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Section 102

Agri 1110

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Canadian Agri-food Exports Final Paper: Low Cost Bottling Machine

Section 1

Introduction:

Nepal is a country located in South Asia. Around 27 million people living there, 12% of them are lack access to water (Ngai, 2007). In this report, I would like to export bottling machineries to Nepalese from a Canadian company called Canadian Clear by using Himalayan spring water in order to improve their water access rate.

Product Description:

Compact linear bottling machine is uniquely designed for mineral water and beverages by Canadian Clear (Canadian Clear, 2014). The product name is CC 600. (Canadian Clear, 2014). The function of this product is capping and filling water into a bottle without human's assistances, and then rinsing the water bottle semi-automatically (Canadian Clear, 2014). The whole process has stipulations in this filling machine for rinsing, filling, capping and sealing (Canadian Clear, 2014).

One touch instrumentation systems which is a PLC with sensor controls, control the entire process (Canadian Clear, 2014). This feature makes CC600 is easy to use for beginners because there are 41% of adults in Nepal that are illiterate (Shrestha, Petrini, Turale 2013). Capable of bottling different sizes of bottles from a range 200mL to 2Ls (Canadian Clear, 2014). Input Feed Conveyor of this product received the mineral water per bottles after rinsing them by hand in the semi-automatic rinser (Canadian Clear, 2014). The bottles go spontaneously on the bottle conveyor to the filling station (Canadian Clear, 2014). Only needed number of bottles have the access to enter the filling station by the Optic Sensor (Canadian Clear, 2014).

The filling system is extremely accurate and include volumetric filling, which is optionally for counter pressure (Canadian Clear, 2014). After filling process completed, the filled bottles go to a Cap Pickup System (Canadian Clear, 2014). Finally, the capped bottles will be send out to the discharge conveyor (Canadian Clear, 2014). There is a picture that will show how C600 looks like below.



Figure 1 (<http://www.canadianclear.com/pet-rinser-filler.html>)

This product makes 6-10 bottles per minute which is not really efficient compared to other model of water bottle filling machine, but this one is the cheapest one. The weight of CC600 is approximately 500KG (Canadian Clear, 2014). Below this paragraph, a detailed price table will be shown, those information are from Alibaba.

Product Name	Bottle Per Min	Price	Supply Ability	Weight	Delivery Detail
C600	6-10	\$1,000 Set	10 sets/ month	500kg	2 weeks
RFCW16/12/6	150-300	\$10,000 Set	35 sets/ month	2500kg	30 days
CGF18-18-6	150-340	\$10,000 Set	100 sets/ month	3500kg	30 days

Table 1

(http://www.alibaba.com/trade/search?fsb=y&IndexArea=product_en&CatId=&SearchText=Compact+Linear+Bottling+Machine+for+Mineral+Water+)

As you can see from the Table 1, C600 is the cheapest one and the lightest one. Obviously, C600 has the shortest delivery time compared to the rest of machines.

Company Information:

Canadian Clear is one of the best market leader in water technology, they have engaged in water issues and technologies since 1969 which proves that they have 4 decades experiences in water treatment (Canadian Clear, 2014). The company has supplied more than 10,000 projects of various water issues in Bangladesh, Middle East Africa, South East Africa, USA, Eastern Europe, India, and Australia (Canadian Clear, 2014). 3 Million USD order has given to this company because they won a project of bottle water from Federal Electrical and Water Department U.A.E. (Canadian Clear, 2014). A Pioneer Certificate also was given to this company from the Chairman& Managing Director of Pepsi Co Holdings Pvt. Ltd. of Aquafina bulk water. Canadian Clear has global manipulation with Channel Partners and over 42 countries has its branch company (Canadian Clear, 2014). Canadian Clear is also a pioneer in this field, their company is one of the rare companies with a matured range of wastewater, water, bottled waters products and services (Canadian Clear, 2014). This company now has a contract with India which provides 1.2 Million liters per day to Indian (Canadian Clear, 2014). One of their branch company is located in Edmonton, Alberta in Canada (Canadian Clear, 2014). Their contact number and email will be shown at the references page.

Labor and Input Requirement:

Since this product has a semi-automatically rinser and an auto-filler capper, so doesn't require bunch of labors to operate it, CC600 only needs labors to wash the bottles during the semi-automatically rinsing process (Canadian Clear, 2014). In addition, the entire processes are controlled by a one touch instrumentation system, as a result it doesn't need too many labors to handling it as well (Canadian Clear, 2014).

Talk about the inputs, simply supplying plastic bottles and find a water resources are the requirements for this machine (Canadian Clear, 2014). In Nepal, there is a huge mountain named Himalaya where people can take numerous of water from it (Shah, Giordano 2013).

Benefits to Canada:

First of all, CC600 is made by Canadian Company, so each set to be successfully exported to Nepal will bring considerable profits to Canada. Secondly, Canadian government can build up international reputation and relationship with Nepal by assisting with its water needs. Thirdly, Canadian government can make contracts with Nepalese government, such as Canadian government will earn profits for each bottle of water being sold because there are 12% of Nepalese don't have water to drink, it's around 3 million people (Ngai, 2007). A healthy man should take 3.7L per day, and 2.7L for woman (Sawka, chevront, 2005). Therefore, you can see the demand of water will make tremendous profits from the 3 million lack access of water population in Nepal. This is a great opportunity in water market.

Section 2:

Export Potential to Nepal:

National water quality testing shows that Nepalese water contain arsenic substance above 3 % of total water population, this is always be a crisis in Nepal (Nagi, 2007). This test indicates that the water in Nepal is not completely safe to drink. Arsenic is a toxic substances which has effects starting with headaches, drowsiness, severe diarrhea, and confusion (Tüzün, 2009). Set up a water purification system is a feasible way to solve this problem, such as typical schematic configuration filters (Aviles, 2013).

According to Sharma (2005) in article “Water quality in the central Himalaya”, Sharma points out that the water from the central Himalaya contains several nutritional contents. As a result Himalayan water can be an abundant water resources for Canadian government to export the product (CC600). Before transport C600 to Nepal, the Canadian government need to ask Nepalese government for a permission of using water from Himalayan.

One of the buyer would be Nepalese government. Local Nepalese wouldn't buy C600 because it's too expensive for them and this product is selling for a group or a company to use, not an individual person or a family. The reason that Nepalese government would buy this machine will be shown at next paragraph.

Benefits to Nepal:

No doubtfully, water is one of the essential elements that keeps human body works. Since there are more than 3 million Nepalese don't have water to drink out

there, this project is going to help these people and improves their personal healthy condition as well. Citizens' healthy condition is extremely significant for a country because if a country want to develop their economy, the first thing they need is labors, and ill person is not an option for government or company to employ. This also can be described as the second benefit. Then Nepalese government can started to thinking about how to utilize labors in order to increase their GDP.

In a research from Sharma (2006), she lists a table that shows Agriculture is taking the one third proportion in Nepalese GDP, and it also taking the three quarter proportion of labor force to achieve the one third agricultural GDP for the country. This research strongly states that the importance of agriculture in Nepal, Nepal government really need to do something that will help their agriculture becomes more promising, and first thing they need to do is to improve Nepalese life quality by assisting them with clean water. This is the reason why I recommend export C600 to their county because there is no government that would be willing to see its citizens suffer from toxic water or have no water to drink. As long as their citizens become stronger, the country will be better too.

Sector	GDP composition	Labor force
Agriculture	36.8%	75%
Industry	14.5%	7%
Services	48.7%	18%

Table 2

(<http://www.sciencedirect.com.subzero.lib.uoguelph.ca/science/article/pii/S0305750X06000623>)

Transportation:

In order to start this project, the buyer should contact to their branch company in Edmonton first and ask them to buy machines or buy the machine from Alibaba. C600 is a heavy machine with an approximately 500kg weight (Canadian Clear, 2014). The best way to transport this machine is to via sea because sea transportation is the cheapest and it has a huge storage. At this point, transportation by air plane is not a good option. Notice that Nepal is not a coastal country, so the Canadian government cannot transport machines directly by ships, the Canadian government may needs contact to the costal countries and asks for local transportation, such as trucks to do the rest transportation stuff. After transporting those machines to Himalaya successfully, buyer have to seek a water resource supplying place which contain the highest nutritional contents in Himalaya. Then started working on rinsing, filling, and capping water bottles. Finally selling those water to local people to drink.

Cost Analysis to Achieve Profitability:

Remember, the demand of water in Nepal is above 3 million people's desire. The cost of plastic bottles can be ignored because they are too cheap to buy for Canada. Pretend selling \$0.5 or more for each 500mL bottle water, you need to sell 2000 bottle water at least to reach the cost for one machine. Recall that a healthy person should drink 3L per day. To summarized, this is a project that will make money not lose money.

