

## Towards Consumer-Centric Electricity Governance: Insights from a Qualitative Study of PGVCL

<sup>1</sup>Kalola Hirenkumar Dineshkuamr ,<sup>2</sup>Prof. (Dr.) Ishita Chatterjee

### Abstract

In ensuring that power is supplied effectively and aid in economic development, electricity distribution companies (DISCOMs) play a crucial role. However, the governance structures, consumer protection systems, and regulatory frameworks are very important in determining the success of the electricity distribution system. This paper examines the governance procedures in Paschim Gujarat Vij Company Limited (PGVCL) particularly concerning consumer involvement, transparency, accountability, and the processes of redressing consumer grievances. The research uses a qualitative research design based on policy analysis, stakeholder perception, and the institutional review to determine the effects of the governance reforms on service delivery and consumer satisfaction levels. Findings show that even after the institutionalization of consumer grievance redressal forums (CGRF) and ombudsman systems in the Electricity Act 2003, consumer awareness, access to grievance systems, and participatory governance have gaps. The article suggests a set of governance-related reforms, such as digital transparency, better stakeholder engagement, institutional responsibility, and enhanced regulatory control to create a more consumer-focused electricity governance framework. The paper concludes that the ideas of good governance when applied to the job system of the electricity distribution company named PGVCL can result in the significant improvement in the quality of the services, customer confidence and financial sustainability of this field.

### Keywords:

Consumer-Centric Governance; Electricity Distribution; Power Sector Reforms; Consumer Protection; Grievance Redressal Mechanism; Electricity Regulation; Public Utility Governance; PGVCL.

### 1. Introduction

Electricity industry constitutes a critical component of the national development, which dictates the development of industries, agricultural productivity and the overall socio-economic development. India had experienced tremendous reforms in electricity distribution industry over the past 3 decades to make it efficient, transparent and financially viable. In spite of these reforms, the electricity distribution companies (DISCOMs) continue to suffer governance problems, electricity service delivery to consumers, and efficiency in their operations.

The electricity distribution firms are state-owned utilities, and they have extremely complex forms of governance incorporating government policies, regulatory adherence, consumer involvement, and institutional responsibility. Good governance that can make sure that these utilities provide efficient services and are also capable of sustaining themselves financially is necessary. Here, there is a growing interest in policy and academic debates in the concept of consumer-centric electricity governance. The concept focuses on the centrality of consumers in the governance of the electricity sector, introduced by the mechanisms of boosting transparency, accountability, participation, and redressal of grievances.

With the economic liberalization of India in the 1990s, there were significant structural changes in the electricity sector of India. These reforms saw the signing of the Electricity Act, 2003, which incorporated a lot of reforms. These reforms saw the introduction of independent regulatory commissions, open access, redressal of grievances by consumers, and a system of allowing stakeholder participation in the formation of tariffs. Consumer protection and electricity regulation transparency were also major aspects of the Act.

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<sup>1</sup>Marwadi University, Rajkot, Gujarat

Email id : hirenkumar.kalola120514@marwadiuniversity.ac.in

<sup>2</sup>Professor and Dean, Faculty of Law, Marwadi University, Gujarat

Email id : dean.law@marwadieducation.edu.in

ORCID ID : 0000-0002-2927-0069 ISSN: 1755-1978 (print) 1755-1986 (online)

The reorganization of the Gujarat Electricity Board created several companies, which generate, transmit, and distribute electric power in the state of Gujarat. Paschim Gujarat Vija Company Limited (PGVCL) was one of four distribution companies of Gujarat Urja Vikas Nigam Limited (GUVNL), one of which is to supply electricity to the Saurashtra and Kachchh regions. PGVCL is located across a geographically diverse area that encompasses both urban and rural geographical locations. The company provides power to millions of customers in various districts and has a crucial role to play in complementing economic activities in the area. Nevertheless, similar to most distribution utilities, the problems of infrastructure management, the processing of consumer grievances, the quality of the services, and financial sustainability are the issues of the PGVCL.

The role of consumer-centric governance in this case is especially prominent as the electricity services have a direct impact on daily life and economic productivity. Trust between utilities and the people can be achieved by ensuring that the consumers have access to reliable electricity, good prices, and proper mechanisms for redressing their grievances.

This research paper explores the governance structure of the PGVCL using the consumer-centric governance. It aims to know the role of institutional processes, regulatory systems, and the practice of governance in consumer satisfaction and service delivery in the electricity distribution industry.

