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# Development of industrialization in Haridwar and the application of strengths, weaknesses, opportunities and threats (SWOT) analysis

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#### Abstract

It is the most acceptable fact that the most distinctive feature of modern civilization is industrialization. A lot of new things, technologies and many more have become possible only due to industrialization. As a result of this, Earth's physical state is also changing. If we do not try to conserve our planet, the human race, are drifting towards a dark age which may be very difficult to get away from it. Regardless the fact of evident gains from industrialization and the success of many countries in achieving it, numerous other countries remain unindustrialized and poor [1]. In the few last years the Uttrakhand state came forth as one of the most desiring industrial destination in India. In Haridwar, many industrial areas including SIDCUL came into existence and flourishing at a very large scale. Blooming industrialization has caused many positive as well as negative impacts in this area. This paper focused on status of industrialization, and strength, weakness, opportunities and threats caused by industrialization.

Keywords: industrialization, SWOT analysis, BHEL, SIDCUL, Haridwar.

## 1. Introduction

Haridwar district is located at latitude of 29058' North & longitude of 78013' East in the western part of Uttarakhand state of India at an elevation of 249.7 msl. It is covering an area of about 2360 sq.km. The district came into existence on December 28th, 1988. The district headquarter is situated in the Roshnabad, at a distance of about 12 kms from railway station. The district is administratively subdivided into three tehsils i.e. Haridwar, Roorkee and Laksar and six development blocks i.e. Bhagwanpur, Roorkee, Narsan, Bahadrabad, Laksar and Khanpur. As per the 2011 census, the total population of the district is 19,27,029. Decadal population and its growth in district have been referred from Census of India (Table 1).

**Table 1**: Population and decadal growth of District Haridwar

S. No.	Year	Population	Decadal Growth
1	1981	**	32.30
2	1991	1124488	25.95
3	2001	1447187	28.69
4	2011	1927029	33.16

*Note\*\**: *Haridwar district came into existence in 1988.* **Source:** Census of India

However, it may be different due to floating population as Haridwar is a well known tourist destination due to many recreational and religious places. It is also regarded as one of the seven holiest places to Hindus and gateway to God [2]. Important towns in the district are Haridwar city, BHEL Ranipur, Roorkee, Manglaur, Dhandera, Bhagwanpur, Jhabrera, Laksar, Landaura and Mohanpur Mohammadpur. Map of Haridwar district is as follows:



Figure 1: Map of Haridwar District

Industrialization had commenced in Haridwar district with the establishment of PSUs like Hindustan Antibiotics Limited and Dabur during 1964. Now it is a blooming industrial area situated at the bypass road, comprising mainly of various Public Sector Undertaking (PSUs) and Bharat Heavy Electricals Limited (BHEL) and currently employs over 8000 people [3]. Bharat Heavy Electricals Limited, a Maharatna Public Sector Undertaking (PSU) is spread across an area of 12 km². BHEL is having its own colony of 43,000 persons, has indirect impact on the economy of the town.

Haridwar is rapidly developing as an important industrial hub of Uttarakhand since the state government agency, SIDCUL established in 2002, set up the Integrated Industrial Estate. As a result of which infrastructural and transportation facilities have been improved and cost of living has also been increased. In this area many manufacturing units are coming and some of the reputed industries already placed here like Indo Asian Switchgear Limited, Hindustan Unilever Limited, TATA Motors, Reliance, Lotus, Avon, Vijay Electricals, SBL, Hero Honda, Controls & Switchgears Limited, ITC, and Mahindra & Mahindra etc.

There are so many industrial and agricultural sectors like Stone Rolling Mills, Textile mills, Paper Mills, Sugar Mills, Mentha Oil, Paint industry Units and Flour and Rice Mills on the other side there are Dairy Products, Floriculture, Production of Rice and Wheat, Horticulture and fish farming sectors.

Industrial area of Haridwar has been divided as mentioned below:

- Haridwar Industrial Area nearby railway stations
- Mustafabad Industrial Area
- Dhanpura Industrial Area
- Padartha Industrial Area
- Landhora Industrial Area
- Pipli Industrial Area
- Bahadrabad Industrial Area
- SIDCUL Haridwar

State Industrial Development Corporation of Uttarakhand (SIDCUL). SIDCUL, spread over a land of 2034 acres, developed by State Industrial Development Corporation of Uttarakhand (SIDCUL), a state government body. With big enterprises like Hindustan Unilever Limited, Dabur, Mahindra & Mahindra, Havells, Kirby moving in SIDCUL is set to develop into another industrial township within the city [3]. Many medium and large scale industrial units are also operating in and around the town.

The State Industrial Development Corporation of Uttarakhand (SIDCUL) has now established one new 'industrial development zone' in the district, adjacent to Shivalik Nagar near Haridwar, to encourage industrialization. The state government paid 20 crores to the company for the industrialization in Uttrakhand state.

