

Children's Creativity and Innovation Day

October 15



IGNITE

**National Competition for Children's Technological Ideas
and Innovations**

in association with

Honey Bee Network, SRISTI, Central Board for Secondary Education (CBSE),
Jawahar Navodaya Vidhayalaya, (JNV), Everonn Education Ltd. and other partners



National Innovation Foundation (NIF)

Bungalow 1, Satellite Complex,
Premchand Nagar Road, Vastrapur
Ahmedabad 380 015, Gujarat

What is the IGNITE contest?

IGNITE is a national competition to harness the creative and innovative spirit of school children. Students are invited to send their creative technological ideas and innovations for the same. IGNITE contest was first organised in 2007 by the NIF in the four southern states. Building upon the experience, the NIF partnered with the CBSE in 2008 and launched the contest nationally. For the IGNITE 2008, 961 entries were received from over 62 districts of 19 states. The awards were given by Dr. A. P. J. Abdul Kalam at Indian Institute of Management, Ahmedabad on November 26, 2008.

Why the IGNITE contest?

Creativity among children is almost in-born, every child is creative, degrees may vary, but not the basic manifestation. Then what happens during the growth and maturation? Why should children stop asking basic questions? Why do they agree to do repetitive science projects instead of being original? Why do they learn to live with unsolved social and professional problems? We should not allow our children to live with such problems rather urge them to come up with solutions to these.

We want to promote originality, creativity and innovative spirit among our children so that when they become leaders of our society, they ensure an imaginative, inclusive and an innovative future for the country. We want our children to be more sensitive to the problems faced by not just them and their families or neighbors but also other socially disadvantaged sections of the society.



IGNITE 09

The IGNITE 09 contest (April 15, 2009 to September 15, 2009) saw participation of students from 82 districts of 21 states of the country. Over all 1344 entries were received, which ranged from sectors like energy, environment, transport, general household utility items and many even discussed societal problems. The awards were announced on October 15th, the birth day of children's favorite Dr A.P.J. Abdul Kalam, former President of India, celebrated as the Children's Creativity and Innovation Day by NIF. A total of 19 students won awards in different categories. Two schools were selected for recognition for their efforts to promote originality in the children and to motivate children learn and preserve traditional knowledge. Another student was selected for special recognition for his idea about tiny savings. Read more about them in the following pages (List of award winners annexed).

Dr. APJ Abdul Kalam

Seven Point Oath for Students

1. I realize I have to set a goal in my life. To achieve the goal, I will acquire the knowledge, I will work hard, and when the problem occurs, I have to defeat the problem and succeed.
2. As a youth of my nation, I will work and work with courage to achieve success in all my tasks and enjoy the success of others.
3. I shall always keep myself, my home, my surroundings, neighbourhood and environment clean and tidy.
4. I realize righteousness in the heart leads to beauty in the character, beauty in the character brings harmony in the home, harmony in the home leads to order in the nation and order in the nation leads to peace in the world.
5. I will lead an honest life free from all corruption and will set an example for others including my home to adopt a righteous way of life.
6. I will light the lamp of knowledge in the nation and ensure that it remains lit for ever.
7. I realize, whatever work I do if I do the best, I am contributing towards realizing the vision of developed India 2020.

(Source: http://www.abdulkalam.nic.in/address_airindia_pres.html)

Automatic Food Making Machine



Abhishek Bhagat

Class X, Adwait Mission Public School, Bhagalpur, Bihar

Who has not wished a machine which would cook one's chosen recipe every time exactly as one wished it to be? But then such a machine will not elude us any more, if Abhishek's innovative food machine comes in the market.

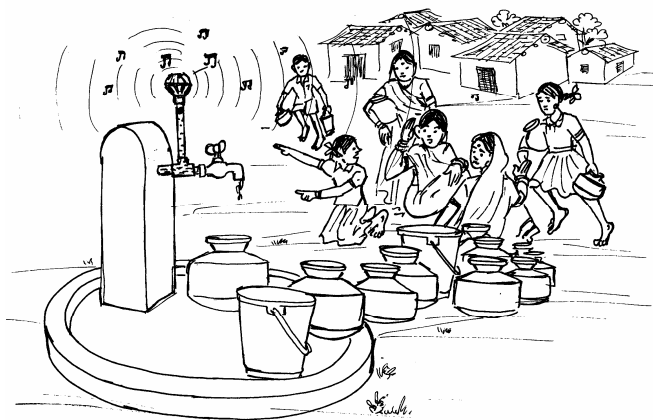
Kitchen King has 12 boxes containing different ingredients, with a display screen to select options to cook different items. The required quantity of each ingredient will be fed into the machine in the sequence one has pre planned to cook the desired dish.



