

# A Study on Employee Engagement and Its Impact on Productivity at Cropgate Chemicals Pvt. Ltd., Nagpur

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**Abstract**— The employee engagement is a construct that has become pivotal in the organizational behavior and it has played a significant role on employee performance and productivity as a whole. In this research paper, the connection between the engagement of employees and their productivity in Cropgate Chemicals Pvt. Ltd., Nagpur, an expanding company in the agrochemical industry is examined. The research will seek to determine how much the engagement drivers, including effectiveness of leadership in organisations, organisation culture, communication practices, recognition systems, and career development opportunities can help organisations to improve employee productivity. The study takes descriptive and analytical research design and employs primary and secondary data. Structured questionnaires were used to collect primary data which were distributed to employees and secondary data were collected using academic journals, research articles, and company related documents. The data were interpreted using statistical instruments including percentages and correlation methods, which were used to derive variables relations. The results demonstrate a high positive interrelationship between employee engagement and productivity, which means that employees, who are cognitively and emotionally engaged, are most likely to show greater efficiency, commitment, and quality of work. Another finding of the study is the importance of the following factors in the process of engagement development; timely recognition, transparent communication, supportive leadership, and professional growth opportunities. On the other hand, absence of such factors may result into disengagement, low level of morale, and decreased level of productivity. Moreover, the study lays an emphasis on the significance of strategic human resource in nurturing an engaged workforce. It comes to a conclusion that employee engagement is not just an employee psychological but a strategic driver that has a direct contribution to organizational effectiveness and competitive advantage. The study suggests that, structured engagement programs, ongoing feedback programs and policies that are people-oriented ought to be initiated in organizations such as Cropgate Chemicals

Pvt. Ltd. to maintain the high rate of productivity and realization of long term growth.

**Keywords:** Employee Engagement, Employee Productivity, Organizational Effectiveness, Human Resource Practices, Work Motivation, Job Satisfaction, Organizational commitment, Employee performance.

## I. INTRODUCTION

In modern business world where there is a high pace of technological changes, growing globalization and competition, organizations are constantly looking to improve productivity and maintain competitive edge. Human capital is one of the greatest organizational success drivers in this case. Employee engagement is one of the most important practices in human resources that affect performance of employees, effectiveness of an organization and its long-term sustainability.

Employee engagement is the degree of emotion, mind, and actions that employees show their organization and its objectives. It is a multidimensional measure which extends beyond job satisfaction or organizational commitment. Employees with a high level of engagement are not only content of their employment, but also highly engaged in the workplace, eager to their job and also willing to make discretionary efforts in order to meet the organizational goals. Engagement has become popular with the works of scientist such as William A. Kahn who was the first to define the notion of personal engagement and disengagement in the workplace giving importance to the psychological presence of the employees in their work life.

Theoretically, the engagements of the employees are directly connected to various theories of motivation and behavior. As an example, according to the Theory

of Hierarchy of Needs, developed by Abraham Maslow, employees are encouraged to work more efficiently by the fact that their basic needs, psychological needs, and self-fulfillment needs are met. Likewise, the Two- Factor Theory by Frederick Herzberg identifies two categories of factors, hygiene factors, and motivators, showing that the real interest is triggered by intrinsic ones, including recognition, achievement and career growth. On top of that, Theory X and Theory Y by Douglas McGregor indicate the significance of managerial assumptions when creating employee engagement and productivity.

It is especially significant when it comes to manufacturing and industrial institutions where the level of productivity directly depends on operational efficiency, quality control and work team. In these workplaces, motivated employees will have higher rates of compliance to safety practices, reduction of accidents and support of ongoing improvement programs. In addition, the engagement creates a feeling of ownership and responsibility, which increases the performance of the individual and the organization.

The context of this is in the case of Cropgate Chemicals Pvt. Ltd., Nagpur, a thriving agrochemical company, employee engagement is a critical aspect with regard to operational efficiency and productivity. Since its workforce is rather small, the contribution of every employee plays an important role in the work output and success of the organization. Hence, it is also paramount to comprehend the factors that determine the employee engagement and how it correlates with productivity to engage in productive human resource strategies.

The paper seeks to dig deeper on the concept of employee engagement and examine how it affects productivity within the organizational setting. The research aims at discovering the insights into improving employee performance and organizational development by analyzing different engagement drivers like leadership, communication, work environment, and career development.

