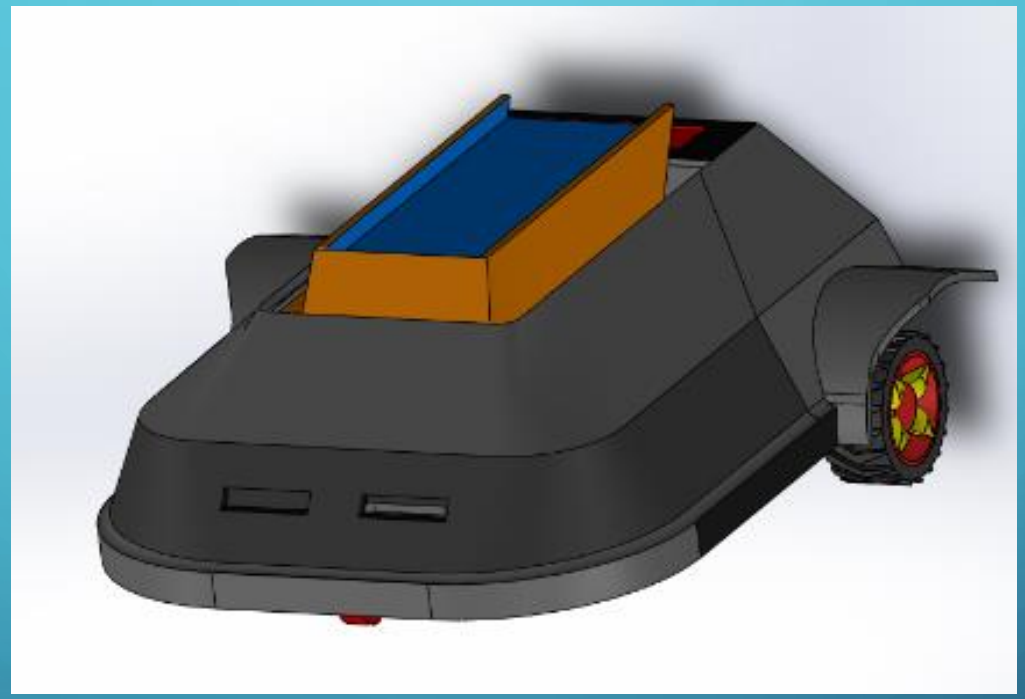
# AUTOMATIC SOLAR LAWN MOWER



BY

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# SYNOPSIS

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- BATTERY EFFICIENCY
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# INTRODUCTION

- Lawn is defined as that portion of a yard or land area covered with moved turfgrass plants.

## LATE 12TH AND EARLY 13TH CENTURIES

The cricket of those times was the first team sport played on turfgrass.

The "bowling greens" were the forerunner of our modern fine turfgrasses that were used on tennis courts, croquet courts, and golf putting greens.

## 15TH CENTURY

The beginning of turf grass being used within the private ornamental lawns and within the public parks spaces of those days.

## 19TH CENTURY

The first mechanical lawn mower was invented by Edwin Beard Budding in 1830. Invention of an effective mechanical mowing device allowed more extensive use of mowed turfgrass areas as part of ornamental gardens and larger recreational areas such as parks, the latter allowed less affluent persons to enjoy mowed lawns.

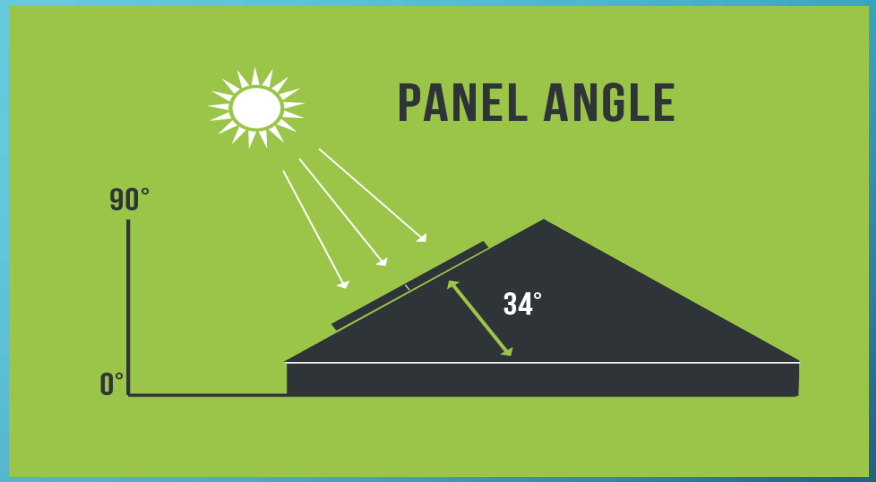
## 1890

Mass production of mechanical mowers made them available to the public at an affordable price.