Pressure Detector for Water Pipelines

Himala Joshi,

Class XI, Aryaman, Vikram Birla Institute of Learning, Nainital, Uttarakhand



In many places in India, water is supplied for one or two hours only in a day. People have to keep turning taps on every few minutes to check the water supply. Himala has designed a pressure detector fitted in the pipeline. It rings an alarm immediately on sensing the flow of water; thus alerting people.

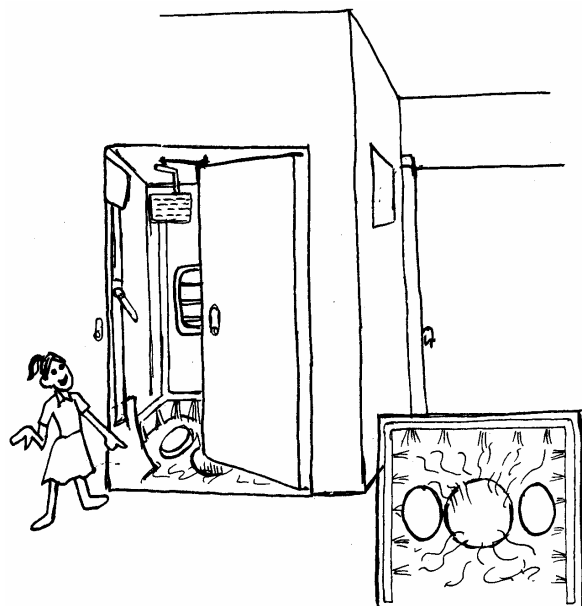


Flameless Seal Maker

Masha Nazeem

Class XI, Vidya Vikas School,
Namakkal, Tamil Nadu

The traditional way of sealing covers or boxes is using lac heated at a very high temperature. It is a hazardous job. It has been so used in India since the Mughal Era. The flameless seal maker eliminates the use of fire to melt lac and also ensures uniform treatment or seal imprint. Just fill the device with lac, plug it into power supply and one can then control the flow of the lac with a piston. There is little chance of getting burns too.



Lavatories with Auto Washing Pipe

Sasmita Nayak

Class Seven, Govt. High School, Kendujhar,
Orissa

A toilet fitting connected to a door by a spring mechanism, splashes water on the floor and in the toilette when a person opens the door. This way, toilets in railway bogies can be kept clean with minimal water wastage.

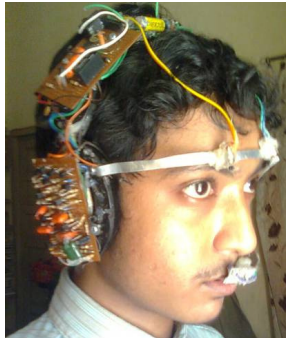


Breathing sensor apparatus to assist physically challenged

Susant Patnaik

Class XI, DAV Public School,
Bhubaneswar, Orissa

This system consists of a circuit, which uses the changes in breathing patterns to select several options such as food, water etc. It thus enables paralyzed/physically challenged people articulate their wish and be self-reliant in routine activities. The technology has a range of applications like operating a wheelchair, electronic appliances, prevention of accidents, detecting thefts, etc.

