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## **Industrial Relation in Jammu and Kashmir: A Case of Cement Industry**

*Archana Bhat\* and Dr. Ravikant Swami\*\**

*\*Research Scholar, ARNI School of Business Management, ARNI University, Kathgarh, Indora, Distt. Kangra, (Himachal Pradesh), INDIA*

*\*\*Professor, ARNI School of Business Management, ARNI University, Kathgarh, Indora, Distt. Kangra, (Himachal Pradesh), INDIA*

*(Corresponding author: Archana Bhat)*

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**ABSTRACT:** There has been discussion regarding the dispute settlement of manufacturing industries world widely and in India but very scant attention have been paid for measuring the factors responsible for the causes of the disputes in the Cement industry in India and in particular to Jammu and Kashmir. The present endeavour focused on the industrial dispute scenario in Jammu & Kashmir state and with special emphasis on the causes of disputes and the impact of various demographic indicators on the causes of disputes in the cement industry in Jammu and Kashmir. The study been exploratory in nature uses both primary and secondary data to have a better understanding about the disputes and their scenario in Jammu & Kashmir. The study has employed a simple random sampling technique to collect the data from the respondents.

The study found that over the period of time there has been gradual decline observed in the number of disputes in Jammu & Kashmir but it has been experienced from the statistics that Jammu division is showing the presence of more disputes than other districts of the state. In addition to this, the study highlighted the issues namely recruitment, promotion and wages as the responsible factor for the causes of disputes in cement industry in Jammu & Kashmir state. To judge the impact of demographic indicators namely age group, experience and qualification, it has been concluded for the results that there appears a statistically significant influence of these parameters.

The analysis concludes that employees classify the disputes into two dimensions namely economic and non-economic causes. The economic cause appears to be more strong reasons for the causes of disputes in the organisation than non-economic ones. To create a harmonious relationship in the organisations, the policy makers and management should take into consideration the people at younger age group with fair level of experience and qualification so as to make efficient output by utilization the most important assets of the organizations. The policy maker should take into consideration proper follow up for the disputes that come under the different acts and try to make the settlement machinery more effective and powerful so that the disputes are settled very effectively and efficiently.

**Keywords:** Employee, Compensation, Industrial Dispute, Recruitment, Promotion, Wages and Allowances, Settlement Machinery

### **I. INTRODUCTION**

The India cement industry is considered as one of the major industries in India. Being one of the oldest manufacturing industries, it is having the presence of capital and energy intensiveness. This industry is especially well endowed with all the essential raw materials, skilled labour/human resources, machinery, equipments, technology and know-how. Human resources besides other inputs viz. labour, capital, technology, raw materials etc. are considered as the most important input for the production of goods or services in different economies of world. It has been believed as the most valuable assets and the back bone of developed as well as well as developing economy in modern era. To manage such resources in the contemporary era is a growing concept. It is having the remarkable significance in the manufacturing industry especially.

Human resource as the input is having the largest presence in the cement industry in particularly. Thus, the intensity of effective and efficient production by the cement industry in India is revealed by the quality products being

manufactured by using this meticulous resource principally. Hence, to play a pivotal role for the growth and development of the cement industry, the effective and proper utilization of resources becomes an issue of concern. Therefore, without any emphasis on the excess to proper utilization of manpower the industry cannot think of growth in future. There have been various studies that indicate Indian labour laws are highly protective of labour, and labour markets are relatively inflexible and these laws apply only to the organised sector. Consequently, these laws have restricted labour mobility, have led to capital-intensive methods in the organised sector and adversely affected the sector's long-run demand for labour. Labour being a subject in the concurrent list, State-level labour regulations are also an important determinant of industrial performance. Evidence suggested that States, which have enacted more pro-worker regulations, have lost out on industrial production in general (Ministry of Finance, 2006, p.209) [1].

As Indian economic scenario has been changing at the rapid pace and the organisations that are in operations in India are continuously looking into the psychological difference among the individuals thereby making changes in the management process. The poor understanding about the human resources and their relation in the organisations is thus going to lead towards the difficult implementation of other resources and can build the hindrances toward the firm's ability to accept risk, being innovative and proactive in nature.

Ideally, an organization's culture and procedures should seek to avoid or resolve any potential conflict. A number of studies have been conducted on the different aspects of Industrial relation at national and international level. Kumar (1966) examined that the contributing factors for the ineffectiveness of settlement of disputes are lack of trust in conciliation machinery and the nature of politicized Trade Union [2]. Khurana (1972) found that public sector firms have registered the better performance in terms of settling the industrial disputes in India [3]. While taking into consideration the factors for the impact of Industrial disputes act during the period 1960-95, Bhalotra (1998) and Dutta Roy (2004) found that the imposition of job security regulations can, by no means, be identified as the sole, or even the primary, cause for the observed rigidities in employment adjustment in the Indian manufacturing sector [4-5].

The study by Singh (1983) found that the pay allowances and human resources are the dominant cause for strikes [6]. Islam (1983) found that industrial relations are promoting or negating the overall economic growth of a country [7]. The study by Gani (1990) examined the industrial relation in Jammu and Kashmir. The study concluded that wages allowances are the major cause for the industrial disputes in the state [8]. Nagaraju (1981); Murthy *et al.* (1986) and Asdhir (1987) concluded that conciliation machinery as a settlement tool of industrial conflicts has overall failed to contribute in the sphere of industrial relations [9], [10], [11]. Verma and Kumar (1992) discussed the emerging trends based on an analysis of considerable data [12]. Sharma and Sidhu (2003) concluded that the lockout have been used as the powerful weapon to counter the increasing organised power of workers in Punjab [13]. Katuwal (2011) suggested for voluntarily resolution a medium of settling the disputes [14]. Pathania (2015) found that there is satisfactory industrial relation in India, due to the growth of trade union and continuous decline in industrial strikes and lockout [15].