Global Competition:

As a Chinese, I know that the China is a nation that is pleased to help the small countries around them geographically. In this case, the Chinese government might be a competition. And they have more advantages than Canadian government, for example the distance between China and Nepal is much smaller than the distance between Canada to Nepal. The Chinese government can save much more time on money on transportation because of their geographical preponderance.

Trade Barrier:

The barrier for this project might be the way that transport this giant machine to Himalaya because it is a mountain and it's cold up there. The safety of transportation might be a problem.

Who Might be Hurt from this Product?:

The last paragraph points out that the people who are responsible to transport C600 from land to the mountain might get hurt because it's cold and there are ice on the mountain, so they really need to be care of it.

Unknown Information:

One thing I couldn't figure it out is that the international transportation fee from Canada to Nepal.

Summary:

Based on the information I've collected, I really this project will be an amazing work to do. For a developed country like Canada, they can earn huge profits from it but also help Nepalese to solving their water issues so Canadian government will build international reputation as well. To Nepalese, the 3 million people can finally stop suffering from no water to drink. They would be appreciate to all the Canadians. As long as Nepal develops well, Canada also can export the genetic cattle because at that moment, they are able to afford it. Here is a picture that will prove Nepal is a country with potential. The Canadian government should seize this opportunity.

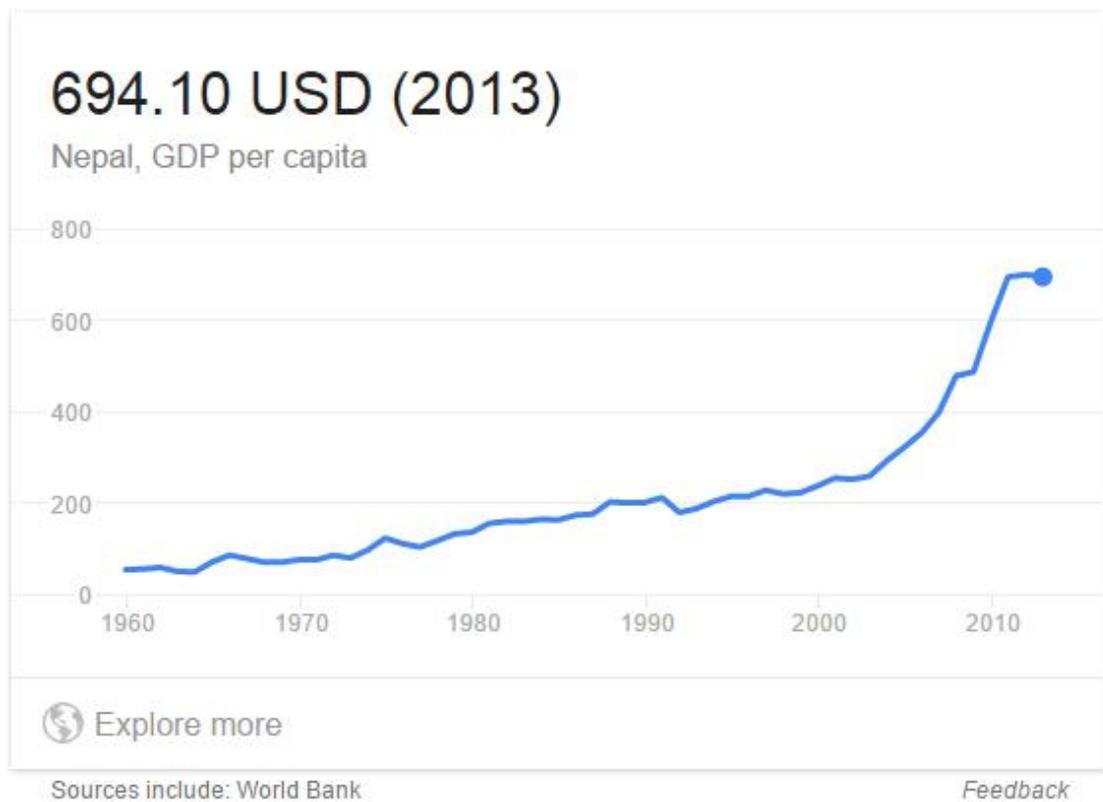


Figure 2

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