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

COMMUNITY SERVICE PROJECT REPORT

By

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II B.Sc,MPC EM

Topic: Electric power Consumption

Under Mentor

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Visakhapatnam.

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.NVS Bhagavan,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 valuabtion and contribution towards the project.

- I would like to thank my project mentor **Dr.NVS Bhagavan** 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 Balaga Dharma Rao, B.Sc, MPC English 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 Mentor

Date: Dr.NVS Bhagavan

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 back ground, 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 chappabuchampeta.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

1.About my village:

My village is a small village with a population of only 600 hundred people. My village's name is Karajada. It is 110km 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.

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	House 7
Name of the Respondent /Gender	Balaga Appa Rao/male	Panga Satyam/Male	Aakasapu Nageswara Rao/Male	Patcgagantula umamasewara Rao/Male	Patcgagantula Santha Rao/Male	Dunga Subhadra/ Female	Balaga Sriramulu/ Male
Age	51	78	67	25	49	55	76
Village /Mandal	Karajada / Srikakulam	Karajada/ Srikakulam	Karajada/ Srikakulam	Karajada/ Srikakulam	Karajada/ Srikakulam	Karajada/ Srikakulam	karajada/ Srikakulam
I. Social Status of Study Village/Area	Karajada	Karajada	Karajada	Karajada	Karajada	Karajada	Karajada
a) Geographical and Administrative location of the village:	Pedda veedhi/ karajada	Pedda veedhi/ Karajada	Pedda veedhi/ Karajada	Pedda veedhi/ Karajada	Pedda veedhi/ Karajada	Pedda veedhi/ Karajadai	Pedda veedhi/ Karajada
b) Caste Profile:	BC-D	BC-D	BC-B	BC-A	Bc-A	Bc-D	Bc-D
c) Religion Profile:	Hindu	Hindu	Hindu	Hindu	Hindu	Hindu	Hindu
d) Education Profile:	3rd	10th	1st	Inter	ITI	Nill	5th
e) Occupational profile:	Farmer	Farmer	Tailor	Worker	.....	.....	Farmer
f) Natural Resources:	Land	Land	Land	Land	Land	Land	Land
g) Lives stock resources:	Land	Land	Land	Land	Land	Land	Land
h) Health profile:	Healthy	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	Post office and Drinking water

Section I	House8	House 9	House 10	House 11	12	House 13	House 14
Name of the Respondent /Gender	Balaga Kuramanna/Male	Balaga Appala Naidu/Male	Menda Thavudu/Male	Dunga Appala Raju/ Male	Balaga Appala Suri/Male	Gurram Appala narasamma/ Female	Balaga pedanna/ Male
Age	50	94	50	45	55	70	60
Village /Mandal	Karajada/ Srikakulam	Karajada/ Srikakulam	Karajada/ Srikakulam	Karajada/ Srikakulam	Karajada/ Srikakulam	Karajada/ Srikakulam	Karajada/ Srikakulam
I. Social Status of Study Village/Area	Karajada	Karajada	Karajada	Karajada	Karajada	Karajada	Karajada
a) Geographical and Administrative location of the village:	Pedda veedhi/ Karajada	Pedda veedhi/ karajada	Pedda veedhi/ Karajada	Pedda veedhi/ karajada	Pedda veedhi/ Karajada	Pedda veedhi/ Karajada	Pedda veedhi/ Karajada
b) Caste Profile:	BC_D	BC_D	BC_D	BC_D	BC_D	BC_D	BC_D
c) Religion Profile:	Hindu	Hindu	Hindu	Hindu	Hindu	Hindu	Hindu
d) Education Profile:	10th	3rd	Nill	5th	Nill	Nill	8th
e) Occupational profile:	Farmer	.....	Farmer	Farmer	Farmer	.....	Farmer
f) Natural Resources:	Land	Land	Land	Land	Land	Land	Land
g) Lives stock resources:							
h) Health profile:	Healthy	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	Post office and Drinking water

