



## Attitude of LPG consumers in Androth Island

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### Abstract

*LPG here stands for the Liquefied Petroleum Gas which is flammable gas used for several of the purposes all very 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. In India, the use of LPG in the cooking is very high as compared to the other uses of it. The study to explain the values of Govt. has to provide cooking gas connection to the family who has needed. The present years most of the consumers opt to have a LPG connection their home, the increasing usage in gas connection among the people in this Island. This makes it possible to have a saving time and easy to cooking. Here is the question arising this facility is affordable to the poor people that's why the impotence of this study. So the researcher is stated the problem that "A study to identify the attitude of LPG consumers in Androth island"*

**Key words : LPG, BPCL, HPCL**

### INTRODUCTION

The Lakshadweep is a wide geographical area. In Lakshadweep the Androth island having most population . So the peoples in Androth Island are doing so many activities related to their daily life. They try to collect money so many ways. Fishing is the main thing in Androth. The people are approaching firewood and induction stove for cocking purpose. The lack of firewood, the cost of electricity is adversely effected their daily life Recently Govt. has to provide cooking gas connection to the family who have needed. So that the researcher is made an attempt to identify the level of usage of LPG is more helpful for Androth Island, because they all are living for that daily wages. They have so many expenses, that time, LPG is helpful the people in Androth Island. It helps to reduce the expenses of the people. So the researcher try to, identify the attitude and satisfactory level of the LPG users

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## OBJECTIVES OF THE PAPER

- ✓ To identify satisfactory level of the LPG users.
- ✓ To track customers attitude towards LPG users.
- ✓ To identify the role of LPG of Lakshadweep in procurement, storage and commodities in Androth
- ✓ .To analyse the usage level of LPG in Androth Island.

## RESEARCH METHODOLOGY

Population of the present study is the consumers who are getting LPG connection in Androth Island. It is expected that approximately 1700 family in Androth. A well structured questionnaire is used for collecting primary data. Most of the information will be gathered through primary sources.

### Sample size

This technique will be used for conducting the study is convenience sampling technique as sample of respondents shall be chosen according to their convenience. The area subdivided in to four zones on the basis of geographical location. This includes mechary, chemmachery, moola and pandath which are donated as zone1, zone2, zone3 and zone4 respectively, the sample size of the study consist of 60 customers who purchased LPG connection in Androth Island.

### Sampling method

The sampling method is very helpful to collect the information regarding LPG consumers this method will help to introduce the value of the LPG. Here the entire population is divided or subdivided into various on the basis of there, attitude, behaviour etc... with each strategy a random sample or systematic sample is selected.

## REVIEW OF LITERATURE

**Ranjitkumarsiring** “Customer satisfaction level in LPG among domestic and non-domestic consumers” LPG Gas is a clean and potable fuel. It provides heat and power in remote areas as well as in densely populated urban areas. Because of its most portability, it is not dependent on transmission lines or pipeline grids. Its most popular use is for cooking and heating in the residential and commercial segments. The agriculture market uses LP Gas for crop and animal production, and powering farm equipment such as irrigation pump engines. Industry relies on LPG for heating, drying, and powering industrial trucks etc... In response to growing concerns

of urban air pollution and greenhouse gas formation, the use of LPG as an automotive fuel (auto Gas) is becoming increasingly popular

**Dr .M.Dhanabhakya\* & T. Sumathi** “A Study customers attitude and satisfaction towards HP LPG in House Hold, Coimbatore” Humanity faces a unique and far – reaching challenge. Our energy needs are growing as a result of continued population increasing, economic growth, and individual fuel/ energy consumption, at the same time, omissions from fuel wood and fossil fuels, the main energy source for heating in homes and powering our economies, are contributing to climate change and affecting the local air quality. Liquefied petroleum Gas is used as fuel for thousand 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 revolutionary role when it comes to changing the face of domestic fuels used for heating and cooking.

