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Planning Of Human Resources In Small- Scale Scientific Instrument Industry Of Ambala

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Abstract

Scientific instruments have prominent place in the area of education, medical and industry. Scientific instruments are used since the ancient times. In today' world we cannot imagine the existence of life without scientific instruments. Perhaps the 'Astrolabe' was based on the scientific technology which is called the first scientific instrument. This instrument was used for observation of this world by the Eratosthenes of Alexandria in the third century. Ambala district of Haryana has the glorious historical preview regarding scientific instrument industry. Lala Hargolal is famous as the founder of scientific instrument industry in Ambala. Now, more than 800 small scale scientific instruments units are working in Ambala. The aim of this research paper is to highlight the practice of human resource planning in the scientific instrument industry of Ambala District. This industry is not merely the small industry but this scientific hub is a heritage of Haryana. This paper further highlights the role of human resource planning in this industry.

Key Words

Scientific Instruments; The Ambala District; Small-scale Scientific Instrument Industry; Human Resource Planning.

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Introduction

Scientific instruments play crucial in the education, medical and industrial sector. We use various types of scientific instruments in our daily life. Instrumentation makes our working possible and convenient. Scientific instruments are manufactured mainly by the small scale sector because small scale industrial units of our country accounts for 70 percent of innovation. A small-scale industrial unit has been defined by the MSMED Act 2006 in terms of manufacturing enterprises and service enterprises. A manufacturing small scale industrial unit is that unit in which the cost of plant and machinery engaged is more than ` 25 lakh and upto ` 5 crore and a service providing small industrial unit is that unit in which the cost of equipment installed is more than ` 10 lakh and upto ` 2 crore. Small scale scientific instrument units can be categorized into three types, namely, (a).the units engaged in the manufacture and assembling of all the components of scientific instruments, (b). the units engaged in the manufacturing of instruments with the components received from other local units and (c). the units which manufacture the specific components for the assembling of scientific instruments.

Scientific Instrument

The scientific instruments are used in the area of measurement since the ancient times. Astrolabe is assumed the first scientific instrument of this world. After this device the microscope and the telescope were invented which are capable for measuring all types of measurements. In the seventeenth century, the Barometer was invented which was another revolution in the history of scientific instruments. Later on various scientific instruments such as the pendulum, magnetic compass, electroscope and air pump etc were also discovered for the scientific purposes. A scientific instrument can be defined as that instrument which is helpful for understanding the features of scientific practices.

Review of Literature

Following are some important reviews of the literature related with the study:

Rauch Andreas and Frese Michael (2000) have concluded that employees of the organisation have prominent place in the organisation because they are the valuable resource of the organisation. **Singh Manjari and Vohra Neharika (2005)** have emphasized the human resource planning in the small scale units for increasing the productivity. Workforce related planning should be done as per the requirements of the small scale units. **Satpathy Sarita, Ajyothy M.L. Nag and Sailajarani P. (2017)** have pointed out that the management cannot accomplish their objectives without the effort of its workforce. In the present era,

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human resources have become an important factor among the various factors which are responsible for the economic growth.

On the basis of above review it can be said that there should be an important planning system for the employees in the small scale units so that they can feel the sense of belongingness in the organisation and contribute in the progress at their best.

The Ambala District

The Ambala district is the famous district of Haryana. Its area is spread in the 1,574 square kilometers. The famous towns of Ambala include Ambala Cantt, Naraingarh, Saha, Mullana and Shahzadpur. It is said in the fourteenth century, this district was founded by an Amba Rajput. This district includes various types industries like mixer grinders and metal castings etc. Ambala is world famous for its scientific instruments manufacturing units.

Human Resource Planning in the Scientific Instrument Industry of Ambala District

The scientific industry of Ambala manufactures more than 20,000 types of scientific instruments. The annual turnover of this industry is worth ` 800 crore. The small scale scientific instruments units of the district contribute upto 34% of the total production of India. These units cater the demand of education institutions, hospitals, research laboratories, engineering colleges, defence sector and the space agencies. Ambala city is famous as the 'Scientific Instruments City' at international level.

In the year 2015-16, the production of the small scale scientific units of Ambala was ` 3,537 lakh while total production of the units of Haryana was ` 6,462 lakh. Hence, the small-scale scientific instruments industry of Ambala contributes in the production of state upto 55%.