# SOLAR PANEL EFFICIENCY

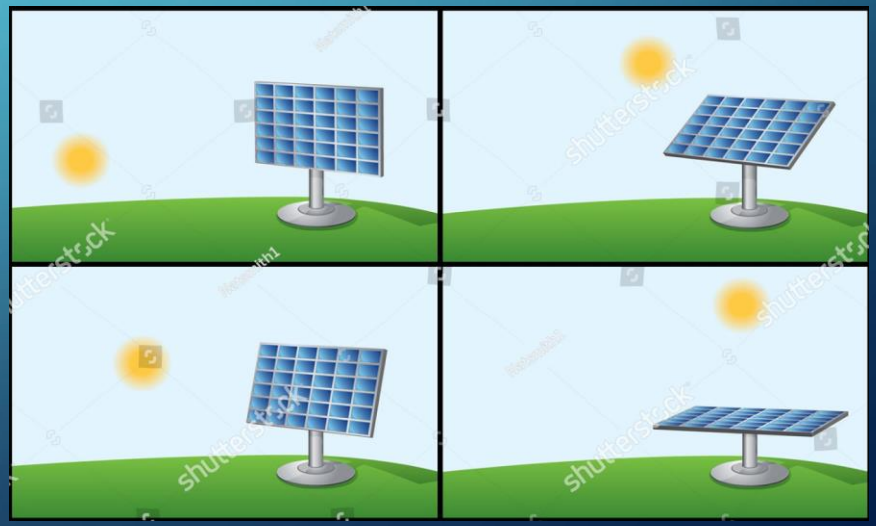
Old system:

- Panel is fixed at a certain angel where the efficiency is less due to sun's movement.