## **ABOUT LPG**

Liquefied Petroleum Gas(LPG) can be defined as a blend of propane (C3’S) and butane (C4’S) readily liquefied under moderate pressure or is the over head of the gasoline stabilizer and used as fuel in heating appliances and vehicles as well as refrigerants and the same time provide the petro-chemicals industries with different feed stock. LPG is heavier than air and will flow along floors and tend to settle in low lying places which can cause suffocation or ignition hazards LPG evaporates at normal ambient temperature and pressure and the ratio between the volume of the vaporized gas and the liquefied gas varies depending on the composition, pressure and temperature but typically around 250:1.

## **Uses of Liquefied petroleum Gas**

LPG has a very wide variety of uses, mainly used for cylinders across many differed markets as an efficient fuel container in the agricultural recreation, hospitality, calefaction, construction, sailing and fishing sectors. It can serve as fuel for cooking, central heating and to water heating and is a particularly cost-effective and efficient way to heat off-grid homes. In the safety font LPG cylinders must be updated to new standards in safety and user experience, giving huge contribution for domestic usage.

## **Cooking**

LPG is used for cooking for cooking in many countries for economic reasons, for convenience or because it is the preferred fuel source. According to the 2011 census of India, 33.6 million (28.5%) Indian households used LPG as cooking fuel in 2011, which is supplied to their homes in pressurized cylinders. LPG is subsidized by the government in India as it potentially affect’s the urban middle class voting pattern. LPG was once a popular cooking

fuel in Hong Kong, however, the continued expansion of town gas to buildings has reduced LPG usage to less than 24% of residential unit LPG is the most common in Brazilian urban areas, being used in virtually all holders, with the exception of the cities of Rio de Janeiro and Sao Paulo, which have a network as pipeline infrastructure. Poor families receive a government grant (Vale Gas) used exclusively for the acquisition of LPG. LPG is commonly used in North America for domestic cooking and outdoor grilling.

## **Liquefied Petroleum Gas**

LPG, otherwise also known as Liquefied Petroleum Gas, is used as fuel for thousands of applications in commercial business, industry, transportation, farming, power generation, cooking, heating and for recreational purposes. It is actually a mixture of hydrocarbon gases. It includes butylene's, propylene, butane as well as propane, which is present in substantial part. It is a flammable mixture and one needs to be highly cautious when dealing with it. Propane and butane gases that become liquid under pressure and can then be stored in pressurized containers. The proportion of each gas varies depending on the source and climate. Propane is preferred where the climate is cold and butane where it is warm. LPG has a high energy per unit volume and is convenient to use. Its calorific value per unit volume is about 2.5 times larger than that of natural gas (methane).

## **LPG-Liquefied Petroleum Gas**

LPG is the abbreviation or short form for liquefied petroleum gas. Like all fossil fuels, it is a non-renewable source of energy. It is extracted from crude oil and natural gas. The main compositions of LPG are hydrocarbons containing three or four carbon atoms. The normal components of LPG thus, are propane (C<sub>3</sub>H<sub>8</sub>) and butane (C<sub>4</sub>H<sub>10</sub>). Small concentrations of other hydrocarbons may also be present. Depending on the source of the LPG and how it has been produced, components other than hydrocarbons may also be present. LPG is a gas at atmospheric pressure and normal ambient temperatures, but it can be liquefied when moderate pressure is applied or when the temperature is sufficiently reduced. It can be easily condensed, packaged, stored and utilized, which makes it an ideal energy source for a wide range of applications. Normally, the gas is stored in liquid form under pressure in a steel container, cylinder or tank. The pressure

## **LPG AGENCIES IN INDIA**

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. 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 as 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**

It is mainly known as the BPCL. The company is very large and mainly a State owned company which is having its headquarters at Mumbai. The company deals in lubricants, fuels and mainly the LPG gases. They are in the field of the manufacturing LPG gases form very long time and have listed themselves in the fortune 500 lists. Bharat Gas form very long time and have listed themselves in the Limited (BPCL). At present, the Bharat gas has coverage of around 25 million households across the country as well as hundreds of commercial and industrial establishments. Bharat gas has always been the frontrunner in maximizing the efficiency and in enhancing the customer satisfaction.

