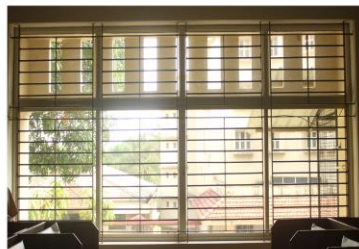




Eco-friendly initiatives- Conservation of Trees



The institution prides itself on all its eco-friendly initiatives that aim at ensuring a sustainable educational environment within the college campus. Well- developed *Arboretum*, the rich green campus, installation of solar panels for alternative sources of energy, the measures for water harvest, the Water Re-cycling Plant, unique practice of planting seed balls, saplings, regular maintenance of re-chargeable bore wells, procedure for minimal use of water and usage of cloth bags instead of plastics reflect the eco-friendly stance of the institution. In addition to these, the importance is given to the alternative sources of energy and the use of iron and fiber materials for making doors, windows, ventilators and furniture in the construction of hostels, auditorium, GYM and college buildings.



Top most priority is given to alternative sources of energy instead of firewood while making doors, windows and ventilators. The energy required for meeting various day to day needs in the college campus especially in hostels is very high. It is the firm belief that the sustainable consumption of energy is one of the best ways to conserve trees has made the institution to adopt a model of eco-friendly approach. With this uncluttered notion, the institution has given utmost preference to pro-environmental practices in the college campus and hostels.

Siddavana Gurukula, A Free Boys Hostel, PG and UG hostels have adopted alternative sources energy for cooking food and providing hot water facility to the students. SDM UG and PG hostels are using two-plus cylinders containing 95 kg gas per month and it costs Rs.4,500. It is important to note that LPG is more energy concentrated compared with wood. LPG transfers 50 per cent of its energy to the stove compared to the 10 to 20 per cent of wood. Higher ratio wood consumption leads to a lot of pollution because firewood creates exhaust smoke. Indoor air pollution is avoided when LPG is used for the purpose of food preparation. An important observation on the disadvantages of firewood usage made in the research-based books titled **Cooking with Gas: 2018 Update**, '**The 2018 Tracking SDG7: Energy Progress Report**'- 'using firewood for cooking results in several million premature deaths worldwide every year'.

Quantity and cost of Firewood

- In *Siddavana Gurukula*, 300 students are staying, 120 quintals of firewood is the required to cook every month. For both UG and PG hostels, in which 780 students are staying, 450 quintals of firewood is used to burn per month. Per quintal firewood, it costs around Rs 700. The institution used to spend totally Rs **3,99,000** per month for the firewood in earlier days. By using the LPG Rs 4,500 is spent every month and therefore –570 quintals of fire wood saved.

Conservation of trees through alternative energy sources

- By using iron materials while making doors, windows and ventilators
 - Totally 489 Ft firewood consumption avoided in the *Siddavana Gurukula*. It denotes the conservation of 26 trees
 - Totally 943.5 Ft firewood consumption avoided in the college campus. It indicates conservation of 59 trees



- Totally 61 Ft firewood consumption avoided in PG Centre Boys Hostel. It denotes the conservation of 105 trees
- Totally 66 Ft firewood consumption avoided in PG Centre Girls Hostel. It signifies the conservation of 122 trees.
- By using iron materials to make 124 doors and 48 windows in the PG Center, totally 70 trees saved

Final analysis on alternative energy usage system in the campus shows that the conservation of 370 trees is done per year. As per the estimation, two windows, two doors and nine ventilators can be made from one tree. It varies while consideration of the trees pertaining to different species and their cost would be very high.

Digitalized Version of *Manisha*, the college Magazine

With the objective of providing platform for the different kinds of write-ups written by the students, College is bringing annual magazine *Manisha*. Instead of printing and distributing printed 2500 copies of the magazine which cost around 3 lakh rupees, the institution has preferred its digitalized version. Through this, College is saving **2.5 tons of papers** (Wood)

Online Exam

Online examination is a unique initiative of the institution. By conducting online exam every semester the college is able to save one oak tree of sixty feet height per exam.

Other initiatives

- All internal communications are done through emails including financial approvals, CL, Budget Proposals.
- Maintenance of single office copy for multiple purposes
- Reuse of envelopes for internal use
- Communication to students through emails, website and electronic display board
- Display of notices on digital notice boards
- Well-equipped multi-gym and weight-lifting room with a capacity of 2,298 sq.ft (First Floor) and 2,298 Sq. Ft (Ground Floor) constructed by using alternative materials



- Well-equipped and spacious SDM Indraprastha Auditorium with a capacity of 14,130 Sq. Ft constructed without the use of wood
- Nearly 490 desks and benches with the size of 3.6'1.3 and 259 chairs with writing pads (1X1.7) and 23 tables with size 6X3 in PG Center are used by avoiding the wood
- Nearly 880 desks and benches and 747 tables are used in degree campus by using the alternative materials

Institutional Initiative

Table-1

Desk and Bench using alternative materials to conserve Trees

Sl.No	Unit/ Building	Quantity of Desk and Benches (Usage of alternative materials)	Quantity of Tables (Usage of alternative materials)	Quantity of Chairs (Usage of alternative materials)	Wood Saved in terms of Trees
01	Degree Campus	880	747	-	228
02	PG Center	490	23	259	74

Table-2

Doors and Windows using alternative materials to conserve Wood/Trees

Sl.No	Unit/ Building	Quantity of Doors using alternative materials	Quantity of Windows using alternative materials	Wood Saved in terms of Trees
01	Both UG and PG Wings	740 Doors	740 Windows	370 Trees



Table-3

Conducting Online Exam to conserve Wood/Trees

Sl.No	Unit/ Building	Avoided usage of papers' quantity (Every Semester)	Wood Saved in terms of Trees
01	Both UG and PG Wings	2,44,800 pages	30 oak trees of sixty feet height

Table-4

Digitalized Version of *Manisha* Magazine to conserve Wood/Trees

Sl.No	Unit/ Building	Avoided quantity of Printed copies	Wood Saved in terms of Trees
01	For the students of both UG and PG Wings	2500 copies	2.5 tonns of papers (Wood)

Table-5

**Buildings constructed using alternative materials (Multi-gym,
Indraprastha Auditorium, Vanaranga Theatre)**

Sl.No	Unit/ Building	Construction without use of wood	Wood Saved in terms of Trees
01	SDM Indraprastha Auditorium	A capacity of 14,130 Sq. Ft	80 Trees
02	Well-equipped multi-gym and	A capacity of 2.298 Sq. Ft (First	80 Trees



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	weight-lifting room	Floor) and 2,298 Sq. Ft (Ground Floor)	
03	Vanaranga Theatre	A capacity of 4000 Sq. Ft	35 Trees