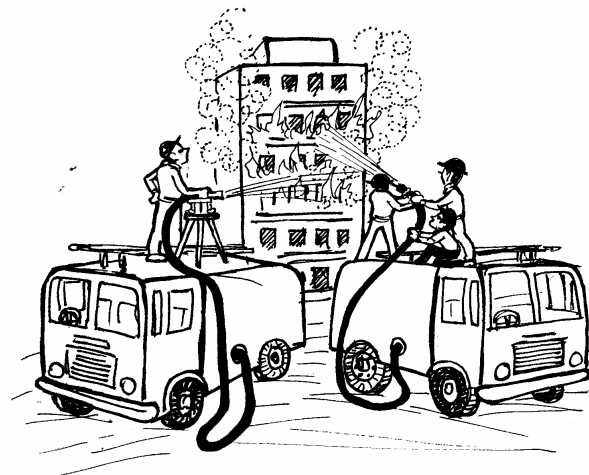


Sushant has designed a proof-of-concept electronic circuit of a wheelchair, which can be navigated through commands given by changing breathing patterns, just like a morse code.

Fire Hose Supporter

Abhishek Srikanth

Class IX, Global Indian International School,
East Coast Campus, Singapore



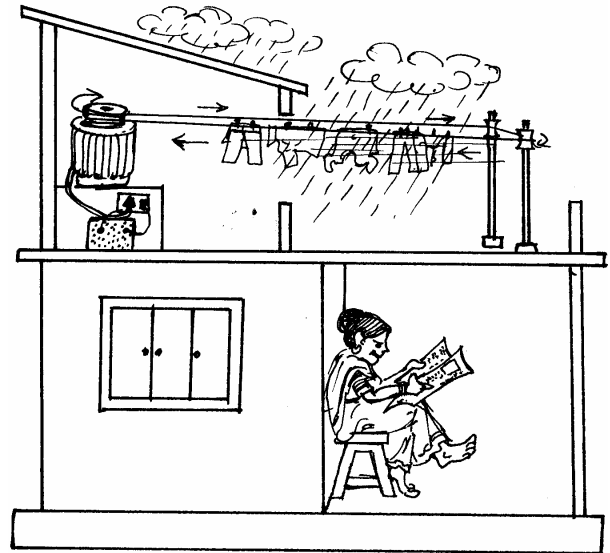
The jet of water that shoots out of a hose is very strong and the reaction force on the fire-fighter is difficult for him to handle. Hence, a foldable stand could be developed which is connected to the fire-hose by a spring mechanism. The angle of the hose is also flexible. This enables less strain and ensures a steady spraying of water jet at desired targets.



Preventing Clothes from Being Wet in Rain

Piyush Agarwal
Class XI, DAV Public School,
Hazaribag, Jharkhand

When it rains, a motor may get triggered by salt that absorbs atmospheric moisture/sensor. It would pull the rope inside on which clothes are hung. This may save housewives, an additional chore!



Body Heat and Pulse to Charge Cell Phone

Sarojini Mahajan
Class IX, St. Mark's Sr. Secondary School, Delhi



A gadget can be developed to utilize the body heat or the stimulus of pulse to charge a cell phone. Interestingly, this idea was picked up by Stanford University faculty for exploring its feasibility for charging batteries of e-book.



Bus with approach alert system

Pallavi Sharma

Class IX, Police DAV Public School,
Jalandhar Cantt., Punjab

Pallavi gives an idea about a high tech school bus, which can give alert signal as it approaches the bus stop. No one would miss any bus this way!! Are not children so busy nowadays that they don't have even a few minutes to waste.



Integrating gait with security systems in mobiles

Anurag Rathore

Class IX, Police DAV Public School,
Jalandhar Cantt., Punjab



Anurag wants to integrate the gait of a person with a mobile. As walking style differ from person to person, the software will be able to identify the signals based on the body movements while walking. If the mobile will sense a different movement once activated, it will lock itself and send a message about its location to a predefined number. The system will also have a password option so that in cases of emergency, the original user can unlock it.

Since no two people walk alike, one's cell phone will not work in another person's hands.

