



**Dr. V. S. Krishna Govt. Degree College (A)  
Visakhapatnam**

**Under Mentor**

**Dr. T. Swarna Latha**

**Lecturer In Physics**

**Dr. V. S. Krishna Govt. Degree College (A)**

**Visakhapatnam.**



**COMMUNITY SERVICE PROJECT REPORT**

**By**

**GANGAPUJARI VARAPRASAD**

**II B.Sc,MPCS TM**

**Topic: Electric power Consumption**

## **Declaration**

I hereby declare that the project report entitled “**Community service project on Electric power consumption**” has been carried out by me under the supervision of Dr.T.Swarna Latha,Mentor, Physics Department,Dr.V.S.Krishna Govt.Degree College (A), Visakhapatnam.I further declare that the work reported in this project has not been submitted and will not be submitted, either in part or in full to this or any other university for any degree.

## Acknowledgement

- I wish to express my gratitude to those who extended their valuable co-operation and contribution towards the project.
- I would like to thank my project mentor **Dr. T. Swarna Latha** for her valuable time and continued assistance for the successful completion of the project.
- I would also like to thank the faculty and staff of the institute for their support.
- I would also like to express gratitude to my own village----- for facilitating this project and providing their guidance throughout the duration of the project.

## **Certificate**

This is certify that the project work incorporated in this document entitled “**Community service project on Electric power consumption**” is a bona fide work carried out by Gangapujarivaraprasad, B.Sc, MPCs Telugu medium, under my supervision in the academic year 2021-2022 at the Department of Physics, Dr.V.S.Krishna Govt.Degree College (A), Visakhapatnam.

Visakhapatnam

Date:

Mentor

Dr.T.Swarna Latha

## **Abstract**

In this study analyze the average energy consumption per house is done. The duration of CSP is four weeks. In the first week the socio-economic survey was done to understand the social background, the economic status, the consumption of electricity and the different electrical appliances used for the domestic purpose used. The data was collected from every individual house in the locality Paderu. From already issued electricity bill by the electricity board, the calculation of the bill for the consumption was learnt. the analysis was done by using bar graph between number of houses vs electricity bill.

# Contents

<b>1.About my village</b>	<b>Page 6</b>
<b>2. Community Service Definition.</b>	<b>Page 7</b>
<b>2.1 The Benefits of Community Service.</b>	<b>Page 7</b>
<b>3. Introduction about Electricity energy Consumption</b>	<b>Page 8</b>
<b>4. Economic survey Report</b>	<b>Page 9-13</b>
<b>4.1. Economic survey Gallery.</b>	<b>Page 14-24</b>
<b>5. Awareness about power consumption</b>	<b>Page 25</b>
<b>5.1. Awareness about power consumption – Gallery.</b>	<b>Page 26</b>
<b>6. Power calculation of each home &amp; Bar graph.</b>	<b>Page 27-30</b>
<b>7. simple ways to reduce your electricity bill at home.</b>	<b>Page 31-33</b>
<b>8.To protect yourself from lightning strikes:.</b>	<b>Page 34</b>
<b>9. Conclusion.</b>	<b>Page 35</b>

## 1.About my village:

My village is a small village with a population of only two hundred people. My village's name is Jaithavaram. It is 150kms away from the main city of Visakhapatnam. My village is a small abode for happy people. Here they live in harmony and peace. The village people are very hardworking and thus they must have a good source of upliftment, Like the village's schools and clinics should be maintained and increased in number. The farmers should be facilitated by helping them to leverage their sales, make them notified about the modern techniques used in farming, and give them compensation and knowledge of the true market price of their crops. Thus, I would request governmental authorities to come forward and uplift the medical, educational, and farming facilities in the village.



**My village paderu**



**Evening view**

## 2.Community Service Definition

Community service is social work done by an individual or group of individuals that benefit other people of the society. It regularly is done in a region closer to where one lives, so the community

keeps procuring with its benefits, and these kinds of acts are not paid, as it is for the betterment of the community.

## 2.1. The Benefits of Community Service

There are many benefits of participating in community service, and some of the most important ones are listed below.

**Have the opportunity to help others:** This is often the most important benefit of community service. Participating in it gives you the opportunity to know that you are improving someone's life and making your community better, and you get to see the direct impact of your work.