Section I	House15	House 16	House 17	House 18	House 19	House 20
Name of the Respondent /Gender	Potnuru Bangarusetti/ Male	Velamala Ramanamma / Female	Sudharshan Swathi/ Female	Chitti Ramu/ Male	Chitti Laxmana/ male	Silla Ramanayya /male
Age	75	35	34	37	40	62
Village /Mandal	Karajada/ Srikakulam	Karajada/ Srikakulam	Karajada/ Srikakulam	Karajada/ Srikakulam	Karajada/ Srikakulam	Karajada/ Srikakulam
I. Social Status of Study Village/Area	Karajada	Karajada	Karajada	Karajada	Karajada	Karajada
a) Geographical and Administrative location of the village:	Pedda veedhi/ karajada	Pedda veedhi/ Karajada	Pedda veedhi/ Karajada	Pedda veedhi/ Karajada	Pedda veedhi/ karajada	Pedda veedhi/ Karajada
b) Caste Profile:	OC	BC-D	BC-B	BC-D	BC-D	OC
c) Religion Profile:	Hindu	Hindu	Hindu	Hindu	Hindu	Hindu
d) Education Profile:	Nill	8th	10th	5th	Nill	7th
e) Occupational profile:	Worker	Labour	Labour	Farmer	Labour	Business
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

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	NO	NO	NO	NO	Yes
d) Agricultural land used for _____ crops	O.19	0.40	.....	.....	.....	.....	2.0
e) Type of cooking fuel used: LPG / Kerosene/ Electricity/ Wood/ others specify	LPG	LPG	LPG	LPG	LPG	LPG	LPG
f) Do you have vehicle: Two wheeler/ Auto/ Car/ Any other vehicle	Two wheeler	No	No	Two wheeler	Two wheeler	No	Two wheeler
g) Name of the Govt. Schemes received: (Jagananna Vidhya Deevena / Jagananna Vasathi Deevena/ Raithu Bharosa / Any other)	Raithu Bharosa /Jagananna Vidya deevena/jagananna vasathi deevena/Ysr Cheyutha	Raithu Bharosa/ Amma vodi	Ysr pension Kanika/ Ysr netanna nestham	.....	.....	Raithu Bharosa	Raithu Bharosa/ Ysr pension Kanuka

Section II	House8	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	Yes	NO	Yes	Yes
d) Agricultural land used for _____ crops	1.0	0.50	0.50	1.50 -------	.....	0.20	1.50 ---------
e) Type of cooking fuel used: LPG / Kerosene/ Electricity/ Wood/ others specify	LPG	LPG	LPG	LPG	LPG	LPG	LPG
f) Do you have vehicle: Two wheeler/ Auto/ Car/ Any other vehicle	No	No	No	Two wheeler	No	Two wheeler	No
g) Name of the Govt. Schemes received: (Jagananna Vidhya Deevena / Jagananna Vasathi Deevena/ Raithu Bharosa / Any other)	Raithu Bharosa/ Ysr cheyutha/ Amma vodi	Raithu Bharosa	Raithu Bharosa/ Jagananna Vidya deevena/ Jagananna vasathi deevena	Ammavodi/ Jagananna vidya deevena/vasath Deevena/raithu bhorasa/ Ysr asara	Ysr cheyutha	Jagananna vidya deevena/va sathi deevena/raithu Baroda/jagana nna chedodu	Ammavoodi /Jagananna vasathi deevena/ Amma vodi/ Ysr pension Kanuka

Section II	House15	House 16	House 17	House 18	House 19	House 20
a) Source of Income:	56,000	47,000	58,000	45,000	50,000	43,000
b) Type of House Building: Own/Rental	Own	Own	Rented	Own	Own	Own
c) Availability of Agricultural land: Yes/No , If Yes	NO	NO	NO	Yes	NO	NO
d) Agricultural land used for _____ crops	.....	.....	.....	0.10	.....	------
e) Type of cooking fuel used: LPG / Kerosene/ Electricity/ Wood/ others specify	LPG	LPG	LPG	LPG	LPG	LPG
f) Do you have vehicle: Two wheeler/ Auto/ Car/ Any other vehicle	Two wheeler	No	No	No	No	Two Wheeler
g) Name of the Govt. Schemes received: (Jagananna Vidhya Deevena / Jagananna Vasathi Deevena/ Raithu Bharosa / Any other)	Ysr pension kanuka/ Ysr Asara	Amma vodi	Ysr pension kanuka	Ammavoodi /Raithu bharosa	Amma vodi	Ysr pension kanuka/ Ysr asara

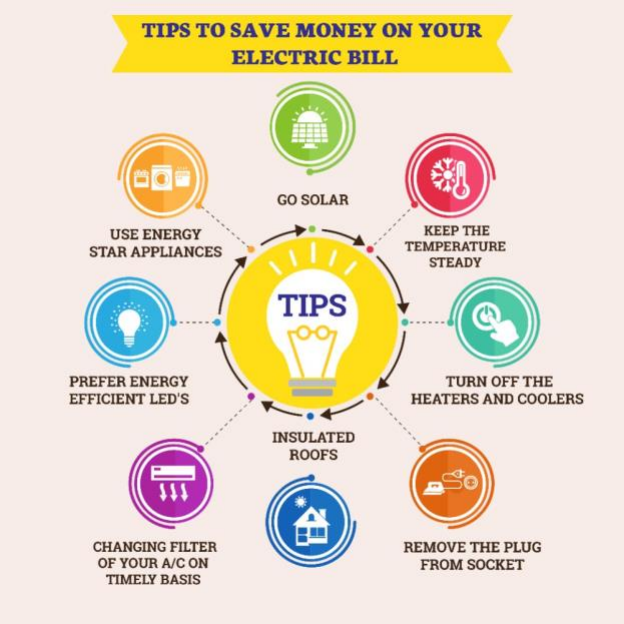
Section III	House1	2	3	4	5	6	House 7
1) Do you have electricity supply: Yes / No	Yes	Yes	Yes	Yes	Yes	Yes	Yes
2) If yes: i] Number of working bulbs/tube lights: ii] Type of using bulb/Tube lights: LED / CFL/or any other	04 LED/FLOROSCENT	04 LED/FLOROSCENT/ CFL	3 LED/CFL	03 LED/CFL	07 LED/CFL/ FLOROCIENT/TUNGSTEN	04 LED/CFL/ TUNGSTEN	07 LED/CFL/ FLOROSCENT/TUNGSTEN
iii]Each bulb Volts: iv] Number of working fans:	36w 04	36w 03	36w 02	36w 02	36w 03	36w 02	36w 03
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 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 Forty five rupees	One hundred Thirty rupees	One hundred rupees	One hundred fifty rupees	Two hundred forty rupees	One hundred twenty five rupees	Two hundred Fifteen Ruppes

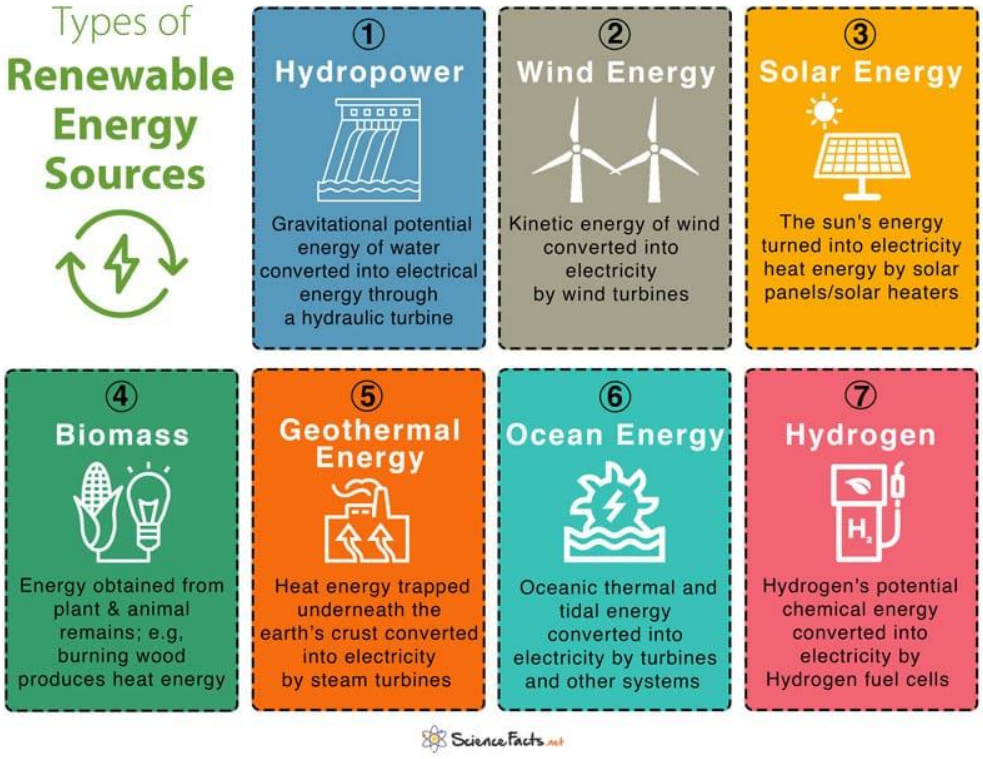
7) Any issue related to electricity?	No	No	No	No	No	No	No