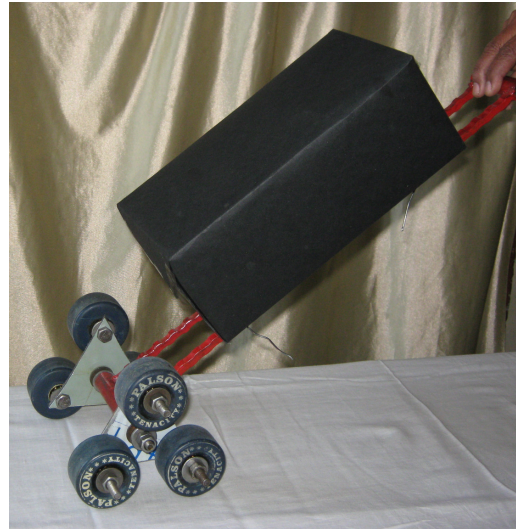


Triangular Wheels

Yatharth Saxena

Class V, Campus School,
Pantnagar, Uttarakhand

This is an arrangement of three wheels on both the side of an axle. This may be used in carrying luggage strollers on the stairs.



Rain water harvesting umbrella with filter

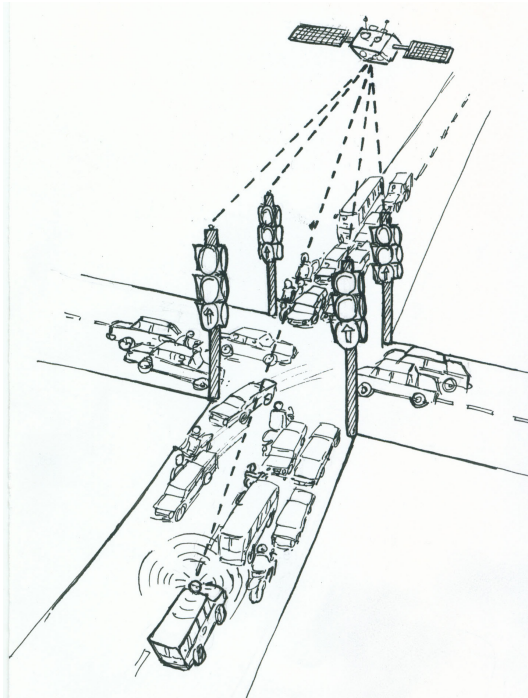
Saihiel Bakshi

Class VI, Vasant Valley School,
Delhi



Integrating funnels in an umbrella, Saihiel has made a model, which can harvest rain water. The water from the funnels is led into a filter and then collected in a bottle. This can then be used later.





Ambulances/fire brigades with integrated GPS

Meenakshi Padhi

Class VII, DPS Nalconagar,
Angul, Orissa

In order to stay clear of traffic during emergencies, Meenakshi suggests that ambulances/fire brigades fitted with GPS are integrated with traffic system so that path is cleared for them by appropriate light switching. For instance, as the ambulance comes near a traffic junction, lights will turn green for it to pass through while stopping the traffic across its path.

Water clock with a water alarm!



Airam Khatoon

Class VII,
Jawahar Navodaya Vidhyalaya Vrindavan,
West Champaran, Bihar



This is a simple idea about a water clock that sprays water after a preset time.

System to provide a mirror with extended view while over-taking a vehicle

Ujjwal Jain

Class X,

Nirmala Rani High School,

Bangalore, Karnataka

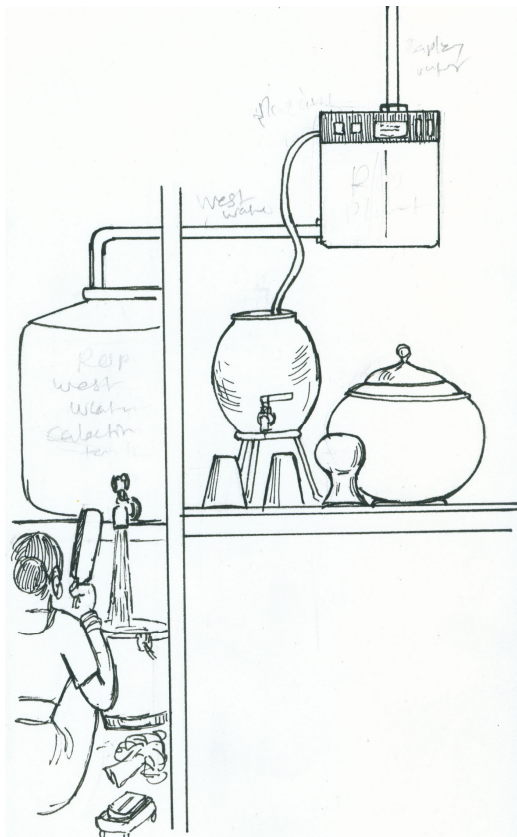
This device mainly shifts the area of view along the axis of the mirror. This is done in order to extend the view behind the vehicle and also to enable the driver to view what is besides him.



