

## **A STUDY ON PROBLEMS FACED BY THE LIQUEFIED PETROLEUM GAS CUSTOMERS IN THANJAVUR DISTRICT**

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**ABSTRACT:** LPG is a mixture of propane, butane and other substances of a small amount and it is obtained as a by-product of being manufactured during the refining of petroleum. Humankind faces unique and far-reaching challenges in the fast moving and growing world. Our energy needs are increasing as a result of continued population growth, economic development, and individual fuel/energy consumption. At the same time, emissions from fuel wood and fossil fuels are also increase, the main energy source for heating in homes and powering our economies, are causative to climate change and affecting the quality of air. Liquefied Petroleum Gas (LPG) is used as fuel for thousands of applications. In developing countries the main benefits of LPG is in helping people to switch from unsustainable biomass use to a clean and safe cooking fuel. LPG's domestic uses can never be ignored. It has played a radical role when it comes to altering the face of domestic fuels used for heating and cooking. Now a day particularly the single domestic LPG customers are facing so many problems due to inadequate and delayed supply of the LPG. Through this study the Gas Company is recommended to improve their service to rectify the problems faced by the customers.

**Keywords:** Domestic fuel, Energy, LPG, Problems, Service.

### **INTRODUCTION:**

LPG here stands for the liquefied petroleum gas which is flammable gas used for several of the purposes all over the world as a fuel in the vehicles and in several of the chemical industry where the flammable gas is required. In several of the uses of the gas the main use of it lies as the cooking gas. LPG reaches the domestic consumer in cylinders under relatively low pressures. The largest part of the LPG produced is used in central heating systems, and the next largest as raw material for chemical plants. In India, the use of LPG in the cooking is very high as compared to the other uses of it. There are various companies in India which are in the business of manufacturing the LPG gas in India. Most of the companies are under the government authority while some of them are private organizations also. The several LPG manufacturing companies are as follows: Bharat Petroleum Corporation Limited, Hindustan Petroleum Corporation Limited, Indian Oil. Convenience is one of the main reasons why the use of LPG has been growing worldwide. The LPG heats quickly and provides much greater efficiency than even the most improved biomass stoves. LPG stoves can also be controlled more precisely to match the user's requirements and can save time for cooking and cleaning the kitchen. Additionally, LPG can be transported, stored and used virtually anywhere. The main challenges for broader dissemination of the LPG are its limited accessibility and affordability for its users. Furthermore, lack of awareness of the LPG as well as fear of accidents exists. The development of governmental policies and regulations to create incentives for increasing LPG use are therefore advisable to support the LPG uptake.

**STATEMENT OF THE PROBLEM:**

Humankind faces unique and far-reaching challenges in this growing world. Our energy needs are increasing as a result of continued population growth, economic development, and individual fuel/energy consumption. At the same time, emissions from fuel wood and fossil fuels are also increase, the main energy source for heating in homes and powering our economies, are contributing to climate change and affecting the quality of air. In this situation, there are many opportunities for LPG to contribute to improved living standards. LPG is known to be the most useful and effective energy alternative for domestic, as well as business, use. The fact that it offers versatile usage at lower costs than other energy sources, accompanied with its environmentallyfriendly nature, greatly increases the demand among people. Now a day particularly the single domestic LPG customers are facing so many problems due to due to price increase, inadequate and delayed supply of the LPG. Even though the price is the political sensitive mater, the companies have to take the necessary step to reduce the problem.

**SCOPE OF THE STUDY:**

The scope of the study is mainly relates to the problems faced by the customers towards the domestic LPG. The scope of the study can be identified as follows:

- ❖ The study helps the researcher to have a practical exposure in this specific field.
- ❖ The study helps the Gas Company to know the problems faced by the customers among their product as well as service.
- ❖ The study results will be of a great help to the government as well as the company in future distribution policy making.

**OBJECTIVES OF THE STUDY:**

- ❖ To examine the problems faced by the LPG customers in study area.
- ❖ To study the customers opinion towards the services provided by the company.
- ❖ To offer valid suggestions for realizing the customer importance and the need for improve the service quality.