The conceptual analysis concludes that though there has been discussion regarding the dispute settlement of manufacturing industries world widely and in India but very scant attention had been paid for measuring the factors responsible for the causes of the disputes in the Cement industry in Indian and in particular to Jammu and Kashmir. However the main flaw of the previous studies is that they have focused on the secondary sources primarily. Thus, the present study showed novelty in respect by using both primary and secondary data sources for the empirical analysis. Therefore, the present study has not only enriched the existing literature but has also provided an enhanced picture regarding the positions of industrial disputes with indicators on the causes of disputes in the cement industry in Jammu and Kashmir.

## II. RESEARCH METHODOLOGY

Therefore, the objective of the study is to identify the trend of various disputes in Jammu & Kashmir. It has also explored the causes of disputes prevailing in the cement industry and the impact of various demographic indicators on the causes of disputes in the cement industry in Jammu & Kashmir.

The present study being exploratory in nature explored various causes responsible for the disputes in the cement industry in Jammu and Kashmir. It had also explored the meaningful results regarding the scenario of disputes in Jammu & Kashmir. The study had employed a simple random sampling technique to collect the data from the respondents.

For the primary analysis part, the present study had developed a well structured questionnaire to determine the effectiveness, causes and the application of dispute resolution mentioned in the cement industry of Jammu and Kashmir. The questionnaire includes various questions related to the causes of disputes in cement industry in Jammu & Kashmir. The questionnaire has been filled up from the respondents in such a manner that respondents are representative of population and appropriate sample size will be taken out to conduct the study.

For the secondary analysis part various publications and annual report published by Ministry of Labour, Jammu and Kashmir State Industrial Development Corporation, District Industrial Centres, Labour Bureau of Government of India, and Reserve Bank of India, and Statistics Department of Jammu and Kashmir; Labour Commissioner Office Jammu and Kashmir has been used to explore the scenario of the disputes under different acts in Jammu and Kashmir.

For any research study data is an important aspect as without data the study is incomplete. It provides us important information and methodology for carrying the study about the subject. As data is the basic as well as fundamental unit of any research study. Therefore, in the present study both primary and secondary data has been taken into consideration so that the study will be concluded effectively.

**Period of Study:** To explore the trend and causes of disputes the study has incorporated the secondary data for different districts from 2001-11 and to identify the causes and the impact of various demographic indicators on the causes of disputes, the primary data has been collected in 2016-17, respectively

Type of Data	Period of Study
Secondary Data	2001-2011
Primary Data	2016-2017

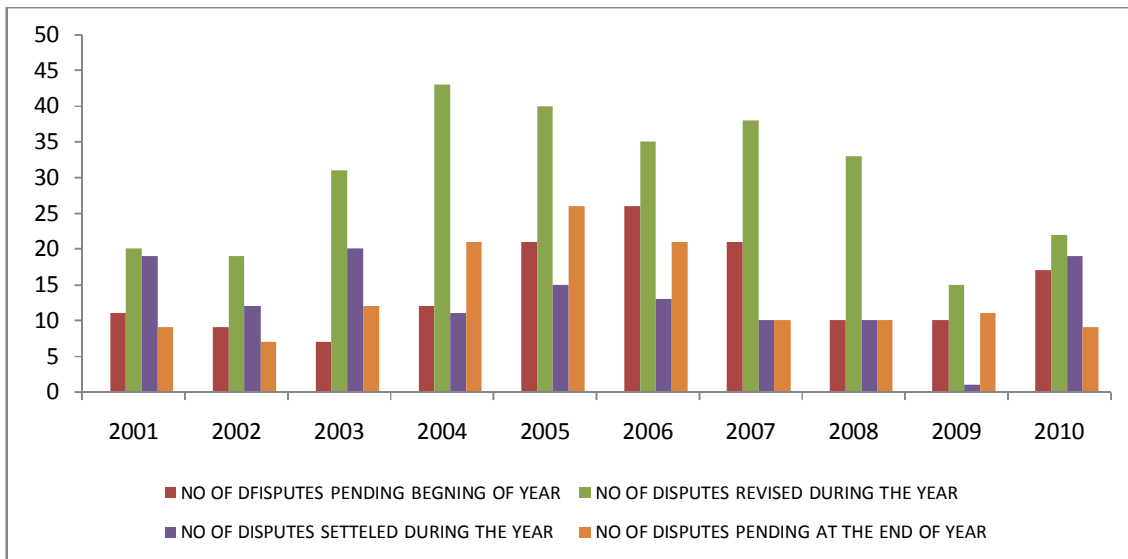
**Hypothesis:**

1. There appears no statistical significant difference in the causes of disputes across different age groups.
2. There appears no significant difference for the dimensions of qualification and experience with the causes and non-economic causes of disputes for the employees working in cement industries of Jammu and Kashmir.

The universe where the study has been conducted is the state of Jammu and Kashmir. The present study has explored the issues regarding the manufacturing units of Cement industry in the state. The list of firms in the cement industry are accounted and registered under Jammu and Kashmir Industry and Commerce Department. In totality 33 cement manufacturing units in has been consider for the collection of responses. The total sample size comprises of 289 respondents.

**III. RESULTS AND DISCUSSIONS**

The data collected from various secondary sources has helped in understanding the position of disputes in the state and the trend of resolving them over the period. Fig. 1 provides data in terms of number of disputes pending beginning of year, number of disputes received during the year, number of disputes settled during the year and number of disputes pending at the end of the year for the period 2001-2010.