## II. LITERATURE REVIEW

Employee engagement is an idea that is not only popular in a variety of fields but it is also considered in the context of human resource management,

organizational behavior, and industrial psychology. The relationship between employee engagement and organizational productivity has been researched over the years, with a number of researchers noting the importance of this relationship in organizational success.

**Relational employee engagement** The original theory of William A. Kahn (1990) defined employee engagement as engaging the selves of the organizational members to their work roles in which individuals would represent themselves physically, cognitively and emotionally when performing a role. Kahn stated that three psychological conditions such as meaningfulness, safety, and availability were critical to engagement. These conditions serve as the basis of the understanding of the connection of employees to their work and contribution of specific goals to organizations.

The concept has been extended by later research which has associated engagement with organizational performance. The concept of engagement in Wilmar Schaufeli and others was of a positive satisfaction-inducing work-related state, which is vigorous, dedicated, and absorbed. According to their studies, employees that are engaged are high energy individuals with high involvement to their job and enthusiasm that has direct effects on work productivity and performance.

Literature in the manufacturing industry will show that employee engagement has been found to be a major factor in increasing efficiency in the operations and decreases absenteeism and turnover. Research has revealed that employees that are engaged tend to be more prone to engage in proactive behaviour, drive innovation, and ensure standards of high quality. Moreover, engagement has been identified to have a positive effect on organizational citizenship behavior which is discussed as the voluntary activities that offer more than the job expectations and make an organisation effective.

A number of empirical studies have emphasized the issue of leadership in enhancing staff engagement. Involvement of intellectual stimulation, individualized consideration and inspiration that define transformational leadership has been identified to have a positive impact on the level of engagement. Effective leaders who acknowledge employee efforts and give them the chance to develop will help foster a favorable work environment that motivates participation.

Employee engagement is also very much based on the organizational culture. A trustful, transparent, and collaborative culture will promote a feeling of belonging in the employees thereby improving their commitment and motivation. On the other hand, an inflexible culture or one that is not supportive may result in a lack of engagement and low productivity.

Also, communication has been cited to be a primary determinant of engagement. Open and transparent communication assures that the employees are aware of organizational goals and expectations and their contribution to its attainment. Feedback is also easily reached with the help of effective communication and is necessary to ensure a continuous improvement and growth of employees.

### III. RESEARCH METHODOLOGY

Research methodology is the systematic system in terms of which a research issue is investigated and studied in a scientific way. It gives the basis of data collection, analysis and interpretation making the study valid and reliable. In the current study being undertaken under the title A Study on Employee Engagement and Its Effect on Productivity at Cropgate Chemicals Pvt. Ltd., Nagpur, the paper has been structured analytically and systematically to examine the connection between employee engagement and the productivity level in Cropgate Chemicals Pvt. Ltd., Nagpur.

The research is founded on descriptive research design, which is suitable to grasp and describe the features of a certain phenomenon. Descriptive research will allow the researcher to study the prevailing situations on staff engagement in the business and the impact of staff engagement on the production levels. It concerns what exists and not why it exists making it good in the case of studying organizations as well as behavior.

To come up with comprehensive analysis, both primary and secondary data sources have been used. Primary data were gathered directly among the employees using a structured questionnaire that aimed to measure different aspects of employee engagement, including job satisfaction, employee motivation, support at the workplace by the leaders, effectiveness in communication, and work environment. The questionnaire was structured with the Likert scale and closed-ended questions in order to obtain quantitative answers. Academic journals, research papers,

company documents; and other online sources related to the topic were the sources where secondary data collected to assist in gaining theoretical knowledge and offering a wider context of the research.

Convenience sampling is the sampling method that will be employed in this study as it will require the respondents to be chosen by way of availability and their readiness to engage in such a study. This approach is best applicable in small organizations with a lower number of the population. The sample population will be about 30 employees of Cropgate Chemicals Pvt. Ltd. who will represent various functional sections of the firm. Despite the limited size of the sample, the sample offers important results regarding the perception and engagement levels of the employees in the company.

Different statistical tools and methods have been used in analyzing data. The interpretation of the responses distribution is done by percentage analysis to define the trends in the opinion of the employees. In order to study the relationship between variables of employee engagement and productivity indicators, the correlation analysis is used. Besides this, the data is provided in a clear and understandable way through the use of graphical representations, which include charts and diagrams.