### **1. Hindustan Petroleum Corporation Limited**

It is mainly known as the HPCL all over world. The company is a state owned organization which is mainly involved in the oil refinery mainly LPG gases. HPCL commenced marketing of LPG under the brand name “HP GAS” in 1979 with takeover of these concessionaires and merger with HPCL with a customer holding of 75 lakhs, the filed marketing set up consists of 32 exclusive LPG

Regional Managers. There are sales areas in each region with and exclusive Sales Officer looking after the various aspects of LPG marketing of a particular geographical area including control on the IHP Gas distributorships. In a addition to Domestic LPG, HPGAS also markets LPG cylinders for Commercial and Industrial purpose and Bulk LPG by tankers for Industries. HPCL is a Government of India Enterprise with a Navratna Status, and a Forbes 2000 and

### **2. Indian Oil**

Indian Oil is India’s flagship national Oil Company with business interests straddling the hydrocarbon value chain – from refining, pipeline transportation and marketing of petroleum products to exploration & production of crude oil & gas, marketing of natural gas and petrochemicals. It is the leading Indian corporate in the Fortune ‘Global 500 listing, ranked at the 83rd position in the year 2012. The Indian oil is that much largest company in the India which is having 10 out of 18 oil refineries in India. It is having its heads office at Delhi. The company is the largest in terms of the sales among all the companies in India. For the benefit of its LPG cooking gas customers, Indian Oil is promoting fuel – efficient, safe & quality products through its Indane distributorships.

### **3. ONGC**

ONGC stands for the oil and natural gas Corporation limited. The company is also a PSU which is headed by the state and having its head office in the degrading. The company is involved in the production, exploration and the refining of the oils and the gases in India. The gases here stand for the LPG gas mainly which is very highly used in India as cooking gas. It is the second largest gas agency in India. ONGC company limited ranks as the numerous Uno oil and gas exploration & production (E&P) in Asia. It contributes over 78% of India’s oil and gas production. ONGC offers Liquid Petroleum Gas (LPG) for home usage. It officers LPG cylinders in various capacities. It provides easy access to the customer through various modes that includes telephone, SMS, online access etc., It provide home delivery of cylinders. It also offers LPG gas

suppliers through pipe lines. ONGC has been ranked in various international surveys. It also offers the anytime emergency services throughout the country

## ANALYSIS AND INTERPRETATION

### GENDER STATUS OF CUSTOMERS

Factors	No. Of Customers	Percentage of Customers
Male	22	37%
Female	38	63%
<b>Total</b>	<b>60</b>	<b>100</b>

### INFERENCE

From the above table and chart shows that out of 37% male customers and 63% female customers. Through this analysis prove that most of the customers are female.

### AGE PROFILE OF CUSTOMERS.

Rang	No. Of Customers	Percentage of customers
Below 30 years	13	23.21%
30-50	43	71.67%
50 years and above	4	1.68%
<b>TOTAL</b>	<b>60</b>	<b>100</b>

Out of 60 customers 21.66% of customers are aged in below 30 years. 71.66% of customers in between 31-50 and remaining customers aged above 50. Through this analysis prove that most of the customers are in between 30-50 years.

### EDUCATIONAL STATUS OF CUSTOMERS.

Factors	No. Of Customers	Percentage of customers
SSLC	14	23.33%
High school	23	38.33%
Degree	13	21.67%
PG	10	16.67%
<b>TOTAL</b>	<b>60</b>	<b>100</b>

Out of 60 customers 23.33% of customers are qualified in SSLC 21.66% of customers are obtained High school 5% of customers are Graduates and 16.66% of customers are qualified in PG 16.66% of customers are obtained Post graduation 33.33% of customers are others. This show that most of the customers are others.