Source: Authors' elaboration- <http://jklabouremp.nic.in/>

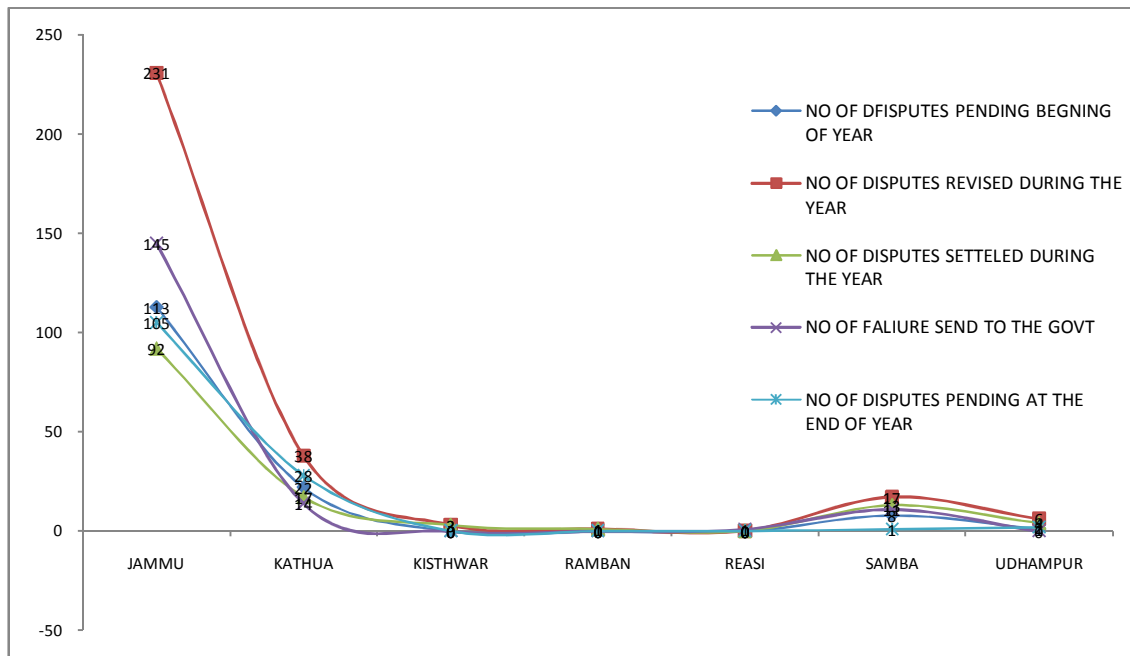
**Fig. 1.** Time Series Analysis Regarding Disputes.

Disputes pending in the beginning of year have decreased from 11 to 7 during the year 2001-2003 but an increase to 17 in 2010-2011 has been observed. The number of disputes received has fluctuated during the years but during the year 2010-2011 an increase has been observed from 20 to 22. The highest number of dispute received is 43 during 2004-2005. The number of disputes pending has also depicted an increase during 2002-2005 and decline from 26 to 9 during 2010-2011. Therefore, it can be concluded from the estimates observed from available secondary data is that the disputes settlement process is not so much effective in the state of Jammu and Kashmir. Fig. 2 depicts that the Jammu is appearing as the districts with highest numbers of disputes pending (113) in 2011-12 as compared to others. In Kathua, 22 disputes are been pending, Samba comprises of 8, Udhampur 1, and rest of districts have not any dispute pending in the beginning of year.

While considering the parameters regarding the number of disputes revised, it has been found that 231 disputes are revised in Jammu, 38 in Kathua, 17 in Samba, 6 in Udhampur, 3 in Kisthwar, and 1 in Ramban. Ninety-two disputes were settled in Jammu, 17 in Kathua, 13 in Samba, 4 in Udhampur, 3 in Kisthwar and 1 in Ramban district, respectively.

The disputes that are not resolved are sent back to the government for resolution. It has been observed that 145 disputes in Jammu district are send back as a failure report. On the other hand, no failure report is being sent to the government in Kisthwar, Ramban and Udhampur district. The disputes pending at the end of the year are 105 in Jammu, 28 in Kathua, 2 in Udhampur and 1 in Samba, respectively.

Overall, it can be concluded from the figure that the highest numbers of disputes are found in Jammu district followed by Kathua, Samba, and Udhampur. In district Reasi, Ramban and Kisthwar least number of disputes have taken place. The reason behind the occurrence in large number of disputes in Jammu district is due to presence of large number of manufacturing units in various regions or in Jammu & Kashmir State Industrial Development Corporations operational across different districts of the state.



Source: Authors' elaborations- <http://jklabouremp.nic.in/>

**Fig. 2.** District Wise Analysis for the Number of Disputes.

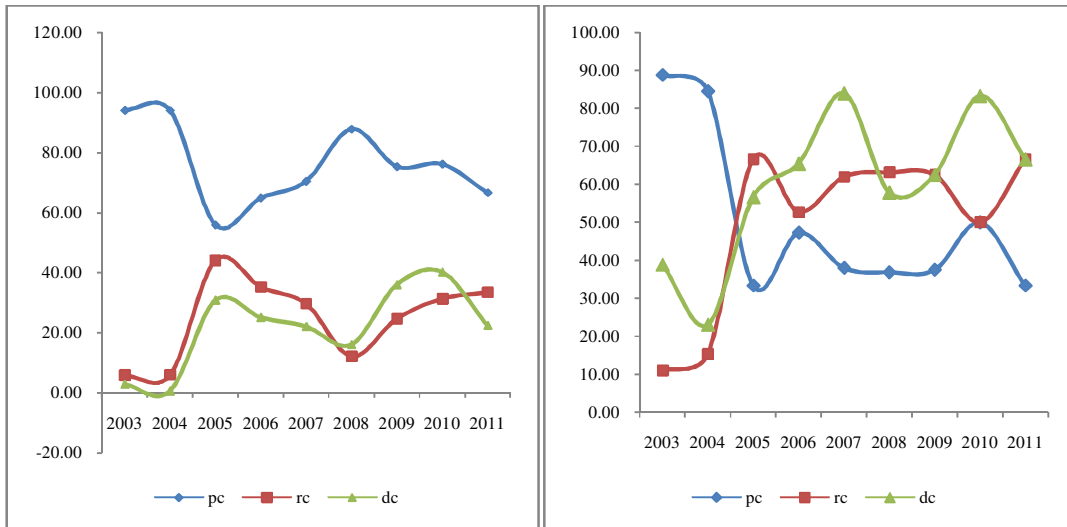
The number of disputes received, pending and disposed under different acts namely Employee Compensation Act, Industrial Dispute Act, Minimum Wages Act, Payment and Gratuity Act and Payment and Wages Act have been highlighted in Fig. 3, 4, 5, 6 and 7, respectively. A percentage wise analysis has been made for the disputes received, pending and disposed at the end of year in different acts over the period of time across industries in Jammu and Kashmir.

