



# ORCHID



ISSUE 6.1 / 2022

**ART & DESIGN**  
MAGAZINE

EDITOR'S  
PICK



# KINETIC SCULPTURE

## ACHIEVEMENT

### 3<sup>RD</sup> PRIZE IN ROBONGIERS ROBOTICS FEST

Organised by Pathways School Gurgaon  
from 23 to 26 February 2022

Today's world is driven by competition, wealth and authority. The run for authority is ever widening and history has shown that we as humans can go to unimaginable lengths to have an upper hand. There being a very fine line between expectations and reality, people who walk that extra mile for that line to go finer, take some steps that qualifies as being particularly 'unimaginable'. This mile can trap a lot of innocent intentions and dreams alongside their own, which brings us to the world we live in today.

My sculpture depicts those intentions and aspirations alongside the very prevalent competition and the lengths people go to, to achieve them even though it could be stepping into the territory of being wrong. The hands emerging from the globe, reaching for heights, represent the ever so prevalent and obvious element of competition in our society. The fact that one might not be aware of who 'one upped' them in an aspect of which they were so bodeful. The kinetic element in the sculpture goes to show how desperate people are to fulfill their aspirations and that act is ever increasing. The man being chased represents all those who suffer owing to the hyper competitiveness, making the one who's chasing, overly devoted to the competition. The depiction is outlandishly strong because these lengths are often seen in our own society.

Artwork by Harshit Sharma (CDT Captain), Class 11, Thejose Epao, Class 10 & Nilav Prajapati, Class 4 (Sunnyside).



# Founders' Exhibition

Art Department



# FASHION SHOWCASE



NORZIN LHAMU



ANUSHCKA JOSHI



JIYA AGARWAL



ANUSHCKA JOSHI



NILASHA BHIMSARIA



JIYA AGARWAL

CDT Founders' Exhibition



ANGREE KILLINGPI



NILASHA BHIMSARIA

ANUSHCKA JOSHI



Students made patterns on fabrics using the technique of clamp dyeing. The garments were made by draping and binding them together with the help of rubber bands and plastic buttons.

PC: Zainab Khan & Luqmaan Ahmed

# Founders' Exhibition

Craft Design & Technology Centre







# Christmas Installation

**F**ounders' at The Assam Valley School is not just any event that comes and goes; it is definitely one that is looked forward to the most. The 3-day CDT workshop towards the end of the Founders' Semester culminated in a grand installation spreading the Christmas aura of excitement and joy.



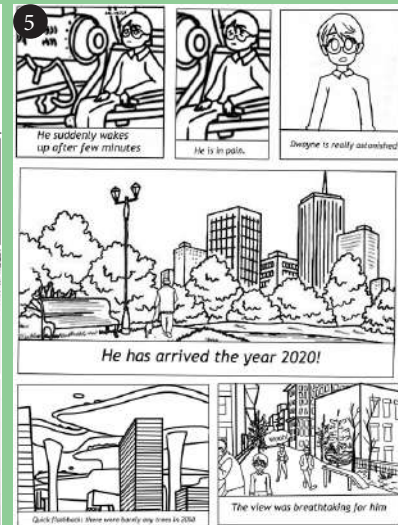
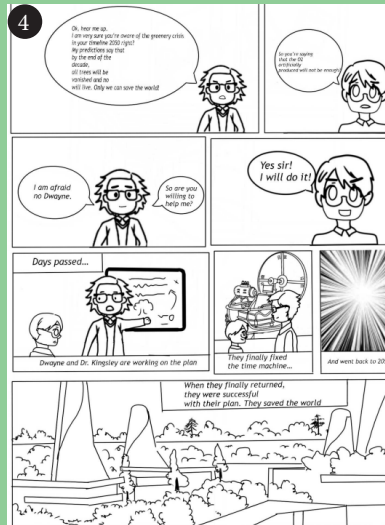
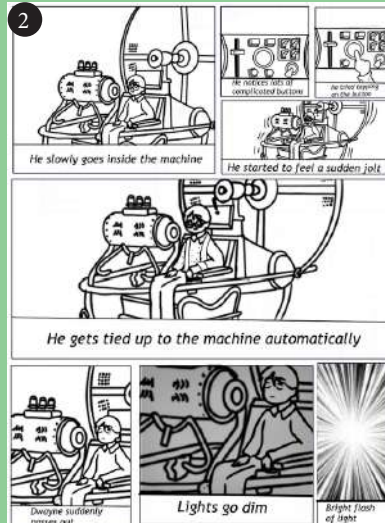
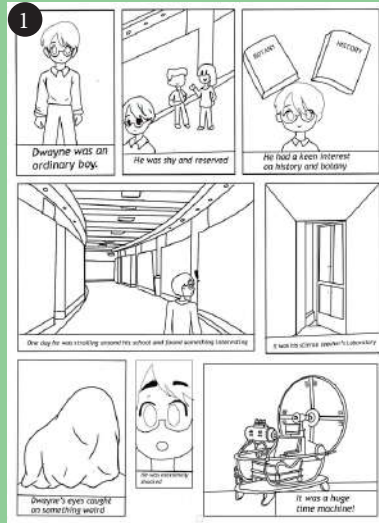