Besides the State Government, SIDCUL has equity participation from LIC, ICICI and SIDBI. This led the Haridwar city to be turned into a big industrial city in the state of Uttrakhand [4].

## 2. Industrial Scenario of Haridwar

S. No.	Head	Particulars	
1	Registered industrial unit	7496	
2	Total industrial unit	7581	
3	Registered medium & large unit	159	
4	Estimated average number of daily worker employed in small scale industries	149	
5	Employment in large and medium industries	55786	
6	Number of industrial area	38 (Govt./Private industrial/ Mega projects)	
7	Turnover of small scale industries (in lacs)	850374.8	
8	Turnover of medium & large scale industries (in lacs)	108776.00 Excluding large industries	

Source: Brief industrial profile of District Haridwar, MSME (2005) available at dcmsme.gov.in/dips/DIPSR%20-%20HARIDWAR.pdf

With the passing of time number of industrial units has also been increased. During 2005, only 14,205 workers were engaged in 23 industrial units in the Haridwar city area; 11,599 were employed by the BHEL and its ancillary unit alone (Table 2). Outside the city limit, there are 19 functioning industrial units together employing 2.6 thousand workers [5]. Total number of Large and Medium Scale Industrial Units in Haridwar District and Workers Employed are shown in Table 2. During 2011-12, number of registered factories were 998, small scale industrial units 6,458, Khadi Gramodyog units 3893 and workers employed 1,25,619, 52,154 and 3,893, respectively.

Registered factories, small scale industrial units, Khadi Gramodyog Units and workers employed in Haridwar District are given in Table 3.

**Table 2:** Large and Medium Scale Industrial Units in Haridwar District and Workers Employed

Tuna of their	Within Haridwar Urban Area		Outside Haridwar Urban		Total	
Type of Units	No. of	No. of	No. of	No. of	No. of	No. of
	Workers	Units	Worker	Units	Workers	Units
Pharmaceuticals and	559	1	532	3	1091	4
chemicals	333	1	JJ2	3	1031	7
Engineering	40	1	135	1	175	2
Electrical	11000*	2	122	3	11122	5
Food processing			1453	3	1453	3
Iron & steel			308	2	308	2
Others			56	7	56	7
Total	11599	4	2606	19	14205	23

\*BHEL and in ancillary of BHEL

Source: Government of Uttarakhand, Directorate of Industries, Directory-Large and Medium Industries (Functioning), 2005

**Table 3**: Registered factories, small scale industrial units, khadi gramodyog units and workers employed in Haridwar District

Type of	Registered Factories		Small Scale Industrial Units		Khadi Gramodyog Units	
Units	No. of Units	No. of Workers	No. of Units	No. of Workers	No. of Units	No. of Workers
2009-10	736	88140	5665	42104	1839	3609
2010-11	998	125619	6051	48212	1898	3786
2011-12	998	125619	6458	52154	1935	3893

Source: Statistical Abstract 2012

As per data available with DIC [6] about existing micro & small industrial units in the district witnessed a rapid pace of industrialization since the formation of Uttarakhand as a separate state. In 2005, there were 81 large units, 1166 small & medium units and 81503 workers employed.

**Table 4**: Details of existing micro & small industrial units in the district

S. No.	Industry Group	No. of Large Units	No. of Small & Medium Units	No. of Unit Set	Employment
1	Textiles	3	25	28	4654
2	Electrical	9	185	194	14014
3	Electronics	2	59	61	2529
4	Food processing	6	35	41	6336
5	Pharmaceuticals	7	157	164	8619
6	Soap, Cosmetics	5	51	56	5333
7	Automobiles	11	63	74	6928
8	Misc. Engg.	2	153	155	5322
9	Packaging	4	90	94	4536
10	Steels	9	28	37	2617
11	Foot wears	1	15	16	2047
12	Plastics	8	168	176	6233
13	Eco-tourism	-	12	12	368
14	Other	14	125	139	11967
	Total	81	1166	1247	81503

Source: DIC Roorkee (Haridwar) (2005)

As the New Industrial Policy is implemented, Haridwar will experience an accelerated growth in secondary sector. The present pattern of concentration of industrial units indicates that Haridwar is a preferred destination for industrial investments in Uttarakhand. The main reason of industrial development and growth in Haridwar is being closer to the National Capital Region and having very good rail and road connectivity, it offers locational advantage for industries. There is lot of optimism about faster rate of industrialization of Haridwar [3].