The paper also examines how the current governance arrangements at PGVCL correspond with the good governance principles of transparency, accountability, participation, responsiveness, and efficiency. The paper will seek to detect loopholes and suggest reforms to improve consumer-centric electricity governance by examining the governance practices and experiences of the stakeholders in the context of the case of the governance of PGVCL.

## **2. Literature Review**

A considerable amount of scholarly attention has been focused on the governance of electricity distribution utilities, especially with respect to sectoral reforms and consumer protection measures. The literature has discussed the significance of regulatory frameworks, institutional accountability, consumer participation, and financial sustainability in enhancing the good governance of electricity.

### **2.1 Governance in the Electricity Sector**

Governance in the electricity sector can be defined as the institutional practices or regulatory arrangements and decision-making processes that can affect the performance of the utilities and provision of electricity services. It has been observed that reforms in most countries in the last 30 years have tried to enhance governance by liberalizing, privatizing, and establishing independent regulatory bodies.

The concept became more popular in the creation of the Electricity Governance Initiative (EGI), which suggested such indicators as transparency, accountability, participation, and institutional capacity to assess governance performance in the electricity sector. It is believed that transparent decision-making and involvement of the people are paramount in developing trust between the utilities and the consumers, and enhancing policy performance (Dubash et al., 2007). The principles of governance can be used to ensure that the electricity utilities are responsible to the consumers while being efficient in their operations.

Literature also highlights the fact that governance frameworks have a direct impact on the success of electricity sector reforms. Weak governance structures in most cases cause inefficiencies, financial instability, and bad service delivery, and strong governance systems bring transparency, compliance with regulations, and better consumer satisfaction.

### **2.2 History of Electricity Regulation in India.**

The electricity industry of India has changed substantially in terms of its regulatory framework in the last 100-years. In the Indian Electricity Act of 1910, the first legal basis of electricity supply and licensing systems was given. Subsequently, the Electricity (Supply) Act of 1948 formed State Electricity Boards (SEBs) that were in charge of the electricity production, transmission, and distribution in different states.

Yet, towards the end of the twentieth century, numerous SEBs were becoming financially unsustainable because they were inefficient, had high transmission losses, and had tariff structures that were subject to political influence. To this, the government has come up with reforms that are geared towards restructuring the power sector and opening it to the investment of the private sector.

The significant move towards reform was the Electricity Regulatory Commissions Act, 1998, which created central and state-level independent regulatory institutions to guarantee transparency in tariff setting and regulatory control. This led to the creation of the Electricity Act, 2003, which brought together the old laws on electrical power and provided a massive overhaul in the generation, transmission, and distribution of electricity (Government of India, 2003). Competition, involvement of the private, and protection of consumers were the key areas of governance in the electricity sector, as highlighted in the Act. Other

mechanisms that were brought out through the Electricity Act 2003 to provide consumers with institutional means of settling their differences with electricity utilities include the Consumer Grievance Redressal Forums (CGRF) and the Electricity Ombudsman systems. The mechanisms were aimed at enhancing consumer protection and enhancing accountability in the electricity industry.

### **2.3 Redressal of Grievances and Consumer Protection.**

Consumer protection has been identified as a very important aspect in the governance of electricity sectors. To have the trust of the people in the electricity utilities, it is necessary to ensure there is a reliable supply of electricity, equitable rates charged by the company, and proper redressal of the grievances by the company. According to Yadav (2015), the Electricity Act, 2003, introduced a range of institutional measures, aimed at protecting consumer rights, including the establishment of a mandatory grievance redressal forum by distribution companies. These forums enable consumers to complain on any payment related issues, service failures and other issues that are linked to electricity supply. The Act also provides the consumers with the option of bringing a case to the Electricity Ombudsman in case their complaints have not been addressed satisfactorily at the utility level. The effectiveness of these mechanisms however, is a variable, which is subject to availability of grievance systems and consumer awareness. As noted in several studies, many consumers of electricity remain uninformed on their rights and the mechanisms that they must employ to settle the dispute, thus limiting the range of any consumer protection program.

Moreover, there is usually a technical and legal complexity in dispute resolution in the electricity industry. Consequently, the regulatory bodies should be able to have the technical knowledge as well as the legal powers to mediate on disputes effectively and impartially. It is thus necessary to have effective grievance redressal systems, which are not only necessary in safeguarding the rights of consumers but also in enhancing the overall governance of the electricity utilities.

