



RELATIVE IMPORTANCE OF FACTORS INFLUENCING FACTORY SICKNESS: A CASE STUDY OF GOVERNMENT SILK WEAVING FACTORY, RAJBAGH

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Abstract

The Industrial sector of Jammu & Kashmir state is still lagging behind to fully leverage the opportunities provided by the dynamics of regional trade and globalization. Despite the shortcomings arising out of various factors like remoteness, poor connectivity, weak resource base, sparse population density and shallow markets, the J&K state has remained an industrially backward state. However, the industrial sickness has persisted in most of the industries of J&K state like Govt. Silk Weaving Factory, Rajbagh. In order to address this problem, numerous efforts have been made by researchers that are not sufficient for a successful and sick-free industry. This research attempts to fill this gap and empirically explores the causes of factory sickness based on the Relative Importance Index, the weightage and the key factors responsible for the sickness of the industry and suggests measures to tackle with each influencing factor.

Key words: Silk Weaving Factory, Sick Industry and Relative Importance Index.

1. Introduction

Industries involved in the processing and manufacturing fall under the category of secondary economic activity. The industrial practice encompasses the changing form of goods in order to enhance their value. The J&K state has an age-old tradition in the manufacturing of carpets, silk textile, shawls, woodwork, handicrafts, etc. which provide employment to the people (Ali, 2016). Jammu Kashmir Industries Limited, a wholly owned J&K Government undertaking is a registered company under the Companies Act, 1956 and was incorporated in the year 1963. Its main objective is promoting local & traditional art of the state dealing with wood work, woolen, silk weaving, carved furniture, Rosin & Turpentine industry. Govt. Silk Weaving Factory in Kashmir set up more than 120 years ago located at Rajbagh is fading due to the official apathy and non-serious attitude of state government towards it (Akmali, 2014; Masood, 2017). Further, the same can be held responsible due to the external causes like unexpected adverse market conditions, change in government policies, rise in cost of production, scarcity of critical resources etc. or internal causes like inefficiencies in technical, financial, operational, marketing, etc. (Srivastava, 1986). Consequently, compels to conduct the study to find out all the major and minor causes of factory sickness paving a way towards downfall. The various external and internal causing variables to be studied are covered under the six main factors namely Mission Statement, Financial Problems, Corporate Planning & Control, Production Problems, Human Resource Problems and Marketing Problems (Chowdhary, 2012; Goyal et al., 2012). Adequate supply of raw material is a principal compulsion for the survival of the silk industry in Jammu and Kashmir (Shah, 1991).

As per the Sick Industrial Companies (Special Provisions) Act of 1985, a sick unit is "An industrial company (registered for not less than seven years), which has accumulated losses at the end of any financial year equal to or exceeding to its entire net worth and also has suffered cash losses in such financial year and the financial year immediately preceding such financial year" (Murlidharan, 2004).

A unit passes through the different phases before reaching the Incipient Sickness. Following are the three different phases along with the factors responsible:

- a. Normal Unit: A normal unit is categorized by the efficient functioning of its operational areas like production, marketing, finance and personnel.
- b. Inclining near to Sickness: At this stage a unit shows certain initial aberration in any of its functional areas. Also the unit faces some environmental constraints.
- c. Incipient Sickness: The persistence of the decline in the operational fields leads to the definite setting of industrial sickness. In other words, cash losses are surfaced even if instability and imbalance doesn't seem in the financial structure.

Govt. Silk Weaving Factory faces a continuous deterioration in the functional areas and technically suffers a burden of cash losses thus falls in the stage of Incipient Sickness. Once the industrial sickness is identified, it suggests for its rehabilitation (Bidani & Mitra, 1982). A broad set of empirically tested criteria should serve as an

early warning system including the abnormal fluctuations in a factory relative position should be clearly used to determine sickness at the incipient stage. This is likely to help prevent industrial sickness (Dholakia, 1989). At the level of Individual industrial units, it becomes mandatory to attempt every option for the revival of the factory (Narayanan, 1994).

2. Objectives

1. To study the factors responsible for the sickness of the factory.
2. To analyze the factors on the basis of RII in order to give an understanding to the extent each factor contribute to Silk Factory Sickness.

3. Research Methodology

3.1 Research Design

On the basis of time dimension, it is a Cross-sectional study as it was carried out once and represent a snapshot of one point in time.

3.2 Area of Research

The J&K industries Ltd includes various industries like Govt. Silk Filatures, Rambagh, Srinagar; Govt. Silk Factory, Jammu; Govt. Silk Weaving Factory, Rajbagh, Srinagar; Govt. Joinery Mills, Pampore, Kashmir; and Govt. Joinery Mills, Bari-Brahmana, Jammu, etc. This paper focuses on Govt. Silk Weaving Factory, Rajbagh Srinagar and thus is the area of research. The researchers will determine the reasons of sickness and will study them to meet out the objectives of the study.

