

Invention Fair

28th - 29th February, 2016 | SDM D.Ed College, Ujire | 10 AM - 4 PM

SUMMARY



Guests speak

Maj. General M. V.
Bhat, President, Rotary,
Belthangady



Parents and teachers should create a positive atmosphere for children to foster the spirit of invention. Students must continue this good habit in future.

Prof. K.S. Mohan Narayan,
Principal S.D.M College, Ujire



Students enjoy these activities more than academics. Harish Hande and Selco team is motivating students to do inventions to solve social problems so students can channelise their enthusiasm and interest towards newer things.

Mr. Guruprakash Shetty



What started as a light for education programme, evolved through stages of digital education programme and finally invention education and sustainable science lab. The work has just begun and there's a long way to go- for this to reach many more schools and finally be mainstreamed.

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Mr. Krishna Shetty, Warden
of Rathnamanasa



We should thank Rotary club and Selco foundation for visiting villages and helping students of villages innovate and finally come up with these models.

Mr. Swamy, Principal of
D.Ed college



We saw many innovations and ideas here, students should continue these in college life and have to develop it further.

Mr. Krishna Murthy, Principal
of Residential PU College



Like Thomas Alva Edison, we should possess enthusiasm even if we fail thousand times while inventing new things.

Introduction

Invention Fair is an end of the year showcase of Invention Education and Sustainable Science Labs programs run in 15 schools across Belthangady, Yadgir and Muthur.

This year students identified issues across areas of agriculture, day to day tasks at home and work, safety and health, water management and energy. They created initial prototypes, tested them with community members and arrived at final models that got exhibited in the Invention Fair.

Most of these students come from modest backgrounds and under-resourced schools. Their choice of problems to work on and use of mostly recycled and locally available

materials reflected a sensitivity to their surroundings and empathy for problems faced by those around them. Be it the issue of fuel saving stoves, effective management of water, appropriate irrigation techniques, the problem of crop-raiding by animals, concerns around pure drinking water, the breadth of topics tackled reflected a keen enthusiasm for connecting what is learnt in school and through books with the problems that are faced on a daily basis and providing effective solutions for them.

The fair was visited by students as well as faculty members from schools and colleges nearby.

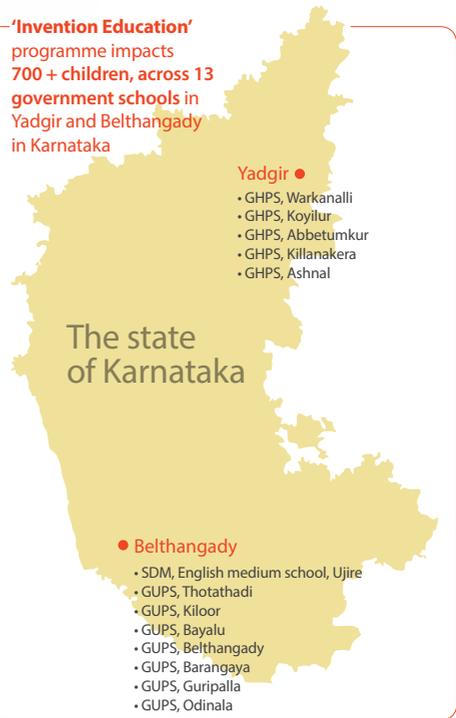
Invention Education



A program conducted in government schools to sow the seeds of invention in the young minds of children who will eventually be effective contributors to inventions for sustainable villages in India.



'Invention Education' programme impacts **700+ children, across 13 government schools in Yadgir and Belthangady in Karnataka**



Sustainable Science Labs



A program introduced in government schools to expose the students to a variety of challenges related to environmental and sustainability issues that are specific to Muthur. Our focus is not just on alternative energy solutions, but also on holistic, sustainable living practices.