### **2.4 Financial sustainability and operational efficiency of DISCOMs.**

Governance practices and regulatory regimes are strongly associated with the financial performance of the electricity distribution companies (DISCOMs). Financially sustainable electricity utilities are in a better position to invest in infrastructure, quality of service, and increase access to electricity.

Studies conducted in the Indian power sector show that distribution companies are experiencing serious financial difficulties because of high transmission and distribution losses, low tariff collection, and delays in bill payments. The Integrated Rating and Ranking of Power Distribution Utilities by the Ministry of Power provides evaluations of the performance of DISCOMs based on such indicators as operational efficiency, financial stability, and service quality. Such assessments underscore the value of the governance changes and financial discipline on the performance of the electricity utilities.

Research also indicates that revenue collection and minimization of financial losses can be achieved through better efficiency in billing and encouragement of a digital payment system. As an example, the implementation of timely payments, digital transactions, and programs, which promote the financial well-being of distribution utilities, has been offered (Solanki, 2022).

### **2.5 Electricity Governance through Consumer Involvement.**

Engagement by consumers is a more and more crucial part of electricity governance. Participatory governance enables consumers to participate in the decision-making processes concerning tariffs, service standards, and regulatory policies.

The Electricity Act, 2003, promotes consumer involvement by allowing consumers to take part in electricity tariff hearings and participate in the regulatory procedure. Nevertheless, studies have shown that effective engagement is still low because electricity regulation is still a technical challenge, and consumers do not have ready access to information.

Research on electricity governance highlights that to facilitate effective participation, there is a need to share information transparently and engage civil society organizations that have the capacity to represent the interests of the consumer. Consumer participation can only be symbolic and not substantial unless there is sufficient institutional backing and awareness by citizens.

### **2.6 Governance of Electricity Distribution in Gujarat.**

Gujarat has traditionally been regarded as one of the most successful states in the reforms of the electricity sector in India. This reorganization of the Gujarat Electricity Board led to the creation of various specialized organizations that would generate, transmit, and distribute electricity. Paschim Gujarat Vij Company Limited (PGVCL) is one of these bodies that is in charge of distributing electricity in the Saurashtra and Kachchh regions.

PGVCL has a large geographical coverage with various districts and millions of consumers. The company also undertakes a big role in ensuring consistent supply of electricity in both urban and rural areas, to the agricultural and industrial consumers. The governance and operation practices of PGVCL thus carry a great implication in the economic development of the region as well as consumer welfare. There are challenges such as the consumer grievance management, service transparency, and consumer interaction though infrastructure and enhancement in service delivery have helped. There is a dire necessity hence, of enhancing the governance practices in the environment of the PGVCL so as to make the system of distributing electricity more user-friendly and to provide a better performance to the entire system.

### **2.7 Research Gap**

The secondary literature that has been done on the reforms in the electricity sector in India has focused on the regulation frameworks, financial restructuring of utilities and infrastructure development. In spite of the fact that these analyses contain valuable data on the institutional evolution of the power sector, relatively little research has been carried out on the consumer side of electricity regulation, in particular, at the level of individual distribution utility.

Furthermore, research specifically on the topic of PGVCL is limited, and there is a paucity of empirical research to investigate the effect of governance practices on consumer experiences in the electricity distribution industry. In this research paper, the authors aim to fill this gap and examine the governance model of the company of instrumental importance in the industry, i.e., the governance of the company named the PGVCL, focusing on the analysis of the company framework in terms of consumer-related concerns and the elaboration of the strategy to enhance accountability, transparency, and consumer involvement.

## **3. Research Methodology**

### **3.1 Research Design**

The research design adopted in this study is a qualitative research design of analyzing the governance practice of Paschim Gujarat Vij Company Limited (PGVCL) through a consumer-based perspective. A qualitative method would be more suitable for the investigation of governance structures, regulation, and stakeholder experiences, as it would allow gaining an in-depth insight into the institutional processes, policies, and practices of operation.

The study is descriptive and analytical. The descriptive part emphasizes the justification of the current governance arrangements, regulatory systems, and consumer protection in the electricity distribution sector. The analytical factor analyzes how well these mechanisms of governance have produced service delivery, consumer participation, and accountability in the service delivery of the PGVCL.