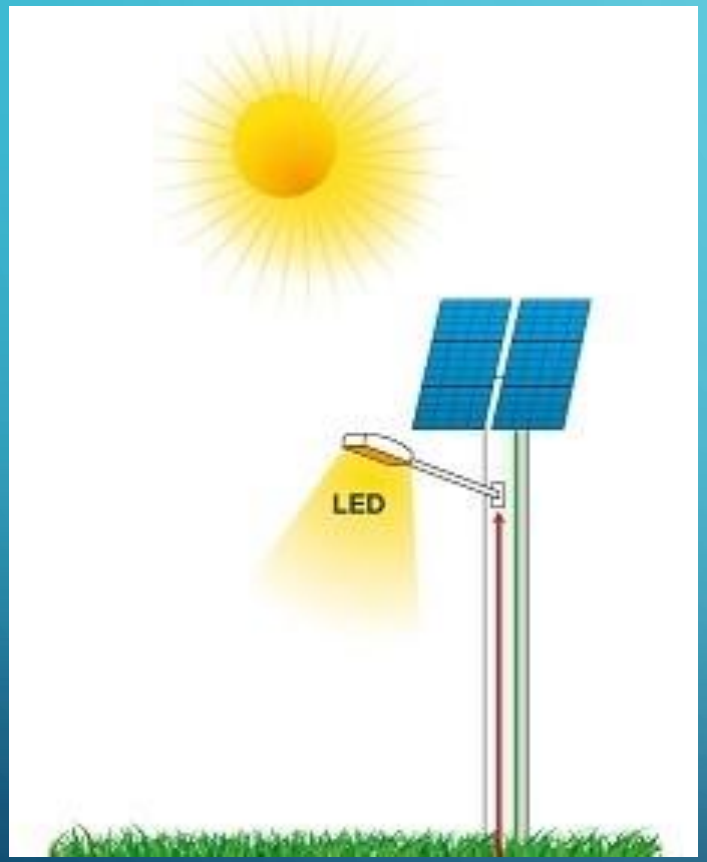


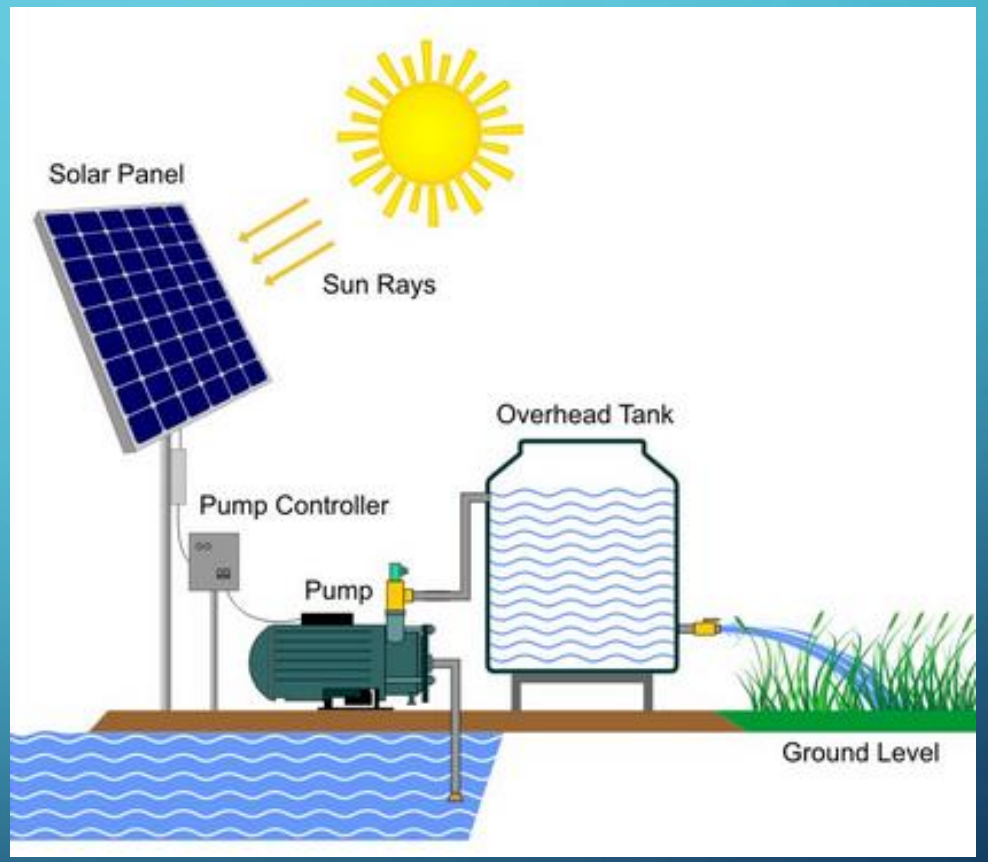

New proposed system:

- Here the problem is solved by making the panel rotate itself towards the direction of sun.



# USES OF SOLAR PANEL SYSTEM



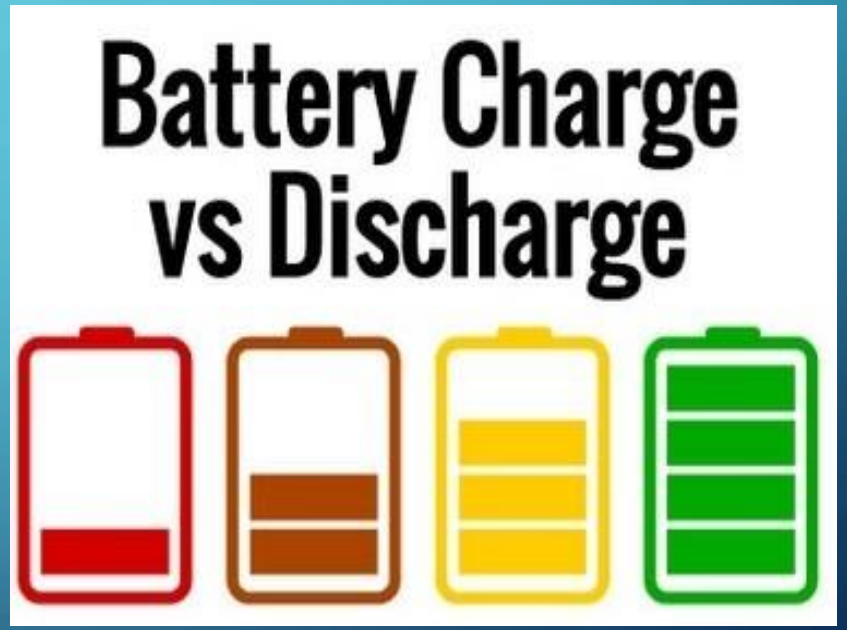
# BATTERY EFFICIENCY

Old system:

- Charging time of the battery is equal to the discharging time of the battery in present lawn mowers

New proposed system:

- Here we are decreasing the charging time and increasing the discharging time by stepping up the voltage.