Fig. 3 depicts that under the Employee Compensation Act the number of disputes pending at the beginning of year have been on higher side than the number of disputes received and disposed off. It has further been highlighted from

the figure that the number of disputes disposed has been on lower side in the initial years but a gradual improvement is observed during 2008 to 2010 and in the year 2011, the decline has again been depicted.

On the other hand, Figure 4 provides the data on Industrial Dispute Act during the year 2003-2011. The number of pending disputes has decreased from 88.89 per cent during 2003 to 2011, whereas, in between it has also fluctuated. The numbers of received disputes have increased from 11.11 per cent to 66.67 per cent during 2003 to 2011 that is very high in number. The management has to make a major overlook in such issues that are responsible for the occurrence of disputes in the organisation and due to which the disputes received has been on higher side.

Furthermore, the number of disputes disposed increased from 38.89 per cent to 66.67 per cent during 2003-2010 then sudden decreased has been observed in 2011. It can be concluded that the disputes that are been disposed of in this act are depicting a sound industrial scenario in the state, but the management still require to maintain the industrial peace so that the issue that are turning up into disputes should always be on lower side of the scale.

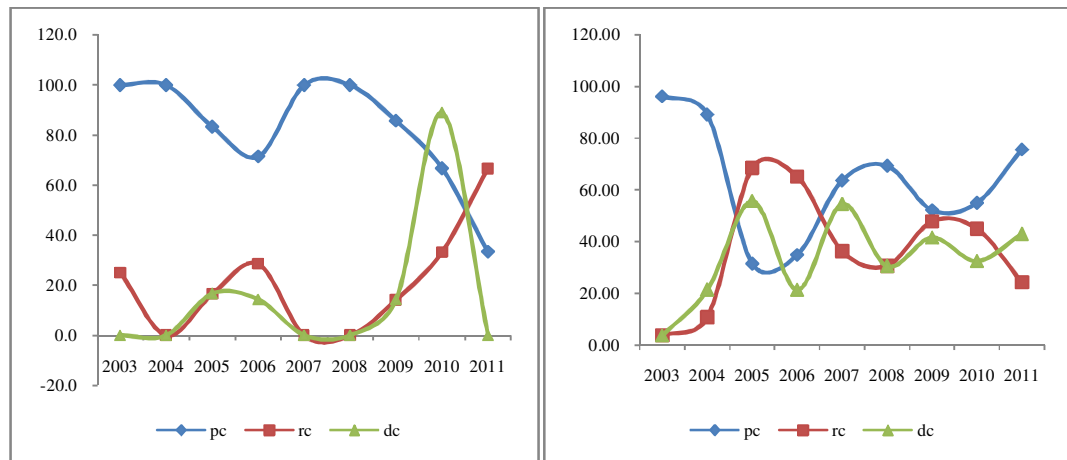


Source: Authors' elaborations- <http://jklabouremp.nic.in/>

**Fig. 3.** Employee Compensation Act.

**Fig. 4.** Industrial Dispute Act.

Fig. 5 mentions that the pending disputes of Minimum Wages Act have decreased from 100.00 per cent to 33.33 per cent from 2003 to 2011. The number of disputes received under Minimum Wages Act has showed an increase 66.66 per cent during 2003 to 2011. Very interestingly the disputes that have been disposed under this particular act have also shown a steady path and are been successfully followed up with proper conclusions over the years.



Source: Authors' elaborations - <http://jklabouremp.nic.in/>

**Fig. 5.** Minimum Wages Act.

**Fig. 6.** Payment and Gratuity Act.

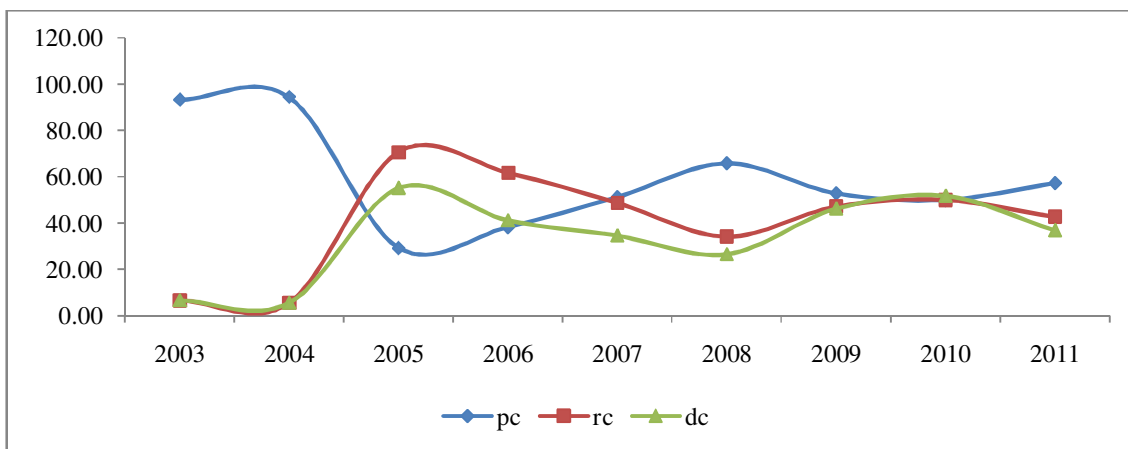
The disputes have initially increased up to 88.89 per cent during 2003-2010 but during the year 2011 these have totally settled down. Taking into consideration the similar ground, Fig. 6 highlighted the data in terms of Payment and Gratuity Act for the period of 2003-2011. The pending disputes under this act have decreased from 96.29 per cent in 2003 to 55.00 per cent in 2010 and then increase to 75.00 per cent in 2011.

Interestingly, received cases increased from 3.70 per cent in 2003 to 47.79 per cent in 2009 and then a probable decline has measured in 2011 by 24.30 per cent. Alternatively, the disposed cases have depicted a cyclic trend over the years and it has been observed that an increase by 42.99 percent has been observed from the beginning to 2011.