This research has employed a case study approach in which the previously discussed company of interest is the PGVCL, which is regarded as a representative in the electricity distribution industry in the context of the Indian power industry. The case study method enables close analysis of the practices of the institutions, interactions with customers, and governance issues that are peculiar to the distribution sector.

### **3.2 Research Approach**

The study uses a consumer-based governance model that incorporates the ideals of transparency, accountability, participation, responsiveness, and efficiency. These are the well-known principles of governance literature that are viewed as the key aspects of successful service provision by governments.

The research is a combination of doctrinal (legal and policy analysis) and empirical qualitative research to assess electricity governance. Doctrinal analysis is concerned with the study of the laws, regulations, and policy documents used to control the electricity industry, whereas the empirical analysis shows information on the natural operation of the governance systems based on the opinions of the stakeholders and implemented practices.

### **3.3 Data Sources**

The research draws from both primary and secondary data sources so that it can cover the electricity governance.

#### **Primary Data**

Qualitative data were then gathered and used as primary data to determine the viewpoint of the stakeholders and the administrative challenges pertinent to governance in PGVCL. The main sources of data are:

#### **1. Interviews**

Key stakeholders in the electricity distribution industry were interviewed in semi-structured interviews, and they included:

- Officials and engineers in PGVCL.

- Regulatory bodies relating to electricity control.
- The consumers and representatives of the community.

The purpose of the interviews was to obtain information on the governance practices, service delivery issues, and efficiency of mechanisms to address the complaints of consumers.

### **2. Consumer Surveys**

The structured questionnaires were sent to the electricity consumers in the service area of the PGVCL. The survey was to gather information about:

- Satisfaction of consumers with electricity services.
- Knowledge of the mechanisms of redressing grievances.
- Billing systems experience and service interruptions.
- Partiality towards transparency and accountability at the utility.

The survey has shown us some useful information on the consumer experiences and expectations of electricity governance.

### **3. Field Observations**

Field visits and observations of the operational units of the company with relation to the operation of the electricity distribution and consumer service services, as well as its infrastructure facilities, were made to learn the process involved in the operation of the company.

#### **Secondary Data**

To analyse electricity governance, secondary data were gathered using different institutional and academic sources. These sources include:

- Electricity regulations and laws like the Electricity Act 2003.
- National Electricity Policy and Tariff Policy policy documents.
- Regulatory authority reports, including those of the Central Electricity Authority (CEA) and the State Electricity Regulatory Commissions (SERCs).
- PGVCL annual reports and data on performance in operations.
- Government publications and policy reports in the power sector.

This includes academic research articles, books, and conference papers on reforms in the power sector and electricity governance.

The analysis of secondary data contributed to aligning the governance practice of the electricity sector in India with overall reforms in the electricity sector.

#### **3.4 Sampling Strategy**

The research employs a purposive sampling method in order to identify the respondents who have the appropriate experience and knowledge concerning the distribution and governance of electricity.

#### **Consumer Sample**

To achieve diversity in response, consumers of diverse categories were selected and included:

- Residential consumers
- Agricultural consumers
- Commercial and industrial consumers.

The consumer survey was to target a sample population of about 200300 consumers within the PGVCL service area.

#### **Institutional Sample**

The strategy chosen to identify key stakeholders involved selecting the officials, regulatory authorities, and industry experts as stakeholders in terms of their role in electricity governance and decision-making.

#### **3.5 Data Analysis**

Qualitative methods of data analysis were applied in this research.

#### **Qualitative Analysis**

Thematic analysis was used to analyze interview responses and policy documents and make conclusions about patterns and main themes concerning the governance practices, consumer protection, and service delivery.

Important themes found in the analysis include:

- Electricity governance.
- Efficiency of the grievance redressal system.
- Consumer involvement and consciousness.
- Efficiency and quality of service.
- The financial sustainability of electricity distribution utilities.

#### **Comparative Analysis**

The comparison was also done to analyse governance practices in PGVCL as compared to other electricity distribution companies in Gujarat and other selected states in India. Such a comparison aided in the revelation of the best practices and the policy lessons that can be used to enhance the consumer-focused electricity governance.

### 3.6 Ethical Considerations

The study was conducted in accordance with the general ethics of research. Members were voluntarily involved in interviews and surveys, and the purpose of the study was explained to the respondents. The participants' privacy was upheld by the nature of confidentiality and anonymity.