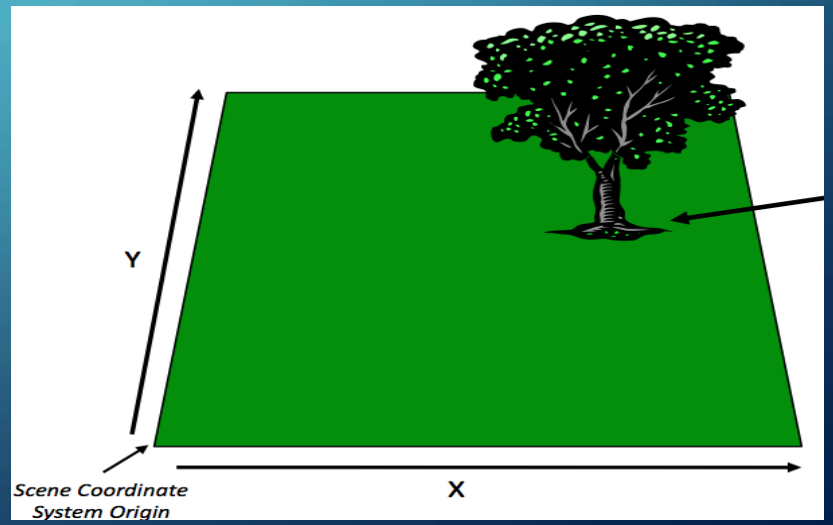
# COORDINATE SYSTEM

Old system:

- There are charging stations to every lawn mower and guide wires which means that the present environment is disturbed.

New proposed system:

- We are using coordinate system to find the borders of lawn so that the present environment is not disturbed.



# BLADES

Old system:

- Normal blades used in the lawn mower cuts the grass uneven.
- Normal blades damages any object or wires in its way.

New proposed system:

- We are using laser cutting blades to reduce the damage to both grass on its cute edge and other objects when goes in contact with blades.

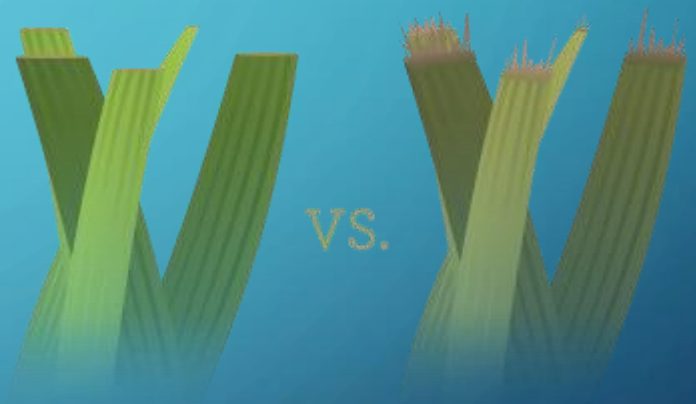
# LIFE OF GRASS

Old system:

- Normal blades used in the lawn mower cuts the grass uneven and this damages the grass and reduces the growth.

New proposed system:

- We are using laser cutting blades which reduces damage to grass on its cute edge this won't disturb grass growth.



# BAGGING

Old system:

- Here there is a requirement of bag for storing the grass.

New proposed system:

- The blades used will cuts the grass into small chip which is used as fertiliser for the grass itself so no bagging required.

# ADVENTAGES OF NEW/PROPOSED SYSTEM

- Increase usage of Renewable resource.
- Does not need any external power supply.
- Does not emit any harmful gasses (Eco-friendly).
- No messy external cable.
- No supervision required.
- Can be controlled manually using the app.
- Increase solar energy efficiency.
- Increase in working time.
- Damage to objects like wires is reduced.
- Solar panel set can be used in other systems.
- No noise pollution.

# SCOPE OF PROPOSED IDEA

- In India at present there is no automatic lawn mowers so there is a high success rate and this solar panel system will be used in large scale.
- Solar panel system can be even used in street lights, home appliances, etc.

# CONCLUSION

As this project is about increasing the usage of renewable energy in large scale which the government is encouraging now a days we have high possibility of success and also reduces the time taken to mow the lawn. By all count, and with proven results, it is no wonder that this project will be success.


Thank you!