**OCCUPATIONAL LEVEL OF CUSTOMERS.**

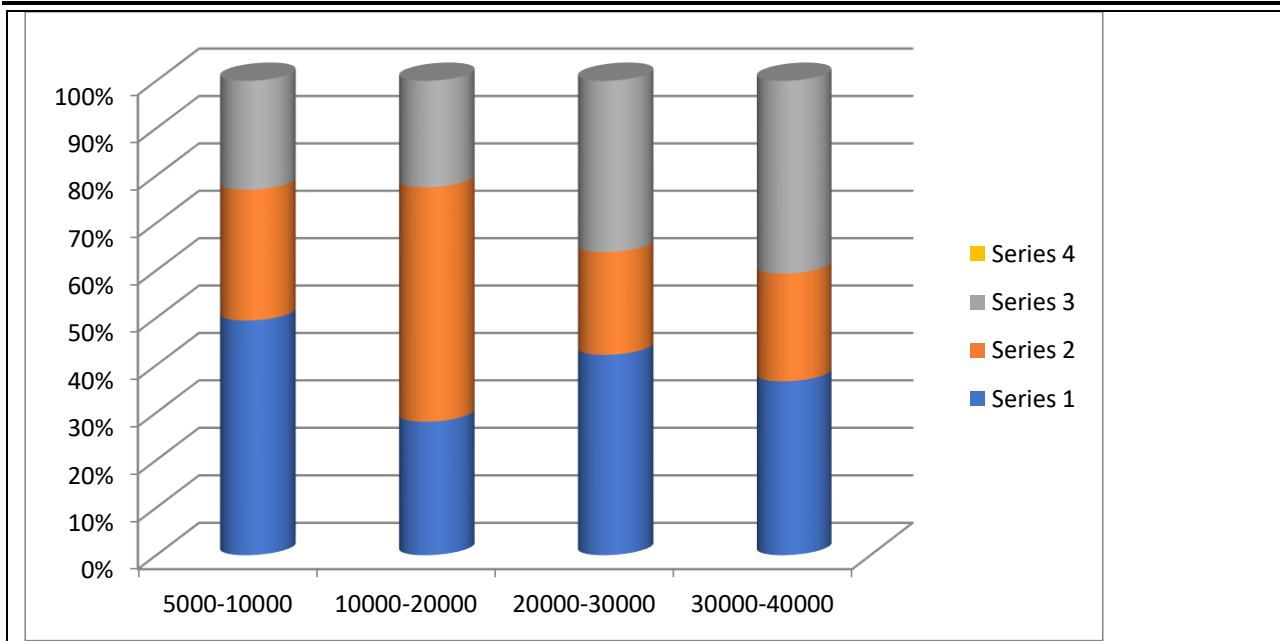
<b>Factors</b>	<b>No. of Customers</b>	<b>Percentage of customers</b>
House wife	40	66.66
Student	3	5
Salaried person	16	26.66
Business man	0	0
Professionals	1	1.66
Others	0	0
<b>TOTAL</b>	<b>60</b>	<b>100</b>

**Source of Primary Data**

From the above analysis reveals that our of 60 customers 66.66% of customers are House wife, 5% of customers are students, 26.66% of customers are Salary person, 1.66% of customers are occupied in Professional job No one of customers are Business man and others.

**MONTHLY INCOME OF CUSTOMERS.**

<b>Factors</b>	<b>No of Customers</b>	<b>Percentage of customers</b>
5000-10000	30	50
10000-20000	4	6.66
20000-30000	10	16.66
30000-40000	16	26.66
<b>TOTAL</b>	<b>60</b>	<b>100</b>