This is the prominent industry of the state which makes the export of scientific instruments to many regions namely, Europe, United States, Africa, the Middle East and the far East etc.

This sector is strengthening the industrial economy of the state as well as the country by its growing tendency. In 1966-67, the production of the scientific instruments of the state was

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only ` 136 lakh which has increased to ` 6462 lakh in the year 2015-16. The increase in the production of scientific instruments is the progressive symbol for the industry.

"It is almost as difficult to keep a first class person in a fourth class job, as it is to keep a fourth class person in a first class job."

-- Paul H. Dunn

Human resource planning has been defined by the ILO as the process for ensuring the workforce by the people of management. The selected personnel should be competent to perform the tasks assigned by the administration. It is a strategy which is implemented to attain the optimum acquisition and utilisation of the employees. The planning of workforce is associated with the procurement of future needs of the manpower. It ensures the growth of human resources which is helpful for attaining the organisational objectives. Effective human resource planning ensures a mechanism for resolving the various problems of workforce. For identifying the practice of human resource planning in the scientific instruments industry of Ambala, a survey was conducted in which responses were obtained from 210 respondents who are engaged in these units. The practices of human resource planning are shown in the following table.

Table 1: Planning for the Human Resource is done in the Firm

Attributes/ Responses	Ranks	Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree	p
Period of Working	Less Than 10 Years	0 (00.0)	0 (00.0)	5 (25.0)	9 (45.0)	6 (30.0)	0.953
	10 to 20 Years	0 (00.0)	0 (00.0)	15 (26.8)	29 (51.8)	12 (21.4)	
	Above 20 Years	0 (00.0)	0 (00.0)	35 (26.1)	69 (45.0)	30 (30.0)	
No. of Employees	Less Than 10	0 (00.0)	0 (00.0)	17 (37.8)	20 (44.4)	45 (17.8)	0.184
	10 to 20	0 (00.0)	0 (00.0)	26 (26.8)	47 (48.5)	24 (24.7)	
	Above 20	0 (00.0)	0 (00.0)	12 (17.6)	40 (58.8)	16 (23.5)	
Annual Turnover	Less than ` 25 Lakh	0 (00.0)	0 (00.0)	15 (33.3)	20 (44.4)	10 (22.2)	0.483

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	` 25 Lakh to ` 1 Crore	0 (00.0)	0 (00.0)	19 (30.2)	31 (49.2)	13 (20.6)	
	Above ` 1 Crore	0 (00.0)	0 (00.0)	21 (20.6)	56 (54.9)	25 (24.5)	

Source: Computed from the Primary Data. P Value is Significant at 0.05 Level. Figures in Bracket are in percentages.

Table 2: Karl Pearson's Correlation between the Variables

		Value	Asymp. Std. Error[a]	Approx. T[b]	Approx. Sig.
Interval by Interval	Pearson's R	-.023	.071	-.326	.745[c]
		.129	.067	1.879	.062[c]
		.094	.070	1.358	.176[c]

The data shown in the above table have depicted that high majority of the respondents (75.00 %) pertaining to the variable of period of working with less than 10 years and above 20 years have favoured the human resource practices either in agree or strongly agree categories. Significant majority of the respondents (82.3%) in the variable number of employees above 20 have given their consent with the statement. In the variable of annual turnover, high majority of the respondents (78.5%) whose annual turnover is less than ` 25 Lakh and fair majority of the respondents (69.8) with turnover of ` 25 Lakh to ` 1 crore and majority of the respondents (66.6%) with the turnover Above ` 1 Crore went along with the query. However the data have not shown the statistically significant association between the variables and the statement related to the query.

The data depicted in the table 2 have shown high correlation (0.745^{c}) between the variables of period of working and the responses. There is low degree of correlation between the remaining two variables and the responses.

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Conclusion

The small scale scientific instrument industry of Ambala is the innovative and qualitative industry which is not famous in India only but also at international map. This industry requires special knowledge and expertise for the various operations. The small scale units engaged in the scientific work have prominent place in the export business and have special contribution in earning the foreign exchange. This industry is more than 100 years old which caters the needs of various prominent sectors like education, medical, research and industry. Based on the above discussion, we can say that there is positive response of the entrepreneurs engaged in the small scale scientific instruments units of Ambala pertaining to the practice of human resource planning. Human resource planning is the important practice which can help the organisation to implement its growth strategy in the effective way.

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