

Market Access of Nepalese Honey

Beekeeping or honey production has been an age-old practice of Nepal implemented by the rural population. Nepal's own indigenous species *Apis cerena* was domesticated and kept in traditional log bee hives or in the wall of house from many years and this technique of Beekeeping has been handed from generation to generation. The bee species like *Apis laboriosa*, *Apis dorsata* and *Apis florea* are still found in their wild habitat. Viewing the prospects of Beekeeping and realizing the significance of honey on poverty reduction Nepal Government and bilateral organizations working in Nepal introduced many programs to promote Beekeeping in Nepal. The government took first initiatives in 1968 to provide training and technical assistance through its Department of Cottage Industry and Remote Area Development Committee. The objective was to increase productivity of indigenous species *Apis cerena*. The Italian honey bee species *Apis mellifera* was introduced in 1990 and prioritization was given by Government, bilateral organizations for its promotion in Nepal with objective of producing more honey.

There are five different types of honey bee species found in Nepal; namely, *Apis cerena*, *Apis mellifera*, *Apis laboriosa*, *Apis dorsata* and *Apis florea*. Most of the honey produced in Nepal is multifloral and some unifloral honey is also in existence. Honey found in Nepal is famous for purity and medicinal value. The honey collected in hilly areas differs with the honey collected in Terai. Most of the honey of Terai region is of *Apis Mellifera* and honey collected from hilly regions is of *Apis cerena* and of other species.

Honey Production:

Nepal has vast suitable agro ecological environment for commercial Bee keeping. Lack of awareness on its sustainable impact on raising living standard of marginal farmers has created difficulties for sizable production practice. Out of 75 districts in Nepal few districts like Chitwan, Nawalparasi, Rupandehi, Kapilbastu, Dang, Sarlahi, Sunsari, Mahotari, Makawanpur, Banke, Bardia and Kanchanpur are promising for Beekeeping. Nepal has potentiality of producing more than 10 thousand Metric Tones (MT) of honey every year. The production statistics of recent five years shown in Table 1.

The unique agro ecological climatic conditions of Nepal should be tapped for Beekeeping expansion. Government and bilateral organizations involved in extension of Beekeeping in Nepal should provide technical and financial assistance on need basis. There should be strategies to assure Beekeeping farmers and honey traders regarding the price and market for the produced honey.

Table 1: Total Honey Production in Nepal

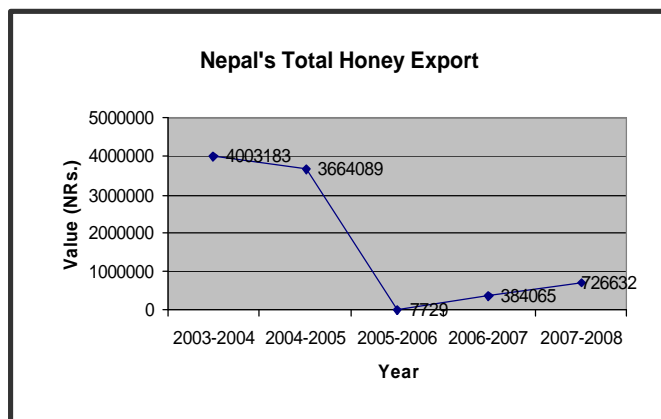
Year	Bee Hives (number)	Production (MT)
2003/04	130000	577
2004/05	130000	600
2005/06	125100	650
2006/07	124500	650
2007/08	124500	1000

Source: Statistical Information on Nepalese Agriculture, ABPSD, MOAC, GON

Honey Export:

Nepal Government has prioritized honey as a high value commodity. It is also assisting entrepreneurs on promoting Nepalese honey in different markets. Nepalese honey is famous for its exotic taste and it has been already exported to different countries. The major consumers of Nepalese honey are Germany, Japan, Malaysia, Russia, Taiwan, Korea, USA and India. According to FAO STAT-2005, European Union ranked first in the world honey consumption. It alone shared 24% of total international honey market. Similarly, China with 15% honey consumption market, ranked second and USA with 12% market share ranked third.