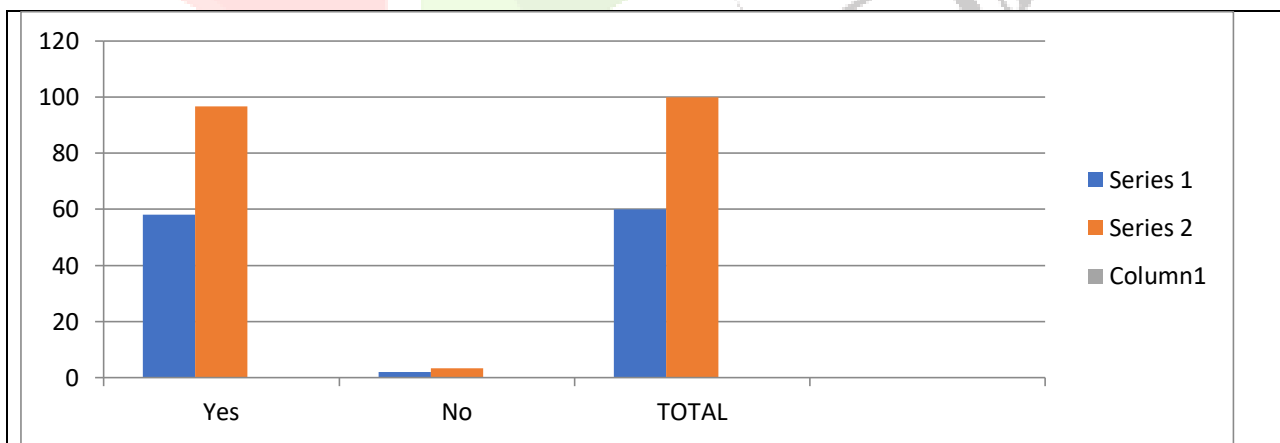


Source Of Primary Data

According to the above table and diagram express express out of 60 customers 50% of customers have earned below 15000 rupees 6.66% of customers are have earned in between 15000-25000, 16.66% of customer earned in between 25000-35000, 21.66% of customers have earned in between 35000-45000 and remaining's are belongs in the range of 45000 earning per month.

**SATISFACTORY LEVEL OF CHOOSING LPG**

Range	No. Of Customers	Percentage of customers
Yes	58	96.66
No	2	3.33
<b>TOTAL</b>	<b>60</b>	<b>100</b>



Source Of Primary Data

Above table express that out of 60 customers. 96.66% of customers are satisfied to select a LPG and remaining were not satisfied to choose LPG.



## USE OF ALTERNATIVES BEFORE LPG GAS

Factors	No. Of Customers	Percentage of customers
Firewood	29	48.33
Induction cooker	31	51.66
<b>Total</b>	<b>60</b>	<b>100</b>

Source Of Primary Data

The above table show that out of 60 customers 48.33% customers were used fire wood for the cooking purpose 51.66% of customers were used induction cooker. This show that most of the customers used induction cooker for their cooking purpose

## SATISFACTORY LEVEL OF COST OF LPG

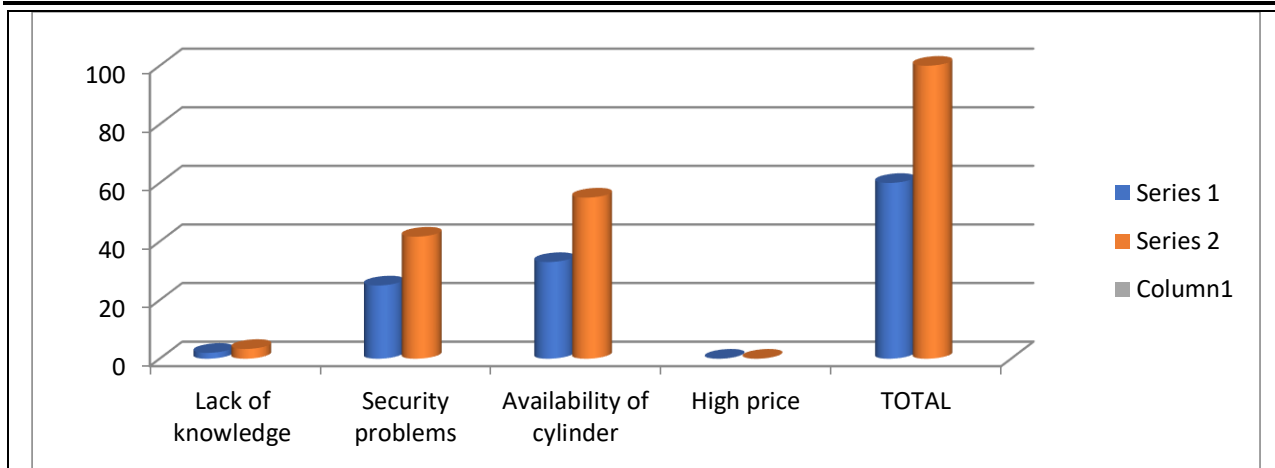
Level of satisfactory	No. of Customers	Percentage of customers
Highly satisfied	1	1.66
Satisfied	44	73.33
Moderate	13	21.66
Non Satisfied	2	3.33
<b>Total</b>	<b>60</b>	<b>100</b>