'Sustainable Science Labs' programme in Muthur in Karnataka, impacts 130 students across 2 government schools

- **Muthur**
 - GHPS, Muthur
 - GHS, Muthur



Agriculture



Seed quality testing, Pooja,
Pritviraj, Roja | *GMPS Belthangady*



Boom sprayer, Sharath
| *GMPS Belthangady*
This pump has 4 nozzles to cover a greater area subsequently reducing the labour requirement



Mango remover net,
Mallappa | *GHPs Varkanalli*



Garden plough, Sudarshan
| *GUPS Barengaya*
A tool that makes the maintenance of the school kitchen garden easy



Garden plough, Devaraj
| *GHPs Koyilur*
Manual Plough made from discarded school bench and old cycle



Grass cutting machine,
Yashwanth | *SDM School*



Grass cutting machine,
Roopesh | *GHPs Ashnala*



Soil erosion,
Nitesh | *GUPS Bayalu*



Areca de-husking,
Vikas Bhat | *GUPS Barengaya*



**Protector of crops, Sunil,
Ashish, Ashwin | SDM School**



**Farm irrigation and scare the
animals without electricity,
Sukesh | GUPS Tottathadi**
Protect crops from wild animals
and irrigate the farms as well



**Pesticide pressure Tank,
Chaithra | GUPS Odilnala**
Manual pump adds pressure
that ensures that insecticide
can spray for longer



**Protector of crops (LED
insect trap), Gautam | GMPS
Belthangady**
Box; Rs 30-40, Fan; Rs.50 + discarded
charger



**Protector of crops (crackers),
Shankara | GUPS Koyilur**



**Hanging garden, Ushalata
| GUPS Tottathadi**
Hanging gardens for cities where
space is limited.



**Hanging garden, Moksha | GUPS
Guripalla**
Hanging gardens for cities where
space is limited.



**Water saving planter,
Vishwanat | GHPS Ashnala**
Water saving planter that utilises
cappillary action can water small indoor
plants; stores water for 22-24 days



**Water saving planter,
Bheemraya | GHPS Ashnala**
Can be used for crops such as mangoes,
coconut & helps prevent soil erosion

Agriculture



Mobile Sprinkler,
Zunaid | GUPS Tottathadi



Hydroponics,
Suneeth | GUPS Killoor

Utility items



Air conditioner, Pillinga

| GUPS Killankera

Using paint containers + a discarded battery (Rs.180) from a 2 Wheeler + new exhaust fan (Rs.130), ice has to be bought from a shop; generated project capital by selling waste glass bottles



Air conditioner, Bheemarayal

| GUPS Killankera



Laptop cooling pad,

Sindhushree | GMPS Belthangady



Hydraulic JCB, Mahesh

| GUPS Ashnal



Solar umbrella, Sumanth | GUPS Balayu

6 Volt Rechargeable battery Rs.175 (inside torch), At night it rains when villagers head to the farm to keep a watch. It is difficult to carry an umbrella with torch and dinner



Butter Churner, Chaithra

| GMPS Belthangady

Low cost model built as there is a need and existing models are costly



Remote controlled pulley for well, Sujan | GUPS Bayalu

Young and the elderly are unable to fetch water from the well on their own. This will help them



Hand washing Machine, Parshuram | GUPS Killankera

Saves water, no electricity required



Solution for making bags less heavy, Akash, Noufal

| GMPS Belthangady

Filing system made for carrying only required worksheets and not heavy bags

Utility items



PVC clothes rack, Darshan
| *GMPS Belthangady*
Clothes rack made using PVC Pipe. It can store shoes + Clothes + can add wheels to make it movable+ easy to dismantle for efficient storage.



