation of the trimmers in Nepal and increase packaging cost. The transportation of the trimmers from the airport to the retailer is an unknown cost that could still increase the cost. The increase in packaging cost comes from a solution to the problem that is, the Nepalese farmers may not all have the knowledge and experience to properly trim the hoofs of livestock. The increase in cost comes from the insertion of picture instructions into the packaging. There would have to be instructions for the different animals because of the unique hoof and trimming techniques used. The cost increase would be small but where income is very limited, small price increases can make a big difference. Table 1.

Table 1 shows the cost breakdown of an individual Enderes F12 Hoof Nipper for a Nepalese supplier.

Component	Cost (US Dollars)
Hoof Trimmer	33.00
Shipping	55.53
Profit (15%)	13.37
Unknown Expenses (shipping in Nepal)	X
Total Cost	101.80+X

To make the hoof trimmer more affordable it should be shared amongst multiple neighbors in a community. With the gross domestic income per capita in Nepal at only a 662 US dollars annually they cannot afford to spend one sixth of their yearly income on a pair of hoof trimmers (UNdata, 2012). The goal of the project was to have the cost of the trimmers around ten dollars per farmer so with the high cost of transportation, it raised the number of farmers need to share the trimmers to around ten. Even though the hoof trimmers still cost a significant percent of a Nepalese farmer's income, the hoof trimmer is a durable product and the farmer should not have to make another purchase for a number of years.

#### Benefits for Nepalese Farmers and Nepal

Benefits of purchasing a Hoof trimmer for the country of Nepal would be the increased trade with a developed country. A developing country trading with a more developed country such as Canada would be more beneficial than trading with a neighboring country such as India. Nepal currently only does \$18.8 million in trade with Canada compared to the \$521 million Nepal does with India (Government of Canada, 2013). Two major benefits for Nepal that would



come from trade with Canada is that it can open up new markets and the ability to access new materials that they would not originally be able to get a hold of (European commission, 2014). The other benefit is that trade with Canada can create an availability to better technology and information and lead to an increase in research in Nepal (European commission, 2014). Creating more trading between Nepal and Canada can be mutually beneficial to both countries because more trade creates more employment opportunities and a stronger economy.

Benefits to the Nepalese farmers would be the improved production of the livestock as well as better animal welfare. Nepalese farmers keep livestock as a part of the farm to produce goods a lot more than to produce meat. The different livestock produce different goods for the Nepalese farmers and families, goats and sheep produce wool, fiber and milk whereas cattle, buffalo and yak are used for both work and milk (Pariyar, 2006). Since the animals are being used to produce products maintaining the livestock is very important, and proper hoof care is part of maintaining a healthy animal. Foot rot is a cause of both premature culling as well as decreasing wool production which Nepalese farmers rely on their livestock for. Avoiding the highly contagious disease as well avoiding the negative affects foot rot will have on the livestock, would be very beneficial to the Nepalese farmers.

### Competition

Competition from neighboring countries India and China makes it very difficult to export a good manufactured in North America to a country in Asia. China and Pakistan both have companies supplying hoof trimmers at a lower cost than the Enderes F12 Hoof Nipper. The Pakistan company sells them for \$18 dollars US and will have a lot lower transportation cost (Alibaba, 2014). The company out of China sells them for \$6-8 dollars US however the

minimum order is 600, making the order cost \$4800 dollars US (Alibaba, 2014). Where our hoof trimmer can gain an edge is through allowing smaller orders that make the original purchase by the Nepalese supplier a lot smaller and if the product is marketed to be shared by approximately ten farmers our hoof trimmer should have the ability to sell.

Table 2. Table 2 compares the Canadian hoof trimmer to the Chinese hoof trimmer

	Canadian Hoof Trimmer	Chinese Hoof Trimmer
Product Name	Enderes F12 Hoof Nipper	Drop forged Farrier Tools / Hoof Nippers
Cost	33.00 US dollars	8.00 US dollars
Minimum Order	5	600
Distance to transport to Kathmandu	12000 kms	3500 kms

From figure 1 the cost of the Canadian hoof trimmer is around 4 times as much as the Chinese hoof trimmer but the much smaller minimum order has to be the sales focus for the Canadian hoof trimmer to sell. The largest difference which really gives the advance to the Chinese hoof trimmer is the smaller transportation cost, the distance is much shorter for it to be shipped by either air, truck or boat either mode of transportation will still be a lot cheaper.

#### Recommendations and Future Research

Future research is needed to evaluate the exporting of hoof trimmers to Nepal, the shipping cost of Nepalese trucking companies in Nepal is very important to the product and is still unknown. Hoof trimmers should be available to all Nepalese farmers and it should become an annual routine to properly trim all hoofs of livestock. It is important that all livestock with

hoofs get them trimmed because foot rot and foot disease is highly contagious and can spread when herds and animals are mixed. Properly maintained hoofs would be beneficial for both the animal and the farmer. Avoiding the effects of foot rot will lead to continuous production from livestock. Nepal would benefit from trade with Canada by opening up more opportunities for the exporting of other products and also allowing more information and technology to come into Nepal. For Nepal it would be better for the Nepalese farmers to buy hoof trimmers from a supplier in Nepal that buys their hoof trimmers from the Chinese hoof trimmer supplier. The transportation cost from Canada to Nepal makes it very difficult to compete with neighboring countries. To lower the cost it is possible to create a very large minimum order which would lower the cost of the product as well as the transportation cost but it would still not be as low as the Chinese supplier and creating the large minimum order you would lose the only selling edge you have over the Chinese supplier. Overall hoof trimmers would be beneficial to Nepal and increased trade between Canada and Nepal would be mutually beneficial.

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