3.3 Data Collection

The data is collected by distributing the questionnaire among the 50 employees of the industry. The reason for small distribution of questionnaire lies in the fact of the minimum presence, accessibility and low availability of the employees of the unit. The researchers with the help of the selected sample size can know their opinion concerning the reasons of sickness of Govt. Silk Weaving Factory.

3.4 Sources of Data and Analysis

Primary data was primarily used for the study. In order to find out the demographic features, descriptive statistics was conducted on the demographic variables. Also, in order to empirically determine the factors accounting for Silk Factory Sickness and to give an understanding as to the extent to which each factor contribute to Silk Factory Sickness in Rajbagh, both by itself and in combination of the other factors, the Relative Importance Index (RII) was employed. Relative Importance Index or weight is a type of relative importance analyses. RII was used for the analysis because it best fits the purpose of this study. Johnson (2000) defines Relative weight (also called relative importance) as the proportionate contribution each predictor makes to R², considering both its unique contribution and its contribution when combined with other variables. According to Johnson and LeBreton (2004), RII supports in finding the contribution a particular variable makes to the prediction of a criterion variable both by itself and in combination with other predictor variables. Further, supported by Tonidandel et al.(2009) that Relative weights allow one to make statements regarding the contribution of variables relative to other variables in the model.

For calculation of the Relative Importance Index (RII), the formula below was used (Badu et al., 2013):

$$RII = \Sigma W / (A * N)$$

Where, W-weightage given to each statement by the respondents and ranges from 1 to 5; A-Higher response integer (5); and N-total number of respondents.

Further, secondary data is used to create a theoretical background of the Study and to analyze the data in context of reasons for sickness of Govt. Silk Weaving Factory through previously available information in the form of Articles, Journals, Editorials, Research Papers and Books.

4. Research Findings

In order to find out the demographic features, descriptive statistics was conducted on the demographic variables. The demographic features depict that male respondents (74 percent) are more as compared to female respondents (26 percent). Most of the respondents are of age above 40 accounting to 64 percent and the top listed respondents have educational qualification upto matriculation. Majority of the respondents accounting to 88 percent are from production department as the study was primarily focused on the manufacturing unit i.e., Govt. Silk Weaving Factory accounting major share of Production horizontal organizational structure. The findings are shown in Table 1.

Table 1: Demographic profile of respondents (50)

Items	Percentage	Items	Percentage
<u>Age</u>		<u>Educational Qualification</u>	
<i>Upto 20</i>	6	<i>Upto matriculation</i>	60
<i>21 – 30</i>	10	<i>Intermediate-Graduation</i>	28
<i>31-40</i>	20	<i>Post-Graduation</i>	12
<i>Above 40</i>	64		
<u>Gender</u>		<u>Department</u>	
<i>Male</i>	74	<i>Production</i>	88
<i>Female</i>	26	<i>others</i>	12

Source: Authors

For a Likert five-point response item, Relative Importance Index (RII) produces a value ranging from 0.2 - 1.0 (Badu et al., 2013). Therefore, the group index is the average of the Relative Importance Index for the variables in the various groups (Fugar & Agyakwah, 2010). The values 0.7068, 0.6296, 0.6220, 0.5260, 0.4576 and 0.3640 indicate respectively, the RII values of Mission Statement, Financial Problems, Corporate Planning & Control, Production Problems, Human Resource Problems and Marketing Problems, as shown in Table 2.

Table 2: Factors influencing the industrial sickness of Govt. Silk Weaving Factory