# 3. Pros and cons of Industrialization

Industrialization was an interminable process that has had multiple unintended consequences including

environmental destruction. Industrialization brought new technologies. The new changes and inventions led to urbanization and large industrialized cities that seemed to transform over night from small towns and villages. The newly opened factories created jobs for the people who have just moved to the cities from the farming life style. Goods could now be produced in massive quantities, leading to cheaper prices so that virtually anyone can buy the goods. It seemed that the pros of the Industrial Revolution seemed to outweigh the cons at the time, but the newly created industrial cities would soon learn that for something good that happens, something bad will soon follow; for example, the factory jobs were unforgiving and consisted of long hours. Children were put in factories to work long hours and were uneducated. Only the middle class and the wealthy were able to put their children in school. The pollution from the factories and from the way of life will soon create problems in the future. Pros and cons of industrialization are summarized in the Table 5.

Table 5: Pros and cons of industrialization

Pros	Cons
Created jobs for hundreds of people and immigrants.	Sometimes, jobs are extremely dangerous to the point that someone can lose their life.
Competition between skilled and unskilled labours is reduced.	Sometimes, workers are exploited by the owners of the companies.
Now, all kinds of the machines that are required to build the things, which we use daily like cars, computers, televisions, clothing, and many other things, are available.	industrialization provides a great pollution: smoke, ashes, black canal, bad smell and purple river.
Brought people to the large cities to work instead of farms.	Many health related problems are increasing with the industrialization; it has caused a bunch of pollutants that have gone into the air causing people to get sick from it.
Brought people over from different areas not only other states but also other countries.	There is no security that is if you missed a day of work you would pretty much lose your job.
Development of wealth or capital	People are underpaid because the company owner wants to make as much money as possible. As a consequence, rich get richer, the poor get poorer
Development of new inventions and new technologies.	·
Production of variety of products.	
Put the state one step ahead of the world.	

## 4. Application of SWOT analysis

# 4.1 What is SWOT analysis

SWOT is not the only assessment technique, but is one with a long track record of effectiveness and to determine the right approach for a situation. SWOT is a term formed from S, W, O and T Where, S stands for strength, W stands for weakness, O stands for Opportunities and T

stands for threats. It can be defined as the examination of internal strengths and weaknesses, and external opportunities, and threats. It is a general tool designed to be used in the preliminary stages of decision-making and as a precursor to strategic planning in various kinds of applications (www.wikipedia.org). When correctly applied, it is to get an overall picture of present situation. It also guides to identify the positives and negatives factors both from inside and outside. Sometimes, it is also called as TOWS. It was originally developed for business and industry, but it is equally useful in the work of community health and development, education, and even personal growth. An understanding of the external factors (comprised of threats and opportunities) coupled with an internal examination of strengths and weaknesses assists in forming a vision of the future and in making appropriate decisions.

## 4.2 SWOT application

	Favourable	Unfavourable		
	Strength	Weakness		
Internal	Adequacy of transport facilities and interstate connectivity.     Industrial Township i.e., SIDCUL     Sustainable economic growth     Rural areas have high employment rate     Rising population     Superior Technological equipment     New advertising and marketing techniques     New invention and technology     Growth of industrial capitalist     Growth of capitalism     Improved transportation and communication facilities	Inadequacy of information channels.  Inadequacy of marketing.  Sufficient funds provided by State Govt.  Lack of adequate infrastructural support.  Lack of civic facilities.  Improper environmental management.  Infrastructure of public service and transport  Higher price		
	Opportunities	Threats		
External	Newer sources of communication like the internet must be used effectively to influence and advertise.  Opportunities of employment. Scope to develop inter-religious philosophies prevails. High immigration Land —space to grow Export  Cross-selling	Spread of communicable diseases.      Loss of Biodiversity.      Degradation of Environment.      Fuel poverty     Storage and high cost of rural house     Competitions from others     Environmental Disasters like Bhopal gas tragedy, Chernobyl accident etc.		

### 5. Conclusion

It can be concluded that industrialization is flourishing in Haridwar at a very fast rate. Due to industrialization, many things can become possible and without these things like electricity, electronic goods, automobiles, various kinds of medicines and other products life would be much different. Industrialization is not only an engine for employment, wealth and technical skill, but an engine for the development of technology. Biggest advantage of industrialization is the development of new technologies and inventions. It increases productivity, which enable production of a large variety of products and service economically and we can buy them at affordable prices. This in turn leads for improved standards of living for the entire society or the economy. The most evident advantage of industrialization would be the development of wealth or capital. Industrialization generated a great deal of wealth for many people [7]. Workers were able to find a source of work that could expand to employ more people. Another advantage of industrialization was the movement to a more urbanized setting.

Industrialization also opens the door to lots of employment opportunities which, in turn, also open the door to establishing businesses to satisfy the needs of those employed by the industry. But on the other hand, industrialization have a dark side also for, example, the invention of the automobile and other gasoline consuming vehicles created a faster way of transportation, but in the long run, the pollution that the vehicles will eventually destroy the ozone. Another good example of destroying the earth atmosphere was during the Industrial Revolution; the British factories destroyed and deforested almost all of the woods on the island, and in the long term, the disforestation is a leading cause for global warming. The only way to stop the destruction of the planet is conservation and restoration.

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