Artworks made by Lower School students during Art Workshop

# ROBONGIERS ROBOTICS FEST

## BY PATHWAYS SCHOOL



## AVS entry for Reading: AI Graphic Novel

by Harshi Kashyap (Art Captain), Class 11 & Tasmin Ahmed, Class 9

# SMART VILLAGE

Our school participated in the Robongiers Robotics Fest Competition in which we had to design a Smart Village.

The village we designed has a radius of 2 kilometres and is spread over an area of 12.57 km<sup>2</sup>. The village is divided into different sections which will all have different purposes.

**Housing:-** The village will have 750 houses which will accommodate around 3000 people. Each house will have an area of 2000 sq. ft. Every house will have its own lavatory for hygienic purposes. Every house will have 24 hrs water supply and electric services. It will also have facilities to house animals.

**Agriculture:-** An area of 6 km<sup>2</sup> will be reserved for agriculture where different crops will be grown during different seasons. The farm land will receive fertilisers from a biogas plant and will have irrigation facilities during the dry season.

The village will be administered by a 'panchayat' which would take care of the law and order of the village. It will also have a common market (Haat) and will house a school, which will provide primary and secondary education. It will include a hospital, a Waste Management Centre, emergency services, uninterrupted power supply and potable water.

Design by Dev Agarwal, Class 11 & Anikaith Anant Joshi, Class 9.



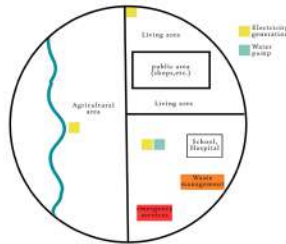
## Village management and living arrangement

The village has a radius of 2 kilometre and is spread over an area of 12.57 km<sup>2</sup>. The village is divided into different sections which will all have different purposes.

**Housing:-** The village will have 750 houses which will accommodate around 3000 people. Each house will have an area of 2000 Sq feet. Every house will have its own lavatory for hygienic purposes. Every house will have 24 Hrs water supply and electric services. It will also have facilities to house animals.

**Agriculture:-** An area of 6 km<sup>2</sup> would be reserved for agriculture where different crops will be grown during different seasons. The farm land will receive fertilisers from biogas plant and will have irrigation facilities during the dry season.

The village would be administered under the panchayat which would take care of the law and order of the village. It will also have a common market(Haat), it will also house a school, which will provide primary and secondary education. It also has a Hospital,Waste management centre, emergency services, continuous electricity and potable water.



## Energy

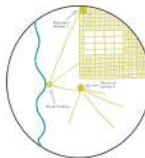
The village will be powered by the 2 MW platform created by GE renewable energy, with an estimated output of 2 MW, we plan to be able to power

|                   |      |
|-------------------|------|
| OUTPUT (MW)       | 2    |
| ROTOR DIAMETER(m) | 116m |
| HUB HEIGHTS(m)    | 80m  |
| FREQUENCY(Hz)     | 60Hz |
| IEC WIND CLASS    | HSHS |

Our wind turbine produces a total of about 2 mwh of power=2000 kWh(1 mwh=1000 kWh) and in total produces 2000 (energy produced) x 24 hours = 48000 kWh per day. The average 4 family household in a 2000 sq ft consumes approximately 30 kWh of electricity in a day.