Fig. 7 provides an insight for the data on Payment and Wages Act for the period 2003-2011. It has been observed from the data that the number of pending disputes have shown fluctuations during the years. Consequently, a decline has been depicted from 93.33 per cent in 2003 to 57.28 per cent during 2011. The received number of disputes has shown a contrary trend. An increase in the number of disputes received from 6.66 per cent in 2003 to 42.72 per cent in 2011 has been experienced.

The disposed number of disputes has simultaneously increased from 6.67 per cent in 2003 to 36.89 per cent in 2011. It is clear from the data that regarding the payment of wages the disputes have not been solved in the proper and continuous manner.

The disputes that have been received and the disputes with no solution have also shown continuous growth over the time. Keeping into view these statistical observations, it can be easily identified that the wage issue are the major concerns for the growth in the number of disputes in various industries across the Jammu & Kashmir state.



Source: Authors' elaborations - <http://jklabouremp.nic.in/>

**Fig. 7.** Payment and Wages Act.

#### A. Nature and Causes of Disputes in Cement Industry in Jammu and Kashmir

After evaluating the statistics regarding the industrial disputes in Jammu and Kashmir, the study have also focused on evaluating the responsible factor for the cause of disputes in Jammu and Kashmir state with special emphasis on Cement industry. The increasing complexities in the industries have created and widen the mutual trust among the employees and employers. It becomes pertinent to identify the probable reasons for the loss in the production, lockouts and increase in the gap between management and employees at the workplace. The present section of study tries to identify the in-depth analysis for nature of causes of disputes. The disputes that are caused or occur in the industry can be segregated into economic and non-economic causes. The economic causes include Salary and incentive problems, Withdrawal of any concession or privilege, Leaves with wages and holidays, Bonus, profit sharing, Provident fund and gratuity and Dispute connected with minimum wages and allowances. On the other hand the non-economic causes takes into account the Dissatisfaction with company grievance handling policy, Wrongful discharge or dismissal of workmen, Hours of work and rest intervals, Retrenchment of workmen and closure of establishment, Political factors, Standing orders/Rules/Service Conditions/Safety measures, Non consultation with employees before key decisions affecting them are taken, Lack of effective mechanism for the prevention of conflict and Recruitment and Promotion policy, respectively.

It has been revealed from the Table 1 that respondents are disagree with the causes for disputes namely grievance handling policy of employer (47.6 per cent) followed by Wrongful discharge or dismissal of workmen (36.9 per cent), Withdrawal of any concession or privilege (32.4 per cent), Hours of work and rest intervals (37.9 per cent), Leaves with wages and holidays (45.5 per cent), Retrenchment of workmen and closure of establishment (35.5 per

cent), Standing orders/Rules/Service Conditions/Safety measures (38.3 per cent), respectively. On the other hand, employee agree with handling of Salary and incentive problems by management (35.9 per cent); Bonus, profit sharing, Provident fund and gratuity provided by the employer (40.7 per cent); Dispute connected with minimum wages and allowances (58.6 per cent), Political factors (40.3 per cent), Lack of effective mechanism for the prevention of conflict (44.8 per cent) and Recruitment and Promotion policy of the employer (66.9 per cent), respectively in the cement industry the main cause of disputes.

**Table 1: Causes of Disputes.**

Statements	SA	A	NAND	D	SD
Dissatisfaction with company grievance handling policy	2 (0.7)	29 (10.0)	70 (24.1)	138 (47.6)	51 (17.6)
Salary and incentive problems	128 (44.1)	104 (35.9)	49 (16.9)	4 (1.4)	5 (1.7)
Wrongful discharge or dismissal of workmen	7 (2.4)	78 (26.9)	81 (27.9)	107 (36.9)	17 (5.9)
Withdrawal of any concession or privilege	16 (5.5)	77 (26.6)	91 (31.4)	94 (32.4)	12 (4.1)
Hours of work and rest intervals	15 (5.2)	64 (22.1)	89 (30.7)	110 (37.9)	12 (4.1)
Leaves with wages and holidays	12 (4.1)	58 (20.0)	63 (21.7)	132 (45.5)	25 (8.6)
Bonus, profit sharing, Provident fund and gratuity	87 (30.0)	118 (40.7)	47 (16.2)	23 (7.9)	15 (5.2)
Retrenchment of workmen and closure of establishment	31 (10.7)	62 (21.4)	71 (24.5)	103 (35.5)	23 (7.9)
Dispute connected with minimum wages and allowances	170 (58.6)	45 (15.5)	18 (6.2)	34 (11.7)	23 (7.9)
Political factors	117 (40.3)	93 (32.1)	28 (9.7)	25 (8.6)	27 (9.3)
Standing orders/Rules/Service Conditions/Safety measures	38 (13.1)	63 (21.7)	55 (19.0)	111 (38.3)	23 (7.9)
Non consultation with employees before key decisions affecting them are taken	87 (30.0)	72 (24.8)	15 (5.2)	57 (19.7)	59 (20.3)
Lack of effective mechanism for the prevention of conflict	12 (4.1)	130 (44.8)	98 (33.8)	31 (10.7)	19 (6.6)
Recruitment and Promotion policy	194 (66.9)	75 (25.9)	18 (6.2)	2 (0.7)	1 (0.3)

Note: Figures in the braces represent percentage values

To have a comprehensive overview about the respondent response towards the various economic and non economic causes of disputes, the study focused on deriving the descriptive statistics of the statements used to measure the perception. The descriptive analysis has also been developed to determine the distribution of the response provided by the respondents towards various causes of disputes in cement industry in Jammu and Kashmir. After evaluating the statistics regarding the industrial disputes in Jammu and Kashmir, the study have also focused on evaluating the responsible factor for the cause of disputes in Jammu and Kashmir state with special emphasis on Cement industry. The descriptive statistics of the table provide the interesting and vital conclusions regarding the causes of disputes for cement industry in Jammu and Kashmir.