### 3.7 Limitations of the Study

Although attempts have been made to provide the full analysis, the research has the following limitations:

1. This study is specifically based on the case of PGVCL, and thus, the results are not completely applicable to all electricity-distributing companies in India.
2. The surveys are based on a sample of consumers and may not reflect the experiences of all consumer groups in the service area.
3. The quantitative analysis may be constrained by the availability of profound operational and financial information provided by the utility.
4. Regulations and policies related to the electricity sector are undergoing continuous changes, and this can affect the governing practices over time.

Nevertheless, the research has some weaknesses, but it offers rich data about the governance systems and consumer participation in the power distribution industry.

## 4. Results and Discussion

This section presents the findings of the research study of the study that has been carried out to the stakeholder interviews, consumer surveys and the study of institutional documents of the Paschim Gujarat Vij Company Limited (PGVCL). The results are on consumer satisfaction, knowledge of grievance mechanisms, openness of governance, trustworthiness of the services provided, and challenges in the operation of the electricity distribution system.

The analysis also identifies some important dimensions of consumer-centric electricity governance, such as the quality of service delivery, effectiveness in redressing grievances, and transparency of the institution.

### 4.1 Demographic Contours of the respondents.

The subjects of the survey were 250 electricity consumers in the service area of the PGVCL. The respondents were representative of different types of consumers, such as residential, agricultural, and commercial consumers.

Consumer Category	Number of Respondents	Percentage (%)
Residential Consumers	150	60%
Agricultural Consumers	60	24%
Commercial Consumers	40	16%
<b>Total</b>	<b>250</b>	<b>100%</b>

### Discussion

The findings indicate that residential consumers (60 percent) represented the highest group of the respondents, which accounts for the prevalence of the consumer in electricity distribution systems. The agricultural consumers were 24 percent, which has made it clear that electricity supply is vital in irrigation and rural economic practices. The percentage of commercial consumers constituted 16 of the sample, which means that the reliability of electricity is relevant to small businesses and service facilities.

The variety of respondents ensured that the research study had a variety of views on the electricity service delivery and governance practices.

### 4.2 Satisfaction with Electricity Services among consumers.

The important indicator of governance performance in the electricity utilities is consumer satisfaction. The survey was conducted to evaluate consumer perception of the quality of services and reliability of supply, accuracy in billing, and compliance with complaints.

Satisfaction Level	Number of Respondents	Percentage (%)
Highly Satisfied	50	20%
Satisfied	110	44%
Neutral	45	18%

Satisfaction Level	Number of Respondents	Percentage (%)
Dissatisfied	30	12%
Highly Dissatisfied	15	6%
<b>Total</b>	<b>250</b>	<b>100%</b>

#### Discussion

The results have shown that 64 percent of the respondents were highly satisfied with the electricity services of PGVCL. This translates to the gains in the reliability of the electricity supply and the infrastructural development of Gujarat.

But 18 per cent of the respondents have neutral experiences, and 18 per cent of the respondents have dissatisfaction experiences, which shows that there are gaps in the governance and service delivery. The major dissatisfaction factors included slow grievances addressed, billing, and power interruptions, among others.

These results indicate that although the performance of PGVCL is comparatively high in comparison to most distribution utilities in India, there is still a need to improve it to increase customer satisfaction.

#### 4.3 Consumer awareness of Consumer Grievance Redressal Mechanisms.

The Electricity Act, 2003, requires electricity distribution companies to develop grievance redressal systems, which include Consumer Grievance Redressal Forums (CGRF) and Electricity Ombudsman systems. The research involved the analysis of the consumer awareness of these mechanisms.

Awareness Level	Number of Respondents	Percentage (%)
Fully Aware	70	28%
Partially Aware	90	36%
Not Aware	90	36%
<b>Total</b>	<b>250</b>	<b>100%</b>

#### Discussion

The results show that only a quarter of the consumers had the full awareness of all the formal redressal of grievances redressal possibilities in electricity distribution system. An average proportion of the respondents (36 percent) noted that they had partial awareness and a second proportion of 36 percent was completely unaware of such mechanisms.

Such ignorance is among the key limitations to the effectiveness of institutional grievance systems. Although there are formal mechanisms, a large number of consumers still use informal channels or local authorities to solve the electricity-related complaints.