Putting to use waste water from RO systems

Ramya Ahuja

Class X, Vasant Valley School, Delhi



It is suggested to use the waste water from RO system for different domestic purposes.

Travel bags with folding seats



Nisha Chaube
Class X,
Ryan International School,
NOIDA, Uttar Pradesh

Considering the problem commuters have to face while waiting for buses/trains at stations, Nisha has suggested incorporating light-weight folding seats in traveling bags so that the same can be used when needed.



Apparatus to increase the life of mosquito coils

Prakhar Parashar

Class XII,
Saraswati Higher Secondary School,
Hoshangabad, Madhya Pradesh



This is a tested apparatus that increases the life of a mosquito coil considerably. Without apparatus five inches of the coil burns in one hour, while with apparatus only four inches burn in the same time. Thus 20 per cent extra life helps in controlling mosquitoes for that much time extra.



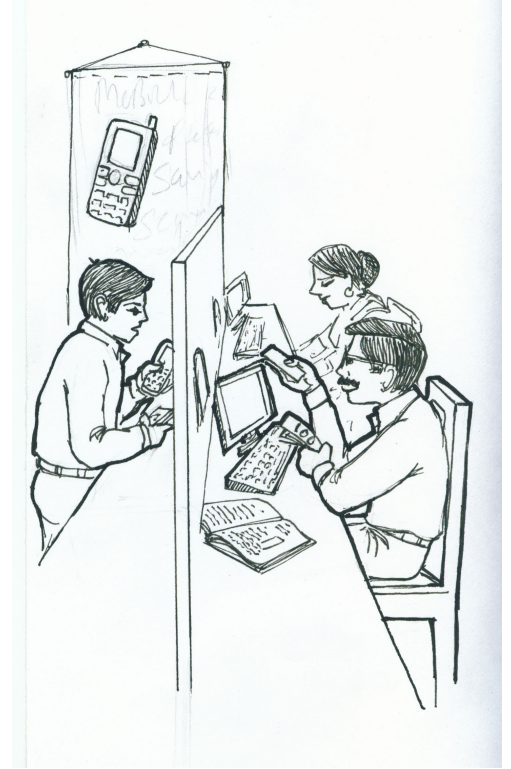
Special Mention

Tiny savings through mobile recharges

Praanshu Goyal

Class X, Kendriya Vidyalaya,
Agra, Uttar Pradesh

Praanshu suggests that every time, some one recharges one's prepaid card for cell phone, a fraction of the recharge amount is invested by the mobile operator in a mutual fund or some other saving scheme. This can be claimed later by the user as per the accumulated savings in his portfolio.



Special Mention

1. Honey Bee Creativity Club, Sri Sathya Sai Lok Seva Vidya Kendra, Dakshina Kannada, Karnataka. Teacher Incharge: Mr. Saimon Cardoza

The club has contributed more than 200 ideas and innovation of the students and continues to motivate students to think creatively.

2. Salwan Public School, Gurgaon, Haryana

School Representatives: Mr. Pankaj Gupta and Ms. Hema Malini

The school motivated the children to document and learn traditional knowledge from their elders. The documentation of the same was sent to NIF along with well presented literature.

Annexure

IGNITE 09 Award Winners

Upto Class Seven

Name	Standard	Home City	Idea/innovation	Prizes
Yathartha Saxena	5 Campus School, Pantnagar	US Nagar Uttarakhand	Triangular wheels	I
Sashmita Nayak	7 Govt. High School, Suakati	Kendujhar Orissa	Lavatories with flush-door integrated system	II
Saihiel Bakshi	6 Vasant Valley, Delhi	Gurgaon Haryana	Water harvesting umbrella with filters	III
Meenakshi Padhi	7 Delhi Public School, Nalconagar	Angul Orissa	Remote sensing system integrated with ambulances/ fire brigades and traffic system	Consolation
Airam Khatoon	7 Jawahar Navodaya Vidyalaya	East Champaran Bihar	Alarm integrated water clock	Consolation