**REVIEW OF LITERATURE:**

The report of the World LP Gas Association (2014) investigates current LP Gas distribution practices in selected rural markets with the objective of clearly delineating barriers and commercial risks that stand in the way of building new markets in the rural areas of developing countries. Much of the study was derived from survey responses from LP Gas organisations and their representatives from around the world. The information obtained from LP Gas companies via the questionnaires was a major source of data for the study. The information received was carefully reviewed and analysed for commonalities, trends, successful, unsuccessful and innovative practices. The questionnaires were combed for the defining characteristics of the various LP Gas markets that were described, carefully extracting information of relevance to rural LP Gas supply and distribution. Throughout this meticulous analysis, the focus was on identifying the critical criteria, barriers and critical success factors confronted by each company in the course of their daily operations. This material then formed the basis for forming conclusions on barriers, critical success factors, supply models and case studies. A variety of other information sources including the authors' own knowledge and experience were also reviewed to yield valuable insights and the results described later in this report. Parallel studies, both academic and market, on successful supply 46 of other services to remote communities were also consulted. There exists a current

opportunity to significantly expand the supply of LP Gas to vast markets in rural regions of many developing countries around the world. There are a number of barriers that limit market expansion and the overall ability and viability of reaching these prospective markets. Rural consumer demand in developing countries exhibits an inherent set of characteristics that serve as barriers to investment in LP Gas supply.

Mahendran and T. Sumathi (2015) conducted a study to study the problems faced by the customers towards HP LPG in households and to study the customers opinion towards the services provided by the company. Particularly the single domestic LPG customers are facing so many problems due to inadequate and delayed supply of the LPG. Researchers have derived the sample criteria from the total population, such as domestic single HP LPG customers, who are all using for last 3 years (from 2011 to 2014). In this study the sample size is 351, who are all using single HP LPG connection in Coimbatore central zone. The findings of the study depict that the customers has faced the irregularity of price increase and delayed supply of LPG gas cylinders. While distributing the refilled cylinders HP Gas Agencies should give more preference to the single gas customers and provide refilled cylinders with minimum waiting period. It is essential for a healthy business in creating new customers, keeping loyal customers, and developing referrals for future customers.

#### **HYPOTHESIS:**

**ANOVA test for literacy level of the respondents and the problems faced by the LPG customers**

**Null hypothesis H0-** There is no significant relationship between the mean score of literacy level of the respondents and the problems faced by the LPG customers.

**Alternative hypothesis H1-** There is significant relationship between the mean score of literacy level of the respondents and the problems faced by the LPG customers.

**Table – 1: ANOVA test for literacy level of the respondents and the problems faced by the LPG customers**

<b>Problems faced by the LPG customers</b>	<b>F – Value</b>	<b>Significant Value</b>
Problem with gas booking	.373	.773
Poor communication on Gas booking	1.085	.355
Irregularity of increasing price	.296	.828
High Installation and additional cost	1.004	.390
Delayed supply of refilled cylinders.	1.012	.387
Waiting time to get the new LPG connection and additional	.285	.836
Time of delivery gas cylinder	.620	.602
Problem with government policies with regard to gas usage	.358	.784
Facing difficulty to get LPG subsidy form the Government	.970	.406
Problem with safety of gas cylinder	3.398	.018
Problems due to inadequate supply	1.481	.219
Compulsion to buy other related products	.483	.694
Unstrained services in agency outlets	1.683	.169
Less quality of stove, lighter and other related items	.373	.773
Insecure of LPG	1.085	.355

Source: Output generated from SPSS 20

Based on the result generated by SPSS 20, the significant values of all the variables related to the problems faced by the LPG customers (except Problem with safety of gas cylinder) from the agent), are greater than 0.05. So the null hypothesis is 87 accepted in all these cases. Therefore, there is no significant relationship between the mean score of literacy level of the customers and the problems faced by the LPG customers (except Problem with safety of gas cylinder) from the agent). This implies that the literacy of the customers does not make any impact on the problems faced by the customers. It is indeed the problems are felt from the practical experience. Hence, the literacy level does not take any stand in this regard.