Source of Primary Data

In above table and chart reveals that out of 60 customers 1.66% of customers are said that they were highly satisfied in the cost of LPG, 73.33% of customers said that they were satisfied, 21.66% of customers are said that cost of LPG in your locality is moderately satisfied, 3.33 of customers are non-satisfied. Most of the customers are satisfied with the cost of LPG

## PROBLEMS OF LPG USAGE IN ISLAND

Factors	No. Of Customers	Percentage of Customers
Lack of knowledge	2	3.33
Security problems	25	41.66
Availability of cylinder	33	55
High price	0	0
<b>TOTAL</b>	<b>60</b>	<b>100</b>

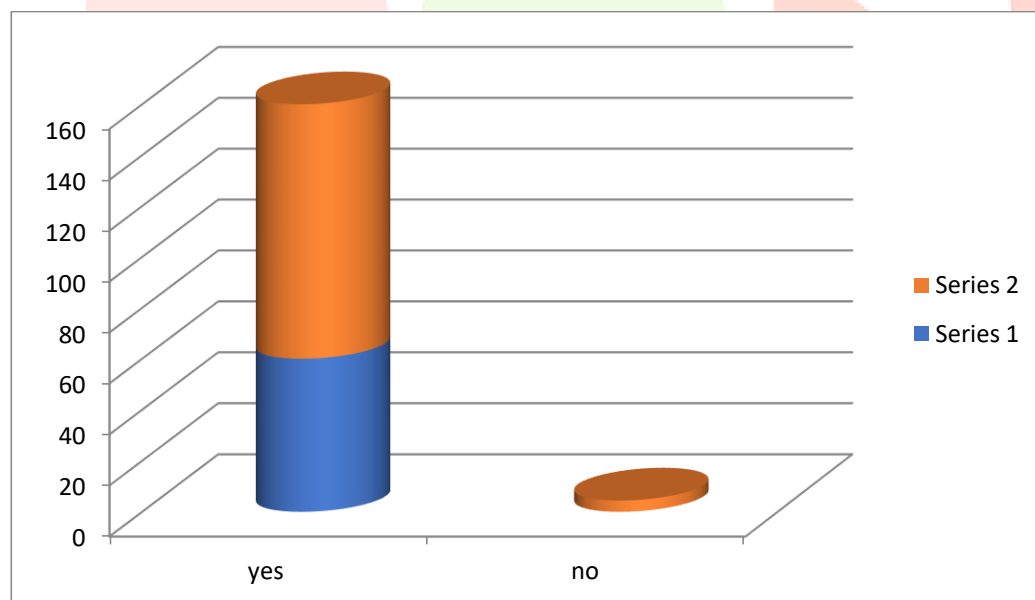


Source of Primary Data

Above chart display that out of 60 customers 3.33% of customers have opinion that the lack of knowledge is the major problem of LPG used in Island. 41.66% of customers have opined that security problems. 55% of customers opined that availability of cylinder have opined that availability of cylinder is major is major problem of LPG used in Island.