The hypotheses influencing the study are:

H0(Null Hypothesis): there is no significant correlation between employee engagement and productivity.

H1 (Alternative Hypothesis): Engagement in employees and productivity are significantly positively related.

The study is limited in some way although it has been well planned. The study is also narrowed down to one organization, and this might restrict the extrapolation of the results. Convenience sampling can also be a source of bias, because convenience sampling does not guarantee that all employees are equally represented. Besides this, the research is based on self-reported information that can be affected by subjectivity and perceptions.

In general, the methodology of the research offers a logical and systematic way to examine how the

engagement of employees influences the productivity of the latter to make the findings meaningful and applicable to the organizational environment.

#### IV. COMPANY PROFILE

Cropgate Chemicals Pvt. Ltd. is a small company within the agrochemical industry that deals in production and supply of agro input products which include fertilizers, herbicides, insecticides, fungicides, and plant growth regulators. Company has a mission to improve agricultural productivity and assist farmers with effective and innovative chemical solutions.

Cropgate Chemicals Pvt. Ltd. is a small yet fast developing company in the sphere of industry, founded in the year 2020 and located in Nagpur, Maharashtra. The company operates in a very competitive and controlled environment with quality standards, safety, and the efficiency of the operations being paramount determinants of success. Because the company belongs to the agrochemical sector, it promotes the agricultural value chain by supplying agricultural products that increase crop production and prevent plants against pests and diseases.

Organization wise, Cropgate Chemicals Pvt. Ltd. has the relatively flat structure which is common to the small and medium sized businesses. This system will enable information to be easily decided, communication is faster and the management and the employees are able to interact in an easier way. Nevertheless, it also puts more responsibility on the employees, because individual performance directly affects the productivity and performance of an organization.

The company has an approximate of 30 workforce including managerial staff, technical experts, production workers, and administrative workers. Under these circumstances, employee engagement is an extremely important, and in this small-scale organizational environment, every employee plays an important role in the operational efficiency and the product quality. Employees that are engaged will be more apt to conform to the production norms, safety standards, and to take part in the incessant development. Quality control, innovation and customer satisfaction are the key values of the company. It is also operating in a dynamic business environment where demand changes, regulatory needs and technological changes

demand adaptation as they occur. Here, human resources will be strategically involved in making the organization resilient and competitive.

Many factors determine employee engagement in Cropgate Chemicals Pvt. Ltd. among which are leadership style, communication practices, work environment and professional development opportunities. As the organization is not very large, the interpersonal relationship and informal communication are very influential in forming the attitude and behaviors of employees. A positive working atmosphere could help boost the morale of employees, and the absence of well-organized HR standards can become a challenge in keeping the levels of engagement at the same level.

#### V. DATA ANALYSIS CONCEPTUAL FRAMEWORK.

The conceptual framework offers an organized model that can explain the connection among the important variables in the study. The framework in this study will be to study the impact of employee engagement on productivity in Cropgate Chemicals Pvt. Ltd., Nagpur. It determines the independent variables (things that influence engagement), the mediating variable (employee engagement), and the dependent one (employee productivity).

Employee engagement is regarded as a key construct that bridges different organizational variables and performance. It is a kind of mental condition dictating how employees look at their work, how they relate to the surrounding environment and how they can help the organization to achieve its objectives.

This framework takes advantage of the theories of motivation and organizational behavior theories that have been laid down showing that several elements in the workplace including leadership, communication, recognition, and career development play an important role in determining employee attitudes and behaviours. All these combine to influence the degree of employee engagement that will influence productivity.

Important Variables in the Framework.

Independent Variables (Determinants of Employee Engagement) 1.

The independent variables are the factors which affect employee engagement in the company:

**Leadership Support:** This is the advice, support, and feedback given to employees by management and supervisors. Trust and motivation between employees is created through effective leadership.

Positive working conditions increase the chances of comfort and satisfaction of the workers.

**Communication:** Is concerned with movement of information in the organization. Open communication makes the employees know their roles and expectations.

**Recognition and Reward:** This is the enjoyment and appreciation of employee performance and displays the rewards. Rewards serve as incentives and as reinforcement of good behavior.