#### **ANOVA test for occupation of the respondents and the problems faced by the LPG customers**

**Null hypothesis H0-** There is no significant relationship between the mean score of occupation of the respondents and the problems faced by the LPG customers.

**Alternative hypothesis H1-** There is significant relationship between the mean score of occupation of the respondents and the problems faced by the LPG customers.

**Table –2: ANOVA test for occupation of the respondents and the problems faced by the LPG customers**

<b>Problems faced by the LPG customers</b>	<b>F – Value</b>	<b>Significant Value</b>
Problem with gas booking	1.530	.192
Poor communication on Gas booking	.636	.637
Irregularity of increasing price	.161	.958
High Installation and additional cost	2.824	.024
Delayed supply of refilled cylinders.	.882	.474
Waiting time to get the new LPG connection and additional	.652	.625
Time of delivery gas cylinder	1.024	.394
Problem with government policies with regard to gas usage	.431	.786
Facing difficulty to get LPG subsidy form the Government	.949	.435
Problem with safety of gas cylinder	.721	.578
Problems due to inadequate supply	1.700	.148
Compulsion to buy other related products	1.952	.100
Unstrained services in agency outlets	1.832	.121
Less quality of stove, lighter and other related items	1.530	.121
Insecure of LPG	.636	.121

Source: Output generated from SPSS 20

Based on the result generated by SPSS 20, the significant values of all the variables related to the problems faced by the LPG customers (except High Installation and additional cost), are greater than 0.05. So the null hypothesis is accepted in all these cases. Therefore, there is no significant relationship between the mean score of occupation of the customers and the problems faced by the LPG customers (except High Installation and additional cost). No significant relationship exists because all the customers face these problems irrespective of the occupation of the customers. But,

in the case of high installation and additional cost, the significant value is less than 0.05 so that the null hypothesis is rejected. In this case, significant relationship exists between mean score of occupation and the problem of high installation and additional cost. As the cost of installation is the extra cost, in the view *point of the customers, they have felt this as the problem.*

#### **FINDINGS:**

There is no significant relationship between the mean score of literacy level of the customers and the problems faced by the LPG customers (except Problem with safety of gas cylinder) from the agent). This implies that the literacy of the customers does not make any impact on the problems faced by the customers. It is indeed the problems are felt from the practical experience. Hence, the literacy level does not take any stand in this regard.

There is no significant relationship between the mean score of occupation of the customers and the problems faced by the LPG customers (except High Installation and additional cost). No significant relationship exists because all the customers face these problems irrespective of the occupation of the customers. But, in the case of high installation and additional cost, the significant value is less than 0.05 so that the null hypothesis is rejected. In this case, significant relationship exists between mean score of occupation and the problem of high installation and additional cost. As the cost of installation is the extra cost, in the view point of the customers, they have felt this as the problem.

#### **CONCLUSION:**

It is concluded that the LP gas companies should take some essential arrangements to improve their service quality by the way they can introduce some more dealers in all the places. By seeing the overall customer service and the concert of the company, the results specify that the consumers have positive attitude towards referring others to buy the LPG. This study highlights that the company needs to improve in customer care area, proper communication while booking and delivery through short message service (SMS). Gas Companies should understand the position and needs of the customers. It is essential for a healthy business in creating new customers, keeping loyal customers, and developing referrals for future customers.

#### **REFERENCES:**

- ❖ Masami Kojima, (2011), The Role of Liquefied Petroleum Gas in Reducing Energy Poverty World Bank Oil, Gas, and Mining Policy Unit Working Paper Extractive Industries for Development Series #25 December 2011 .
- ❖ Nthabiseng Mohlakoana and Wendy Annecke, The use of liquefied petroleum gas by South African low income urban households: A case study, Journal of Energy in Southern Africa, Vol. 20 No. 4 November 2009, pp.2-9.
- ❖ P Krishnan Kutty (2012),“Oil & Gas for Sustainable Growth”, R&D Intervention in LPG,LPG Equipment Research Centre Report, Bangalore.