**Gain hands-on experience:** You can learn a lot of skills while performing community service such as construction, painting, customer service, and medical skills. You can also include your community service work on your resume.

**Learn about different careers:** Sometimes you can focus your community service in a field you may want to work in down the road. Some examples of this include volunteering at an animal shelter if you are thinking about becoming a veterinarian, working at a hospital if you want to be a doctor, or volunteering in a museum if you like history. The experience gained from community service can help you get an internship or job in the future, and it also gives you the opportunity to see how much you would really enjoy a particular career.

**Personal growth:** Doing community service has personal benefits as well. It often makes participants more organized, responsible, and compassionate, which are all good qualities to have, as well as qualities that both colleges and employers like to see in applicants.

**Gain new friends:** A final benefit is that you can meet a lot of great people while doing community service. Community service is often done in groups, so it's easy to make friends with the people you are working with. You may also become friends with the people you are helping, especially if you volunteer at the same place regularly.

## 3. Introduction about Electricity energy Consumption

## **Energy consumption:**

Energy consumption defines the use of energy. It is the use of energy specifically for a definite amount. This is related to the energy consumption of electrical power generated through power plants or energy used by any living creature. Both types of consumption of energy vary from each other. Joules is the term used to scale energy as a standard unit of measurement, hence the energy is generally observed as gigajoules per year. The formula to calculate energy is derived for the calculation of consumed energy in a specific period.

## **Energy Consumption Formula:**

As mentioned above in the introduction, energy consumption is measured by multiplying the number of power units consumed within the period over which it has been consumed. Hence, the energy consumption formula or the power consumption formula is given as below:

$$E = P*(t/1000)$$

where E = energy measured in Joules or kilowatt-hours (kWh),

P = power units in watts, and

t = time over which the power or energy was consumed.

## **4. Economic survey Report**

In First week, I went to each home and collected data by using questioner. The total questions are divided into three sections and showed in separate tables as section I,II and III. The Questions are arranged/ put in vertical column and data from each house put in horizontal rows as shown in the below tables.

### **4.1. Problems identified during survey:**

- i] In streets have so many wires hanging overhead. This leads electrical shock to the people /children
- ii] some village people are dry their cloths on electric cable wires.
- iii] Some people do not switch off the electrical appliances like bulbs, fans, tv etc., when

they leave their house.

iv] Incandescent bulbs have been using by most of the people instead of LED.

Section I	House1	House 2	House 3	House 4	House 5	House 6
Name of the Respondent /Gender	Gangapujari chinna rao /Male	Pangi rajaya /Male	Gangapujari ram Naidu/ Male	Gaduvu ganapathi/ Male	Gadugu Naidu/ male	Someli subhadra/ Female
Age	45	50	55	36	41	35
Village /Mandal	Badimela/paderu	Badimela/paderu	Badimela/paderu	Badimela/paderu	Badimela/paderu	Badimela/paderu
I. Social Status of Study Village/Area	Badimela	Badimela	Badimela	Badimela	Badimel	Badimela
a) Geographical and Administrative location of the village:	Visakhapatnam	Visakhapatnam	Visakhapatnam	Visakhapatnam	Visakhapatnam	Visakhapatnam
b) Caste Profile:	ST	ST	ST	ST	BC	ST
c) Religion Profile:	Hindu	Hindu	Hindu	Hindu	Hindu	Hindu
d) Education Profile:	Nil	Nil	Nil	10th	5th	Nil
e) Occupational profile:	Farmer	Farmer	Farmer	Farmer	Farmer	Farmer
f) Natural Resources:	Land	Land	Land	Land	Land	Land
g) Lives stock resources:	Land	Land	Land	Land	Land	Land
h) Health profile:	Healthy	Healthy	Healthy	Healthy	Healthy	Healthy
I) Infrastructural Facilities: 1) Market 2) Health facilities 3) Post Office 4) Drinking water 5) Connectivity and Transport	Post office Drinking water	Post office Drinking water	Post office and Drinking water	Post office and Drinking water	Post office and Drinking water	Post office and Drinking water