From many years Nepal is exporting honey to different countries. The export of honey was encouraging on the year 2003/2004 and 2004/2005 but the export figures slump afterwards discouraging Nepalese honey trade. The slump in export was because of losing Nepalese honey market like EU (Norway), Bangladesh, India etc. The increasing trend in these three recent years shows satisfaction level of growth in honey export.



In these three years Malaysia has emerged as new market for Nepalese honey but the exporting figure is not so encouraging. For the viable trade practice for sustainability of honey trade the volume of transaction need to expand.

Table 2: Nepal's Honey Export excluding India

HS Code	Description, Commodities / Countries	Value (Rs.)				
		2003-2004	2004-2005	2005-2006	2006-2007	2007-2008
04090000	Natural Honey					
	Bangladesh		2,951,666			
	China	4,648				
	Germany				11,880	3,650
	Korea R	480,850	536,818	7,729		
	Japan	13,634	51,762		3,000	16,650
	Malaysia					107,523
	Netherlands	13,976				
	Russia					8,960
	Taiwan					30,049
	UAE	6,192	123,843			
	USA				8,585	

Source: TEPC/MOCS/GON

From Table 2, it can be seen that Nepalese honey is finding new markets like Malaysia, Taiwan and Russia. The amount of trading is not satisfactory but the prospect of honey trading is encouraging. Thus focus should be given to gain trade competitiveness in the international markets.

Table: 3 Honey Import of India from Nepal

Unit: MT, Value: NRs (Lakhs)

Natural Honey	2003/04		2004/05		2005/06		2006/07		2007/08	
	Volume	Value	Volume	Value	Volume	Value	Volume	Value	Volume	Value
Nepal's Export	146	348.2	-	-	-	-	73.15	36.06	164.96	55.98

Source: DGFT/GOI

India has been influential market for primary Nepalese commodity. More than 90% of Nepalese primary goods are exported to India. In this scenario, the stake of India on Nepalese honey consumption is high. Honey export from Nepal in the year 2003/2004 was about 146 MT worth around 34 lakh Nepalese Rupees but after promulgation of Prevention of Food Adulteration Act (PFA) in 2004 by India, there was no honey export from Nepal for two years because of not meeting PFA standards on honey. After two years of export nil situation, honey export was resumed from the year 2006/07 after meeting PFA standards. The rise in exporting figure was 125% in the year 2007/08 in compared to the year 2006/07. The significant rise in honey export to India is a matter of satisfaction to Nepalese honey traders. This fledging industry with viable market expansion potential can influence national economy if standard concerns of trading partners could be addressed with specific market promotion strategy.

Non Tariff Barriers on honey:

Nepal is exporting honey to various countries from years. The organic features and exotic taste of Nepalese honey has attracted many big markets. But the issues of sanitary and phytosanitary and technical barriers to trade measures of World Trade Organization and various stringent barriers of importing countries made Nepalese honey uncompetitive in their market. Until the year 2001/2002 before entering into European Union, Norway was one of the major buyers of Nepalese honey but after the year 2001/2002 Nepal could not meet the stringent sanitary and phytosanitary measures of EU failing to submit Residue Monitoring Plan demanded by EU Nepalese honey was ceased to import to the EU market under EU law on residues council directive 96/23/EC. South Korea also restricted import of honey from Nepal from the year 2001/02 as Nepal failed to submit a quality certificate that the honey from Nepal does not contain grannotoxin. India has been significant market of Nepalese honey before the year 2003/04 but after introduction of PFA in 2004 the export of honey to India became nil. Similar situations were observed in case of Netherlands, UAE and Bangladesh. The quality aspect of honey is regarded as major factor influencing honey export. Thus utmost attention needed to be given to maintain standards of markets for regular and smooth transactions. The honey export to EU could be easier if honey production is Hazard Analysis Critical Control Point (HACCP) certified. Likewise Indian standards, American, Japanese standards along with CODEX standards should be meet before exporting to international market. The Nepalese producers and processors required pertinent information on the quality and standards of different markets. Also Nepalese standards parameters need to be maintained prior marketing to domestic market for safer honey consumption. The detail of EU, India, Japan and Codex with Nepal standards are described in Table 4.

Table 4 Regulations and Standards

Parameters	EU	India (PFA)	Japan	Nepal	Codex
Visual Inspection		Free From Foreign Matters		Free from external food or non food matters	
Specific gravity (% by Mass)		NLT 1.35			
Moisture (% by Mass)	NMT 20	NMT 25	NMT 22	NMT 23	NMT 20
	NMT 23 (heather and bakers honey)				NMT 23 (heather honey)
	NMT 25 (baker's honey from heather)				
Fructose Glucose ratio		NLT 0.95		NLT 0.95	
Total reducing sugar		NLT 65		NLT 65 (pure flower nectar)	
		NLT 60 (FOR CARBIA COLOSSA AND HONEY DEW)			
Fructose glucose content (sum of both g/100g)	NLT 60 blossom honey		NLT 60		NLT 60
	NLT 45 (honey dew, honey blends)				
					NLT 45 (honey dew, honey blends)
Sucrose (g/100g)	NMT 5	NMT 5%	NMT 5	NMT 5 (pure flower nectar)	NMT 5
	NMT 10%	NMT 10% (FOR CARBIA COLOSSA AND HONEY DEW)		NMT 10	NMT 10
				other	(Alfa citrus spp, false Acacia, French honey suckle, Manzies bankasia, Red gum, Leather wood, EUcryphia milligani)
	NMT 15	NMT 15			
	(Lavender, Borage)	(Lavender, Borage)			

Parameters	EU	India (PFA)	Japan	Nepal	Codex
Ash		NMT 5% by mass		NMT 0.5	
Acidity (expressed as formic acid)	NMT 50 milleq acid/kg (in general)	NMT 0.2% by mass	5ML of 1 N alkali or less 100g	NMT 0.2%	NMT 50 meq acid/kg
	NMT 80 milli-eq acid/1000g (baker's honey)				
Fiehe's test		Negative (if positive, and HMF more than 80 mg/kg, then fructose, glucose ration should be 1 or more)			
Hydroxy methyl furfural (HMF) mg/kg	NMT 40 (in general, except baker's honey)	NMT 80	NMT 59	NMT 40	NMT (general)
Water insoluble solid (g/100g)	NMT 80 (honeys of declared origin from regions with tropical climate and blends of these honeys)				NMT 80 (honey of declared origin from countries or regions with tropical ambient temperature and blends of these honeys)
	NMT 0.1-honey other than pressed honey				NMT 0.1 (honeys other than pressed honey)
	NMT 0.5 (pressed honey)				NMT 0.5 (pressed honey)
Mineral (Electric Conductivity)	NTM 0.8 ms/cm				NMT 0.8 ms/cm (except strawberry tree, bell heather, eucalyptus, lime, ling heather, manuka or jelly bush, tea tree)
Starch and dextrin			Negative		
Diastase activity	NLT 8		10 or more		NLT 8 (in general)
					NLT 3 (honeys with a low natural enzyme content)

Note: NLT- Not Less Than and NMT-Not More Than

Regarding entering to EU market, the exporter need to know the content of the EU council directive 96/23/EC because it is one of the SPS measures to monitor certain substances and residues thereof in live animals and animal products. Every Sample of honey is tested in EU as described by EU Council Directive 96/23/EC.

Table 5: Chemical to be tested in Honey in EU

	Chemical Groups	
1	A6 –Antibacterials	6 compounds
2	3B1 VETERINARY DRUGS	15 Compounds
3	B2c Carbamates and pyrethroids	6 compounds
4	B3a -Organochlorine compounds/PCBs	15 compounds
5	B3b -Organophosphorus compounds	22 Compounds
6	B3c -Chemical elements 5 heavy metals	5 heavy metal
	Total Chemicals to be tested in HONEY	69 per sample

For the regular bulk honey transaction, stringent SPS (Sanitary and Phytosanitary) and TBT (Technical Barriers to Trade) measures of EU could be hurdle despite policies of EU "Everything but Arms". Thus sustainable honey production and processing approach to comply with market standards should be in practice to get access to world's largest honey market.

