



Assessment of Maize Demand of Bhutan Centennial Distillery (BCD), Samteling

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Background

A team comprising of officials from RAMCO (G) and Dagana Dzongkhag led by Regional Marketing Coordinator (RAMCO) and ADAO of Dagana Dzongkhag, visited the Bhutan Centennial Distillery (BCD), Army Welfare project (AWP) located at Samteling, Gelephu to determine the demand for maize for possible supply by Bhutanese maize growers.

Findings and recommendation

The main findings of the assessment are as follows:

1. The consumption capacity of maize for BCD is 70-80 MT a day and as of now they have never purchased maize from local growers and has been fully reliant on the supply from Bihar and West Bengal in India. AWP spends to the tune of Nu. 390m to 400m on raw materials alone. AWP management is of the opinion that the quality of the final brew can also be enhanced because local grains are naturally grown and the water (60 % component of whiskey) is clean and of high purity. There is also a preference for grain based whisky over molasses.
2. The BCD uses maize and broken rice as of now for distilling. Rice is better than maize in terms of both milling and distilling and sometimes the price is also lower than maize. At the most only 90 MT of maize could be processed in a day while 120 MT of rice can be processed within the same stipulated time period given its softness.
3. The BCD has two silos with a capacity of 750MT each. If silos are filled, they have stores for pro tempore storage.
4. Moisture content of the maize grains must be below 14 % for storage, and for processing the ideal is 10 – 11 %. Higher the starch content, the better is the yield (during processing starch is converted to alcohol). Lab analysis of the different varieties of maize grown in Bhutan indicate starch content more than 60 per cent (Annexure I).
5. The BCD raised likely problems of high moisture content at the time of supply and suggested learning how they do in Bihar and West Bengal. However, the BCD is assured good quality maize supply from April till September from India. They suggest the most opportune time to supply Bhutanese maize would October onwards.
6. The current price offered by BCD is Nu.15/kg f.o.b, Gelephu, and is not likely to increase any time soon. International prices of maize remained generally stable in July 2017, with the benchmark US maize (No.2, Yellow, f.o.b.) price averaging USD 159 per tonne, (FAO), which is approximately Nu. 10.34 per kilogram.
7. The BCD makes payment on cash basis but they are open to other modalities of payment. In the future, they may consider contract farming wherein advances to farmers etc. could be provided.

Annexure I: Moisture Content and Start Content of Locally Grown Maize varieties



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ARMY WELFARE PROJECT LIMITED
(An undertaking of Royal Govt. of Bhutan)



BHUTAN CENTENNIAL DISTILLERY
BHUR

Date:14.07.2017

QC LABORATORY TEST REPORT

Test Request Ref. letter No :	ARDC-SAM/ADM-36/2017-2018/016 dated:11/07/17
Type of sample :	Maize
Source of sample :	Bhutan

Sample No.	Sample Names	Moisture Content	Starch Content
1	Yangtsepa	8.85	63.04
2	Bhur Ashom 1	10.58	64.09
3	Khangma Ashom 2	13.21	63.04
4	Chaskharpa Ashom	8.92	63.04
5	Arun 2	10.72	63.57
6	ZM 621	8.83	63.57
7	QPM	10.68	64.09
8	POP 44 C10	11.98	63.57
9	P3377	6.08	63.57
10	P3502	7.39	63.04
11	Local TekSumpa	9.64	64.09

*Test Method followed was IS 4706 (part 2):

1. Determination of moisture (Oven drying Method)- sample as received
2. Determination of starch (Acid hydrolysis method)

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Approved By: