

# Innovations

## Distillery and Brewery Industry in Sikkim: A Case Study

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**Abstract:** *Sikkim is a himalayan mountainous state and one of most prosperous state in India. Alcoholic drinks and brewing is deeply embedded in culture and an important component of socialization in the state. Due to recent life style change and rapid urbanization along with growing hospitality industry in the state consumption pattern of alcohol drinks has been transformed a lot. The state has recieved 19 lakh tourists in 2019 before covid 19 despites small state with i.e. 6.1 lakhs population (Census of India, 2011).Brewery and distillery industry is one of the important economic sector in the state. Sikkim's breweries and distilleries have gained a good reputation in both local, national and global markets. Despite popular craft alcholic brewing in the state, first sikkim distillery came into existence in 1954 before part of Indian union which allowed in Durbar. In this paper, an attempt is made to discuss and analyze the development and contribution of brewery and distillery industry in the state and two factories have been selected for indepth study.Presently there are two brewery industries and six distillery factories in the state with total revenue collected by the State Excise Department was Rs.298 crores. The total registered shops were about 3500 and 23 distributors and sub distributors in the state in 2023.*

**Keywords:** *Brewery, Distillery, Revenue, Privatization and Hospitality industry.*

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### Introduction

From time immerorial alcoholic drinks have been playing an important role in food security, community socialization and health (both positive and negative) in a society. It is now, one of the fastest growing market in the world. The global market of alcoholic beverage was \$ 1.62 trillion in 2021 and it is projected \$ 2.036 trillion in 2031 with present growth rate of CAGR of 2.2% (Allied Analysis LLP, 2023). Though it suffered a deepduring Covid 19, it has recovered well in 2022. Alcohol use in India goes back to Vedic ages. The scriptures talks about techniques to be used in fermentation. So, it is no surprise that India has a brisk brewery and distillery sector. Presently, India is the third largest alcohol marketwith about USD 52 billion in 2022 and expected to reach USD 70 billion by 2026.Among alcohol drinks in India, beer is becoming very popular across age and gender (FMI, 2025). Beer industry is growing at 7-9 % over the last 10 years. The Indian beer market is dominated by strong beers (more than 5% alcohol by volume), which account for 70% of the total beer industry (IBIS, 2023). But

consumption patterns of beer, wine and spirits have changed substantially in last two decades in India and in the world over the past two centuries (Aderson et al. 2018). This change in consumption pattern was mainly due to colonial legacy, production with technologies, globalization and economic transformation. The dual nature of alcohol in colonial India that the British government generated revenue from the sale of consumable liquors while simultaneously promoting industrial alcohol to support national industrialization. Though nationalist movements, including Gandhian nationalists and medical authorities were against the initiatives and raising social and economic concerns about government reliance on alcohol revenue (Bhattacharia, 2017). The Britishers during colonial period spread consumable standard liquors in the world and industrial revolution contributed to excess consumption by stimulating demand and lowering the cost of alcohol. After Independence, governments regularised and intervened in excessive consumption, raise taxes, protect domestic industries and ensure competition. Still in India, there is a mixed response on liquor production and its implication on economy and social cultural aspects from different states. Among the states of India, Arunachal Pradesh has highest percentage of alcohol consumption among male above age of 15 with 52% and Sikkim stands third with 39.9%. In terms of women alcohol consumption again Arunachal Pradesh stands first with 24% followed by Sikkim 16% (NFHS-5, 2019-21). In the state of Sikkim, it has been observed that pattern of alcohol consumption has changed in recent years due to change in socio-economic in the state as well as among the communities. The state as a whole, alcohol consumption rate has declined from NFHS-4 to NFHS-5 but in rural area frequency of daily consumption among women has increased (Rai and Firdos, 2025; Pandey and Datta, 2014). Sikkim, located in the Eastern Himalayas, is mostly known for its rich cultural heritage and beautiful landscapes. However, among its many aspects, it is also well known for its alcohol consumption practices, deeply embedded in its socio-cultural landscape. The perception that "hill people consume a lot of alcohol" and that "Sikkimese are very fond of alcohol" shapes societal attitudes toward alcohol in Sikkim (Lama, 2001). Due to their distinct climate and topography, hill communities consider alcohol essential (Pandey et al., 2015). Moreover, in Sikkim, social customs frequently involve the consumption of substantial quantities of alcohol, as ethnic communities attribute significant ceremonial importance to traditional alcoholic beverages (Tamang et al., 1996). Non-Brahmin ethnic communities such as the Rai, Limboo, Bhutia, and Lepcha are Sikkim, located in the Eastern Himalayas, is mostly known for its rich cultural heritage and beautiful landscapes. However, among its many aspects, it is also well known for its alcohol consumption practices, deeply embedded in its socio-cultural landscape. The perception that "hill people consume a lot of alcohol" and that "Sikkimese are very fond of alcohol" shapes societal attitudes toward alcohol in Sikkim (Lama, 2001).

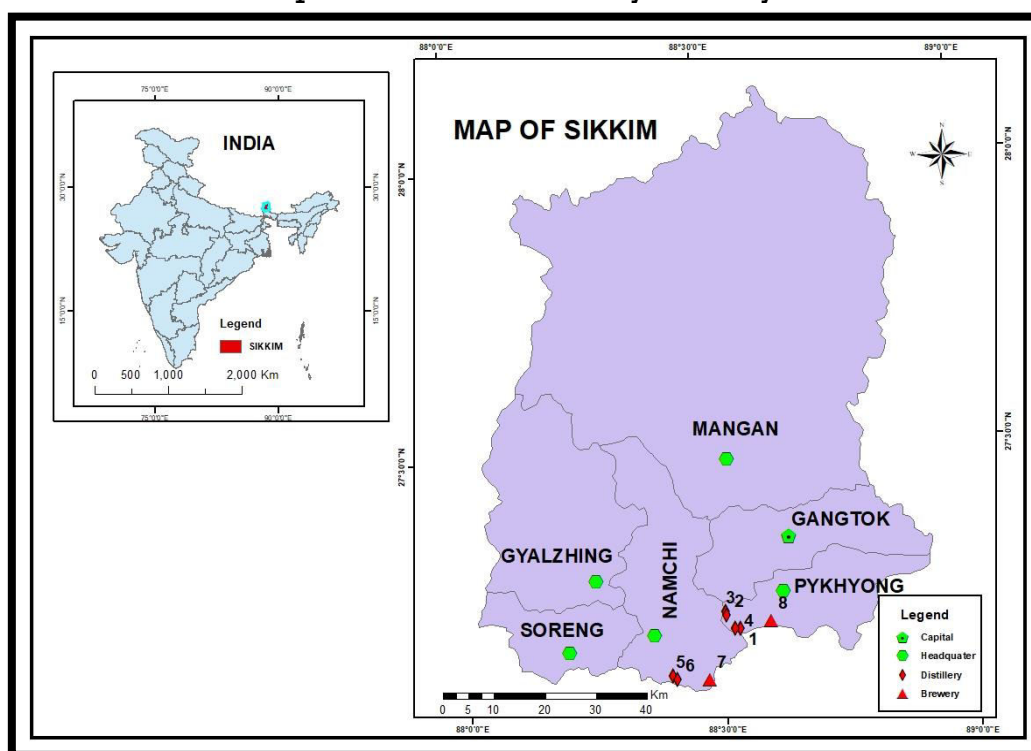
Due to their distinct climate and topography, hill communities consider alcohol essential (Pandey et al., 2015). Moreover, in Sikkim, social customs frequently involve the consumption of substantial quantities of alcohol, as ethnic communities attribute significant ceremonial importance to traditional alcoholic beverages (Tamang et al., 1996). Non-Brahmin ethnic communities such as the Rai, Limboo, Bhutia, and Lepcha are. The distillery and brewery sector in Sikkim reflect an amalgamation of economic prudence, cultural conservation, and industrial dynamism. The brewery and distilleries sector is the most important sector in the state economy. The sector is involved in the conservation and representation of the original cultural identity of the state. There are some popular traditional alcohol drinks like *Rakshi*, *Chang* and *Tongba*. No celebration or occasion can be completed without alcohol (Lama, 2001; Tamang, et al. 1988 and Sharma, 2024). The state breweries and distilleries products-beer, wine, rum, whisky by using purest water of Himalaya, traditional knowledge and local climatic conditions give unique taste and quality. These products have gained a good reputation in both national and international markets. The sector's contribution is not limited to state revenue, it has domino effect as it creates employment, rural development, entrepreneurship, overall enhancing the livelihood of the people. The Sikkim Distilleries was the first modern industry in the state established in 1955 at Singtam during Chogyal followed by the Palden Thondup institute of cottage industries in 1957 and the Directorate of industry set up in 1976 (Lama, 2001). The company was given an exclusive monopoly license for the manufacture of alcoholic drinks in Sikkim by the Chogyal. This was done under the agreement that the government, then known as the Durbar, would own about 47 percent of the company's shares, thus providing partial state control and ownership. This historic step not only established a framework for an organized alcohol industry but also provided an early example of public-private collaboration in Sikkim's industrial policy. Rapid urbanization, socio-economic transformation and hospitality industry in the state boost the industry. The urban population in Gangtok was around 29 thousand in 2001 which increased to more than one lakh in 2011 (Census of India, 2011). Tourist visited in the state was recorded 19 lakhs in 2019 who mainly visited Gangtok ( Government of Sikkim, 2020). The present paper emphasised on two aspects of distillery and brewery industry in the state. Firstly, development and contribution distillery and brewery industry in the state and lastly in depth study on two selected factories (one each from brewery and distillery).

### **Study Area:**

Sikkim is a mountainous state which lies in the eastern Himalayan region with a total geographical area of 7096 sq km. Sikkim is located between 88°00'58" and 88°55'25"E Longitudes and 27°00'46" and 28°07' 48" N Latitudes. Sikkim is located between Tibet on the North and Northeast, Bhutan and Bengal on the Southeast and south, and Nepal on the West. Mount Kanchendzonga the third-largest Mountain in the world is located in Sikkim. Singalila range forms the Western

boundary of Sikkim with Nepal and Chola range demarcated the eastern boundary and Dongkia range runs from North to East Sikkim. Sikkim is divided into six districts i.e Gangtok, Mangan, Gyalzhing, Namchi, Soreng and Pykyong. Gangtok is the capital of the state located in gangtok district. The first kingdom of Sikkim was established in 1642 by Phuntsog Namgyal, the first Chogyal. Sikkim became the 22nd state of India on May 16, 1975. In first first census conducted in 1891, state had about 30 thousand people dominated by Lepchha andin 2011, it was 6.1 lakh population (Census of India, 2011) .

Figure no 1: Location Map of Sikkim ad Distillery Industry in Sikkim



Source: Excise Department govt. of Sikkim, 2024

## Discussion

### 1. Factory

Presently, there are 8 (eight) brewery and distillery industries in the state (Table no 1). Out of which two (2) are breweries (Yuksom Breweries Ltd and Denzong Albrew Ltd) and six (6) are distillery industries. Four breweries and one distillery industry are located in Pakyong district and two distilleries and one brewery are located in Namchi district. Though, all of them are located closely near Rangpo, the gate way of Sikkim which is located at border area with West Bengal (Figure no 1). Out of the six breweries and two distillery industries (one each from Brewery and Distillery) were taken for indept study.

Table no 1: Process of Brewery and Distillery

Aspect	Breweries	Distilleries
Process	Brewing involves the fermentation of ingredients like grains (barley, millets, wheat), hops, and water to produce beverages such as beer and cider. The process includes mashing, boiling, fermenting, and conditioning.	Distilling takes a step further by heating fermented liquids (like beer or wine) to separate alcohol from the mixture. This results in stronger spirit like whiskey, vodka and rum through a process called distillation
Products	Breweries produce beverages with moderate alcohol content, typically ranging from 4% to 8% ABV (alcohol by volume).	Distilleries create higher proof spirits, often exceeding 40%ABV.
Ingredients	Brewing primarily uses grains, hops and yeast.	Distilling generally utilizes grains (like corn, rye, or barley) but can also include fruits for certain spirits.

Source: Excise Department govt. of Sikkim, 2024

i. Sikkim Distilleries Ltd.

The Sikkim Distilleries Limited founded by Mr. JR Contractor in 1954 at Rangpo, Pakyong district of Sikkim, is the oldest, largest liquor manufacturers and first formal industry in the state. It enjoys a pre-eminent position in the domestic liquor industry. The distillery is now owned by Aneja Group. They have also tied up with M/s Allied Blenders & Distilleries Pvt. Ltd., Mumbai, for bottling Officers Choice.

The company was given an exclusive monopoly license for the manufacture of alcoholic drinks in Sikkim by the Chogyal. This was done under the agreement that the government, then known as the Durbar, would own about 47 percent of the company's shares, thus providing partial state control and ownership. This historic step not only established a framework for an organized alcohol industry but also provided an early example of public-private collaboration in Sikkim's industrial policy before the state became part of union territory. Presently it produces 4000 cases per day.

ii. Himalayan Distilleries Ltd.

Himalayan Distilleries in Sikkim was established in 1985 at Mazhitarin Pakyong district with the aim to research, develop, manufacture, and market quality alcoholic beverages responsibly and competently.

iii. Mount Distilleries Ltd

Mount Distilleries Limited was established in 1999 in Mazhitar, Pakyong district. The company began as a private limited firm focused on manufacturing and

trading a range of products, including alcoholic beverages and, more recently, sanitation products. Its production is ranges from 2.7- 3.25 lakhs cases annually.

iv. Mayell & Fraser Ltd.

Mayell & Fraser was established on November 13, 2006, at Rangpo, in Pakyong district setting up its distillery at Bageykhola near Singtam. The company is collaborated with Angus Dundee Distilleries of Scotland, aiming to produce premium spirits, including 100% Scotch whisky and deluxe grain whisky, leveraging international expertise and Sikkim's natural resources. It is producing 1500 cases with a capacity of 6000 cases per day depending market demand.

v. Kanchenjunga Distilleries & Liquor Ltd.

Kanchenjunga Distilleries & Liquors was established on April 28, 2011 at Manpur, in Namchi district, Sikkim. It was established by a group of professionals with a shared interest in manufacturing a variety of distilled alcoholic beverages, including whisky, brandy, and gin, leveraging the region's resources and strategic location for production and distribution.

vi. Lahag Spirit Ltd.

Lahag Spirits Private Limited established its unit in Sikkim on 1<sup>st</sup> July, 2017. It is a beverage manufacturing company based in Manpur, Namchi district known for producing spirits such as Green Label Whisky. The company is involved in the manufacture and wholesale distribution of Indian Made Foreign Liquor (IMFL) and other alcoholic beverages.

vii. Yuksom Breweries Ltd.

Yuksom Breweries was founded in 1987 by renowned Bollywood actor Danny Denzongpa in Melli, Namchi district. It is one of India's leading regional brewery companies. It known for unique quality and taste because it uses pure Himalayan spring water from the river Teesta. The company is a beer manufacturing unit. Presently, licence capacity is 3 lakh liters per month.

viii. Denzong Albrew Ltd

Denzong Albrew Pvt Ltd was established 2011 which is a Green field Breweries plants situated at Darpaney Mulukhey Rhenock, Rongli road Pakyong district, Sikkim. It is heaving an annual capacity of 1.5 lakh liters. It is producing the most famous UBL brands Kingfisher and Kalyani black lable since April 2011. The company has constructed its building in the area of 12 acres of lands.

## 2. Distributors and Retail Shops

The capacity of alcohol production in the state from eight industries is more than 30 lakh litres per month but actually around 10 lakh litres of alcohol or daily around 50 thousand litres are being produced due to market, season, raw materials etc.. It is distributed by numbers of registered distributors and sub distributors in the state and outside to retailer shops. There was a sudden growth of retailers shops from 2019-2020 with 866 shops to 1444 in 2020-2021 with the



growth percent of 66.7 and 2022-23 with 2218 shops (158% growth) from 2019-20. This is due to the lifting of ban on issue of new Foreign Liquor Retail (FLR) licenses by the Excise Department in 2019 (State Excise Department, 2024). This lifting of ban on foreign liquor was reflected in number of foreign liquor bars which suddenly increase. In 2018 there was only 940 bars but in 2023, it has increased to 1223 bars (30% growth). Home made wine has also established a niche market after Covid -19. Pachwai has maintained a balance. Few Army units have added. Among the number of distributors, there is no change but sub distributors has increased from 10 in 2017-18 to 15 in 2022-23 (Table no. 2 and 3).

Table no 2: Number of Distributors and Retail shops

	Particular	2017-2018	2018-2019	2019-2020	2020-2021	2021-2022	2022-2023
1	Foreign Liquor & Country Liquor Shop	857	857	866	1444	1989	2218
2	Foreign Liquor Bar	940	940	999	1224	1061	1223
3	Pachwai	33	33	20	44	30	33
4	Homemade Wine	0	0	0	3	5	6
5	Methylated Spirit	22	22	22	22	3	3
6	Army Units	44	44	42	44	44	50
7	Distributor Of Smfl / Beer	7	7	7	7	7	7
8	Distribution Of Imfl	1	1	1	1	1	1
9	Sub- Distributor	10	10	7	20	17	15

Source: Excise Department govt. of Sikkim, 2024

Table no 3: Growth Rate of Distributors and retail shops

Year	2018-2019	2019-2020	2020-2021	2021-2022	2022-2023
Foreign Liquor & Country Liquor Shop	0	1.05	66.7	37.7	11.5
Foreign Liquor Bar	0	6.2	22.5	13.3	15.3
Pachwai	0	39.4	120	-31.8	10
Homemade Wine	0	0	0	66.6	20
Methylated Spirit	0	0	0	-86.3	0
Army Units	0	-4.5	4.7	0	13.6
Distributor Of Smfl / Beer	0	0	0	0	0
Distribution Of Imfl	0	0	0	0	0
Sub- Distributor	0	-30	185.7	-15	-11.7

### 3. Excise Department and Revenue

The Sikkim Excise Act, 1992 enables the Department not only to regulate but also to collect revenue in the form of Excise Duty, License Fee, Import Pass Fee and Export Pass Fee etc. Under the provisions of the Acts, the Department monitors and frames Rules and Regulations for manufacture, import, export, licensing, sale, storage /warehousing, inspection of all alcohol, spirits, raw material and by products. The Department is also a major contributor of revenue in the state. In 2013-14, the total revenue collected by State Excise Deptt was Rs. 120 crores and steadily increase. After lifting the ban in 2019, there was sudden growth. In 2018–2019, the revenue was Rs.183.08 crores which increased to Rs. 298.46 crores in 2022–2023. In a span of 4 years from 2019 to 2023, revenues increased by Rs. 115 crores out of Rs. 178 crores in 10 year from 2014 to 2023 (Table no 4). The post-pandemic growth rates were high, reflecting successful policy implementation and state economic revival.

The Department also runs a laboratory at Chanatar, Rangpo. It is headed by an official in the rank of Assistant Chemical Examiner. It has the responsibility to examine, test and analyze all liquor produced in Sikkim as well as those imported from other states. As per this new notification No.19/EX dated 16/12/2022, the department is authorised to issue new excise licenses in all districts of the State with relevant documents and including the basic requirement of notified distance required from public places – (School –300 ft., Colleges-200 ft. ,Places of worship-50 ft., Hospitals-50 ft., Petrol pumps and Taxi stand-100ft) (State Excise Deptt., 2024).

Table no 4: State Excise Revenue Receipt (2013-2023)

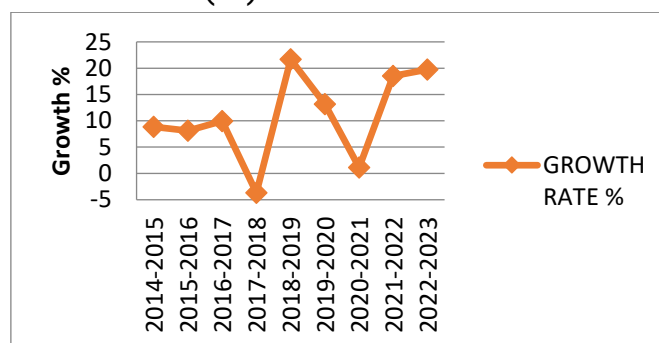
<b>Year</b>	<b>Rupees in Crores</b>	<b>Growth Rate Percentage</b>
2013-2014	120.64	
2014-2015	131.36	8.88
2015-2016	142.07	8.15
2016-2017	156.23	9.97
2017-2018	150.47	-3.69
2018-2019	183.08	21.67
2019-2020	207.15	13.15
2020-	210.27	1.15



2021		
2021-2022	249.19	18.51
2022-2023	298.46	19.77

Source: State Excise Department Govt. of Sikkim, 2024.

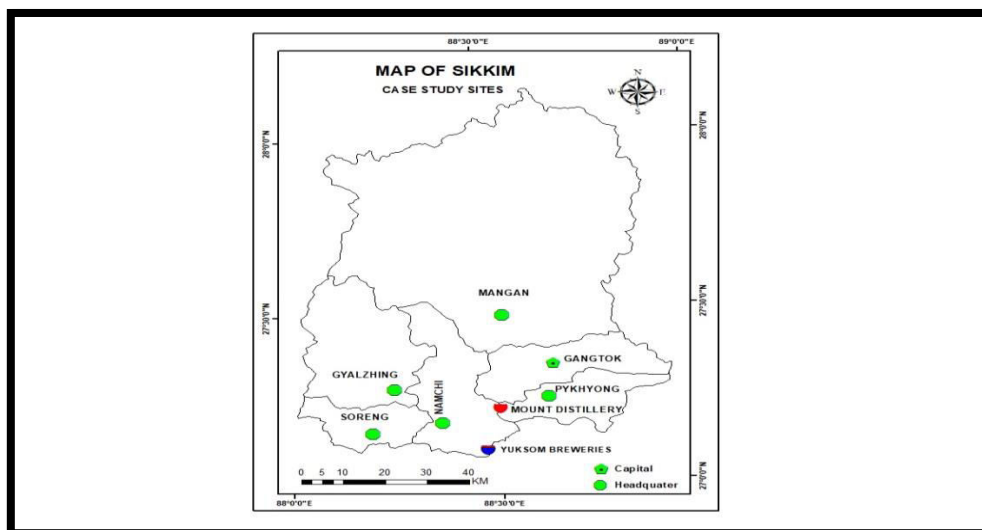
Figure 2:Trends of Growth rate (%) from 2014-2023.



#### 4. Case Study

Two factories were chosen for case study one from Distillery and one from Brewery factory, they are Yuksom Brewery Industry and Mount Distillery Pvt Ltd (Figure no 3). The study was done in month of April 2025.

Figure no 3: Location map of Yuksom Brewery and Mount Distillery Pvt. Ltd



Source: State Excise Department , 2024

##### i. Yuksom Brewery Industry:

Yuksom Breweries was founded in 1987 by renowned Bollywood actor Danny Denzongpa in Melli, South Sikkim. It is one of India's leading regional brewery companies. Its known for unique quality and taste because it uses pure Himalayan

spring water. The company is a beer manufacturing unit came into production in 1987. The company based in Sikkim but expanded in other states too, a units at Khordha, Odisha and one at Amingaon, Assam (as Rhino Agencies Ltd). Today, Yuksom Breweries ranks as India's third-largest beer brand, producing nearly 3 lakh cases annually.

### **Products:**

The company produces variety of beer for both domestic and international. The varieties for domestic and local includes - HIT, HE-MAN 9000, DANSBERG BLUE, DANSBERG STRONG, DANSBERG PREMIUM known for their bold flavours (4.6%–6.8% range of alcohol content). For international markets, DANSBERG 16000, HIMALAYA BLUE and HIMALAYAN SNOWMAN which are exported to countries specially in US, European countries and Australia. These international varieties are crafted to meet global tastes while maintaining the essence of Himalayan purity.

### **Economy:**

Yuksom Breweries plays a significant role in the local economy and state as a whole. It employs large number of people and beneficial directly and indirectly to the people of state. It contributes over Rs. 100 crore in taxes annually and supports dairy farming by supplying malt by products, which in turn enhance milk production in the state. Local people also prefer the company products and control the flow of outside productions in the state. The company is highly rated for its employee welfare, work culture and job security.

### **Process:**

Yuksom Breweries blends strongly with traditional brewing practices with modern techniques, a deep connection to its Himalayan roots. It is not just a brewery, but a symbol of regional pride and entrepreneurial success in India's alcohol beverage industry. Process in the brewery are Mill, Mash Tun, Lauter Tun, Wort kettle, Whirlpool Tun, Fermentation Tank, Storage Tank and Bright Beer tank etc.. MILL (roasted malt barley is milled into grist for easier absorption); MASH TUN (Grist is mashed in with heated water and starch breaks down into sugars making wort); LAUTER TUN (grain is filtered out from the wort and reused as cattle fodder); WORT KETTLE (hops are added to the boiling wort for flavour); WHIRLPOOL TUN (hops and malt residue are filtered out from wort); FERMENTATION TANK (chilled wort is infused with yeast and fermented, resulting in green beer); STORAGE/LAGERING TANK (green beer is stored at low temperatures for atleast 12-15 days for maturation of beer) and BRIGHT BEER TANK (Matured beer is filtered, carbonated and sent for bottling and packaging) and lastly before labelling and packaging, the beer goes through tunnel pasteurization extending its shelf time.

Yuksom Breweries has been linked to sources such as Imperial Malts Ltd. in Gurgaon, India, which means a local source for malted barley. Hops are used to

contribute bitterness and aroma to beer. Yuksom Breweries imports hop pellets mostly from Germany and Vietnam so that the brews get the desired flavor profiles. Yeast is responsible for fermentation as it converts sugars to alcohol. Though specific suppliers are not named, the brewery utilizes selected yeast strains to obtain consistent fermentation outcomes. One of the characteristic elements of Yuksom Breweries is that they utilize pure Himalayan spring water to give unique taste and quality of their beers.

The brewery maintains rigorous Standard Operating Procedures (SOPs) and adheres to ISO 9001 quality management standards. Documentation and regular audits also guarantee product consistency and compliance with regulations.

### **Capacity:**

The installed capacity of the distillery is 300,000 litres per month (10,000 litres per day), while the actual output in production is 180,000 litres per month ( 60% of total installed capacity). This inefficiency may be because of raw material availability, diminishing market demand, operational inefficiencies or labour and maintenance constraints.

### **Labour:**

The breweries employ approximately total 250 employees in a direct pay. The workers are distributed in sections (administrative, processing, bottling, packaging and warehouse). The plant operates a single 8-hour shift a day. Staff are given initial training in machine use, safety, and sanitation on a quarterly. The average pay for different categories of workers Rs.30,000 per month and above as per their works. Industry provides medical facilities (doctor visit in the industry every month) and subsidised canteen, transport, and housing.

### **Distribution:**

The distributors cover for entire Sikkim and including main consumption centre of Gangtok district. The distributor in Gangtok receives product shipments from Melli approximately 12 times a week. Each consignment contains around 800 cases (c/s), summing up to nearly 9,600 cases delivered weekly. The godown used by the Gangtok distributor has an estimated capacity of 10,000 c/s. The storage system is designed to handle peak demand scenarios, such as festivals and tourist seasons. The facility is built over a 5,000 square feet area, allowing adequate room for inventory management, vehicle movement, and stock rotation. The monthly sales volume handled by the Gangtok distributor is estimated to be around 2 lakh cases. This reflects the strong market presence and consumption rate in the district. To establish a distributor business in Gangtok, an estimated investment of ₹5crores is required.

**Environmental Concern:**

Yuksom Breweries has an integrated waste management system for dealing with solid, liquid, and gaseous waste. It has an Effluent Treatment Plant (ETP) within the premises to treat wastewater produced during the brewing process. The water that is treated is partly recycled for cleaning non-contact surfaces (Rao and Sharma, 2016), while the rest is discharged according to the Sikkim State Pollution Control Board norms. Solid waste like spent grains and yeast residue is collected and reused as cattle feed, benefiting local dairy farmers and minimizing landfill usage. In the case of gaseous emissions, particularly from boilers and fermentation tanks, the brewery controls air pollution and odors using multi-stage scrubbers and filters.

**ii. Mount Distilleries Pvt. Ltd.**

Mount Distilleries Limited was established in 1999 at Mazitar, Rangpo in East Sikkim. It manufactures Indian Made Foreign Liquor (IMFL) and State Made Foreign Liquor (SMFL). It produces fine wine, rum, brandy, gin, vodka and whiskey. Their varieties of product are- WINE –(Saino Sikkim Peach Wine, Saino Sikkim Shiraz, Saino Rio Red Wine, Saino Rio White Wine, Sikkim White Wine, Sikkim Red Wine); RUM –(Millennium XXX Rum -Sikkim 2000, Red Mountain); BRANDY (Honey Gold, Royal Star, Golden Dragon Sikkim, Himal Melon); GIN (Blue Sapphire); VODKA (Doklam) and WHISKEY (Blue Mountain, Royal Castle, Sikkim Knight).

**Process:**

First process of manufacturing is purification of water under DM (Demineralized) Water Plant to supply highly purified water for blending. DM Water samples are sent finally to FSSAI Approved Lab. The blending section is the final product with mixing of ingredients in exact proportions. After mixing, the blend is given a maturation, during which the ingredients will get harmonized and establish the required flavour profile within a specified timeframe. After the maturation process a sample is then extracted and tested by an approved panel to confirm quality and adherence to maintain standards. Once it receives approval, then proceed for bottling stage to fill into bottles for supply which is also associated with correct fill level, proper sealing etc..The final products are handled over to distributors.

**Capacity:**

The installed production capacity of the of the industry is between 2.7 lakh case to 3.25 lakh cases annually and 25000 cases to 30000 cases monthly and daily 10,000 litres. Actual output is generally in the range of 80–90% of this level depending on market conditions and operational considerations.

**Raw Materials:**

The core raw material are molasses, Caramel, Extra Neutral Alcohol (ENA) and DM water. ENA comes from Bihar and Thailand, Glass bottles from West Bengal and cartoon boxes from Sikkim.

### **Labour:**

The company has a number of permanent and contractual employees. There are total number of 40 workers and 22 staffs. Working time and shift schedules in these distilleries usually operates a single shift of 8 hours. They work in different departments. Employees also get regular training and counselling for every 15 days. Different wages for different labours who are unskilled, semi-skilled, or skilled. Unskilled workers receive minimum wages paid according to the state wage rules.

### **Environmental Regulatory Compliance:**

The company has an Effluent Treatment Plant (ETP) ensuring that the liquid waste produced from manufacturing is treated and neutralized prior to discharge. Hence it reduces the impact on environment and ensuring conformity to pollution control measures. Biodegradable waste is generally collected and composted or transferred to municipal waste management plants, whereas recyclable plastic is sorted and routed to recycling units. This double waste management approach not only minimizes the environmental impact of the plant but also aligns with overall sustainability objectives.

### **Finding and Conclusion**

The distillery and brewery industry in Sikkim represents a unique convergence of economic potential, cultural heritage, environmental awareness, institution and governance. Making and drinking of alcohol is common among various ethnic group in Sikkim and deeply embedded in society. Due to local climatic condition, raw material, spring water of Himalaya and their valuable culture blended with new technology produce unique taste of alcohol. Recently, rapid urbanization and hospitality industry in state catalyst for rapid growth of alcohol business and distillery industry. The industry has shaped the pattern of alcohol consumption in the state. Urban areas was dominated by foreign liquor and rural areas were traditional drink. But at present, branded and foreign liquor are also increasingly popular in rural areas and also among women. Though, local/ traditional wine and alcohol drinks have also created a niche market due to hospitality industry.

It is a sector that has successfully contributed to state revenue, industrial growth, rural development also preserving deep-rooted cultural traditions. In the study ultimately reaffirms that the alcohol industry in Sikkim is not just a business but a vital component of its social and cultural economy. It mirrors the state's evolving identity—rooted in its indigenous wisdom, yet open to transformation. Its future success will depend on its ability to maintain this balance, ensuring that

development does not come at the cost of environmental degradation or social disintegration. With government support, community participation and responsible business practices, Sikkim's alcohol industry can serve as a model for similar mountain economies across India and beyond.

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