Section I	House8	House 9	House 10	House 11	12	House 13
Name of the Respondent /Gender	Sidhari raju babu Male	Pangi parvathsma Female	Gadugu nagamani Female	Gadugu Suri babu Male	Bandlabu venkata Laxmi Female	Pangi Mangamma Female
Age	55	52	46	42	53	44
Village /Mandal	Badimela /paderu	Badimela/paderu	Badimela/paderu	Badimela/paderu	Badimela/paderu	Badimela/paderu
I. Social Status of Study Village/Area	Badimela	Badimela	Badimela	Badimela	Badimela	Badimela
a) Geographical and Administrative location of the village:	Visakhapatnam	Visakhapatnam	Visakhapatnam	Visakhapatnam	Visakhapatnam	Visakhapatnam
b) Caste Profile:	ST	ST	sc	ST	ST	ST
c) Religion Profile:	Hindu	Hindu	Hindu	Hindu	Hindu	Hindu
d) Education Profile:	Nil	Former	Former	Nil	Former	Nil
e) Occupational profile:	Farmer	Farmer	Farmer	Farmer	Farmer	Farmer
f) Natural Resources:	Land	Land	Land	Land	Land	Land
g) Lives stock resources:						
h) Health profile:	Healthy	Healthy	Healthy	Healthy	Healthy	Healthy
I) Infrastructural Facilities: 1) Market 2) Health facilities 3) Post Office 4) Drinking water 5) Connectivity and Transport	Post office and Drinking water	Post office and Drinking water	Post office and Drinking water	Post office and Drinking water	Post office and Drinking water	Post office and Drinking water

Section I	House15	House 16	House 17	House 18	House 19
Name of the Respondent /Gender	Gadugu chinam Naidu/ male	Pangi Laxmi/ female	Korra bagiraju / male	Koda Devi/ female	Korra Raju / Male
Age	47	48	33	42	45
Village /Mandal	Badimela/paderu	Badimela/paderu	Badimela/paderu	Badimela/paderu	Badimela/paderu
I. Social Status of Study Village/Area	Badimela	Badimela	Badimela	Badimela	Badimela
a) Geographical and Administrative location of the village:	Visakhapatnam	Visakhapatnam	Visakhapatnam	Visakhapatnam	Visakhapatnam
b) Caste Profile:	ST	ST	ST	ST	SC
c) Religion Profile:	Hindu	Hindu	Hindu	Hindu	Hindu
d) Education Profile:	Nil	2nd class	5th class	Nil	3rd class
e) Occupational profile:	Farmer	Farmer	Farmer	Farmer	Farmer
f) Natural Resources:	Land	Land	Land	Land	Land
g) Lives stock resources:					
h) Health profile:	Healthy	Healthy	Healthy	Healthy	Healthy
I) Infrastructural Facilities: 1) Market 2) Health facilities 3) Post Office 4) Drinking water 5) Connectivity and Transport	Post office and Drinking water	Post office and Drinking water	Post office and Drinking water	Post office and Drinking water	Post office and Drinking water

# Economic Survey -Gallery



Section II	House1	2	3	4	5	6	House 7
a) Source of Income:	48,000	52,000	48,000	55,000	60,000	43,000	40,000
b) Type of House Building: Own/Rental	Own	Own	Own	Own	Own	Own	Own
c) Availability of Agricultural land: Yes/No , If Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
d) Agricultural land used for _____ crops	0.80	1.03	0.75	0.88	1.10	0.72	0.55
e) Type of cooking fuel used: LPG / Kerosene/ Electricity/ Wood/ others specify	LPG and wood	LPG and wood	LPG and wood	LPG and wood	LPG and wood	LPG and wood	LPG and wood
f) Do you have vehicle: Two wheeler/ Auto/ Car/ Any other vehicle	No	No	No	No	No	No	No
g) Name of the Govt. Schemes received:	Raithu Bharosa Vidhya deevena	Raithu Bharosa	Raithu Bharosa	Raithu Bharosa and Amma vodi	Raithu Bharosa	Raithu Bharosa	Raithu Bharosa
(Jagananna Vidhya Deevena / Jagananna Vasathi Deevena/ Raithu Bharosa / Any other )							