Factors	1	2	3	4	5	W	RII	rank
Mission Statement							0.7068	1
<i>clear mission and objectives</i>	0	0	7	20	23	216	0.864	
<i>adequate attention by top management</i>	0	0	3	21	26	223	0.892	
<i>functional policy inducing growth</i>	0	0	3	22	25	222	0.888	
<i>financial policy for revival</i>	0	0	5	8	37	232	0.928	
<i>proper approach to counter sickness</i>	0	0	38	9	3	165	0.66	
<i>delay in rehabilitation</i>	0	0	3	42	5	202	0.808	
<i>revival through privatization</i>	2	25	12	11	0	132	0.528	
<i>innovative technology yielding market share</i>	0	0	4	43	3	199	0.796	
<i>change in the work force for viability</i>	6	41	3	0	0	97	0.388	
<i>sickness due to unclear mission</i>	26	19	5	0	0	79	0.316	
Corporate Planning & Control							0.622	3
<i>silk factory location</i>	42	5	3	0	0	61	0.244	
<i>difficulties in procurement of raw material</i>	0	0	2	43	5	203	0.812	
<i>out dated machines & technology</i>	0	0	2	5	43	241	0.964	
<i>institutions tie up for finance purposes</i>	0	0	16	34	0	184	0.736	
<i>lack of government support</i>	0	0	5	10	35	230	0.92	
<i>effects of price escalation</i>	37	6	7	0	0	70	0.28	
<i>delay in procurement of basic amenities</i>	50	0	0	0	0	50	0.2	
<i>stagnant price of the product</i>	43	4	3	0	0	60	0.24	
<i>inadequate R&D support</i>	0	0	5	12	33	228	0.912	
<i>lack of co-ordination with concerned govt. dept.</i>	0	0	6	10	34	228	0.912	
Production Problems							0.526	4
<i>lack of infrastructural facilities</i>	41	9	0	0	0	59	0.236	
<i>poor maintenance of machines</i>	0	0	2	7	41	239	0.956	
<i>hike in raw materials , consumables, power etc.</i>	0	40	10	0	0	110	0.44	
<i>under performance of plant and machinery</i>	0	0	0	8	42	242	0.968	
<i>poor standard of quality product</i>	46	4	0	0	0	54	0.216	
<i>improper planning of product mix</i>	46	4	0	0	0	54	0.216	
<i>inability to tap foreign market</i>	0	0	0	5	45	245	0.98	
<i>capacity utilization must for revival</i>	0	0	1	47	2	201	0.804	

<i>products not as per market specifications</i>	45	4	1	0	0	56	0.224	
<i>outdated approach of production processes</i>	45	5	0	0	0	55	0.22	
Marketing Problems								0.364 6
<i>losing of target market due to better substitutes</i>	2	48	0	0	0	98	0.392	
<i>cut-throat competition</i>	3	43	4	0	0	101	0.404	
<i>products not promoted as required</i>	44	6	0	0	0	56	0.224	
<i>communication gap between departments</i>	47	3	0	0	0	53	0.212	
<i>smaller target market</i>	1	47	2	0	0	101	0.404	
<i>poor cost and pricing policies</i>	38	10	2	0	0	64	0.256	
<i>product quality not meeting the expectations</i>	44	5	1	0	0	57	0.228	
<i>poor approach towards satisfying customer</i>	48	2	0	0	0	52	0.208	
<i>new product development & innovation support</i>	0	37	13	0	0	113	0.452	
<i>exhibitions & trade fair leading to promotion</i>	0	0	0	35	15	215	0.86	
Financial Problems								0.6296 2
<i>irregularity in paying wages and salaries</i>	0	0	0	42	8	208	0.832	
<i>over staffing</i>	5	45	0	0	0	95	0.38	
<i>inability to achieve projected figures</i>	0	0	0	23	27	227	0.908	
<i>training assistance for staff</i>	0	30	20	0	0	120	0.48	
<i>misappropriation of funds</i>	0	15	35	0	0	135	0.54	
<i>lack of proper auditing</i>	0	18	32	0	0	132	0.528	
<i>overburden of credit policy</i>	0	0	38	9	3	165	0.66	
<i>financial figures are shady</i>	0	10	40	0	0	140	0.56	
<i>delay in finalization of the accounts</i>	0	41	9	0	0	109	0.436	
<i>inadequate working capital</i>	0	0	0	7	43	243	0.972	
Human Resource Problems								0.4576 5
<i>dissension within the management</i>	5	45	0	0	0	95	0.38	
<i>poor industrial relations</i>	0	42	8	0	0	108	0.432	
<i>lack of coordination and control</i>	4	46	0	0	0	96	0.384	
<i>non availability of skilled manpower</i>	47	3	0	0	0	53	0.212	
<i>disguised unemployment</i>	1	24	25	0	0	124	0.496	
<i>periodical trainings to the staff</i>	0	16	34	0	0	134	0.536	
<i>traditional method of getting work done</i>	0	1	18	31	0	180	0.72	
<i>absence in the unity of command</i>	1	47	2	0	0	101	0.404	
<i>absence of motivation</i>	0	0	27	23	0	173	0.692	
<i>lack of manpower planning</i>	20	30	0	0	0	80	0.32	

Source: Authors

Likewise, the RII values indicate that, primarily, Mission Statement, Financial Problems, Corporate Planning & Control, Production Problems, Human Resource Problems and Marketing Problem factors influence Govt. Silk Factory Sickness. Similarly, it suggests that, Mission Statement factors ranked the first significantly influential factor that accounts for Govt. Silk Factory Sickness. This was followed by Financial Problem factors. Then Corporate Planning & Control, Production Problems, Human Resource Problems and Marketing Problem factors ranked third, fourth, fifth and sixth respectively.

