NITI Aayog | ATAL INNOVATION MISSION

WORLD CHILDREN'S DAY 20 November

UNICEF-ATL
YOUNG CHAMPIONS

FOREWORD

NITI Aayog and UNICEF India have come together this Children's Day to provide an open platform to young children of India, to contribute towards sustainable development. The partnership presents an opportunity for these children to be placed at the centre of global conversations for every child through UNICEF.

On October 2, 2017, Atal Tinkering Labs had launched a six month long nationwide challenge called the Atal Tinkering Marathon, across six different thematic areas namely clean energy, water resources, waste management, healthcare, smart mobility and agri-technology. The objective was to encourage students to observe community problems and develop innovative solutions. From over 650 innovations received, only the top 30 were identified from 20 different states and Union territories across India.

These 30 teams were awarded with several prizes including a three month long ATL Student Innovator Program (ATL SIP) in partnership with industry and start-up incubators where students were trained on business and entrepreneurship skills. NITI Aayog would like to extend a big thank you to all the partner organizations – Intel India, Stratasys India, Learning Links Foundation, AIC-Aartech, Amrita TBI, Centre for Cellular and Molecular Platforms (C-CAMP) and TREC-STEP for their support towards the ATL Student Innovator Program.

The ATL Student Innovator Program is an effort to institutionalise a mechanism where high school students can work with university incubators to pursue their innovative and entrepreneurial ideas along with their education. These top 30 innovations are symbolic of a larger movement which is taking root in every school in every district across India. This Children's Day, top 6 teams have been selected that are being awarded the UNICEF ATL Young Champion Awards to celebrate innovation and recognise the young innovators of India.

Happy Tinkering 😊

WASTE MANAGEMENT
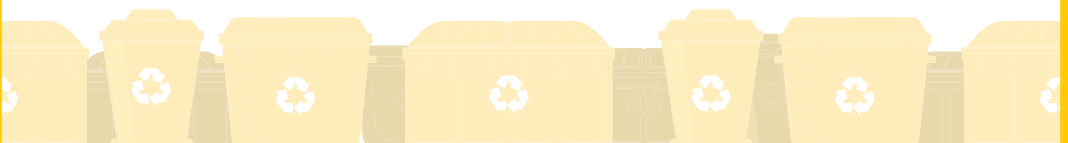
CHRISTUKULA MISSION HIGHER SECONDARY SCHOOL, Satna, Madhya Pradesh

CLASS
10

STUDENTS
Rachit Agrwal & Sadhak Jain

PROJECT NAME
GloboClean

DISTRICT
Satna

STATE
Madhya Pradesh

SUMMARY
GoboClean is a self-sustainable system for municipal corporation, officers and citizens to report and monitor cleanliness issues of the city.
The prototype developed is a working model that collects garbage from the water bodies of the city. It is equipped with guiding blinders and conveyor belt system to capture and collect.

HEALTHCARE

JNANA PRABODHINI NAVNAGAR VIDYALAYA,
Pune, Maharashtra

CLASS
10

STUDENTS
Shravanee Limaye, Jay Aherkar &
Shreya Gaikwad
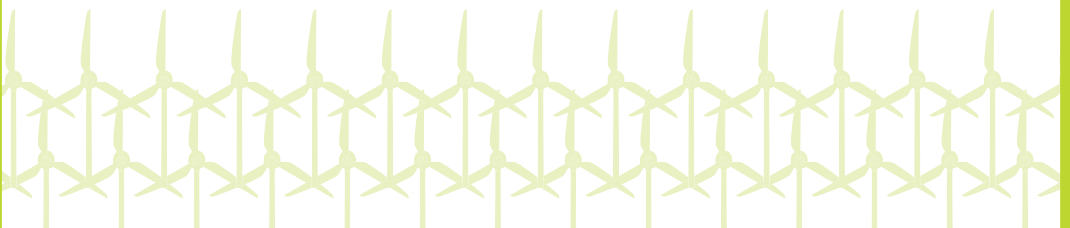
PROJECT NAME
Ayuspray

DISTRICT
Pune

STATE
Maharashtra

SUMMARY
This innovation has a spray of traditional indigenous Ayurvedic herbs to minimize harmful microbes present in the air. The system can be installed in a room which sprays the medicine across, at regular intervals. The system is targeted to be installed in schools, hospitals and public places.

CLEAN
ENERGY

VIVEKANANDA KENDRIYA VIDYALAYA, Jairampur, Changlang, Arunachal Pradesh

CLASS
11

STUDENTS
Amit Kumar Gupta, Arjun Chetry &
Jyotishka Das

PROJECT NAME
Solar Tracking Panel

DISTRICT
Changlang

STATE
Arunachal Pradesh

SUMMARY
This is a solar panel with sunlight tracking system. Adding to the conventional solar panel, the system is equipped with a mechanism which is capable to move the solar panel at the most optimum angle throughout the day. This substantially increases the efficiency of the solar panel. This is done via a Light Dependent Resistor (LDR) and servo motor mechanism controlled by arduino.