Section II	House 8	House 9	House 10	House 11	12	House 13	House 14
a) Source of Income:	55,000	52,000	60,000	48,000	56,000	45,000	50,000
b) Type of House Building: Own/Rental	Own	Own	Own	Own	Own	Own	Own
c) Availability of Agricultural land: Yes/No , If Yes	Yes	Yes	Yes	No	Yes	No	No
d) Agricultural land used for _____ crops	0.70	0.68	0.85	- -----	0.55	-----	-----
e) Type of cooking fuel used: LPG / Kerosene/ Electricity/ Wood/ others specify	Wood and LPG	Wood and LPG	Wood and LPG	Wood	Wood and LPG	Wood	Wood
f) Do you have vehicle: Two wheeler/ Auto/ Car/ Any other vehicle	No	No	No	No	No	No	No
g) Name of the Govt. Schemes received: (Jagananna Vidhya Deevana / Jagananna Vasathi Deevana/ Raithu Bharosa / Any	Raithu Bharosa and vidhya deevana	Raithu Bharosa	Raithu Bharosa	Ammavoodi	Raithu Bharosa	Vidhya deevana and vasthi deevana	Ammavoodi



Section II	House15	House 16	House 17	House 18	House 19	House 20	House 21
a) Source of Income:	56,000	47,000	58,000	45,000	50,000	43,000	58,000
b) Type of House Building: Own/Rental	Own	Own	Own	Own	Own	Own	Own
c) Availability of Agricultural land: Yes/No , If Yes	Yes	Yes	Yes	No	Yes	No	No
d) Agricultural land used for _____ crops	0.60	0.58	0.85	-----	0.75	-----	-----
e) Type of cooking fuel used: LPG / Kerosene/ Electricity/ Wood/ others specify	Wood and LPG	Wood	Wood and LPG	Wood	Wood and LPG	Wood	Wood
f) Do you have vehicle: Two wheeler/ Auto/ Car/ Any other vehicle	No	No	No	No	No	No	No
g) Name of the Govt. Schemes received:	Raithu Bharosa and vidhya deevana	Raithu Bharosa	Raithu Bharosa	Ammavoodi	Raithu Bharosa	Vidhya deevana and vasthi deevana	Ammavoodi
(Jagananna Vidhya Deevana / Jagananna Vasathi Deevana/							

## Economic Survey -Gallery



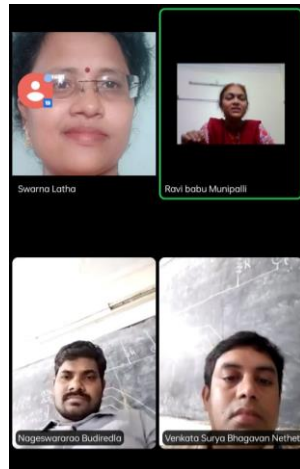
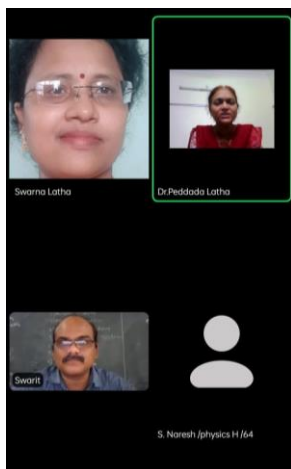
Section III	House1	2	3	4	5	6	House 7
1) Do you have electricity supply: Yes / No	Yes	Yes	Yes	Yes	Yes	Yes	Yes
2) If yes: i) Number of working bulbs/tube lights: ii) Type of using bulb/Tube lights: LED / CFL/or any other	3 LED	2 LED	3 LED	4 LED	2 LED	3 LED	4 LED
iii) Each bulb Volts:	7w	7w	7w	7w	7w	7w	7w
iv) Number of working fans:	1	2	1	2	1	1	2
v) Refrigerator / AC / Geyser /electric cooker / heater /Micro-oven or any other appliances	No	No	No	No	No	No	No
3) Are You using electricity for agriculture? Yes/ No,	No	No	No	No	No	No	No
If yes collect details: ]water pumping/any other							
4) Do have you any solar panels to generate electricity: Yes / No	No	No	No	No	No	No	No
If yes: how much power generate monthly?							
5) How many devices running by using solar panels?	No	No	No	No	No	No	No
6) Monthly electricity bill: -----in Rupees [collect proof]	One hundred rupees	One hundred twenty rupees	One hundred ten rupees	One hundred five rupees	One hundred forty rupees	One hundred twenty five rupees	Hundred rupees
7) Any issue related to electricity?	No	No	No	No	No	No	No