**Training and Development:** Refers to the chances of skills improvement, learning, and development in their careers. It helps in competence and confidence of the employees.

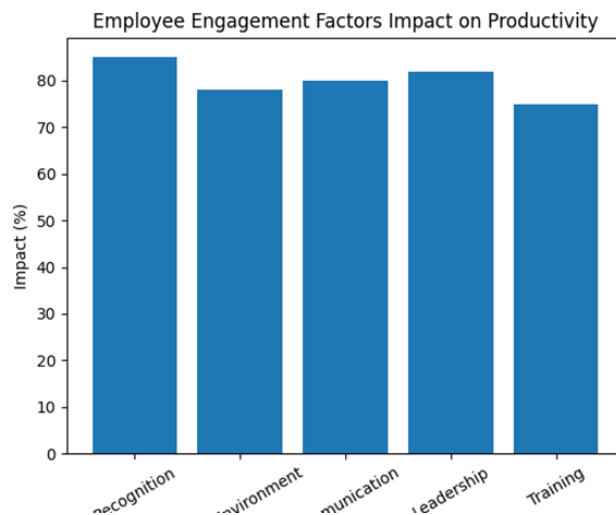


Fig6.1 Data Table: Employee Engagement Factors and Productivity Impact

## VI. DATA ANALYTICS AND RESULTS

The data is analyzed to discuss the answers obtained with the employees of Cropgate Chemicals Pvt. Ltd., Nagpur in order to analyze the connection between the engagement of employees and their productivity. This data has been discussed using percentage method and analyzed in form of tables and graphical diagrams to understand better.

6.1 Data Table: Employee Engagement Factors and Productivity Impact

| Sr. No. | Engagement Factor      | No. of Respondents (Out of 30) | Percentage (%) |
|---------|------------------------|--------------------------------|----------------|
| 1       | Recognition            | 26                             | 86.67%         |
| 2       | Leadership Support     | 25                             | 83.33%         |
| 3       | Communication          | 24                             | 80.00%         |
| 4       | Work Environment       | 23                             | 76.67%         |
| 5       | Training & Development | 22                             | 73.33%         |

### Interpretation

The graphical analysis and the table of results presented above reflect the effects of various engagement factors of the employees on the productivity in the organization in a clear way.

The percentage of recognition is the highest (86.67%), which means that most employees will be more involved and productive when their work is valued. This shows how reward and recognition systems are important in motivating employees and increasing their performance.

The support of leadership is at 83.33, and it indicates that the employees like to have their superiors guide them, provide encouragement, and feedback. Leadership is very useful in instilling trust and confidence in employees and this aspect reflects in the levels of engagement and their productivity.

Communication takes 80% of the total and this means that good communication is very crucial in the process of aligning employees to the organizational goals, which is much more precise and effective when done clearly and transparently. When employees know their roles and duties, chances are high that they would be able to work effectively and help in productivity.

Work environment adds 76.67 meaning that a healthy environment with safe and conducive work environment is an important factor in employee engagement. Positive environment leads to

cooperation, less stress, and general job satisfaction.

The training and development indicates 73.33, which is a little lower, but nevertheless, the difference is very significant in influencing the productivity. Well-trained employees will be in a position to do tasks more efficiently as they are well acclimatised with skills and knowledge.

#### Results

Based on the analysis, it is evident that all the factors of engagement positively influence the productivity of employees. Among them, recognition and leadership support are most powerful issues. The information supports the fact that the level of employee engagement is the key to better performance, efficiency, and commitment to organizational work.

Therefore, this means that the findings reinforce the alternative hypothesis (H1), a significant positive correlation between employee engagement and productivity.

### VII. FINDINGS AND DISCUSSION

According to the current research paper, a number of significant discoveries have been made on the correlation between employee engagement and productivity at Cropgate Chemicals Pvt. Ltd., Nagpur. The analysis has shown that employee engagement is not a one-dimensional construct but a combination of various organizational and psychological conditions which have an overall impact on the performance of the employees.

The most valuable outcomes of the research are that recognition and appreciation mostly enhance the involvement of the employees. Workers will become more motivated, committed, and productive when they feel valued due to their contribution. This indicates the significance of intrinsic factors of motivational influence on forming behavior of employees and corresponds to the known theories of motivation.

