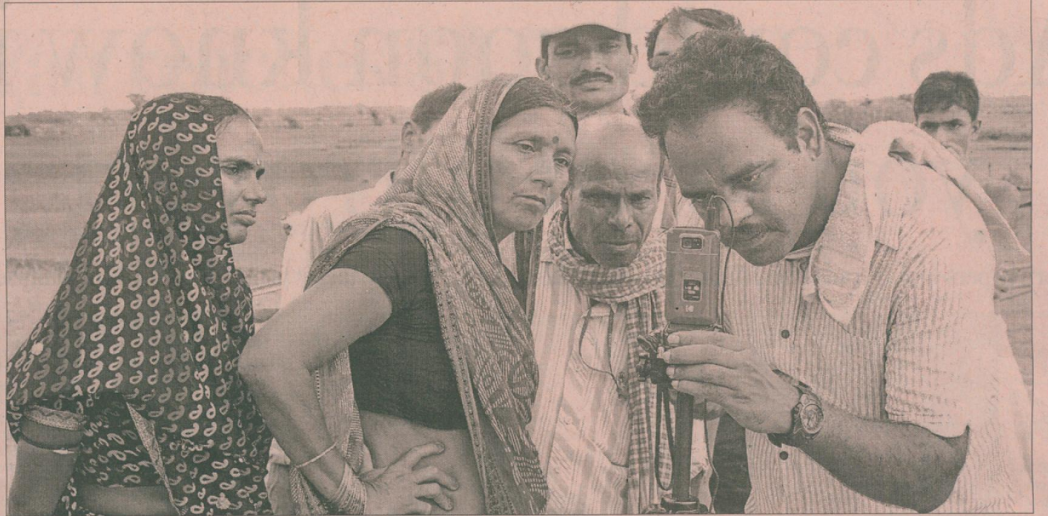


Clip: 1 of 2

From mobile science labs to bio-digesting toilets, these innovators are revolutionising the way technology is being used to bring change in society



A volunteer from Digital Green teaching farmers to become community knowledge workers

# GROWTH engineers



A member of the group, Agastya, with a 'motorbike science lab'



Bio-toilets (above) installed by SANA; a 'Bala Janaagraha' civic fest that was held by Janaagraha

**Abhishek Chakraborty**

dioxide, hydrogen, the teach teachers as well as stu-

## FANTASTIC FOUR

A year-old daughter of a soap factory worker in Karnataka, always wanted to become a doctor but dreaded science, and the lack of practical issues in her village school made the subject more terrifying. The first time she experienced anything of academic interest outside a textbook was a visit to a metarium, which was sponsored by a philanthropic organisation. However, when Agastya, an NGO that provides rural children access to practical science and technology education, came to her school and showed live demonstrations and scientific experiments, she realised that there was a rich world outside textbooks too. Reshma learnt about carbon

monoxide, hydrogen, the teach teachers as well as students. Reshma's favourite subject used to be social studies. Now, she thinks science is cool too. Apart from the "Tech-LaBikes", as the motorbike science labs are being called by the NGO, Agastya is training local teachers on how to incorporate hands-on science into their classrooms. Over the next three years, Agastya plans to teach the power of science education to children and teachers at 1,620 rural schools across the country. K Thiagarajan, chief operating officer, Agastya, adds: "We are going to create a network of motorbike-based science labs, which will go to rural schools and

Agastya is one of the recipients of the recent Global Impact Awards Initiative by Google, which gave away prize money of about ₹21 crore to 10 best Indian non-profit organisations to scale up their enterprises. Although only four were declared "winners", which included Digital Green Trust, Janaagraha and Social Awareness, Newer Alternatives (SANA), apart from Agastya—they got ₹3 crore each, in addition to 10 Nexus tablets—the remaining six got ₹1.5 crore each. From making India the world's largest milk producer to bringing solar power technology to the poor, Indian social entrepreneurs have a proud history of using technology to make the world a

better place. The four winners are only taking that revolution to a new level. Like Agastya, Digital Green Trust also works at the grassroots level. By scaling a video hub and an online knowledge platform, Digital Green has been training farmers to become community knowledge workers and enable them to share locally relevant agricultural skills with their peers. Janaagraha: It hopes to close information gaps, and plans to create online and mobile apps connecting government representatives in urban India with citizens. Social Awareness, Newer Alternatives (SANA): It works on bringing hygiene practices and portable e-toilets to villages and slums.



plans to provide agricultural training to one million farmers across 10,000 villages over the next three years. Rikin Gandhi of Digital Green says: "We'll use the funds to create 10,000 village resource centres by 2015 in tie-up with the ministry of rural development." SANA, which got the "fan favourite" award, engages in private-public partnerships to enable rural villages and



urban slum clusters to get potable drinking water by designing and implementing solar-powered micro-ionising water treatment plants. It works on bringing hygiene practices and portable e-loos to places where sanitation facilities are absent.

"We started a water treatment sanitation plant in RPVV School in east Delhi recently which was inaugurated by Delhi CM Sheila Dikshit. Through this water plant, students get about five litres of drinking water daily for their family, on a first-come-first-serve basis. This is also encouraging family members, especially from the economically weaker sections of society, to send their children to school so that they can get safe drinking water," says Sanchaita Gajapati Raju, managing trustee, SANA.

On November 14, SANA inaugurated a solar-powered water treatment station in N Chamavaram village of Andhra Pradesh, a parliamentary constituency of Union minister Pallam Raju. Through this station, the whole village will get about 5,000 litres of water every day. They are also planning to use the waste water from these plants for sanitation purposes in villages.

In the next three years, SANA plans to provide 50 million litres of safe drinking water to residents, bio-digesting toilets to 10 villages across India, and improved health conditions for 25,000 people annually.

The fourth winner, Janaagraha, works to bridge the gap between elected government officials and the people they represent in urban India. It creates online and mobile apps that connect citizens to their government representatives. These apps allow users to provide faster and more detailed feedback directly to their representatives, helping to close information gaps.

Janaagraha is currently conducting a joint programme in Bangalore with the Election Commission of India where they have selected about 1,500 persons called "area voter *mitras*" who go door to door to teach people about the various nuances before voting. "Our voter *mitras* travel from one place to another and help people get registered in the voters' lists, and check if their names are correct, etc," says Swati Ramanathan, co-founder, Janaagraha.

They have another programme called "Bala Janaagraha" through which they develop knowledge and citizenship values, and sensitise children to important civic issues. Currently, they have about 11,000 eighth-grade students under the programme.

At present, Janaagraha has its services only in Bangalore, but in the coming five years, it plans to connect 15,00,000 citizens to governments across 10 metros.