Generally import of honey in Malaysia is not allowed but the honeycomb with or without honey are imported in Malaysia provided that the consignment are subjected to inspection and necessary treatment by Department of Agriculture prior to clearance of custom as provided under the Plant Quarantine Regulation 1981. Nepalese honey also need to comply with this regulation but in the year 2007/08 significant amount of Nepalese honey has been exported to Malaysia signaled that Nepalese honey had overcome the non tariff barriers of Malaysia.

Packaging and labeling:

The Packaging and labeling issues are important non tariff barriers that are creating obstacles in smooth transaction of agricultural commodities. These standards are adopted for consumer safety. Hence, Nepalese honey entrepreneurs wishing to export honey to these markets need to have knowledge of packaging and labeling standards otherwise the consignment will be returned or destroyed in the port of the respective importing country. Here we have tried to explain packaging and labeling standards of few potential markets.

1. European Union(EU):

European Union (EU) could be one of the major markets of Nepalese honey because EU is the world largest honey consumer and the market is growing 2% annually. The consumers are more attracted towards natural and organic honey and Nepalese honey trade prospect is high with EU. Hence Nepalese honey business community needs to have following knowledge of packaging and labeling standards;

EU Packaging and Labeling Standards

- ? Name
- ? List of ingredients
- ? Quantitative Ingredient Declaration
- ? Self life of the product
- ? Manufacturer or packer's name
- ? Place of origin
- ? Instruction to use
- ? Mark
- ? Bar code
- ? Language
- ? Net weight
- ? Health claim
- ? Allergenicity
- ? Nutritional Labeling

2. Gulf countries:

Gulf countries could also be the potential Nepalese honey markets. UAE, a Gulf country, had imported Nepalese natural honey. This trading of honey with UAE reflects possibility of Nepalese honey market in Gulf countries but the standards should be maintained and packaging and labeling standards should be adopted. The packaging and labeling standards of Gulf countries are one of the stringent standards in the world. The product needs to match their standards before entering into the market. The UAE (United Arab Emirates) labeling standard is briefed here:

UAE Packaging and Labeling Standards

- ? Name of product and brand
- ? Ingredients in descending order of proportion
- ? Additives using their E number (group names are accepted)
- ? The origin of animal fats (should be of halal origin)
- ? Net content in Metric Units
- ? Production and expiry dates
- ? Country of Origin
- ? Expiry Date
 1. Day/Month/Year for products with a shelf life of six months or less
 2. Month/Year for products with a shelf life longer than six months
 3. with few exception , a product must have at least one half of its self life remaining at the time of import

3. India:

India consumes most of Nepalese primary goods and the Indian standards for the agricultural products are one of the stringent standards in the world. India also has also established its own packaging and labeling standard. The product that does not meet the standards is not allowed to import into India even though India has tariff free policy for Nepalese primary goods. Thus for the access of Nepalese agricultural goods the products should be abided by their packaging and labeling standards. Generally products entering into Indian market need to have following things.

- ? Name of product, trade name, or description of product
- ? Name of ingredients used in the product, in descending order of their composition by weight or volume
- ? Name and complete address of manufacturer, packer, importer, or vendor, and country of origin of the imported food (including if the food article is manufactured outside India and packed in India)
- ? Net weight, number, or volume of contents Distinctive batch, lot, or code number
- ? Month and year the product was manufactured or packed
- ? Month and year by which the product is best consumed
- ? Maximum retail price (MRP) Where applicable, the product label should also contain the following:
 - ? The purpose of irradiation and license number, in case of irradiated food
 - ? Extraneous addition of coloring matter
 - ? Non-vegetarian food (any food which contains whole or part of any animal including birds, marine animals, eggs, or product of any animal origin as an ingredient, excluding milk or milk products), must have a symbol of a brown color-filled circle inside a square with a brown outline prominently displayed on the package, contrasting against the background on the principal display panel, in close proximity to the name or brand name of the food.
 - ? Vegetarian food must have a symbol of a green color-filled circle inside a square with a green outline prominently displayed on the package, contrasting against the background on the principal display panel, in close proximity to name or brand name of the food.