The other important conclusion is the profound importance of the leadership support in promoting engagement. By having their supervisors in the company guiding them, motivating and providing them with constructive feedbacks, the employees will develop a sense of trust and belonging in the organization. This in effect has a positive effect on

their productivity and work quality.

Communication is also identified in the paper as one of the key factors, which influences engagement. Effective communication will be made transparent to ensure that employees are well aware of the organizational objectives, expectations as well as their respective roles.

Other than that, work environment is another major factor that contributes to the magnitude of engagement of employees. Good and healthy work culture promotes teamwork, less stress and job satisfaction. Employees in these environments stand high possibilities of getting involved and active.

The other discovery is the availability of training and development opportunities. The employees become more motivated and devoted to their organisation when they know that they have an opportunity to acquire skills and develop their career. Failure to have such opportunities can result in lack of engagement and eventual inefficiency with time.

Discussively, all these findings are indicators of the fact that the employee engagement is a mediating factor between the practices and productivity results at organizational level. The study confirms that the policies and systems can only ensure high productivity in the organizations unless the employees are emotionally and psychologically connected to the job. Employee engagement, therefore, comes out as a strategic instrument that directly leads to organizational effectiveness and performance.

### VIII. RECOMMENDATIONS

According to the research results, it is possible to make some recommendations to improve the level of employee engagement and productivity at Cropgate Chemicals Pvt. Ltd., Nagpur.

The organization should consider incorporating systematic recognition and reward system in order to reward the contribution of employees on regular basis. Besides the drive that it instills in the employees, recognition also enhances good behavior and encourages heightened performance level.

The support and participative management approaches should be made to energize the leadership practices. The leaders are also expected to listen to mentoring the employees, frequent feedback, culture of trust and

openness.

The other extremely significant suggestion is to improve the internal communication systems. The organization should ensure the flow of information among the levels and make the employees aware in all the places of organizational goals, changes and expectations. This will assist in integrating the efforts of individuals to organizational goals.

The company should invest in training and development exercises with the view of enhancing the skills and competencies of the employees. The performance, as well as the satisfaction and retention of the employees, will be enhanced by the opportunities of continuous learning.

It also involves the provision of good and inclusive working environment. To ensure the high level of engagement, the organization should pay attention to the well-being of the employees, teamwork, and work-life balance.

In addition, the company should establish clear career promotion avenues to the employees. By providing employees with an opportunity to develop professionally, they will be motivated to work better and be loyal to the organization.

#### IX. FUTURE SCOPE

The current research gives remarkable knowledge on employee engagement and its effects on productivity, but there is room to conduct more research on the topic.

The research can be given a contribution in the future by using more sample sizes and engaging more organizations in different industries to improve the generalizability of the findings. The comparison between small, medium, and large businesses may help to shed more light on the effects that the sizes of the organization have on employee engagement.

The researchers are also able to explore the way the enhanced HR analytics and technology can quantify and enhance employee engagement. Data-based tools can be applied to assist organizations to make better decisions on managing employees.

The other theme that should be discussed further is the impact of remote working and digital transformation on employee engagement and productivity especially in the business environment, which is already adversely affected by the pandemic.

The longitudinal study can be conducted to investigate how employee engagement has changed over the years and the impact of the same in the long-run on the organization performance. Also, more sophisticated statistical methods like regression analysis and structural equation modeling can be considered in the future research to analyze it further.

#### X. CONCLUSION

To conclude, it is clear that the employee engagement is one of the variables of organizational productivity that was identified in the study. The experiment conducted in Cropgate Chemicals Pvt. Ltd. in Nagpur confirms the fact that an engaged worker is much more motivated, committed and efficient in his/her work that leads to the improvement of the performance of the organization.

The results also bring out that recognition, leadership support, communication, work environment, and training are some of the factors that have a significant impact on the level of employee engagement. All these are geared towards the provision of good organizational climate that helps in motivating employees to put in their best.

The paper also shows that employee engagement is not only a HR issue but also a strategic requirement that must be sought after in the whole process and the organization must invest in it. Companies that value employee engagement have higher chances of ensuring a high productivity, employee retention and sustainable growth.

Moreover, the paper points out the importance of making sure that the organizational practices are in line with the expectations of the employees so as to develop a sense of belonging and commitment. By giving them a place where they feel valuable, motivated and empowered, organizations can also exploit the potentials of employees in achieving long term success.

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