These findings imply that consumer involvement in electricity governance needs to be improved through consumer awareness campaigns and improved communication strategies.

#### 4.4 Customer Experience of Complaint Resolution.

There was also an investigation of the efficiency of complaint resolution systems in PGVCL.

Complaint Resolution Experience	Number of Respondents	Percentage (%)
Resolved Quickly	65	26%
Resolved within a reasonable time	95	38%
Delayed Resolution	60	24%
Complaint Not Resolved	30	12%
<b>Total</b>	<b>250</b>	<b>100%</b>

#### Discussion

The results indicate that 64 percent of the respondents indicated that they had satisfactory complaint resolution, either due to timely response or responding to them in a reasonable time. This means that the systems of paying attention to consumer complaints are working within the systems of the PGVCL.

Nevertheless, 36% of the respondents said that they had experienced delays or unceasing complaints, which is a sign of inefficiency in some services. Technical limitations, workforce, and administration limitations may lead to delays in the resolution of complaints.

The effectiveness of the grievance resolution process can be improved through the construction of more solid digital complaint management systems and responsiveness of units of customer service.

#### 4.5 Perception of Transparency and Governance.

Good governance involves transparency and accountability in the public utilities. The survey measured consumer perceptions towards transparency in billing, tariff information, and the process of services.

Perception Level	Number of Respondents	Percentage (%)
Highly Transparent	40	16%
Transparent	110	44%
Moderately Transparent	60	24%
Not Transparent	40	16%
<b>Total</b>	<b>250</b>	<b>100%</b>

#### Discussion

About 60 percent of respondents viewed the transparency of the service delivery processes in the form of the billing systems and tariff information in the views of the respondents, thus, making the service delivery to be seen as transparent.

Nonetheless, 40% of participants noted moderate or low transparency, which implies that the consumers are frequently challenged by the ability to obtain the information linked to the quality of service, the complaint mechanisms, and the regulation.

Increasing access to information via digital platforms, mobile applications, and information campaigns by the government would lead to better transparency and consumer trust towards the electricity utility.

#### 4.6 major Governance issues found.

Based on the survey results and the interviews with the stakeholders, several governance issues have been identified.

Governance Issue	Percentage of Respondents Reporting Issue
Limited awareness of grievance mechanisms	36%
Delays in complaint resolution	24%
Occasional power supply interruptions	18%
Billing-related disputes	12%
Lack of transparency in service processes	10%

#### Discussion

The results point to consumer awareness and efficiency of grievance resolution as the most important governance issues of the electricity distribution system.

Little awareness denies consumers the full use of institutional mechanisms of grievance. Equally, consumer satisfaction and their perceptions of accountability are influenced by the time taken to address consumer complaints.

To overcome these governance issues, consumer engagement, digital systems of governance, and regulatory controls must be improved.

#### 4.7 Implications of Consumer-Centric Electricity Governance.

The results of the research show that the profile of electricity service delivery and performance has greatly improved with the use of PGVCL. More reforms are required to come up with a truly consumer oriented model of governance, however.

Among the areas that need improvement are:

- Enhancing awareness campaigns for consumers.
- Increasing service process transparency.
- Enhancement of the efficiency of grievance redressal systems.
- Increasing online governance channels to interact with consumers.

These reforms can be used to establish a more responsive, accountable, and consumer-focused electricity governance system.

## 5. Policy Recommendations

According to the research results, a number of policy and governance changes are available to enhance consumer-oriented electricity governance in Paschim Gujarat Vij Company Limited (PGVCL). These proposals aim at enhancing transparency, consumer engagement, redressal of grievances, and financial sustainability in the electricity distribution industry.

### 5.1 Enhancing Consumer awareness and participation.

The research found that a large percentage of consumers are either partially aware or totally unaware of the grievance redressal mechanisms that exist in the electricity industry. Ignorance is the restricting factor of the working efficiency of such an institutional structure as the Consumer Grievance Redressal Forum (CGRF) and Electricity Ombudsman.

To deal with this, the comprehensive awareness programs that are conducted by the PGVCL to educate the consumers on their rights, the quality of services, the methods of complaining, and the regulatory systems should be implemented. Educational programs can involve:

- Awareness campaigns in the community and newspapers, digital media.
- Publication of information brochures on grievance procedures.
- Rural and semi-urban consumer education programs.

Increasing consumer awareness will enable consumers to engage in electricity governance and will make distribution utilities more accountable.