The results from the Table 2 reveals that the most essential and responsible factor for the causes of disputes in cement industry in Jammu and Kashmir state is recruitment and promotion policy (Mean= 1.42, SD= 0.67, Variance=0.45) followed by salary and incentive problems (Mean= 1.81, SD= 0.89, Variance=0.79) and disputes connected with minimum wages and allowances (Mean=1.950, SD=1.350, Variance=1.83), respectively. Thus, it can be concluded from the table that the factors that are responsible for the occurrence of disputes in cement industry in Jammu and Kashmir are mostly under the power and influence of the management personnel only. Therefore, it is can be suggested to these firms that the focus should be on these two factor primarily in order to have the least number of man days lost thereby, helping the firms in making the industrial harmony and focusing on the production. In addition to this, the present study also provide an insight about the least responsible factor i.e. company grievance handling policy with (Mean = 3.71, SD=0.89, Variance 0.80). Hence, the policy maker should be able to tackle out the issues regarding the wages and promotions of the employees working in the cement industry in Jammu and Kashmir. The interesting results from the present study depicts that the promotion and recruitment issues are the most important factor than the wages for the cause of dispute in Jammu and Kashmir state. Moreover,

the result highlights that the primary contribution for the cause of disputes in the cement industries operating in Jammu and Kashmir are economic causes rather than non-economic causes. One of the primary reasons for this result may be the engagement of labour class people for the short duration in the cement manufacturing companies by the employer and adequate availability of cheap and easily available workforce in the state. Thus, the policy makers of the state should keep into consideration the view over the unethical practices and the less focus of employer for the workforce especially in context with the economic concerns in the enterprises.

**Table 2: Descriptive Statistics of Causes of Disputes.**

Statements	Mean	Std. Deviation	Variance
Dissatisfaction with company grievance handling policy	3.710	0.890	0.800
Salary and incentive problems	1.810	0.890	0.790
Wrongful discharge or dismissal of workmen	3.170	0.970	0.940
Withdrawal of any concession or privilege	3.030	0.990	0.980
Hours of work and rest intervals	3.140	0.980	0.960
Leaves with wages and holidays	3.340	1.020	1.050
Bonus, profit sharing, Provident fund and gratuity	2.180	1.100	1.220
Retrenchment of workmen and closure of establishment	3.090	1.140	1.310
Dispute connected with minimum wages and allowances	1.950	1.350	1.830
Political factors	2.140	1.290	1.670
Standing orders/Rules/Service Conditions/Safety measures	3.060	1.200	1.440
Non consultation with employees before key decisions affecting them are taken	2.760	1.550	2.410
Lack of effective mechanism for the prevention of conflict	2.710	0.950	0.900
Recruitment and Promotion policy	1.420	0.670	0.450

To check the internal consistency of data the reliability has been assessed using the Cronbach alpha statistics. The value of Chronbach alpha is reported to be 0.901 for the data set thereby, validating the reliability of data for further analysis. The statistics clearly indicates that the value dimensions for used in the present contribution appears to be greater than 0.70 (Hair *et al.*, 2012), [16] thereby, indicating the internal consistency of data set.

To validate the analysis and have more comprehensive overlook among the causes of disputes, the present study used a factor analysis technique. The factor analysis approach has been used to segregate the causes of disputes into different categories. Moreover, to verify that the sample is adequate for the further analysis and the variables that have been used to determine the causes of disputes can actually be classified into categories, the study used Kaiser-Meyer-Olkin (KMO) and Bartlett's Sphericity Test (Willamms *et al.*, 2012; Beaunout, 2012)[17-18]. The KMO test has been used to measure the adequacy of the sample for applying the factor analysis and also validate that whether the sample is adequate for further analysis or not. In addition, to determine whether the variable used to measure the causes of disputes can be classified into different categories, the Bartlett's Test of Sphericity has been used. This test verifies that the variables used to find out the causes of disputes have correlation among themselves to get clubbed into different groups or not. The statistical significance of this test has been veteran with help of Chi-Square test. The value of KMO from the results appears to be 0.901. It is clearly indicated from the statistics that the value is above the standard value of 0.50 (Hair *et al.*, 2006), [19] thus, giving a clear inference for the adequacy of sample to conduct factor analysis (Kaiser, 1963; Bartlett, 1950), [20-21]. To check whether there appears the correlation among the various indicators in the dimensions extracted with help of factor analysis approach, the present study conducted Bartlett's Test of Sphericity and the value of Chi-square equal to 1668.863 for causes of disputes appears to be statistically significant at 1 per cent level of significance level, hence validating that there appears a significant correlation among the dimension extracted with help of factor analysis for different categories of disputes in cement industry in Jammu and Kashmir (Table 3).

**Table 3: KMO and Bartlett's Test.**

<b>Kaiser-Meyer-Olkin Measure of Sampling Adequacy</b>		0.901
Bartlett's Test of Sphericity	Approx. Chi-Square	1668.86
	Df	91
	Sig.	0.000

Further, on the basis of computation of Eigen values, the number of factors extracted across the causes of disputes has been determined. The Eigen values have been translated approximately to the amount of variance explained by the factor. It has been identified from the results that two factors has been extracted using the factor analysis. Factor 1 is having Eigen value 5.90 and factor 2 is having Eigen value 1.49.



The factors having Eigen values less than 1.00 are not considered in the present study. It is also imperative to explore that how much variance has been explained by these factors individually and cumulatively so as to validate the fairness of the explanation by these factors while identifying the causes of disputes. The factor 1 is explaining the component of causes by 42.18 per cent and factor 2 by 10.65 per cent. Cumulatively, 52.93 per cent of the variance is been explained by both the factors in context to causes of disputes.

**Table 4: Total Variance Explained.**

Component	Initial Eigen values			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	5.906	42.184	42.184	5.906	42.184	42.184	4.021	28.725	28.725
2	1.491	10.651	52.835	1.491	10.651	52.835	3.376	24.111	52.835
3	0.918	6.557	59.392						
4	0.856	6.116	65.508						
5	0.714	5.103	70.612						
6	0.662	4.726	75.338						
7	0.593	4.239	79.577						
8	0.565	4.038	83.615						
9	0.507	3.618	87.233						
10	0.456	3.254	90.487						
11	0.420	2.997	93.484						
12	0.387	2.764	96.248						
13	0.301	2.151	98.399						
14	0.224	1.601	100.000						

Extraction Method: Principal Component Analysis.