Furthermore every package of food in India should have following additional information on its label otherwise the product will not be allowed to enter into Indian by the custom authority.

- ? **The name of the food**
 - The name, trade name, or description of food contained in the package.
- ? **List of ingredients**
 - The names of ingredients used in the product in descending order

- ? Composition by weight or volume, as the case may be.
 - The complete nutritional information (energy value, protein, carbohydrates,
- ? Fat, type of fatty acids, vitamins, minerals).
- ? Special requirements for irradiated food.
- ? Country of origin for imported food.
- ? Instructions for use.
- ? Additional provisions for proprietary foods.
- ? Information on allergic and /or hypersensitive ingredients in the food.

Value addition:

Nepalese honey is exporting as natural honey. The product value addition will enhance its sustainable transaction thus it should be thought earlier for product diversification and value addition. The products of honey fermentation like honey vinegar, honey beer, tobacco preservatives and cosmetic products production like, shampoo, make up lipsticks, perfumes, cream, soap etc. could be made and supplied to markets.

Honey Import Tariff:

The trade competitiveness of Nepalese honey in international markets depends upon various variables. The import tariff is one of the variables directly influencing market competitiveness. Import tariff plays vital role on market price fixation. The high import tariff on the product contributes on high market price reducing product market competitiveness. Thus, information regarding the tariff rate on the honey should be viewed before exporting to the market focusing sustainable trade practice. The countries like USA, EU, Japan and Malaysia have zero tariff regimes on honey from Nepal.

Table 6: Import Tariff on Honey

Country		%												
	Bangladesh	China	Pakistan	India	Sri Lanka	Bhutan	USA	EU	Japan	Malaysia	Russia	Nepal		
Commodity	MFN	General					General	Special						
Honey	37.5	20	70	35	60	28	50	1.9cent/kg	Free	Nil	Nil	Nil	15	10

** The tariff custom of China and Bhutan are based on Tariff Schedule of 2004*

The market of neighboring countries like Bangladesh, India, Pakistan, Bhutan, China, and Sri Lanka imposed high tariff on import of honey than of Nepal itself i.e. 10%. The higher tariff could reduce the trade competitiveness of Nepalese honey in these markets. Hence, thrust should be on reducing or removing the higher import tariff imposed on honey either through bilateral or regional agreement.

South Asian Countries have entered into South Asian Free Trade Agreement (SAFTA). After complete adoption of SAFTA the import tariff in SAARC region will be lower to 0-5%. The lower tariff rate will accelerate export but it will equally hammer domestic honey market by providing domestic market access for SAARC nation's honey.

Market Price Development:

The price of the honey is determined by the quality and origin of the honey. The selling price of honey differs in different markets of the world. In the EU market the inferior quality industrial honey cost between £500 and £ 800 per MT and the higher quality table honey fetches prices £800 to £1500 per MT. The price of organic honey is unavailable but it is relatively higher than the price of general honey and it is expected that organic honey market price is growing every year. (CBI market Information database).

The fair trade honey receives price based on its quality and nature. The price comprises of Fair Trade Minimum price and a Fair Trade premium.

Table 7: Prices of Fair Trade Honey (€/kg)

Grade	Fair Trade Minimum FOB price	Fair Trade Premium	Total Fair Trade price	Organic premium	Total Fair Trade Organic price
A grade	1.37	0.11	1.49	0.11	1.6
B grade	1.26	0.11	1.37	0.11	1.49

Source: CBI Market Survey: The Honey and Sugar Market in the EU

Nepalese honey had not gone for fair trade and it could be benefited if the production and trade could be done based on fair trade standards.

Because of its exotic taste and medicinal values the wild honey in Nepal costs up to Rs.2000 per kilogram. This honey is directly collected from the wild habitat of wild species of bees.

The export of Nepalese honey could play vital role to heal yearly trade deficit of country. If we could expand Beekeeping and involve marginal community in this sector it will be boon to reduce the poverty level. The high value character and saturated domestic market with increasing production is projecting sizable Nepalese honey export if honey production and processing meet stringent international standard parameters.

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