Class 8-10

Name	Standard	City	Idea/innovation	Prizes
Abhishek Bhagat	10 Adwait Mission Public School, Bounsi	Bhagalpur Bihar	Automatic food making machine	I
Anurag Rathore	9 Police DAV School	Jalandhar Punjab	Gait identification in mobiles	II
Ujjawal Jain	10 Nirmala Rani High School	Bangalore Karnataka	System to provide back view mirror with extended view	III
Sarojini Mahajan	9 St Mark's Senior Sec Public School	Delhi	Charging mobiles using human pulse	Consolation
Abhishek Srikanth	9 Global Indian International School	Singapore	Tripod to support fire hose	Consolation
Ramya Ahuja	10 Vasant Valley, Delhi	Gurgaon Haryana	Using discarded water from RO for household applications	Consolation
Nisha Chaube	10 Ryan International School	NOIDA Uttar Pradesh	Travel bags with folding seats	Consolation
Pallavi	9 Police DAV School	Jalandhar Punjab	School bus alert system	Consolation

Class 11-12

Name	Standard	City	Idea/innovation	Prizes
Sushant Pattnaik	11 DAV Public School	Bhubaneswar Orissa	Breathing sensor apparatus to assist physically challenged	I
Masha Nazeem	11 Vidhya Vikas Girls High Sec School, Namakkal	Kanyakumari Tamil Nadu	Flameless seal maker & Modified fuel dispenser for pumps	II
Prakhar Parashar	12 Saraswati H Sec School, Itarsi	Hoshangabad MP	Apparatus to increase the life of mosquito coils	Consolation
Himala Joshi	11 Aryaman Vikram Birla Institute of Learning, Haldwani	Nainital Uttarakhand	Pressure gauge and alarm in water supply pipes to alert about the water supply	Consolation
Piyush Agarwal	11 DAV Public School	Hazaribag Jharkhand	Automatic system to draw back clothes hung for drying during rain	Consolation

Do you have an IDEA that can solve a problem, make life better for others and win you a PRIZE!!!!



National Innovation Foundation (NIF), Ahmedabad

IGNITE 10

An idea and innovation contest for school students.

We are looking for creative solutions for everyday problems, problems that have been there for long. We don't want you to live with them but solve them.

We are looking for new machines/gadgets that can life or work easier for yourself or others.

We are looking for great practical ideas that have the potential to be converted into reality.

We promise technical and financial support for the most unique and innovative ideas and innovations along with possible patent support & business development opportunity.

If you think you have a creative idea, come and participate.

Entries are being accepted till August 31, 2010

The awards will be declared on October 15, 2010 the birth day of Dr APJ Abdul Kalam celebrated as the Children's Creativity and Innovation Day and given later by him at his convenience

You can send any number of your creative ideas and innovations to the email* ignite10@nifindia.org or send them to our address below

IGNITE 10

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www.honeybee.org



www.cbse.nic.in

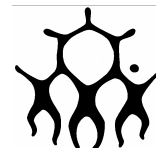


www.sristi.org



www.everonn.com

* Please include your complete name, address, contact number, class and school/college's name along with the details of your ideas/innovations and pictures/diagrams if any.



A Newsletter on Creativity and Innovation at the Grass Roots

An invitation to join a global movement to conserve biodiversity through documentation, experimentation, value addition and dissemination of local innovations by farmer, pastoralist, artisan and horticulturist men and women. You may also like to join the campaign for the protection of the Intellectual Property Rights of grassroots level innovators.

What is Honey Bee? The name *Honey Bee* signifies a philosophy of discourse that is authentic, accountable and fair. A honeybee does two things which many of us do not. It collects pollen without impoverishing the flowers, and connects flowers through pollination. The idea is that when we collect people's knowledge, we should ensure that they do not become poorer for having shared their insight with us. Further, we should connect one innovator with another through feedback, communication and networking in their local language. We have to let the providers of knowledge know what we with their knowledge. If we generate consultancies or other sources of income by writing on people's knowledge, a fair share of this income must accrue to the providers in as transparent a manner as possible.