The factor matrix provides us the loading values between 0 and 1. Values close to 1 represent high loading value and value close to 0 represent low loading. In the present contribution, the variables with loading weight of 0.50 have been taken into consideration (Hair *et al.*, 2012). [22]. A glimpse of communality statistics using the varimax rotation approach depicts that the results for all the dimensions are above the standard or threshold value of 0.50. The factor loading of the dimensions ranges from 0.564 to 0.810 in Economic Causes and 0.521 to 0.808 in case of Non-economic causes as depicted from the Table 5.

The total factor loadings of 4.787 and 4.368 for Economic causes and Non-economic causes, respectively, depicting that the causes of disputes in the cement industry in Jammu & Kashmir state is primarily associated with economic causes (EC) rather than the non-economic causes (NEC). The factor loading represents the degree of association of each variable with each factor. Thus it can be revealed from the Table 5 that the degree of association or the explanatory power for the economic causes appears to be 0.810; 0.769; 0.732; 0.693; 0.619; 0.600 and 0.564 respectively. On the other hand, it appears to be 0.808, 0.746; 0.631; 0.572; 0.549; 0.541 and 0.521 for non-economic causes, respectively.

Further, the total amount of variance explained can be explained by the trace of factor matrix. The trace is the total variance to be explained and is identified as the sum of the Eigen values of the variable set. The percentages of trace explained by the two dimensions are noted as of 42.184 per cent (EC) and 10.681 per cent (NEC), respectively. The index for overall solution shows that 52.83 per cent of the total variance explained by the information contained in the factor matrix of two factor solution.

**Table 5: Rotated Component Matrix.**

Economic Causes			Non Economic Causes		
Component	Factor Loadings	Item Reliability	Component	Factor Loadings	Item Reliability
B3i	0.810	0.731	B3d	0.808	0.879
B3j	0.769	0.772	B3c	0.746	0.889
B3o	0.732	0.912	B3e	0.631	0.890
B3g	0.693	0.893	B3h	0.572	0.917
B3b	0.619	0.933	B3k	0.549	0.921
B3n	0.600	0.906	B3f	0.541	0.901
B3l	0.564	0.907	B3a	0.521	0.905
<b>Total Factor Loading</b>	4.787			4.368	

**Note:** Extraction Method: Principal Component Analysis. **Rotation Method:** Varimax with Kaiser Normalization.

Therefore, it has been observed that the index for the solution is quite high and the variables are infact highly related to one another. Combing these criteria together the present study makes a conclusion for retaining the two dimensions for the further analysis.

Moreover to check whether the age groups, experience and qualification makes any impact on the economic and non-economic causes especially for the employees working in the cement industry in Jammu and Kashmir state, the present contribution tried to establish a relationship and validate the significance. To test whether there appears the statistical difference across the age group of respondents and the causes of disputes one way ANOVA has been applied. The factors of causes has already been explored in terms of economic and non-economics causes, where as the age of respondents have been categories into four different segments namely 21-30 years; 31-40 years; 41- 50 years and > 51 years. It further becomes critically important to determine whether the demographic indicators have significance with the causes of disputes or not. The null hypothesis in the set case is:

**H0:** There appears no statistical significant difference in the causes of disputes across different age groups.

**Table 6: ANOVA Test of Causes of Disputes with Age.**

ANOVA						
		Sum of Squares	Df	Mean Square	F	Sig.
Economic Causes	Between Groups	27.54	3	9.183	10.045	0.000
	Within Groups	261.45	286	0.914		
	Total	289.00	289			
Non Economic Causes	Between Groups	15.97	3	5.326	5.358	0.001
	Within Groups	282.02	286	0.986		
	Total	289.00	289			

A fleeting looks into the Table 6 shows that the employees are mostly impetrated by economic causes followed by non-economic causes. The difference between the causes of disputes across different age groups appears to be statically significant at 1 per cent level of significance in both economic causes as well as non-economic causes' dimension.

**Table 7: Post-Hoc Test for influence of Age on Causes of Disputes.**

Multiple Comparisons							
Tukey HSD							
Dependent Variable	(I) Age	(J) Age	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Economic Causes	21-30 years	31-40 years	0.592*	0.139	0.000	0.233	0.952
		41- 50 years	0.743*	0.167	0.000	0.312	1.176
		> 51 years	1.671*	0.492	0.004	0.400	2.943
	31-40 years	21-30 years	-0.592*	0.139	0.000	-0.952	-0.233
		41- 50 years	0.151	0.143	0.713	-0.218	0.521
		> 51 years	1.079	0.484	0.118	-0.172	2.330
	41- 50 years	21-30 years	-0.743*	0.167	0.000	-1.176	-0.312
		31-40 years	-0.151	0.143	0.713	-0.521	0.218
		> 51 years	0.927	0.493	0.238	-0.346	2.202
	> 51 years	21-30 years	-1.670*	0.492	0.004	-2.943	-0.400
		31-40 years	-1.079	0.484	0.118	-2.330	0.172
		41- 50 years	-0.927	0.493	0.238	-2.202	0.346
Non Economic Causes	21-30 years	31-40 years	-0.160	0.144	0.682	-0.534	0.212
		41- 50 years	-0.416	0.174	0.080	-0.865	0.032
		> 51 years	0.371	0.511	0.887	-0.949	1.691
	31-40 years	21-30 years	0.161	0.144	0.682	-0.212	0.534
		41- 50 years	-0.256	0.148	0.313	-0.639	0.128
		> 51 years	0.532	0.503	0.716	-0.768	1.831
	41- 50 years	21-30 years	0.417	0.174	0.080	-0.032	0.865
		31-40 years	0.256	0.148	0.313	-0.128	0.639
		> 51 years	0.787	0.512	0.416	-0.536	2.111
	> 51 years	21-30 years	-0.371	0.511	0.887	-1.691	0.949
		31-40 years	-0.532	0.503	0.716	-1.831	0.768
		41- 50 years	-0.787	0.512	0.416	-2.111	0.536

\*. The mean difference is significant at the 0.05 level.