Section III	House8	House 9	House 10	House 11	12	House 13	House 14
1) Do you have electricity supply: Yes / No	Yes	Yes	Yes	Yes	Yes	Yes	Yes
2) If yes: i) Number of working bulbs/tube lights: ii) Type of using bulb/Tube lights: LED / CFL/or any other	4  LED	3  LED	3  LED	4  LED	2  LED	2  LED	4  LED
iii)Each bulb Volts:	7w	7w	7w	7w	7w	7w	7w
iv) Number of working fans:	2	1	2	2	1	1	2
v)Refrigerator / AC / Geyser /electric cooker / heater /Micro-oven or any other appliances	No	No	No	No	No	No	No
3) Are You using electricity for agriculture? Yes/ No If yes collect details: i)water pumping/any other	No	No	No	No	No	No	No
4) Do have you any solar panels to generate electricity: Yes / No							
If yes: how much power generate monthly?	No	No	No	No	No	No	No
5) How many devices running by using solar panels?	No	No	No	No	No	No	No
6) Monthly electricity bill: ----- -in Rupees [collect proof]	One hundred twenty two rupees	One hundred forty rupees	One hundred fifty five rupees	One hundred ten rupees	One hundred sixty rupees	One hundred twenty five rupees	One hundred twenty six rupees
7) Any issue related to electricity?	No	No	No	No	No	No	No



Section III	House 15	House 16	House 17	House 18	House 19	House 20	House 21
1) Do you have electricity supply: Yes / No	Yes	Yes	Yes	Yes	Yes	Yes	Yes
2) If yes: i] Number of working bulbs/tube lights:  ii] Type of using bulb/Tube lights: LED / CFL/or any other	3  LED	4  LED	2  LED	4  LED	3  LED	3  LED	4  LED
iii] Each bulb Volts:  iv] Number of working fans:	7w  2	7w  1	7w  2	7w  2	7w  1	7w  1	7w  2
v] Refrigerator / AC / Geyser / electric cooker / heater / Micro-oven or any other appliances	No	No	No	No	No	No	No
3) Are You using electricity for agriculture? Yes/ No,  If yes collect details:  j] water pumping/any other	No  -----	No  -----	No  -----	No  -----	No  -----	No  -----	No  -----
4) Do have you any solar panels to generate electricity: Yes / No  If yes: how much power generate monthly?	No	No	No	No	No	No	No
5) How many devices running by using solar panels?	No	No	No	No	No	No	No
6) Monthly electricity bill: -----in Rupees [collect proof]	One hundred sixty rupees	One hundred twenty rupees	One hundred seventy five rupees	One hundred eighty rupees	One hundred sixty rupees	One hundred fifty five rupees	One hundred twenty six rupees
7) Any issue related to electricity?	No	No	No	No	No	No	No


## 5. Awareness about power consumption



<https://meet.google.com/bao-tpxk-pux>

One house Calculation electric bill per month

New Domestic Tariff Rates	
Slab(Units)	New Rates
0-30	1.90
31-75	3.00
76-125	4.50
126-225	6.00
226-400	8.75
400 పై	9.75



House holder	Total electrical appliances	Total walts	Using power per month	Total amount of current bill
B.raju	$4+2+1+1=8$ Bulb+fan+ TV+fridge	$140+1260+280+160$ $0=3280$	$3280 \times 30 =$ $98,400/1000$ $=98.4$ <b>38.04 kWh</b>	<b>299 rupees</b>

## 6. Power calculation of each house

Name of the Owner	Total number of electrical appliances Bulbs+fans+TV+fridge+etc...	Calculation Total Watts	Using power Day/month	Total amount of current bill
G chinarao	8	168+1260+ 1600+350= 3,378	101,340= 101.34 kWh	312 rupees
G.ram naidu	3	112+840+ 210= 1,162	34,860= 34.86 kWh	72 rupees
K.raju	2	196+840= 1,036	31,080= 31.08 kWh	60 rupees
S sai kumar	5	70+770+ 210= 1,050	31,500= 31.5 kWh	61 rupees
G.ramudu	3	112+980= 1,092	32,760= 32.76 kWh	65 rupees
K.pandu	6	126+630+1600+210 =2,566	76,980=76.98 kWh	202 rupees