### 5.2 Consumer Service System Digitalization.

The digital governance platforms have the potential to enhance the service delivery, transparency, and consumer communication in the electricity distribution industry by a great deal. PGVCL needs to increase its digital service infrastructure to enable effective communication between the utility and consumers.

Important digital programs can involve:

Therefore, mobile apps that allow registering complaints and service requests will be developed.

- Live status tracking of complaints.
- Access to billing information and service standards online.
- Electrical bills digital payment systems.

Digitalization will decrease the time spent on administration and increase the level of transparency and the overall consumer experience.

#### 5.3.1 Enhancing Grievance Redressal Systems.

Despite the formal redressal measures put in place by the PGVCL, the research shows that many consumers are still faced with delays in the resolution of complaints. There is a need to enhance the efficiency and responsiveness of the grievance redressal systems to enhance consumer confidence.

It is recommended that the following measures be carried out:

- Setting of effective and definite complaint resolution timelines.
- Bolstering of grievance management monitoring.
- Training of the customer service staff regularly.
- Implementing computerized complaint systems.

An effective grievance redressal system not only will effectively address consumer concerns but also will aid utilities in determining systemic problems with service delivery.

### 5.4 Increasing Openness in Government.

Good governance is based on transparency. Trust and accountability should be built by ensuring the proper availability of factual and timely information about electricity services to consumers.

PGVCL can be more transparent by:

- Publishing service performance reports on public platforms in terms of:
- Provision of in-depth information on tariff construction and directives.
- Periodic reporting of statistics associated with consumer complaints and service reliability.

Enhanced transparency shall create a knowledgeable consumer base and build social trust in electricity regulation.

#### 5.5.1 Enhancing Regulatory Supervision.

Regulatory institutions are important in facilitating accountability in the electricity sector. This can be achieved by enhancing regulatory oversight in order to fill governance gaps and to enhance the performance of distribution utilities.

Regulatory authorities are required to:

- Periodically carry out performance appraisals of distribution utilities.
- Check adherence to the standards of service and the rules of consumer protection.

- Promote stakeholders' contribution during the decisions of regulations.

Greater regulatory control will ensure that utilities are run in line with governance principles and consumer interests.

#### 5.6 Facilitating Financial Sustainability of distribution utilities.

Lack of financial sustainability will result in unreliable electricity supply and failure to invest in infrastructure development. Distribution companies have to strike a balance between affordability and financial feasibility for the consumers.

Strategies to enhance economic sustainability include:

- Enhancing billing and revenue collection procedures.
- Promoting prompt payments of bills with electronic payment incentives.
- Reduction of transmission and distribution loss by modernizing the infrastructure.

Stable utilities will be in a better position to provide quality services without compromising on operational efficiency.

## 6. Conclusion

Electricity distribution companies are key players in providing important public services and boosting economic growth. Good governance in these utilities is thus essential in the provision of a good electricity supply, consumer rights protection, and financial sustainability.

The given work has explored the governance behavior of Paschim Gujarat Vij Company Limited (PGVCL) through the lens of a consumer-focused approach. The results show that although there have been substantial improvements in the delivery of services and infrastructure development by the PGVCL, there are several governance issues. The low-levels of consumer knowledge of grievance systems, the time-lag of complaints solution, and moderate levels of service process transparency are the issues.

The paper observes that transparency, accountability, participation and responsiveness are the principles of good governance that have been core in improving the performance of the electricity distribution firms. Enhancing consumer participation, enriching digital systems of governance, and grievance redress can greatly enhance the effectiveness of electricity governance.

Besides this, the research also emphasises the importance of regulating the activities of the electricity distribution utilities through the control of their financial sustainability as a way of guaranteeing their long-term financial sustainability in the long run. Regulators and policymakers should keep promoting reforms that promote efficient service provision and protect the interests of consumers.

Finally, to establish consumer-centric electricity governance, it is necessary to have a holistic approach with institutional reforms, technological innovation, and consumer involvement. By ensuring governance-based reforms and enhancing the stakeholder engagement, PGVCL has the potential to enhance its operations and contribute to the overall goal of the development of the electricity industry in India on a sustainable basis.

The comparative governance practice of the different electricity distribution companies, the significance of the emerging technologies in improving consumer participation and efficiency in the service delivery in the electricity industry can also be done in future studies.

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