As there appears a statistically significant difference among the age groups for causes of disputes, it becomes pertinent to explore that which age group had a strong influence on the economic as well as non-economic causes of disputes in the cement industries operating in Jammu and Kashmir state. Thus, to identify and establish such association, the study adopted Tukey-HSD Post-Hoc analysis approach. In such approach the age group variables have been taken as independent variables and on the other hand both economic and non-economic causes have been considered as dependent variable. It has been identified from the Table 8 that with the increase in the age group the employees are not making a significant impact for economic causes. In other terms less the age group more is the influence of economic causes in the industry. As respondents that are falling in the age group of 21-30 years are mostly concerned towards the economic parameters while working in the organisation, whereas, with the increase in the age group, the economic parameters does not influence to the large extent and there may be some other parameters apart from economic causes that make a significant impact on employees. In addition, it has been explored from the statistics of the Table 7 that no age group make strong influence on the non-economic causes of disputes.

**Table 8: Independent Samples t-Test of Causes of disputes with Experience and Qualification.**

Experience										
		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Economic Causes	EVA	8.862	0.003	3.961	288	0.000	0.462	0.116	0.232	0.692
	EVNA			4.138	280.48	0.000	0.462	0.111	0.242	0.682
Non Economic Causes	EVA	2.614	0.107	0.881	288	0.379	0.105	0.119	-0.130	0.341
	EVNA			0.898	264.19	0.370	0.105	0.117	-0.125	0.336
Qualification										
		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Economic Causes	EVA	9.802	0.002	3.023	288	0.003	0.370	0.122	0.129	0.611
	EVNA			3.358	256.98	0.001	0.370	0.110	0.153	0.587
Non Economic Causes	EVA	3.634	0.058	0.086	288	0.932	0.010	0.124	-0.234	0.255
	EVNA			0.083	175.90	0.934	0.010	0.129	-0.244	0.265

However the results appear favourable in case of 21-30 years and 40-50 years, thereby inferring that either at the young age or at the maturity, the age makes a statistically significant impact on non-economic causes.

However, to test the significance of respondents on the basis of these two causes an independent sample test has been applied in context with the qualification and experience profile of respondents working in the cement industries. The independent sample rather than ANNOVA has been applied to establish the relationship because qualification parameters has been classified into two group namely 1=illiterate and 2=literate. On the other hand, the experience has been segregated into two parameters namely <=5years and >5 years experience, respectively. The independent sample test has been applied to identify whether a significant difference exists between the two set of respondents with regards to the economic and non-economic causes. It has been analysed from the Table 8 that there appears a significant difference for the dimensions of qualification and experience with the causes and non-economic causes of disputes for the employees working in cement industries of Jammu and Kashmir state at 10 per cent level of significance.

#### IV. CONCLUSION AND POLICY IMPLICATION

The present study has focused especially for the disputes in the Jammu and Kashmir state with special emphasis on the Cement industry. The present study use both primary and secondary data collection approach to present the real

figure of the disputes in the Jammu and Kashmir state. As the state always remain unfocused in case of such matters and there have been very limited number of figures available in the various statistical abstracts across India. Thus to bridge the gap the study will provide the policy makers in the Indian economy about some real facts and figures for the disputes scenario in Jammu and Kashmir state from the last one decade. The study also paid a special focus on finding out the responsible factor for the cause of disputes in the cement industry in Jammu and Kashmir state.

Although, the study concluded that over the period of time there has been gradual decline observed in the number of disputes in Jammu and Kashmir but it has been experienced from the statistics that Jammu division is showing the presence of more disputes than other districts of the state. The reason behind this may be due to the presence of large number of small enterprises in the districts that are in the disputes very often than the medium and large enterprise. The study further revealed that there have not been an effective settlement of disputes that come under different acts in Jammu and Kashmir. It has been observed that the settlement machinery mechanism might have some errors due to which the disputes that fall under the various acts involved in the present endeavor are not been settled out at the pace and thereby confirming that the management or the third party contribution in the settlement is not very effective in Jammu and Kashmir. additionally the pending case are more in all the acts than the received case except for industrial dispute act. This concluded that cases under dispute act are only having the effective settlement procedure rather than the others.

It can also be concluded that the analysis that employees classify the disputes into two dimensions namely economic and non-economic causes. The economic cause appears to be more strong reasons for the causes of disputes in the organisation followed by non-economic ones. However to judge the impact of demographic indicators namely age group, experience and qualification, it has been concluded for the results that there appears a statistically significant influence of these parameters. Thus organisation should focus on the economic parameters primarily to stop any occurrence of disputes and develop a strong cordial relationship with the workforce. In addition to create a harmonious relationship in the organisations, the policy makers and management should take into consideration the people at younger age group with fair level of experience and qualification so as to make efficient output by utilization the most important assets of the organizations.

The state industrial policy provides employees the provision of settling disputes through collective bargaining in the organization. If disputes do not get settled with the organization, then both the parties involved in the disputes go to labor court for the resolution of the disputes. Most of the times the cases get settled in the labor court, but of the solution is not satisfactory both the parties willingly can go to the higher court for the resolution of their conflicts. However, the State Industrial Policy 2016, provide the provision of Industrial Grievance Forums (IGF) to speedily sort out grievances and solve interdepartmental issues faced by entrepreneurs. The policy maker should take into consideration that there should be proper follow up for the disputes that come under the different acts and try to make the settlement machinery more effective and powerful so that the disputes are settled very effectively and efficiently thereby contribution in the industrial harmony.

In addition to this the study highlighted the issues that have been the responsible factor for the causes of disputes in cement industry in Jammu and Kashmir state. The study found that recruitment, promotion policy, wages and allowances are the responsible factor for the causes of disputes in cement industry in Jammu and Kashmir state. However, the least responsible factor for the cause of disputes has been identified as Inter and intra union rivalry. Therefore, the suggestion to the policy maker should be that the management should provide the proper recruitment, promotion policy for the workforce in Jammu and Kashmir. There should also be focus on the wages that are provided to the workforce working part time or full time in the cement industry in Jammu and Kashmir and the level of industrial harmony should also be kept in mind of both the employees and employers.

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