Therefore our 750 homes will generate a total of 30kwh x 750= 22500 kWh

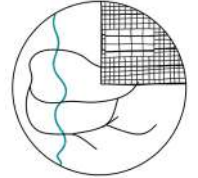
Which is 46.875% our estimated output, easily allowing us to compensate for sudden spikes in energy consumption and drops in production. In the event of a malfunction of the turbine, power can be temporarily generated in the waste management center where biogas is produced.



## Transportation

The village is internally connected by 2 lane roads made of concrete. The village will also have easy access to nearby towns and cities.

Electric bikes which can accommodate 2 people will be used. This will help reduce our carbon footprint. Heavier non-commercial(luggage etc.) loads can be carried in electric three wheelers that can be loaned via an online app for money, in a similar system to Yulu cycles, a company in bangalore. These 3 wheelers can be picked up and dropped off at designated zones, with a penalty fee if not done so. Most important of public areas are within walking distance of the main housing area of the village as well. Electrical tractors will be used for agricultural work.



## Waste mitigation

The village will strictly follow the concept of 3 R's: Recycle, Reduce, Reuse. The village will have an underground Sewage system which will be connected to all the houses. This system will then lead to the waste Management center where it would be purified and drained into the river.

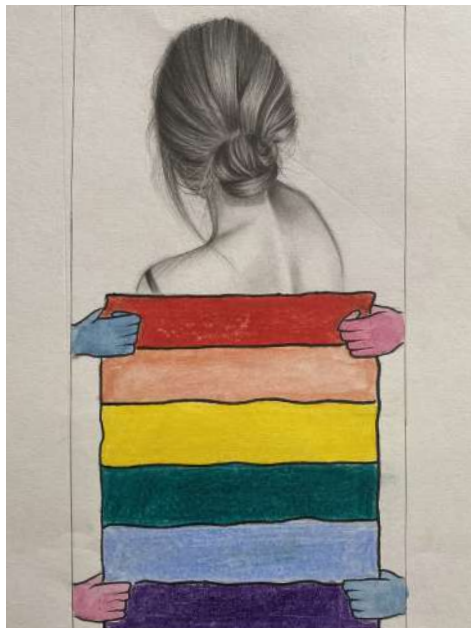


Agricultural waste such as hay, paddy etc. is usually burned however it will instead be collected and then anaerobically digested to give methane this biogas can be used for cooking by the villagers and can also be used to generate electricity in case of a malfunction in the wind turbine. This process will also give organic fertilisers as a by-product which can be used by the farmers. The solid non organic waste would be segregated and sent to recycling centres.

# Art Showcase

Art Department





**Artworks by:**

Anvita Dey, Class 10, Reemeya Mithi, Class 9, Anvita Dey, Class 10, Reemeya Mithi, Class 9.

Previous page: Top to Bottom, L to R: Harshi Kashyap, Class 11, Anvita Dey, Class 10, Reemeya Mithi, Class 9, Bhavya Kejriwal, Class 7.



Bhoroli House Mascot: Sculpture by Mr. Tapan Barui

The creatives published are the students' ideation and do not necessarily reflect the views of The Assam Valley School . Editor-in-Chief- Art: Harshi Kashyap . Editor-in-Chief-Design: Harshit Sharma. Art and Design Crew: Shrey Modi ,Yashraj Agarwal ,Krishna Agarwal , Raghav Agarwal, Anikaith A. Joshi . Published by: The Headmaster, The Assam Valley School . Faculty Advisor: Ms. Priyanka Joshi . Online link: [https://issuu.com/orchid-assamvalleyschool/docs/orchid\\_issue\\_6.1](https://issuu.com/orchid-assamvalleyschool/docs/orchid_issue_6.1) . Website: [www.assamvalleyschool.com](http://www.assamvalleyschool.com) . Email: [orchid@assamvalleyschool.com](mailto:orchid@assamvalleyschool.com)

Produced by  
Craft, Design &  
Technology Centre,  
AVS