K.NEELU	7	126+1260+1600+ 280= 3,266	97,980= 97.98 kWh	297 rupees
B.bonju babu	8	140+1260+1600+ 280=3,280	98,400= 98.4 kWh	298rupees
K.sunitha	4	84+420=504	15,120= 15.12 kWh	101rupees
K.ASHOK	9	240+1260+350+ 1600= 3,450	103,500= 103.5 kWh	321 rupees
P.praveen	3	196+980= 1,176	35,280= 35.28kWh	72rupees
G.SWETHA	7	168+1260+280= 1708	51,240= 51.24 kWh	97 rupees
B.baburao	7	168+1120+280= 1568	47,040= 47.04 kWh	108 rupees
J.jagadhesh	8	140+1260+280+ 1600= 3280	98,400= 98.4 kWh	299rupees
K.KOMATI Swararo	5	140+1120+210= 1470	44,100= 44.1 kWh	99rupees
K.ramudu	9	140+1680+1600+ 210= 3,630	108,900= 108.9 kWh	346rupees

G.bujji	7	126+1260+280+ 1600= 3,266	97,980= 97.98 kWh	297rupees
K.LINGESH	6	105+560+1600= 2,265	67,950= 67.95 kWh	297rupees
B.pandu	3	112+980= 1092	=32,760 32.76kWh	65 rupees
K.sujith	10	140+1680+210+ 1600+1000= 4,630	138,900= 138.9 kWh	505rupees

## 7.Simple ways to reduce electric bill & Electrical shocks

1. Turn off electrical appliances when not in use (most common practices which I've observed are :
  - a. Air conditioners, mixers, microwave, televisions are on standby throughout the day
  - b. Mobile phone\Laptop chargers are on, though not connected to devices
  - c. Desktop computers are on standby
  - d. Have thick curtains for windows and turn on the lights!
  - e. Fans on, though no one is in bedroom
  - f. Geyser on from 6am until 10am.
  - g. using vacuum cleaners where a good brush can help clean the rugs or sofas better and quicker.
2. Use less power consuming appliances at home and stop using appliances such as electrical room heaters (they are bad for health and consume lot of power). Stop

using huge audio systems such as powerhouse\7.1 stereo while watching normal TV programs or sports.

3. It is good to show your devotion to God. But please replace that 15watt (a.k.a Zero watt) bulbs with some 0.5watt LED bulbs
4. Replace old Tube lights (T12s) with LED units. Stop using incandescent lamps. Those fashionable indirect lighting is just a waste of electrical energy. Get some direct lighting using LED tube lights instead. Also, look for lumens and not watts for lights. Lumens guarantee the amount of light while wattage is the amount of electricity the device consumes.
5. Replace electric geyser with solar geysers or gas geysers and use it wisely OR replace the old electric geysers with a new one. The new units have ceramic protection with better heat transfer properties and an efficient auto shut off.
6. Having solar panels installed in your home can significantly help on saving on energy. If your area is a place that gets lots of sun throughout the year, then installing solar panels to produce electricity is a wise investment that will surely reduce your electricity bills.
7. Check for thermal leakage of rooms, while using Air conditioner. Get thermal insulating wallpapers for bedrooms (they look stylish and can save AC power consumption). Set the AC temperature higher (from the usual 21 °C to 25 °C or so).

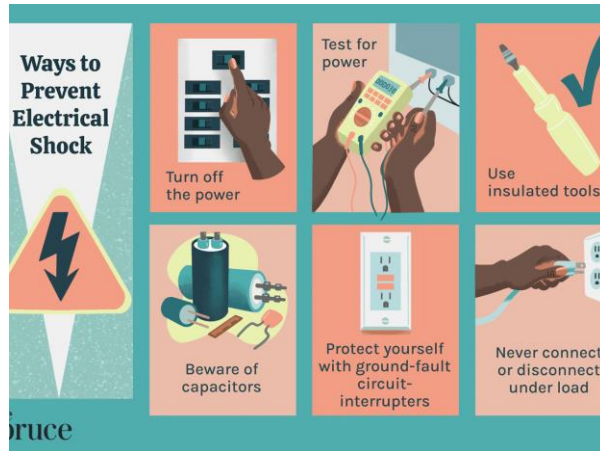
## **The simple ways to prevent electrical shock**

An electric shock happens when you have contact with an electric current and the current passes through your body. It can cause serious injury or death.