Jewelry containers made of reused plastic bottles, Nireeksha, Varnashree, Varun
| *GMPS Belthangady*
Small jewelry boxes made from discarded plastic bottles



Midday meal trolley, Prathik, Prajwal | *GMPS Belthangady*



Hot box, Sukanya | *GUPS Barengaya*
Low cost model built using cardboard ,cotton cloth, and dry hay



Plastic Rope, Sinchana
| *GUPS Barengaya*



Book Stand using old PVC Pipes, Harshitha
| *GUPS Barengaya*



Innovative umbrella, Mikshitha | *GUPS Odilnala*



Bamboo Speaker, Sujay | *GUPS Killoor*



Low cost PCB Drill, K. Kiran | *GUPS Killoor*



Low cost simple microscope,
Vinay | GUPS Bayalu
Simple microscope to do experiments & research. The invention was made as there is no microscope available in the school lab, + the invention is useful to practice experiments at home without the need to buy an expensive model



Seating made from used tyres,
Sinan | GMPS Belthangady



Seating made from coiled paper,
Mary | GUPS Abbetumkur



Matka fridge, *Vinay, GUPS Bayalu and Ningappa, GUPS Abbetumkur*



Yallapa | GUPS Killoor
Decorative items made of coiled paper



Decorative materials,
Niteshkumar | GUPS Bayalu
Decorative items such as christmas tree decorations & rice measuring cups using discarded plastic bottles



Floor cleaner, *Yuvaraj | GUPS Varkanalli*

Safety and health



Life Jacket, Vinod, Soujanya |
GMPS Belthangady
Life-jacket is made using
discarded plastic bottles



**Security system, Hardik, Saad
Hasanabba** |SDM School
Created a two level security alarm
system that sounds a first alarm if
someone tries to enter a residential
property and second alarm if someone
tries to open the locker inside the house



**Animal presence warning
system, Bhimraya** |
GUPS Killankera
When animals move around in
the trees, the bottles and stones
make a sound creating a warning



Air Gun, Akash | GUPS Odilnala



Accident avoider, Bharath
|SDM School
A loud beep is emitted when
a car goes over a blind turn



Fire extinguisher, Pritvirani
|GUPS Guripalla
Extinguisher made from
a baking soda, and water
+ vinegar in a bottle.



**Bamboo raft, Mohammad
Naazim** |GUPS Killoor



Boat, Nishanth | GUPS Tottathadi
Boat made using PVC pipes and
old discarded chair, Tottathadi
floods during the rains and as PVC
is cheaper and lasts longer than
bamboo that is why it was selected



Bulb protector, Pavitra
|GUPS Guripalla
The protection is made from
discarded plastic bottles.
Belthangady receives explosive
rains which sometimes causes
water to enter light bulbs resulting
in short circuits. To prevent this from
happening this invention was made.



Mosquito trap made of sugar solution, Sunil,
| GHPs Abbetumakur
Insect trap using yeast
+ water + sugar



First aid, Sameena,
Unaiza, Rashmitha
| GUPS Bayalu



Menstrual health education,
Usha, Nikhitha | GUPS Thothady



UV dustbin, Shreejith
| GMPS Belthangady
Light attracts insects inside
of dustbin bad + UV also kills
bacteria in the garbage



Dustbin from used bottles,
Ameer | GUPS Tottathadi
Dustbin made from
discarded plastic bottles



Water purification using Moringa seeds, Sharadhi,
Rehana | GMPS Belthangady



Matka (pot) filter, Rashmitha
| GUPS Guripalla
Outer pot was broken and
was re-used whereas the
inner pot was purchased

Water management



Archimedes water screw,
Ajith | GMPS Belthangady
Manual pump where no
electricity is required



Ram pump, Sri Ram Marathe
| GUPS Barengaya



Solar distiller, Shri Kara
| GUPS Odlnala



**Water level indicator
(using coloured lights),**
Vikram | SDM School
Different LED signal to indicate
different levels of water collected
in tank; low, medium, high



**Water level indicator (using
sound),** Pranav | SDM School



Rainfall level indicator,
Abhivrudhi | GUPS Bayalu



Hand pump, Manoj | SDM School



**Water lifting from a borewell
using bamboo** Jayaraj | GUPS
Bayalu Water is lifted from bore
well using bamboo



Lifting water using bicycle,
Gurucharan | GUPS Tottathadi

Energy



Hybrid street light Akshay
| GMPS Belthangady



Fuel saving stove with flame control, Lavanya
| GMPS Belthangady



Innovative stove (fan) Bhavishya | GUPS Odilnala
Has created a charcoal based stove that is connected to a motor and external energy source which eliminates the need to blow while cooking; thereby making the whole process easier