4.1 Mission Statement

The Mission Statement factor grouping variable (0.7068) was ranked the first significantly influential factor that accounts for Govt. Silk Factory Sickness by the respondents. Individually, financial policy for revival (0.928) and adequate attention by top management (0.892) was ranked the highest variable under Mission Statement factor indicating more critical to Govt. Silk Factory Sickness than the other variables. On the other hand, sickness due to unclear mission (0.388) and change in the work force for viability (0.316) was ranked low, thus there is the need to intensify and strictly focus on these respective factors.

4.2 Financial Problems

The Financial Problem factor grouping variable (0.6296) was ranked the second significantly influential factor that accounts for Govt. Silk Factory Sickness by the respondents. Individually, inadequate working capital (0.972) and inability to achieve projected figures (0.908) was ranked the highest variable under Financial Problem factor indicating more critical to Govt. Silk Factory Sickness than the other variables. On the other hand, over staffing (0.38) and delay in finalization of the accounts (0.436) was ranked low, thus there is the need to intensify and strictly focus on these respective factors.

4.3 Corporate Planning & Control

The Corporate Planning & Control factor grouping variable (0.6220) was ranked the third significantly influential factor that accounts for Govt. Silk Factory Sickness by the respondents. Individually, out dated machines & technology (0.964) and lack of government support (0.92) was ranked the highest variable under Corporate Planning & Control factor indicating more critical to Govt. Silk Factory Sickness than the other variables. On the other hand, delay in procurement of basic amenities (0.2) and stagnant price of the product (0.24) was ranked low, thus there is the need to intensify and strictly focus on these respective factors.

4.4 Production Problems

The Production Problem factor grouping variable (0.5260) was ranked the fourth significantly influential factor that accounts for Govt. Silk Factory Sickness by the respondents. Individually, inability to tap foreign market (0.98) and under performance of plant and machinery (0.968) was ranked the highest variable under Production Problem factor indicating more critical to Govt. Silk Factory Sickness than the other variables. On the other hand, poor standard of quality product (0.216) and improper planning of product mix (0.216) was ranked low, thus there is the need to intensify and strictly focus on these respective factors.

4.5 Human Resource Problems

The Human Resource Problem factor grouping variable (0.4576) was ranked the fifth significantly influential factor that accounts for Govt. Silk Factory Sickness by the respondents. Individually, traditional method of getting work done (0.72) and absence of motivation (0.692) was ranked the highest variable under Human Resource Problem factor indicating more critical to Govt. Silk Factory Sickness than the other variables. On the other hand, non-availability of skilled manpower (0.212) and lack of manpower planning (0.32) was ranked low, thus there is the need to intensify and strictly focus on these respective factors.

4.6 Marketing Problems

The Marketing Problem factor grouping variable (0.3640) was ranked the sixth significantly influential factor that accounts for Govt. Silk Factory Sickness by the respondents. Individually, exhibitions & trade fair leading to promotion (0.86) and new product development & innovation support (0.452) was ranked the highest variable under Marketing Problem factor indicating more critical to Govt. Silk Factory Sickness than the other variables. On the other hand, poor approach towards satisfying customer (0.208) and communication gap between departments (0.212) was ranked low, thus there is the need to intensify and strictly focus on these respective factors.

5. Conclusion

The paper empirically establishes the fact that Govt. Silk Factory Sickness is predominantly the result (in sequence) of unclear mission statement, financial problems, improper corporate planning & control, production problems, human resource problems and marketing problem. Nonetheless, the critical items that influence Govt. Silk Factory Sickness under their respective factor groups are financial policy for revival, adequate attention by top management, inadequate working capital, inability to achieve projected figures, out dated machines & technology, lack of government support, inability to tap foreign market, under performance of plant and machinery, traditional method of getting work done, absence of motivation, exhibitions & trade fair leading to promotion, new product development & innovation support. The findings provide an understanding into the factors that contribute to Govt. Silk Factory Sickness.

There is an hour of need for the revival of the Govt. Silk Factory. It becomes clear from the study that the proper management approach must be towards providing the adequate attention to the workers of the factory and the development of practically feasible financial policies. It also necessitates the top management to go for timely maintenance of the plant and machinery, so that they are not left as such, while they become outdated eventually. Furthermore, the more difference between actual working capital and adequate working capital resulting in inadequate working capital should be taken care of by managing the proposed budget in a way to achieve projected figures. Also, provisions made to comply and attract the support from government, marketing strategies like exhibitions and trade fair and innovative assisted new product development result in the revival of Govt. Silk Factory.

The limitation of the study includes feedback from the respondent which was based on their memory recall and experience pointing towards memory and experience bias. Though, cross checking at proper intervals has led to reduction in bias. Further, less number of employees in the factory necessitated sample size to be small.

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