### **Some simple precautions can prevent electric shock hazards around the home.**

- Inspect electric cords for fraying. If you see a crack in the insulation, repair or replace it. Cords can be frayed if they get moved a lot, are in the sun, or are chewed by an animal, or if you have had them for a long time.

- Do not plug too many things into the same outlet. This can overload electrical circuits.
- Replace all older two-pronged outlets. All outlets in the home should be of the 3-pronged type. It is not safe to use adapters that allow you to plug a 3-pronged appliance into a 2-pronged outlet for an extended period of time.
- Insert plastic safety caps in all unused electrical outlets if small children are in the home. Keep extension cords out of the reach of children. A young child may put the end of an extension cord in his or her mouth and suffer a severe electrical burn.
- Keep all electric appliances away from places where there is water, such as a sink, toilet, or bathtub. Do not handle extension cords or electric appliances and do not plug anything into an electrical outlet while you are wet or if the appliance is on a wet surface.
- Check electrical outlets used near sources of water, such as the bathroom sink, or near a hot tub, spa, or swimming pool. All such outlets should be a special type known as a ground fault circuit interrupter, or GFCI, outlet.
- Keep electric appliances, outlets, and light bulbs away from flammable liquids or products that produce vapors.
- Make sure that all power tools are grounded or double insulated. This means there is an extra barrier between you and the electricity.
- Make sure that children do not play or climb near electric lines on a power pole or where the lines enter a house.
- Stay clear of electric power lines when you are trimming trees or using gardening tools.
- Do not handle fallen wires. Report fallen wires to the police or local utility right away. If you are in a car and a wire has fallen on it, stay in the car and drive away if you can. Do not touch any metal in the car until the electrical source has been removed. If you cannot drive away, do not get out of the car. Call or wait for help.



## 8.To protect yourself from lightning strikes:

- Watch for developing thunderstorms. If you can hear thunder, you are within striking distance.
- When a thunderstorm is approaching, seek shelter right away in a safe building or vehicle. A safe building is one that is fully enclosed with a roof, walls and floor, such as a home, school, office building, or shopping center. Picnic shelters, dugouts, sheds, and other partially open or small structures are **NOT** safe. A safe vehicle is a car, SUV, minivan, bus, or tractor with a hard top.
- When you are in your house during a storm, you still need take precautions. Avoid contact with plumbing. Stay away from showers, sinks, bathtubs, hot tubs. Do not wash your hands, do not take a shower, do not wash dishes, and do not do laundry. Also, avoid contact with electrical equipment or cords. If you plan to unplug any electronic equipment, do so well before the storm arrives. Stay away from windows and doors, and stay off porches. Do not lie on concrete floors and do not lean against concrete walls because lightning can travel through metal wires or bars in the concrete.
- Stay inside until 30 minutes have passed since you last heard thunder.
- If you are caught outdoors during a thunderstorm, there is NO safe place to be outside. If you can possibly run to a vehicle or building, DO so. If you absolutely cannot get to a safe shelter, there are things you can do that can lessen the chance of being struck by lightning: Stay away from tall, isolated trees or other tall and isolated objects. Lightning typically strikes the tallest object. That maybe you in an open field or clearing. Get to a low spot and

stay at least 15 feet apart from other members of your group so the lightning won't travel from one person to another if one of you is struck. Keep your feet together and sit on the ground. Do not lie flat on the ground. Being under a group of trees that are shorter than others in the area may be safer than being in the open. Don't hold any object that might conduct electricity, such as a shovel.

- If you are swimming or boating when a storm is approaching, get out of the water, and get away from it. If there is no time to get out of your boat and onto land, stay low and avoid contact with the water. If the boat has a cabin, go into the cabin.

## **9. Conclusion**

- For the above study in the home village, different houses in the village are visited in different phases.
- A log book was maintained to understand the date and time of visit to different residence.
- Data was collected from the already issued electric bill from the electricity board. Apart from this the data was collected to understand the different electrical appliances used for domestic purpose.
- From the study of the electric bill, we have learnt the calculation of electric consumption vs electrical appliances.
- The bar graphs are drawn to understand the rate of consumption of electricity per house.
- Precautions are given to the residence about how they can reduce the consumption of electricity.