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# Sustainable Development Goals in Quality Education

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**Abstract:** It basically describes about the quality education the one has played role in sustainability development goals. Quality education provides foundation for equality in society. Quality education basically deals with giving equal education to everyone. In this we have solved the problem using excel sheet how the students face the problem in school. After finding out the solution we have drawn the graph to compare the graph with the exact solution.

**Keywords:** Quality Education, Excel Sheet, Energy generated, Energy Deficit

## I. INTRODUCTION

Quality Education enables people to develop all of their attributes and skills to achieve their potentially as human beings and members of society. Elements of quality education include well trained teachers, availability of books, active participation of pupils through child centered learning and appropriate infrastructure. When we deal with quality education we mean a standard education must be given to all, the content or syllabus must be same for all and improve with passage of time.

The goals of quality education are

- A. Academic Excellence.
- B. Improved academic standards.
- C. Applied learning.
- D. Lifelong academic skills.

## II. METHODOLOGY

- A. Imagine a school in village where students face the problem. As a quality engineer, how will you overcome their problem with the help of computational tool?

Devices	Watts	Hours
Computer	40	3
Phone	2.24	8
Stabilizer	25	3
DC light	40	4
DC water pump	20	2
Fan	60	2
Xerox	40	6
Printer	50	4
Projector	80	3
TV	70	2
Speaker	80	3
Fridge	60	4

No of Components	Total energy	Monthly sunshine hr
3	360	9.6744
2	35.84	10.2758
1	75	9.6129
6	960	9.86667



1	40	9.6774
2	240	3.6
1	240	3.2903
3	600	3.5484
1	240	6.1667
1	140	8.7096
1	240	9.5
3	720	9.6774

Energy Consumed	Power rating
120	41.333416
17.92	5.813010504
75	26.00672014
160	54.05403579
40	13.77780533
120	111.1111111
240	243.1389235
200	187.8781047
240	129.7290285
140	53.58072319
240	84.21052632
240	82.666832
Max	243.1389235
Average	86.10835309
Avg*1.5	129.1625296

Energy Generated		
A	B	C
243.1389235	86.10835	129.1625
243.1389235	86.10835	129.1625
243.1389235	86.10835	129.1625
243.1389235	86.10835	129.1625
243.1389235	86.10835	129.1625
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243.1389235	86.10835	129.1625
243.1389235	86.10835	129.1625

Energy Deficit		
A	B	C
123.1389	-33.8916	9.16253
225.2189	68.18835	111.2425
168.1389	11.10835	54.1625
83.13892	-73.8917	-30.8375
203.1389	46.10835	89.1625
123.1389	-33.8917	9.1625

3.138924	-153.892	-110.838
43.13892	-113.892	-70.8375
3.138924	-153.892	-110.838
103.1389	-53.8917	-10.8375
3.138924	-153.892	-110.838
3.138924	-153.892	-110.838

The above has been solved with the help of certain formula:

Total energy= Watt\*Hours\*Number of components.

Energy consumed= Watt\*Hours

Powerrating=  $\frac{\text{Energy consumed}}{\text{Overall efficiency*No of sunshine hours}}$

Energy generated= Power rating\*no of sunshine hours\*overall efficiency

In this problem we have assumed overall efficiency as 0.30

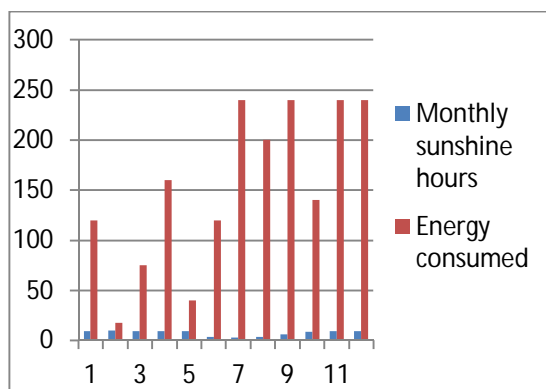
Power rating max = A

Power rating average = B

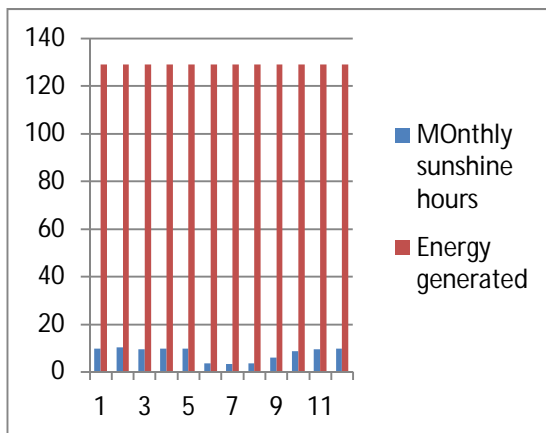
Power rating avg\*1.5 = C

### III. RESULTS AND DISCUSSIONS

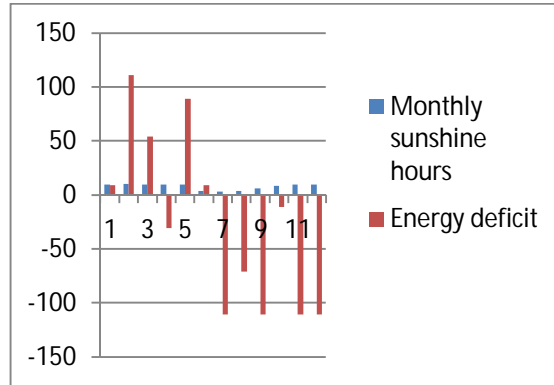
The results obtained for above method is validated and the graph is plotted for x and y axis.



Graph 1: Energy consumed v/s Monthly Sunshine hours, x-axis monthly sunshine hours, y-axis energy consumed.



Graph 2: Energy generated v/s monthly sunshine hours, x-axis monthly sunshine hours, y-axis energy generated.



Graph 3: Energy deficit v/s monthly sunshine hours, x-axis monthly sunshine hours, y-axis energy deficit

#### IV. CONCLUSION

The results obtained by this tells us that

- A. The graph is plotted for energy consumed v/s monthly sunshine hours.
- B. The graph is plotted for energy generated v/s monthly sunshine hours.
- C. The graph is plotted for energy deficit v/s monthly sunshine hours.
- D. Number of sunshine hours is calculated for each month.
- E. Energy consumed is calculated for watt\*hours.

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