Solar water heater (bottle + drip pipe), Reena | GUPS Odilnala



Waste water management and hydropower generator, Pranam Rai | SDM School



Mechanical generator, Abhikarthik | SDM School



Current generator, Shreyas | GUPS Killoor



Water wheel Ariff | GUPS Bayalu
Home made water wheel could be used to generate electricity



Solar water heater (from discarded bottles), Bhimaraya | GUPS Killankera
Solar Water Heater made from discarded plastic bottles, it creates no mess and the water is very hot and appropriate for a bath



Daylight system, Bannibasava | GHPS Abbetumkur

Invention Fair 2016 photo-essay- Day 1



Students queue up to witness inauguration



Maj. General M. V. Bhat, President, Rotary, Belthangady cutting the ribbon



Ms. Santhi, Program manager, Education Lab introduces the facilitator teams from Ujire and Yadgir

Registrations



Participants and visitors leave their feedback on the feedback tree



Participant feedback



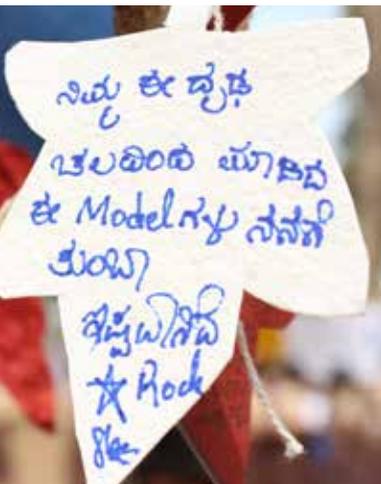
Maj. General M. V. Bhat addresses the students, Mr. Azharrudin, Ms Santhi and Mr Suhas look on



Collecting welcome kits



Low-cost models demonstrating scientific principles, Lifelabs



Dr. Yashvarma, Secretary, SDM Education Trust, Ujire, pays a visit

Invention Fair 2016 photo-essay- Day 2

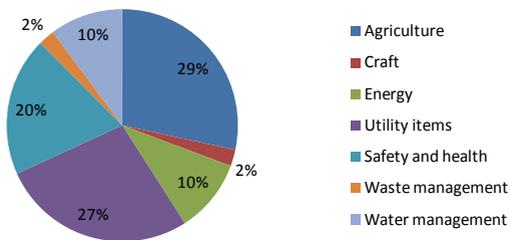
Certificate distribution ceremony



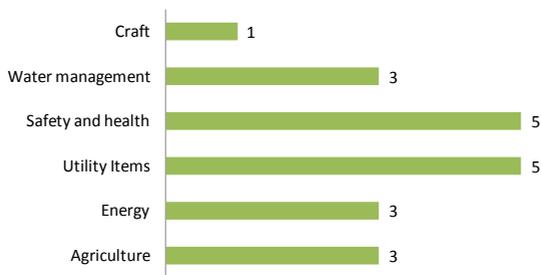


Interesting facts about Invention Fair 2016

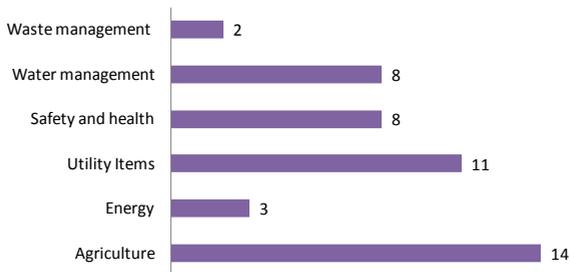
Invention Areas



Class 6 : Invention Areas



Class 7 : Invention Areas



Class 8 : Invention Areas