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	03 LED/CFL	02 LED/ TUNGSTEN	03 LED/CFL/ TUNGSTEN	07 LED/CFl/ FLOROSCENT	03 LED/CFL/ TUNGSTEN	04 LED/CFL/ TUNGSTEN	4 06 LED/CFL/ FLOROSCENT/TUNGSTEN
iii]Each bulb Volts: iv] Number of working fans:	36w 02	36w 02	36w 03	36w 03	36w 02	36w 02	36w 02
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 thirty rupees	One hundred rupees	One hundred forty rupees	Two hundred ten rupees	One hundred seventy rupees	One hundred Fifty five rupees	One hundred thirty eight rupees
7) Any issue related to electricity?	No	No	No	No	No	No	No

Section III	House15	House 16	House 17	House 18	House 19	House 20
1) Do you have electricity supply: Yes / No	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	04 LED/CFL/ TUNGSTEN	4 LED/CFL/ FLOROSCENT	03 LED	06 LED/CFL/ TUNGSTEN	05 LED/CFL/ FLOROSCENT/TUNGSTEN	08 LED/CFL/ FLOROSCENT/TUNGSTEN
iii]Each bulb Volts: iv] Number of working fans:	36w 03	36w 03	36w 02	36w 03	36w 03	 04
v]Refrigerator / AC / Geyser /electric cooker / heater /Micro-oven or any other appliances	No	No	No	No	No	No
3) Are You using electricity for agriculture? Yes/ 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 If yes: how much power generate monthly?	No	No	No	No	No	No
5) How many devices running by using solar panels?	No	No	No	No	No	No
6) Monthly electricity bill: --------in Rupees [collect proof]	One hundred ninety rupees	One hundred eighty four rupees	One hundred sixty five rupees	Two hundred ten rupees	One hundred eighty eight rupees	Two hundred ninety five rupees
7) Any issue related to electricity?	No	No	No	No	No	No

5. Awareness about power consumption





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 పైన	9.75

6. Power calculation of each house

Name of the Owner	Total Energy Consumption of tube lights/fans for one month In units	Using power bill per month
Balaga Appa Rao	52.8	189.00
Panga Satyam	53.1	189.00
Aakasapu Nageswara Rao	37.2	189.00
Patchagantula Umamasewara Rao	37.2	189.00
Patchagantula Santha Rao	69.3	189.00
Dunga Subadra	42.6	189.00

Balaga Sriramulu	69.3	189.00
Balaga Kuramanna	37.2	189.00
Balaga Appala Naidu	31.8	189.00
Menda Thavudu	47.7	189.00
Dunga Appala Raju	69.3	189.00
Balaga Appalasuri	37.2	189.00
Gurram Appalanarasamma	42.6	189.00
Balaga Pedanna	53.4	189.00
Potnuru Bangarusetti	53.1	189.00
Velamala Ramanamma	53.1	189.00
Sudharshan Swathi	37.2	189.00

Chitti Ramu	63.9	189.00
Chitti Laxmana	58.5	189.00
Silla Ramanayya	85.2	409.00

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 ^{0}C to 25 ^{0}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.

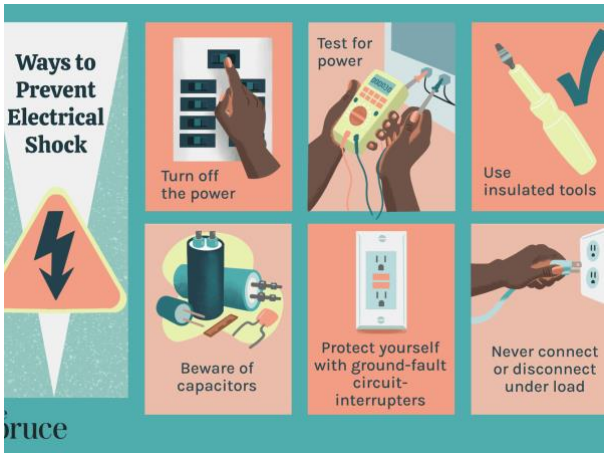
Keep electric appliances, outlets, and light bulbs away from flammable liquids or products that produce vapors.

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 electricity.