Honey Bee is an experiment in people to people learning: We write in English language which connects us globally but alienates locally. We are unable to reach the people from whom we have learnt. Thus, while we grow in our careers, achieve wider recognition and reap professional rewards, the people suffer, often silently. The ethics of knowledge extraction, documentation, dissemination and abstraction into theories, institutions or technologies, is thus one of our central concerns. *Honey Bee* is brought out in six

languages through collaborators. Write to us if you would like to contribute to this network by paying your annual/life subscription fee as suggested in the table or in any other voluntary way. The Honey Bee Network supports the National Innovation Foundation (www.nifindia.org) and Grassroots Innovation Augmentation Network (GIAN) (www.gian.org).

*This subscription entitles you to receive the newsletter and other information about the Honey Bee Network. Please send your contributions through a bank draft or money order in favour of **SRISTI Innovations** at the editorial address: C/o Prof Anil K Gupta, Editor, Honey Bee, Indian Institute of Management, Vastrapur, Ahmedabad 380 015, India. Individuals can also send life membership in three to four installments.*

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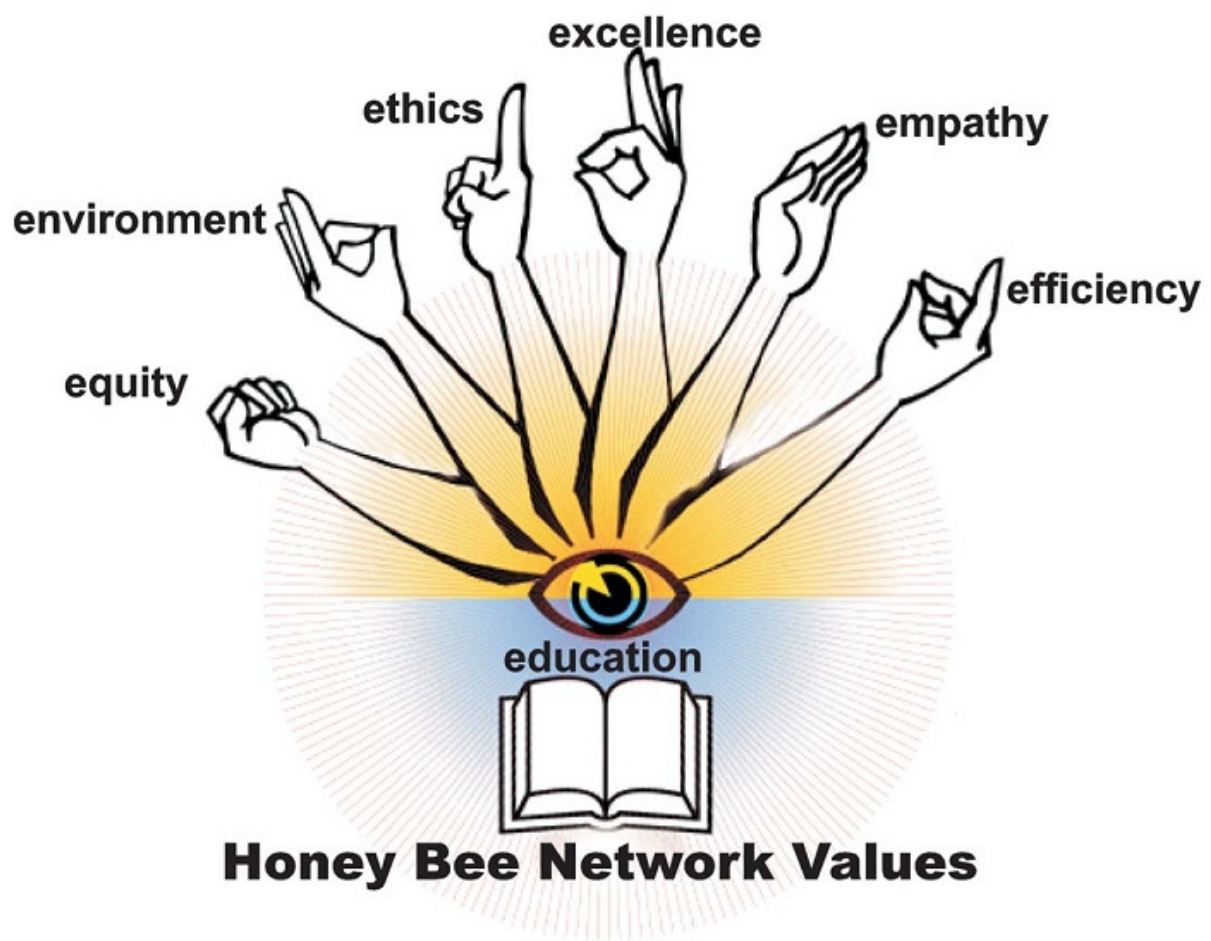
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<i>Nature Heals</i>	150	20
<i>Profile of Innovators</i> 175	25	