### SATISFIED TO CHOOSE A LPG FOR COOKING PURPOSE

FACTORS	NO.OF CUSTOMERS	PERSENTAGE OF CUSTOMERS
YES	60	100
NO	0	0
<b>TOTAL</b>	<b>60</b>	<b>100</b>

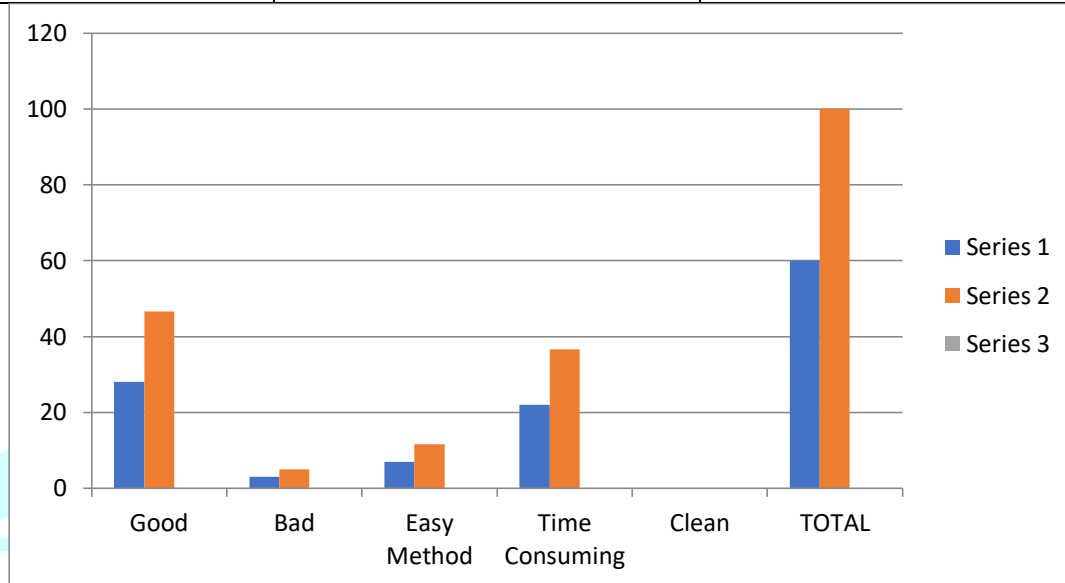


Sources of primary data

From the above table shows that 60 customers 100% of customers are respondent that satisfied to choose a LPG for cooking purpose.

## OPINION ABOUT USING LPG

Factors	No. of Customers	Percentage of customers
Good	28	46.66
Bad	3	5
Easy Method	7	11.66
Time Consuming	22	36.66
Clean	0	0
<b>TOTAL</b>	<b>60</b>	<b>100</b>



Sources of Primary Data

The above graph reveals that on 60 samples 46.66% customers opined that using LPG are good. 5% of customers opined that using LPG is bad. 11.66% of customers opined that the LPG is easy method. The 36.66% of customers opined using LPG is time consuming and no one opined using LPG gas is clean. This show that most of the customers are opined about using LPG are good.

### FINDINGS, SUGGESTIONS, AND CONCLUSION

#### FINDINGS

- In this study helps to identify the satisfactory level of the LPG users.
- In Androth Island most of the people's educational qualification is high school (38.33%).
- Most of the people's are satisfied this facility provided by the government.
- Before LPG most of the LPG customers are used induction cooker for cooking purpose.
- The main problem of LPG used in island is availability of cylinder.
- Most of them customers are say LPG is easy method.

## SUGGESTIONS

The research providing the following suggestion in the light of above study.

- ✓ The entire respondents are using LPG at heavy cost. Due to that implementation of Biogas plants is necessary in Androth Island.
- ✓ Through the usage of Biogas plant reducing wastage also.
- ✓ Govt introduce new scheme for Biogas implementation and also provide various subsidiaries.
- ✓ Providing subsidies for using LPG as village level.
- ✓ Providing LPG through the Gov .organization.

## CONCLUSION

“The customers are always right” is a famous business slogan. The underlying truth behind this statement is realizing that, customers are the life blood for any business. Customer satisfaction provides a leading indicator of consumer punchers intension and loyalty. In this competitive environment, customer satisfaction and service has become the secret of success in all service sector. Customer satisfaction means, it is absolutely to satisfy the customer needs. Keeping in this mind, this survey been conducted at Androth island to identify the customer satisfactory level of HP LPG services. The findings of the study depict that the customers has faced the irregularity of price ingress and delayed supply of LPG cylinder. It is suggested that the HP gas company should take some necessary action to improve their right time availability and service quality to the company, the result indicates that the customers has positive attitude towards the HP LPG and they were satisfied for using. This study emphasize that the company needs to improve in customer care area, proper communication while booking and delivery short message services (SMS). HP has company should understand the importance 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.

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