AGRICULTURE TECHNOLOGY

DELHI PUBLIC SCHOOL,
Nacharam, Telengana, Hyderabad

CLASS
11

STUDENTS
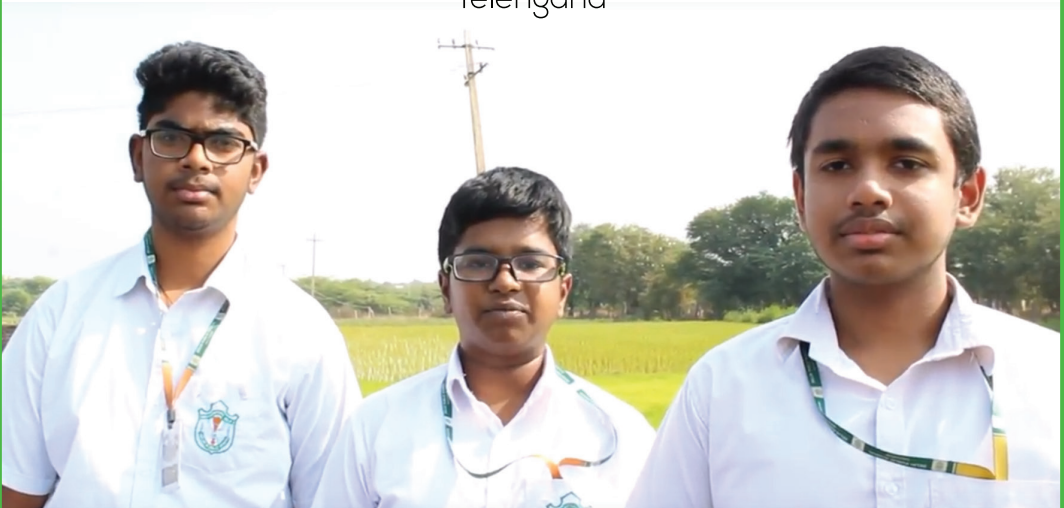Advaith Gowrishetty, Manikanta Chavvakula &
Manish Mallapur

PROJECT NAME
Farm Tech

DISTRICT
Hyderabad

STATE
Telengana

SUMMARY
The innovation aims at helping the farmers with economical and effective digital and technological solutions for their problems. It helps reduce the chances of crop failure and increases profits. This is done via an inventive IoT and electronic based system which monitors various parameters of the farm and educates farmers about possible situational remedies for their crops. A system with multiple sensors and actuators is installed in the farm which sends data to the farmer's mobile via the Farm Tech App. The farmer can remotely monitor and control his farm equipment via the app.

SMART
MOBILITY

DR. K.B. HEDGEWAR HIGH SCHOOL, Cujira, Bambolim, North Goa

CLASS
9

STUDENTS
Sanad Baligeri, Sumedh Prabhu Desai &
Lekhraj Surlakar

PROJECT NAME
Smart Headlight

DISTRICT
Bambolim, North Goa

STATE
Goa

SUMMARY
This innovation helps to prevent momentary blindness during night driving because of full glare/dipper lights. The system is an add-on attachment which can be installed in vehicles across the geography. The system is attached to the electronic control of the vehicle. When two of these are in range of each other, both communicate to each other and the dipper light is deactivated temporarily.

WATER RESOURCES
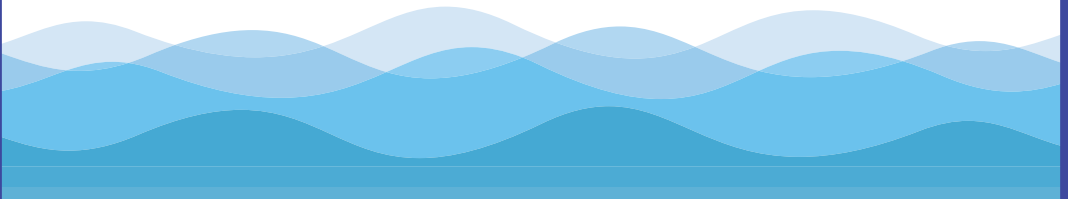
MAHARAJA AGRASEN MODEL SCHOOL, New Delhi

CLASS
12

STUDENTS
Satyam Prakash, Yash Soni &
Pranshu Kapoor

PROJECT NAME
Smart Tap

DISTRICT
Delhi

STATE
New Delhi

SUMMARY
A Smart Tap monitors and purifies water flowing through it.
The mechanism monitors water quality via the water flow, light sensors and
can segregate potable and non-potable water via multiple valves
controlled by arduino.