* Postage extra for each publication 25 4

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10. Do you have any suggestions for making the Honey Bee Network stronger and more purposeful?	:			
11. How did you come to know about <i>Honey Bee</i> ?	:			
12. Would you like to collaborate/ assume voluntary responsibility towards research, bringing out a local language edition, surveying innovations, etc.?	:			





NATIONAL INNOVATION FOUNDATION, INDIA

The Seventh National Biennial Competition for Green Grassroots Unaided Technological Innovations and Traditional Knowledge

Co-sponsors



Honey Bee Network



CSIR



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IIM-A

The competition

The NIF, set up by Department of Science and Technology, GOI, seeks entries of unaided technological innovations and traditional knowledge developed by an individual or group comprising farmers, artisans, fishermen and women, slum dwellers, workshop mechanics, students, local communities etc., in managing natural and/or other resources. The innovations can be in machines, gadgets, implements, or processes for farm operations, household utility, transportation, energy conservation or generation, reduction in drudgery, creative use of biodiversity, development of plant varieties, generation of herbal remedies for human or animal health or developing new or any other low cost sustainable green technology related to various aspects of survival in urban and rural areas. Creative ideas for innovative technologies which have not yet been reduced to practice are also welcome. Communities developing People's Biodiversity Register (PBR) or People's Knowledge Register (PKR) are encouraged to register/link their knowledge base with the National Register at the NIF.

The awards

The best three innovations and traditional knowledge practices will be awarded Rs 1,00,000, Rs 50,000 and Rs 25,000 each in different categories. In addition, individuals and/or organizations that make extraordinary contributions in scouting grassroots innovations and traditional knowledge may also get awards worth Rs 50,000, 25,000 and 15,000 respectively besides recognition to many others. There will be several consolation prizes of Rs 10,000 each in different categories depending upon the number of entries and incremental inventiveness and potential social and environmental impact. Three most outstanding innovative ideas may be given prizes of Rs 50,000, 25,000 and 15,000 in addition to consolation prizes of Rs 5,000 each. There are special prizes for innovations by or dealing with, physically challenged people. The innovations/ideas of professionally trained

persons are not considered for award or financial support. There are special awards for journalists writing about grassroots innovations and/or traditional knowledge and creating greater awareness about NIF's missions. *The award money may be revised in due course.*

Students

Young inventors and innovators are invited to send their ideas or innovations for a special category of awards for them. These should be unsupervised, an outcome of their own creativity, without any support from their teachers or outsiders. There will be prizes worth Rs 15,000, 10,000 and Rs 7,500 for the best three entries and several consolation prizes of Rs 5,000 each in this category.

How to participate

Individuals or groups may send as many entries as they wish on plain paper providing a) genesis of the innovation and traditional knowledge b) its background and c) educational qualification and occupation, accompanied by photographs and/or videos if possible and any other information that may help in replicating the innovations/traditional knowledge. Herbal entries may be accompanied by dried plant samples to enable proper identification procedure. **The Seventh National Competition started on February 1, 2009 and entries will be accepted till December 31, 2010.** Every entry should include the full postal address to facilitate further communications.

Where to send entries?

National Coordinator (Scouting & Documentation), National Innovation Foundation, Bungalow No. 1 Satellite Complex, Premechand Nagar Road, Ahmedabad 380015 Gujarat
Toll Free No 1800 233 5655 Fax: (079) - 2673 1903
email: campaign@nifindia.org; www.nifindia.org